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Roll No. 5. 3. 9
LEGISLATIVE ASSEMBLY - 6 MAR. 95 NEW SOUTH WALES. 95/553
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1894-5.

NEW SOUTH WALES.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

REPORT

TOGETHER WITH

MINUTES OF EVIDENCE, APPENDICES, AND PLANS,

RELATING TO THE

PROPOSED RAILWAY

FROM

JERILDERIE TO BERRIGAN.

Presented to Parliament in accordance with the provisions of the Public Works Act, 51 Vic. No. 37.

SYDNEY: CHARLES POTTER, GOVERNMENT PRINTER.

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MEMBERS OF THE COMMITTEE.

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The Honorable JOHN DAVIES, C.M.G.
The Honorable CHARLES JAMES ROBERTS, C.M.G.
CHARLES ALFRED LEE, Esquire.
JAMES GORMLY, Esquire.

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

PROPOSED RAILWAY FROM JERILDERIE TO BERRIGAN.

REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS, appointed during the first Session of the present Parliament, under the Public Works Act of 1888, 51 Vic. No. 37, the Public Works Act Amendment Act of 1889, 52 Vic. No. 26, and the Public Works (Committees' Remuneration) Act of 1889, 53 Vic. No. 11, to whom was referred the duty of considering and reporting upon "the expediency of constructing a line of railway from Jerilderie to Berrigan," have, after due inquiry, resolved that it is expedient the railway should be constructed with a deviation recommended by the Sectional Committee, and at a cost not exceeding £2,000 per mile, to include goods and grain sheds, engineering charges, and all contingencies; and in accordance with the provision of sub-section IV, of clause 13, of the Public Works Act, report their resolution to the Legislative Assembly:—

History of the proposal to construct the railway.

1. The proposal to connect Jerilderie with Berrigan by railway was first brought into public notice in April, 1888, when the residents of Berrigan petitioned the Government for a railway or a tramway. This the Engineer-in-Chief for Railways (Mr. John Whitton) opposed, on the ground that the railway or tramway would have the effect of diverting traffic from New South Wales to Victoria. In April, 1889, the residents of Berrigan again petitioned, and in 1891, a deputation, representing the Berrigan Progress Association and the Berrigan Tram League, waited upon the Minister for Works and asked for a trial survey. In the meantime, the matter had been handed over to an Examiner of Public Works Proposals, who was instructed to report upon all railways proposed for the development of the Riverina district, and he recommended railway communication with Berrigan, by means of a line from The Rock to Murray Hut, which would pass through Berrigan township. Nothing more appears from the official *précis* of the papers on the subject to have been done until February, 1892, when a deputation from the districts of Jerilderie and Berrigan, to the Minister for Works, was informed that if no absolute determination were arrived at within a reasonable time in regard to constructing a line from The Rock to Murray Hut the Minister would recommend the carrying out of the Jerilderie to Berrigan proposal. Six months afterwards Ministerial approval was given to a survey being made between Jerilderie and Berrigan, and the survey was completed in January, 1893. In May, 1894, a deputation from Berrigan urged upon the Minister for Works that the proposed railway should be referred to this Committee, and in October, 1894, it was decided by the Government that the reference of the work to the Committee should be made. The railway is proposed as a pioneer or cheaply built line, different in the manner of its construction from the existing railways of the Colony, but suited to the requirements of the district it is intended to serve.

Description of the proposed railway.

2. The railway will be an extension of the Narrandera to Jerilderie branch line, very lightly constructed. From an engineering point of view it would be difficult to find a district more suitable for railway construction than that through which the proposed line will go, or one better fitted for the experiment of a pioneer railway. Beginning at the present terminus at Jerilderie the

the route, as submitted to the Committee, proceeds over flat country in almost a straight line to the township of Berrigan, a distance of a little over 21 miles. Grades, curves, and works generally will be very easy. There are some water-ways to be crossed—two of them, Algudgerie Creek, near Jerilderie, and Berrigan Creek, near Berrigan—but they are inconsiderable, and in the aggregate do not cover a length of more than 200 feet. The bridge-work over the two creeks will not exceed 190 feet, or eighteen spans of 10 ft. 6 in. each, while the height of the bridge over Algudgerie Creek is 6 feet, and of the bridge over Berrigan Creek about 4 feet. The line will follow the surface as nearly as possible. As the land is flat and not subject to floods it is proposed to lay the sleepers upon a rolled formation, or embankment, from about 6 to 18 inches above the ground, and 16 feet in width, ballasted to a limited extent, or possibly without ballast, and having drain openings at suitable distances for the passage of water. Drainage will also be provided by means of drains made in scooping the earth required for forming the permanent-way embankment. The sleepers will be half round instead of the square kind ordinarily used, and more numerous than on railway lines generally, as they will be laid about 18 inches apart, and about half the rails required will be second-hand—rails that have been in use on the railways of the Colony, but still in a very fair condition and quite suitable for the requirements of this line. The other portion of the rails used will be new 60-lb. steel rails. Station buildings and platforms are designed in a new and cheap form, all of timber. At Jerilderie the present station buildings will be sufficient for the line. At Berrigan a station building will be erected, and there will be a small waiting-shed and platform at one or two intermediate stopping-places. The platforms will be similar to some constructed in connection with the railway from Lismore to the Tweed, where they are no higher than nine inches above the level of the ground, and are kerbed. Wool-loading banks and sheep-yards are provided for where necessary. Fencing will be dispensed with except where it is almost impossible to avoid it. As it is intended that the trains on the line shall run in the day-time only, and at a slow rate of speed, the absence of a continuous fence each side of the railway to prevent stock from straying on the line is not regarded as likely to affect its safe working. Cattle-stops at suitable places will considerably lessen the risk of danger to the trains or injury to stock.

Estimated cost.

3. The estimated cost of the railway as first stated to the Committee is £43,543, or £2,061 per mile, which includes everything but land and compensation; but during the course of the inquiry it was explained that by omitting all or most of the ballast, and in lieu of ballast increasing the number of sleepers, the cost could be reduced to £1,800 or £2,000 per mile. The estimate first submitted is lower than that in the case of any other railway referred to the Committee or constructed before the Public Works Act was passed. The lowest estimate of cost per mile previous to that in the present inquiry was £2,409, the cost at which it was represented the proposed railway from Narrabri to Moree could be constructed. The reasons for the low estimate in the present case are to be found in the studiously cheap manner in which the several parts of the railway are to be carried out, supplemented by special facilities given to the Railway Construction Branch of the Department of Public Works by the Railway Commissioners in the form of very low freight for the carriage of materials required for the work. Originally it was estimated that the line would cost £2,511 per mile; subsequently this amount was reduced to £2,286; and then it was brought down to £2,061, and afterwards to £2,000, per mile, or less than the cost of constructing a first-class road from Jerilderie to Berrigan, which is given as £2,060.

Railway Commissioners' report.

4. In their report upon the railway the Railway Commissioners express themselves favourable to the line, but advise that its construction should be conditional upon the owners of the land through which it will go giving the land required for it. They estimate a slight excess of annual revenue over annual cost in the working of the railway. Taking the cost of construction, exclusive of land and compensation, at £43,543, the figures of the Acting Engineer-in-Chief, they set down the interest upon the capital expenditure at 3½ per cent as £1,523, and estimate the cost of maintaining the permanent-way and for traffic and locomotive expenses (one train per day each way, three days per week) at £1,550, which, together, make the estimated total annual cost £3,073. Against this the estimated annual revenue

from

from traffic is £3,083—passengers, parcels, and mails £415, and goods, live-stock, and agricultural produce £2,668, or a difference in favour of revenue of £10. The district which will be served by the railway, the Commissioners say, "is very fertile, and, no doubt, capable of considerable development if supplied with railway communication, so as to reduce the cost of getting produce to market"; but, besides developing the district, the line should enable New South Wales to retain a good deal of traffic which, under present conditions, passes into Victoria. Subject to the condition that the land required for the railway shall be given by the owners to the Government, the Commissioners strongly advise the construction of the line, and urge that it be put in hand without delay, and completed within a period of six months.

Points for the Committee to consider.

5. It was essential in their inquiry that the Committee should satisfy themselves as to the necessity of the railway to the district, the style of line proposed to be constructed, the likelihood of the railway paying expenses, and the reasonableness or otherwise of the condition mentioned by the Railway Commissioners that the land required for the line should be given by the owners of it free of cost to the Government.

The evidence in the inquiry.

6. The evidence which the Committee have taken supplies information upon all these points. From the Under Secretary of the Department of Public Works were obtained a general statement of the proposal and the views of the Minister for Public Works respecting it. The Principal Assistant Engineer and Acting Engineer-in-Chief, and the Chief Assistant Engineer for Railway Surveys, of the Railway Construction Branch of the Works Department, were examined respecting the route surveyed for the line and the details of the Departmental plans for its construction; and later in the inquiry the Engineer-in-Chief, who at the commencement of the Committee's proceedings had not returned to the Colony from a visit to America and Europe, also gave evidence on these subjects, and on that of cheaply-constructed railways in America. His evidence will be found both interesting and instructive. The views of the Railway Commissioners with regard to the railway, and the basis of their estimate of traffic results from it, were explained at length by the Secretary to the Railway Commissioners and the Railway Goods Superintendent; and the Acting Chief Draftsman of the Department of Lands was examined in order that the Committee might have accurate information before them as to the quantity of alienated and unalienated land in the district through which the line will go. Other witnesses called were the Commissioner and Engineer-in-Chief for Roads and Bridges, with regard to the cost of constructing and maintaining roads in the Berrigan district, and the surveyor who surveyed the proposed route for the railway. This brought the inquiry by the Committee to the appointment of a Sectional Committee and their visit to the Jerilderie and Berrigan districts. On the return of the Sectional Committee and the presentation of their report, the Engineer-in-Chief for Railway Construction, an officer of the Roads and Bridges Branch of the Department of Public Works, and a representative of the Railway Commissioners, were examined with reference to a deviation from the route which the Sectional Committee recommended. The Sectional Committee examined a large number of witnesses, taking evidence at Jerilderie, Berrigan, Finley, and Savernake.

The Sectional Committee's Report.

7. The report of the Sectional Committee is favourable to the construction of a railway between Jerilderie and Berrigan, but recommends a deviation from the proposed route with the object of avoiding as much as possible the severance of private land. It states that the Sectional Committee inspected the junction of the surveyed line with the present terminus at Jerilderie, in order to determine, "from personal observation, the value of the improvements upon the allotments traversed by the railway route, and to ascertain, as far as possible, the practicability of a starting point which would avoid the allotments," and that between Jerilderie and Berrigan the route was examined as to water supply and timber reserves along it or in its vicinity, and also with regard to the questions of earthworks, ballast, and the possibility of injury to the railway from flood-water. After this examination of the route, and the taking of evidence at Berrigan, it appeared desirable to ascertain whether the route could be altered so that, while the district was afforded the

required means of communication, there should be less severance of private property or necessity for the resumption of land; and a further inspection being made, it was found that, without difficulty, a route could be chosen which, while providing all the advantages in respect of construction, maintenance, and traffic, represented as obtainable in connection with the route referred to the Committee by the Legislative Assembly, would minimise the severance of private estates and very materially reduce the quantity of land it may be necessary to resume. Some of the evidence given before the Sectional Committee, and their report, refer to Finley, which lies 13 miles to the west of Berrigan, as the centre of an important agricultural district, part of which is not likely to be served by the proposed railway, and the Sectional Committee express the opinion that the construction of a cheap line of railway between Berrigan and Finley would be justifiable.

Railway communication with Finley.

Route recommended by the Sectional Committee.

8. The route recommended by the Sectional Committee (indicated on the plan by a green line) for most of the distance approximately follows the present main public road, and by altering the position of the present road where necessary to make it contiguous to the railway the road would be adjacent to the railway for the whole length of the line. The new route is about twenty chains longer than the route referred to the Committee.

Necessity for a railway to Berrigan.

9. The evidence of witnesses examined, and the report of the inspection made by the Sectional Committee, show that the district is extensively settled, that a very large portion of it is under cultivation, and that Berrigan will eventually be the depôt for a vast quantity of produce. The greater part of the country which will be served by the railway is in the county of Denison, the total area of which is 778,000 acres, 62,135 of this quantity being cultivated. Within a ten-mile radius of Berrigan about 35,000 acres of land are under cultivation, and the cultivated area is steadily increasing. Clearing, with a view to cultivation, is in progress throughout the district; and there is apparent among the proprietors of the large pastoral estates a tendency to cut them up and sell or lease them in small holdings. The Sectional Committee, as will be seen from their report, ascertained "that a large area of land suitable for farming settlement extends approximately from 9 miles south of Jerilderie, passing thence in a westerly direction to within a few miles of the present surveyed line from Jerilderie to Deniliquin, thence with a southward trend to within about 12 miles of the town of Deniliquin, reaching to the Murray on the south, and to the east embracing Clear Hills and Savernake, and extending eastward to The Rock." The proposed railway will not serve all the country so described, but this statement of the farming area in which Berrigan and its district are situated indicates the importance of this portion of southern New South Wales and its claims to railway facilities for its population of producers.

Description of a pioneer railway.

10. A pioneer railway, as this line is designated, differs materially from the railways hitherto constructed in New South Wales. It is described by the Railway Commissioners on page 23, question 688, of the evidence, as a cheaply made line, suitable for level country, where the traffic will not be great, carrying a light locomotive with the ordinary rolling stock, and the trains running in daylight only at a speed not exceeding 15 miles an hour; the permanent-way being capable of improvement to the ordinary standard at any time such improvement is warranted by an increase of traffic. The Engineer-in-Chief for Railway Construction explains it in the information he imparted to the Committee respecting cheaply-constructed railways in America. There the pioneer railway is conspicuous for the absence of ballast and fencing, the use of sleepers in larger numbers than on ballasted lines, the construction of wooden trestle bridges in place of bridge work of a permanent character, and the limited extent and inexpensiveness of the station and platform accommodation.

Pioneer railways in America.

11. The American plan of constructing one of these railways is, first to prepare an earth formation or low bank by excavating from ditches at the sides, the ditches afterwards serving for drainage purposes, as is proposed in the case of the railway to Berrigan, and then on this bank, formed only of excavated earth, to place flat sleepers, about 18 inches or 2 feet apart, and upon the sleepers the rails, which, being flat-bottomed, are laid directly on the sleepers, without a bed being previously cut for them in each sleeper as is done in New South Wales. Where bridges are necessary, small or large wooden trestle work is employed, and, except at the terminal

terminal stations, no elaborate station accommodation is provided. Platforms in most instances are merely wooden planks laid upon the ground, and at the railway termini they are raised but very little above the ground. The extra number of sleepers laid down compensates for the absence of ballast, and the use of bogies and centre buffers on the rolling stock makes the railway trains adaptable to an unevenness of surface or to sharp curves. As traffic on these cheaply made lines increases sufficiently to justify it the permanent-way is improved: ballast is put down, sleepers are renewed, heavier rails are used, and concrete or stone piers with iron or steel superstructures take the place of the wooden trestle bridges.

The expected traffic.

12. It has already been stated that the Railway Commissioners anticipate a profitable traffic upon the railway from the time of its opening. The data upon which the Commissioners base their estimate of the traffic was collected in the district by the Railway Goods Superintendent, and in his evidence before the Committee it is explained that the traffic will arise from the carriage of live-stock, wool, wheat, general goods, firewood, road-metal, passengers, parcels, and mails. The earnings are estimated on the following rates:—Live-stock, 7s. per truck; wool, 3d. per ton per mile; wheat, 2s. 6d. per ton; general goods, 3d. per ton per mile; firewood, 7s. 6d. per truck; passengers at 2s. and 3s. 6d.; and parcels, £25, mails, £242, and road-metal, £50, per annum. The area around Berrigan from which traffic will be drawn the Railway Goods Superintendent describes as between Savernake in the south-east, the border of Barooga in the south, and a point within 3 or 4 miles of Murray Hut or Finley in the west. The information collected by the Goods Superintendent appears to have been carefully obtained, with a desire to under rather than over estimate the capability of the district.

The land required for the railway.

13. The quantity of land it will be necessary to acquire in connection with the railway will not be very large. On the route for the line as referred to the Committee there is very little Crown land, and what there is consists principally of roads. The remainder of the land through which the route passes is private property, most of it portions of two large pastoral holdings. The recommendation of the Railway Commissioners, that the land required for the railway should be given to the Government free of charge, has received attention from both the Sectional Committee and the Committee as a whole, and no effort has been spared first to ascertain the views of the owners of the land on this point, and then to lessen as much as possible the quantity of land requisite for the purposes of the line. A few town allotments at Jerilderie, which the railway cannot avoid, will have to be purchased, but the value set upon them by their owners is insignificant. A larger sum is represented by the land through which the route has been surveyed after leaving Jerilderie. But, as mentioned in what has been said of the Sectional Committee's report, it was found practicable by an alteration of route to very much reduce the possible expenditure upon the resumption of land. The Sectional Committee found that the owners of the large estates were not satisfied at the manner in which their land was divided, and therefore were not disposed readily to accede to the suggestion that they should give the land required from them for the railway. The owners of the largest extent of land along the route informed the Committee by letter that the line would cut through much of their best country, and put them to great inconvenience and expense; and another large estate was similarly served. The route recommended by the Sectional Committee doing away with much of this objection, parish maps with the route as first proposed and the suggested deviation were sent with explanatory letters to the land-owners principally concerned. It was pointed out to them that the altered route represented a width of 3 chains throughout, embracing both railway and road, the intention being to have them contiguous, and that for this purpose the existing road, where any deviation was necessary, would be brought close to the railway. As by the new route there would be little or no severance of the large estates, it appeared to the Committee reasonable to believe that the owners would readily give the strip of land required from them for the portion of the railway and road which would pass through their property; and, at the same time, it was evident that should they refuse the expense of resumption would be very much less than was probable in connection with the route referred to the Committee. Letters have since been received by the Committee from the landowners written to favorable to the suggestion that they should give the land required from them in connection with the altered route,

route, and consequently there should be no difficulty in having this condition to the construction of the railway carried into effect. They express a desire that their paddocks and improvements shall be interfered with as little as possible, and their wishes in this respect will doubtless receive attention from the Engineer-in-Chief for Railway Construction when the line is being located. In surveying the line efforts should be made to meet the views of the landholders in every way practicable, and care should be taken to see that the land required for the railway is promptly and legally transferred by the owners to the Government.

Recommendation of the Committee.

14. The Committee are of opinion that a railway from Jerilderie to Berrigan should be constructed without delay, at a cost not exceeding £2,000 per mile, including all charges, and recommend that the route found by the Sectional Committee be adopted. This the evidence strongly supports. The district has undeniable claims to a railway, the cost of construction will be small, and the traffic prospects are satisfactory. The only matter of any difficulty in the inquiry has been that relating to the land required for the railway, and this is dealt with advantageously by the alteration of the route. The amended route virtually removes the question of compensation for land resumption from the inquiry. In addition to this it is approved by both the Engineer-in-Chief for Railway Construction, and the Railway Commissioners. The Engineer-in-Chief describes it as a very satisfactory route—altogether an improvement on what was originally proposed. If the line can be brought alongside the road, or the road alongside the line, it is far better, he says, than to adopt a route across the country. "If it can be managed that where the line diverges from the main road the position of the main road can be altered and brought on to the line, a great deal will be gained." That this can be managed will be seen from the evidence of the Principal Assistant-Engineer of the Roads and Bridges Branch of the Department of Public Works, who states that it may be done under the Act 4 William IV, No. 11, and that it will shorten the road by about a mile and a quarter. In his opinion the alteration in the position of the road will be much more advantageous than leaving the road as it is at present, and had he known of the existence of the bend which the Committee recommend should be done away with, he would, he states, have had the road straightened long ago. Everything else relating to the proposed work appears to be satisfactory. Cheapness of construction being new to the experience of this Colony in connection with its railways, some apprehension may be felt that the line will not be as stable and safe as it ought to be, but there is no real ground for fear in this respect. The evidence points to the belief that in ordinary weather there will be nothing in the manner in which the railway is constructed to interfere with its being worked effectively, and that in continuous or unusually wet weather all difficulty may be obviated by a little extra maintenance. Running the trains in the day-time only, and at moderate speed, will greatly diminish the risk of accident. The Engineer-in-Chief is not apprehensive of any interruption to traffic or of want of safety, for there will be nothing to prevent the line being kept to the required standard or improved at any time it should be necessary. He regards the railway, on account of its cheapness, as an experiment, but considers it one that ought to be tried in view of other lines of the kind being carried out in similar country where they are much needed.

Resolution of the Committee.

15. The resolution arrived at by the Committee was passed on 28 February, and is shown in the following extract from the Minutes of Proceedings :—

Mr. Davies moved,—"That, in the opinion of the Committee, it is expedient the proposed railway from Jerilderie to Berrigan, referred to the Committee by the Legislative Assembly, be carried out with the deviation recommended by the Sectional Committee, and at a cost not exceeding £2,000 per mile, to include goods and grain sheds, engineering charges, and all contingencies."

Mr. Lee seconded the motion.

Mr. Chanter moved,—"That the motion be amended, so that it shall read as follows :—That, in the opinion of the Committee, it is expedient the proposed railway from Jerilderie to Berrigan, referred to the Committee by the Legislative Assembly, be carried out with a deviation *via* Finley, and at a cost not exceeding £2,000 per mile, to include goods and grain sheds, engineering charges, and all contingencies."

The amendment, not being seconded, lapsed.

Mr. Molesworth moved,—"That the motion be amended by omitting the figures £2,000 with a view to insert £1,800."

The amendment, not being seconded, lapsed, and the motion was then passed.

Thos Chung

Chairman.

Office of the Parliamentary Standing Committee on Public Works,
Sydney, 28 February, 1895.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

MINUTES OF EVIDENCE.

RAILWAY FROM JERILDERIE TO BERRIGAN.

WEDNESDAY, 19 *DECEMBER*, 1894.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.
The Hon. William Joseph Trickett.
The Hon. James Hoskins.
The Hon. John Davies, C.M.G.
The Hon. Charles James Roberts, C.M.G.
James Hayes, Esq.
Robert Henry Levien, Esq.
John Moore Chanter, Esq.
Charles Alfred Lee, Esq.
James Gormly, Esq.
Edmund William Molesworth, Esq.

The Committee proceeded to consider the proposed Railway from Jerilderie to Berrigan.

Joseph Barling, Esq., Under Secretary, Department of Public Works, sworn, and examined:—

1. *Chairman.*] Have you a Departmental statement with regard to this railway which you would like to read to the Committee? Yes; it is as follows:— J. Barling, Esq. 19 Dec., 1894.

Proposed Railway from Jerilderie to Berrigan.

On the 18th of this month, viz., December, 1894, Parliament referred the proposed railway from Jerilderie to Berrigan for the consideration of this Committee in the following terms:—

"That it be referred to the Parliamentary Standing Committee on Public Works to consider and report on the expediency of constructing a line of railway from Jerilderie to Berrigan."

Before going further, I should like to explain that I have not gone very fully into the details of the history of this line, because I have hardly had the time. There are many papers on the file, such as letters from the Members of the district, petitions, and so on, to which I do not refer; but I will have a very complete *précis* prepared, which I will hand in later on. I think, however, that the statement which I am now reading will be sufficient to put the proposal before the Committee. The previous history of this proposal appears to be briefly as follows:—In January, 1891, a deputation, representing the Berrigan Progress Association and the Berrigan Tram League, was introduced to the then Minister for Works, Mr. Bruce Smith, and urged that a trial survey be made for a line between Berrigan and Jerilderie. The Minister replied that he could not give any decisive answer at that time, as the report of the Examiners of Public Works Proposals, on the question of proposed railways for Riverina, had not been received. In February, 1892, another deputation waited upon the Minister, Mr. Secretary Lyne, who had then succeeded Mr. Bruce Smith, and he informed them that he had received a protest from the Savernake and Murray Hut residents against the proposal, which showed that the people were not unanimous. He promised, however, that if no absolute determination had been arrived at within a reasonable time with regard to constructing the Rock to Murray Hut line, he would recommend that the Jerilderie to Berrigan route be adopted. The last deputation on the subject appears to be that which waited upon Mr. Secretary Lyne in May last, and the Minister then promised that if he were in office after the elections he would certainly advocate a reference of the proposal to the Public Works Committee. I should mention, however, that in the papers a notice appears of an interview with Sir Henry Parkes on the subject some years previously, but I have never seen the papers, which are not on the file. In October last the present Government came to the decision to refer the question to this honorable Committee, and the Railway Commissioners were accordingly requested to submit their report as required by the Public Works Act.

The official description of the line is as follows:—

Jerilderie to Berrigan.—Length, 21 miles 10 chains.

Estimated Cost £43,543, or £2,061 per mile exclusive of Land and Compensation.

This extension is proposed to be of very light construction, and begins at the present terminus of the branch line, Narrandera to Jerilderie, at 411 miles 75 chains from Sydney, and leads with slight divergence from a straight line to the township of Berrigan, where it ends at 433 miles 4 chains.

The line is on a dead flat throughout, so that grades, curves, and works generally, are very easy. The waterways crossed are moderate in size, and in the aggregate cover a length of 200 feet. The materials for construction, such as ballast and timber, are scarce.

J. Barling, Esq.

19 Dec., 1894.

The report of the Railway Commissioners is as follows :—

Office of the Railway Commissioners of New South Wales, Sydney, 4 December, 1894.

Proposed "Pioneer" line of Railway, Jerilderie to Berrigan, 21 miles 10 chains.

In accordance with the provisions of the "Public Works Act, 1888," section 13, we beg to report as under :—

Cost of Construction—

The Acting Engineer-in-Chief estimates the cost of construction of the line, exclusive of land and compensation, at £43,543

Annual Cost—

Capital expenditure at 3½ per cent.	£1,523	
Estimated cost of maintaining the Permanent-way and for traffic and locomotive expenses (one train per day each way three days per week)	1,550	
Total annual cost		£3,073

Traffic Estimate—

Passengers, parcels, and mails	£415	
Goods, live-stock, and agricultural produce	2,668	
Total revenue		£3,083

The district which would be served by the proposed line is very fertile, and no doubt capable of considerable development if supplied with railway communication, so as to reduce the cost for getting produce to market, which is now so much increased by the long cartage to the railway.

The line would also enable a good deal of traffic which now passes through Victoria to be retained to New South Wales.

We would draw attention to the following extract from our report, dated 29th December, 1888, upon suggested new lines of railways, in which we called attention to our views in regard to the free conveyance to the Government of all lands necessary for the construction of new lines of this character, viz. :—

"Looking at the fact that in nearly all cases in which reports have been made upon suggested railways the land has passed into the hands of private individuals, whose property will be largely enhanced in value by the making of the railways, and that the lines in themselves will not be self-supporting for a long time to come, we are of opinion that the land-owners in the respective districts should join together and arrange for the necessary land, free from all question of compensation of any kind, to be conveyed to the Government for the construction of the railway. This, in our opinion, should be a *sine qua non* in connection with the making of lines of this character."

We intimated to the deputation that waited upon us at Berrigan that we should advise the Government to make this a condition in connection with the construction of the line. We were given to understand that some of the land-owners had already expressed their willingness to give the land, and that probably the whole of those concerned would adopt a similar course.

Subject to this recommendation, we would strongly advise the construction of this line, and also urge that it should be put in hand without delay, and completed within a period of six months from the time of commencing its construction.

The Common Seal of the Railway Commissioners of New South Wales has been hereunto affixed by the Railway Commissioners in the presence of—

H. M'LACHLAN.

E. M. G. EDDY, Chief Commissioner. (L.S.)
W. M. FEHON, Commissioner. (L.S.)
CHARLES OLIVER, Commissioner. (L.S.)

With regard to the report of the Railway Commissioners, I may state that a preliminary report from them was received by the Minister, dated the 9th October, 1894, but as the subsequent report covers the same ground, I need not read it, but attached to that report are some interesting particulars with regard to the district to be served by the line, which, with the permission of the Committee, I will read.

The Commissioners say :—

For about 19 miles of the route of the railway the land is said to be eminently suitable for agriculture. The country too lying between Berrigan and the river Murray is also said to be very suitable for the same purpose. South of Berrigan cultivation is carried on to a large extent, no less than 16,000 acres being under crop, on the Barooga Pastoral Holding this season. The Berrigan township is small, having a population of 150 only, but the police district, which covers a radius of 8 miles, has a total population of 590.

Mixed farming is carried on, and it is found that this mode of farming enables more stock to be kept on the same area than was the case when the land was devoted exclusively to pastoral pursuits.

The figures gathered by the police during the last season indicated there were about 19,000 acres under crop within a radius of 8 miles of the township, and that the average yield was 13½ bushels per acre. It is said this year fully 27,000 acres will be under crop.

To the west of Berrigan is the town of Finley (late Murray Hut), distant 14 miles, and it is stated that within a distance of 7 miles 20,000 acres are under crop. The farmers of the district have bought freehold land at figures as high as £3 to £4 per acre.

It is stated that the construction of the railway would cause a very much larger area to be put under cultivation.

With regard to the portion of their report in which the Commissioners advise that inasmuch as the construction of this railway will largely enhance the value of private properties, that, in their opinion, it should be made a *sine qua non* that the land required should be given free, I am to say that the Minister fully concurs with this, and would make it a condition, precedent to the construction of the line, that all the necessary land should be conveyed to the Crown free of cost. This is a very important point, as I understand from Mr. Stopps, of the Lands Department, that the line will pass wholly through alienated land, except where it intersects roads and the Jerilderie Common.

This is what Mr. Stopps says :—

The proposed line of railway, Jerilderie to Berrigan, lies wholly within alienated lands except where it intersects roads and the Jerilderie Common.

That is all that I have to say at the present moment.

2. *Mr. Molesworth.*] Have you any idea whether it is intended to extend the line beyond Berrigan on to the Victorian border at any future time? I am not able to speak as to any future extension, because the Minister has given me no indication of what he proposes to do. But a proposal has been made to extend the line to Finley or Murray Hut.

3. You have no knowledge of any proposed extension to the Victorian border? Not at present.

4. *Chairman.*] *Via* Berrigan? Passing through Berrigan. If you will look at the report upon proposed railways for Riverina, laid on the Table of the House in 1891, you will see that Mr. Alexander, who was then one of the examiners of public works proposals, went into the whole question very fully. The conclusion he came to was that it would be desirable to take the railway from The Rock to Murray Hut, and he also suggested certain cross lines, of which the line to Berrigan is one. His final conclusion was

that

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19 Dec., 1894.

that it would be better to construct a line from the Rock to Murray Hut, because such a line would escape certain objections which he points out to the construction of these cross lines. The distance from the Rock to Murray Hut is 98¾ miles, and the estimated cost of the line £291,957, or £2,953 a mile. Mr. Firth, however, with whom I had a conversation, is under the impression that the cost could be brought down to £2,700 a mile. The members of the Committee may ask why it is that that line should cost more per mile than the proposed line to Berrigan. The explanation is that although all the country is pretty level, the route which a line from the Rock to Murray Hut would traverse, is rougher than the route from Jerilderie to Berrigan and more cutting would have to be done upon it. The Minister determined to submit this line because we are not prepared to consider at present the large cost which would be involved in the construction of a line from the Rock to Murray Hut. He has been advised by the Railway Commissioners, who are the proper authorities to give advice on this subject, that a line to Berrigan would meet the circumstances of the case at present, that Berrigan is in the centre of a thickly populated district, and that a railway to that place would bring railway communication to the door of a very great number of settlers who are cultivating a large area of land there. It would have the further advantage that it would be the means of bringing in traffic to the branch line from Narrandera to Jerilderie, the loss on which line is, according to the last report of the Commissioners, something like £14,806 per annum. It was these considerations which induced the Minister to give his adherence to the proposal which has been submitted to the Committee.

5. *Mr. Hoskins.*] How far is it from Berrigan to Murray Hut? About 13¼ miles. Questions have been brought before the Department as to whether it might not be desirable to take the line more in the direction of Murray Hut. There is a little more cultivated land to the west, but Berrigan seems to be about the centre of a district thickly populated with farmers.

6. *Mr. Davies.*] What is the annual loss on the Culcairn to Corowa railway? According to the Commissioners' report, dated 30th June, 1894, the loss on that line in the year ending December, 1893, was £7,818.

7. *Mr. Hayes.*] Proportionately, about the same as the loss on the Jerilderie line? Yes.

8. *Mr. Lee.*] Has there been any local agitation for this extension? Yes; we have had deputations and petitions, and letters, and, as I have pointed out in my statement, there have been adverse representations coming from Murray Hut on the one hand, and Savernake on the other. These people are anxious to have the Rock line carried out, because, as far as I can understand, they are afraid that, if the short line to Berrigan is constructed, it will have a detrimental effect on the proposal to carry out the Rock line.

9. Then this proposal does not emanate altogether from the Railway Commissioners? Certainly not.

10. The matter has been before your Department for some time? For some years previous to the date mentioned in my statement.

11. In fact there has been a continuous agitation for the extension of the railway into that district, some asking that it should be taken to Berrigan, some to Murray Hut, and some to other places? Yes.

12. Do the figures which you have just given us from the Commissioners' report show the total cost of constructing the line? As far as I am aware.

13. Do they cover the cost of the line, exclusive of bridges and waterways? I believe they cover everything.

14. Are you in a position to say? I should rather the engineers gave you the information; but I believe that what I state is correct. There are only two creeks of any importance to cross—the Berrigan Creek, near Berrigan, and the Algudgerie Creek, near Jerilderie. It may strike you that the cost is rather low; but I may mention that special facilities have been given to the Construction Branch by the Railway Commissioners in the way of very low freight. The Commissioners are going to supply us with over 10 miles of old flat-bottomed rails, at a cost of £3 a ton, delivered at Jerilderie. Rails for the sidings will be supplied for £2 10s. a ton, and a very low price will be charged for spikes and fastenings. For the new material which we shall have to send up—60-lb. steel rails—the Commissioners are only going to charge us 25s. a ton for carriage, and 2s. a ton for loading and unloading. Therefore, taking the cost of the rails at £4 10s. a ton, they will not cost more than £5 17s. landed on the spot. That is for the new rails. This is a very large reduction on the ordinary rate.

15. Because of the second-hand material supplied by the Commissioners, the cost of construction will be kept down? It will be considerably kept down.

16. Has the question arisen in your Department as to the policy of adopting a different gauge for the extensions of our lines? I do not know that it has been brought up lately. Of course the question of narrow gauge has been before the Department and the public for years; but I do not know that it has ever been seriously considered.

17. There has been no Departmental departure from the existing gauge? No.

18. *Chairman.*] Is there a very large supply of these old rails? I should think that what the Commissioners offered to supply would about exhaust the available stock. Otherwise I think they would have offered us more.

19. Do they belong to the Construction Branch or to the Commissioners? To the Railway Commissioners. Those that we have in stock are simply new rails.

20. Have you had any correspondence with the land-holders along the proposed route? I have heard nothing from the land-holders along the route, except that the Commissioners have said that a number of them had expressed their willingness to give their land for railway purposes, and the Minister is strongly of opinion that the work should not be carried out unless the land is given.

21. Still you have no statement from them? I have not. In the case of the Marrickville to Burwood-road line a provision was inserted in the Act of Parliament which authorised it, declaring that certain land was to be given free, and no contract was accepted until the land had been given. We have had to pay a very large sum of money for land in connection with that work; but it was for small portions which we did not expect to be given.

22. You recommend the same procedure in this case? Yes.

23. Have you any information with regard to the traffic at present going to Victoria? No; that will be dealt with by the Railway Commissioners. I have not had an opportunity of seeing them.

24. You desire to subsequently supplement your evidence? I should rather desire to subsequently put in papers giving the Committee a fuller account of the history of the line than I have given up to the present.

J. Barling, Esq. 19 Dec., 1894.

25. *Mr. Davies.*] What speed is it proposed to maintain on this line? I am unable to answer that question at present; but the information will be given by the Commissioners and the engineers.
26. Will trains running three times a week give an income of £3,000 a year? That is what the Commissioners say—"One train a day each way three days per week."
27. The rails that you speak of are old rails which have been supplanted by more modern rails? Yes.
28. They are not being used at the present time? I presume that they are not: but I have no particulars in regard to them beyond what I have given.
29. The cheapness of the line is based upon the fact that these rails would be used? To a considerable extent. The original estimate was appreciably larger than the present estimate, but we were able to reduce it because of the facilities offered to us by the Commissioners.
30. You have no information as to the probable traffic? No; Mr. Harper will give you that.
31. *Mr. Hoskins.*] Is it your impression from the conversation that you had with Ministers that the Government will not submit the proposal to construct this railway to Parliament unless there is a provision inserted in the Bill that the consent of the land-holders should be obtained for giving the land to the Government before the work is undertaken? I think that is the opinion of the Minister, though I should not like to make an absolute statement. There may be some small town lots in Berrigan which would be excluded, but I cannot say for certain what would be done. In the main it is the opinion of the Minister that it should be made a *sine qua non* of the construction of the line that the land should be given to the Government.
32. *Mr. Chanter.*] The Commissioners speak of this as a light line—what do they mean by that;—is it not to be of the same gauge or as heavy as the line from Narrandera to Jerilderie? Mr. Firth will give you more information about that. I suppose that what is meant is that the sleepers and ballast, and so on will be lighter.
33. Is it called a light line because old rails are to be used upon it? The term is used in connection with the sleepers ballast, and character of the stations, &c., but Mr. Firth will give you better information on the subject than I can.

THURSDAY, 20 DECEMBER, 1894.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	James Hayes, Esq.
The Hon. William Joseph Trickett.	Robert Henry Levien, Esq.
The Hon. James Hoskins.	John Moore Chanter, Esq.
The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Thomas Rhodes Firth, Esq., Principal Assistant Engineer, and Acting Engineer-in-Chief, Railway Construction Branch, Department of Public Works, sworn, and examined:—

T. R. Firth, Esq. 20 Dec., 1894.

34. *Chairman.*] Have you a Departmental statement to make with regard to this proposal? I have not prepared a statement, but I am ready to answer any questions which you may wish to put to me. I may say that I have not been over the country. My information has been obtained from the plans and reports which I have seen in the office.
35. Are the tracings and book of reference produced those prepared by your Department? Yes.
36. *Mr. Davies.*] You do not know the country? I have not been along the route of the proposed line, but I have been to Jerilderie, and round through Corowa to Deniliquin.
37. I suppose that country is somewhat similar to the country along the route of the proposed line? I believe it is.
38. What do you estimate the cost of the proposed line per mile? According to the revised estimate, it will cost £2,061 per mile, including station accommodation, water supply, and everything else.
39. Except land? Of course. We do not take land into consideration in making our estimate.
40. Do you provide for fencing? For partial fencing. We do not intend to fence the line, except where it is almost compulsory—through small paddocks, for instance, or in cases like that.
41. And will £2,061 per mile cover the cost of such fencing as may be required? Yes. I have allowed £1,000 for fencing where required along the route. The original estimate for the line, which was made in March, 1893, was £2,511 per mile. In October last I made another estimate, revising the plans, and, having in view a lighter class of line, which came to £2,286 per mile. Since then, however, I have had two or three interviews with the Chairman of the Railway Commissioners, who has made several concessions in regard to freight and other matters. Mr. Eddy proposed to let me have 10 miles of second-hand rails—they are not worn-out rails, but rails in a very fair condition, which the Commissioners wished to replace with heavier rails, and he agreed to deliver those rails at Jerilderie for £3 per ton. In my other estimate I allowed for new rails costing about £6 4s. per ton.
42. That is new steel rails? Yes. Of course Mr. Eddy agreed to accept these old rails when laid. This arrangement makes a considerable reduction in the cost, but he also promised to reduce the freight on the new rails which I had originally calculated would be 1d. per ton per mile.
43. That is the rate which you have been usually charged hitherto? That rate has been charged, but it is not the rate at present in the books. It is the rate, however, at which I made out my first estimate. The Commissioners promised to reduce the rates on the 60-lb. rails from 34s. to 25s. per ton. That was another big concession. Another advantageous arrangement was made in connection with the wool loading banks at the stations, which are rather expensive when we have to put them up with new timber. Mr. Eddy offered to put them up himself at a much lower price than we could do the work, using new timber, because he would use old sleepers, which would make quite as good a job, and would not cost so much. He agreed to do this work at a stated price, which I have included in my estimate. Then again, I allowed for a large tank to hold 20,000 gallons of water. We have generally been in the habit of making

making tanks like that, because it has been found that they hold a sufficient supply; but Mr. Eddy told me that a smaller wooden tank with a small engine would do just as well, so that we can make a saving of £700 or £800 there.
44. *Mr. Chanter.*] Where would that tank be made? At Berrigan. Those are the principal items in regard to which the Commissioners have made concessions.
45. *Mr. Davies.*] Do I understand you to state that in consequence of these concessions you have been able to reduce the cost of the line from £2,286 per mile to £2,061 per mile? Yes; they make a difference of £225 per mile.
46. Where do you propose to get your water supply from? I am told that water is to be obtained at Berrigan by sinking. I was told that there is a well there which we can get, and which will give a sufficient supply.
47. Has there been any boring to prove that? The well is now in existence, and is used by some of the townspeople. Mr. Eddy told me of it.
48. Do you know, of your own knowledge, that there would be a permanent supply? No.
49. Are the second-hand rails to which you have referred single-headed or double-headed? Single-headed 70-lb. iron rails.
50. Does £3 per ton cover the cost of chairs? There are no chairs.
51. Will that amount include the cost of all the fixings? I have made arrangements to get the fastenings, fish-plates, and bolts at a very low price.
52. Have you a detailed statement of your prices and quantities? I only had time this morning to scribble down the few figures from which I am quoting, but I could furnish the Committee with any particulars later on.
53. At what speed do you propose that engines should run over the line? There would be no objection to their running at 25 miles an hour in good weather.
54. The gauge would be the same as on the existing lines? Yes.
55. How much ballast do you propose to use? Five inches under the sleepers, and 2½ inches up the sleeper. There would be 7½ inches of ballast in the middle of the road.
56. Where do you expect to get it? I am told that we can get ballast near Berrigan.
57. You have no knowledge of the place yourself? No.
58. Who could give us the information? Mr. Burge. He has been through the country, and he says that this is the only place that he is aware of where we can get ballast.
59. Did he make the survey? He was in charge of it. He has been through the country, and reported on the survey.
60. Have you anything further to communicate to the Committee in regard to the line? I suppose I should inform you that it is proposed to use half round sleepers instead of the square sleepers which we ordinarily use.
61. What are called undressed sleepers? Well, they are not squared up. There must be at least 5 inches squared on the top to carry the rail, and not less than 4 inches of solid timber, the base of the sleeper being 9 inches broad.
62. Do you know that there is a supply of good timber in the district? I expect that we shall get it most cheaply from the Murray. We cannot insist on having ironbark sleepers for the price set down. I think that red gum will be about the only timber which we can get down there that is fit for sleepers.
63. You are quite of the opinion that £2,061 per mile will cover the cost of the line, including station accommodation, water supply, and everything else? Yes; station accommodation is to be provided according to the Commissioners' requirements. We are not always in a position, when making our estimates, to know what these will be, and we have to go on precedent, averaging the cost of stations which have already been made; but in this case I went through the matter with Mr. Eddy, and he gave me a description of the buildings that he wanted, upon which we put an approximate value, so I have every reason to believe that the estimates will be pretty correct.
64. Will wooden buildings be put up? They will all be timber buildings.
65. What is the total estimated cost of buildings, platforms, and stations? We shall not erect proper platforms, but we shall do somewhat the same thing as we have done in the case of the Tweed line. There the platforms are raised only 9 inches above the level of the road, and are kerbed, American cars being used, with a lower step extended out a little further than is usual, so as to hang over the kerb, and enable the passengers to step down easily. There is a big saving by doing without platforms, especially in flat districts, where we often have to raise them nearly 5 feet above the formation. That runs into a lot of money.
66. What do you estimate the cost of the station buildings to be? I have put down £471 per mile for earthworks, box drains, and bridges, cattle stops, level crossings, and fencing. Then the rails themselves would cost £532 per mile—that is, taking the average cost of the 10 miles of old rails and the 11 miles of new rails. The cost of ballast and sleepers, and of laying the road, will be £667. To those items I have added 10 per cent., so that the estimate includes £471 for the line itself, and £1,319 for the permanent-way complete per mile, making £1,790 per mile without stations, supervision, or any extras.
67. How long would it take to construct the line? If we get American graders to do it, it ought to take about six months, but it would depend upon the weather. If American graders are used, it may reduce the cost a little; but I feel satisfied that the work can be done for the estimated amount.
68. You regard the estimate as a full one for work of this character? I do.
69. *Mr. Hoskins.*] Have the Department made detailed surveys of the route? Only a trial survey has been made.
70. How long would it take to complete the detailed surveys? We could call for tenders in about five or six months.
71. Supposing Parliamentary sanction were given to the work, tenders could not be called within a less time than five or six months? Not advantageously. I could put on more surveyors, but it would not be profitable, having regard to the ordinary cost of surveying. There is room for two men there, and if you put on four they would only be doing three men's work.
72. Therefore the Berrigan people cannot, under any circumstances, get a railway within less than twelve months? No.
73. *Mr. Molesworth.*] What do you understand by a pioneer railway? Well, I am not the godfather of the

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the term, but I understand it to mean that this is the first of a light description of line made in the Colony.
74. By a pioneer line you mean a light line? A lighter line in embankments and cuttings. The line will follow the surface as nearly as possible.
75. Do you propose to ballast the line fully? Not fully, only to the extent which I have already described.
76. Have you any idea of the character of the soil there? I believe that it is a clayey soil.
77. Do you consider the ballast sufficient for that class of soil? I think so. If very wet weather comes on, they will have to run the trains very slowly. I cannot guarantee this line as I could guarantee a line costing £4,000 a mile. In the latter case we should keep the embankment up so that the floods could not affect it.
78. Then on the proposed line in bad weather you will either have to reduce your speed or increase the quantity of ballast? Perhaps we shall have to do both. If the ground became very soft, the line would sink; but as the route is very straight you could a run a train over it, if you did not go fast, even when the line was going down. Of course it would have to be lifted again, but there would be no real danger in going over it the first time.
79. I suppose there are a few short grades on the line? They can scarcely be called grades, they are so flat.
80. There is nothing of importance? No.
81. The line will be practically unfenced? Yes; if we find that we can run along the side of some of the existing fences, we shall do so. Of course, if a property owner insists on our fencing on the other side, there will be the question whether it is better to fence or to pay extra compensation.
82. How many stopping places do you propose to have? Two besides Berrigan. The first would be 5 miles from Jerilderie.
83. What name? I do not know that it has a name. It would be near Wunnamurra. The next stopping place would be 13 miles from Jerilderie in the parish of Mairjimmy. There is a road running through at those places.
84. The estimated cost will include everything which you can possibly allow for at the present time? Yes; so far as I know.
85. You do not think that any serious amount will have to be provided for contingencies? No.
86. What do you estimate the life of the second-hand rails which you propose to use? Well, if they are in the condition which I expect they are, trains running over them at the present time, I suppose they will be good for twenty years, with such traffic as there will be on the proposed line.
87. You feel confident that the work can be done without meeting any serious difficulty? Yes; I do not anticipate any difficulty. It is about the most favourable part of the country I know in which to make a cheap line. There are only two creeks to cross, and the rest of the country is very favourable. I expect, too, that labour will be cheaper there than in any other part of the country.
88. Will the bridges be expensive? No; though they are rather wide creeks. There will be eighteen spans, each 10 ft. 6 in., for the two bridges—190 feet of bridge-work altogether.
89. *Mr. Trickett.*] Is the proposed line of the same type as the Narrandera to Jerilderie line? No; it will be a much cheaper line. I have not been over the Jerilderie line, but I know the type—it is the old standard type.
90. Will the proposed line carry the same engines and the same traffic as the Jerilderie line? No, I do not think it will. On the Jerilderie line the rails are heavier, and I think the sleepers are a little bit closer.
91. Do you know if the heavy engines run from Narrandera to Jerilderie? No, I do not; but I think the road would carry them. I have not been over the line, and I have not seen the plans of it. I am merely judging it because of my knowledge of the description of the work which we used to do at the time that line was made.
92. Then if the Berrigan line is to be a lighter line, will not that necessitate a change of engines at Jerilderie? Not unless the Commissioners are in the habit of running very heavy engines over the Jerilderie line, and I do not think they are. The proposed line will carry the kind of engine they are now running from Orange to Forbes. I believe the Jerilderie line is capable of carrying the biggest engines; but I do not think they ever use them there.
93. It would be undesirable to have to make a change at Jerilderie? Yes; because you would require another set of engines, and an engine-shed.
94. Is there any official who could give us information in regard to this matter? Mr. Harper could tell you the size of the engines which they are running to Jerilderie now. I feel certain that there is not the traffic for the big engines there.
95. Who made the trial surveys to Berrigan? I do not remember. It is more than two years since it was made; but Mr. Burge will know who made it, and where the surveyor is now.
96. Are there any curves on the line? There is one of about 12 chains radius near Jerilderie. That is about the only curve worth calling a curve.
97. Why is it necessary? To get away from the station. The line runs almost at right angles with the direction of the station. By taking it out in this way, you will save an extra siding, and an extra set of switches.
98. Is the country through which the line will pass clear, or is it covered with scrub and trees? I think a great lot of it is clear, and a part of it is open scrub; but it is not timbered. I do not think you get any heavy timber in that part of the country, until you get right on to the river flats.
99. *Mr. Hayes.*] This is one of the first lines you propose to make on the new system—it is a cheap line for agricultural produce? The Narrabri to Moree line will be made in the same way.
100. As far as grades are concerned, was not the Jerilderie line as easy to construct as the present line? I do not know what the grades on the Jerilderie line are, but I should think there would be one or two small ranges to cross, whereas there is nothing of that kind in this case.
101. The class of engines used on the Jerilderie line could travel over the proposed line with perfect safety? Yes; I feel almost certain that the engines they use there now would run right on. I think that if it was intended to run heavy engines over the line Mr. Eddy would have pointed it out to me when we were speaking about the spacing of the sleepers.

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102. This will simply be a continuation of the Jerilderie line, and the engines used on that line will run right on? Yes, I believe so.
103. You propose to have no station buildings at the intermediate stopping places? Just small waiting-sheds and a kerbed platform, with a grain-shed at one place.
104. Have you seen the American graders at work? No, I have not.
105. Do you know anything about the working of them? I have a very good idea as to how they work. They are very satisfactory where there is not much timber.
106. What is the estimated difference between the cost of forming with these graders and the cost of ordinary formation? I can hardly say. If you believe the Yankees, the graders will do it for about ¼d. per yard, and by hand it can be done for 8d. or 9d. per yard. The cost of such work, using the graders, is anything from ¼d. up to about 6d. per yard.
107. Do you know that there are some of these graders now at work in the Colony? I believe that they have them down there for forming the roads.
108. The Municipal Council of Jerilderie has had one in use for some time, and it works extremely satisfactorily. If they were used in the construction of this line, would the cost be reduced materially? Yes; though that would depend upon the quantity of timber and stumps there are. You must clear out the stumps before the graders can work, and sometimes the money you have to spend in getting out roots and stumps is as much as would pay for the extra cost of doing the work by hand.
109. Have you calculated whether red-gum sleepers could not be got cheaper from the coast than from the Murray? I think they could be got much more cheaply from the river. The cartage will only be about 15 or 20 miles.
110. That is from Cobram? From the banks of the Murray. You could not get them from the coast for anything like that.
111. Have you tried box for sleepers? If there were box we would take it for sleepers. It is a good timber when free from sap. The difficulty is to get the sap out of it.
112. I suppose you are aware that there is a good deal of box timber in that country? Yes; and if you can get it big enough to give three sleepers from a tree and free from sap, it does very well.
113. If you could get such sleepers there, it would help to lower the cost? I do not expect to save much on my estimate. I expect the sleepers will cost 2s 6d. on the ground. I do not think they will cost more, but I do not expect to save much upon them.
114. You say that there is no ballast to be got except at the terminal point? I am told so.
115. That would make it rather costly? It will add to the expense. If the ballast had been closer, I should have put down about 6d. per yard less for it. I think I have allowed about enough for ballast.
116. Since this country is practically level, could not the line be permanently staked in less than six months? I am going to put on two surveyors, and I think they ought to do the survey in from three to four months. There is not only the staking of the line that has to be done, but every one of the boundaries has to be picked up and surveyed, and put on to paper. You can only put a certain number of men on at this work, and I do not think it would be safe to say that it could be done in less than six months. You would have to get your sleepers on the ground, obtain your ballast, and make a great many other arrangements.
117. This is an agricultural district, and according to your statement it would be impossible to get the line ready for the next harvest? I do not think it could be done.
118. But if it were absolutely necessary to have the line ready then, you could reduce the time considerably? Yes; I could reduce it by putting on more men. If Parliament sanctioned its construction at once, and we had fine weather, I think we could get it ready in twelve months.
119. *Mr. Lee.*] Can you give the Committee any evidence in reference to the provision which you have made for waterways? The waterways to be provided are box-drains. We always cover these drains in, and on the old lines we have built them of concrete right up to the top of the earthworks; but such drains are very expensive, and I am having a drawing made of a cheaper kind made of timber, which will answer the same purpose. I intend to have a slight embankment all the way along—6 inches above the surface in the middle, and tapering off to nothing. To get the material for the embankment we will make a small drain on each side of it. That will help to keep the formation dry, and we shall have drains through it from one side to the other.
120. Will you have a sufficient fall to carry the water away? Well the country is so flat that the water would have to stand; but we shall make openings in the embankment sufficiently close together to allow it to get through.
121. Will the embankment be high enough to protect the line in very wet weather? I would not guarantee it to be high enough in very wet weather.
122. The water might then be over the line in some places? I do not think that it will get over the rails, but it may get over the ballast. It may, and I expect that it will, make the embankment so soft that in very wet weather the trains will have to travel very slowly, and probably have to stop running for a day or two.
123. Have you any record in your office of the flood levels in that district, or of the fall of the water? We know the flood levels of those creeks. That is the only place where any water is seen at all; but there is no current there.
124. Are there not some swamps along the line? There is one swamp, but the water there is stationary.
125. What will be the position in wet weather? The embankment will be more than 6 inches high where the swamps are. You can scarcely tell which way the water falls there, for in point of fact it hardly runs at all.
126. Are there any permanent tanks—station tanks—along the line of route? There are some tanks, but I cannot say whether they are permanent or not. They are shown on the map.
127. Is there any danger of the large bodies of water conserved in these tanks flooding the line at any time? Not unless the dams burst, and we could not make the embankments strong enough to resist the water in that case.
128. What would be the result if the dams were to burst? The line would be washed away.
129. You make no provision against that? I do not see that we could. If some of the big dams burst they would take the line away, even though the embankment were 3 feet high.
130. Would it not be rather a costly matter to replace the line? It would not be so costly a matter to

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replace a cheap line as to replace a good line. The water would simply carry the ballast and formation away.
131. Are the wool stages you have spoken of to be erected upon the platforms? They are platforms upon which the drays can be drawn so as to bring the wool above the level of the trucks.
132. Is not all the country through which the railway will pass freehold? All except the commons.
133. And fenced? I believe it is all fenced on one side.
134. I suppose there is a lot of stock there? Yes; but I do not think the fencing will matter much where it is grazing land. We will put up cattle stops at the cross fences. It must be remembered that the line will only be worked in the daytime. It would not be safe to work an unfenced line in the dark.
135. Have you included the cost of stockyards in your estimate? I have provided for sheep-yards, but not for cattle-yards. I was told that cattle-yards would not be required.
136. I suppose that £2,061 per mile is about as low as you can bring the estimate? Yes, that is the lowest estimate that I would give.
137. What reason have you for supposing that you would get the line constructed for that? Well, take the contracts that we have had carried out recently—take the Milson's Point line.
138–9. Any other? Yes; three contracts were let on the Lismore to the Tweed Railway for less than the estimate.
140. For less than £2,061? No. What I mean is that in the case of other lines, we have had the work carried out within the estimate.
141. But it is usual to allow a margin? I have put on 10 per cent. for that. It is included in the estimate. I have put on £500 for miscellaneous requirements—I do not know what they will be, and I have put on 10 per cent. for supervision and contingencies.
142. Can the Department assure the Committee that the work can be carried out for the amount you have named? I think the Committee will be perfectly safe in recommending the construction of the line. I do not see any reason whatever why the estimate should be exceeded. If it is exceeded it will only be because of somebody ordering us to depart from the contract.
143. The cost of so small and easy a work as this ought to be calculated very readily? Yes.
144. If it were a larger work with heavy grades and bridges, you would require a larger margin? Of course we should be more liable for contingencies. It sometimes happens that slips occur in deep cuttings which we could not possibly expect or provide against.
145. Have any of the owners of property along the line offered to give the Government the land free of cost? I am not aware.
146. The last point to be considered is the time which will be occupied in the construction of the line? If it is necessary that the line should be finished by the end of next year, and we know this early, I think it could possibly be done in time; but if it is a couple of months or so before we get instructions about it, it cannot be done in time.
147. With fair weather there is a possibility of doing it within nine months? Within twelve months.
148. The Commissioners state that the work could be completed within six months? Well let them do it. They have not done any of this work yet.
149. Your opinion is that it would take about twelve months if the weather is good? Yes. I do not see why it should take longer; but I do not think it is any use promising it sooner.
150. *Mr. Gormly.*] The two creeks which you would have to cross would not require culverts of any considerable height? No.
151. Will you give us an idea as to what height they would have to be from the bottom of the creek? The first bridge—that over the Algudgeric Creek—would have to be about 6 feet high; that is, the under side would be about 5 feet above the ground. There is a dam over that creek, so that we shall save part of the bridging there. The bridge over the Berrigan Creek would be about 4 feet high.
152. You can easily estimate the cost of such structures? Yes, it is a very simple matter. Besides there would not be much current.
153. And it would be very easy to estimate the quantity of earth required for the embankment? Yes. We propose to adopt a new system in letting the contracts for this line. Formerly the work has been paid for by cubical measurement, the earth being taken from the sides, or from the cuttings, and used for the embankments; it has all been paid for at so much per cubic yard. In this case it is proposed to let out the work at so much per lineal yard.
154. I suppose you have seen ploughs and scoops used for such work as this? Yes.
155. From your knowledge of this class of country, could the work, if not done by graders, be done with ploughs and scoops? Yes.
156. That would be cheaper than to use drays and picks and shovels? Yes.
157. This is a class of railway of which it is easy to estimate the probable cost? Yes.
158. Where it is found necessary to erect a fence, a wire fence would do? I think so. That is what I intended.
159. For how much a mile do you think a six-wire fence could be erected in that part of the country? It might be put up for £65 per mile—it ought to be done for 4s. 6d. per rod.
160. Do you not think that it could be done for much less than that? I have heard squatters talk of getting it done for £25 per mile, but we can never get it done for less than the sum I propose.
161. A ton of No. 8 wire does about a mile of fencing. If you found it necessary to fence part of the line, the fencing would not be very expensive? I have allowed £1,000 for it. I could not form any idea as to how much would be required, so I put down that amount. There may be a balance, and, at any rate, I do not think it will be very much exceeded.
162. Do you think half the line could be fenced with a six-wire fence for £1,000? That would be £50 a mile for each fence. It could be done for that, but I feel certain that we shall not have so much to do.
163. You think you have left a sufficient margin to pay for the erection of any fencing which may be necessary? Yes; the line will follow the road for a good way at the lower end. There are fences up there now, and I will not move them.
164. Do you not think it would be safe to run trains on that line at night, even without fencing? Not if there were cattle.
165. You are not aware whether there are cattle? No; but I presume that it is all grazing country.
166. Would there be much danger in running over an unfenced line in sheep country? Yes; both cattle and sheep are very fond of leaving the grass to lie upon the ballast.

167.

167. *Mr. Chanter.*] As far as I can understand the difference between the Jerilderie line and the proposed line consists in the difference in depth of ballast and in the quality of the sleepers? And in the height of the embankment. The waterways would also be different. There would be no concrete or brick culverts.
168. You would only require to add to this line in those particulars to make it a permanent line? Yes.
169. What is the total cost of the buildings? £5,180.
170. That would leave the cost of the rest of the line about £1,800 a mile? £1,790 a mile.
171. I notice, on looking at the map, that the proposed line does not go by the side of the paddocks. I understood that you presumed that one side would be fenced? At the Berrigan end I believe that it will be fenced for a mile or two.
172. But from Jerilderie to within 5 or 6 miles of Berrigan, you will be running through the middle of the freehold land? Yes; it is only about Berrigan that the line would be fenced. Of course in doing the permanent staking we might diverge 2 or 3 chains.
173. But that would not make much difference? Not very much. It is not worth speaking of, perhaps.
174. What width of land do you propose to resume? We generally take about 2 chains when going through private property.
175. You are not in a position to say what it is proposed to take in this case? No; but we will take about that width. We take more when going through Crown land.
176. Would you not require a bond from the owners of the land through which the line will pass, that no claim shall be brought against the Government for any injury that may be done to animals in the paddocks? I do not think so. Besides, the trains will run in the day time, and at a slow rate of speed, so that the driver will be able to see if there is anything on the line, and pull up in time. The line from Nyngan to Cobar is not fenced.
177. Cattle and sheep will camp upon the ballast in the day time as well as at night? Yes.
178. Supposing a flock of very valuable stud sheep, at lambing time, were camped on the line, they could only be frightened off with the whistle? Yes.
179. And supposing in the hurry some of them were injured or killed, would not a claim be made against the Government? Accidents happen even when a line is fenced, and the Commissioners have to pay damages.
180. But if stock trespass on a line when it is fenced, the owners are liable? The Commissioners will have to be responsible for any accidents which may occur if the line is not fenced, and they must run their trains with sufficient care to prevent accidents from occurring.
181. *Chairman.*] Is it your opinion that if a Government engine travelling over Crown land injures anything trespassing there, the Government can be held responsible? Yes; I take it that every man is supposed to fence in his land. Besides, the Government will only purchase this land by compulsion. If you could make an agreement with the owners of the land that they would take all risks, it would be another thing.
182. By whatever process the Crown obtains the land, it becomes Crown property, and anything trespassing on it has no right there? That is so.
183. How then could the Government be held blameable for any accident that might take place;—what is the position at the present time if sheep trespass upon your property? I think that as a railway is a source of danger, the Government, if it will not fence it in, will be liable for any damage it might do to stock. However, that is a legal question.
184. *Mr. Chanter.*] Did I understand you to say that if at any time it were necessary to fence in this land, it would cost £60 a mile? That is my approximate estimate for every class of fencing.
185. What class of fence would you propose? A 7-wire fence.
186. With a top rail? No.
187. You have not had any experience as to the cost of fencing in that district, except in connection with the Jerilderie line? No; and I do not know what the fencing on the Jerilderie line cost. I do not know whether those fences are 7-wire fences, or fences with two rails and four wires. That is the kind of fencing which used to be put up about the time that line was made.
188. The Department in inviting tenders for the construction of the line would include fencing? We should have a schedule of prices prepared with the different kinds of fencing. Where we cross a man's garden, which is paled in, we have to put up a paling fence, and so we provide for fences of different descriptions.
189. Would not the Department save considerably by inviting separate tenders for the construction of the roadway and for fencing? As a rule, I believe it is cheapest to include the fencing. A large contractor will probably not commence the fence until he has got his rails laid and he can then carry the fencing material along the line wherever he wants it at a fraction of what it would cost to cart it.
190. Are you aware that the maximum cost of the kind of fencing to which you have referred does not exceed £40 a mile in that district? Very probably. I should not be surprised to hear it.
191. Something over 10 miles of the road will be laid with new rails—what weight will they be? They will be 60-lb steel rails.
192. Will they be of a similar quality and design to the old rails which the Commissioners are to supply? The same type of rail exactly, but a little smaller.
193. What do you think is the difference between the life of the old rails and the life of the new rails? Probably seven or eight years.
194. What would be the increased cost of laying the road entirely with new rails? About £200 per mile.
195. Where do you propose to get your sleepers? I think we could get them from the banks of the Murray.
196. Are you aware that it is 23 or 24 miles from Berrigan to the Murray? I calculated on from 18 to 20 miles of cartage.
197. But you must remember that the sleepers would have to be got a considerable distance from the river;—is there not plenty of red gum on the Murrumbidgee at Narrandera? We might get sleepers there, but the freight would come to more unless the Commissioners gave special concessions. The freight would come to about 5½d.
198. What do you estimate the sleepers will cost each? Two shillings and sixpence delivered on the line. They would not cost more than 2s. 4d. if not delivered.

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199. Do you think that it is good economy where it is possible to get a thoroughly sound regulation sleeper of matured timber to take a cheaper sleeper of sapling timber. I suppose these sleepers would practically be saplings sawn down the middle? They would probably be split. There would be about three in a tree.
200. You are aware that red-gum splits very badly? Yes; but the sleepers are generally taken from large trees.
201. The regulation sleeper is about 9 by 4? Nine by four and a half.
202. Do you not think that regulation sleepers could be supplied from the sawmills for very nearly the same price as these? I am afraid not.
203. You might get some information on the subject from some of your officers? I will try to do so. It must be remembered that sawn sleepers are very likely to split, and although you may get them delivered for 1s. 9d., when you come to put them down you may find 25 per cent. of them split.
204. There is a timber reserve about 10 miles south of Jerilderie, on which there is a considerable quantity of box. If good sleepers could be obtained there, would not that lessen the cost? It would depend upon the distance you had to cart them. If you can get them for 3d. less each, there would be a saving of about £25 per mile. I should not, however, like to alter my estimate on the chance of it.
205. Can you tell the Committee how far from Berrigan the ballast supply is of which we have spoken? I am told that it is within a mile of Berrigan. Mr. Burge has seen it; I have not.
206. How would the Department obtain it,—by running a tramline out? I think the contractor would probably find it cheapest to run a temporary line out.
207. How near to Jerilderie is ballast to be found on the Narrandera line? I do not think there is much ballast along that line, though it is nearly twenty years since I was across there. I do not remember seeing any ballast near Jerilderie.
208. There is a large quantity of ballast between Jerilderie and Narrandera, right on the line? I do not know anything about that.
209. Do you not think that coarse gravel could be used with advantage instead of costly metal ballast? We take gravel now, where we can get it.
210. Have you any knowledge of the kind of ballast used on the private line from Deniliquin to Moama? I know that when that line was first made, sand was taken up from alongside the embankment and thrown on the top.
211. It is a coarse sand obtained a few feet below the surface. Where it is very costly to obtain ballast—as in the case of the proposed line—would it not be wise economy to use sand? I am quite prepared to accept ballast inferior to that which we have used hitherto. I fully expect to be obliged to take it.
212. Perhaps Mr. Burge will be able to inform the Committee as to what tests he has made along the route in regard to ballast? I do not think that any trial holes have been sunk.
213. Are you aware that the Mines Department have endeavoured to obtain water at Berrigan by sinking in certain parts of the town, and have failed? No.
214. Supposing it were not possible to obtain water just where you require it, could the engines carry sufficient to take them from Jerilderie to Berrigan and back? Only with a light load. They could with a three-quarter load.
215. On Travelling Stock Reserve 1,111 there is a permanent well. In the event of water not being obtained at Berrigan, what would it cost the Department to put a pump there and convey the water by pipes to the line. The distance would be about a mile? It would not cost very much. A possibility that struck me was, the putting of a dam on the Berrigan Creek. There is a dam there now, just where we propose to cross, and before I heard of the water at Berrigan it was my intention to make a tank in the bed of the creek.
216. If water cannot be obtained at Berrigan you can make ample provision for obtaining it either from the creek or from the public well I spoke of? Yes.
217. In regard to the wool-loading platform, do I understand that it is simply proposed to face the earthen embankment with sleepers? [*Witness showed by drawing how he proposed to construct these embankments.*]
218. How high will they be? 3-ft 6-in.
219. Have you taken into consideration the question of cheapening the earthworks by using American graders? No.
220. Have you calculated upon doing the earthwork with the help of pick and barrow men, or do you propose to use scoops? The ordinary pick and barrow men.
221. You are aware that scoops are now very largely used where men were formerly employed with picks and shovels and wheelbarrows? Yes.
222. That cheapens the work considerably? Yes.
223. The work would be done more cheaply if scoops were used? There would be some money saved for any little extras, such as putting on more ballast, if it were required.
224. In the case of this line there is practically nothing to do except to form the road and lay the rails? Yes, and clear the scrub away.
225. What you call bridges are only culverts? There will be about 190 lineal feet of bridge-work over the two creeks.
226. *Mr. Roberts.*] Have you estimated for a single line or for a double line? For a single line.
227. Is the Jerilderie line a single line? Yes.
228. What would be the probable cost of continuing the Jerilderie line as constructed to Berrigan, exclusive of land resumption and compensation? Probably £500 or £600 a mile more.
229. So that if the line is carried out as proposed, there will be a net saving of about £12,000? Yes, about that.
230. *Mr. Humphery.*] What is your reason for inviting tenders for the work at so much a lineal yard, instead of at so much a cubic yard? I think the contractors will do it for less, and we have generally found some trouble in arranging the cubical measurement. Where we have provided for an embankment of 9 inches or 12 inches, there may occasionally be a few yards where the ground drops; and the contractors always charge for the extra amount of material required, and we have lot of trouble with them. Then hitherto we have generally stipulated that the material required to fill up these places shall

shall be taken from some cutting, and that has increased the cost. But in this case we propose to let them get the stuff where they like, provided that the drains are kept clear.
231. When did it first occur to you to make this change? When getting out this scheme.
232. You have no previous experience of the system? No. With other lines, the embankments have been so high that it has seemed better to pay for the work by cubical measurement.
233. This will be an experiment? Yes.
234. Will this line be similar to the Cobar line? It will not be so good. It will be something like what the Cobar line was before it was washed away.
235. How would you describe the Cobar line? That was a surface line to a great extent, and part of the country through which it goes is undulating, though a great deal of it is flat.
236. In the depressions did you use ballast, or did you put the rails upon the surface of the ground? We used ballast throughout.
237. When the line was originally made? Yes.
238. How much ballast did you use. I am not speaking of the time when you re-made the line? The ballast was up to the usual standard. It was about 11½ inches in the middle of the road, and 13 or 14 inches outside.
239. Was that found to be sufficient, or did you increase the quantity? No. The trouble came about because of the wet weather setting in just when we had got our earthworks made, and the water swept away mile after mile of the line.
240. *Mr. Gormly.*] Was that in the hollows? Well there did not appear to be any hollows.
241. *Mr. Humphery.*] It was before the ballast was put on? Yes.
242. You would not call it a cheap line now? No; it is not what was originally intended. There was so much damage done that we had to make it over again, and it was then thought advisable to make a good thing of it by raising the embankment 9 inches. At first the formation was laid upon the surface.
243. But this line will be an improvement upon the Cobar line as originally designed? Yes.
244. Will it with perfect safety carry the main line engines? It will carry ordinary engines up to 60 or 70 tons weight. It will carry all except the heavy American engines.
245. Do you remember expressing the opinion that no line of railway should be constructed that would not, with perfect safety, carry a main line engine? Yes.
246. *Mr. Davies.*] Baldwin engines? No, I did not refer to them. I do not put them under the head of main line engines.
247. *Mr. Humphrey.*] This line will carry with perfect safety what you consider to be main line engines? It will carry the class of engine made up to within the last ten years.
248. What did you say the total cost of the earthworks would be? £225 a mile.
249. Do you recollect that some time ago you expressed the opinion that in the most favourable country not less than £300 a mile should be expended upon earthworks? Very probably, and in making an estimate I still say that £300 would be low enough. When I gave that estimate we had not this kind of formation.
250. You pledge yourself that the cost of this earthwork will not exceed £225 a mile? As far as I can.
251. What have you allowed for clearing and grubbing? That is included.
252. Did you get a description of the country from Mr. Burge? Yes.
253. How many sleepers do you allow for each 30 feet of rail? Eleven.
254. That is in accordance with the view which you expressed some time ago? I have not changed as to that.
255. How do you get the earthworks down to £225 per mile? I do not advise the construction of this line. At the time you refer to, I was speaking of a safe line that you could work at any time, a cheap line, but not a pioneer line. In the case of this line, if the weather comes on wet, the trains can only travel very slowly, if at all. The Commissioners are satisfied to have this description of line, and I think it will meet the requirements of the traffic, but I must not lead you to understand that it will always be workable.
256. You say that you do not recommend its construction, or the construction of a line of this description? I do not know whether I could recommend it or not. I tell you what I think it will do. In ordinary weather it will carry all the traffic that there is; but if the season turns out very wet, the trains will have to be run very carefully, and probably will be stopped altogether.
257. *Mr. Hoskins.*] That happens on the Cootamundra line at times? Yes; but the trains would be stopped much sooner on this line.
258. *Mr. Lee.*] What would stop them? The ground would become so saturated that the line would probably sink.
259. *Chairman.*] Do you mean that the mud would come up through the ballast? Probably, in very wet weather.
260. *Mr. Humphery.*] Would that lead to very considerable expense in raising the line? It would always be possible to raise the line and make a good line of it. When the weather comes on wet, that will be the time to put on more ballast and make it a good line.
261. Do you think the Committee should recommend the construction of such a line as this? I think so in this particular case.
262. It is a suitable line for the district? I think so. The traffic will not be heavy during the whole year. The principal traffic will be in the grain season when, I suppose, the weather is dry.
263. Would the line be suitable for any other than the lightest locomotives? Yes; I think this line will be quite good enough for the district.
264. You will not say whether you would recommend it? I think that taking everything into consideration I could recommend it.
265. *Mr. Hoskins.*] Would not the difficulty be somewhat got over by having the sleepers closer together? Yes, very much.
266. Do you propose to use a larger number of sleepers than are used on the main line? No; I think that on the main lines, where they run the big engines, they have twelve sleepers for every 30 feet.
267. Would it not then be advisable to increase the number of sleepers on this line? Well that would increase the cost.
268. How much? Every extra sleeper per length of rail adds about £25 per mile to the cost.
269. Would it not be less expensive to increase the number of sleepers than to make up the line as the Cobar

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Cobar line was made up? I think it would take at least two extra sleepers to make very much difference. The question is—how much bad weather are you likely to have in a year.
270. But you have shown that the cost of the Cobar line has been greatly increased by the damage done to it in bad weather. Could not the trouble be obviated in this case by putting in extra sleepers? I think you could hardly put in enough sleepers to obviate the difficulty. You must have a sufficient space between them to enable you to pack them with ballast. I think the cost of making up the earthwork would come to more than the cost of extra sleepers, but you could not put sleepers close enough together to avoid the trouble.
271. I suppose you are aware that in America there are hundreds of miles of line without any ballast at all? I believe that there are.
272. *Mr. Hayes.*] As to the ground going soft, does that not depend upon the character of the soil? Yes, I do not know what this soil is.
273. If this is a loamy sandy soil, is it likely to become soft? Not if it is loamy.
274. I suppose Mr. Burge would be able to give us information about the character of the soil? Yes.
275. Since the country is flat, there will be no current to wash the embankment away, even if heavy rain sets in? No. Then, too, we shall put in box drains to carry the water away. The Cobar line subsided because it was partly below the surface of the ground. The middle of the embankment was probably a little above the surface, but the sides were below it. But in this case we do not propose anything of that kind. The material required for the embankment would be taken from the drains, which will be about 6 feet away on each side. These drains will keep the water from flowing on to the formation, and I expect will partly drain the subsoil. The box drains will carry the water through from one side to the other.
276. *Mr. Humphery.*] But you have not had time to test the value of this scheme? No; but I do not think there will be any difficulty in connection with it.
277. *Mr. Hayes.*] You do not anticipate any danger of the line sinking if the soil is fairly good? No.
278. Traffic could be carried on in almost any weather if the soil is good? It is only in very bad weather that we should have any trouble.
279. *Mr. Davies.*] What would be the size of the side drains? They would vary. The width would depend upon whether they were made with a plough or scoop, or by hand. They would all have the same capacity, but the width and depth would vary.

FRIDAY, 21 *DECEMBER*, 1894.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	James Hayes, Esq.
The Hon. William Joseph Trickett.	Robert Henry Levien, Esq.
The Hon. James Hoskins.	John Moore Chanter, Esq.
The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Charles Ormsby Burge, Esq., Chief Assistant Engineer for Railway Surveys, Railway Construction Branch, Department of Public Works, sworn, and examined:—

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280. *Mr. Hoskins.*] What is your name? Charles Ormsby Burge.
281. Are you an engineer employed by the Railway Department? I am an engineer employed by the Railway Construction Department.
282. Have you had charge of trial-surveys in the South-western Division? Of railway surveys.
283. Are you acquainted with the character of the country which is proposed to be intersected by this projected railway we are now considering from Jerilderie to Berrigan? Yes.
284. Have trial-surveys been run over that country? Yes; one trial-survey.
285. Of which you had charge I presume? Yes; under the Engineer-in-Chief.
286. Is the character of the country favourable for railway construction? Very much so.
287. Is there a scarcity of water between Jerilderie and Berrigan? I fancy there would be in some seasons.
288. In the average seasons could water readily be obtained for the use of the engines? Generally I think so; but the surveyor reported to me that there was no permanent water on the length, by which he means that it could not be depended upon always; but there is a water supply at Jerilderie.
289. Where is that taken from? I do not know.
290. Then the water in the tract of country through which this railway would probably be made is water that is conserved? Yes.
291. Do you know is there any probability of there being any permanent water at Berrigan itself? I cannot say. I have only passed through the town. The surveyor reports that there would be no permanent water to be depended on.
292. Is the country above Berrigan and between Jerilderie and Berrigan well settled with population—that is to say, are there a sufficient number of producers in that locality to give something like reasonable warrant for the construction of this railway? Between Jerilderie and Berrigan the population is rather scanty. I may say that I have not been over every mile of it. I went south from Jerilderie to near Berrigan. I went over the line from Jerilderie to near Berrigan Creek.
293. In speaking of the district of Murray Hut, is that a locality or district? Murray Hut is, I think, the old name for the township, which I believe is called Finley.
294. Were you referring to the proposed line from the Rock through Berrigan to Murray Hut? I have been over the line from the Rock to Murray Hut, and stopped at Berrigan on my way.
It was all the same character of country from Jerilderie to Berrigan.
295. There was a very limited number of settlers from Jerilderie towards Berrigan, as far as you went? Yes

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296. You have been to Berrigan? Yes.
297. Is there a large number of settlers about Berrigan? Yes.
298. Principally graziers or agriculturists I suppose? Agriculturists principally.
299. What do they generally grow—wheat? I think so.
300. Where do they take that to at the present time? I really do not know. I went to inquire into the engineering features of the line, not with regard to its traffic. Of course when I went over the Rock to Murray Hut line there had been an examiner over it, and during the period that the examiners are examining lines the engineers do not interfere with their duties, but simply confine themselves to the engineering.
301. You travelled from Murray Hut to Berrigan? Yes.
302. How far? Thirteen or 14 miles.
303. What is the character of the country? It is quite flat.
304. Are there many settlers between Berrigan and Murray Hut? Yes, a great many.
305. I suppose you have not given any consideration to the character or description of line proposed to be made between Berrigan and Jerilderie? Yes, I made the estimate, subject of course to Mr. Firth's revisal and approval.
306. It is to be a cheaply constructed line? Yes.
307. In that flat country how do you propose to get rid of the drainage, in the event of heavy rains? We propose to have a formation about 6 inches high above the ground, and the side-drains which will make up that bank must serve as the drainage. But I should not be surprised if there was a very heavy rainfall that the line would be injured.
308. And if injured by heavy rains I suppose it would necessitate reconstruction? So far as it is seriously injured.
309. How much ballast do you estimate to be required? About 1,200 cubic yards per mile.
310. Where would you get the ballast from? A mile on the southern side of Berrigan.
311. What is the nature of the ballast? Granite. It would have to be broken.
312. It is good hard stone I suppose? Yes.
313. What is the size of the sleepers you propose to use on this line? I think the usual size—8-ft. x 9-in. x 4½-in.
314. In your survey of the tract of country to be traversed by this line, did you observe any difficulties that are likely to be created by the crossing of creeks, which are almost dry in the summer time, but which are swollen in the wet months? No, I did not observe any unusual difficulties. We have other instances of the same sort.
315. The water used by the residents is generally conserved by them in dams, I suppose? Yes, there are dams.
316. In the construction of the line there, is much provision made for getting rid of the water during flood time;—would it not be probable, if any of these dams burst, that the line might be carried away in the same manner as another line somewhere else was? Yes; there is one place in connection with that that I may be allowed to mention, where the line would cross close to a dam, and I directed the surveyor to carry the line over the dam.
317. That is a private dam, is it not? Yes, it is on private land.
318. Would you be justified in doing so;—would not the owner of the land object? I do not think so. If we were to be below the dam we would be in danger of having it burst and coming down on the line; consequently, as it was only a short distance below, I directed the line to be carried over the top of it, for then it would be under the control of the Railway Commissioners, being within their land, and its repair would be in their hands.
319. Would that necessitate the Commissioners resuming the land? Yes.
320. While in the locality did you ever hear people express a great anxiety to have a line constructed from Jerilderie to Berrigan, and also express a willingness to give sufficient land for the construction of the line through their property? No, of course I was no time there; I just passed through.
321. You do not anticipate any difficulty in making the line? No.
322. *Mr. Trickett.*] Are you provided with details as to the probable cost of this line? Yes.
323. Could you give them to the Committee? If you will allow me to say so, after this estimate left my hands, the Acting Engineer-in-Chief had some conferences with the Railway Commissioners, which resulted in some concessions being made by them which are embodied in this detailed estimate that I now give you. (*Vide Appendix.*)
324. How much is this calculated to cost a mile? £2,061 4s. 7d.
325. Can you give us the details of how you arrived at that amount? Earth-works are estimated at £225, box-drains and timber bridges, £111; level crossings, cattle stops and fencing, £92; permanent-way materials, £532; ballasting and laying the road and sleepers are lumped together at £677 per mile, the stations are £223. Then there is an item of miscellaneous for various smaller matters, £24; contingencies allowed at 5 per cent., £94. Then there are the engineering and supervision which include the permanent surveys and the supervision of the work during the construction, at another £94, also 5 per cent. Then there is a note attached to this estimate which I do not know whether Mr. Firth gave you: "The above estimate is made after interviews with Mr. Eddy, who agrees to deliver for the main line 10 miles of second hand rails at £3 per ton—fish-plates at £2 15s. per 100, and fish-bolts at 14s. per 100—old rails for sidings delivered at £2 10s. per ton. The wool banks and grain sheds will be built by the Commissioners for the sums named—a 40-feet turn-table is to be supplied for £150. The water supply is to be by an oil engine and timber tank."
326. When was that estimate made? On December 4th.
327. Was it made by yourself? The original one was made by myself and then I was directed to make some alterations.
328. Having had considerable experience in work of this kind, do you think that the estimate you have given us would be the ultimate cost—that is to say, do you really think that the work can be done for the amount which you stated to the Committee? Yes, I think the work can be done for it, but at the same time I think it is too cheap a line.
329. In arriving at this amount have you taken into consideration the present low rate of wages in the labour market? Yes.
330. Then you are quite confident, so far as you are able to give an opinion, that the line can be built for that money? Yes, at the present rate of wages.

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331. You have said that it is too light a line? I think that it would be an ultimate saving if we had a larger allowance for earth-works, in consequence of the extra cost of maintaining a line of this character.
332. The earth-work is to be 6 inches in height according to this estimate;—what height do you think it should go to make the line a fairly substantial one? It varies right throughout. It is not exactly 6 inches. I should rather refer to it in the terms of money. There is only £225 allowed in this estimate for earth-works.
333. What is the usual charge for earth-work in country similar to that proposed to be traversed by this line? Well, I think myself that there should not be very much less than £300 spent—say £280.
334. Would that make a more substantial line? Yes. This estimate in my opinion is cut a little bit too fine. What I have just suggested would give £55 a mile extra.
334½. This would make the total extra cost a little over £1,000? Yes.
335. You think then that the cost of forming should be allowed at not less than £280, instead of £225? Yes.
336. Do you know of any line that has been laid at so low a cost as this—a cost that is to say of £225 per mile? No, it is quite a new departure.
337. Have you had any experience with regard to the construction of American lines? No, I have been in America but have never examined the lines.
338. Will the sleepers on this line be laid much closer than ordinarily? No.
339. If the sleepers were put a little closer would not that improve the stability of the line? Oh, yes.
340. Would you recommend placing another sleeper under each rail? If I added anything I think I would rather add to the earth-work.
341. As the Committee will be very much guided by your evidence as to this particular work, would you go so far as to say that you would not recommend a line of this kind being constructed? No, I do not go so far as that. I would say that I would prefer it to be in some respects, not quite so light.
342. But you think the Committee would be justified in recommending a light line in this country as an experiment? Yes, for the reason that it is easily improved upon afterwards.
343. But if you had to raise all the sleepers, and so on, would it not be a great extra cost? Well, it is partly a matter of conjecture.
344. As this is only a single line, how could it be raised while the traffic is running over it? It is very easy to lift a line.
345. With regard to the country—apart from the chance of a water tank bursting—do you think there would be much fear of the line being flooded in the case of heavy rains? Not very much, because the tanks are all shallow, spread out over a great surface, and if one of these tanks were to burst there would be a certain amount of damage done, but to no very large extent.
346. But apart from the chance of a tank bursting, do you think there would be any damage from a heavy rainfall? There might be.
347. The line would have to be protected from that kind of damage by little drains put across it, would it not? Yes.
348. Will they be put at very frequent intervals? We generally put them at three to a mile in that country.
349. What width are these boxes? Three feet.
350. And they would only be 6 inches high? No; 9 inches high. They are generally made with a sleeper put up on side.
351. Are they expensive to put in? No.
352. In a line in flat country such as this, would it not be possible to put a few more of these in, so as to relieve the line from flooding? Well, we were going on the example of the Culcairn to Corowa line, which has been constructed for a considerable time, and has worked satisfactorily.
353. This line will cross Berrigan Creek? Yes.
354. Will there be an expensive bridge there? No; a small bridge.
355. Do you know what will be the cost of that bridge? I have no particulars here to enable me to separate this particular work.
356. What would you allow for the cost of these bridges? About £3 per foot.
357. Will these bridges be sufficiently stable? Yes; I may say, in regard to £111 per mile allowed in the estimate, that it includes all the box-drains as well as the bridges.
358. Graders are likely to be used for this work;—have you ever seen any of them in operation? No.
359. Before they can be used, however, must not the country be all cleared and stumped? Yes; I should think so.
360. Then before they could be used on this line the whole of the stumps would have to be taken out? Yes; but a good deal of this country is plain country, and nowhere is it thickly timbered.
361. But timbered lightly or heavily the roots will have to be taken out? Yes.
362. Have you taken this into consideration in the estimate? Yes.
363. Would that be a considerable item? I do not think it would be.
364. Have you inspected the Deniliquin to Moama railway? No.
365. Is not that constructed on very shallow earth-works? I do not know beyond reading what was in the reports of the Jerilderie to Deniliquin line.
366. A little while ago you stated that this was a little too cheap a line of railway to be constructed;—is that in reference to the engine and loads that have to be taken over it? No.
367. Are you, then, of opinion that the same engines and trucks and loads that run from Narrandera to Jerilderie would be able to run on this line? Yes; but at not too high a rate of speed.
368. Would you kindly tell the Committee at what rate of speed? It is all a question of maintenance. High rates of speed involve heavy rates of maintenance, but I think that on this the speed should be limited to 20 miles per hour.
369. You think that at that speed a train could be run safely over a line of this character? Yes.
370. What sort of road is there from Jerilderie to Berrigan at the present time? It is a very bad road.
371. Is great inconvenience experienced by teams getting bogged? Yes.
372. But even if this railway were constructed, there would still exist the difficulty of getting the produce to the stations, and this difficulty would only be minimised by getting it trucked to Sydney? Yes.
373. From your experience of this locality, do you think that a line constructed from Jerilderie to Berrigan would be the means of diverting the traffic that now goes to the southern capital by way of Moama? I have not the means of judging any more than anyone else. I have only passed through the country, and have no intimate acquaintance with it.

374.

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374. There are one or two awkward curves, are there not, on this line, where it gets into Jerilderie? No; nothing out of the way.
375. But there is a big curve there, is there not? Yes.
376. Cannot it be avoided in any way? There is no objection to it.
377. The Departmental tracing shows the curve going into the station at Jerilderie;—would it not be possible to start from the 413 mile point, and go straight into the station instead of taking this curve? It would be possible, but it would not be desirable.
378. For what reason would it not be desirable? On account of traffic arrangements. It would interfere with the economical working of the traffic, the train having to shunt back from the station, in order to go on to Berrigan.
379. I see that this curve here goes through a whole lot of town allotments;—would not their resumption very considerably increase the cost of constructing the line? Yes; but it seems to me unavoidable.
380. Is all that part of the town that the line is to go through built on? No.
381. Taking all things into consideration, you think it would be cheaper to go through these town allotments than to take the eastern direction? Yes; it would be cheaper as regards the working, though it would not be very much cheaper in regard to the laying of the line.
382. Are you able to tell the Committee what the cost of resuming these allotments would be? No; but I am quite certain that it would be very much better to resume them than to take the alternative route.
383. *Mr. Molesworth.*] Can you tell the Committee what is the nature of the soil in this district? It is loamy.
384. Do you look upon that as a good foundation for your operations? Yes.
385. Upon that, do you think you could build a very good, strong permanent way? Yes; we have a line over similar country going from Narrandera to Jerilderie.
386. You do not find it weak or troublesome? No.
387. How do you propose to provide facilities for watering the engines? By dams. There is a supply already at Jerilderie. We are providing a small amount for water supply at Berrigan, which I presume will have to be done by a dam, and pumped up into elevated tanks.
388. You speak about this being too cheap a line? Put it in this way: if I were asked my opinion I would be inclined to add a little more for earth-works.
389. That is the only point in which you think it too cheap;—you are of opinion that if an additional £50 per mile were allowed it would make a fairly satisfactory line? Yes.
390. Notwithstanding the arrangements you have made for the box-drains, if the country is comparatively level how are you to get the volume of water away—is there any fall in the country? Very little.
391. Do you think it is probable that flood-waters would remain near the line for several days? Yes; but I do not think that that country is subject to very heavy rainfalls.
392. If, in consequence of a downfall, water lodged near the roads for some days, would that not seriously affect the stability of the line? I do not think it would affect it seriously.
393. But would not the fact of the water being over the line interfere with the traffic? They would have to travel more cautiously.
394. But you do not think the line would be very seriously weakened? No.
395. Would the line then be capable of carrying as heavy loads as the main line to which it would be attached? Yes.
396. Would it be able to carry the same engines and rolling-stock as the main line? Yes; I think it would be able to, but I think that such engines as the Baldwins would be rather heavy for it. It is not likely, however, that Baldwin engines would be run on it.
397. But, exclusive of Baldwin engines, you think the line would be capable of carrying any kind of engine or rolling-stock at present in use? Yes; exclusive of Baldwin and similar engines.
398. I understand the gauge is exactly the same as on our principal lines; therefore there would not be any difficulty at the point of connection? No.
399. You said just now that if the line were made stronger in the direction which you indicate that it would be a saving in the cost of maintenance? I think it would.
400. Would it be an important saving? Well, I think it would be worth doing.
401. You think it would justify the expenditure? I think so.
402. *Mr. Lee.*] In making the calculations for this pioneer line, I suppose you had to depart from the regular routine of railway construction altogether? Yes; to some extent.
403. Do you regard this as an experimental line? Yes.
404. Have you not had to cut everything down to the finest possible limit to bring it out at this estimate? Yes.
405. Do you think you have paid sufficient attention to the contingencies which inevitably arise in constructing large works like these? We have always been accustomed, working on long experience, to allow 10 per cent. for contingencies and supervision. We have continued that practice in this instance.
406. Do you think that this estimate is sufficient to complete the work? Yes, I do.
407. As a rule, in all proposals of this character the actual cost exceeds the estimate? Not always.
408. Can you give any instance of where they were carried out for the estimate? I think most of the recent lines constructed by the Department were very close to the estimate. I daresay Mr. Firth would be very glad to give the Committee more information on this matter.
409. In cutting down the cost of everything with the view of making the line as light as possible, have you considered that you have reached the limited speed in your proposal? I do not quite understand you.
410. What I mean to say is, could you cut the line down any more;—could you make it cheaper, consistent with speed? I do not think so.
411. Do you think there is any portion of the proposed line which could with advantage be increased or strengthened, other than the earthworks? No; I think not.
412. It is proposed that this line be not fenced except in those places where fencing is absolutely required? Yes.
413. Supposing it is found afterwards that it would be necessary to fence all this line, what would be the additional cost per mile? About £150 per mile is what we generally allow.
414. *Mr. Davies.*] What description of fencing will that be? A post and seven wires.
415. *Mr. Lee.*] There is some fencing to be done? Yes; we have allowed a lump sum for it.
416. Which is merely an estimate? Yes.

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417. I see it is proposed to use half-round sleepers;—has this kind of sleeper ever been used here before? Not to my knowledge. They are not exactly half-round sleepers—roughly-squared rather.
418. I want to know if the Department have used them before and with what result? I am not aware of their ever having been used before.
419. Will the cost be greater for these half-round sleepers than for the ordinary sawn sleeper? No; I do not think so.
420. You have already stated to the Committee that you think the construction of this line under the conditions proposed, as a pioneer line, could be effected with safety? Yes.
421. And from what you have said you wish it to be understood that if the Railway Department were going to make a proposal they would recommend the construction of such a line? I do not know what Mr. Firth's opinion may be. He is the representative of the Department. It is only my individual opinion that I have been giving with regard to the earthwork.
422. Now, is there any feature in regard to this line that you think ought to be brought before this Committee? No; except that I think it would be a very valuable experiment.
423. And must be treated solely as an experiment? Yes; but I think it is a sufficiently safe experiment; there would be no risk about it whatever.
424. Have you had any experience in other colonies where lines of this character have been made? Not in other Australian colonies, but I have had a great deal of experience with lines of a similar stability at the Cape, though, of course, they were of a different gauge; in fact, they were of less stability because the engines were lighter.
425. Have you had any experience with lines of this character, taking into consideration the proposed size of the earth-work, gauge, rails, and rolling-stock? Well, I do not know that I can recall anything exactly similar, but in all lines there are lengths, more or less, that run over country like this.
426. Are we correct, then, in understanding that in ordinary weather, and under ordinary circumstances, that line might fairly be expected to carry the traffic? Certainly.
427. What is likely to be the result in very bad weather? There might be interruptions.
428. In what way? Through flooding, for instance, or the lines being washed away.
429. If that is the case, would it not materially increase the cost of maintenance? Well, I should not like to say materially, but it certainly would considerably.
430. Your Department admit that there is a liability to danger? Not danger, I should say.
431. Well, that the line is exposed? Well, that it is not so substantial a line as it might be.
432. You proposed to minimise the flooding difficulty as much as possible by putting in waterways? I do not say an extra number, for we put the number here specified in any line.
433. How do you propose to carry off the water if there were a heavy fall of rain? It is very flat country, and, consequently, there would not be very much current; but if our waterways turn out to be insufficient, of course some of the line would probably be washed away, and have to be repaired.
434. *Mr. Hayes.*] In reference to flooding—this country is almost absolutely level? It is very level.
435. So there would be very little current? Very little.
436. The water practically soaks away? Yes, practically.
437. Do you think there is very much danger of the line being washed away at any time? No; I do not think so.
438. I think that you stated that you allowed £223 a mile for stations? Yes.
439. And the line is 21 miles in length, making the amount about £4,680 in all? Yes, about that.
440. Is it not the intention of the Department to have practically only one station—that is, the terminal station at Berrigan? There is to be an intermediate waiting-shed and siding, too. We provide for a passenger building at Berrigan at £250; goods shed, £200; grain shed, £250; station-master's house, £300; waiting shed, £200; wool platforms, £200; one stock-yard, £200; weigh-bridges, £552; turn-table, £400; water supply, £750; metalling, £500; and sidings, £910.
441. So you include, under the heading of station buildings, all those items you have just given? Yes.
442. In reference to the sleepers, do you propose to have half-round—were they not very much used formerly on the main lines? They may have been, but not to my knowledge.
443. What you call half-round sleepers are simply split sleepers with a space adzed off to let in the rails? Yes.
444. They are practically as good as the others? Yes.
445. With reference to water supply, a large well on the reserve has recently been constructed about half way to Jerilderie, and that being so there will be no difficulty whatever about getting water? No.
446. *Mr. Chanter.*] In reference to the question of timber, what does your Department expect to save by getting rough-dressed sleepers instead of the usual sawn sleepers? I suppose they expect to save the cost of sawing the sleepers.
447. You are aware that there are only two classes of timber in that locality, red-gum and box, and I understood from Mr. Firth yesterday, that it is intended by the Department to lay down red-gum sleepers? Yes.
448. Is it the practice of the Department to use red-gum sleepers? Hitherto we have generally had ironbark.
449. Do you think it quite possible to get full-sized sawn red-gum sleepers on the same terms as the half round? I do not know.
450. What depth in the centre of the sleeper do you propose? Four and a half inches.
451. What width? Nine inches.
452. What width of the face where the rail would lay? That would vary with the shape of the sleepers. I do not know that there is anything definitely laid down about that.
453. But would not you determine to have not less than a certain space on the face of the sleeper where the rail would lie? There ought to be some limit, no doubt.
454. In preparing the estimate for ballast, did you take into consideration the fact that no metal ballast can be obtained along the line of route? Yes.
455. Were any efforts made to ascertain if any gravel or other suitable substance could be obtained? No.
456. No trial shafts were sunk? No; we do not generally go into that sort of thing when making a trial survey.
457. You have estimated a certain sum for ballast and sleepers, and I think you propose to get this ballast from

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from some granite quarries about a mile from Berrigan? That is as far as our knowledge goes at present.
458. If it is possible to get along this line a very coarse gritty sand, which could be used for ballast, would not that lessen your estimate for ballast very materially? Yes; to some extent.
459. In regard to the water supply, did you take that into consideration going over the line? Yes.
460. I understand you to say that the only permanent water that you could look upon in times of drought would be that to be obtained from Jerilderie? That was the report of the surveyor who was for many months over the line, and would know more about it than I would.
461. Supposing no water was to be obtained at Berrigan in time of drought, what provision would you make for watering the engines? I do not know. The gradients are very flat, and an engine might, therefore, carry water sufficient to go to Berrigan and back.
462. You think it would be quite possible for the engine to take a sufficient supply of water from Jerilderie? Yes; it is only about 21 miles, and the gradients being so very easy there would not be so very much consumption of water by the engine.
463. In regard to the earthworks, I notice you estimate the cost at £225 per mile—that is calculating for a depth of earthworks to be laid on the surveys of 6 inches? Well, that is the minimum.
464. That is the average depth, is it not? No; I should not call it the average depth, but I think that is the minimum.
464½. But the average would not be likely to exceed materially 6 inches? No.
465. What width would you lay that? Seventeen feet.
466. Might I ask you, when arriving at this estimate for the earthworks, do you base your estimate for £225 per mile, or £2 15s. per chain, on the information obtained in that locality? No; not so much as on a general experience of the cost of previous works in other parts of the Colony.
467. In assuming that estimate, you would take into consideration that on the works in other parts of the Colony? Yes; much additional labour, such as pick and shovel and barrow work, would have to be provided for.
468. Did you give any consideration to the fact that in such level country as this the American graders are used, and where not used the plough and scoop is used, and that that would minimise the cost per mile? Yes.
469. Taking into consideration that the municipal bodies in this locality are having their roads formed for ordinary wheel traffic 20 feet wide, at a cost of £1 per chain, how do you estimate £2 15s. per chain for the railway? We have a number of things to estimate for which those municipal bodies do not, such as widening at the different stations and sidings, &c., and the whole estimate rests on actual tenders by railway contractors who know their business.
470. But taking into consideration the road proper, and also taking into consideration the extra formations necessitated by these sidings and so on, do you not think a considerable saving could be made in your estimate, from the statement that the municipal bodies are getting this class of work done for less than half your estimate? I do not know. What I have given is based upon experience of open tenders.
471. You say that your estimate is based upon experience of other parts of the Colony, but are not the circumstances greatly different? There is not a very great difference.
472. Could you give the Committee the schedule price tendered for the earthworks on the line from Culcairn to Corowa? No.
473. That is very similar country, is it not? Yes; it is very similar country, as far as I know.
474. In this trial survey you propose to make a diversion at a commencing point on the Jerilderie line, at a point about midway between Wood and Kennedy streets, and then you would take your line through a large number of allotments south of that point? Yes.
475. Then, forming your curve, getting in a straight line just on the southern side of those allotments? Yes.
476. Will you explain to the Committee why the line could not be taken from a point opposite Brown-street, immediately adjoining the goods-shed at the Jerilderie railway-station and going in a south-western direction? The object in going down south is to avoid having to shunt. If we were to come out on the north side of Jerilderie, we should miss the station, or otherwise have to shunt into the station, and shunt back again, which would be a very great inconvenience and expense.
477. But do you not think that, taking the line from the point that I have already indicated, that there would be more than sufficient compensation in the amount of money that would be paid for a resumption of land than shunting back that short distance to Jerilderie station? I do not know. I only know that the Railway Commissioners would strongly object to such an arrangement as that.
478. What I desire to know is what had your Department in view in making your curve immediately from the starting point, and then making another curve at or upon allotment 23, near Berrigan Creek? The object of making the two curves was, in the first place, to avoid crossing the public road from Jerilderie to Berrigan. If we had to cross it once, we should have had to cross it twice, because we end our line on the eastern side of the road. We therefore cleared the most easterly corner of that road. Then we bent slightly to the west in order to join the road there within the last 5 miles next to Berrigan. The saving effected by this arrangement would be much greater than the slight saving in distance that would be effected by going straight from Jerilderie to Berrigan.
479. Why would it not meet the Departmental views to have a line direct from Jerilderie to Berrigan? If the line were run from the eastern side of Jerilderie station to Berrigan, it would be still further from the water supply.
480. Would it not be a wise thing to have some arrangement so that the train could approach the water at the 420-mile point? There is no reason why, if the Department thought it desirable, the railway should not be diverted nearer to the water supply. I understand that the water supply was created since the trial survey was made, and consequently it might modify our view as to the exact direction. All our trial surveys are subject to modification in the permanent survey.
481. As the lines shown by the trial survey will, for two-thirds of the whole distance, go through private property, have the Department considered the advisability of taking it along the line of road so as to save resumption? It would narrow the road very much, and the road appears to want all the width it has at present. It would also involve a number of additional curves. It does not appear to me, anyhow, that the mere resumption of land is, after all, a very large item. I may add that I know the Engineer-in-Chief is generally hostile to having public roads occupied by railway.
482. The question of the resumption of this land did not, I understand, come under your notice at all? No.

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483. In reply to Mr. Hoskins you said that no one had intimated their intention of giving land for the purposes of this line, so that your Department is not in a position to inform the Committee as to whether any of this land is likely to be granted to the Crown for railway construction? No.
484. If it is found that this line cannot be constructed on the free-grant principle, do you not think it would be wise to go as nearly as possible along the line of road from Jerilderie to Berrigan. I have not gone into the question, but I doubt its wisdom very much.
485. In taking the line from a point as shown upon the plan you take it across what is called the Wonnaimurra dam—that is, the diversion you speak of? Yes; it is near Berrigan Creek.
486. If the diversion is made nearer Murray Hut, would not that get away from any difficulty in regard to the cost of resumption of that dam? Of course any departure from the dam would involve a saving in the cost of it, whatever it might be.
487. From your own observation of that embankment and the large quantity of water conserved, do you not think that it would be wise to avoid any resumption of that kind by making a detour? No.
488. Does this line go close to Wunamurra Station? I do not know where the station is.
489. You are aware that it goes right close by a wool-shed. Was the Department approached any way to make that detour—which to me appears a nasty angle from the starting-point—to go out in that locality to get alongside the wool-shed, and then make another detour to get to Berrigan? Certainly not. I am responsible for the position of the line and nobody approached me in any way.
490. In regard to the fencing, you said in reply to Mr. Lee that you estimated the fencing at £150 per mile, and the class of fence to be erected was to be a post and seven wires. Is your Department in the habit of paying this excessive cost for this class of fencing? That estimate is based upon our experience of contracts of a similiar nature. Of course it includes returns to all gates and culverts and other contingencies. It is in accordance with the contractors' prices which have been realised for years past.
491. The estimate given by Mr. Firth yesterday for partial fencing was £1,000. It is contemplated therefore to fence a portion of this line? Yes; but that estimate is only a guess.
492. Will you kindly explain to the Committee why if it is not necessary to fence the whole of the line it is necessary to fence a portion of it? Well, there might be some allotments near Berrigan and Jerilderie which it would be necessary to fence.
493. This service is to be a day service, is it not so? I presume so.
494. There will only be a service three times a week? I only know that, from what I heard of the Commissioners' report.
495. In your opinion is there necessity for any fencing? It may be possible to do without it.
496. In that case you will save your estimate for the fencing? Yes.
497. In your opinion would a line of 6-inch formation be able to carry a heavy load at the rate of 20 miles per hour? I think so.
498. In a locality like this where the water has to lie, could you supply the Committee with the extra cost for a 12-inch formation instead of a 6-inch? Yes, we could supply that.
499. It would not of course amount to twice the sum? I think not.
500. If the elevation were 12 inches instead of 6 inches, in your opinion as an engineer, do you think that in extraordinary seasons when there might be an excessive rainfall and perhaps an excessive quantity of water lying about, that the line would be safer? Yes.
501. You are aware that some of the seasons in this country are excessively wet? I understand from the report of Mr. Alexander, who examined the country very closely, that the rainfall over the Riverina was more evenly distributed than in most parts of the Colony.
502. But I am alluding more particularly to the excessive seasons which you would have to make provision for? Yes.
503. *Mr. Gormly.*] You stated that the ballast for this line should be got from a granite formation near Berrigan? That is the only information we have at present.
504. Have you calculated the cost per cubic yard for the ballasting that could be got from that quality of stone. We have taken it out in lineal yards, 3s. 6d. per lineal yard and there are 1,200 cubic yards to the mile.
505. What cost for a cubic yard would that be, calculating 5 inches in depth? A little over 5s.
506. What gauge would it have to be broken to? Two and a half inches, which is the minimum.
507. At your estimate would the ballast have to be broken by hand or by machinery? By machinery, most likely.
508. Then if a suitable gravel or rough sand, suitable for ballasting purposes, were found close to the line, I suppose it would mean a considerable reduction in your present estimate? Yes.
509. Do you think that under those circumstances 2 yards could be done at the cost of one? Yes.
510. As much as 3 yards? Perhaps so.
511. In going over the country about Jerilderie and Berrigan did you observe any localities where, in your experience, gritty formations might exist? Well, I have not a very intimate acquaintance with that part of the country.
512. But you are of opinion that gravel pits might be discovered suitable for ballast for a line such as this? Yes.
513. You are aware of the gradients on the line from Narrandera to Jerilderie? I know it is a very easy line, but do not know the exact gradient.
514. Narrandera is the railway junction, and it is probable that the engine that would leave Narrandera would go on to Jerilderie, therefore the engine that would run on the Narrandera to Jerilderie line would be required for use on the extension to Berrigan? Yes.
515. But on the existing line from Narrandera to Jerilderie there is no need to use an excessively heavy engine? No.
516. Therefore a smaller engine would be sufficient? Yes; the lightest class, I should think.
517. The haulage would not be so great as to need a heavy engine? No.
518. Then the proposed line would be sufficiently strong to carry an engine running on the Narrandera to Jerilderie line? Yes.
519. In making the side cuttings for the drains on the proposed line, these drains would be graded wide? Yes.
520. They would carry off a fair amount of surface water, I suppose? Yes.

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521. It is proposed to put some culverts on this line where the depressions exist, is it not? Yes.
522. And the side drains would carry off a reasonable quantity of water to these depressions? Yes.
523. And these culverts would carry the water through? Yes.
524. In a country which is as level as that between the Billabong at Narrandera and on past Berrigan to the Murray River, if the water rose 6 inches the country would be inundated? Yes.
525. But this would only be caused by an extraordinary rainfall? Yes.
526. Then if the water by chance ran over a portion of the line there would not be such a current as would cause any considerable damage? No.
527. Such a thing as washing away the line would hardly be possible, would it? Possibly, in the approaches to the two creeks, there might be something of that kind.
528. But you would have a reasonably high embankment on the rivers? No.
529. Where you found it necessary you would raise the embankment, would you not? Yes.
530. With these precautions you could provide for the safety of the line under heavy rainfalls? Yes.
531. Had you any experience in the construction of the line from Narrandera to Hay? No.
532. You have not been over that line since it was constructed? No; I have only been to Jerilderie.
533. But you have some knowledge of how that line was constructed? Yes.
534. Were you in the Department when it was constructed? No, I was not.
535. Have you seen the ploughs and scoops used in the formation of some of the railway lines? Yes.
536. They have, of course, been used by the contractors for the purpose of cheapening the cost of formations? Yes.
537. Have you any idea whether they considerably lessen the cost of forming earth-works? Well, it depends entirely upon circumstances.
538. I am speaking of plain country, where there is little difficulty with regard to stumps and trees, &c.? Well, you might have a very lengthy cutting to make, in which case they would be useful, but in the case of short lengths the turning of the whole arrangement to come back would mean a loss.
539. But it would considerably lessen the cost of the formation, as the one under consideration? Yes.
540. In such a line as the one under consideration what would be the probable cost of making the ordinary side-cuttings and lifting the earth by manual labour, including barrowmen and pick and shovel men, what would be the cost per cubic yard? I should say 1s. 6d., including all charges.
541. Have you any idea what the cost of ploughing and scooping would be per yard? I do not think I could say.
542. From your observation could you give a very good estimate as to the amount of labour that seems to be employed in it? No; I do not think I could.
543. The earth is such that it could be easily removed? Yes.
544. There is a certain amount of loam and some clay? Yes.
545. You think that, having looked at this line, a contractor would be justified in regarding the formation as favourable to be taken at a moderate cost? Fairly favourable.
546. With regard to contingencies, is the formation such that circumstances would be likely to arise which increase the cost of contingencies, chiefly with respect to the earth-works; in other words, do you think that in such a line the contingencies would be likely to exceed the estimates? No; I do not think they would go over the estimates. We have provided a certain amount for contingencies.
547. Have you seen any flood-box in the depressions? I have not particularly noticed.
548. Do you know anything as to the durability or strength of the timber that grows in the vicinity of this line? No.
549. In procuring the sleepers have you got rough sleepers in some cases, that would be heavier than an ordinary sleeper through not being dressed? They are generally lighter than the ones ordinarily used.
550. Would these sleepers, with an excessive quantity of sap, be likely to be as durable as the ordinary dressed sleeper? Nearly so.
551. You have stated to the Committee that you have not studied the matter with regard to the danger of the country being covered with water? I have not heard of it being covered with water.
552. In making the formations you would raise the depression to a corresponding level with the other portion of the line, would you not? Well, I think as the line stands at present it is a little too low.
553. *Mr. Roberts.*] When were you last in Berrigan? I think it was in 1891. It was when I was inspecting the other line.
554. Were you on a visit of inspection in connection with the trial survey of this proposed line? From the Rock to the Murray Hut. Subsequently I inspected the Jerilderie to Berrigan line, but I did not go right up to Berrigan. Having gone over the greater part of the line, I omitted that little bit, more especially as I had been at Berrigan before.
555. Were you struck with the fertility of the soil about Berrigan? Yes.
556. Is it equally fertile from Berrigan to Murray Hut and on to Clear Hill? So far as I could judge, there is a good deal of cultivation from Berrigan up to Clear Hill. Berrigan would be rather more to the west of the centre.
557. At that time did there appear to be any anxiety amongst the residents for railway communication at Jerilderie? I only stopped there for a night, but I did not see that there was any special anxiety.
558. Have any offers been made as to the giving of the land free to the Crown in the event of a railway being constructed? No; not to my knowledge.
559. Is there any such light railway in this Colony as is this branch? Not yet constructed, but the Department propose to construct several.
560. Why do you especially recommend this line as an experimental line—is it owing to the short distance, *i.e.*, only 21 miles? That would be one reason.
561. Have you had experience of a similar line in South Africa? Not exactly similar.
562. But it passed over the same class of country? No; the country was not so flat—it was more undulating.
563. Was it equally liable to heavy rain? No; it was drought country.
564. Can you speak from experience as to the success or otherwise of light lines in South Africa similar to these? Yes. Of course, they were not exactly similar, but they have been successful.
565. In what way do they differ? Well, the gauge was different, for one thing, and the country was not so flat.

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566. Is the ballasting the same? There are all sorts of ballast there, according to the country you go into.
567. Would it be lighter or heavier? I think there would not be much difference. It is rather a difficult question to answer in regard to such large country as the Cape.
568. Is this as light a line as you think might be ventured upon? Certainly, I do not think you could go beyond this.
569. You think that the Committee would be thoroughly justified in recommending the construction of this line as an experiment, on the lines laid down in the specification? I do.
570. *Mr. Davies.*] I understood you to say, in reply to a question put you, that you regard the earthworks as not sufficient, to your judgment, to form a stable line? I did not go as far as that.
571. Did you not state that you regarded the earthworks at £225 per mile as insufficient? I did. It would be more economical to expend a little more on the earth-work.
572. You stated that 6 inches is the rise above the earth and on top of that 5 inches of ballast, and on top of that a sleeper of 4½ inches, and ballast packed alongside and up to the top of the sleeper, making a total height of some 15 or 16 inches? Yes.
573. Then you regard that as sufficient height for the proposed line on the ordinary level of the road? Generally.
574. But if you had your own way you would sooner see it higher? Not much higher. I do not mean that any addition should be added right through to the line, but what I mean is that I should prefer to have a little more money to spend in bad places. I think it is cut a little too fine in this estimate.
575. Would that money be spent in ballast or earthwork? In earthworks.
576. Would there be sufficient material got from each side? Yes.
577. That is where you propose to get the material for raising the line to its proper level? Yes.
578. Do you know anything about the men through whose property the line will pass? No; except that I know it is nearly all private property.
579. But have you no knowledge yourself? No.
580. Do you know if your Department have made any application for the free grant of the land? No.
581. *Chairman.*] There are one or two things that you might give the Committee a little more information upon. First of all, there are your flood levels—your plans show nothing with regard to those. You might also mark the main road from Jerilderie to Berrigan in sienna? Yes.
582. It would be well for your Department to make some inquiries to see if there is any probability of finding a gravel pit?——
583. *Mr. Hayes.*] How long will it take to make a permanent survey? It depends upon the number of surveyors which we can place upon the work.
584. What is the shortest time it can be made in if you had sufficient? I think we could do it in two months.
585. Is there any difficulty in getting surveyors for that purpose? We have had to retrench very considerably during the last month, but I suppose there would be no difficulty in getting the dismissed surveyors back again.
586. *Chairman.*] Is the surveyor, Mr. Bullard, who made this survey, available, if we wanted him? He is retrenched.
587. You might find out where he is? I do not know where he is, but I will ascertain.

WEDNESDAY, 2 JANUARY, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.
The Hon. William Joseph Trickett.
The Hon. James Hoskins.
The Hon. John Davies, C.M.G.
The Hon. Charles James Roberts, C.M.G.
James Hayes, Esq.
Robert Henry Levien, Esq.
John Moore Chanter, Esq.
Charles Alfred Lee, Esq.
James Gormly, Esq.
Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Hugh M'Lachlan, Esq., Secretary to the Railway Commissioners, sworn, and examined:—

H. M'Lachlan, Esq. 2 Jan., 1895.

588. *Chairman.*] You are Secretary to the Railway Commissioners? Yes.
589. You come here to give evidence with regard to the line under consideration as the representative of the Commissioners? Yes.
590. *Mr. Lee.*] Do you remember giving evidence before this Committee when it inquired into the expediency of constructing the line from Jerilderie to Deniliquin? Yes.
591. I believe the evidence you then offered was somewhat unfavourable as regards the proposed connection? Yes.
592. And one of the chief causes of objection, I understand, lay in the ownership of the land? I do not know whether that was made a strong point or not. I do not remember it.
593. Was it not made a strong point that the land was in the hands of a few persons, and that it would therefore be comparatively unproductive? I do not think I made that point particularly. I do not recollect it.
594. The estimate submitted by the Commissioners on that line showed a loss on the working? Yes.
595. And that loss was shown in consequence of there being little or no freight to carry, through the land being so largely held by large owners? To some extent that is so.
596. Since then the Commissioners have had the benefit of the evidence taken by the Committee and the report submitted? Yes.
597. Could you give the Committee any clear idea as to why the Commissioners should at this juncture recommend an extension of the line from Jerilderie to Berrigan? It is in altogether a different direction. The circumstances are also largely different.

598. Can you give me any clear reason why, in your opinion, the line should take this particular direction? One reason why the other line was objectionable was that it was considered that it would be largely a feeder to the Deniliquin-Moama line. In this case there is a direct connection with Sydney, and it is thought that the traffic would come this way. There is already a large production in the district.
599. When you speak of the Deniliquin-Moama railway, you have in your own mind the fact that it is practically part and parcel of the Victorian railways? Yes.
600. And the Commissioners did not think it desirable to divert our trade any further in that direction? I think that was one of the reasons they had in view in objecting to the line.
601. Would that argument apply to the extension of the line from Jerilderie to Berrigan? No.
602. Why? Because the connection only applies Sydneywards. Berrigan would be connected directly with Sydney, but there would be a gap across to the Victorian line. In the case of the other railway you would have had a direct connection at Moama.
603. But the connection with Sydney of Berrigan would mean a considerably greater distance from that place to Sydney than to Melbourne? The distance to be traversed would be nearer to Melbourne than to Sydney.
604. What is the nearest point of connection on the Victorian lines with Berrigan? I think it would be at Cobram.
605. What is the distance from Berrigan to Barooga? I am not personally acquainted with the district. Mr. Harper went over it, and he will be able to give you all the information you require from that point of view. I have not been over the district myself, and I cannot speak as to the actual distances.
606. You hold, I suppose, that from a railway point of view, trade is only influenced to a railway from within a certain distance? Naturally.
607. Then in calculating a certain probable traffic, you confine your estimate to within a certain radius? Circumstances alter cases a great deal. The local circumstances would affect the traffic in almost every instance.
608. Take the case of the produce raised on the New South Wales side of the Murray about Barooga, 12 or 15 miles back from the river;—do you think that that would go to Berrigan if there were a railway there? Probably the produce raised about the Murray would continue to go to Victoria, unless high duties had the effect of sending it away.
609. In submitting their estimate to the Committee, have the Commissioners taken into consideration that view of the question? The report of the Commissioners is based upon the estimates given to them as to the production likely to be influenced by the new railway. Mr. Harper, on whose figures the report of the Commissioners as to traffic is largely based, has been over the district, and would be ableto give you information on that point.
610. The Commissioners estimate a certain return annually from goods, live stock, and agricultural produce;—have you any details as to the number of live stock and the number of bags of grain which it is expected would be carried on the railway? No.
611. Do you know what cost of carriage they are allowing from Berrigan to Jerilderie on bags of grain for instance? I could not say.
612. Mr. Harper will be able to tell us that, I suppose? Yes.
613. Do you happen to know anything about the earnings of the line from Jerilderie to Narrandera? It will be given in the Railway Report; I have not a report by me.
614. Do you happen to remember if much grain is carried that way? A good deal comes from Jerilderie, I believe.
615. Are there any intermediate markets? Some of it comes from Narrandera to be ground there. Some of it will then go on towards Sydney, and some of it will go back to Hay.
616. What I want to know is whether there is any intermediate market for the grain grown in this district? I think the bulk of it would come to Sydney.
617. The probable returns of this line, I suppose, are based upon the earnings from Berrigan to Jerilderie only? Yes; it would be the sectional earnings without reference to the through traffic.
618. It is estimated upon that basis that this line if constructed would earn the amount given? Yes.
619. Have you found that the extension of the line from Narrandera to Jerilderie has increased the traffic at all? There has been no great increase of grain traffic along the line itself, so far as my knowledge goes.
620. Mr. Alexander, in his report of the 20th May, speaks of Jerilderie as the chief depôt of the wheat grown in this district? Yes.
621. And there is a large flour-mill there? Yes.
622. Is there not a large proportion of wheat grown in the immediate vicinity of Jerilderie? I have not been in the district, and I should not like to speak as to the local conditions.
623. Berrigan being only 21 miles from Jerilderie, it is not an impossible distance for the conveyance of grain by dray? Of course it is known that grain cannot stand long carting.
624. You would not call 21 miles a long distance? Every mile tells, especially in regard to traffic which will bear so small a proportion of charges.
625. There is a good deal of grain grown along Berrigan Creek, between Berrigan and Jerilderie, about half way? Yes.
626. Has not that in the past found its way to Jerilderie by dray? Speaking of my own knowledge, I could not say.
627. We have it in evidence that Jerilderie is the only depôt there;—it would seem, therefore, that the grain would have to be carried by dray? At present the grain must go to Jerilderie, but you would open up the country, and increase grain production considerably by giving the producers a new market.
628. Do you think the farmers will be likely to use the railway instead of a dray for 10 or 12 miles? They would probably look at in this way: The grain would have ultimately to be carried by rail in either instance, and it would be a great convenience to them to put it on the trucks near their own farms. There cannot be a great consumption at Jerilderie. It is only a small place.
629. And the grain being once on the trucks the farmers would have the option of the market at Jerilderie, or any market further north? Yes; once the grain was on the trucks.
630. Can you tell me what the rate for grain would be from Berrigan to Sydney? About 18s. 6d. per ton. That would be in 6-ton lots.

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631. What would the rate to Albury be? I have not the rate-book with me, but I should think about 15s. 3d.
632. Is it on a sliding scale? It is proportionate to the distance. There are specially low rates coming towards Sydney from all country stations.
633. Of course the Commissioners have considered the probable traffic from this point of view—that the bulk of it is likely to be in the shape of grain? Yes.
634. And unless the grain can be carried at a profit to a central market it will not be carried at all? Certainly not.
635. The Commissioners have already made a differential rate to secure the carriage of grain? There is a specially low rate for grain now.
636. Will the rates on this line come under the existing low rates? The Commissioners have an idea of making local charges on this short length of new line.
637. Perhaps you will be able to tell the Commiitee whether the output of grain in this district has increased or decreased within the last few years? I could not say of my own knowledge.
638. In estimating the traffic from this district, have the Commissioners considered the scope of the boundaries allowed by the Victorian railway authorities for rebates? I do not think the Victorian railway authorities allow any rebate now on grain. I think it has been withdrawn.
639. Are you sure of that? That is my impression, and I think I am correct.
640. It is very important that the Committee should know. Could you supply us with the information later on? I will ascertain the facts and let Mr. Harper know;—he will be able to give you the information.
641. Do you happen to know whether the boundaries within which rebate is allowed by the Victorian railway authorities on general goods have been altered? I think there has been some slight modification, but they are generally in existence.
642. Therefore, if they have not been materially altered, Berrigan would still be within the rebate distance allowed for general goods? Yes.
643. The rebate line would be about midway between Berrigan and Jerildorie? There are a number of rebate lines, but that would be one of them.
644. Did your Department make its estimate in regard to the returns of the line with reference to the fact that at present wheat cannot find its way into Victoria for sale? It is based on the fact that Sydney would be the better market.
645. Does the estimate take into consideration the fact that the Victorian market is rendered prohibitive by the duties? That has been considered in making the estimate.
646. In what position would the earnings of the line be if, in the future, we were to have a free border? I could not say.
647. It would affect the earnings, would it not? I daresay it would affect the course of the grain traffic.
648. Can you give us any special reason why the Commissioners recommend the line from Jerilderie to Berrigan in preference to a line to Savernake, or a line by way of Coonong to Urana? No.
649. You have no special remark to make upon that point? No; but I may say at once that the Commissioners do not go into the question of alternate routes. They simply consider the route submitted to them. They do not care about recommending alternate routes.
650. Do you find the carriage of grain at present rates profitable to the Department? There is not a great deal of profit in it, but there is the return traffic in dearer goods to be considered. I believe it pays working expenses, but I do not think it has actually been worked out.
651. The Commissioners estimate a total revenue from the line of £3,083, and out of that total £2,668 is represented by goods, live stock, and agricultural produce; so that those three items of traffic would represent a very large portion of the whole? They would be considerable items.
652. If the profit upon grain is practically nil upon longer distances, what reasonable prospect would there be upon so short a distance as 21 miles of obtaining profitable carriage? The estimate of the Commissioners is based upon a careful consideration of the conditions, and they believe their estimate to be correct as regards both working expenses and revenue.
653. I am speaking of revenue now? The Commissioners think the revenue will come out at £3,083.
654. Grain being carried at practically a loss? I do not say that, although there may not be much profit in it.
655. Well, we will say at a very small profit, if any? Yes. The Commissioners propose to make local charges on this line, and proportionately they will be somewhat higher than the through charges. Ordinarily, the local charges will come to about 3s. a ton.
656. The country around Berrigan is largely under cultivation at the present time? I have not been to Berrigan, and I do not know the local circumstances.
657. Do the Commissioners view this extension as a continuous feeder to the Jerilderie line or only as a temporary feeder? They regard it as being a continuous feeder.
658. That is to say, it is a line that will probably show a return on its own whole length as well as bring additional traffic to the existing line? Yes
659. Respecting the estimate of the Commissioners, they have made several estimates in regard to the various lines in the past? Yes.
660. Have you worked them out to ascertain what difference there has been between the reality and the estimates? The figures have, I think, in one or two cases been looked at, but this line does not bear comparison with many that have preceded it. It is to be built on a new system; it is a "pioneer" line.
661. But, after all, the proposal is based upon a calculation of working expenses and probable revenue? Yes.
662. Could you give us any information with reference to the return upon the lines from Culcairn to Corowa? You will see the figures in the report. I could not give you them from memory.
663. I should like to show the Committee, through yourself, what was the Commissioners' estimate of traffic upon that line when submitted to this Committee, and what the actual returns have proved to be? I will ask that the information be prepared for you, and send it by Mr. Harper.
664. *Mr. Molesworth*] The Commissioners, I understand, have personally inspected the route of the proposed railway? Yes.
665. And they are favourably impressed with the idea of constructing the line as proposed? Under certain conditions which they mentioned.

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660. The principal condition being that the land required should be given without cost to the public? Yes.
667. Have the Commissioners any reason to suppose that that condition will be complied with on the part of the owners? They understood locally that it would be complied with. They say in their report: "We were given to understand that some of the landowners have already expressed their willingness to give the land, and that probably the whole of those concerned would adopt a similar course."
668. I understand that applies principally to the land in the vicinity of the proposed terminus at Berrigan. Are the Commissioners aware that the bulk of the land through which the proposed line will pass is in the hands of a few large owners? I understand that some of them would give the land.
669. I believe, for instance, that two-thirds of the land through which the line will pass is in the hands of Mr. Wilson? It may be so; I am not aware. Of course, in some cases the line may pass through small properties, and it would not be fair to ask a small owner to give up his land free. But what the Commissioners think is that all the landowners should combine and arrange among themselves to give the land as suggested. For instance, there is the Horsfall property, and there are other big properties which are contiguous to the line. Although the line does not actually touch them they will benefit by its construction. They would not be required to give any land from their own estates, but the Commissioners think that the landowners of the district should combine and arrange to give the whole of the land required free. It is thought that those whose land would be improved, and who would not be affected prejudicially by the line, might make some contribution to those whose land was so affected.
670. In other words, you think the betterment principle ought to be applied privately? To some extent. The Commissioners think that the landowners benefited by the construction of the line might come to some arrangement among themselves.
671. Have the Commissioners any reason to suppose that the landowners generally affected will fall in with this arrangement? The Commissioners have an idea that they will fall in with it.
672. Is it not the experience of the Commissioners that branch lines have hitherto resulted in serious losses? A number of branch lines have been unprofitable.
673. Is not the branch line from Narrandera to Jerilderie among the unprofitable branches? Yes.
674. Is not the loss serious? It has been heavy.
675. Can you tell me the amount of loss last year and the year preceding? I could not say, speaking from memory.
676. I understand that the loss for 1893 was something like £18,000;—will the loss during 1894 work out to a greater or lesser amount? The returns are not yet out for December, 1894.
677. Do you think that there is likely to be any improvement upon the returns for 1893? I could not say. It takes some little time to make out the returns—they are not prepared yet.
678. I understand that the Commissioners insist upon the gauge of this line being the same as the gauge of the main line? Yes.
679. What is about the difference of mileage between Berrigan and Sydney, and between Berrigan and Melbourne, *via* the nearest point of communication on the Victorian border;—the distance is nearly double, is it not? Yes, I suppose it would be pretty well double.
680. In the event of the border duties being removed, would not Melbourne, therefore, be the natural market for Berrigan produce? That depends upon the cartage. There are 20 miles of cartage, and that would be equal to a good many miles of railway carriage, especially at the cheap rate at which grain will be carried from Berrigan to Sydney. That will be under £1 per ton.
681. What is the rate from the border to Melbourne for the same class of goods? Mr. Harper would be able to tell you that.
682. Are the Commissioners in favour of continuing the proposed extension to the border? They have never been asked.
683. It is a matter they have not considered? No.
684. In regard to the proposed line, can you tell us whether the schedule rates would be adhered to, or whether special rates would be charged? The Commissioners' idea is to charge local rates as in the case of some other branch lines.
685. There will not be any exception made in the case of this branch line as compared with other branches? There will be no exception—local charges will be made.
686. From the Commissioners' report we understand that they are clearly favourable to the construction of this line provided the land is given free of charge? Yes.
687. Are the Commissioners responsible for the expression in their report, "Proposed pioneer line of railway"? Yes.
688. What do the Commissioners really mean by that expression? Well, it means a cheap railway. The Commissioners' views upon that point were laid before the Committee in connection with their inquiry into the Bega-Eden railway. In that case the Commissioners entered into the question of gauge and pioneer lines. At the time to which I refer the Commissioners expressed their views upon the point in the following terms:—"That the country is right in insisting on cheaper railways where it is a question of 'a railway or no railway,' there is no doubt; but it would, in our opinion, be absolutely wrong to introduce a different gauge from the standard gauge. We do not think it is practicable or desirable to construct a subsidiary trunk line, or a line likely to convey any amount of traffic upon it, on cheaper principles than that recently carried out in connection with the Cobar line, the cost of that line, including all construction charges, being about £3,300 per mile. There is no doubt, however, that for purely pastoral *and level country*, where the traffic would be exceedingly light, a line capable of carrying a light locomotive with the ordinary class of rolling stock, at a speed of about 15 miles per hour, in daylight only, could be constructed, exclusive of bridges, waterways, and station accommodation, which latter should be of the most simple nature, for about £1,750 per mile, money being voted later on, when the traffic had increased sufficiently to justify a better class of line, to raise the line to the ordinary standard. This could only be considered a 'Pioneer Railway,' and would be altogether different from a standard railway line even of light construction, such as that to Cobar; it would be simply a line to carry traffic with reasonable speed at a lower rate of charge than it is now carried by road. The rates for such lines on whatever scale fixed, would bring about a material saving to the users of it as compared with the rates now paid for carriage by road, and the scale of charges fixed should be such as to avoid any material loss to the country in connection therewith. Lines of this character would avoid the great disadvantage of break of gauge; they would cost scarcely anything more in the first instance than a narrow-gauge line, and the whole of the ordinary rolling stock, exclusive of engines which could be selected from the lightest types existing in the service, could pass over them."

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689. Although this would be a light line of railway it will be practicable for the traffic from and to the main line to travel through without unloading? Yes. Perhaps a light engine might be provided, but there would be no need to unload; the traffic would go through. Although the heaviest engines would not be suitable to the line, we have engines that could run over it.
690. *Mr. Chanter.*] I understood you to say in reply to Mr. Lee that the Commissioners reported against the proposed line from Jerilderie to Deniliquin principally because the land traversed by the proposed railway was owned by a few persons? I do not think I said that.
691. Is not that the interpretation you place upon the report of the Commissioners? I do not think the Commissioners' report bears that impression.
692. You are not personally acquainted with this district? No.
693. You do not know whether the land traversed by the line now before the Committee is in the hands of only a few persons? No. Mr. Harper has been through the district and he is acquainted with all the details, and I do not wish to anticipate any evidence he may be likely to give you.
694. I think I understood you to say in answer to Mr. Lee that the Commissioners were of opinion that the construction of a line from Jerilderie to Deniliquin would act as a feeder to the private company's line? I think that was the impression to some extent.
695. Are you aware of the terms in the Act of Parliament under which the company hold their charter? That they are to charge such rates as the Railway Commissioners may approve, I believe.
696. Is it not a fact that within twelve months after connection of their line with any part of the New South Wales railway system they are bound to assimilate their gauge to that of the New South Wales railways? I think the Acts say they may be required to do so. I do not think it is imperative.
697. Is not power conferred upon the railway authorities to compel them to assimilate their gauge to that of the New South Wales railways? I think they could be compelled to put down a third line, but I do not know about the total assimilation of gauge. That might help them to draw traffic away from us.
698. Assuming that the gauge were altered to the gauge of the New South Wales railways would it not absolutely prevent the drawing of traffic in that direction, seeing that there would be a break at Moama? The matter is one upon which I did not expect to be examined. I do not think, however, that the Act makes it compulsory for the company in the contingency you mention to do away with their 5 ft. 3 in. gauge. They can lay down a third rail I think.
699. I suppose the Commissioners are legally advised in such a matter as this? If necessary.
700. Would it not be possible for the Commissioners to obtain legal advice upon this point and to instruct the Committee absolutely as to what the position would be if the connection were made? It is a matter for the Commissioners to determine.
701. The Commissioners are of opinion that any connection whatever in that direction might act as a feeder to the Victorian line? I believe that was the purport of the evidence I gave upon the question, but that was three years ago, and I have not since looked it up.
702. Upon the same basis this extension from Jerilderie to Berrigan if carried further would also act as a feeder to the Victorian line? At present the circumstances are different. In the one case you have a connection with a railway, and in the other case you have not. There would be a gap in this instance to be covered by road cartage.
703. But there is no great distance between the proposed terminus at Berrigan and Cobram, the nearest point on the Victorian railway? It is no great distance.
704. Is it not about the same distance as from Berrigan to Jerilderie? I have an idea that it is about the same distance.
705. Did I understand you to say that a certain portion of the produce in the neighbourhood of the Murray would go to Victoria? I should think so from its proximity to the Victorian lines.
706. Are you acquainted with the Victorian fiscal system? Generally I am not.
707. Is it not a fact that all the produce of that part of the Colony, grain and stock for instance, would have to pay a heavy duty on entering Victoria. Would not the duty be so heavy as to render the traffic absolutely prohibitive? I believe so.
708. Is it not a fact that the duty on wheat would be equivalent to 2s. per bushel, actually more than the price of the wheat itself? I did not think it was as much as that, but grain could go there in bond.
709. What is the cost of the carriage of grain from Jerilderie to Sydney? Fifteen shillings and six-pence per ton.
710. And the Commissioners propose a charge of about 3s. a ton from Berrigan to Jerilderie? I believe so, but they have not yet definitely decided upon the charges. There will be a local rate.
711. The through rate I name would be about 6d. a bushel? About that.
712. When you spoke some time ago of the removal of duty affecting the traffic, were you referring to the New South Wales duty? No; I understood Mr. Lee to refer to the Victorian duties.
713. You are aware of course of the cost to the Berrigan people of taking their grain *via* Cobram to Melbourne last year? The Victorian Commissioners made a special rate of about 9s. a ton I think, but Mr. Harper will be able to give you detailed information upon that point. I know that the Victorian railway authorities made a special rate, but I believe they have since abolished it.
714. Is it not a fact that the Commissioners have been inclined to report favorably upon this line in consequence of the special rebate given to the Berrigan people last year? No; I think they looked at the matter entirely upon its merits.
715. How much grain do you suppose was lost to the New South Wales railways in consequence of this special rebate to the farmers of Berrigan? I could not say.
716. Have the Commissioners estimated it at all? Not to my knowledge.
717. They did not take it into consideration when they reported upon this line? I do not think they did—especially in view of the abolition of the rebate.
718. Has a similar rebate been given in other places? I am not sure.
719. Has it been given in the Swan Hill district? I could not say.
720. Could you supply us with information later on as to where it has been given, and also as to the amount? Yes.
721. Can you say from memory what is the cost of a cattle truck from Jerilderie to Sydney? Not from memory.
722. I notice that the Commissioners in their report express a strong opinion as to the land required for the line being conveyed to them in fee simple? Yes.

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723. Has any offer been made to the Commissioners in respect of any land which would be traversed by the railway? I am not aware of any offer in writing having been made.
724. Has any been made verbally? Yes.
725. Has such an offer been made by the owners of Wonnamurra Station? Not that I am aware of I believe that a deputation waited upon the Commissioners at Berrigan, and gave them to understand that a certain number of persons there would give the land free.
726. Does that not apply, as far as your knowledge goes, to only a few landowners immediately around Berrigan? I could not say.
727. Has Mr. Wilson, the owner of Berrigan Station, made any offer of conveyance? No offer in writing has been made to my knowledge.
728. And in the opinion of the Commissioners, if the owners of land along the route do not convey it free of charge, the line should not be constructed? Subject to that condition, the Commissioners strongly advise the construction of the line.
729. A large quantity of grain is grown in the Finley as well as in the Berrigan district, is it not? Yes.
730. And a line taken from Jerilderie to Murray Hut or Finley as it is now called, would go through Crown land all the way? The Commissioners have not considered any alternate route. They always advise solely on the route submitted to them.
731. In the event of the land not being conveyed free of charge along this particular route, would the Commissioners be prepared to consider a line from Jerilderie to Murray Hut, seeing that there is a stock route about a mile wide the whole distance? As far as I know that route has not been considered at all by the Commissioners. In considering a proposal such as this, they do not look at alternative routes.
732. Are not the Commissioners strongly in favour of a line from the Rock to Finley? They have never reported upon it I believe.
733. Did not Mr. Alexander and Mr. Gilliat report to the Commissioners? No.
734. They reported purely to the Works Department? Yes; I think I am right in saying that that line has never been looked at by the Commissioners.
735. Have the Commissioners any information leading them to believe that the landowners will give the land free of charge along this route. Have they any definite information on that point? We have no written guarantee, but it was stated to the Commissioners by a deputation at Berrigan that the land would be given.
736. Those present at the deputation agreed to the conditions laid down by the Commissioners perhaps, but the other parties at this stage, as far as you know, are not consenting parties? So far as my knowledge goes that is so.
737. Seeing that the land between Jerilderie and Finley is all Crown land, do you not think that the Commissioners should consider that route? They would not report upon the route on their own initiative. It would be a matter entirely for the Government.
738. *Mr. Hayes.*] The Commissioners can only report upon the particular route referred to them by the Government? That is the practice.
739. They have no authority to initiate anything of the kind to themselves? No.
740. They could not express an opinion with reference to the route mentioned by Mr. Chanter unless it were submitted to them for report by the Government? That is the usual practice. It might perhaps be outside their policy to recommend the construction of lines. The Act says, I think, that before the second reading of any proposal is submitted the Commissioners shall make a report.
741. The only information with which you can supply us is that which you have received officially as Secretary for Railways? Yes.
742. Mr. Harper has been over the line and knows everything connected with the probable traffic? Yes.
743. *Mr. Gormly.*] You know the working of the line from Narrandera to Jerilderie? Yes.
744. Trains are made up at Narrandera to go to Jerilderie? Yes.
745. Would there be much additional cost arising from the trains going right on to Berrigan instead of stopping at Jerilderie? That has all been considered in the Commissioners' estimates.
746. It would not entail much additional loss? The Commissioners estimate the cost of maintaining and working the additional 20 miles of railway at £1,550.
747. Could the trains go right on with the same engines? I do not think that has been determined. The same engines might possibly go on, or there might be smaller engines for working the branch.
748. You have not sufficient knowledge of the working of the lines to know whether the same engines could go on? They could go on, certainly.
749. And they would have sufficient time to do so without interfering with the existing time-table. Yes.
750. Therefore there would not be much additional expense? No; you will see that the Commissioners estimate only £1,550 for the whole working of the line.
751. Do you think that the proposed line will bring a fairly large additional traffic on to the existing line? It would be a feeder to some extent to the existing line.
752. And in your opinion there would be some considerable return traffic in general goods? Yes.
753. And to that extent it would be the means of making the existing line more productive? It would help it.
754. That of itself would be an inducement to the Commissioners to recommend the line apart from the amount which it is expected that the new line would earn for itself? Yes; the Commissioners have laid it down already in former reports that where a line cannot be shown from their estimates to pay, it might be recommended as a feeder and as being helpful to the main line. This line would be in that position.
755. You know sufficient of the district to know that it is an agricultural district? Yes.
756. From your knowledge of the working of the Railway system of New South Wales, you are of opinion that it is desirable that lines should be taken into agricultural districts in order to bring produce on to the existing line? Yes; agricultural districts will naturally carry a bigger population than pastoral districts.
757. The existing lines are capable of carrying a large amount of increased traffic if it could be brought on to them from the outlying districts? A very much larger amount.
758. Would this line divert a portion of the traffic which now goes to Victoria? The Commissioners think it would help to do so—that we should get more of our own business.

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759. *Mr. Davies.*] In the event of the line being constructed from Jerildorie to Berrigan is it in contemplation to extend it further to the Murray? That has not come before the Commissioners—they would not anticipate that.
760. Would it be necessary to continue the line, do you think? I could not say. I should not like to offer an opinion.
761. Do you think that the line would add materially to the traffic of the main line? It would be a feeder to the main line.
762. Do you not think it would be the means of carrying a portion of our traffic to Moama? No; because there would be no connection.
763. What distance would Berrigan be from the private line at Deniliquin? It is in altogether a different direction—it would be between 40 and 50 miles.
764. You will notice on the map that the proposed line makes a detour towards Berrigan rather than towards Deniliquin? Yes.
765. What is the distance between Sydney and Jerildorie? Four hundred and thirteen miles.
766. And between Jerilderie and Melbourne? About 240 miles I believe.
767. There being so great a difference in the train mileage could goods be carried more cheaply to Sydney than to Melbourne? Direct communication with Sydney would, I think, enable a certain class of goods to be carried more cheaply.
768. Does not a large proportion of our wool traffic from the Murray and Murrumbidgee already go to Melbourne? Our wool traffic from that district has been increasing; it has been much larger lately.
769. Hitherto a large portion of the traffic has gone to Victoria? By reason of the specially low rates they have been quoting. Their differential rates have been abnormally low as compared with their ordinary rates.
770. Has not the water carriage had something to do with it? It has helped them no doubt. From some of the stations their ordinary rates are 7s. and 7s. 6d., but their differential rates have been as low as 2s. 9d. This year we got a bigger quantity of wool from the district than we have had before.
771. You admit that the river carriage coupled with the differential rates imposed by the Victorian Railway Commissioners have had a large influence in diverting the produce of New South Wales into Victoria? Yes.
772. But notwithstanding that an increasing portion of the trade has come Sydneywards in the present season? Yes.
773. What would be the nature of the produce carried on the proposed line;—I suppose it would be chiefly wool and grain? Chiefly wool and grain.
774. Do you think that produce would be largely increased by reason of the extension? I think there would be a considerable increase in the carriage of grain.
775. What would you consider a reasonable railway service so far as agricultural land is concerned; what would you consider a reasonable distance, for instance, between the producer and the railway station? That would depend upon circumstances. A man might be 20 or 30 miles from a railway station and he might be only 50 miles from the consuming point. He could pay a higher carriage than the man 400 miles from the consuming point.
776. The man 400 miles away could necessarily pay only a low rate of carriage? Twenty miles of cartage has a big effect on the price of agricultural produce.
777. Would 20 miles be considered a long distance for the haulage of wool? It would for grain, but not for wool, because of the higher value.
778. Does it pay the Railway Commissioners to carry grain at the present rates? There is not much profit in it, but we have not worked out any particular item of traffic from that point of view.
779. So that the Commissioners have not taken into consideration so much the probable earnings of the line and the advantages accruing to the revenue from them, as the indirect advantages likely to accrue to the country? They have, of course, taken the whole of the circumstances into consideration. So far as this particular line is concerned they have made an estimate of the probable traffic, and they think the line will pay.
780. I believe you told the Committee on a former occasion that the average cost per train mile was £857? Possibly; but the amount given in the Commissioners' last report is £656.
781. Supposing you apply that to this distance of 22 miles? It would not apply at all.
782. What I understand you to mean is that you take the suburban traffic and the more expensive portions of the lines as a set-off against the cheaper portions? Yes, in these extensions the Commissioners consider the actual cost of the working of the lines, not debiting them with general charges, and their own administration.
783. £656 then would be the average of all the lines? Yes.
784. But taking the cheaper kind of line the cost of maintenance would be greater proportionately than on the more expensive lines, where the service would be of a more permanent character? Certainly it would be much greater where the heavy traffic exists.
785. Have the Commissioners in this estimate taken that into account? This estimate is what the Commissioners consider the actual out of pocket expenses would be for this section.
786. In giving evidence to the Committee about two and a half years ago upon the proposal to connect Jerilderie with the line running from Moama to Deniliquin, you expressed yourself strongly against the connection as a means of diverting trade to a large extent to Victoria, and you still entertain that opinion? Yes.
787. You do not think we shall suffer in any way from that point of view if this line is constructed? No, I think it would be rather the other way.
788. You think it would help to draw trade to our own railways? Yes.
789. *Mr. Trickett.*] In the Commissioners' Minute of the 4th December, 1894, the point is strongly emphasised that the landowners should give the land required for the railway free of charge? Yes.
790. Having regard to former experiences, do you not think it would be advisable that if the line is to be constructed, a section should be put in the Act making the conveyance of the land compulsory? That is a matter for the Government, but the Commissioners think that the conveyance of the land should be a condition precedent to the construction of the line.
791. As a matter of fairness to the rest of the country? Yes.

Arthur

Arthur James Stopps, Esq., Acting Chief Draftsman, Department of Lands, sworn, and examined:—

A. J. Stopps, Esq. 2 Jan., 1895.

792. *Chairman.*] You are Acting Chief Draftsman of the Department of Lands? Yes.
793. The map displayed has been prepared at your instance? Yes.
794. Have you any explanation to offer in regard to the reserved, the freehold, and the leasehold land in the vicinity of the proposed line as shown on that map? Yes. The various colours show the different holdings. The land coloured red indicates freehold land, the land coloured blue indicates conditionally purchased land, and the reserves are shown in green. The white patchy areas are the remaining Crown lands.
795. You define on the map a certain area as being affected by the proposed line? Yes; the map takes in 20 miles on both sides of the proposed line of railway, and 20 miles to the southward.
796. You take that as the area which will probably be affected by the work? Yes.
797. *Mr. Molesworth.*] In regard to the areas shown in white, I suppose the land comprised in them exists in very small quantities, and has not been taken up, because it would be almost valueless? I do not know the quality of the land.
798. Do you know the country itself? No, I do not.
799. I presume the reserves generally are for public purposes? Yes; the white dotted lines represent the divisions between the resumed and leasehold areas. I might, perhaps, explain that the whole of the unalienated Crown land at the present time within the 20 mile radius shown on the map is represented by only 12,400 acres.
800. *Mr. Chanter.*] The 20 miles extends to the south of Berrigan? Yes; I have not taken in anything to the north of Jerilderie on the supposition that it would be served by the existing railway system.
801. The proposed line runs through a great proportion of freehold land? With the exception of the Jerilderie common, it runs entirely through alienated land.
802. Is there not a stock route running from Jerilderie through Finley to Tocumwal? Yes.
803. What is the width of the route? I should think it would be a mile wide.
804. Do you know the character of the country? I cannot say.
805. It is not indicated by the plan? No.
806. I suppose it is similar to the surrounding country? I cannot say—I do not know the country personally.
807. I notice that your plan includes the pastoral holdings Momalong, Narrow Plains, and Barooga. Do you know whether the lessees of those runs have applied for a renewal under the 43rd section of the Act of 1889? I do not know.
808. *Mr. Hoskins.*] I suppose there would be no difficulty in your Department furnishing this Committee with information showing the owner of each portion of alienated land traversed by the proposed railway? I suppose the information could be ascertained. Of course the records in our office would only show the persons to whom the land was alienated in the first instance. We should have to trace the transfers to ascertain the present holders of the property. I suppose there would be no difficulty about it.
809. *Mr. Davies.*] What is the total acreage of land alienated within the 20 miles radius indicated by the map? There are 447,974 acres of freehold land, 272,783 acres of conditionally-purchased land, and 105,374 acres of reserve.
810. Is any of the land held under lease? Probably some of the areas of unalienated land are held under lease.
811. So that the whole area is occupied? Completely occupied.
812. What is the total acreage of the unalienated land? 12,400 acres.
813. Do you regard 20 miles distance from a railway as being a fair and reasonable service? I have not formed any judgment on that matter at all. I have simply taken the data employed in connection with the proposed line from Jerilderie to Deniliquin.
814. From whom did you receive instructions to prepare a map taking in this radius on each side of the line? I received no instructions at all. I prepared the plan with the idea of elucidating the matter before the Committee.
815. And not because you regarded 20 miles distance as a reasonable railway service? No; not at all.
816. *Chairman.*] Can you give us any information as to the effect of the railway on the land? I cannot.
817. You know nothing except what your books disclose? No.
818. You can give the Committee no information which it has not yet elicited? No.
819. *Mr. Chanter.*] Will you supply us with information showing the area of all the stations embraced within the 20 mile radius? Yes.
820. *Chairman.*] You, of course, lose all trace of land in your Department when it becomes freehold? Yes; but we could give you the area of freehold land on the stations, and also the area held under lease.
821. *Mr. Gormly.*] You could not say, from the information at present in your Department, who are the present holders of the land? No.
822. *Mr. Hayes.*] Practically, you could give the Committee no more information than is shown on the map you have laid before us to-day? Nothing more than that.
823. I presume the leasehold land embraced in the area shown on the map consists principally of roads? In most cases it would probably be nearly all roads. There are a few small blocks of Crown land on the leasehold areas, and some of the reserves might be under lease.

THURSDAY.

THURSDAY, 3 *JANUARY*, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (CHAIRMAN.)

The Hon. FREDERICK THOMAS HUMPHERY.	JAMES HAYES, Esq.
The Hon. WILLIAM JOSEPH TRICKETT.	ROBERT HENRY LEVIEN, Esq.
The Hon. JAMES HOSKINS.	JOHN MOORE CHANTER, Esq.
The Hon. JOHN DAVIES, C.M.G.	CHARLES ALFRED LEE, Esq.
The Hon. CHARLES JAMES ROBERTS, C.M.G.	JAMES GORMLY, Esq.
EDMUND WILLIAM MOLESWORTH, Esq.	

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

John Harper, Esq., Goods Superintendent, Department of Railways, sworn, and examined:—

J. Harper, Esq. 3 Jan., 1895.

824. *Chairman.*] What is your position? I am Goods Superintendent in the New South Wales Railway Department.

825. You have made some inquiry with the Railway Commissioners in connection with the railway under consideration? Yes.

826. And you are now prepared to give the Committee full information in regard to it? Yes; I should like to say in the first instance that with regard to certain information promised yesterday by Mr. M'Lachlan in regard to the Culcairn to Corowa earnings, the information is in course of preparation, but is not yet ready. Perhaps I had better at this stage hand in my estimate of traffic, upon which the Commissioners have based their estimate in connection with the line before the Committee. My estimate was as follows:—Live stock, 400 trucks at 7s., £140; wool, 700 tons at 3d. per ton per mile, £183 15s.; wheat, 17,000 tons at 2s. 6d., £2,125; general goods, 300 tons at 3d. per ton per mile, £78 15s.; firewood at 7s. 6d. per truck, £100; road metal, £50; passengers, 800 at 2s., and 200 at 3s. 6d., £115; parcels, £25; mails, £242; total, £3,059 10s.

827. That is the only Departmental statement you now desire to put before the Committee? That is the only statement.

828. You have dealt, I presume, with the whole question of traffic? Yes.

829. And you have also considered the question of where the railway stations should be at the intermediate points between Berrigan and Jerilderie? Yes.

830. You can give us reasons for your conclusions upon these points? Yes.

831. Can you give us any information as to a line from Jerilderie to Finley—have you considered that? I can only give you information of a general character. I know the nature of the settlement on the route.

832. You have a full knowledge of the locality? Yes.

833. Have you travelled through the district yourself? Through the district between Berrigan and Murray Hut—yes.

834. Perhaps you would tell the Committee where you went? I went from Jerilderie to Berrigan, thence to Momolong, thence to Savernake, from there to Berrigan, from there to Murray Hut, from there to Barooga, Mulwala, and Yarrawonga. I have also been across the country from Corowa.

835. So that you have a full knowledge of the country from Jerilderie to Corowa, from Corowa to Tocumwal, from Tocumwal to Finley, and from Finley to Jerilderie? Yes.

836. Do you consider that the area influenced by the proposed railway? Not all of it.

837. Where does it cease? At Savernake to the south-east, the border of Barooga to the south, and at a point three or four miles from the Murray Hut to the west.

838. *Mr. Chanter.*] Your knowledge and connection with this matter are entirely confined to traffic? Yes.

839. You have no knowledge of engineering? No.

840. Have you taken into consideration in estimating the traffic on the proposed line the probability of the Victorian Railway Commissioners making further concessions to the producers in the area which you have sketched out on the plan? In connection with the general traffic, yes. We have taken that into consideration.

841. Having considered that, you are sure that the estimate of probable earnings you gave just now is not excessive? It is based upon local rates.

842. Rates which will exist purely for this line? Yes.

843. Has it ever struck you that possibly the Victorian Railway Commissioners may again offer further concessions, compelling you to reduce the rates you have now in view? I do not think that it is at all probable that they will.

844. What was the nature of the rebate given to the producers in this district by the Victorian Railway Commissioners? Four shillings per ton on grain, but I do not think they will repeat it in view of the storm which the concession brought about among their own producers.

845. Is that rebate in existence now? No.

846. Is any rebate of the Victorian Railway Commissioners in existence now in any part of the Murray district? Yes; on general goods.

847. Is it in existence in any part of the area which would be served by this railway? It does not embrace Berrigan.

848. As I understand the matter, about one-half the distance between Berrigan and Jerilderie is embraced within the present rebate line? Yes.

849. That rebate applies to general goods? Yes; and of course to wool.

850. Was the rebate given in respect of the wheat produced in this district this year a special rebate? Yes; it was altogether a special rebate.

851. Was it in consequence of the representations made by your Department that that rebate on wheat was withdrawn? No; we did not make any special representations on the subject.

852. Did you not meet the Victorian Railway Commissioners in reference to the matter? Yes; but not in reference to the wheat rebate. That did not form portion of the discussion.

853. At the meeting to which I refer was any arrangement made? No arrangement was made at all. The Victorian Railway Commissioners practically declined to make any arrangement.

854. If this line is constructed, therefore, you would still have to meet the possibility of a special rebate being again offered by the Victorian Railway Commissioners? Yes; but the position is this: We have to give a rebate in the district to meet the Victorian rebate, but the producers at the present time have 25 miles of road carriage to reach the Victorian railway, and the rate which we propose is not more than a quarter of what it would cost them to do that.
855. Has it struck you in dealing with this question of rebate that if this proposed line is constructed, and the charges were exceptionally high for the 21 miles, that there would be an agitation to get them reduced to a rate similar to that charged upon the main line? There will probably be an agitation. Our experience is that there is always an agitation in these matters.
856. If that agitation were backed up by a further offer on the part of the Victorian Railway Commissioners to carry New South Wales produce on their lines at a lesser rate, what would be the position of affairs? I do not think it would affect the estimate generally, because we cannot conceive it possible that the Victorian Railway Department would still further reduce the freight on wheat, and that represents nearly four-fifths of the entire estimated traffic.
857. You are aware that the Victorian Railway Department in order to obtain trade, not only in this district, but all down the Murray, have been carrying goods absolutely at a loss? Yes.
858. Is there any means at the disposal of your Department by which that can be checked? We can only check it by competition with them.
859. If that competition commences the question is where it is to end;—I suppose if such a thing took place, that sooner than loose the trade of the district, if this line were constructed your Department would be prepared to adopt rates upon it similar to those in existence for the whole mileage between Jerilderie and Sydney? As far as wool is concerned—yes; but I do not think it would be necessary as far as grain is concerned.
860. Why would it not apply to grain? After the recent experience of the Victorian Railway Department, I do not think it is likely to repeat the rebate. They cannot afford to reduce the rate on wheat any further. If they reduce the rate to the people of New South Wales they will have to reduce it to their own farmers, and they cannot afford to do that.
861. You expect to get a larger tonnage from wheat than from wool on this line? Decidedly.
862. So that if wheat were affected by the system of rebate you would be compelled to reduce your charges if you wished to conserve the trade? If it were so affected, I dare say we should have to do it.
863. You have carried some of the produce from Tuppal Station this year? Yes.
864. By special arrangement? Yes.
865. The Victorian Railway Department had a special arrangement with them in the past? Yes.
866. A special rebate was allowed? Yes.
867. You would be prepared to retain the whole of the traffic from the Murray Hut district—that is, to conserve the trade for the Berrigan line? We should be prepared to carry at the rate at which we carried this year, with the addition of the Berrigan to Jerilderie mileage. I suppose it would be about 5s. 3d. per ton from Berrigan to Jerilderie.
868. Do you think you would find any competition with the proposed line arising out of the private line running from Deniliquin to Moama? I do not think so. We have never come directly into conflict with the directors of the Moama-Deniliquin line. Whatever movements have been made in this district have been originated by the quotations of the Victorian Railway Department.
869. As far as the district we are now discussing is concerned, the competition against you has been more particularly with the line starting from Cobram? Yes, decidedly.
870. And you expect the competition to be confined to that district still? Yes.
871. I notice a charge of 7s. per truck in your estimate of traffic—would that be for sheep and cattle? It is 4d. per truck per mile for both sheep and cattle. That is not a local rate at all.
872. What is the cost per truck at the present time from Jerilderie to Sydney? £8 0s. 11d.
873. At what do you estimate your earnings from live stock on the proposed new line? £140.
874. Do you not think that that is likely to be exceeded? I think that in view of the chilled meat industry and other things it very likely may be, still I have kept within what I have considered the safe side in making this estimate. You will also observe that in the estimate of 7s. per truck we have taken the terminal rate—it is not a local rate. Of course, if live stock is carried to Narrandera and other places where the chilled meat industry may be carried on, we should probably get 8d. per truck per mile for the whole of it, so that the earnings would be proportionately greater upon the same quantity carried.
875. Have you estimated, in connection with the probable traffic of live stock, the different market values of cattle and sheep in the Sydney and Melbourne markets? I think they are both rather controlled now by the home market for dead meat than anything else.
876. If that is the case the producers in the district would benefit to the extent of something like 12s. per head on cattle, and to a proportionate extent on sheep, by sending the stock to Sydney, instead of to Melbourne? Yes; taking into consideration the duties, that would be about it.
877. Would not that mean that your estimate of earnings would be exceeded? There are not many cattle fattened in the district.
878. But with regard to sheep? There it is a question of competition with other localities. It is a question of what the market will absorb.
879. Have you had brought under your notice any special rebate on live stock on the part of the Victorian Railway Department? We have heard of it, but we have taken no notice of it. We understand that the rebate was on account of stock intended for shipment, frozen or chilled, but we took no steps to counteract it.
880. Had the Victorian authorities not permitted sheep—I am not sure of cattle—to be passed into Victoria in bond to be boiled down there? Yes.
881. Do you think that if the present duty on wheat, imposed by ourselves, were removed it would affect the trade all along this line? I am of opinion that in this particular district a large quantity of wheat will be grown under almost any conditions. I am not quite sure that as much would be grown in the contingency you name.
882. You do not think there is any probability of the Victorian duty being removed? That I cannot say.
883. Did you take it into consideration in dealing with the question of traffic? We look upon it as being very improbable.

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884. I suppose it has come to your knowledge that a certain tonnage of return goods has gone to Tuppal Station in consequence of your obtaining their wool? Yes; that is the fact.
885. And you estimate that, in regard to all the produce sent from this district to Sydney, and which has previously been sent to Melbourne, there would be a return tonnage? Yes.
886. How far towards the river Murray do you expect to draw trade by this line? I do not expect to go more than 10 miles to the south; that is to the northern boundary of Barooga.
887. You have the Tuppal traffic now? Yes; but as it was a debatable matter, and as the 500 tons of wool which we obtained from that station were obtained under special circumstances, I did not include it in my estimate.
888. While present circumstances last, I suppose you will always have to make special arrangements in regard to this district? Probably.
889. And having once obtained this particular trade, do you think you can retain it? Yes.
890. You are aware that the Commissioners, in reporting upon this line, are strongly of opinion that it should only be constructed contingent upon the landowners making a grant of the land to the Government? Yes.
891. In the event of the landowners refusing to make that grant, what would you say to the construction of a line from Jerilderie to Murray Hut; do you think such a line would conserve the trade of the district equally with a line from Jerilderie to Berrigan? No; I do not think it would conserve as great a trade as the line now proposed.
892. You know that a line from Jerilderie to Finley or Murray Hut would be taken through Crown land? Yes.
893. What area would be affected by such a line, supposing the terminal point were Finley? Well, I should like to explain in the first place, that the land in that district is not nearly as suitable for cultivation as is the land to the eastward. In the Berrigan district there are fifty or sixty original selectors to whom the land belongs, but upon Mr. Faulkner's holding about midway between Berrigan and Murray Hut the cultivators are leasing the land and are paying 5s. an acre with the option of purchase. My own impression is that under existing conditions they will be unable to continue the payment of that amount, and that the land will go out of cultivation. The land along the stock route is not as good as the land to the eastward. It is important to consider that the land to the south of Berrigan is principally in the hands of freeholders who have cleared it, and who are likely to go on cultivating it. The land to the eastward of the stock route is far more suitable for agricultural purposes than is the land to the west of it.
894. Does not the system of leasing the land with the right of purchase exist on the Momolong and Barooga estates? Yes, but that does not represent one-half of the estimated traffic in grain. The estimate is made up chiefly of wheat grown upon freehold land, upon land south and eastward of Berrigan. Wheat grown in that district certainly would not come in to Murray Hut even if a line were made there from Jerilderie. It would continue to find its way into Jerilderie as it does at the present time. The Savernake produce would probably go to Corowa.
895. If a line were made to Murray Hut I gather from what you say that the traffic would not be lost, but that it would be simply diverted to other terminal points? Yes, but it would not be carried on the line you suggest.
896. Do you not think we are entitled to conclude that the 500 tons of wool from Tuppal would be carried on the proposed line? Yes, and I am also under the impression that the Barooga wool would be carried upon it.
897. Would there be any gain in distance from Tuppal by going to Berrigan instead of to Jerilderie? They would gain about 10 or 12 miles.
898. In the event of the land not being granted in fee simple by the owners for the construction of the proposed line, would you favour the construction of a line to Murray Hut sooner than loose the trade which has hitherto gone to Melbourne? No, I cannot say that I would.
899. *Mr. Hayes.*] You have a good knowledge of the whole of the district you have described? Yes.
900. Is it not a very rich agricultural district? Yes.
901. Taking a radius of 10 miles around Berrigan, I suppose it would be one of the best agricultural districts in the Colony? It is the best I have seen, and I think the Statistical Register goes to prove it. The greater part of the area proposed to be served by the line is in the county of Denison. The total area of that county is 778,000 acres, of which 62,135 acres are under cultivation. I think there are only one or two other counties in the Colony having as large an area under cultivation. To the west of the Tocumwal stock route is the county of Townsend, with an area of 2,235,000 acres, of which only 10,700 acres are under cultivation.
902. Therefore, county Denison, of which Berrigan is the centre, has six times the area under cultivation? Yes; with a total area of about a quarter as great.
903. You say that Berrigan is the centre of the county of Denison Taking a 10-mile radius of Berrigan about what area would be under cultivation? About 35,000 acres.
904. That would be served by the proposed railway? Yes.
905. Is the whole of that land under cultivation at the present time? Yes.
906. Is cultivation in the district increasing? Yes. They were clearing the land when I was there last, and there will be a greater area under crop this year than there was last year.
907. When did you visit the district? About two months since.
908. Did you see much land then under process of being cleared? Yes; a considerable quantity.
909. What percentage was there, as far as you could judge? I could form no conception of how much was being cleared, but the clearing was going on generally throughout the whole district.
910. I suppose the land in the district generally was specially suitable for the growth of wheat? Yes.
911. And it can be cleared at a cheaper cost, I suppose, than can the land in most other districts? Yes, to a certain extent it is improved land; that is, it has been ringbarked, and it can be cleared cheaply.
912. At about what price, do you suppose? From 10s. to £1 per acre. £1 per acre is as much as I have heard of as being paid for any clearing there.
913. Is the estimate you have formed about the amount of grain likely to be brought on to the proposed line from personal observation? Yes.
914. You believe that if the line were completed by the next harvest the estimate you have already given would be considerably increased? That is my impression. I have referred to Mr. Coghlan's figures to substantiate

substantiate my own estimate. His estimates are collected in the police district. For the Deniliquin district he gives 415,000 bushels; for Tocumwal, inclusive of Denison and Townsend, and I have already pointed out in Townsend there are only 10,000 acres under cultivation—635,000 bushels. That would be over 1,000,000 bushels between the two districts.

915. What would be the proportion belonging to Denison? I suppose one-fifth of the total might be credited to Townsend. I do not wish to imply that the whole of this district would be affected by the railway, or that it is included in my estimate. Although I did not include the wheat grown within a few miles of Murray Hut, I think there is reasonable ground for supposing that if a railway were taken within 10 miles of it it would come in to Berrigan instead of going 23 miles to Jerilderie. However, I did not include that wheat, because the stock route to Jerilderie being of such a favourable character for travelling, it occurred to me as being possible that the people of Finley might prefer to go to Jerilderie by road.

916. What is the difference in distance as between the two places? About 2 or 3 miles. One road is comparatively straight, and the other takes all sorts of angles. I think, however, that it is about 3 miles longer from Berrigan to Jerilderie than from Murray Hut.

917. What is the present rate of tonnage, taking Berrigan as the centre, to the Jerilderie railway station? From 1s. to 1s. 3d. per bag; from 9s. 3d. to 11s. per ton. Roughly, you may put it down at 10s. per ton.

918. And you propose to take it by railway at 2s. 6d.? Yes.

919. That is the wheat? Yes.

920. What is the present rate for other traffic? It would be about the same.

921. Could we average it all at 10s.? You would have to add 25 per cent. for the other traffic, but there is very little traffic beside the grain traffic.

922. The rates you have quoted apply to summer traffic only? Yes; in winter it is impracticable.

923. What do you suppose the rates would be in the winter? I think it would be impossible to carry wheat over the roads. I do not think anyone would attempt it.

924. You think the roads would be impassable for ordinary traffic during the winter? Between Berrigan and Jerilderie—certainly.

925. From your knowledge of the country, what should you say it would cost to make an ordinary road from Berrigan to Jerilderie? I do not know. I can form no idea. I should think it would be very expensive. It would be boggy on account of the loose character of the soil. Besides, there is no stone or material in the neighbourhood, with the exception of the granite hill adjoining Berrigan.

926. You think the road would be impassable during the winter months? Yes.

927. If the cultivators of the soil are to be served, therefore a railway of the kind proposed is an absolute necessity? I believe that if they are going to continue cultivation under existing circumstances it is an absolute necessity. I do not think the grain will bear a charge of 10s. a ton.

928. The Victorian Railway Commissioners last year made a concession of 4s. a ton for grain? Yes.

929. But that rebate has since been removed? Yes.

930. Assuming that concessions were made and that the wheat were to be shipped into steamers in the port of Melbourne for Sydney, would it be cheaper to take it *via* Victoria in bond than to bring it to Sydney at the rates you propose from Berrigan? It would be slightly in favour, under the circumstances of the carriage last year, of going *via* Melbourne; but freights were very low. The rate from Yarrawonga would be 13s. 4d. a ton. The shipping charge would be 4s. a ton, and the insurance, wharfage, and other charges would amount to another 2s., making the total 19s. 4d. Deducting the rebate of 4s., the charge would be 15s. 4d. The rate from Jerilderie to Sydney is 15s. 6d., the proposed rate on the new line is 2s. 6d., making in all 18s.

931. Showing a difference on present charges of 1s. 4d. a ton in favour of the railway? Yes.

932. From Berrigan to the Murray what would be the rate of land carriage? To Cobram it would be about 12s. 6d. a ton.

933. So that there would be a total charge of £1 11s. 10d.? Yes.

934. Taking a radius of 10 miles from Berrigan what, on the average, would be the rate of carriage to Berrigan? About 3s.

935. And the proposed rates from Berrigan to Sydney would be 18s.? Yes.

936. Supposing you took 4s. as the average charge within the 10-mile radius, the rate from Berrigan *via* the New South Wales lines would be £1 2s. a ton? Yes.

937. As against £1 11s. 10d. on the Victorian side? Yes.

938. You do not anticipate any competition from the Victorian Railway Department? No, we do not anticipate that that will take place again as regards grain.

939. Was there not a strong outcry from the Victorian farmers in connection with the rebate allowed to the producers of this Colony? Yes.

940. The Victorian farmers waited upon the Commissioners in reference to it, and the Commissioners in consequence removed the rebate? Yes.

941. Was it not stated by the Commissioners that the grain traffic was not paying at the then rates, and that it was impossible to reduce them lower? Yes.

942. I believe there is a large number of small holders around Berrigan and to the eastward? Yes.

943. Are they original selectors? Yes.

944. There are also those who have purchased land from the Momolong Estate? Yes.

945. What do you estimate as regards the future of the district;—is there not a tendency to break up the large estates and to convert them into small holdings? That is the tendency, most undoubtedly. With the exception of Wonnamurra, Nangunyah, and Berrigan they are all doing it as quickly as they can.

946. If this line were constructed to Berrigan do you think it would cause more estates to be cut up into small holdings? Certainly; if the owners could find persons willing to take up the land upon the terms they are prepared to offer it at.

947. From the observations you have made in the district, and from your knowledge of it, you think that the line will not only be of advantage to the residents, but that it will be a profitable line in itself? Yes. I am sure it will—it will be a good feeder to the main line. In 1887 we carried on that line 1,091 tons altogether. During last year we carried 17,000 tons. The increase is attributable entirely to the increased growth of cereals in the district, between the two dates.

948. Is not all the cultivation to the south of Jerilderie? Yes.

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949. Is there much land under cultivation between Jerilderie and Narrandera on the main line? There is a good deal close to Morundah.
950. The principal traffic is from the east and south of Jerilderie? Yes.
951. And the tendency is for it to increase? Yes.
952. Is this a line which can be cheaply constructed from what you have seen? Yes, it is practically a surface line. Judging from the descriptions of the surveyors it is very level.
953. There are no engineering difficulties? No.
954. Have you been over the country in the winter? Yes.
955. Is there likely to be any damage to the line from flood? I should not think so. I passed over the land when the whole country was practically under water, and I did not meet with running water anywhere.
956. It was all still water? Yes.
957. Do you anticipate that in winter there will be any difficulty in running trains on the line? No; I do not know of any reason why it should not be practicable to run trains on it in the winter months.
958. Do you think the line could be easily worked as a line from Narrandera to Jerilderie? Yes, I should think so.
959. You do not anticipate any difficulty in keeping the traffic open? I cannot see that there would be any difficulty.
960. I suppose you personally examined the country in the direction of Finley? Yes.
961. Do you think that the production of that district will increase as rapidly as that of the district to the eastward of Berrigan? There is some splendid country there, and the only reason I can assign for its not being as permanent, from the point of view of cultivation, as the land to the eastward of Berrigan, is that the farmers have the land under continuous cultivation. No land would stand that. The farmers who have freeholds to the south of Berrigan carry sheep upon their land and work it year about. I do not think the cultivation of the leasehold areas near Finley can continue long. The land has been cropped three or four years. It is becoming exceedingly dirty, and there is every promise of a poor yield this year on some farms.
962. You have no doubt in your own mind that the proper course for the railway to take is from Jerilderie to Berrigan? That is my opinion.
963. *Mr. Roberts.*] Are you responsible for the figures given in the Railway Commissioners' report relating to the estimated traffic? Yes; but I notice that there is a difference of £25 between the two totals. I do not at this moment know how it came about.
964. You have had a large experience in preparing similar estimates? Yes.
965. Will your memory allow you to give the Committee any instance in which your estimate has been fully borne out? I am afraid some of my estimates have been of a negative character, but my estimate in regard to the Cobar line was borne out, and my estimate also in connection with the Temora line has been justified. I had nothing to do with the Corowa line.
966. As a rule you would under-estimate rather than over-estimate? Yes.
967. You regard Berrigan as the centre of a large agricultural district? Yes.
968. And you believe that a large amount of traffic which now goes to Victoria would be retained in this Colony if this line were constructed? Yes; the greater part of it. A great proportion of the grain and live-stock traffic would be new traffic.
969. The line from Narrandera to Jerilderie is now being worked at a heavy loss? Yes.
970. Do you think the construction of this line would tend in a marked degree to lessen that loss? Yes. I may mention what the district has already done for us. In 1892 we carried 4,672 tons of breadstuff from Jerilderie, and earned £3,400. In 1894 we increased this to 10,000 tons, earning £7,358.
971. Is that owing to the large amount of settlement which has taken place to the south of Berrigan? To the cultivation in the neighbourhood of Berrigan.
972. Are the people round about Berrigan very keen about the construction of this railway? They are very anxious about it, and especially those who are freeholders—those who settled on the land originally, and who have held it. It is rather an extraordinary thing that the stations there have never been able to buy any land from those who originally selected it. It is still in the hands of the original selectors, or has been sold by them to small *bona fide* holders.
973. Do you think they are sufficiently keen about the railway to give the land required for the line free of charge? I am quite sure that in every case the small land-owners will do so. I do not know what the larger owners will be prepared to do.
974. Do you think Petersen and Sargood will give the land required? If Sir Frederick Sargood realised what was the wise thing to do he would do it. He has some very valuable land there, and he can do better with it than grow sheep upon it. I gather from what Mr. Wilson, the owner of Berrigan told me, that he would give the land required.
975. Does Berrigan Station contain good agricultural land? It is considered the best land in the district.
976. From your knowledge of the country, and of the probable traffic, you think the Committee would be justified in recommending the construction of the line? That is my opinion.
977. *Mr. Gormly.*] Do you think the construction of the line would cause more land to go under cultivation in the neighbourhood of Berrigan? That is my impression.
978. But if agriculture there is increased there would be likely to be increased population? Yes.
979. Increased population meaning increased traffic on the line? Yes; the general traffic would increase proportionately.
980. Did you base your estimate upon the present population of the district, or did you proceed upon the assumption that there would be an increase of population? The estimate is based upon the existing population.
981. Therefore you are of opinion that the population is likely to increase, and that there would be a good return from the coaching traffic alone? Yes.
982. I suppose that in working the line the trains made up at Narrandera would be able to go right through? Yes; the same engine could run through.
983. Therefore the cost of running the additional distance would not greatly increase the working expenses of the line? No; the working expenses would be light on that account.
984. There would be no difficulty in doing the run three times a week without interfering with the existing time-table? No.

985.

985. I suppose the general rolling-stock would do? Yes.
986. Berrigan, instead of Jerilderie, would practically become the terminus of the line running from Narrandera? Yes.
987. To a great extent the same staff, with the exception of station-masters and porters, would be able to do the work? Yes; I should say that during a greater part of the year one man at Berrigan would be sufficient. During the wheat season it might be necessary to give him some assistance.
988. Have you taken into consideration the rainfall of the particular districts now under cultivation? Yes.
989. Is there a sufficient rainfall there for the production of wheat? That is the conclusion arrived at by all the farmers in the district. The rainfall is 21 inches at Mulwala. The Berrigan record is not old enough to be of value, but the Mulwala record is 17 years old.
990. Is it not a fact that the rainfall increases as you go to the eastward, and decreases as you go to the westward? Yes.
991. Therefore, there is a probability of agriculture being more permanent at Berrigan than it would be further to the westward? Yes. Another point to be considered is this: That at some time different relations may exist between these colonies, and if it then became a question of the produce of this district finding its natural outlet, there is no doubt that the proper route would be *via* Jerilderie, Berrigan, and Barooga.
992. That would be a nearer route than going round by Echuca? Yes.
993. But there is no intention of making any connection in that direction now? Not at present.
994. You have been over the country about Clear Hills and Savernake? Yes.
995. Is there a tendency there for land to go under cultivation? Yes; a good deal of land is under cultivation in the neighbourhood of Clear Hills.
996. Conditional purchasers there are inclined to retain their holdings? Yes.
997. And there are good indications of permanent settlement to the eastward of Berrigan? Yes.
998. *Mr. Hoskins.*] I suppose you have travelled over this district a good many times? Yes.
999. When did you first become acquainted with it? About five years ago.
1000. Have the residents of the district that will be served by this railway frequently expressed to you a wish for a line to connect them with the Jerilderie terminus? I cannot say that I ever discussed that matter with them until about two years ago. Then the Berrigan people were anxious to have a railway anywhere so long as they had not to cart their wheat.
1001. Have they not endeavoured to enter into arrangements with a private company to make a tramway? Yes; I believe one or two people have been down in the district dealing with the matter.
1002. Did not one company offer to make a tramway providing the residents would guarantee to pay 2 per cent. interest on the outlay? I do not think so. The people down there appear to have doubted very much the *bona-fides* of those making overtures to them. One representative of a company, I understand, wanted £500 advanced for preliminary expenses, and he was eventually prepared to take £50. Of course, the matter was dropped.
1003. What I want to ascertain is this: If the people were so anxious to have railway communication, do you not think they would have been prepared to incur some liability? They were prepared to accept a certain amount of liability at the time, but probably the project got into wrong hands. I think they were also discouraged by the circumstance that the policy of the country was apparently against the construction of private lines.
1004. Have you heard the residents of the district say that they would willingly give the land required for the line if the Government would undertake its construction? In every case, as I have indicated already, the small landowners have shown a disposition to do so.
1005. Do you think the large landowners would be prepared to take a similar course? I did not meet the representative of Peterson and Sargood. The manager of Wonnamurra was not in a position to say what his principal would do. I spoke to Mr. Wilson about the matter, and without saying definitely that he would give the land he indicated in an indirect manner that he would be prepared to do so.
1006. Do you think, from what you know of the people in the locality, that they would be prepared to bind themselves by an Act of Parliament to give the land required for the railway? I am sure I do not know. I do not think the small landowners would hesitate at any step which would secure for them a railway. I do not know what the feeling of the larger landowners might be if they had to bind themselves in the way you suggest. It was rather a delicate matter for me to discuss with them, because it was a departure from the policy of the country, and my mission was simply to estimate the traffic.
1007. It is admitted that the profit on the carriage of wheat is very small;—do you think that this line will be the means of diverting the carriage of wool from Melbourne? Yes, to a certain extent. I believe that the selectors of the district, who grow yearly 2,000 bales of wool between them would send it to Sydney to a man. The rates they would have to pay would be a small consideration as against getting their wheat hauled at a quarter of the rate they are now paying for it. I believe the selectors in every case would give us their wool. I have the personal assurance of Mr. Horsfall, of Momolong that his wool will be brought to Sydney, and I am sure he will keep his word, and I have received a similar assurance from the owner of Berrigan. This wool now goes to Melbourne. I have also had a promise of Mr. MacFarlane, of Barooga, that he would send his wool to Sydney if this line were constructed.
1008. If these persons send their wool to Sydney they will get stores up in return? Most undoubtedly they will get supplies back.
1009. You include in your estimate of traffic firewood;—where would you carry it to, and for what purpose? To Jerilderie. There is a forest reserve midway between Berrigan and Jerilderie, and at the present time wood is being carted from there to Jerilderie.
1010. Is there much timber on the reserve? It is a large reserve, very densely timbered.
1011. What is the timber chiefly? Box. The reserve is about 10 miles from Jerilderie.
1012. Seeing that Jerilderie is a small place, there would not be a great deal of timber required there? Mr. Wise, the miller there, would pay us nearly the amount I have estimated for his mill.
1013. You have also mentioned road-metal in your estimate;—where would you get that? Within half a mile of Berrigan—there is a hill of granite. It makes excellent road-metal. The streets of Berrigan are formed of it.
1014. As a rule, the profit on the carriage of road-metal is very small, is it not? Yes.

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1015. *Mr. Humphery.*] Have you estimated the additional traffic which would be brought to the main line as the result of this extension? I should think there would be about 7,000 tons of additional traffic including wool.
1016. *Mr. Trickett.*] Is there any profit at all made out of the grain traffic? There is a certain amount of profit under existing conditions, and that would be especially the case on a line where heavy loads could be hauled.
1017. Mr. M'Lachlan, in giving evidence as to the proposed line from Jerilderie to Deniliquin, in answer to more than one question, said the Department did not get any profit out of the grain traffic;—that was in 1892? The conditions are altered since then. We have reduced our grades, and we have heavier engines.
1018. And you say that there is a slight profit now on the grain traffic? Yes.
1019. I suppose the greatest part of the traffic on this line would be grain? Yes.
1020. In fact, the main object of the line would be to carry grain? Yes; you may say that for all practical purposes it is a grain line.
1021. Is the land in the vicinity of the proposed railway subject to flood? Not at all.
1022. Therefore you do not anticipate that any great damage would result to the proposed line by reason of heavy downfalls of rain? There is only one small running stream in the whole district, and that is Berrigan Creek. It is proposed to put an embankment across that.
1023. We had a good deal of conflicting evidence as to the line from Narrabri to Moree, that is as to where it should go, in view of the probable damage which would be done by flood waters. That line also goes through very flat country? The country is altogether very different in character. There is a range of mountains on one side of the route from Narrabri to Moree, and the line travels over creeks from that watershed. This is flat country, and there is no watershed.
1024. That would be an additional reason for constructing the line with very light ballast? Yes.
1025. Did you go into the question of what the additional cost would be if the Government had to pay for the land through which this line would have to pass? I did not go into it, but I do not suppose they would have to pay more than £5 per acre. There would be practically 18 miles of resumed land. The line for the first 3 miles passes through the Jerilderie common.
1026. In round numbers then the Government would require about 300 acres? About that. That is assuming that 2 chains were taken. I do not know that with a line of this character a width of 2 chains would be required.
1027. Assuming 300 acres were taken, what do you think would be a fair estimate for the resumption money? I do not think it should exceed £1,500.
1028. In that valuation you make no allowance for severance? No; there would not be much severance. The line does not pass through the land of many persons. There are only two persons who would be somewhat seriously affected by it. Their blocks would be cut up rather awkwardly. It is proposed, however, that it should be an unfenced line. In a similar district where a line has been proposed the landowners, although at first opposed to it, viewed it favourably on learning that it would be unfenced. That, of course, would save severance. A daylight line, such as it is proposed this should be, would be very much like a street tram.
1029. Are the landowners willing to take all the risk of damage to stock by reason of the line being unfenced? Yes; I should imagine so. The Cobar line is unfenced, and it has been in existence now four years. There has been no accident on that line necessitating compensation.
1030. One of the officials says he thinks the width of the land taken should be 2 chains;—do you think that is necessary? No; I do not think so. The only danger in country of this character would be from engine sparks, but I should imagine that the adjoining landowners would protect themselves. I think a width of from a chain to a chain and a half would be ample.
1031. Taking the station sites and such things into consideration, is not the general average about 2 chains? Yes.
1032. In a former inquiry, evidence was given as to the river coming into competition with the proposed railway, and it was then stated that the Commissioners had been in communication with the Colonial Treasurer, urging upon him the imposition of special tonnage dues on vessels using the river;—has that been followed up at all do you know? I have not heard of any result following from it.
1033. In 1892 it was stated by Mr. McLachlan that the necessity of having special tolls on vessels using the river had been urged upon the Government so as to bring revenue to the railway;—would that policy affect this line at all? No; it would not. There is no river traffic in competition with it. Practically the river traffic ceases at Moama.
1034. You spoke of the settlers on Tuppal working their land continuously year after year;—will the land stand that kind of treatment? No; it gets dirty and weedy, as well as impoverished.
1035. What will be the result of the settlers there not being able to rest a part of their land? I suppose they will have to give up cultivating it.
1036. Will not that materially affect the wheat-producing part of the country? Very little of that area is included in my estimate. It only comes slightly within the boundaries of the district likely to be affected by the line.
1037. *Mr. Davies.*] In the event of a railway being constructed from Jerilderie to Berrigan, what influence do you suppose it will have upon the value of the adjoining freehold land? It will give it an increased value no doubt.
1038. To any large extent? Not to any very great extent, in view of the contingency of Crown lands being thrown open in other districts. Under other conditions it would.
1039. But the line would surely have the effect of largely increasing the value of the lands served by it? I should think it would increase its value to some extent, but to what extent I could not say.
1040. There is very little Crown land available in the district for settlement? There are only 20,000 acres on the three runs, and I think a great deal of that is reserve.
1041. This railway will pass through the holdings of several large squatters? Yes.
1042. You visited the district with the Commissioners to make their inspection? Yes.
1043. Did you interview the large land proprietors with the view of them giving the land required for the railway? The matter was mentioned by the Commissioners, but there were no large landowners present at the time. We met only the small settlers. Mr. Horsfall, the owner of Momolong, said he would be prepared to give any land that might be required.

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1044. Will the railway pass through any portion of his run? No. The large holders affected are Mr. Wilson and Peterson and Sargood.
1045. And you do not know whether they will give the land or not? No, I do not.
1046. Your estimate depends chiefly upon the production of wheat and wool? Yes.
1047. Do you know the number of stock in the area which would be served by the line? No; but I could give you the number of bales of wool shorn on each holding.
1048. Has there been an increase this year upon the previous year's clip? A 10 to 15 per cent. increase.
1049. Does that arise from the good season? From the good season. Some of the smaller men are carrying more sheep than in the previous year on account of the exceptional season.
1050. The carriage of wool pays very well? Yes.
1051. And it would pay coming from Berrigan to Sydney? Yes.
1052. What would be the case as regards grain? The grain leaves a small margin of direct profit, but there is a wide margin of indirect benefit.
1053. In the way of back carriage? Yes.
1054. What do you estimate would be the back carriage to Berrigan? I have allowed for 300 tons, but I am quite sure that that would be exceeded.
1055. What stores find their way from Sydney to Berrigan at the present time? The great bulk of the supplies of the district at present come from Victoria through Mulwala and Tocumwal.
1056. The people in that district at the present time are supplied for the most part from Victoria? Yes. A number of cornsacks go from Sydney to Jerilderie, but the bulk of the sacks come from Victoria.
1057. Do you think the construction of this railway will have an influence in preventing this traffic to and from Victoria? I am sure we should get the bulk of the traffic. We have all the Jerilderie traffic now, and the Berrigan business is worked by Jerilderie storekeepers.
1058. Is Berrigan within the Victorian rate rebate area? No. The line is 10 miles the other side of Berrigan.
1059. You have referred to the fact that a number of settlers on Tuppal are paying 5s. an acre per annum ground rent? Yes.
1060. Does not that strike you as a very high rent? I think so, considering the present price of wheat. When they went on to the land they had an advantage for a time because it was practically cleared for them. It was very good land too.
1061. Where would the wheat they produce go to? To Jerilderie.
1062. You do not know what quantity is produced by the settlers who are paying this rental? Last year they grew about 35,000 bags.
1063. Whose run are they upon? Faulkner's.
1064. Do they combine sheep farming with wheat production? Not those particular farmers, but the freeholders do.
1065. What would be the area these settlers have under lease? About 16,000 acres.
1066. How many of them would there be upon that area? I do not know. Some of them hold as much as 2,000 acres.
1067. Would it pay them to send their wheat by train through Berrigan to Sydney? It might under existing conditions, but from the way in which they are farming they would not soon be able to do so, because the yield will shortly be comparatively poor. The land will get very dirty from constant cropping.
1068. From your general observation and inquiry you think the line would act as a feeder to the main line? Yes.
1069. And it would pay from its inception according to your estimate? Yes.
1070. What speed have you allowed for on the line? Fifteen miles an hour.
1071. It is to be a day line? Yes.
1072. No provision is made for fencing? No.
1073. You do not think fencing is necessary? No; our experience on the Cobar line has been eminently successful in that direction.
1074. Seeing that the line would be a greater advantage to the large owners than to the small owners, do you think it likely that they would object to give the land required for the line free of charge? I cannot say what they will do; but if I were one of them I should be prepared to give it.
1075. *Mr. Lee.*] Mr. Chanter questioned you as to whether any alteration of the rebate line by the Victorian Railway Commissioners would affect your traffic estimate for this extension;—I suppose any further concession made by the Victorian Commissioners would only apply to general goods? That is all.
1076. It will not affect wheat or wool? It might affect wool, but the reduction would be only comparatively small.
1077. In view of grain being excluded from the Victorian market on account of the duty, any alteration in the rebate line will not affect traffic in that particular description of goods? No.
1078. Although it might affect more or less the general goods traffic and perhaps wool? Yes; but not to so great an extent as might at first be supposed, because although Jerilderie is within the rebate line we already hold the Jerilderie traffic. Not an ounce of goods goes to Jerilderie from Victoria.
1079. Although Jerilderie is within the rebate line its traffic is not attracted to Victoria? No.
1080. How is that? Our rates have been more favourable.
1081. Notwithstanding the great attractions offered by the rebate of the Victorian Commissioners you have retained the traffic? Yes.
1082. When you were in the district collecting information from whom did you get it? I saw pretty well every one in the district who had any information to give.
1083. Did you get your information from the farmers individually or from the Progress Committee? From the farmers individually. I suppose I was at from sixty to seventy farms.
1084. In estimating the wheat traffic, did you take the probable returns from all the farms from Jerilderie to Berrigan within the area you have named? Yes, the whole way.
1085. Is it not a fact that a certain area on the line would not be affected by the extension, inasmuch as it is within easy reach of Jerilderie? That is only so to a limited extent. There is no wheat grown till you get 8 miles from Jerilderie. Wheat is simply grown for fodder on Wonnamurra Station.
1086. From which point do you reckon the charge of 2s. 6d. per ton? That would be the uniform rate—the maximum and minimum.

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1087. Even for only half the distance? Yes.
1088. If a farmer used the line for 5 miles instead of 21 miles he would still have to pay the half-crown? Yes; it is practically the zone rate, which is in general application for the carriage of wheat.
1089. Would not that arrangement have the effect of bringing drays into competition with the line? I do not think so. No wheat is grown till you get within about 8 miles of Berrigan.
1090. The rate will be uniform for all those who are likely to use the railway? Yes.
1091. And you do not anticipate any dray competition? No; only on the Tocumwal stock route. Some of the farmers in the neighbourhood of Murray Hut might send their wheat along the stock route by dray.
1092. But you have not included that part of the district in your estimate? No.
1093. Will there be no dray competition going on in any other parts of the district? Not as regards wheat.
1094. Supposing a competition of that kind grew up, would it not seriously affect the traffic? Not as regards wheat. I do not think we need fear competition with 1½d. per ton per mile. No matter how good a road was the teams could not compete at 1½d. per ton a mile.
1095. How do you arrive at the quantity of wheat raised in the district? From the area under crop and the quantity we have carried. We carried 102,000 bags last year, and there is an increased area under crop this year.
1096. You estimate that there will be 17,000 tons of wheat? Yes, 153,000 bags.
1097. You expect that from the area marked by you on the map which does not include Clear Hills or Tuppal? That is so.
1098. There is a large discrepancy between your estimate and that supplied by a miller at Jerilderie to the Sectional Committee in 1891? That mill alone has quadrupled the quantity dealt with then. The miller to whom you refer told me himself that he dealt with 70,000 bags last year. The progress which has been made in cultivation is incredible to anyone who has not seen the district within the last few years.
1099. The figures formerly given were 40,000 bags, and that has been increased according to your estimate to 153,000 bags? Yes.
1100. You are quite satisfied about your figures, although they are inconsistent with those given a few years ago by a local miller? Yes. On the 5th October, 1894, the miller to whom you refer said he estimated that about 107,000 bags had come into Jerilderie from the harvest of 1893-4. My figures are also substantiated by those of the Government Statistician.
1101. When you were in the district you went into all the little centres to ascertain as clearly as possible what would be the best point to which to take the extension? Yes.
1102. And you think the extension should go to the point where the largest number of small settlers is to be found? Yes.
1103. That would be in the neighbourhood of Berrigan? Yes.
1104. That is without offering any opinion as to which direction any further extension should take? Quite so.
1105. Touching the railway war between the Victorian Commissioners and the New South Wales Commissioners, has there not been competition on both sides for many years to obtain the traffic from this particular part of the Colony? There has been competition on our own side to get our own traffic.
1106. You are offering inducements now to get traffic which you never had before? Yes.
1107. Can you foresee any alterations likely to be made by the Victorian Commissioners whereby they would be likely to checkmate us in obtaining the traffic estimated for this particular extension? No, I think they have done their best. I do not think they can do any more.
1108. Have you kept in view the desirableness or otherwise of approaching only within a certain distance of the river Murray? Yes.
1109. You think it would be wise policy not to get too close to the river? At the present time, yes.
1110. You have located your terminus at a point where it will be outside the influence of the traffic of the river, and outside the influence of any special rates on the Victorian lines? Yes.
1111. If the produce of the district is increasing so largely, is it not fair to assume that the population will also become thicker there? Yes; it has increased during the last three or four years.
1112. Do you happen to know whether the increase of produce has arisen from the fact of the farmers putting more of their holdings under cultivation, or from the fact of more land being made available for selection? The farmers have put more of their holdings under cultivation. They have been engaged for years past in clearing, and they are putting more land under cultivation every year.
1113. If a grain centre were established in the district served by this railway, would there not be a possibility of the large landowners subdividing their estates and leasing them? I think so. It has been done to a large extent already on several holdings.
1114. Is there any truth in the rumour that owing to the low price of wool the owners of land in this part of the country find it more profitable to lease it to grain-growers? Yes. The last owner of Tuppal told me that he had bought 4,000 acres from Barooga, and that he carried on it 7,000 sheep, and that he had 2,000 acres under wheat. He said he reckoned that he was a more prosperous and a happier man than when he owned Tuppal.
1115. How many flour-mills are there at Jerilderie? Only one.
1116. Does that mill deal with the whole of this large crop of wheat? No.
1117. I imagine that a large proportion of it goes along the existing line to other markets? Yes.
1118. Therefore, Jerilderie would not be the depôt for all the wheat grown in the district? No; we carried over 68,000 bags of ungristed wheat last year.
1119. You took that from Jerilderie to various places along the line? Yes.
1120. It does not follow that all of it found its way along the line down to Sydney? No.
1121. *Mr. Molesworth.*] You know that a loss has been incurred on the line from Narrandera to Jerilderie? Yes; it is lessening, but there is still a heavy loss. It would be greater but for the large increase in the produce of breadstuffs in the district. Within the last few years the carriage of breadstuffs has doubled itself along that line.
1122. You think the construction of the proposed line would materially reduce the loss on the line between Narrandera to Jerilderie? Yes.
1123. Are you not of opinion that the natural market of this district is the port of Melbourne? Yes, assuming that it is a question of export.

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1124. What would be the distance from Berrigan to Melbourne, as against the distance to Sydney? It would be 175 miles, as against 434.
1125. Then the distance to Sydney is more than twice the distance to Melbourne? Yes.
1126. In the event of the border duties being removed, would not the traffic you anticipate find its way to Melbourne? Not if it is intended for consumption in Sydney.
1127. But if the Border duties were removed, would not Melbourne be as good a market for wheat as Sydney? Yes, certainly.
1128. And Melbourne being the nearer market, would not the wheat go there? On the other hand, you have to consider that there is land near Melbourne which is also capable of growing for the Melbourne market.
1129. What is the number of settlers likely to be served by the proposed railway? I should think about 100 or 120,
1130. You spoke about there being an inexhaustible supply of road-metal within easy distance of Berrigan? There is a large supply there; the only supply of the district.
1131. Would that not be likely to be largely required by Jerilderie and other places in the surrounding district? I have estimated that the line would earn about £50 for the carriage of metal for road-making in Jerilderie.
1132. Is not that estimate low? Well, it is a very vague thing to estimate.
1133. I understood you to say that the additional traffic to the main line, consequent upon this extension, would be about £7,000 in the course of the year? That is only an approximate estimate.
1134. Can you ascertain how much of that would be profit? It is not easy to say. So much depends upon the conditions upon which you would carry the additional traffic. Of course, if the trains were fully loaded and were running at a minimum rate of speed, the profit would be greater than under other circumstances.
1135. Do you think there would be a 10 per cent. profit? I should think so, undoubtedly.
1136. That would be so much additional profit as against the cost of working the line? It is very difficult to say what the profit would be? The Americans venture upon estimates of that kind, but we do not pretend to make them. The profit in this case might be 50 per cent., or it might be only 10 per cent.
1137. You spoke of £1,500 as being approximately the value of the land required for the railway between Jerilderie and Berrigan? Well, it was suggested to me that 300 acres would be required, and I said I thought that £1,500 would be a fair valuation of the land.
1138. Is not the betterment principle introduced in connection with the Public Works Act? I have not studied the operation of the Act at all as regards that. In this case I am simply giving an estimate of the traffic.
1139. In some cases on the line between Culcairn and Corowa, the set-off in the shape of the additional value given to the land served by the railway reduced the claims to nil, I believe? I do not know about that—I did not read the facts.
1140. In the case of this particular line, do you not think that the increased value given to the land through which it passes would equal the value of the land taken? I thiuk it would.
1141. But you are under the impression that the land will be given free of charge? I am under that impression, as far as the small landowners are concerned.
1142. *Chairman.*] You regard the proposed line purely as a feeder to the main system? Yes.
1143. It does not bear any relation to any other part of the Colony except that small portion bounded on the east by Clear Hills, on the south by Savernake, and on the west by Finley. That is, roughly, the area under consideration? Yes.
1144. Do you consider that the line has any connection with the proposal to construct a line from Jerilderie to Deniliquin? No.
1145. Do you consider that it has any connection with the proposal to construct a line from The Rock, *via* Berrigan, to Finley? None.
1146. In the view of the Commissioners the line is simply a feeder to the main line? Yes.

TUESDAY, 8 *JANUARY*, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	James Hayes, Esq.
The Hon. William Joseph Trickett.	John Moore Chanter, Esq.
The Hon. James Hoskins.	Charles Alfred Lee, Esq.
The Hon. John Davies, C.M.G.	James Gormly, Esq.
The Hon. Charles James Roberts, C.M.G.	Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Henry Deane, Esq., Engineer-in-Chief, Railway Construction Branch, Department of Public Works, sworn, and examined:—

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1147. *Chairman.*] You are Engineer-in-Chief of the Construction Branch of the New South Wales Railways? Yes.
1148. I understand that when you have been over the line from Jerilderie to Berrigan you desire to supplement your evidence of to-day with regard to that line? Yes; I intend to go over the line with a view to see how far the experience I have gained with regard to the American lines can be made applicable to this particular railway.
1149. Therefore, you desire to give evidence to-day with regard to general principles rather than with regard to details of the investigation? I should prefer to postpone all my evidence until a later date, but as the Committee wish to examine me now, I will deal with the subject as far as I am able.
1150. There is a good deal of information which you could give us to-day? I think so.

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1151. One of the points which would appear to be important is the difference in construction as between America and Australia. Can you give us any information as to that? Yes, I can. There are many points of difference. I have not prepared a statement in regard to the matter, but I can briefly refer to the main points. With regard to the cheaper kind of construction, it is the practice in America, in easy country, where cheapness is required, to lay the lines without ballast. I have never seen nor heard of their laying the sleepers directly on the surface of the ground—there is always a formation. A low bank is prepared by excavating from ditches at the sides, and these serve for drainage. The bank may be very low, but there always is a bank. It is the practice in America to use a very much larger number of sleepers than we do in this country. In fact, even on the best lines in the east, I noticed that the practice was to put the sleepers pretty close to one another. It makes all the difference, especially when you have no ballast to depend upon to support the road. The absence of ballast is, of course, a very important item of economy, but to make up for it you require a great number of sleepers. The Americans can build on this system readily enough, because they can get sleepers very cheaply. Their sleepers cost from 1s. 3d. to 1s. 6d. apiece. An increase, therefore, of two or three sleepers to the rail length does not mean anything like the cost of the ballast which has been dispensed with.
1152. What would be the cost of our sleepers generally? The full-sized sleepers generally cost from 3s. 6d. to 4s. 6d. At the present time we have a contract in the Department to deliver sleepers at Narrabri at half-a-crown, and I understand that the present Secretary for Public Works has been making arrangements to get the supply of the same class of sleepers continued at 2s. 3d.
1153. Would they be ironbark sleepers? Yes; they are not squared sleepers—they are round on the top. They are very strong and durable, and will, I believe, answer every purpose. I should be inclined if anything, to put in a cheaper class of sleepers than that if we had to do without ballast, and to put in more sleepers to give proper support to the permanent-way.
1154. It would be cheaper than ballast? Yes.
1155. Are the American sleepers of fairly durable wood? They are of different classes. On the Californian coast they are always red wood, which is a very durable timber. They told me that the sleepers wore out—that they did not rot. They wear out, because the wood being somewhat soft the rails eventually cut into them, and they have to be discarded on that account. Then they have ordinary pine sleepers, a very soft wood indeed. They have only a very short life. Then they have pine sleepers, impregnated with creosote or otherwise treated with preservatives. There are also white oak sleepers, which are largely used—in the eastern States especially. A good many different kinds of timber are used for this purpose. Both the soft and hardwood timbers are always sawn. The practice in America is to lay the rails flat down on to the sleepers. The rails are laid flat down on the sleepers without any dressing for the rail-bed. Our practice is to adze a bed for the rails, inclining the surface at an inclination of 1 in 20 towards the centre of the road. That fits in with the coning of the wheels of the rolling-stock. In America the wheels are turned cylindrically, with us they are conical. That is an important difference. Apart from greater ease in travelling, the idea originally was that, in going round curves, as the centrifugal force carried the rolling-stock towards the outside of the curves there would be a larger circumference travelling on the outside of the curve, and the body of the carriage on that side would be carried further on in consequence. In America the top surface of the rail is practically level. So far as the wheels are concerned, there is a little bit of taper on the outside, but that part which bears on the rail is cylindrical.
1156. *Mr. Davies.*] Would the friction on the rails as laid in Australia be more severe than on the rails as laid in America? There is no difference.
1157. Would the rails last as long in Australia as in America? Quite as long.
1158. The friction is on the head of the rail in America, is it not? It is all on the head, except on curves.
1159. With the angle that exists in the case of the Australian rails, would not the friction be more on the side than on the head? No.
1160. Is that because the wheels are turned to meet it? Yes, the wheels are turned so as to meet it. The bearing of the wheel on the rail is normal to the surface of the rail in both cases. I mention the point because it is an important difference resulting in this—that there is less work in laying an American road than in laying our roads. There they can get their sleepers sawn from the mill, and all that they have to do is to spike their rails down on to them. Here the sleepers have to be put through an adzing machine before that is done.
1161. *Chairman.*] Before you went to America were you an advocate of the Australian system? Yes; and I would not advocate any alteration now—it could not be altered.
1162. You would not adopt the American system? No; it would be impossible to do so now. You could not do so now without altering the whole of the rails and the whole of the rolling-stock.
1163. The Baldwin engines were an American engine? Yes; but the tyres of the wheels were so turned as to meet the Australian practice.
1164. You give this as a piece of general information and not with a view to our adopting the American practice? No, it is merely to show a point in economy in American railway construction, to which I thought it worth while to direct attention.
1165. Had the American system been adopted in the first instance would it have answered quite as well as our own? They seem quite satisfied with it in America. I believe that our practice is theoretically better. These are some of the principal points of difference between the American construction and ours. Another point is the use of large quantities of timber in their bridges. We are more inclined to use stronger and more permanent structures than the Americans. They have large supplies of cheap timber which we have not, and they use trestle work for getting over gaps, and for both small and large bridges, much more largely than we do here. That all helps to cheapen construction in the first instance, although after a time the trestle work has to be replaced.
1166. Therefore, in the construction of pioneer lines, the first difference you notice as between the American system and ours is the use of more sleepers and less ballast in America? Yes.
1167. The next alteration consists in having flat sleepers with the bottom of the rail also flat, of necessity lessening the cost of construction? Yes.
1168. And the third point would be the use of trestle work instead of permanent bridge work? Yes; I think those are the principal points of difference.*

1169.

* Note (*on revision*):—There is also the absence of raised platforms at the stations referred to later on in the evidence.

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1169. *Mr. Hayes.*] In reference to what they call pioneer lines in America, I suppose you travelled over the line from Denver to Rio Grande. I see from your report that the line has been made to the 4 ft. 8½ in. gauge? Yes.
1170. It was originally a 3-ft. 6-in. gauge? Yes. It goes right through the Rocky Mountains, a very rough piece of country to go through.
1171. Did you travel from Salt Lake City to Denver? Yes.
1172. The line passes through far more difficult country than any we have in this Colony, does it not? I would not say that, but it is far more difficult taking it altogether. No doubt there is a longer stretch of difficult country than any we have here.
1173. When that line was first constructed, it was a pioneer line such as you have been referring to? No; it was always a difficult line. The lines which would come under the class of what the Railway Commissioners call pioneer lines would be those which have been made across the prairies—across level country—which you do not meet until you go east from Denver. I left Denver in the evening and took a Pulman car to Omaha. The next morning early, I found we were on the level country. From there right into Chicago there was very little in the way of rough country at all. It was very nearly a dead level. That is the class of country to which pioneer lines are suitable.
1174. Did you travel upon any of the lines you have described, where, instead of using ballast, they use a large number of sleepers? I noticed that nearly all the lines I travelled upon had been ballasted. I travelled on a part of the line running south from San Francisco to Los Angelos, over the San Joachim Plains, which was without ballast. That would be about the same class of line which it is proposed to make to Berrigan. It is a dry country, and the climatic conditions are altogether very similar to what one would find in the interior of Australia. Portions of some of the other lines were also without ballast, as between San Francisco and Portland, and the line east of Denver.
1175. From your observation, do you think a line similar to that, taking away the ballast and substituting more sleepers, might be adopted in many of our country districts as pioneer lines? Yes, I am of opinion that system might be adopted.
1176. With advantage? I should like to see the system tried. There could be no harm in doing that. I should prefer to adopt a better and more solid construction, but as there is such a demand for light lines, I would strongly recommend that this Berrigan line, and any similar lines running into the interior, should be made on the system I have described.
1177. What is the difference in cost between a lightly ballasted line and a line without ballast and more sleepers to the mile? In making what are called pioneer lines you follow the surface very closely, and you take a good deal of risk in heavy rains and floods. If you are to make a line perfectly safe there are many places where, to guard against all contingencies, you might have to make a bank of considerable height, and that would add materially to the expense of the line. In the case of the particular line before the Committee, I think it has been said that the traffic is to be slow, and that would mean, I assume, that if there were an occasional interruption no great harm would be done.
1178. But what is the difference in cost between a lightly ballasted line and one laid upon the American system with more sleepers to the mile than we have here? Well, it would be cheaper to lay it on the American plan without ballast, of course.
1179. What rate of saving would there be per mile? In the case of the Berrigan line ballast is estimated to cost about £308 per mile, and the sleepers to cost £240 a mile. If, instead of eleven sleepers, you put in fourteen, that would add about £60 to the mile in the way of sleepers. You would then have to take off the ballast. There would be a saving of about £248 per mile.
1180. That is at Australian prices? Yes. I am taking the estimate of the Berrigan line, the sleepers being estimated to cost 2s. 6d. apiece, and the ballast being estimated at 3s. 6d. per lineal yard. There would be 1,930 sleepers to the mile, at 2s. 6d. per sleeper. The estimate of 3s. 6d. per lineal yard of ballast is the same price that I allowed in the case of the Morce line. The principle is the same.
1181. What would the ballast come to altogether? £308 per mile.
1182. And you think there would be a saving of £243 per mile? Yes, nearly. There would be a little extra for platelaying, on account of the extra sleepers, but it would not amount to very much.
1183. Should you think there would be a saving of £230 per mile? I think we might say £230 a mile, by putting in more sleepers and knocking the ballast out altogether.
1184. Would you advise the adoption of that system in the case of this particular line? That is a point I would rather leave until I have seen the country. I have not even a report before me showing what sort of soil there is.
1185. From your experience in America of lines laid without ballast, are you prepared to advocate that practice here in the case of pioneer lines worked at a low rate of speed? If I recommend them, it is scarcely because I prefer them. I should feel inclined, in all cases of new lines, from what I have seen in America, to put in a couple of sleepers more than we have been in the habit of doing. I believe it would relieve the maintenance of the line very much. But where you can get ballast easily I should always recommend its use. However, if it is desired to make as cheap a line as possible—a cheap and workable line—I would say leave out the ballast and put in more sleepers. You will make a satisfactory job and you will test the method. It may be, that if it turns out a success, it will lead to the construction of a large number of lines which would not otherwise be made—lines which are really wanted.
1186. I suppose you recognise the necessity, in the case of lines running through agricultural and pastoral districts, that they should be built cheaply, so that there may be some prospect of their paying? Yes.
1187. And there would be a large saving in carrying out the system you have mentioned? Yes.
1188. From information you gathered from America, would it not appear that when they laid down the new lines in the first instance they invariably laid them down on the principle you suggest? Yes.
1189. And that as the traffic increased——? They ballasted them.
1190. But in the first instance the lines were laid down on the principle you have referred to? Yes.
1191. And as far as safety and speed are concerned, are they not worked as well as the ballasted lines? I should not like to say that as to absolute safety. But there is one thing about the traffic on the American railways in which they differ considerably from us—that is the use of bogies on the rolling-stock. All the rolling-stock, all the passenger and freight cars, are provided with bogies, enabling them to work over rougher surfaces than our rolling-stock.
1192. That would not make any difference where the line is straight, would it? It might also refer to instances where lines were straight, and a settlement had taken place, and the rails got out of line. If there was any unevenness in even a straight part of it there would be much less chance of the American rolling-stock going off the line than there would be in our case.

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1193. You think the American rolling-stock safer than ours? Yes.
1194. And more suitable for pioneer lines? Yes. Of course, it may not be so suitable for traffic purposes. For instance, you may not be always able to fill up the long trucks. This is an important difference in the conditions of the two countries. I believe the Railway Commissioners acknowledge that except for wool traffic and wheat traffic the long trucks on bogies are not so suitable for our requirements as is our own rolling-stock.
1195. That is from a traffic point of view alone? Yes.
1196. But as regards ease of running and safety, the rolling-stock provided with bogies is far better? Yes.
1197. The lines in America as a rule are not fenced? A great many are not.
1198. As a general rule in America new lines are not fenced? No.
1199. Take the line from Denver to Rio Grande, is there any fencing on that? Very little fencing.
1200. Although it is very rough country? I passed over no line which was absolutely devoid of fencing. Fencing in America is creeping in.
1201. Does that not refer more to the eastern lines? No; even out west a good deal of fencing is done.
1202. I suppose that the quality of the sleepers used in America is not as good as is the quality of our sleepers? No.
1203. Neither as regards durability nor hardness? No. There are none of them so hard as ours, nor are they as durable.
1204. As a matter of fact on the lines in the west do they not as a rule take the sleepers from the ordinary timber of the country through which they are passing? Well on the Californian coast they use redwood.
1205. I am speaking of the line from Salt Lake City to Denver for instance? They use various kinds of pine.
1206. Ordinarily they take the timber they get as they are passing along? No, I do not think they do that. They may do so in laying the line down in the first instance, but they soon learn to make a careful selection.
1207. Are they as particular as we are with regard to the length of the sleepers, that is about getting them all of the exact size? As to length, perhaps they are not quite so particular as we are, but as to size they are supposed all to be cut exactly to size. They must be. They are sawn by machinery, and if the saws are set right the sleepers must come out right. There is not the same chance of variation as when you depend upon a man's handiness with the adze or axe.
1208. Did you see the American grader in use in the formation of any of the lines? No.
1209. Did you hear of its use? Yes. I believe it is largely used.
1210. Is it more economical than hand labour? It is taken to be so—probably it is.
1211. What would the difference in cost be? I should say the cost of work done with the grader would be about one-half as compared with dray work or even barrow-work.
1212. Could the grader be used to-day in this country? Where the country is clear of stumps it might be used.
1213. With advantage? Yes.
1214. As to station buildings, what was your experience on the pioneer lines of America? Everywhere I went there were stations of more or less importance, but there is one great difference between their practice and ours, which I should have mentioned before, and it is this, that they make no raised platforms. In the large stations the roads are separated one from another, by perhaps a little more interval than you would have with a double line of way, but still the passengers have to thread their way out between the trains standing pretty close up against one another.
1215. That applies to American railways in all parts? Yes, except at the termini.
1216. Is not the same principle adopted at New York, at Chicago, and at the principal termini? No. There, in many cases, they have low platforms. They are not nearly so high as ours, but are simply raised a little from the surface.
1217. About a foot? Yes. They are distinct from the general surface of the station.
1218. As a rule, on the ordinary lines of railway in the country districts the stations are of a most primitive character, are they not? Yes.
1219. Take the Denver and Rio Grande road—it is 750 miles long, is it not? Yes, about that, with the Rio Grande Western included.
1220. Are there any station buildings of importance on that line? No; I do not remember that there are until you get to Denver.
1221. Do you think, speaking generally, that, if we could adopt the American system you have just been describing on our pioneer lines, it would cheapen the cost of construction to a large extent? Yes.
1222. And as far as this particular line from Berrigan to Jerilderie is concerned, if the principle were adopted in that case there would be a saving of at least £230 a mile. I should say about that.
1223. *Mr. Roberts.*] Are you familiar with the Report of the Railway Commissioners to this Committee regarding the proposed line, Jerilderie to Berrigan? I am not sure whether I have seen it yet.
1224. You will see that the estimated cost of construction is about £2,060 per mile? Yes.
1225. Do you not think that that could be reduced to a considerable extent? It could be reduced by cutting out the ballast and putting in more sleepers. That would make a difference of £230 a mile, and for the 21 miles it would represent a difference approximately of £4,830.
1226. From what you have seen of railways in America, would you be prepared to reconsider that estimate with the view of reducing it? I recommend that the system of which I have been speaking should be adopted, and that would reduce the estimate to the extent I have named.
1227. *Chairman.*] You recommend a trial of the American system of construction in the case of this line? Yes. Of course, as I have said, I should prefer to see the country before binding myself absolutely to that opinion, but I do not see why the system should not be tried on this line as well as anywhere else.
1228. *Mr. Roberts.*] I hold in my hand a memorandum from two members of a former Sectional Committee who visited the district around Berrigan, and who gave it as their opinion that a line should be constructed for £1,500 a mile—do you think that that would be practicable? I should like to know what details they give.
1229. You say that the estimated cost could be reduced by £230 a mile, making £1,830 a mile? Do you think

think that estimate could be further reduced to £1,500 per mile? No, I do not think so. I do not see any other item beside that which I have mentioned upon which a reduction could take place.
1230. You are of opinion that this pioneer line might be built upon the American system, and at as low a price as possible, as an experiment, having in view the fact that when the amount of traffic upon it should be ascertained, it could, if necessary, be improved? Yes, I should like to see the American system carried out in this instance as an experiment.
1231. And you would be prepared to reduce the estimate from that point of view? Yes, to the extent I have named.
1232. *Mr. Gormly.*] I suppose the lines you travelled over in America were lines which had been constructed for some years? Yes.
1233. And I suppose they carried a large quantity of traffic? Yes.
1234. I suppose there was a considerable population not only at the termini but all along the lines? Yes, there was a great deal of traffic.
1235. There was much greater traffic on the lines to which you have referred generally than would be likely to take place upon the proposed line from Jerilderie to Berrigan for a number of years? Yes.
1236. And a much greater number of trains were run upon those lines? Yes.
1237. You will see from the report of the Railway Commissioners that they only intend to run a train three times a week over the line? Yes, I see that.
1238. Therefore the traffic would not be so considerable that the line, if not a very permanent construction, would be likely to go out of repair? It would not be subjected to the same wear and tear as the main lines, and I think it would be a very good opportunity to try the method of construction to which I have referred.
1239. It being intended to run the trains only during the daytime, there would not be much probability of an accident occurring, even if some of the sleepers did sink a little? No, not by running during the daytime.
1240. The line would go into a purely agricultural district, and probably the rate of speed would not be very high? Exactly.
1241. So that there would be no great need to adopt any very high standard of construction? There would be no chance of the sleepers settling unless there were very heavy rains, and if that had taken place greater precautions would be taken.
1242. You do not think there would be such a settlement as would be likely to cause an accident? No, I do not think so.
1243. *Mr. Hoskins.*] What has been the average cost per mile of the pioneer railways you have described in America? I did not obtain any particulars of that, because I did not think they would be of much use to the Committee, the prices in the two places being so different. For instance, I ascertained that in the case of a line being constructed in connection with the Burlington and Quincy railway in the north-west they were getting the earthwork done for 6d. per cubic yard. We have never succeeded in getting earthwork done at that price yet. They are not using graders in the case I speak of, so I suppose people there are satisfied with a less return for their labour than are people here.
1244. In your experience the labour connected with the construction of railways in America is cheaper than it is here? Yes, at the present time.
1245. Do you think the cost would be 25 per cent. lower? The actual wages of a labourer are about the same as ours, but they have longer hours. They have not the 8-hour system in America.
1246. Then you cannot give us an average estimate of the cost per mile of these pioneer lines in America? I could not at this moment, but I dare say I could reckon up the cost of the running road, because I have ascertained the cost of the rails and sleepers and everything else. As I have said, I do not think the information would be of much use to the Committee because prices in the two places are so different.
1247. The cost of the rails would be about the same as it is here, would it not? Yes; the production of the mills in America is slightly higher than it is in England; but there is the less handling and in some cases longer distances to consider.
1248. The pioneer lines or unballasted lines which you have described are on level country generally? Yes.
1249. Did you travel over any of these cheap lines constructed in rough or hilly country? No, the roughest line I travelled over was that from Denver to Rio Grande. It is a line of sharp curves and steep grades and a minimum of earthworks and ballast, but they are going on improving it—every day almost.
1250. What is the sharpest curve on that line? The sharpest curve I travelled over on that line was what they call a 16-degree curve. That was 358 feet radius or about 5½ chains; 14 and 12 degree curves are of considerable frequency, that would mean about 6¾ chains radius.
1251. That is sharper than anything we have on our mountain lines? Yes; but there is this to be said—the American rolling stock is all provided with centre buffers, and that makes their trains much more flexible than ours.
1252. What is the steepest grade on the Denver to Rio Grande Road? 1 in 30.
1253. What was the character of the roadway on the Denver to Rio Grande line; what was the depth of the ballast and the weight per yard of the rails? The line is continually being improved. A few years ago there were some very severe grades on the line. It had a grade of 1 in 25, but the line has been considerably altered, and now I believe the steepest grade is 1 in 30. Curves of 12 and 13 degrees are of frequent occurrence. There is a curve at Leadville of 16 degrees: the rails are of three weights—52lb., 65lb., and 75lb. There would be about 3,200 sleepers to the mile. The pine sleepers would cost 30 cents. or 1s. 3d., and the red spruce sleepers, which are preferred as being more durable, would cost 35 cents or 1s. 5½d. The life of these is said to be seven years. The ballast is from 6 in. upwards under the sleepers.
1254. In view of the fact that the rails are much lighter than on our lines, and having regard to the sharp curves and steep grades, are there many accidents? No.
1255. Is there not at a place called Marshall's Pass a grade of 1 in 22? That is on the narrow gauge line.
1256. You said just now that the trains are much more flexible than ours, and that they adapt themselves to the rough roads better in consequence of the rolling stock being provided with one central buffer only. Does that practice apply to all the lines? It is the universal practice.

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1257. Do you not think it would be much better on our mountain lines, where there are such steep grades and sharp curves, to have central buffers on our rolling stock? You must adopt one practice throughout. If you start with a single buffer you must continue them. If you start with two buffers you must continue it, unless you are at some time prepared to change over your whole rolling stock. You could not work a mixed lot.
1258. Do you not think it would have been much better, having regard to our steep grades and sharp curves, to have adopted a central buffer instead of two side buffers for our rolling stock? It certainly would be much easier for working round sharp curves.
1259. Do you think the present system increases the wear and tear of the permanent way at all? No.
1260. How long has the Denver to Rio Grande line been working? On the standard gauge, four or five years.
1261. Did you notice in travelling over the American lines, they were generally of a rougher character and had not such a solid permanent way, apparently, as ours, although they contained such steep grades and sharp curves? The Denver and Rio Grande line was, perhaps, the roughest line I travelled over. The lines in the Western States in America are not kept in anything like the good condition that our lines are kept in, but I do not wish to imply that they are really in bad condition.
1262. Does not neglect to keep the permanent way in good order mean frequent outlay in relaying the lines? I made some inquiry about the cost of maintenance, and it seemed to be very little more than ours. In some cases it was about the same. On the American lines you do not get the wear and tear you might expect, and chiefly on account of the bogie rolling stock. If it were not for that the wear and tear would be very severe.
1263. Do you not think, seeing that we have got a fair proportion of rough country to go over, that it would be better to adopt the bogie system in connection with our rolling stock? As regards its effect on construction it would certainly be better, but then the Railway Commissioners would probably say that it would not pay to be running long freight cars in every case for general merchandise.
1264. Is it not a fact that our system of double buffers creates greater friction and greater grinding on the rails upon the curves than is caused in America with the use of the centre buffer? I think it is very likely. You can certainly work round sharp curves better with the central buffers.
1265. Did you travel in Belgium and France? I travelled through France. I went from Paris to Caen and back, and then to Vienna and Buda Pesth; then south.
1266. Did you observe that light railways and steam tramways laid down on ordinary roads were very much in evidence in both France and Belgium? I cannot say that I had much opportunity of observing. My time was very short.
1267. Is it not the case that in France and in Belgium especially light lines have been run into the farming districts to enable the farmers to put their produce on to the trucks at their farms. And do not these lines act as feeders to the main lines? I know that a good many narrow-gauge lines have been laid down.
1268. Did you make any inquiry about them—that is as to their cost and as to their working? I have some particulars as to the 2-ft. gauge.
1269. Your experience was that the cheap light lines which have been laid down on the Continent to act as feeders to the main lines are all narrow-gauge lines? I do not say that none of them are on the standard gauge. I did not inquire specially as to that.
1270. Did not Mr. Van de Velde and Mr. Fischer give evidence on a former occasion before this Committee respecting the light lines of railway which have been constructed in France and Belgium? Yes; I think I remember that.
1271. Did you in the course of your travelling see lines similar to those to which Mr. Van de Velde referred? Yes; that was the Decauville system.
1272. From what you saw, and in reply to your inquiries, do you think that if we were to adopt in this Colony a system of light lines running into the farming districts, and even into the squatting districts, similar to those which have been laid down in France and Belgium they would greatly reduce the cost of carriage and facilitate settlement? I would not recommend them as railways, because I consider that all railways ought to form part of one system. I think a break of gauge would be a great mistake.
1273. I suppose you know that they have got over the difficulty of the break of gauge in America, in England, and in France by a mechanical contrivance which shifts the body of the traffic from one gauge and puts it on to another? I have heard of a number of contrivances for the purpose, but I have not seen one which is an absolute success and which is generally adopted.
1274. I suppose you are aware that they are now agitating in England for the construction of light lines such as exist in France and Belgium in order to reduce the cost of conveying the produce of the farmers to market? I am not sure that what they advocate in England is similar to what they use in France and Belgium. With regard to gauge, I understood that what they advocate in England is cheap railways on the standard gauge—that is, 4 ft. 8½ in.
1275. Is it not suggested that railways of a lighter character than the ordinary lines should be laid down by the side of the road in some cases? Yes.
1276. Are you aware that the Board of Trade has acceeded to the application of a large number of persons, and has decided to have a commission to inquire into the propriety of constructing light lines as feeders to the main lines of railway? Yes; when I was in Ireland and Scotland I examined some light lines of railway built under the existing special provisions of the Board of Trade, but they would not do for us.
1277. How is that? They would not be called light railways here at all. They were too costly. They cost from £5,000 to £6,000 a mile.
1278. The opinion you expressed some time ago, before you went upon your travels, as to the propriety of reducing the cost of our railways, and more especially the cost of such a line as that from Narrabri to Moree, has been fortified by what you have observed abroad? Yes.
1279. And you think that it is possible in this Colony to make cheap lines which, although the speed upon them might not be very great, would afford greater facilities than the ordinary roads for promoting settlement and for reducing the cost of conveying produce of small value to the seaboard? Yes.
1280. What is the highest rate of speed maintained on the unballasted lines you have described in America? I have not worked out the speeds, but I can easily do so.
1281. Was it 20 miles an hour? More than that. I suppose it would be from 25 to 30 miles an hour.
1282. *Mr. Humphery.*] Did you observe whether in America the main line engines ran over the light lines? The lines I have been describing are really main lines; for instance, the line from Denver to Rio Grande

Grande is a main line, and the southern line from San Francisco is a main line. They have some of the heaviest engines running on them.

1283. Would the proposed light line between Jerilderie and Berrigan stand the engines which are run upon the line from Narrandera to Jerilderie if the line were constructed without ballast? I am not sure what engines the Commissioners are using on the line from Narrandera to Jerilderie. The rails on that line are 71½ lb. to the yard. The rails proposed to be used on this line are lighter. It is proposed to use some old iron rails of a heavier type, but the lighter ones which will be used to make up are only 60-lb. rails. I do not think that on a 60-lb. rail any engine heavier than 12 tons to the axle should be used. That is the opinion I expressed in regard to the Forbes line. I said that the engines should be limited to 12 tons to the axle, and I believe it is the practice of the Commissioners to use engines of about that weight on the line. Engines of that character would be used on the line now proposed. I think it would be wrong to use heavy engines on the line. Some of our locomotives run nearly 16 tons to the axle, and they might do some damage. There is one thing I should like to mention because it is interesting. When I was in London and was speaking to Sir Benjamin Baker about the loads which could be used on particular rails, he referred me to a new edition of Molesworth's pocket-book, and asked me if I had not seen his formula for the purpose. On page 223 of that book there is a table showing what weight the different rails will bear. Before coming to this Committee I worked out what weight of rails would be required for the two classes of engines I have mentioned, namely the engines of 12 tons to the axle, and the engines of 16 tons to the axle running about 20 miles an hour. The result is this—for the lighter engine a rail of 57·63 lb. to the yard would be necessary, and for the heavier engines 69·8 lb. to the yard. Those figures correspond very nearly to the weights of the two types of rails used in the country, namely, 60 lb. and 71½ lb.

1284. But you are not sure whether the description of engines now used between Narrandera and Jerilderie could be run on this line? No, I have not inquired. But I am quite sure that the Railway Commissioners in advocating a line of this class will be prepared to use suitable locomotives.

1285. In any case if the line be constructed as proposed by you, it would be unsuitable for the main line engines? Certainly, for the heaviest engines.

1286. What is the difference between the heaviest engines and the next heaviest engines? There are many different classes.

1287. Must a special class of engine be used on the proposed line? No; it would only be necessary to keep away those engines having the severest axle-load.

1288. In giving your evidence in the inquiry into the proposed railway between Jerilderie and Deniliquin you estimated the cost of the line per mile at about £3,300, including some special provision for bridges and culverts which might be done away with to the amount of £245 per mile; in other words the amount could be brought down to about £3,000 per mile. How is it that in this case you have reduced that amount to your present estimate exclusive of ballast? The reduction has been made to meet the demand for these pioneer lines. I think what I have said will sufficiently explain the reason why the reduction has been made. The line proposed between Jerilderie and Deniliquin was of a somewhat heavier type. It was of a more permanent character than this line. The earthworks on this line are altogether lighter, and there are various ways in which a saving has been effected. The sleepers are less costly; they are rougher.

1289. Will you point out in detail how the estimated cost of £3,000 for the other line has been reduced in this instance? The earthworks in the case of the Berrigan line are estimated to cost £225 as against £300 per mile in the case of the other line.

1290. Why did you reduce the cost of the earthworks by £75 per mile? You must remember that I did not make this new estimate. I have not been over the line, but it is probably different country. It does not follow that because a line from Deniliquin to Jerilderie would require earthworks to the extent of £300 per mile, a line from Jerilderie to Berrigan would require earthworks of the same extent.

1291. Although the line in both cases is supposed to pass through exactly the same class of country? The country may be supposed to be the same, but there may be depressions on the Deniliquin line which would require more earthworks than would be required on the Berrigan line. I cannot speak from experience on this particular matter, but probably the earthworks have been cut down in order to make the line as cheap as possible.

1292. Although the country is perfectly level, and is similar to the country between Jerilderie and Deniliquin, the difference of £75 can be saved upon earthworks, you think? Yes.

1293. So that £225 per mile may be taken as a fair estimate? Yes; for the kind of line it is now proposed to make.

1294. I want you to be particularly careful, Mr. Deane, in the way in which you answer these questions, because lately it has been represented that the estimated cost of constructing railways has been largely exceeded? I am told that once or twice during my absence it has been reported that the estimated cost of railway works has been grossly exceeded. Some misapprehension seems to have occurred. Take, for instance, the much abused Milson's Point line. It so happens in regard to that particular line that my estimate has not been exceeded. The estimated cost of the land has been exceeded, but I have nothing to do with the value of the land. My estimate of the cost of the line was £127,000. Having made inquiries from the officers, I am given to understand that the whole of that sum has not actually been paid for construction, there being a balance of £1,200 still available.* If anyone can go nearer than that in

* NOTE (*on revision*):—I find that these figures are not strictly correct. Mr. Firth, who was my informant as to the saving in expenditure, was taking the original estimate as being £143,000. The Committee will remember that the estimate first submitted for the Milson's Point Extension, which had a ruling grade of 1 in 40, was £127,000; but afterwards a ruling grade of 1 in 50, with sharper curves, was determined upon, and I gave the additional cost as roughly £16,000. This was before survey. When the survey was completed the earthworks proved to be so much reduced in quantity in consequence of the sharper curves used, that I reported to the Minister that the line could be made for £127,000, the amount of the first estimate. The actual cost of construction, including liabilities, amounts to £141,800, which compared with the £143,000 wrongly taken as the estimate, shows an apparent saving of £1,200. Compared, however, with the proper estimate it looks like a large excess. This amount of £141,800 includes several items which were not provided for and could not have been foreseen. These were—firstly, the cost of substitution of blue metal for white metal ballast, which the contractor should have provided, but which, owing to financial difficulties, he was unable to undertake; secondly, the extra cost of a tunnel, which was ordered in lieu of a cutting, to avoid spoiling certain land on the Berry Estate; and thirdly, an amount of nearly £8,000 spent in widening cuttings, not at present required for the railway, but carried out in order to give the unemployed work. These extras amount to £15,264, which deducted from the total previously mentioned, viz., £141,800, leaves £126,536 as the cost of the works for which the estimate of £127,000 was given.—H.D.

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in his estimate I think he must be very clever. At the same time I do not claim any infallibility in the matter. I know it often happens that more work, in point of quantity, is carried out than was originally estimated. Perhaps the cost of a certain portion of a work may be under-estimated. Everyone is liable to do that. For instance, it may be necessary to raise a line so as to get out of flood-waters which have never before been heard of. No engineer could be blamed for that.

1295. Can the same thing be said with regard to the Ocean-street Tramway, for instance? Mr. Lyne took everything in regard to that matter completely upon himself. I was acting entirely under instructions in connection with that tramway, but I can assure the Committee that they have the full value in the work which has been done.

1296. I am putting these questions to you because, very frequently in Parliament attention has been called to the fact that the cost of a work as sanctioned by the Public Works Committee has been very considerably exceeded. In making an inquiry into the cost of constructing this line, I think it is just as well that we should have the cost of all the details of construction, so that hereafter it may not be charged to the Committee that they have failed to make an exhaustive inquiry in this regard? Of course the Committee are entitled to all the particulars for which they like to ask.

1297. I should like you to tell us in regard to what details the difference arises between the estimated cost of the line between Jerilderie and Deniliquin, and the estimated cost of the proposed line between Jerilderie and Berrigan? Taking each item in succession you will find that it is due to a general lowering of the class of line. For instance, the earthworks have been reduced to bring the line closer down to the level. I have already explained that I should prefer to expend more money, but in order to meet the demands for this class of line I have agreed to reduce the cost.

1298. You are of opinion that the work can be satisfactorily carried out at the reduced estimate? Yes. Where few bridges and culverts are required, there are also less earthworks. In country where little or no drainage is required the earthworks are quite sure to be less. That of itself will account for a considerable reduction in the earthworks item. The next item is in level crossings. The two amounts are nearly in the same. In the case of the Berrigan line the sum is given as £92, and in the case of the Deniliquin line £98. The £92 for the Berrigan line includes cattle-stops and fencing. The Berrigan line is to be an unfenced line, consequently there will be considerably less cost.

1299. Do you think £92 will be ample provision for this item? I think so, under the altered circumstances of the fencing being abolished. With regard to the next item, permanent-way material £582, as against £885, I think Mr. Firth has gone very fully into that and explained the difference. But I may say at this juncture that I think that it is scarcely fair to ask me questions on these points to-day, because not anticipating that the Committee would examine me in regard to them, I have not gone into them at all myself.

WEDNESDAY, 9 JANUARY, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	James Hayes, Esq.
The Hon. William Joseph Trickett.	Robert Henry Levien, Esq.
The Hon. James Hoskins.	John Moore Chanter, Esq.
The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Henry Deane, Esq., Engineer-in-Chief, Railway Construction Branch, Department of Public Works, sworn, and further examined :—

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1300. *Mr. Humphery.*] You were explaining to the Committee yesterday in what way you were able to reduce the estimate of £3,000 per mile, in the case of the proposed line from Jerilderie to Deniliquin, to the amount estimated for this line? I think I had proceeded some way with my estimates. The next item is permanent-way material. In the case of the Berrigan line it is set down at £532 per mile, whereas the average in the case of the estimate of a line from Jerilderie to Deniliquin was £885 per mile.

1301. Showing a difference of £350? Yes. The present prices of material are very much lower than they were at the time the former estimate was made. Last January we received a quotation for new rails much lower than anything we have had before. The price of the new material required for this line has been reduced accordingly. It is proposed to use 11 miles 10 chains of new material, and as regards the other 10 miles, the Railway Commissioners offer to supply us with old rails from the main lines, which will certainly answer very well, and which will help to reduce the cost. They propose to let us have rails for these 10 miles at £3 per ton.

1302. What was your estimate for rails in the case of the Deniliquin and Jerilderie branch? If I remember rightly, it was about £7 per ton.

1303. Then there will be a difference as regards the particular portion of the line to which you have referred of £4 per ton? Yes; that would mean a difference of £440 per mile, or £4,400 for the 10 miles.

1304. Taking the whole length of the line, that would be about £200 per mile? Yes.

1305. That still leaves £150 to be accounted for? Yes. The rest is accounted for by the reduction in the price of new rails, which I have pointed out. We can now obtain rails in Sydney at £4 10s. per ton instead of the previous prices.

1306. What was your previous estimate? I have not brought it with me. I think it is quite clear that the reduction in the cost of rails to £3 over part of the route, and from £7 to £4 10s. as regards the other part, would account for the difference.

1307. Is there any other item in regard to which there is a difference in the two estimates? All the fastenings for the permanent-way—all the rail materials are somewhat lower, I fancy.

1308. Notwithstanding the reduction upon the former estimate, you are quite satisfied that the estimate you now give is a full one? I am absolutely certain of this—even if I made no further inquiry—that the estimate

estimate formerly made was correct. The change which has taken place in the value of rails, and the getting of a portion of the quantity we require from the Commissioners at second-hand rate, enables us to bring the figures down to the present estimate.
1309. The next item, ballasting, would be omitted altogether, I suppose? Yes. But I should like to compare the estimate submitted, with the previous one. In the case of the Deniliquin line, the ballast was estimated at 4s. 3d.; here it is taken at 3s. 6d. You will see that there is a small difference. There is less ballast allowed on this line than on the Deniliquin line.
1310. I see there is an estimate of £667 for ballasting and laying sleepers as against £1,056 for the Deniliquin line;—how is the difference of £400 a mile accounted for? All the permanent-way is put down at a less cost. We are proposing to use only spikes, and to do away with the other fastenings—screws and so on. In this way the laying is done a little cheaper. There is 9d. difference in the ballast, and the sleepers are taken at 2s. 6d. instead of 5s. The 2s. 6d. sleepers are the class which I mentioned yesterday as being delivered at Narrabri at the present moment.
1311. Will the items you have referred to account for the difference of nearly 40 per cent.? I think so.
1312. You consider the allowance of £667 per mile will be ample? Yes.
1313. Notwithstanding the estimate in the case of the Deniliquin line of £1,056 per mile? Well, I can keep it down to the amount I have given. I can put in less ballasting, or I can leave out the ballast altogether if you like.
1314. You will be responsible for the railway. It is not what the Committee would like in regard to the railway? If you will excuse me, I think it is what the Committee would like to recommend Parliament to authorise. If the Committee recommend a cheaper line, such as was recommended in the case of the Jerilderie-Deniliquin proposal, they would be quite justified in doing so.
1315. I understood your estimate would combine efficiency with cheapness? A cheap line is not necessarily as good or useful a line as one which costs more money; still it may answer the purpose. It is like buying a cheap article instead of a dearer one. The cheap article does not wear as well, but it answers the purpose perhaps, and it costs less in the first instance.
1316. I understood you to say yesterday that a line suitable for this particular district might be laid without ballast? Yes.
1317. That it might be a surface line? Yes.
1318. And that you would recommend that form of construction in this case? Yes.
1319. Then, having made that recommendation, you would be responsible for the success or otherwise of the line? So far, yes.
1320. We want to ascertain the lowest cost at which such a line could be constructed? Yes; but when I recommend a line of this class to be tried, it is because you want to have a cheap line. I say that it can be done, that it is safe to do it, and that in this particular class of country it may be well to adopt the method. It does not necessarily follow that I should prefer it. I should prefer to spend more money upon the work.
1321. In the Jerilderie and Berrigan proposal, I see that the item "Miscellaneous" comes to £500, an average per mile of £24. You have also "Contingencies" 5 per cent., and "Engineering and supervision" 5 per cent. Perhaps that might make the amount equivalent to the estimate in the case of the other line? Yes; we have an average of £94 per mile for contingencies, and an average of £94 per mile for engineering and supervision.
1322. That would be included in the £328 estimated for the Deniliquin line? Yes.
1323. There would be a difference of £100 per mile? It is more than that, because the miscellaneous item of £24 would have to include signals, which is put in the other estimate as a separate item.
1324. The difference would be £140 per mile? Yes.
1325. How do you explain that difference? Only that one must get rid of all luxuries—that we must be careful to do so—that is all.
1326. You intend to be more economical in the construction of the Jerilderie and Berrigan line than you contemplated in the cost of the Deniliquin-Jerilderie line? Yes.
1327. To the extent of £140 per mile? In this particular item—yes. I expect the passengers will suffer in one way or another. The travelling public will have to put up with something a little less finished.
1328. This particular item, however, is entirely exclusive of station buildings and what might be regarded as passengers' luxuries? I am aware of that, but it would include platforms.
1329. Your explanation is that you would have to be more economical in engineering and supervision in the case of the Jerilderie and Berrigan line than you contemplated in the case of the Jerilderie-Deniliquin line? Yes.
1330. Having gone through the figures submitted in connection with the Deniliquin proposal and the figures now submitted in connection with the Berrigan proposal, are you still prepared to say that the line could be constructed for £1,830 per mile, everything included? Leaving the ballast out—yes. I have every reason to believe that the line could be constructed in that way.
1331. The way you recommend? Well, I have already explained in what way I have made the recommendation.
1332. But the Committee desire to fix you to your recommendation. Having been to America, and having seen the light lines in existence there, you have no hesitation in recommending their use in this Colony? I would recommend the adoption of the system in this case.
1333. Have you given further consideration to the weight of the engines which should be carried upon this particular line? Yes; I have a little further information to give to the Committee now. The engines which would be used on this line are those classed as C and D. They are a little heavier on the axles than I said I would limit them to, but not very much, and I think there would be no harm in using them. They are engines which are very easy on the road.
1334. Are these engines at present being used between Narrandera and Jerilderie? I believe they are—sometimes heavier engines are also used, but the rails on that line are heavier. I have no doubt that the engines running over the Berrigan line would be limited to the classes I have named.
1335. Will that necessitate a change of engines at Jerilderie? No; they would start from Narrandera and run through. The same engines would be used for the whole branch.
1336. When you speak of "surface" lines, I suppose you mean lines without ballast? There is a little ambiguity about the term. I do not mean that the rails should be laid on the surface without a certain amount

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amount of formation. But there is a term that is used—surface forming— it is applied to a kind of work with a low formation, not sufficient to require heavy side cuttings. When the term "surface line" is used it is understood to be a line that follows pretty closely along the surface. It does not mean that the surface is left untouched, but that the line follows pretty close to it.

1337. *Mr. Trickett.*] Seeing the importance of these light or pioneer lines of railway, are the Committee to understand that you made special inquiries while you were in America lately with regard to their construction? I made special inquiry as to the best way of laying lines in the first instance.

1338. Did you see any of these lines being constructed in America? When I was in America there were scarcely any undergoing construction.

1339. Did you examine any of those that were constructed? Yes, as I have already said I noticed that many of the lines I passed over had been laid in the first instance in the way I have described and afterwards improved. It is difficult in America to get hold of a line which is in its original state. No sooner is the line made than the improvements commence. I came across portions of lines where there was no ballast, where the country was dry and where the line was practically in its original state.

1340. Are you now able to make a comparison as to whether lines constructed in that primitive way should be suitable for the class of country which it is proposed to open up between Jerilderie and Berrigan? Yes. I think they would be suitable.

1341. You think the rails would not sink into the earth? I think the lines might be made suitable by putting in more sleepers. The traffic on the line would be lighter than the traffic on the lines I saw similarly constructed in America.

1342. You think there is no fear of the line giving way? No.

1343. Will you look at your preliminary minute of the 3rd January, 1895. Let me direct your attention to the following paragraph:—(When a new line is laid across the prairies, or comparatively level ground, I am assured that sleepers are never laid on the surface, however flat it may be. Drainage is always attended to, and the sleepers kept off the ground by first forming a low embankment of earth out of the side drains. Ballast is at first dispensed with unless readily obtainable, but to provide more efficient bearing surface the sleepers are placed much closer together than is the practice in Australia or England).

1344. If the line has to be embanked and if the drainage has to be attended to, as will be the case here, will that not entail a certain amount of expenditure over and above what is now proposed? No; the amount of £225 per mile provides for drainage.

1345. And also for the making of embankments? Yes.

1346. Did you see any scoops at work in America in the formation of tracks? No, I saw no work of the kind going on. The only line of a light character I could ascertain to be going forward was a line in the north-west, which was being pushed forward in connection with the Burlington and Quincy line, but it was a long way from my track, and I did not think it was worth while going up there. It would have taken ten days to make the visit.

1347. Did you make inquiry as to whether the system of scooping the track is satisfactory? Yes.

1348. You found that it was considered satisfactory? Yes.

1349. Is it more economical than the ordinary way of making a formation? It is stated to be more economical.

1350. Do you know whether the lines laid across the prairies or on level ground suffer from flood or in case of heavy rain? I should not think that would be the case on the prairies, but some of the level country lines no doubt do.

1351. How do you propose to avoid any damage of that kind upon the line between Jerilderie and Berrigan—I believe there is very heavy rain there occasionally. How will the water get away? This proposed particular line is pretty nearly on the watershed, I believe. I have not yet been over the route, but that is what I understand. There is very little drainage across the line, and the line is kept low so that if any very extraordinary conditions of rainfall arise, they would not do much damage. Of course it must be expected on all lines of this character that some damage will be done occasionally. But in a line of this kind it is better to let the damage be done and to replace it, instead of going in for expensive works in the first instance. That is one of the ideas involved in these cheap lines.

1352. Then I suppose the damage would be easily remedied? Very easily remedied because the bank is so low.

1353. Do you know if they travel at night in America upon these pioneer lines? Yes; they are not at all particular in America.

1354. Do you know at what rate they travel upon them? At whatever rate the engine-driver chooses, I should imagine.

1355. It is a kind of go-as-you-please? Yes; there is an amount of recklessness about travelling in America that is quite surprising.

1356. Do they have many accidents on these light lines? I do not think they do.

1357. You did not hear of any serious accidents? No.

1358. Do the trains often get derailed? They do occasionally. An American journal is sent to me periodically, and on the first page I have been rather amused to see what is called the most important accident of the week, implying that other accidents are altogether disregarded.

1359. Did you make any examination of the class of bridges and culverts in use on the American light lines, in order to compare them with those in use in this country? Yes; they are mostly of timber—soft wood.

1360. They are not as substantially built as ours? They are much less substantially built. They are built of cheap timber. On the Californian coast they use red wood for almost everything, trestles included, but further inland they use pine. The red wood lasts a long time, but the pine lasts only a few years, when it is replaced. But if they have enough money they afterwards put in more substantial bridges. I saw that going on repeatedly. I saw wooden structures being taken out, and concrete or stone piers, and steel superstructures being substituted.

1361. In the construction of these timber bridges, does the cheapness consist only in the timber used, or does it run through the whole structure? They do not build them so substantially as we do.

1362. They do not tie them so well? They do not tie them so well. Some of them are of very nice design, but some are very weak.

1363. Would it be desirable, in the line from Jerilderie to Berrigan, where culverts occur, or where there are crossings, to adopt the American plan? There is so little work of the kind on the line that I do not think

think it would be worth while adopting it. If we had any larger bridges I should go into the matter, as I intend to do with regard to the Narrabri and Moree line.
1364. If we had a large amount of culvert and bridge work in this line, you would be inclined to cheapen the system of construction? I should be inclined to compare the American system with ours. I brought drawings back with me of a number of timber bridges.
1365. With regard to the distance of the sleepers apart, if you adopt the line without ballast what distance would you have between the sleepers from edge to edge? About 18 inches clear from one to the other.
1366. That would be the distance apart that it would be necessary to have them if you had a line constructed on a slight embankment without ballast? Yes.
1367. Do you think that would be a safe running line for traffic at the low rate of speed proposed? Yes.
1368. Did you make any inquiries while you were in America as to the working expenses of the light lines? No.
1369. What do they burn—wood or coal? Both wood and coal, chiefly coal, I think.
1370. A comparison would not be of any service? Not of much service, I think.
1371. *Mr. Davies.*] In the course of your investigations in America, which of the railway services there, recognised as a pioneer line, did you regard as most suitable for the kind of country through which the line referred to us would go? They all adopt pretty much the same style—nearly all the companies. I got several cross-sections of their formations, and I examined at different offices the drawings they showed me. In their system of making the banks and cuttings they are all very much the same.
1372. Is much of the country served by these lines similar in formation to that between Jerilderie and Berrigan? The lines pass through all classes of country.
1373. Did you notice whether the soil upon which the lines were laid was clayey or loamy? In the case of a line which I specially mentioned yesterday, the soil was somewhat sandy—it was pretty dry, similar to that of the interior of this Colony.
1374. It was soil which would not be affected very much by heavy rains? Just so.
1375. By omitting the ballast from the proposed line you expect to effect a saving of £230 a mile? Yes.
1376. Will it be necessary to expend more than the amount of £225 estimated for earthworks? No.
1377. You do not think that it is necessary in order to make the line sufficiently safe to carry the traffic that that estimate for earthworks per mile should be increased? No, I am quite satisfied with it.
1378. Are you aware that Mr. Burge when examined before this Committee said that he regarded the estimate of £225 for earthworks as altogether inadequate, and one which he could not endorse—how do you explain that? I was not aware that Mr. Burge had made that statement.
1379. Let me refer you to Mr. Burge's answer to Question 331. If you read his examination from that point down to Question 336 you will see that what I say is correct. In view of what you have stated do you coincide with Mr. Burge? I coincide with the last statement to which you have referred, that this is a new departure. It is on that account that I recommend it.
1380. You do not coincide with him in refusing to endorse the estimate of £225 for earthworks? No, I do not. I agree with him in probably preferring a more stable line, but I am quite satisfied in this instance to make a line of this character.
1381. Notwithstanding the fact that Mr. Burge has told the Committee that he could not recommend the line at a cost of £2,060 per mile, do you still hold to the opinion that the line could be constructed without ballast for £230 a mile less than that estimate, and that it would still be a safe line for the travelling public and for the carriage of goods? Certainly, under the conditions I have stated.
1382. I understand you to say that we can dispense with ballast? Yes, by putting in more sleepers.
1383. Having a wooden floor as it were for the laying of the rails throughout the whole length of the line? Yes.
1384. You regard the provision of additional sleepers in lieu of ballast as rendering the line perfectly safe? Yes, for the class of traffic that will run over it.
1385. Would it not be very heavy goods traffic and also passenger traffic? Yes, but not express traffic.
1386. What is the annual traffic cost per mile on our railways? I think it is about 4s. 8d. per train mile. I believe that amount was given in the report for 1893. I do not know what amount was given in the report for 1894.
1387. Do you see your way clear to reduce the estimate of £111 per mile for box drains and timber bridges? No, I would not reduce that.
1388. You think the line would be perfectly safe if it were simply provided with earthworks of the character described by Mr. Firth at the rate of £225 per mile? Yes; I think it could be worked with perfect safety.
1389. Is there not at times a very heavy rainfall in this particular part of the country? I have not been over the line, but I understand that it is the reverse of that.
1390. Are you of opinion that sufficient provision has been made to drain the line, and to prevent portions of it from being washed away in the event of storm or flood? Of course, if heavy storms came occasionally the line would have to be repaired, but it would cost less to do that than to make the line much stronger and more substantial in the first instance.
1391. If the line is constructed upon the plan you have now indicated what would be the annual cost of maintenance as compared with that of an ordinary line? It is very difficult to say.
1392. Would it not be much more expensive to maintain than a well-formed line properly ballasted? Yes; I think it would.
1393. Although you would get a cheap line in the first instance it would be a very costly line to maintain? No; I should not say that, because the traffic is so light.
1394. Would it not be much more costly to maintain a line not strongly constructed and ballasted than a line with a very strong formation? Much more costly if the traffic were heavy.
1395. Very much more costly? I would not say very much more costly. It would be very difficult to say to what extent it would be more costly. You will acknowledge, I suppose, that maintenance depends largely upon the amount of traffic going over the line. If you were going to have very heavy traffic it would be far wiser and even necessary to make a strong and substantial line in the first instance, but if the traffic is very light, there would be very little subsidence and very little giving out of the line and so forth, as the result of the traffic. There can therefore be no harm in making the construction light.
1396. I understand that after what you have seen during your visit to America and other parts of the world

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world in connection with pioneer lines, you are of opinion that we can safely recommend the construction of a cheap line of the character you suggest between Jerilderie and Berrigan? Yes.
1397. You think it will be perfectly safe to try the experiment there? Yes; looking at it as an experiment no harm would be done, because if afterwards you wanted better support to the road you could ballast it. After the line is once opened you can go on improving it just as they do in America. There, as I have already explained, they lay their lines in a very primitive way in the first instance, and go on improving them from the day that the traffic starts running.
1398. You calculate your sleepers at 2s. 6d. each? Yes.
1399. And the soft-wood sleepers used in the United States I understood you to say, cost from 1s. 3d. to 1s. 7d. each, having a life of about eight years? Yes.
1400. Would not iron bark or red-gum sleepers at half a crown, with a life of, say, thirty years, be much cheaper than sleepers at 1s. 3d. or 1s. 6d. with a life of, say, eight years? Yes; in the long run.
1401. Although the capital cost of the sleepers in the first instance would be a good deal more, the road would be more permanent than if constructed of the class of sleepers used in America? There would be less expenditure in the way of renewing sleepers.
1402. If the traffic developed to such an extent as to warrant a larger expenditure hereafter upon this line it would be possible to strengthen it by ballasting it, still utilising the sleepers and other permanent way material? Yes; the sleepers would always be there, and they would answer the purpose, even if the line had to be so strengthened as to bear the heaviest of traffic.
1403. What would be the cost supposing it were necessary at some future time to strengthen the road by adding ballast? I suppose it would not cost more than is put down in the estimate at the present time.
1404. Would the estimate of £308 for ballasting be sufficient to give about 6 inches of ballast? Yes, quite that, and the ballast could be run along more cheaply by the Commissioners' trains.
1405. So there would be no additional expenditure in that respect, even if it were afterwards found necessary to strengthen the road by adding the ballast? Nothing would be lost in making the road in the way I now suggest, otherwise I should hesitate about recommending it. The advantage is that you can always raise and strengthen your line. Supposing, for instance, your banks were not high enough, you could raise them, you could strengthen the whole line gradually while the traffic was going on.
1406. And you think that the actual supply of the ballast could be carried out more cheaply with the line laid than in the first instance? I think so in this case, because it is doubtful if good ballast can be got in the locality at all.
1407. You said that very little fencing was done in connection with the pioneer lines in America? Very little.
1408. You do not propose in connection with this line to incur any large expenditure in connection with fencing? No, £1,000 is put down.
1409. That would be the fencing round stations and platforms? Yes, it would include fences across allotments or cultivation paddocks, or anything of that sort.
1410. Where do you propose to get the necessary earth to assist you to get the level? By making drains alongside the line—the draining of the line itself.
1411. You are sure you can get sufficient earth in that way to obtain the level you require? Yes, we shall want very little.
1412. The station buildings are to be of a very cheap and economical character? Yes; the accommodation is fixed by the Railway Commissioners, and they are to be very cheap.
1413. Wooden buildings I suppose? Yes.
1414. One of the reasons, I understand, for your being able to reduce your estimate for the construction of this line is that certain concessions have been made by the Railway Commissioners? Yes, in a great measure.
1415. In connection with freight charges, and in connection with handing over to the construction Department, rails at £3 per ton? Yes.
1416. *Mr. Hayes.*] How many tons of rails would go to the mile? About 110 tons of heavy ones, and 94·3 of 60-lb. rails.
1417. *Mr. Davies.*] You reduce your estimate now to about £1,830 per mile by dispensing with ballast, and by substituting additional sleepers? Yes.
1418. Without any ballast at all, and with 13 or 14 sleepers to the rail you believe that a fairly permanent road could be constructed for that amount? Yes.
1419. What character of traffic would a road of that kind carry? It would depend upon the load on the axle and the kind of rolling stock.
1420. It would not depend on the road itself, but on the rolling stock? It will depend upon the engines chiefly.
1421. You would not be afraid of the road yielding to any heavy traffic in the absence of ballast? No, they would have to be careful in wet weather, and also in the matter of speed.
1422. *Mr. Lee.*] Was this line from Jerilderie to Berrigan contemplated before your tour in the United States? No.
1423. Had you gone into the question of pioneer lines at that time? Yes. I applied the principle in some measure to the Moree line.
1424. Has this particular line had your personal estimate and supervision? I have been through the estimate to-day.
1425. I mean as regards its initiation? The principle is exactly the same as that which I introduced into the estimate for the Moree line.
1426. At that time I suppose you were under the impression that it would be desirable to use ballast to the depth of 7½ inches? Yes.
1427. But in consequence of what you have since seen in America you think that a really good line could be constructed without ballast? I should hardly like to say that, but the principle of light lines can be extended so as to do away with ballast if we put in additional sleepers.
1428. From what you have seen you think that a perfectly safe line, so far as the carrying of traffic is concerned, can be constructed without ballast? Yes.
1429. The line you now propose is put forward in consequence of what you have seen in use in other countries? Yes; and if the Moree line were to come under my consideration again I should be prepared to cheapen the greater portion of it in the same way, but not the whole of it.

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1430. This proposal is altogether a new departure in railway construction, is it not? Yes.
1431. Necessarily you have to cut everything down as finely as possible to enable lines of this character to be made through country where there is cheap traffic? Yes.
1432. You think that this line could be constructed for the estimate given by your Department? I believe it can be; but I should require before the contracts were let to have everything ready, so that I could make proper and binding contracts with the contractors, and should not have to hurry on with any portion of the job, and then have afterwards to meet contractors' claims for being delayed. I must have everything complete to start with. That is the only way in which these works can be carried out cheaply. Many works have suffered as regards cost, because that condition has been neglected.
1433. Has the necessary precaution been taken in this case? The time for that has not yet arrived.
1434. Could you give me the actual cost per mile of the line from Culcairn to Corowa? I have made out a statement of the various lines which have been constructed within the last few years. The statement shows the estimated cost, the original vote, and the actual cost.
1435. *Chairman.*] The estimate does not include resumption? No. The statement is as follows:—

RAILWAYS.

	Estimate.	Original Vote.	Cost.		Excess.	Decrease.
	£	£		£	£	£
Culcairn to Corowa	197,300	188,765		193,817	.....	3,483
Kiama to Nowra	381,390	381,390		316,319	.....	65,071
Cootamundra to Temora	138,000					
Additional works approved by the Minister	2,900					
Bonus	1,333	142,200	124,575	154,893	12,693	.....
Molong to Parkes—Forbes	397,410	397,410		357,919	.....	39,491
Milson's Point	127,000	127,000	£126,536			
Blue metal	2,500		Extras 15,264	141,800	1,977	.....
Extra tunnel	2,500					
Unemployed	7,823	139,823				
Marrickville to Burwood Road	99,275	90,250	99,544			
Extra bridges	1,500		Marrickville bridge 2,500			
Extra ballast	3,000	103,775	Extra cost of stations, bridges, &c. 15,500	121,044	17,269	.....
			Ballast 3,500			
Lismore to Tweed	867,350	867,350		790,398	.....	76,952
Nyngan to Cobar	209,280	209,280	215,539			
Estimates for grades	20,000	229,280	Extra water-ways and banks 60,000	295,539	66,259	.....
			Reduction of grades 20,000			
Totals	£2,458,528	2,386,020		2,371,734	98,293	184,997

With reference to the line from Nyngan to Cobar in which the Committee will see there is an excess of £86,259, additional works were afterwards found to be necessary, and these were not considered when the estimate was made. For instance, floods took place on the line of which previously we had no information. It became necessary to raise the line at those points. These additional works accounted for the difference between the actual cost and the estimate. I ought, perhaps, to explain that the cost I am giving you is in some cases actually over what the lines have cost up to the present time. Certain sums have been added to bring the amounts up to what the lines will probably cost. The accounts are not closed in some cases, and the estimates are all full estimates. In the case of the Cootamundra and Temora line additional works were required at the junction to assist the traffic. This was done at the request of the Commissioners, and the amount was not included in the original estimate. It brought the total up to £142,500. The Committee, I believe, recommended the construction of that line at a certain cost, which was agreed to. With reference to the Marrickville and Burwood Road line it was originally proposed to construct a single road at a cost of £90,250, but after investigation it was found that a double line could be built for 10 per cent. more. The double line added another £9,025. Beside that there were a number of extra platforms and bridges which were not included in the original estimate. There was a bridge at Marrickville Flat which was not provided for, and there were island platforms at the stations which were not included. As the Commissioners point out, although they are more costly at the outset they decrease the cost of running the traffic. The addition of £6,000 for these extra works brings the total up to £105,275 given in the statement. The line is not yet finished, but taking the present cost, and adding the liabilities, as far as they can be added, the total of £109,294 is given. The Nyngan to Cobar line is the only line upon which there is any serious discrepancy, and I have already explained the reason for that.
1436. The proposed extension being in the first place a very short distance, the works being of a very simple character, and there being no bridges, is it fair to assume that the calculations of cost can be made as closely as in regard to some of the greater works you have named? Yes.
1437. You think there is a reasonable prospect of the Departmental estimate not being exceeded? Yes.
1438. After you have visited the locality you may find yourself in the position to recommend still further modifications? I do not think I shall be able to recommend any further reductions.
1439. When you were in the United States, did you notice whether in regard to the mineral or branch lines, a similar gauge to that of the main line was generally adopted? I noticed a great many lines running to mines, the gauges of which were narrower than those of the main lines.
1440. Did the lines belong to the same company as the main lines? They were worked in connection with them. Of course a great many lines of that character are of the standard gauge.
1441. How do they get over the difficulty of the break of gauge in the case where the gauge is different? I do not know that I can give you much information about that, so far as America is concerned, but I can tell you what I saw in the north of Ireland, where there is a narrow-gauge railway running in connection with the Belfast and northern counties line. For instance, there is a 3-feet gauge railway from Balamina to Larne, and from Balamina to Red Bay. They are mineral lines. The bodies of the small trucks carry 4 tons, and the larger trucks into which the smaller trucks are emptied carry 8 tons, so that two small trucks can be tipped into one large one. The trucks on the narrow-gauge line are run over the top of the trucks on the broad-gauge line, and the mineral falls through hoppers into the larger trucks.
1442. That system would be in use for minerals only? Yes; not for merchandise; that would have to be shifted across the platform.

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1443. The gauge of the main line would be what? Five feet 3 in. I find from my notes that the arrangement for transferring the mineral to the standard-gauge waggons is of a double character, either by hopping or side tipping.
1444. Would the coal run out of the hoppers? I should think so. In the Newcastle district hopper waggons are used for loading ships.
1445. *Mr. Lee.*] Of course the arrangement you have named apply only to minerals; it could not apply, for instance, to grain in bags? No; in the case of grain in bags it would be very easy to make a change if it were all in one direction, by having a slide.
1446. Did you inquire when you were in France into the Decauville system? Yes.
1447. What is the width of the gauge? Sixty centimetres. But they use a broader gauge as well They use a metre gauge. The 60 centimetre is the favourite gauge.
1448. Is the system much in use in France? It is very largely in use, I understand.
1449. For both goods and passengers? Yes; it is used also for military purposes, I believe.
1450. Is it used for agricultural produce? Yes, it is in use in the beet districts.
1451. Did you ascertain the probable cost per mile of putting down this description of line? I have some particulars from which I think I could furnish the cost to the Committee.
1452. Do you think it would be an advantage to extend our side railways on the narrow gauge or to continue the present gauge? I am quite opposed to any change of gauge. I think the narrow-gauge system should be applied only in altogether detached parts and for special purposes.
1453. Do you think it would be possible by putting down a narrow-gauge line in this particular district to materially lessen the cost of the proposal? Of course a small-gauge railway on the Decauville system would be very much cheaper; they use such very slight rails and such small rolling-stock.
1454. The patentees of that particular form of rails supply it in sections? Yes; the rails and sleepers are rivetted together.
1455. Wooden sleepers could not be used if the system were adopted here? No.
1456. You do not think it would be advisable to extend our branch lines on the narrow-gauge system? As a matter of general policy, I think it would be very unwise.
1457. So far as mineral lines are concerned, you would have no objection to the use of the narrow gauge? In the case of that class of line, where the mineral can be so easily transhipped, it would be far less objectionable.
1458. You think it might be advisable to adopt it in those cases? It might be advisable.
1459. But you think that the proposal before the Committee is not a case in which the narrow gauge should be applied? Certainly not.
1460. Upon the line you suggest it would be perfectly safe to travel 15 miles an hour in daylight and carry an ordinary load? Perfectly safe.
1461. And you think as regards maintenance that it may afterwards become a consideration in the other branch of your Department as to whether it would be advisable to strengthen the line or to continue it as constructed, with a slight increase in the cost of maintenance over and above the cost on the ordinary lines? Yes.
1462. In that they will be guided entirely by the traffic? Yes.
1463. *Mr. Molesworth.*] Are you able to give us information to-day as to the average cost of some of the cheap lines in the United States? I have been looking up my notes. I can give you the approximate cost so far as the permanent-way and earthworks are concerned, but I could not give you such items as stations, for instance. I have no particulars in regard to them. I find from what I was told as regards the cost of earthworks in America that the proposal before the Committee is a particularly cheap one, because the average cost of earthworks in lines of this character in America is set down at about £360 a mile.
1464. Have you any idea of the lowest cost per mile for earthworks on these cheap lines? I should think it would be very similar to the amount set down for the Berrigan line.
1465. You think, then, that £225 per mile for earthworks is the lowest figure you have any record of? Yes.
1466. You are still satisfied that that amount is sufficient for the earthworks on this particular line? I believe so. That is as far as I can judge without going over the line.
1467. Before giving a decided answer, I suppose you would like to see the character of the country, and the nature of the soil? Yes.
1468. I should like to refer you to the evidence given by Mr. Burge in reply to Questions 388 and 389, and also in reply to Question 399. Mr. Burge says he would be inclined to add a little more for earthworks, and that if the line were made stronger there would be a saving in the cost of maintenance. Do you not think that in considering the cost of construction it would be well to take into consideration the probable increased cost of maintenance through the cheapening of the earthworks? I do not think it is necessary, in the case of a line of this character, where the traffic would be so light. I think you will find that what is proposed will be perfectly satisfactory.
1469. You do not agree with Mr. Burge that decreasing the cost of the earthworks will increase the cost of maintenance? I think the lowering of the cost of any line would probably make maintenance somewhat more severe. Still I would recommend that this particular line should be made in the way proposed, because the traffic would be so light that the difference in the cost of maintenance would perhaps be scarcely felt. As I have already pointed out, if the line wants strengthening, that can easily be done at any time.
1470. Will you, when you are visiting the district, consider especially the question whether the estimate for the earthworks is sufficient? Yes; I can quite understand Mr. Burge giving such an opinion. Of course he likes, as does everyone else, to be on the safe side.
1471. I suppose you have gone very carefully into all the other details of the estimate? Yes.
1472. And you are quite satisfied that the line can be constructed for about the amount named? I am quite satisfied that if I am enabled to make a proper contract, the estimate will not be materially exceeded.
1473. I presume the estimate is framed upon the assumption that the work would be done by contract? Yes.
1474. There is no intention to carry out the work by day labour? I have heard of no such suggestion up to the present time.
1475. I understood you to say that in America the trains were run as fast on the unballasted lines as on the ballasted lines? I should not say that exactly, but generally they run at a good speed over their lines. I do not think they pay so much attention to the question whether a line has been ballasted or not, as to the question whether the traffic demands quick running. The competition between the different lines is sometimes very severe, and a certain amount of traffic is required

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to be carried through within a certain time. Passengers like to travel fast, and if they cannot get fast travelling from one line they will go to another. They will travel fast independently of the condition of the line. Of course, as I have said, when the traffic is increasing the companies strengthen the lines, and this is carried on to a very great extent.
1476. They do not regulate their speed according to the suitability of the lines—it is simply a question of competition? I have not heard of any limit to speed being imposed there. I do not think there is any regulation in the matter of speed.
1477. At the same time, you consider that in this case it would be well to limit the rate of speed in order to ensure safety? Yes. In New South Wales we look after the safety of the public very much more than they do in America.
1478. I suppose the unballasted lines are just as free from accident as the ballasted lines? I have seen no returns. I cannot say.
1479. You have seen the Railway Commissioners' report with reference to this line? Yes.
1480. They make an important condition—that is, that the land required for the line should be granted free to the Government? Yes.
1481. Can you give the Committee a rough estimate of the quantity of land which will be required to be used? The practice has been to resume something between 16 and 24 acres per mile, according to circumstances. If the land were valuable, and were all taken up, then for a line of this character we could probably do very well with an average of 16 acres to the mile. That would give you an average width of 2 chains. Many of our lines—the western and north-western, for instance—are made with a width of 3 chains. There were heavy earthworks in some cases, and the width had to go beyond even that. It depends upon the class of country the line passes through.
1482. *Mr. Chanter.*] As regards ballast, the estimate supposes that the ballast would be procured from Berrigan on the one hand or from near Narrandera on the other? Yes, I believe so.
1483. Could you give us some idea of what the cost of ballast per mile would be? With the quantity proposed to be used it would be £308 per mile, that is two-thirds of a yard to the yard forward, reckoned at the value of 3s. 6d. per yard.
1484. Have you ever made an inspection of the private line running from Deniliquin to Moama? Yes.
1485. You have seen the ballast used there? Yes.
1486. Mr. Whitton, in a report dated the 15th November, 1876, says that the ballast on that line is not of a quality which meets with his approval;—how long is it since you yourself saw the line? I think it would be about six years ago.
1487. What was your opinion of the class of ballast upon it? The line at the time I viewed it was in a different condition from what it was when Mr. Whitton reported upon it. It was quite evident that it had been ballasted and improved very much. It is rather fine ballast—you might call it coarse sand or fine gravel. It is not the kind of sand which would be blown away.
1488. Do you know the weight per axle of the class of engines they are running on that line? I do not remember now, but I think I made inquiries at the time.
1489. Would they not be of a heavier class than those which it is proposed to run on the line from Jerilderie to Berrigan? I do not think so—the rails are only 50 lb.
1490. The company have been in existence for twenty years, and having used no other ballast than that which I have named, and it having been found admirably adapted to their requirements, would it not be advisable to use the same class of ballast in this Colony where heavier ballast could not be obtained? It would be better to use it than none at all, or to, perhaps, go a long distance and spend a great deal of money.
1491. The cost would be materially reduced? Yes. And I suppose that in the case of the Deniliquin line they were compelled to use this particular ballast or none at all.
1491½. They would have had to get ballast along the Victorian railways at a distance of 50 miles? Yes, I suppose so.
1492. That is what you would have to do in this instance—that is, you would have to get it from Narrandera? Yes.
1493. When you visit the district will you give this question of ballast your serious consideration. I should be glad if you would have some tests made along the line of route to ascertain if a sufficient quantity could not be obtained in lieu of the more expensive ballast? You mean that it should be obtained as on the Deniliquin line—yes, I will inquire into that.
1494. There is a length of line going over similar country to that under consideration in Victoria, where the Victorian authorities have used this class of ballast;—do you not think it would be well to give it a trial here? I should not object to using it.
1495. More particularly after the experience of the company I have referred to? Yes. I should prefer stronger and coarser ballast, but if you cannot get that the other would make a very fair road.
1496. Will you also inquire into the value of the ballast I described as a preservative to the sleepers;—it is asserted that this particular ballast is impregnated with cement, and that it has a preservative effect upon the timber embedded in it? I have never heard of that.
1497. What is the average life of a red-gum sleeper? I should think a red-gum sleeper would last nearly as long, if not quite as long, as an ironbark sleeper.
1498. What is the life of an ironbark sleeper? We have had no opportunity of testing it. We have had sleepers which have worn out, and which are still sound.
1499. Are you aware that the sleepers laid down on the Deniliquin and Moama line twenty years since are still in an excellent state of preservation? I should not be surprised to hear it.
1500. The estimate provides for £225 per mile for earthworks on this line? Yes.
1501. It is principally required for the roadway itself? Yes.
1502. Not a large proportion is required for stations? I think not.
1503. What would the formation of the road, without the stations, cost? I do not think the deduction of the stations would materially affect the running cost per mile.
1504. It is proposed to make a formation on the surface 6 inches in depth with a width of 17 feet? Yes.
1505. The estimate provides for two side drains, and the earth taken out of those two drains will be wheeled on to the centre? Yes.
1506. If you can satisfy yourself that this work can be done for about £1 per chain as against your estimate of £2 15s. per chain by ploughs and scoops and horses, would it not be better to adopt that practice? I do not consider a barrow bank line is a good formation. I should have it rolled.

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1507. But even a barrow bank formation after it is rolled would not be consolidated so much as a formation made by the constant tramp of the bullocks or horses drawing the scoop? No.
1508. Are you aware that the municipal councils in this particular district are using the American graders to form their roadways? I did not know that, but I am glad to hear it, because there will be a better chance of getting them used there.
1509. Are you aware that in other cases where graders are not used ploughs and scoops are used, at a contract price of less than £1 per chain for a roadway 9 inches deep in the centre—that is, 3 inches more than you propose—and 18 feet wide as against your 17 feet, with a minimum depth of 6 inches at each side, and with two side drains? I am very glad to hear it.
1510. Would it not preserve the roadway better if, instead of the two side drains being taken out in the way proposed, you had your 6-inch level formed with a batter down to the bottom of your drains? I have not at all decided to have exactly 6 inches in the centre. What I propose to do is to give a considerable rounding to the surface, so as to provide for drainage. But I should certainly allow the contractor, having to use ploughs, scoops, or graders, to have a flat batter for the drains, so as to make it as easy as possible for him. I should not be particular about the side of the drain or embankment, that is as to its being 1½ to 1 and so forth.
1511. After visiting the district and finding that the statements I make can be verified, you may possibly be able to materially reduce your earthwork estimate? I shall be very happy to give an opinion when I have seen the country.
1512. If you find that the municipal districts are doing road work for about one-half the cost you propose, you would take that into consideration in connection with your estimate? I should certainly take it into consideration, but I should not anticipate any reduction being made. There is a difference between a railway road and an ordinary road. In the case of an ordinary road you can alter the grade as often as you like. You have a much greater range of steepness as compared with a railway. In the making of a railway if the ground is lumpy you have to run your grade along with much higher banks, and that will add to the cost.
1513. With regard to the cost of fencing, I see there is an estimate of £75 a mile; is not that excessive for the class of fencing you require? The £75 a mile would be for whatever length might be required.
1514. But if it can be shown on inquiry that similar fencing is not costing other persons more than £40 a mile, could you not reduce your estimate from £75 to £40? I should not like to be bound down one way or the other. I can scarcely tell at present how much fencing is required, but we should probably be able to put up fencing costing less than £75. The contract price on one or two lines has been either 3s. or 3s. 3d. per rod. At 3s, it would be £48 a mile.
1515. Will you, when you are on the spot, make inquiry as to whether it is not possible to reduce the cost of fencing, as well as the cost of the earthworks? It would be a question whether a cheaper class of fencing than we have been in the habit of putting up will answer. I do not think it is desirable to cheapen the fencing very much, because you will get an insecure fence. I think it ought to be done, however, for 3s. a rod.
1516. In all cases where it can be shown that a reduction can be made in this estimate, you will feel in duty bound to make it, so as to give the country a pioneer line at as cheap a cost as possible? I should be only too anxious to keep down the expenditure.
1517. How many station-buildings do you propose to erect? I have not myself seen the Railway Commissioners in reference to that matter. You are, perhaps, aware, that under the Railway Act, they have the sole power of deciding upon the station accommodation. I see from the estimate, however, to which they agreed, that provision is made for a passenger-station and a waiting-shed. That would seem to imply a passenger-building for the terminus, and a waiting-shed for an intermediate station along the road.
1518. *Chairman.*] Your report under date of 3rd January is simply a preliminary report, and will be amplified by you at a later date? Yes; I intend to take up each subject in detail as soon as I can find time to put my notes together. I find that I cannot at the present moment obtain the price of the rails asked for by Mr. Humphery, but I will endeavour to get the particulars he requires by to-morrow.

THURSDAY, 10 *JANUARY*, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	James Hayes, Esq.
The Hon. William Joseph Trickett.	Robert Henry Levien, Esq.
The Hon. James Hoskins.	John Moore Chanter, Esq.
The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Robert R. P. Hickson, Esq., Commissioner and Engineer-in-Chief for Roads and Bridges and Sewerage, sworn, and examined:—

R. R. P. Hickson, Esq. 10 Jan., 1895.

1519. *Chairman.*] You are Commissioner and Engineer-in-Chief for Roads and Bridges, and Sewerage? Yes.
1520. You have forwarded to us a minute upon the cost of road construction in the district affected by this railway? Yes; it is as follows:—

Minute Paper.—*Subject*:—Road, Jerilderie to Berrigan.

Approximate Cost of Construction.

Department of Public Works, Roads and Bridges and Sewerage Branch,
Sydney, 8 January, 1895.

The total length of the road is 25 miles. It is already cleared throughout.

Metal is only procurable at the two ends,—that is, brought by rail from Cuddel to Jerilderie, 52 miles, and from quarries near Berrigan.

On the trucks at Jerilderie, the cost would be, for 3-in. metal, 9s. per cubic yard; at Berrigan, for 3-in. metal, 7s. per cubic yard. Add a mean cartage of 6 miles at 9d. per cubic yard per mile = mean cost, 13s. per cubic yard.

The

The metal is of only second quality, and one and a half cubic yards to the yard run would be necessary, bringing the first cost for metal alone up to 19s. 6d. per lineal yard of road.

Formation will cost at per lineal yard	9d.
Side-drains (single), at per lineal yard	4d.
Blinding, at per lineal yard	3d.
Culverts, say 5 to the mile—per mile	£100

The cost then may be set down as follows:—

Formation—25 miles, at £66	£1,650	0	0
Side-drains—50 miles, at £30	1,500	0	0
3-in. metal, 1½ cubic yards. per lin. yard—25 miles. at £1,716	42,900	0	0
Blinding—25 miles, at £22	550	0	0
Culverting—25 miles, at £100	2,500	0	0
Supervision and contingencies	2,455	0	0
Total	£51,555	0	0

Or an average cost of £2,060 per mile for a metalled road.

The cost of proper maintenance would be not less than £150 per mile per annum, *i.e.*, 225 cubic yards of metal per mile, at 13s. per cubic yard.

A cheaper road could be made by corduroying and forming at, say, £1,000 per mile; but this could not be looked upon as suitable for a road carrying the heavy traffic in wheat and agricultural produce this is expected to bear, and cannot be recommended. Results from this kind of road have not proved satisfactory, and it can only be looked upon as a temporary expedient.

The present annual expenditure on this road is at the rate of £1,100 per annum. For 1894 it was £1,000; for the half of 1895 £550 is voted.

The construction of a line of railway would relieve the Department of this expenditure, but possibly entail the improvement of some branch roads of access from the adjacent country right and left. What this will amount to cannot be stated with certainty beforehand; but as the land is nearly all of good quality, and fit for agriculture, there can be little doubt that considerable development will take place, necessitating expenditure on these approach roads.

ROB. HICKSON.

1521. I suppose that minute fairly well embodies your evidence? Yes.
1522. There will be an officer of your Department to advise the Sectional Committee on the spot if they should be in doubt as to details? Yes. I telegraphed last night to an officer to meet the Sectional Committee at Jerilderie on Monday morning.
1523. *Mr. Roberts.*] The document you have read shows approximately the cost of construction of the road from Jerilderie to Berrigan? Yes.
1524. Have you personally examined the figures, and can you vouch for their accuracy? Yes.
1525. Have you been over the road from Jerilderie to Berrigan? No.
1526. I see you estimate an expenditure of £2,000 per mile for a metalled road? Yes.
1527. If the proposed line were constructed would your Department be relieved of a large amount of the expenditure now incurred in road maintenance? The road would still have to be maintained to a certain extent, because portions of it would act as feeders to the different stations which might be located along the railway line.
1528. And I suppose there would be applications from other portions of the district to be connected with the railway by road? Yes. Roads would be applied for at right angles to the railway.
1529. *Mr. Gormly.*] Have you visited the town of Jerilderie and the Jerilderie district? Not Jerilderie itself.
1530. You are not aware of the existence of any material for making roads, such as gravel or anything of that sort, in that district? Not in that district. It has to come by rail, so the local officer informs me, from a considerable distance. At the other end of the proposed line there is metal.
1531. Do you know of any gravel pits in that direction? No.
1532. Are you aware of the existence in the district of any gravel similar to that found at Urana? I do not know of any.
1533. Do you know whether any attempts have been made by sinking or otherwise to find gravel? Not by sinking—the gravel is generally indicated on the surface.
1534. But your officers have not followed down the surface indications with a view to finding gravel suitable for road purposes? No.
1535. Your Department know nothing of the existence in the district of material for road formation beyond that indicated in the minute you have read to the Committee? That is all.
1536. *Mr. Humphery.*] The figures in the statement you have read are supposed to represent the ordinary cost of country roads in similar districts? They are based upon the figures actually sent me by the local officer—on the cost of material in this particular district.
1537. What would be the ordinary cost of a road through a district similar to that between Jerilderie and Berrigan? It is very difficult to say, because hardly any two of the districts are situated in exactly the same position in regard to either available gravel, or stone, or burnt clay, which is sometimes used. Anything of an average which I might give you would, I think, be misleading—it would not be of any use. This estimate is based upon the prices at which the local officer informs me he could put the material upon the road.
1538. Would a road of the character to which your estimate applies be necessary for such a district as this? This is a first-class road with 9 inches of metal, 3 inches more than we usually put.
1539. Is it customary to put such a road in such a district? It is not, because we do not get funds for it, but it should be done.
1540. You think this expenditure is necessary to make a first-class road? Yes.
1541. What is the cost of the road between Temora and Barmedman? I could not say.
1542. I suppose you know the road? Yes.
1543. Could you not say approximately? I could not say without looking up the papers.
1544. It is a gravel road, is it not? Yes.
1545. I suppose that the building of such a road as that for which you have given an estimate in this particular district would be an entirely new departure? No.
1546. Where is there a similar road to be found in any agricultural district? There is the main road from Goulburn to Cooma. That is a metalled road right through. It is a magnificent road, and it has cost a great deal of money to build it.
1547. Would this road be intended for a main road? It would be a main road in the sense of carrying a very heavy traffic, although it would not be a gazetted main road.

R. R. P. Hickson, Esq.

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1548. *Mr. Trickett.*] You have had a large experience in the supervision of road-making in the Colony? Yes.
1549. I understand that in the country, which would be served by the proposed railway, the soil is of a soft loamy character? There is black soil and red soil—black soil on the plains and red soil on the rises.
1550. In the construction of the proposed railway, it is proposed to put the sleepers on that soil, slightly embanked with earth taken from the side drains. It is proposed to put the sleepers down without any ballast; do you think such a road would be likely to stand the traffic over it without sinking? It all depends upon the speed.
1551. It is proposed to run at the rate of about 15 miles an hour? I think it would stand that.
1552. Without any sinking? I think so.
1553. Seeing that this road would be very level, and that it will have no ballast, do you think it would be frequently damaged by heavy rains? I do not think so.
1554. Supposing the sleepers were put at a distance of only 18 inches apart, would much damage be likely to result from rainfall? I should think not with the sleepers as close as that.
1555. From your knowledge of this kind of country, do you think the Committee would be justified in recommending a pioneer line such as I have just described without ballast, and with the sleepers only 18 inches apart? I think, speaking generally on the subject, that it would be much more economical in cases similar to this to put down light lines of railway instead of the roads we attempt to make.
1556. Lines without ballast? The class of line you suggest.
1557. You think that the experiment in this class of country can very fairly be made? Yes, so long as you keep the speed down.
1558. *Mr. Davies.*] In you estimate of 25 miles of road in this district, what would be the width? There would be 18 feet of metal.
1559. Would that width of metal with 25 miles of the road cost, in regard to metal alone, £42,900? Yes, if you lay it 9 inches deep.
1560. Would you propose to ballast the road first? No, the officer recommends that ballast should not be put in. He thinks it would be better to put the metal in without ballasting.
1561. Do you not think you could form a road of this character very much more economically by putting in ballast first and metalling on the top of it? It makes very little difference in the cost.
1562. You have assumed that blue metal will be used? Yes; the best metal we can get there.
1563. Could you not purchase ordinary ballast at a much cheaper sum than that estimated, delivered at Jerilderie? It would not be so very much cheaper than the metal, because the main cost would be in the carriage. The estimate is based on the railway charges, but I cannot tell you what they are, because I have not the particulars before me.
1564. This estimate is based upon data supplied to you by your local engineer? Yes.
1565. Can you tell me of any district in the Colony which has a road 18 feet wide costing £2,060 per mile? I am afraid not, because we never get enough money to make roads properly.
1566. If you had the necessary money voted, you would advocate the making of a road of this character in the first instance? Yes; especially for the character of the traffic which would be carried by this road.
1567. You would prefer to make a good permanent road in the first instance if the necessary money were placed at your disposal? Yes.
1568. But you cannot point to any road 18 feet wide which has cost £2,060 per mile? I am almost sure we have such roads, although I cannot tell you at this moment exactly where they are. Of course a great deal of the cost of £2,060 in this particular instance would be incurred on account of the carriage of the material.
1569. Have you hitherto had many complaints as to the state of the road in this particular district? Yes.
1570. You estimate that it costs something like £1,100 a year to maintain the road? Yes.
1571. And you think that is inadequate to maintain the road in a proper condition for traffic? It can do very little good in the case of one of these black soil roads. The only thing to do is to metal them in the first instance, but we never get money enough for that.
1572. Would you be surprised to hear that the estimate for the proposed line is about £1,830 per mile, whereas you estimate that it would cost £2,060 for a metalled road 18 feet wide? I am aware of that; but I think these light lines without ballast and laid on the surface ought to be carried out pretty cheaply.
1573. You think that if a railway can be built for £1,800 per mile it would be preferable to a road costing £2,060 per mile? Decidedly.
1574. Both as regards speed and economy of maintenance? Yes. Besides the fact that the railway would give greater facilities, you get some return from it, whereas you get none from a road.
1575. You state that more money will have to be spent than is estimated on minor roads? Yes; to make feeders to the different railway stations.
1576. It will be a saving to your Department if the line is constructed? Yes.
1577. It will serve the district better than a road, and would give a return for the money expended? Yes; it would give some return at all events. Of course I cannot say how much.
1578. Whereas a road would give no direct return? No.
1579. *Mr. Lee.*] Roads in flat black soil country are always more costly to make than in hilly country? A great deal more costly.
1580. I suppose you could not put down a good substantial metal road in that class of country where metal is scarce under a cost of about £2,000 a mile? No.
1581. It would require a pretty good road to carry a traffic of 17,000 tons a year, would it not? Yes.
1582. If it could be shown that the proposed railway would give interest on the capital expended at 3½ per cent., and would repay the cost of maintenance—a total annual expenditure of £3,073—or £100 a year less than it would cost to maintain a road, would you not consider that a very strong reason for the building of a railway in preference to a road? I think it would be a very strong reason.
1583. It has become a question whether country of this character should not be opened by light lines of railway in preference to expensive roads? I do not think there can be any question at all on the point.
1584. But the matter has been considered by your Department? Yes.
1585. If an undoubted saving could be shown, you would not hesitate to recommend the construction of railways of this kind in preference to roads? Most unquestionably.

1586. *Mr. Molesworth.*] Could you tell us, approximately, what has been the cost of the road now in existence? I cannot say. No sum has been specially voted for construction. It has been maintained in its original state by annual vote for a great number of years.
1587. I should like to ascertain what is the total sum which has been expended upon the road from Jerilderie to Berrigan? I can obtain for you the total amount which has been expended, but I cannot distinguish between maintenance and construction.
1588. It takes £1,000 a year, or more, I understand, to maintain the road in an effective condition? About that.
1589. At the same time you are not satisfied with the condition of the road for the traffic it is called upon to bear? I am not.
1590. To make it a good serviceable road a large outlay would be necessary? A considerable outlay.
1591. On account, I suppose, of the peculiar nature of the soil? Yes, and from the absence of any road-making material in the neighbourhood.
1592. Although this £1,000 a year for maintenance would not be required if the railway is constructed, I understand from you that a large amount would be required to maintain the different roads which will act as feeders to the railway? Yes.
1593. I suppose that nearly the whole of that sum would be required? That is a difficult question to answer, because the making of this railway may have the effect of bringing about new settlement, then there would be the question of new roads leading to the expenditure of a certain sum of money. The probability is that the leading and branch roads would involve the expenditure of more than £1,000 a year. It would be difficult to answer your question until we saw to what extent the country was likely to be developed.
1594. You do not think there will be any great saving in the annual road vote of the district in consequence of the construction of the line? Not as regards the whole district.
1595. You think the trade of the district would be likely to increase to such an extent by means of the railway, that quite as much road expenditure would be required? Yes; but in one case we should be expending the £1,000 a year without getting any return at all, but in the other case by expending the £1,000 a year on the maintenance of branch roads to the line we should be getting a return for the railways all the time.
1596. *Mr. Chanter.*] As a matter of fact in this part of the Colony you can practically provide only for summer traffic by earthwork formations or culverts? Yes.
1597. From the absence of metal of any kind, and from the want of sufficient funds, it is impossible to give an effective road for winter traffic? Quite impossible.
1598. It is only at stated places, at good distances from each other, that any metal is obtainable? Yes.
1599. In this instance you would have to obtain the metal from near Narrandera? Yes, at one end, and at Berrigan at the other end.
1600. At the Berrigan end it is granite? Yes; but it would do for the road.
1601. With regard to your estimate for formation, you give the cost of the lineal yard at 9d., or £66 per mile—that formation would be how wide? It would be 30 feet wide.
1602. Is that from drain to drain? Yes.
1603. What would be the absolute formation of the road proper? 18 feet.
1604. What is the average depth of the earthworks in that formation before you put the metal on? About 6 inches.
1605. I suppose it would run from about 9 inches in the centre to about 6 inches at the sides? Yes.
1606. This estimate I suppose is based upon your actual experience of the cost of this class of work in the district? Yes.
1607. I suppose the same estimate would apply to the side drains? Yes. All these prices are prices which the local officer has given for similar work.
1608. Are you aware that the depth of earthworks provided for in the case of the proposed railway is only 6 inches, that is as regards the formation? I do not know what the railway proposal is.
1609. There will be less earthwork in connection with the railway than you propose to put into your road formation? Possibly.
1610. You know from your own experience in the district that road formation can be done at £66 per mile? Yes.
1611. It is usually done in this district with ploughs and scoops, is it not? Yes.
1612. In using the ploughs and scoops, I suppose there would be more consolidation in consequence of the trampling of the cattle drawing the scoops than there would be in the case of men putting the material on by barrows and planks? Yes.
1613. In your opinion such a road would be, if anything, a little more solid than a road made up with barrows? Yes.
1614. The estimate for the earthworks of this railway, 16 feet wide and 6 inches deep, is given at £225 a mile. Taking your own experience, do you not think that that is an enormous estimate? I should not like to give an opinion until I know all the circumstances of the case. It seems high, but I should not like to express an opinion with regard to a railway estimate without knowing the whole proposal. There may be drainage provided for under the heading you have given, and I do not provide for that.
1615. You are satisfied that you will succeed in getting your earthwork done for the price given in your estimate? Yes.
1616. If the earthwork can be done at that cost for road purposes, do you not think that it ought to be done at a similar cost for the Construction Branch of the Railway Department? If the circumstances are the same, certainly.
1617. Will you instruct your district officer to give evidence to the Sectional Committtee with reference to the cost of formation, including side-drains? Yes.
1618. You propose a concave formation from the centre of the road to the base of the drains? Yes.
1619. Would not that be an improvement for railway purposes, instead of having two side-drains? You must have a flat surface for the sleepers.
1620. But could it not be battered down from a point at each end of the sleepers to the base of the drain? I should think so. I do not know that I would commence the slope from the very end of the sleepers—you would want a little heel as it were; but at from 6 inches to a foot from that, it might be better to slope it down.

R. R. P. Hickson, Esq. 10 Jan., 1895.

1621. *Mr. Levien.*] I suppose you do not know of any roads in the Colony that give any return? None of the roads give any direct return.
1622. And you think that if a good road were made in this district the cost would be about £2,000 per mile? About that.
1623. Has the Minister or the Under Secretary of your Department given any instructions for the curtailment of expenses so far as the road vote is concerned? No.
1624. In no way whatever? No.
1625. You have spoken of the possibility of by-roads to the railway being necessary in this particular district;—are you aware that in certain cases where persons have required similar roads they have been informed that the Department would give £1 for every £1 that is subscribed locally? I believe that suggestion was made twelve or eighteen months ago, but it has never been carried out.
1626. Have not letters been sent to different Members of Parliament telling them that if they could get so much money subscribed from various districts the Department wouldgive a certain amount? I cannot say what letters may have been written by the Under Secretary to that effect.
1627. Has not such a letter been written in regard to roads in my own district in three or four instances? About twelve or eighteen months ago it was suggested that in the case of parish roads persons should subscribe something towards them locally.
1628. Have not such letters been sent out within the last three or four weeks from your Department? Not to my knowledge; I do not correspond with Members at all.
1629. You have given no instructions for the issue of these letters? No. I know that for a considerable time letters were sent out to that effect. In some cases the residents were asked to subscribe £1 to the £1, and in other cases 10s. and 5s. to the £1. It would depend upon the number of persons served by the road.
1630. *Chairman.*] I suppose it amounts to this—that in cases where you could not regard the road as of national importance, you asked those who were privately benefited to help you in the construction? Yes.
1631. Do you know if any such arrangement has been in existence in the Jerilderie and Berrigan district? I do not think so. I do not know of any case of the kind in that district.

William Alfred Bullard, Esq., late Temporary Surveyor, Railway Construction Branch, Department of Public Works, sworn, and examined:—

W. A. Bullard, Esq. 10 Jan., 1895.

1632. *Chairman.*] You are at present employed under the Water and Sewerage Board? Yes.
1633. You were formerly employed in the Construction Department of the Railways? Yes; up to fifteen months ago.
1634. I believe you surveyed a line from Jerilderie to Berrigan? Yes.
1635. Have you presented an official report with reference to the line? Yes.
1636. Are the plans and specifications lying upon the table prepared in accordance with your plans? Yes.
1637. I suppose your report would embody the chief evidence you would wish to give to the Committee? Yes; it is as follows:—

JERILDERIE TO BERRIGAN.

Sir,

I have the honor to forward my report on the line of proposed railway from Jerilderie to Berrigan.

This line commences at a point at 411 miles 74·92 chains at Jerilderie, and terminates at 433 miles 3·84 chains at the village of Berrigan, the distance being 21 miles 8·92 chains. There are two creeks crossed by the line, viz., Algudgerie Creek at 412 miles 36 chains, and Berrigan Creek at 426 miles 64 chains, a timber opening being required at Algudgerie Creek, Berrigan Creek being crossed by the line by embankment of dam.

Timber for fencing purposes could be obtained, but none suitable for sleepers, &c.

Good ballast and a sufficient supply can only be obtained at Green Hill, situated 1 mile south of the village of Berrigan.

There is no permanent supply of water for engine purposes along the line of route.

I have, &c.,
WILLIAM A. BULLARD.

The Engineer-in-Chief for Railways.

1638. As a surveyor making a trial survey for this line, you did not get out the quantities? No.
1639. That is no part of your business? No.
1640. Therefore, you can give us no information as to quantities? No.
1641. Your work is, primarily, the location of the line? Yes.
1642. Could you tell us why you took such a sharp turn in coming out of Jerilderie? I acted upon instructions from the Department.
1643. You had instructions to survey, you came out by the easiest curve you could get, and you made straight to Berrigan? Yes.
1644. There are other curves further along the line, why are they made? On account of the crossing at Berrigan Creek, and severance along the road.
1645. By traverse of the line in the first instance, and by direct bearing, you could run it out absolutely straight from end to end? Yes; I should think that might be done.
1646. Do you think the line is properly located? Yes.
1647. It is located as well as it could be? Yes.
1648. And there your work ceases? Yes.
1649. What are the creeks on the line like—are they liable to floods? The first creek—Algudgerie Creek—is a very shallow creek.
1650. What depth of water is there? I only noticed about 2 feet of water in Algudgerie Creek.
1651. What would be the width? From 3 to 4 chains.
1652. Is the Berrigan Creek a more important creek? Perhaps it is a little deeper.
1653. The two creeks are virtually of the same class? No; the Berrigan Creek has banks, the Algudgerie Creek has not.
1654. *Mr. Gormly.*] I suppose you took out levels in making your trial survey? Yes.
1655. Have you plans of the levels? I have the sections.
1656. The sections show that the line will be constructed 6 feet over the bottom of the Algudgerie Creek? Yes. As well as the creek can be defined, the plan shows a width of from 3 to 4 chains.
1657. What waterway is provided for? The officers of the Department will fix that; I have nothing to do with it.
1658. Going on from the creek towards Berrigan, what would be the formation of the country—black soil or red soil? Loamy soil.

1659.

1659. Is there any timber in the immediate vicinity of Jerilderie? Very little till you get to Berrigan.
1660. At what distance from Jerilderie do you get into the timbered country? I suppose at 14 or 15 miles.
1661. It would be chiefly black or red soil plains? Yes.
1662. In traversing this 15 miles would there be a greater proportion of black or of red soil? I fancy it is chiefly black soil.
1663. The red soil plains are harder and drier than the black soil plains? Yes.
1664. What proportion of red soil plain would there be in the distance of 15 miles? Perhaps one half would be red soil.
1665. Is there any other depression with the exception of the creek you have named in the 15 miles? Yes, there is a swamp.
1666. What is the width of it? About 30 chains.
1667. What is the depression in the swamp? It is on the average 2 feet from the ordinary level.
1668. Then that 30 chains would require an embankment of 2 feet to reach the level of the ordinary ground? Yes.
1669. There would be only that 30 chains requiring any considerable embankment, I suppose, over the whole distance of 15 miles? Yes, I think that is so.
1670. What is the class of country after you pass the 15-mile peg; would it be timbered country? Yes.
1671. Sandy loam? It is red soil, I think.
1672. It is proposed to cross the Berrigan Creek on a dam? Yes.
1673. Was that suggestion made to you by the Construction Branch? Yes; I was instructed to cross there.
1674. Have you any decided opinion as to whether this is a desirable mode of crossing the creek, or were you simply guided by the instructions of the Department? I think it would be best to cross the creek on a dam.
1675. Of course, some provision has to be made for the by-wash? Yes.
1676. In crossing the creek on a dam, you would have to provide for the water running under the line on either side of it? I suppose so, but I did not consider that point—I was simply instructed to cross there.
1677. Are your duties simply to make surveys in accordance with instructions, or do you use your own judgment in selecting suitable country upon which to construct a line? We generally use our own judgment.
1678. But in this case you were simply carrying out instructions in crossing the Berrigan Creek on a dam? Of course, if the Department wish us to cross a creek at any particular point they instruct us to do so.
1679. It would be 6 miles from the crossing to Berrigan? Yes.
1680. Through what class of country? Timbered country.
1681. Heavily or lightly timbered? Not very heavily timbered.
1682. Would it cost anything considerable to clear the timber off the line? No.
1683. Is it chiefly ringbarked timber or is it growing timber? It is a mixture.
1684. Would the greater proportion be ringbarked? No; there is more growing, I think.
1685. Is any of the timber suitable for fencing purposes? I think some of it could be used.
1686. Was there any pine on the line? Not much pine that I can remember; I fancy that it was box—forest box.
1687. Portion of it would do for fencing posts? I should think so. Of course there is not much of it.
1688. Going to, say, a distance of 6 miles or to any reasonable distance from the line, would there be sufficient timber to provide posts for that portion of it? I could not say.
1689. Did you in making your survey find any gravel formation? Here and there, but there was very little of it.
1690. Did you gather from the indications that if pits were sunk suitable gravel might be found for road-making? I do not think so.
1691. Have you made any other trial surveys in the Riverina country? Several.
1692. What line? I surveyed the line from The Rock to Murray Hut.
1693. Did you go over any gravel formation in making that survey? Yes; I think the hills were all gravelly through there.
1694. Have you been at Urana? Yes.
1695. You know that a quantity of gravel has been found there? Yes; about Lake Urana.
1696. Did you, between Jerilderie and Berrigan, see any country similar to that, where there would be a prospect of getting gravel for road-making purposes? Not that I can remember.
1697. Did you see any flood indications between Jerilderie and Berrigan? I did not.
1698. You did not see any depression indicating that there had been floods in the neighbourhood? No.
1699. I suppose if there had been floods there would be depressions caused by the carrying off of flood-waters? I should think so.
1700. Do you know the annual rainfall in the district? I do not.
1701. If there were a rainfall of 4 or 5 inches in a corresponding number of days, should you think from what you saw that there would be any possibility of water accumulating at different points along the line in sufficient quantities to damage it, or do you think it would run through the culverts and other drainage provisions on the line, without damage to the construction;—what I want to know is whether you think the water would be likely to spread out over a certain extent of country, or whether it would run away? I should think it would spread out.
1702. You think it would not materially damage the line? No.
1703. Have you ever heard of a rainfall of 4 or 5 inches in a week in this particular part of the country; do you think there is much probability of such a rainfall taking place? I never heard of such a fall there.
1704. You think that for that part of the country it would be an exceedingly heavy fall? Yes.
1705. Therefore you think that the heaviest fall which is likely to take place in the district would not be likely to damage the line? No.
1706. You think the possibility of flood-waters damaging the line is very remote? I should think so.

W. A. Bullard, Esq. 10 Jan., 1895.

WEDNESDAY, 30 *JANUARY*, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	Robert Henry Levien, Esq.
The Hon. James Hoskins.	John Moore Chanter, Esq.
The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.
James Hayes, Esq.	Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Henry Deane, Esq., Engineer-in-Chief, Railway Construction Branch, Department of Public Works, sworn, and further examined:—

H. Deane, Esq. 30 Jan., 1895.

1707. *Chairman.*] You told us you desired to give evidence after having visited and inspected the route from Jerilderie to Berrigan? Yes.
1708. Have you made that inspection? Yes; I have been over the line.
1709. The Committee propose to examine you first in regard to the new route suggested by the Sectional Committee, and afterwards to deal with the question of construction. Are you aware of the new route suggested by the Sectional Committee? Yes.
1710. Are you prepared to express an opinion with regard to it? I think it is a very satisfactory route. Altogether it is an improvement. If you can bring the line alongside the road, or the road alongside the line, it is far better than adopting a route across the country.
1711. You think it is an improvement in that the main road follows the railway? Yes.
1712. That is an advantage always if it be possible? Yes. If it can be managed that, where the line diverges from the main road, the position of the main road can be altered, and brought on to the line a great deal will be gained.
1713. Is there any engineering reason why the line should not be taken by the proposed new route? No.
1714. Is it any longer? It will be about a quarter of a mile longer, so far as I can tell at present.
1715. Is it practically about the same length? Yes.
1716. Within a quarter of a mile? I do not think the difference would be more than that.
1717. You see that the new route does away with the severance of the properties in the vicinity? Yes; on that account it is a great improvement. It would seem to me also to have two other advantages:—It goes close to Wonnamurra, and it would be possible, by putting a siding in there, to take the wool from that station, and have the carriage of it to Jerilderie; otherwise, no doubt, the owners of the station would themselves have it carted to Jerilderie. This would not be very much, but still it would be something. Then again, if the line is carried along the main road it will serve the residents in the district a great deal better because they will have roads of access.
1718. It would save the construction of roads of access? Yes.
1719. Would you have any trouble in getting out of the Jerilderie Station with the line as now suggested? No; in that respect it would be just the same as before.
1720. Therefore you view it as a satisfactory route from an engineering standpoint? Yes.
1721. *Mr. Hoskins.*] I gather from the replies you have given to the Chairman that you consider the route suggested by the Sectional Committee a better one than the original route laid down by the surveyor? Yes; on the assumption that the main road can be altered so as to follow the line.
1722. That is to say, if the Land Act provides that a portion of the road can be exchanged for another portion of land, then this new route will be much superior to the one originally laid out? Yes.
1723. What instructions were given to your surveyor when he was sent to survey the country for a line between Jerilderie and Berrigan? To take the most direct route, I expect.
1724. Did he do so? I think he took as direct a route as he could get without interfering with the roads and the properties, and in view of getting a good crossing at the creek. It was a trial survey, and therefore subject to slight modifications.
1725. If you accept the route suggested by the Sectional Committee there will be something more than slight modifications? Yes; very important modifications.
1726. Have not surveyors instructions when making trial surveys to get the best possible route for a railway to a given point, and as far as possible to avoid taking private land? Yes.
1727. Or causing the severance of private land? Yes.
1728. Would the line originally laid out by the surveyor in this instance meet that condition, having regard to the fact that there are so many persons complaining of their land being severed? There would not be much in the way of severance, even on the original route, if the line remained unfenced, because stock would be able to cross the line without impediment.
1729. Do you think that if this surveyor had exercised ordinary prudence having regard to the cost of the construction of railways and the difficulty in finding money to make these lines, he could have surveyed a better line than he did; and did he exercise the prudence and skill which might have been expected? Except the line suggested by the Committee, I do not see that anything very much better could have been obtained. The line suggested by the Committee is better than the other line, but it involves an alteration in the position of the road which was not considered before.
1730. Is it not also better in this important respect, that not so much private land will be taken, and, therefore, not so many claims for compensation for severance be made against the Government? Yes; anything that avoids compensation for the severance of the land is better. But I do not think that even in connection with the old route there would be very much liability on account of severance, because the line would remain unfenced.
1731. Supposing an agitation were made to have the line fenced, would not claims for severance then come in? Yes, if the line were fenced.
1732. Has it never struck you that the preliminary or trial surveys of railways made by some of our surveyors, have not been made with due care in regard to taking the best routes, and avoiding private land as far as possible; I refer to railways that have actually received the sanction of Parliament; and is

not

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not this case an illustration of the fact? I think you can scarcely judge from the trial surveys in that way. You should judge from the actual position of the permanently-staked line. A surveyor may make an error in judgment in the selection of a line, but it would not be worth while going over that line and spending another two or three months just for the sake of altering it to another position, when the cost would be practically the same.

1733. But in this case, if you accept the line sketched out by the Sectional Committee, will not the cost be considerably less than would be the case if the old route were adopted, inasmuch as you will not have to take so much private land, and pay compensation for it? I believe that will be the case. But in one item the cost will be more. I was going to propose a reduction in the cost of fencing, but I cannot do that if the new route is adopted, because fences will have to be erected. Nearly the whole of the road is fenced, and these fences would have to be shifted back and re-erected so as to accommodate the new line.

1734. Still you would only use the fences that exist at the present time? It would, nevertheless be an expensive matter. It is almost as costly to shift a wire fence and re-erect it, as to erect a new one.

1735. Was the fencing at the side of the roads you are speaking of erected by the occupants of the land, or by the Government? I cannot say.

1736. You cannot say, then, whether the fence really encroaches upon the proclaimed road or not? No; I have not checked that.

1737. Having travelled over the line recommended by the Sectional Committee, you are aware that the greater portion of it is the main road from Jerilderie to Berrigan? Yes.

1738. Is not a proclaimed road of sufficient width on which to work a single line of railway, with occasional sidings at important places, as well as to work a road for dray traffic? No.

1739. How are you going to manage if you are going to lay down a railway on the road? You will have to take in more land; set the fences back, and take a strip of land—say another chain.

1740. All the way through to Berrigan? Yes.

1741. What distance will that be—it will not of course include the common? No; but practically all the way through to Berrigan. In some parts of the main road the width is 3 chains. I consider that 4 chains will be required for the railway and the road together. In other parts the road is less than that in width, and there, of course, a greater area will have to be taken.

1742. Will not purchasing another chain of land in width, and increasing the width of the road and railway, be an expensive matter, and rather increase the cost of the proposed line? I do not think so, because there, at any rate, you will have no severance to pay for. Supposing we only took a chain, that would be 8 acres to the mile. I do not suppose that on the average it would require more than a chain, because the line will go through two reserves, one at the Jerilderie end, and the other some distance down the route.

1743. *Mr. Davies.*] Did you traverse the whole length of the deviation proposed by the Sectional Committee? Yes.

1744. What is the narrowest point on the road, where the railway will run parallel with the existing road? I could not tell you at the present moment. I have given instructions to Mr. Jamieson, the surveyor, to send me the particulars of the road.

1745. You have just stated that it would require something like a chain wide the whole length of the route? Yes, an average of a chain wide.

1746. How has anything of the kind become necessary? Because a width of 3 chains is not sufficient to take both the railway and the road.

1747. You say that 3 chains is not sufficient to carry the traffic of a single line of railway, and the traffic that would be on the road? That is my opinion.

1748. What has been the customary width for roads in the country? Anything from 1 chain to 3 chains, I suppose; and in some cases where you have the travelling stock routes you get half a mile.

1749. Is there not a much larger proportion of the roads only about half a chain wide than there are 3 chains wide? I am not up in statistics, and could not tell you that.

1750. But you have had to travel through the country in your official capacity and are familiar with the roads? I do not think there are many of the country roads that are less than a chain wide. There are some, certainly, but I do not think that there are many.

1751. Do you know any public road in the Colony that has a formation more than 18 feet in width? I was not talking of the actual formation of the road.

1752. You say that 3 chains wide is necessary for the road? Yes.

1753. If a width of 3 chains is necessary how is it the Department only forms about 18 feet? In the first place I wish to correct the idea that I said 3 chains would be necessary for the road. I said that 4 chains would be necessary for the railway and the road, and that the present road in some places is 3 chains wide. At present the road is almost entirely unformed, and I think if you had been over the road on the day I went over it, after heavy rain, you would have acknowledged that 3 chains was a very narrow width for that road, because the whole of it was cut up by the teams. It is necessary in the country to have wide strips for roads, so as to give the teams fresh ground to go over, while the other portions are drying up.

1754. Will the same necessity exist for a wide road after the railway is constructed, and when the traffic will not go by teams? There will not be the same necessity for that great width, but there will necessarily be some traffic on the road, because there will be the intermediate traffic to the stations or sidings.

1755. I have already asked you if you can tell me the narrowest point where you think it necessary that the road should be widened? I have asked Mr. Jamieson to give me all particulars about the width of the roads, and their position, so that we may know exactly how to deal with them.

1756. I suppose you make a wide distinction between travelling stock routes and roads for vehicular traffic? Yes.

1757. You told the Committee that you had traversed the proposed deviation from one end to the other, and that you entirely approved of the suggestion of the Sectional Committee, as being a route as direct as the one proposed by the Department? Yes.

1758. And one which would effect a very large saving, so far as the resumption of land is concerned? It will avoid a great deal of resumption.

1759. Do you know to what extent the line proposed by the Department would pass through the property of Messrs. Peterson and Sargood? A little over 7 miles.

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1760. If you took a railway through that property would not the owners make a substantial claim for severance? I do not think there would be much for severance if the line were left unfenced.
1761. But as engineer for the construction of railways are you not aware that as soon as the land passes from the private owner to the Crown, severance takes place whether the land is fenced or not—that it passes out of the hands of the private owner and becomes the property of the Crown, and severance takes place, though the land may not be fenced? In a certain way, unless you give the people the right-of-way over it.
1762. If the land is resumed by the Crown for railway purposes does it not pass from the private owner to the Crown? Yes.
1763. Well, is there not a severance then? Yes, I say there is severance, unless the owners have a right-of-way; if they have a right-of-way there is no severance.
1764. A right-of-way by a gate? No; I mean anywhere across the line.
1765. But how could you guarantee a right-of-way of that character over a railway line? Why not?
1766. Tell me how it is possible? You remember the case of the Nyngan to Cobar line. There was a clause inserted in the Act stating that the line was to be unfenced. I suppose that if the Government, after that, wanted to fence the line throughout they would have had to get a new Act.
1767. They would have had to compensate the owners for severance? Yes; that would take place when the fencing was erected.
1768. If an action for severance were brought against the Crown where a man's property was cut in half for a distance of 7 or 8 miles, would not the compensation amount to almost as much as the cost of construction of this cheap line of railway? The question is, have you any right to assume that there would be the severance to pay for.
1769. If a man's freehold property is cut in half in the public interest, one part containing his homestead and his woolshed, and the other part his dams, is it not only right to assume that he has a substantial claim for compensation? The occupier of land under such circumstances might put in a claim which he might not be able to justify.
1770. Has your experience been that where private property has been resumed by the Crown, and where the owners have gone to the law courts, juries have taken the view which you have just expressed; has it not been the rule that the Crown has had to pay very heavily? I have no accurate information on that point.
1771. In your experience do you know of any case since you have occupied the position of Engineer-in-Chief for Railways where the Crown has had the use of a man's property for a distance of 7 or 8 miles for the purpose of constructing a railway, and has not paid any compensation for severance? There have been such cases near Sydney.
1772. Not where the Crown has taken 7 or 8 miles for nothing? No; not 7 or 8 miles.
1773. You do not know any case in point similar to that of Messrs. Peterson and Sargood's property, or Mr. Wilson's property, that would be severed by the railway, and which has been taken without compensation? No; I do not remember any such case. I do not know that such a case has occurred. Until recently it was always assumed that the Government would pay for the land, and I do not think any overtures were made with a view to getting the land free until the Milson's Point and Burwood-road lines were undertaken.
1774. Then you admit that the recommendation of the Sectional Committee has several advantages? Yes; I acknowledge that.
1775. And it has a great advantage in regard to the resumption of land and the severance of property? Yes.
1776. And a great advantage in regard to convenience resulting from the road running parallel with the railway? Yes; I believe there will be a great advantage in that respect.
1777. Seeing that the Sectional Committee, composed of laymen, by exploring the country and paying some attention to the character of the district, were able to devise a scheme which has been adopted by your Department, how is it that your officers were unable to find out an equally eligible route to the one recommended by the Sectional Committee and approved by you? I approved of it, but I imagine that the actual adoption of the route is subject to the possibility of finding some Act which will deal with the roads in some way. I can tell you this, that we have had difficulty about the same thing before. We have tried to exchange roads, and have found the difficulties so great that we have given it up. I remember a case in connection with the Culcairn to Corowa line where we wanted to get a road altered.
1778. Had the officer who was sent to survey the line from Jerilderie to Berrigan instructions, to first of all, explore the country, or was he simply told to go and find a direct line from one point to another, regardless of the cost of land resumption? They do not have any such indiscriminate instructions as that.
1779. What is the nature of the instructions given to the surveyor? The line is generally explored by the engineer in charge of the surveys, and afterwards the surveyor receives his instructions accordingly. The engineer in charge of surveys reports to me what he recommends.
1780. But had the surveyor in this case instructions to explore the country and furnish the Department with a report or trial-survey of the most inexpensive route for a cheap line of railway, which would, as much as possible, dispense with the resumption of private lands? I do not remember exactly what his instructions were.
1781. I believe you were absent from the Colony at the time the instructions were given? I think the survey was completed in my absence, but I will not be quite sure.
1782. The surveyor was sent to Jerilderie and Berrigan during your absence from the Colony? I remember the Jerilderie to Berrigan line being proposed and a surveyor being sent there, but I do not remember the exact dates.
1783. In the event of any difficulty arising in regard to the road, the resumption of the land necessary to straighten the road to be resumed would be a very small matter? Yes.
1784. So that if the provisions of the Act were not sufficient to give the Roads Department power to alter the road and exchange one portion for another, the resumption of the land necessary to straighten the road would be a very small matter? I am afraid the resumption in that case would be worse than that necessitated by the original line.
1785. Do you know what quantity of land would be necessary to be resumed for the proposed line? I have not gone into that question yet, because I have not got the particulars ready.

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1786. Speaking generally, you believe, after your investigation, that the line is a direct one, practically of the same length as the one proposed by the Department, the difference being only a ¼ of a mile, and that it will pass through very little private land as compared with the route proposed by the Department? It will pass along the road, if the road is shifted.
1787. There being no municipality, the land is still in the hands of the Crown? Yes.
1788. *Mr. Molesworth.*] I understand that you have recently travelled over the country, and are perfectly satisfied that there are no engineering difficulties in connection with the proposed deviation? Yes.
1789. The cost of construction will not be increased by reason of the deviation, in any shape? No; I believe not. I said there was one item which would be affected, and that was the shifting of the fencing.
1790. The shifting of the fencing will be greater on the proposed deviation than on the original route? Yes.
1791. Otherwise the character of the line is exactly the same? Yes.
1792. Do you consider it absolutely necessary that there should be a width of 4 chains to cover the requirements of a road and railway? I would not like to recommend less.
1793. What width would be occupied by the railroad itself? With the side cuttings, from 1¼ to 1½ chain. If you want to cover everything, very nearly 2 chains, and I should put down 2 chains as the width which should be given.
1794. *Mr. Hayes.*] Looking at the plan, is there not only one part of the road of any consequence, where it deviates from the railway, as proposed by the Sectional Committee? That is the longest part.
1795. The other is only a small portion? Yes.
1796. Are you aware that there is power under an Act of William IV to resume land along a road for railway purposes, and to give in exchange the existing road? No; I was not aware until I heard it suggested.
1797. I think, in your previous evidence, you stated that the maximum width of land required to be resumed for the railway would be 1½ chain, and that possibly 1 chain would be sufficient? I do not think so.
1798. I think you said that 1½ chain would be quite sufficient on a level line like this? As I said just now, it would take about 1½ chain for the actual construction, with the side cuttings on each side.
1799. The width of the road would take more than 1 chain? Yes.
1800. Do you think 1½ chain would be ample for a railway of this kind? I should prefer to take 2 chains.
1801. Does it not cost more for maintenance in clearing the grass, where the width is greater? That is not a serious item of cost, and you have this advantage if you have a wider strip, that if sparks fly out of the funnel of the engine there is less chance of their getting on to the neighbouring land.
1802. Therefore, on that ground, the running of the railway parallel and alongside the road would be a distinct advantage? Yes; on the one side you would be free from that danger altogether.
1803. With reference to the question of severance, you are aware that, as a rule, the cost far exceeds the cost of the land? Yes; I am aware of that.
1804. Therefore, as the line proposed by the Sectional Committee would avoid any claim whatever for severance, there would be a great gain as regards the total cost? Yes.
1805. You think that an average width of 1 chain, which is 8 acres to the mile, is all that would be required? I think it would be about that.
1806. Can you give the Committee any idea of the value of the land that would be required for this line per acre? No; I have no information to give about that.
1807. With reference to the existing road, is it not possible to utilise a portion of the 3 chains without resuming any land at all? No; I do not think 3 chains would be sufficient.
1808. Supposing you took a chain off the road, leaving 2 chains, is that not more than the average width of the traffic roads in this country? The width required would depend upon the nature of the road.
1809. For vehicular traffic? I quite think that where you have 3 chains now you could do with 2 chains with a railway.
1810. In that case, would you save land resumption by taking from the 3-chain road a width of 1 chain for railway purposes? But I do not think 1 chain sufficient.
1811. *Mr. Gormly.*] Looking at the plan, going away from the Jerilderie railway station, would you tell us what distance you would go on the common and stock reserve before you came to the main road that goes through the Wonnamurra Estate? Nearly 4 miles.
1812. Then you would be going that distance wholly through Crown land? Yes.
1813. Therefore, there would be no resumptions for those 4 miles? No.
1814. Then, with the exception of a corner near the travelling stock reserve, you would follow the main road for the entire distance until you came to the timber reserve? Yes.
1815. Therefore, you would entirely avoid severance through the Wonnamurra Estate, with the exception of the short distance where you enter that estate;—you would avoid severance of the Wonnamurra Estate altogether by adopting the route suggested by the Sectional Committee? Yes.
1816. Then what distance would you go through the forest reserve? About 1½ mile.
1817. To what distance would the railway go through Crown lands? Nearly 5½ miles.
1818. From Jerilderie to the end of the travelling stock route—to the end of the forest reserve? That would be about 9½ miles, I should think.
1819. And for that 9½ miles there would be no need of severance in regard to the Wonnamurra Estate which would then be passed through? Yes; it would be passed through then.
1820. Therefore, there would be no need to compensate the owners of that property for severance? No.
1821. And if there was any necessity to resume land to provide for the road and the railway, it would only be necessary to resume some land alongside the main road? Yes.
1822. Therefore, no claim could be set up for severance? Exactly.
1823. You went along the road from the reserve towards Berrigan—I suppose you did not take the trouble to chain the road across to see the width? No; some portions of the road are marked on the plan as 3 chains wide.
1824. Did it strike you from your knowledge, and from what you saw, that the road was fenced more than 3 chains wide? I think it was about 3 chains in some places and narrower in others.
1825. Then you think it is not fenced more than 3 chains wide? It did not seem to me to be wider than 3 chains.
1826. But it is 3 chains wide? I believe so for some distance.

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1827. I suppose you find that the usual width of roads between purchased lands is about 1½ chain? I should not like to say. I have seen roads of all widths, from 1 to 3 chains.
1828. I am speaking about the usual roads that are frequently travelled on? I could not give an opinion now as to the average width. I have noticed in different parts of the country roads 1, 1½, or 3 chains wide, but I do not remember anything with regard to the average width.
1829. Are you aware that many of the roads on which there is an extensive traffic, are only 1½ chain wide? I think that is very likely.
1830. There might be considerable traffic on a road 1½ chain wide? Yes.
1831. If a road were laid out parallel with the proposed railway, would the traffic from Berrigan to Jerilderie be anything approaching what it is at present? The traffic would be very much decreased.
1832. And, therefore, there would not be a necessity for as wide a road as where the traffic is heavy? No.
1833. Would you come to the conclusion then, from these facts, that there is no need to have a 3-chain road, but that a width of 1½ chain might do? I think 2 chains would be about the right thing.
1834. You have not, I suppose, given this particular question much attention? I have; and I have come to the conclusion, as I have already explained, that 2 chains would be enough for the road.
1835. And 2 chains for the railway? Yes.
1836. Therefore it would be necessary to widen the present road by about 1 chain? Yes.
1837. Looking at the plan showing the deviation proposed by the Sectional Committee, and where it goes through private lands, about what distance is it before it comes to the main road again? About 7½ miles.
1838. That is the only portion of the proposed deviation where there would be a necessity for severance? Yes.
1839. And if the main road were moved back to the proposed deviation, there would be no need of any severance at all? No; none whatever.
1840. The question of severance would be entirely got over if that could be done? Yes.
1841. You were asked a question with regard to the Departmental surveys. The officer who made the surveys, and I think Mr. Firth, said it was intended to cross the Berrigan Creek on an existing dam;—has that proposal come under your observation? No; I have not considered that yet.
1842. What is your opinion in regard to crossing a creek or a dam,—would it be necessary to make an artificial water-course, if you blocked up the water-course under the dam? You would have to allow for a by-wash.
1843. If you crossed the creek on a dam it would be necessary to make an artificial creek or an excavation to let the water away? The water-way of the creek might be very much greater in extent than would be necessary to carry all the water.
1844. I suppose it is usually better to utilise the water-way nature has provided than to construct a by-wash? Yes; and I am quite sure that provision is made in the estimate for a bridge or an opening at Berrigan Creek.
1845. But would it in any way lessen the cost to cross on a dam, and then make a water-way afterwards? I should like to see the proposal before expressing an opinion. It has not yet come under my notice.
1846. *Chairman.*] We will now take the question of the construction of the line;—have you any statement with regard to the various items? Yes; as the Committee have inquired into the various items making up the estimate, I should like to state what my inquiries have resulted in. With regard to sleepers it appears that the price in the estimate of 2s. 6d. a sleeper is rather low. I had to wait some time at Narrandera for a train, and I went down to the sawmills to see whether there was any chance of getting sleepers at a moderate cost, and the conclusion I came to was that we might get sleepers delivered at Jerilderie for about 2s. 8d. each of the class which would be suitable for this line. That would be not put in the road, but just delivered; and putting them in the road would bring the cost up to 3s. I saw the manager of the mills at Narrandera, and asked him to send me a quotation for sleepers, explaining to him the class of sleeper we wanted. He has since written stating that he could supply those sleepers at 3s., delivered on trucks at Narrandera. But I am quite sure that the firm could deliver them for considerably less than that, and I am sending him a copy of the specification for the sleepers we are getting at Narrabri. I believe that Narrandera will be the cheapest place to get the sleepers from, and that they will cost 3s. a piece delivered in Jerilderie. Mr. Wise, the Mayor of Jerilderie, told me at the time, that he thought we could get them cheaper from Deniliquin, but I calculated that red gum sleepers sent from Deniliquin would come to about 4s. 6d. each. I also inquired at Berrigan, and no doubt the timber could be got there cheaply, but there would be the cartage. Talking with Mr. Greggery, at Berrigan, the conclusion I came to was that they would cost about 3s. a sleeper.
1847. What was your previous estimate of the cost per sleeper? Two shillings and sixpence was the price used.
1848. And what is your present estimate? Three shillings.
1849. *Mr. Hoskins.*] In your estimate of 2s. 6d., you did not include the cost of laying the sleepers? Yes. That is the price I expected to get the work done for at Narrabri. As I remarked to the Committee, my previous estimate was subject to my going on to the ground. I inquired into the matter of ballast, and I concluded that the cheapest way of getting ballast was to procure it from Cuddell, near Narrandera. We could get it, by arrangement with the Railway Commissioners, for 5s. per cubic yard, or something less. I have obtained some particulars as to what the Jerilderie Council obtain ballast for; but I have no doubt we shall make special arrangements with the Railway Commissioners as to freight and so on, by which we can get a better class of gravel—that is, screened gravel—at a cheaper rate than the Municipality of Jerilderie pay for ballast.
1850. *Mr. Molesworth.*] Do you mean 5s. per cubic yard delivered? Yes; put on the line; delivered where required.
1851. *Chairman.*] What was your previous estimate? Three shillings and sixpence per lineal yard. I have now taken 5s. per cubic yard. If it were to ballast the whole line I should take 3s. 6d. per lineal yard as before. But I propose that only a small portion of the line shall be ballasted, and as we should possibly lose a certain quantity in sinkage, in settlement of the banks, on soft portions, I think it is wiser to allow for a cubic yard per yard forward. I inquired also at Berrigan in reference to ballast, but I do not think anything more reasonable could be done there. At Berrigan some decomposed granite is brought from a quarry about a mile and a half out of the town, which costs about 5s. per cubic yard. It is not very good stuff. It makes first-rate roads, but it would not be so good for the line, because it would set, and would not be sufficiently porous for railway purposes. Mr. Greggery told me that in his well near his house he passed through a lot of gritty

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gritty stuff, a kind of rotten granite, which comes out, I understand, freely enough, but which they say is mixed with clay or kaolin. Some of the other wells show sand too. Without sinking a number of trial holes I do not think any large supplies could be reckoned upon, such as exist on the Moama to Deniliquin line. Of course that could be proved. But I think the most satisfactory way of dealing with the ballast, if ballast has to be supplied, will be to get it from the Narrandera line at Cuddell. The Railway Commissioners would run the gravel on their line at a very low cost, although the distance is about 60 miles. They would charge probably a little more than locomotive expenses, and we should get it at a very reasonable rate.

1852. Have you any knowledge as to how much stripping would be required to get this sand gravel? No; it is almost impossible to tell. I went to have a look at the gravel pits on the Moama and Deniliquin line, and there the stripping is very variable. In some places the gravel appeared to be pretty close to the surface, but in other cases there was a considerable amount of stripping. I made inquiry as to a water supply at Berrigan, and I concluded that there could be no difficulty about obtaining the small quantity of water which we should require.

1853. Would you say where you would get it? By sinking a well at the Berrigan terminus. Some of the wells at Berrigan supply hard water, and some good water. There is a shallow well there that gives very good water, and this well of Mr. Greggery's at Berrigan, which is 192 feet deep, is said to produce very good water. But the water would have to be analysed before we could tell exactly. Then I looked into the question of earthworks. I saw the American Champion road-making machine in use in Jerilderie. It is a very satisfactory machine, and does the work, no doubt, very cheaply. I think the Sectional Committee have very much the same information in regard to it that I have. Mr. Wise told me that the cost of the machine was £75, plus duty and cartage, and that it does the work for about 4d. per cubic yard. There are a great many things to be considered in making a railway bank. A railway bank has to be made in a much more careful manner than is the case with a mere road. You could form a road fairly well, and make it available for traffic in a way that would scarcely do for a railway. In order to make a railway bank satisfactorily, it has to be rolled in order to be consolidated, and even after rolling, it would not be of that smooth character, as usually required for a railway bank. Perhaps some of the members of the Committee have observed that the railway banks and cuttings are trimmed before the ballast is put on. Levels are run over the banks and along the cuttings, which are trimmed very neatly to an exact surface right across the full width—17 or 18 feet as the case may be. If that is necessary where there is ballast, it is all the more necessary for a railway where there is no ballast, where you have to lay the sleepers direct on to the bank, because otherwise you would have an uneven road, which would be difficult to deal with. Then in some parts of the line there will be clearing and grubbing. I quite think the road-making machines might be used profitably in making this railway, and the cost would certainly be cheapened. The cost of side cuttings has generally been from 7d. to 9d., and the contractor has got his profit over and above that. Therefore, if the earth-works can be made by using these road machines and rollers, and afterwards carefully trimming the bank on the top, and the cost will not exceed 6d. per cubic yard, a considerable saving will be effected.

1854. You say that 6d. per cubic yard would be the cost of using the American grader? Yes.

1855. What is your previous estimate? I think it is so much a chain. In America the cost of the earthworks is reckoned at 6d. per cubic yard, which would come to about £300 or £400 per mile. In this case, I have already cut the cost down to £225 per mile.

1856. Are you adhering to your previous estimate with regard to the cost of earthworks? Yes, practically, but I wish to give this additional information. Included in the cost of earthworks there is the item of earthworks at the stations. It is not very much. There will be the terminal station, and a small half-way station or a waiting shed, and there will probably be a couple of places where sidings will be required for taking wool or other produce. Reckoning this at about £800, and taking the extra embankments over swampy places at £1,000, that would make £1,800 for these two items alone. And reckoning £1 13s. a chain for the ordinary line, that is, 66 cubic yards per chain at 6d., as against £2 10s., and you get for the total length of the line, less the deeper banks, £2,739, which added to the £1,800 gives a total of £4,539 for the earthworks. In the estimate previously submitted the cost of the earthworks was stated at £4,754. I do not propose to make any alteration in the amount, because it is not worth while to cut out the difference.

1857. That is notwithstanding the fact that the American grader would allow the work to be done for a much cheaper rate? Yes, I have reckoned it at 6d. The American grader does not do all the work. In the first place, if the ground were very hard it would have to be ploughed up. The American grader will do the work on stiff or sandy ground that the plough will go into, but it will not work in very hard ground without ploughing. It would, in fact, be very undesirable to try it; you would only ruin your machine. When the American grader is done with, the roller has to go to work, and to go up and down the line several times. And when the ground has been rolled and consolidated, it has then to be carefully examined for the purpose of getting the levels absolutely correct. A slight undulation either longitudinally or laterally, would not matter in the case of a road, but in the case of a railway it would make a great difference, and thus more work has to be put on to this embankment for the purpose of preparing it for the sleepers and rails than is necessary in the case of a road. I wish to lay particular stress upon the point that in this respect a railway is not the same as a road. I believe the work could be done, including all operations, even clearing all the land where required, for about 6d. a cubic yard; whereas, in letting works in the ordinary way, I think the lowest cost up to the present has been about 1s. I have here a blue print showing the earthworks on one of the American lines of which I spoke the other day. It shows several cross-sections. On the left-hand side there are three methods of making and forming, and on the right-hand side three corresponding methods; and at the bottom there is a rocky excavation with ballast. I think we can leave out the cuttings, and look at the embankments. The top one shows an embankment where it is intended to use earth ballast, that is to say, no ballast at all, but to use the rubble from the banks. The second one shows gravel ballast, and the third broken stone ballast. What I particularly wish to direct the attention of the Committee to is the one with the earth ballast. It will be seen that there is a considerable rounding on the top of the bank. A level line drawn from one corner of the bank to the other crossing along the bottom of the sleepers would show a depth of 16 inches. The way it is done is this: A bank is first of all constructed to the level to which the bottom of the sleepers come, and it is made 15 feet in width and flat. The sleepers and rails are put on the top of that. The corner

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portions or triangles represent the material, which is afterwards taken off and thrown in between the sleepers and rounded off. That is the way they make their lines without ballast.

1858. *Mr. Davies.*] That prevents the lodgment of the water? Yes; it throws the water off. There is a big slope on each side, and the water rapidly runs off. If it were made flat, and water were allowed to stop on the bank, the result would be ruinous to the road. In reference to the graders, or road-makers as they are called, I find that there are many of them at work in different parts of Victoria, and they seemed to give satisfaction. There are much more complicated machines than these used in America, and Mr. Mountain, the City Surveyor of Melbourne, told me he had seen one of Austin's machines, that the council gave permission for one to be tried, but that he did not consider that it was satisfactory.

1859. *Chairman.*] You mention this, I presume, to show that the road-making machine may possibly be superseded by something better? Yes; although I think at present this road-maker is sufficient. It is a much more simple machine than the others. The Austin Manufacturing Company, of Chicago, supply different classes of the machine.

1860. You say then that the American grader, such as we saw at Jerilderie, is likely to hold its own sufficiently long for it to be worth purchasing? Yes; I am quite sure that it would do satisfactory work here. These larger machines would be useful in heavier work and higher banks, but the American road-maker would answer our purpose perfectly.

1861. Would the Department object to a contractor using the graders in the work of formation? No; I should not object to their use.

1862. Would they materially reduce the cost of the work? Yes; as I stated just now, the reduction would be from 1s. to 6d. per cubic yard. I think we should be paying too much if we could not get these low banks made for 6d. a yard. At first there might be hesitation on the part of contractors to use these machines, but I think if the Government bought some of them, and also rollers and ploughs, we could get the work done for the price I have mentioned.

1863. As the grader does not form part of an ordinary contractor's plant, how would you get over that difficulty? I would suggest that the Government should buy the machines and let them out for use.

1864. You see no other way through the difficulty? No; I do not think so. I think it would be the cheapest way. If in the specification the contractor were bound to use these graders, not knowing what they were, he would put in a big price to cover risk, and there is really no risk in the matter.

1865. *Mr. Lee.*] In the event of the work being done by contract could not the contractor provide the whole of this plant, no matter what it might be, the same as for an ordinary contract? Yes; he would. But supposing our contractors here do not understand the use of these machines, and do not like to use them, then we should lose the benefit of them. I should like to have a try at this line and see how cheaply it could be done, and use the best means for getting it made cheaply.

1866. *Chairman.*] What is the next item to which you desire to refer? In the estimate submitted it seemed to me that if fencing were done without, this particular item might be reduced. But if the line suggested by the Committee is adopted, and the fencing of the road is required, it will be an item which must not be neglected. I think it must stand as it is, and for a reason which I will explain. I was inquiring into the price of local fencing, and I found that the cost complete was from £35 per mile upwards, but smaller wires and smaller posts are used than is the case in our Department. The plan that has been adopted for some time past has been to place the posts 10 feet apart, and use stronger wires—I think No. 7—than the squatters usually use. There is no doubt that a railway fence requires to be a little more secure than an ordinary squatter's fence. A cost of 3s. a rod, for which, no doubt, we could get the fencing done according to specification, means £48 per mile. Taking £50 per mile to cover the small corners and angles, and for running into road crossings or culverts, the result would be this:—If you assume that about 25 miles of fencing will be required—that is to say, the fencing along one side of the line and a little more—at £50 a mile, you get £1,250; and putting down £700 for the cost of cattle-stops, gates, small culverts, and road crossings that might be required, you get £1,950, the same amount as in the estimate submitted.

1867. *Mr. Hayes.*] One side of the line will be fenced by the road fence? That is, if the road is not widened.

1868. The present road will not be altered so far as the width is concerned? But supposing the width is not sufficient for the road and railway, but one fence will have to be altered. I am taking 25 miles—that is the length of the line, and about 3 or 4 miles in addition.

1869. In that case the line would be fenced on both sides? Yes; one fence being on the side of the railway, and the other on the outside of the road.

1870. *Chairman.*] You propose to fence the road and railway in together? Yes; I do not see any objection. With regard to the work on the permanent-way, I propose, as I mentioned before, to put down 5 miles of ballast, which, at 5s., would come to £2,200, and the laying of the road with the extra number of sleepers, would come to £132 per mile, or £2,803. The sleepers (2,500 at 3s. each) would come to £375 per mile, or a total of £7,964. This gives a total cost for the work of ballasting and laying of sleepers of £12,967, or £616 per mile.

1871-2. *Mr. Davies.*] What was your previous estimate? £667 per mile.
That shows a reduction of about £50, notwithstanding that you provide ballast for 5 miles? Yes. The estimate of cost thus altered comes to £2,000 a mile, and I strongly recommend the Committee to adopt that. If you leave out altogether the ballasting I have put in, you will knock out another £100 a mile, making £1,900 a mile. The estimate of £2,000 a mile which I recommend the Committee to adopt is really a very low estimate. I believe the line can well be carried out for that sum, and a very satisfactory job be made of it. I think it would be a pity to reduce the cost of the line, or to reduce the funds available, below that amount, because it might happen that we should require it. If we could do without ballasting over those bad places, I should be the first to try to do so. If we could get sleepers at less than 3s., laid on the road, so much the better; the country would have the benefit of it; but I think it would be unwise to limit the Department down to the other amount, because I am almost sure that a little more would be required. The Committee quite understand that if they knock out the 5 miles of ballasting which I recommend, that would bring the cost down to £1,900 a mile, but I do not consider that we should be free from risk. If we find that in the course of construction we can do without the ballasting, or any portion of it, we shall certainly do so, but I think that it ought to be provided for in the vote.

1873. *Chairman.*] In other words, you believe the minimum for a safe line is £2,000 a mile? Yes.
1874. *Mr. Hoskins.*] Do you mean to say that you feel confident you could make a stable, workable railway, on which trains could be run at the rate of 15 miles an hour between Jerilderie and Berrigan for £2,000 a mile? Yes; I can if I am left unhindered in making the contracts.
1875. What depth of ballast do you propose to use in respect of the 5 miles? I should put in a depth of about 6 inches.
1876. Of that gravel ballast? No; it is a sort of broken stone.
1877. Have you been to the locality during the recent wet weather? There had been some rain just before I got down there, and the roads were very bad.
1878. Witnesses examined before the Sectional Committee, one being a professional gentleman, said they did not believe it would be safe to make the railway without ballast, in consequence of the soft, greasy character of the soil;—what is your opinion of that? That I provide for in what I recommend to the Committee. The ballasting of 5 miles of the line will cover all dangerous spots of that kind.
1879. What would be the difference in cost if you were to put 6 inches of ballast right along the line? It would mean £350 a mile extra.
1880. Therefore, the total cost of the line would be £2,350 per mile? Yes.
1881. As Engineer-in-Chief for Railways, would you prefer to have this line ballasted 6 inches right through, at a cost of £350 a mile, rather than have it ballasted for only 5 miles? I want to see the experiment made of constructing a line without ballast.
1882. You feel no apprehension? I have no apprehension whatever, because if the banks proved a little weak they could always be ballasted up afterwards without any extra expense.
1883. And on the portion of the line which will not be ballasted, and perhaps on the portion also that will be ballasted, how many sleepers will be used per mile beyond the number usually used? The number will be about 500 per mile extra.
1884. *Mr. Davies.*] You are aware that the Mayor of Jerilderie estimated the cost of earth-works similar to the earth-works necessary for the construction of this proposed line at about 10s. a chain, with an uniform depth of 6 inches? But 6 inches is not enough.
1885. But you propose 6 inches? No; I said 6 inches as a minimum.
1886. What would the uniform depth of the earth-works be? The depth will not be very uniform. To carry out the style of work shown on the American plan to which I referred just now, you would have to make the bank a depth of about 18 inches on the average.
1887. So that with a 5 or 5½-inch sleeper the railway will stand up something like over 2 feet? Yes; about 2 feet.
1888. Was that contemplated when you gave your evidence before? I do not think I have altered my opinion in that respect.
1889. From what you have seen of the country, having passed over it, you have come to the conclusion that a height of not less than 2 feet from the surface of the earth to the top of the railway will be sufficient? I should not like to bind myself exactly to that, because in going over a mound, for instance, you would alter the depth of the earth-works. It would all depend upon the nature of the ground. If the ground was high the work would almost approach a cutting, and if the ground were low you would have a considerable bank.
1890. But you have seen the country, and know that it is almost uniformly level? I would not say that. I saw one place where a cutting would be necessary, and I saw several places where banks would be necessary.
1891. What would be the depth of the cuttings which you saw would be necessary? Perhaps 1 foot.
1892. Do you think in any part of the line it would be necessary to have a cutting of 1 foot? Yes; I think so.
1893. Coming back to the earth-works, in the estimate of the Department the cost was put down at £225 per mile—you saw some earth-works carried on in connection with road-making at a depth, on the main road, of about 18 inches or 2 feet? Yes. I saw them cutting down the side of the roadway about 6 inches.
1894. Did you see them making up the road about 2 feet or 2 feet 6 inches? No.
1895. Did you go along the road? Yes.
1896. Did you see the scoops at work? Yes.
1897. Did you see them making the road at least 2 ft. 6 in. higher than it had been originally, by taking earth from the sides, and putting it in the centre? I did not measure it; it did not look to me to be 2 ft. 6 in.
1898. How deep do you think it was? I should think when it was rolled down and consolidated, it would be about 9 inches at the most.
1899. The evidence of the road superintendent was that the road was being done for £1 0s. 4d. a chain? I am told that the men are losing money by it, and that they would not take work again at that price.
1900. If that work is done for £1 a chain, the formation being wider than that required for a railway, would not £225 a mile for your earth-works be a long way in excess, considering the character of the work necessary for this cheap kind of railway, and considering the cost of work now being done in the locality? No. In my former evidence I reckoned the cost at 33s. per chain. The estimate of £223 a mile includes a number of things not shown in the case of an ordinary road. But where the earth-works are light as in this case, and the work can be readily done by the grader, I estimate that it can be done for 33s. per chain, and this amount, even compared with £1 a chain for the road, is very moderate, because I am certainly getting 13s. more work as compared with the £1 for the road.
1901. What reduction is this compared with your previous estimate? No reduction; I propose to adopt the same.
1902. That is £225 per mile? Yes; but that includes earth-works for stations, and crossing the Berrigan Creek, and little depressions on the route. There are several depressions along the route which I could have pointed out to the Committee if I had been with them.
1903. In your previous evidence you put down £750 for stations? That was for the buildings.
1904. Did you not say just now that the sum included stations and other things? No; the 33s. a chain does not include stations, but the £225 per mile includes earthworks at stations.
1905. Do you see any difficulty in using the grader right through the whole length of the proposed line? No; I think it might be used pretty well all through.

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1906. The character of the country is such that it can be easily operated upon by a grader? Yes.
1907. You did not see a stone in the whole of your journey? No; I do not believe I did.
1908. So that there would be no trouble in using an American grader for the earth-works? No.
1909. And it would certainly be much more economical than the old system of barrow and pick and shovel? Yes; very much so.
1910. And though you say that there is some small part that wants to be cut to a depth of about 1 foot the country is uniformly level? Yes; it is a level even country.
1911. There is no difficulty whatever? No.
1912. And you believe the line can be constructed well within your present estimate of £2,000 a mile? Yes; I believe it could be constructed for £2,000, and when I say £2,000, I believe that would be the limit.
1913. And that includes the cost of 5 or 6 miles of ballast which you had not reckoned in your previous estimate? Yes.
1914. Your previous estimate was £1,835 per mile dispensing absolutely with the ballast? Yes.
1915. After having seen the country you now think it necessary to make provision for about 5 miles of ballast? Yes.
1916. That provision being made, you would regard the line, if constructed, as permanent, and as stable as any other line of a similar character in the Colony? We have not any other lines of a similar character in the Colony.
1917. Well, the Cobar line? That is a ballasted line throughout.
1918. Subsequently ballasted? No; it was ballasted at the time.
1919. But this line will be quite stable enough to carry all the produce of the district for many years to come? Yes; it will be quite satisfactory, I believe.
1920. How long would it take to construct a line in the event of its being authorised? I should think a line of this character, if the plans and everything else were ready, ought to be completed in about five or six months.
1921. Quite in time to carry the produce of the present year—by the end of the year? Yes. First of all the road question must be settled.
1922. That is a question outside of your Department? Yes; but it stops my work. Until that is settled I cannot get the line permanently staked, and consequently cannot prepare the plans.
1923. The first thing to be done is to settle the question of the road, so as to enable you and your officers to proceed with the survey? Yes.
1924. And in the event of authority being given to proceed with the survey, the whole of the work should be completed within six months? Not including the survey.
1925. How long would it take to survey that short line? The easy nature of the country has nothing to do with it. The surveyors have to pick up their boundaries, and make a proper survey.
1926. But if amateurs could pick up the boundaries, as the members of the Sectional Committee did the other day, in finding out the deviation, would it be very difficult for the surveyors to do so? I think, the Chairman, who knows something about surveying, will tell you that amateurs could not do the work of surveying.
1927. Allowing for the survey, the preparation of plans, and the advertising, how long would it take before the work was completed? I should say it would take nine months altogether from start to finish. The line would not really be required before December.
1928. From your investigation of the proposed deviation you are of opinion that the difficulty of construction would be no greater than in the case of the line surveyed by the Department? No; it would not.
1929. Would it be any less? It would practically be the same.
1930. Having now seen the country, are you satisfied that the waterways proposed will be sufficient? Yes, quite.

THURSDAY, 31 *JANUARY*, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.	Robert Henry Levien, Esq.
The Hon. James Hoskins.	John Moore Chanter, Esq.
The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Henry Deane, Esq., Engineer-in-Chief, Railway Construction Branch, Department of Public Works, sworn, and further examined:—

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1931. *Chairman.*] Will you continue the evidence you were giving when the Committee adjourned yesterday? I should like first to supply some information asked for by Mr. Humphery in reference to the permanent-way materials on the Jerilderie line. Various methods were proposed for utilising the new and old permanent-way on that line. On looking over the papers, I found several different estimates, and this seems to be the right one:—2,000 tons of re-rolled rails at £5 10s., £11,000; 2,790 tons of 60 lb. rails, at £7 15s. 1d., £21,640; 440 tons of fastenings at £16, £7,040; total, £79,680.
1932. *Mr. Humphery.*] That explains, I suppose, why the estimate is so much greater than in the case of the proposed line from Jerilderie to Berrigan? Yes.
1933. *Mr. Davies.*] Your estimate for the present line, using second-hand rails, and a portion new rails, is £532 per mile, is it not? Yes; it amounts to £11,237.
1934. *Mr. Molesworth.*] In answer to a question asked yesterday by Mr. Hoskins, you said this railway work could be carried out for £2,000 per mile if you were left unhindered, in regard to your contracts; will you kindly explain what you meant? I meant that I should be allowed to have everything ready—

all

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all the plans and details ready at one time—and not that part of the work should be left with a promise of something extra to be placed in the contract afterwards; that, for instance, the station plans should be all ready, and the earth-works included in the contract, so that the contractor should have no claim for extra prices through delay in the delivery of the plans. On some of our lines we have had claims on that account, and in some cases have had to pay compensation. I want to avoid that. That was my chief meaning.

1935. Then I understand that the only source from which such hindrance could come would be the Railway Commissioners who might be behind hand with their plans for the buildings? I do not think that would be the only source. But I think in this case there would be no delay, because it is already pretty well decided with the Railway Commissioners what the accommodation is to be.

1936. Do you fear any hindrance to your work from any other source? There might be, if we had to purchase land, and the arrangements with the owners were not completed.

1937. You do not think that there is likely to be a hindrance of any serious nature to materially delay the line? No; I do not think so.

1938. After the work of construction was placed in your hands, how long would it be before the 60-lb. rails could be imported? We have a stock of rails.

1939. *Mr. Hoskins.*] Sixty-pound rails? Yes.

1940. *Mr. Molesworth.*] How is it that you do not think it possible to construct a line with a less width than 2 chains, considering that some of our suburban lines have not anything like that width? Those suburban lines are not made up from side cutting.

1941. You have not got a full width of 2 chains all the way between Sydney and Parramatta? I could not say what the width is. I do not suppose there is that width all the way for the original line. There may be now with the duplication.

1942. I think you will find that between Sydney and Parramatta, even where there are four lines of rails, there is not, in some instances, a width of 2 chains? I would not like to say. But in this case we are making up the banks from the side. That takes up a good deal of room; and then you want extra width to allow for clearance, and for safety in case of fire. If the trains go too near the fences there will be a danger of sparks from the engines setting fire to the grass on the neighbouring property, and in that case there would claims for damage.

1943. But does not that occur where there is a greater width allowed for the line? No; I do not think so.

1944. You could not confine sparks within 2 chains? At any rate the danger is considerably less if you have a wider strip. The width mentioned is my recommendation. One could cramp it down, but I do not think it would be wise.

1945. You still adhere to that as a recommendation? I do not think it is absolutely necessary, but it is my recommendation.

1946. To have 2 chains for the construction of the line? Yes.

1947. What is about the width of the roadway in Elizabeth-street from kerb to kerb on which they run two lines of rails for tramway purposes? Generally speaking, in Sydney the width is from 33 to 36 feet between the kerbs; in parts of George-street, of course, it is much wider.

1948. Is there any serious difficulty experienced in working the two lines of tramway in Elizabeth-street in such a narrow width of road? No. It is not a question of the passing of the trains. It is not a question of the actual width required for the carriages and rolling stock. The conditions are quite different.

1949. You do not feel disposed to reduce the width in your recommendation? No; I think it would be unwise to do so.

1950. The Committee are anxious to avoid the resumption of land if it is possible;—do you not think that where the road is now 3 chains wide, it would be possible to carry the road and the railway within that limit? I do not say it would not be possible, but I do not think it would be a good plan to adopt. I think you want about 2 chains for such a road in the country. It is not a made road. You require 2 chains for the road unformed as it is now, and practically 2 chains for the railway.

1951. Is it not a fact that many of our roads in the Colony are not more than a chain wide? Yes; I know there are many roads only a chain wide, but they get cut up very badly in wet weather.

1952. You propose that the railway and the road should run side by side? Yes.

1953. I suppose you would have the road on one side of the enclosure and the railway on the other, you would not have the railway running in the centre? No; I would put the railway on one side. There is another reason why we should have a greater width. If you have the railway running alongside, and you have a wide enclosure, there is a better chance for restive horses to get away from the train. I think that is a very important point. If the railway and the road were enclosed within a width of 2 or 3 chains it might become dangerous. I do not think that a comparison with Sydney traffic and the fact of horses running alongside the trams in Sydney is at all to the point, because we know that fresh horses brought into contract with steam motors are sometimes very troublesome to manage. I have known that from my own experience.

1954. Does not the same danger exist when the horses are brought to the railway station when conveying produce or passengers? Scarcely. In that case they are separated from the line by a greater width; they are often separated by the goods platform or by the goods sheds, or by the passenger platform, or passenger buildings.

1955. But are not most of the railway yards at country stations perfectly open, and do not the drays come right alongside the trucks, the engines passing backwards and forwards occasionally? Yes; there is no division, but they do not pass alongside in the same way.

1956. With regard to the question of fencing you stated in your evidence yesterday that you thought that with the proposed deviation it would be necessary to incur a considerable cost for fencing? Yes.

1957. How does that become necessary? I explained that if it had not been for that I should have proposed a reduction in the fencing on the original estimate, but in this case if the road is made use of, and the road being now fenced, we should have to put up new fencing on one side so that a considerable mileage of fencing would be entailed which otherwise would not be required.

1958. You said the estimated cost of the fencing was £35 per mile? No; the kind of fencing I should put up would cost on the average, including all little bits and corners, and pieces running up to gates and so on, £50 per mile.

1959. What description of fence would that be? A wire fence.

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1960. How many wires? Seven.
1961. And the posts 10 feet apart? Yes.
1962. Ordinary split posts? Yes.
1963. Is not that rather an extravagant price? I do not think so. The squatter's fence is mostly made of smaller wire than our fence is made up of.
1964. You propose to use No. 7 wire, do you not? Yes.
1965. In a squatter's fence No. 8 is used as a rule? I have seen No. 10 and No. 12.
1966. For outside boundary fencing? Yes.
1967. But even that would not make such a difference in the cost? Yes; they put in very much smaller posts as a rule, and perhaps more crooked ones.
1968. That estimate, I suppose, covers the cost of all material as well as labour? Yes; it covers everything. It covers the maintenance of the fence, and that is an important thing to remember—the maintenance of the fence during construction.
1969. Will you explain what that means? Take an ordinary railway contract. The railway contractor puts up his fence as soon as he possibly can—as he can conveniently get the men and make the contracts. During the progress of the work the fence is liable to injury from various causes. If the posts are damaged or the wires cut, through the teams coming against it, the contractor is responsible, and he has to put the fence in good condition. He has also to see that the wires are strained at the end of the job before the line is handed over.
1970–1. But is not the contractor always responsible for the condition of the work until it is taken over by the owners? Yes; that is just the point.
1972. Then there could be no special advantage such as you indicate? Yes there would. If a contractor erects a fence on a station, as soon as it is completed, the responsibility of it is taken over by the proprietor of the station.
1973. And as soon as the contractor finishes a railway fence it is taken over, is it not? No; it may be finished months before the line is handed over.
1974. That is only part of his contract? But it makes a great deal of difference. These railway fences are very often damaged to a very serious extent, and the damage has to be made good before the Government take over the work.
1975. But the contractor is not compelled to put up the fence until the last thing, unless he chooses? He does the work as it becomes convenient. According to the present Act he is obliged to fence as the work goes on. He is not allowed to run his engine past where the fence goes. That is the provision in the Act, although it is infringed to some extent.
1976. Is it not possible for the permanent-way to be handed over? Yes.
1977. Why does the fencing stand in a different position to the permanent-way? It does not stand in a different position. The contractor has to maintain the whole thing until it is handed over. A station fence is handed over as soon as it is finished, but a railway fence, or a portion of it, may be finished some time before the line is handed over. Supposing the contract for this proposed line takes six months to carry out, the contractor has to erect 25 miles of fencing. He does not do all that in the last fortnight. He begins straight away, and gets the stuff at once. Very likely in the first month there will be something to show, and that first portion of the fence will have to be looked after for five months, and be subject to damage from outside, and if it is damaged it will have to be put in order by the contractor before he hands the work over.
1978. Then you do not think £50 a mile an extravagant estimate? I do not think so, but if the fencing does not cost that the country will get the benefit of the difference.
1979. I understand that you intend to ballast the line in certain tender places? Yes.
1980. You do not contemplate ballasting from end to end? No.
1981. And you propose to get your ballast from Narrandera? From near Narrandera.
1982. Would not the ballast at Berrigan be sufficiently serviceable, and cheaper? That would be at the wrong end for one thing. I do not think it would be cheaper. I think the ballast can be run cheaper along the Narrandera line, and it can be put on the road for that. You might get it at Berrigan delivered cheaper than that, but then you would have to put it into trucks, and deliver it along the road. The amount I have mentioned is the price of the ballast actually put on to the line. The ballast is put straight away from the quarry into hopper trucks, and then it is run out on to the line, and laid down through the hoppers, just where it is wanted, without any labour at all, except for spreading it.
1983. Does your estimate for fencing include the gates that may be required for the various crossings? Yes. The total item of £1,950 includes fencing, cattle-stops, and gates.
1984. And the necessary fencing at the platforms or waiting-sheds? Yes; everything.
1985. You know of no further expenses likely to be incurred in connection with the construction of the line besides those already enumerated? No; I believe I have everything down, except what might be required for land, which I do not anticipate will be much.
1986. You now bring your estimate of the cost of the line to within about £30 per mile of the original estimate? Yes; I recommend that to be done. I do not think it would be safe to leave out the ballasting altogether; but if we left out the ballasting it would make about £100 a mile difference.
1987. You do not recommend that the line should be constructed at a cost less than £2,000 a mile? No; I recommend that £2,000 should be provided.
1988. *Mr. Chanter.*] In your evidence yesterday you estimated that the sleepers would cost 3s. each on the trucks at Narrandera, and you estimated a similar cost for sleepers from the Murray;—did I understand you correctly that in addition to the 3s. on the trucks at Narrandera there would be the cost of carriage from Narrandera to the point on the railway? No; what I said was this: that I had an offer to supply sleepers on the trucks at Narrandera for 3s., but that I considered the price was too high, and was sending to the saw-mill owners a drawing and specification showing the kind of sleepers we want, and which will answer the purpose. I consider that these sleepers should be delivered and put in the road for 3s.
1989. What description of sleeper have you designed? Those would be red gum sleepers; but they would not necessarily be so square, so rectangular in cross-sections, as has been the practice. They would be sound sleepers, and just as durable as the others, but they would not be quite so nice to look at.
1990. Would there be anything gained by the saw-mill proprietor in supplying a sleeper of that kind when it has to be cut with a saw? Yes; because he can go nearer to the outside, and probably use timber which otherwise would be wasted.

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1991. If the saw-mill proprietor went too near the outside, would he not take in the sap and the worst portion of the sleeper? There is very little sap in the red gum.
1992. Are you acquainted with the evidence given in regard to sleepers before the Committee which inquired into the proposed railway from Jerilderie to Deniliquin? Yes.
1993. Did you note the evidence given by one of the saw-mill proprietors on the Murray to the effect that he could supply first-class rectangular sleepers of the size required by the Department at 2s. a sleeper, if the Government would waive the royalty? No, I do not think I saw that. I reckon that those sleepers would cost 2s. 3d. on the Murray. If you can get them for 3d. less, so much the better.
1994. I presume the difficulty in getting sleepers from the Murray, where first-class sleepers can be obtained, is in consequence of the land carriage to the Berrigan end of the line? Yes.
1995. That would make these sleepers more costly? Yes; it would bring them to about a third more, I suppose, and then, of course, they would have to be run into the trucks on to the line. Another thing is that if you deliver them at Berrigan that is the wrong end of the line. You want them really at Jerilderie, so as to advance with your rails.
1996. It would mean a land carriage of over 40 miles altogether? Yes.
1997. And that would make them too expensive? Yes.
1998. Did you notice the timber reserve about midway between Jerilderie and Deniliquin? Yes.
1999. Is there not sufficient timber there to supply sleepers for this line? No; I think it would be very difficult to get sleepers from there.
2000. It is box timber? Yes. Box is a very good, durable timber if you can get it sound enough, but most of the large trees are pipey.
2001. Then, in your opinion, it would not be possible to obtain sleepers from that reserve? I do not think you could reckon upon more than 1,000 or 2,000.
2002. How many do you estimate would be required for the whole extent of the line? A little over 50,000.
2003. Then if some sleepers were obtained from there you would still have to go to Narrandera or the Murray to obtain sufficient for the line? Yes.
2004. And you think you can get those sleepers delivered where they are to be laid at a cost of not more than 3s. each? Yes; if they can get sleepers on the Murray at 2s., I do not see why we should not get them at Narrandera for 2s. 3d., and if we can get them delivered into the trucks at Narrandera for 2s. 3d., we ought to get them carried along the railway line and put into the road for 3s.
2005. I suppose you are aware that the greater portion of the sleepers laid down upon the railway lines in Victoria have been obtained from forests on the Murray River? Yes; I know they use a great many—red gum sleepers.
2006. Did you ever endeavour to ascertain the contract prices between those saw-mill owners and the Victorian railway authorities? No; I have not inquired.
2007. You might endeavour to make an inquiry which will be useful to the Committee as well as yourself? Yes, I will.
2008. You propose altogether to ballast the railway to the extent of about 5 miles? Yes.
2009. Not continuously for 5 miles, but in parts where, in your opinion, the line requires special care? Yes.
2010. You estimate the cost of that ballast at 5s. per cubic yard? Yes.
2011. Obtained from Cuddell, in the Narrandera district? Yes.
2012. You are of opinion that it would cost about the same if the Berrigan granite were used? I think it would cost more if the Berrigan granite were used. They tell me that the Berrigan granite costs 5s. put on to the road, but it can be more cheaply put on to the road than it could be put on to the line. The Berrigan granite would have to be put into trucks, and then run along the line, whereas the material I have been mentioning would be on the line already, and there would be no extra expense in running it where it was wanted.
2013. Is the ballast you get from Cuddell considered satisfactory by your Department—sufficiently hard stone? Yes; there is a good deal of it used.
2014. It is of a soft powdery character, is it not? No; it did not strike me as such. There is a good deal of it that would have to be screened out—a good deal of soft stuff.
2015. You are not aware from reports, or from your own observation, that a great deal of the stone now used upon the line between Narrandera and Jerilderie is of a soft sandstone character? I saw some of this particular stone at Narrandera. I was looking at it specially, and it seemed to me quite satisfactory for the purpose.
2016. You stated yesterday in your evidence that you thought there was an objection to the Berrigan granite on account of the cementable properties, and its running together too much? Yes.
2017. Is that any great disadvantage to a railway? Well, it is in this way, that it does not admit of the moisture running through, and it keeps the sleepers in a damp state.
2018. But as this decomposed granite, as you termed it, has been proved to make first-class macadam for roads, would it not also have a protective effect upon the sleepers—a chemically preservative effect? I doubt very much whether it would. I do not think that red gum requires that, because it is in all sorts of situations a very durable timber. Ballast that cakes on the line has this disadvantage, that if the road goes down you have to use the pick to open out the road before you can pack the sleepers up.
2019. But you do not contemplate that with the class of engines and the loads that would be taken over this line when constructed there would be any very heavy traffic that would lead to the consolidation of the ballast? There would be as little damage done as with traffic anywhere.
2020. In traversing this route did you observe any appearances on the surface that would indicate a gravelly substance underneath? No. I was on the look-out, but I did not notice any.
2021. Did you give instructions for trial shafts to be sunk along the line of route with a view to test this point? No. I have not done anything of that sort.
2022. If, after test by trial shafts it were found possible to obtain a gravel similar to that used on the line from Moama to Deniliquin, and on the Victorian railway from Echuca to Toolamba would you not recommend that it should be used in preference to the other? If I could get it cheaper.
2023. Of course taking into consideration the cost? Yes.
2024. You are aware that the terminal point on the railway at Moama is only about 40 miles distant from the Victorian quarry at White Hills near Bendigo? I do not know what the distance is.

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2025. The distance from Narrandera to Jerilderie is about 70 miles, is it not? Sixty-four miles I think.
2026. The contractors for the Moama line would only have to pay half the haulage on their ballast as compared with ballast brought from Narrandera to Berrigan? I do not know; I should have to inquire into the circumstances. There is this difference: The quarries in Victoria belong presumably to the Victorian Government, or at any rate are situated on the Victorian Railways. They would want full carriage rates for running the stuff, and if it is Victorian Government property they would want full rates for the value of the material. In this case, it is one Department of the Government aiding another, and there is no necessity for any profits to be considered at all. There is a saving in this case.
2027. But would there not be a much greater saving taking into consideration the fact I am about to state, that irrespective of the cost of ballasting this private line from Moama to Deniliquin, they are getting a revenue themselves for the ballast from the various municipal bodies. Would not that be a great advantage in a district like this if you had these gravel pits at points along the line from Jerilderie to Berrigan, and could use it as well for ballast on your own lines? I do not know that it would. I do not know that they would be able to deliver it at a less cost than is at present paid for the gravel supplied to the municipalities.
2028. You estimate the cost of this class of ballast at 5s. per cubic yard? The Deniliquin-Moama Railway Company provide the labour for filling the trucks, and deliver this gravel at any point on their railway at 3s. per cubic yard? That is a saving, of course.
2029. If you could obtain that class of gravel, which has had twenty years experience on the private railway, would it not be better and cheaper to ballast the line from beginning to end with this class of material than ballast only 5 miles of it with the material brought from Narrandera—as an engineer, which would you prefer? I should think that the way I propose would be the cheaper, as compared with ballasting the whole line.
2030. If the private railway company provide the labour and sell this ballast at 3s. per cubic yard, is it not fair to assume that they get a profit of 1s. a yard? Sixpence, any way.
2031. That would leave half-a-crown, which would be half the cost of the ballast you propose;—for the same amount of money that would do at least twice the distance? Yes.
2032. Would it not be a decided improvement to obtain that class of ballast and have the extra distance, than to use the broken stone and have only 5 miles? You mean to have 10 miles instead of 5 at the same price—you would have more for your money.
2033. You have no prejudice against that particular class of ballast, have you? No; not for a line of this character.
2034. When you gave your evidence before the Committee, on the proposed line from Jerilderie to Deniliquin, I believe you spoke of Mr. Whitton not having passed the private line from Moama to Deniliquin? Yes.
2035. Was that in consequence of the class of ballast? Yes; he mentioned the ballast.
2036. That was the chief feature in his opposition? It was one important feature.
2037. Has it ever been brought under your notice as an engineer that, as a matter of fact, that ballast is better than the hard ballast because it is more yielding in character, and that the life of a sleeper where it is used is estimated to be at least 50 per cent. longer than where a sleeper is laid down upon hard stone? I cannot see that it would be any better for the sleepers.
2038. What is the size of the stone ballast? It is supposed to pass through a 3-inch ring in all directions.
2039. That ballast does not consolidate, and it forms a hard, unyielding surface below the sleeper? Not altogether unyielding; it is pretty hard, of course.
2040. If the sleepers are resting upon this very hard stone broken to a size of 3 inches, and of an unyielding character, and there is a heavy load passing over the line, the pressure must be upon the bottom of the sleeper? Yes.
2041. Consequently, it wears away the sleeper to a very great extent? I do not think it does.
2042. In your opinion, it does not? No; I do not think it does, because the sleepers get set to a certain position, and there is no abrasion of the sleeper.
2043. Was it ever brought under the notice of your Department that when the Victorian authorities constructed a line of railway about 40 miles in extent from Echuca to Toolamba, some of their officers were specially deputed to report upon the ballast used on the private line from Moama to Deniliquin, and have you taken that fact into consideration? I have not heard of that.
2044. Would you undertake before the Committee finally report upon this matter to have some tests made along the route of the proposed railway in order to discover the quality of the gravel, and how much of the surface would require to be removed? Yes.
2045. I believe evidence was given before the Sectional Committee by an officer having engineering qualifications, and at present in the service of New South Wales, and who has had experience in Victoria and Queensland, and has been located in this particular district for the last four or five years, in which he asserted positively, that it is necessary to ballast the whole of this line—I refer to Mr. Beere? I do not agree with him if he said that. I propose to put in extra sleepers. I do not see that the country along this route is any less favourable than some of the country in America where they do without ballast.
2046. I suppose you are aware that it is a class of country in which, when there is an excessive rainfall, the water soaks or sops in the surface, and that it would not carry a horse or cow over it in its natural state—that the animal would sink right through the surface on to the subsoil? That may be the case in some places. If a proper embankment is made, and the line is drained, that condition of things will not occur. The water will not be able to soak into it in that way. The rotten condition arises purely from want of drainage.
2047. In traversing the route you would have observed that there is no natural outlet, that there is no fall for the water to get away; it has either to soak through the soil or evaporate? But the embankment would be drained by the side ditches.
2048. But in that case you would only collect the drainage from the line into the side drains; there would be no outlet for the drains? The water would run either one way or the other. It is not such a dead flat as all that.
2049. What is the difference in the levels from one point to the other? There are grades nearly all the way; they are very slight, but quite sufficient for water to run on.
2050. You could only empty these drains into the natural depressions? Yes.

2051.

2051. There are no creeks or other outlets for the water to get away? I suppose there must be a fall in the country in some direction.
2052. Passing over Berrigan Creek, for instance, there would only be a current there after a very exceptionally heavy rainfall? Yes; but if you dug a ditch alongside, it would be quite sufficient to carry the water away—to drain the bank.
2053. What size side drains do you propose for this line? I should make them according to the size of the bank to be made up.
2054. Giving them a slope from the line itself down to the bottom of the side drains? Yes.
2055. In regard to the earthworks, I understood you to say, yesterday, that from information you had gathered you now estimated the cost of the earthworks at 6d. per yard, as against your previous estimate of 1s.? Yes.
2056. As far as the earthworks are concerned, should not that decrease the cost of the construction of the line by one-half? Yes; it looks as if it might, but it was explained to me yesterday, and Mr. Firth said he took an average of 6 inches for the height of the bank. I would make it higher.
2057. Then, although the cost per cubic yard will be decreased, you now propose to make the line more stable by increasing the height? Yes; and that would meet Mr. Beere's objection.
2058. There would be no difficulty whatever in using these graders you saw at work, or the scoops, in arranging for the top-dressing of the work, so as to have as level a surface for your sleepers as if the work were done in the ordinary way? Yes; it would be fairly level. It would be trimmed off by the graders.
2059. But could you not get it as level as under the old system;—under the old system of barrow-work or trolly, is it not always the practice to keep a man there specially for levelling? Yes; but afterwards there is what is called the forming gang. They go along and trim the lines from end to end, some distance in advance of the permanent-way.
2060. Could not that be arranged for in your specification? Yes; it would be.
2061. Do you now estimate the cost of the fencing at £50 a mile, as against your previous estimate of £75? I do not think I gave an estimate per mile before.
2062. The cost in the case of the proposed line from Jerilderie to Deniliquin, where the country is similar in character, was estimated at £75 per mile? Yes; very likely.
2063. In your evidence yesterday you reduced the cost to £50 per mile? Yes; because it can be done for that.
2064. So that in the event of the line having to be fenced, your estimate would now be reduced by £25 per mile? Yes.
2065. And that would be a considerable saving? Yes, as compared with the Jerilderie line.
2066. The original estimate of the cost of this line was about £1,800 per mile? The original estimate was £2,060.
2067. And then evidence was given reducing it to £1,800? On the assumption that the prices and figures were correct, I stated that a reduction of £230 could be effected by leaving out the ballast and putting in more sleepers.
2068. And you now estimate the cost of this line at £2,000 per mile? Yes.
2069. The only increase in your previous estimate has been in connection with the item of sleepers? Sleepers and ballast.
2070. There has been a considerable reduction in regard to earthworks and fencing, although you now explain that you propose to put in more? Yes; I propose to put in more of each.
2071. Can you explain why this difference of £200 per mile is made up;—Is that wholly on account of the increased cost of sleepers? The ballasting comes to £2,200 for the 5 miles, and that is about £100 per mile. Distributed over the whole length of the line it is rather more than £100 per mile.
2072. I understand that you have never travelled over the country between Jerilderie and Deniliquin? I have not.
2073. I suppose you are prepared to accept the statement that, as a matter of fact, the country between Jerilderie and Deniliquin is similar to that between Jerilderie and Berrigan? If you say so I am quite prepared to believe it.
2074. There is such a difference between your estimate of the cost of earthworks comparing one line with the other;—For instance, you estimate the cost of the earthworks for the proposed line at £250 per mile? £225.
2075. Your estimate for similar works on the Deniliquin to Jerilderie line was £300 per mile? I do not think they were quite similar.
2076. Is not this line of the class recommended by the Railway Commissioners, called light lines? Yes.
2077. And was not the class of line proposed from Jerilderie to Deniliquin also a light line? Yes.
2078. Where old rails were to be used as in this case? Yes.
2079. Wherein lies the difference in the cost of earthworks as between this line and a similar class of line from Jerilderie to Deniliquin? It was proposed to have more earthworks on the line to Deniliquin.
2080. The country is of the same level character? There are one or two creeks, and there is the Edwards River. There would be the approaches to the Edwards River at Deniliquin.
2081. That would be the only bridge, and there would be the Tuppal Creek;—as a matter of fact, your estimate of the cost of earthworks for that line was £300 per mile? Yes.
2082. Your estimate for the line from Jerilderie to Deniliquin, practically the same class of line as this, was £3,300 per mile, and your estimate in this case is £2,000 per mile;—can you explain the difference? I have explained that in my former evidence in answer to questions by Mr. Humphery.
2083. As a matter of fact, has not your personal inspection of this country between Jerilderie and Berrigan led you to reduce your estimate, and satisfied you that a light line of railway to suit all purposes can be made there for £2,000 per mile? I think my recent experience has done a great deal towards causing the estimate to be reduced.
2084. Consequent upon your personal visit? My visit to America has enabled me to recommend a class of line which, perhaps, otherwise I should scarcely have suggested.
2085. Has not your personal inspection led considerably to that end? Yes; I believe in inspecting the lines before giving evidence on them.
2086. Then, had you made a personal inspection of the proposed line from Jerilderie to Deniliquin, you might also have been able to have reduced your estimate of the cost of that line? If I were to make a new

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new estimate of the Jerilderie to Deniliquin line, I should make it considerably less than £3,300 per mile, but I should not reduce it down to £2,000 per mile, because the earth-works would still be in excess, I believe, and the culverts and bridges would be in excess. The level crossings and fencing would be reduced, and the permanent-way would be considerably reduced, because the prices for material have fallen.
2087. The only difference in the earth-works would be in connection with the bridge over the Edwards River, would it not? Yes, I suppose so; and the other creek, the name of which I forget—chiefly those.
2088. If it can be proved that this line from Jerilderie to Berrigan can be constructed at a cost of £2,000 per mile knowing the character of the country as you do, would it not be safe to assume that a similar line could be constructed from Jerilderie to Deniliquin at the same cost irrespective of the bridge over the Edwards River? I should prefer to see the country first and examine the levels; but it would be approximately the same I should think as far as I can tell. There would be an additional expense owing to the crossing of the Edwards River, and perhaps the other creek.
2089. You have seen the line of railway from Deniliquin to Moama? Yes.
2090. You are aware of the class of traffic it carries—heavy traffic? Yes.
2091. You are aware that on that line they use the same class of engines that are used on the main lines in Victoria—the same weight? They have so many different classes of engines on the Victorian lines. They have some very light engines which do very good work.
2092. Do you know what the cost of that line between Deniliquin and Moama was twenty years ago? Yes, I got the particulars of it when I was there.
2093. Can you say from memory what it was? The cost, including rolling-stock and everything was about £3,500 per mile.
2094. Can you state the cost without the rolling-stock? I think the rolling-stock cost about £500 per mile, and that would leave about £3,000 per mile.
2095. Including station buildings? Including everything. As regards the running line the cost no doubt would be less, but including station buildings, and everything else it would be about £3,500.
2096. Do you know the cost of the line from Echuca to Toolamba in Victoria where the country is of the same level character? No, I do not.
2097. The cost is about £2,000 per mile contract price? But that did not include the rails.
2098. Your estimate now includes the rails? Yes.
2099. Have you ever seen a line of railway—tramway it is called—from a point on the Murray River on the Victorian side called Koondrook to the town of Kerang, where there is a junction with the Victorian railway line? No, I have not.
2100. Have you made inquiry or have you any knowledge of that short line? No, I have no particulars.
2101. In your evidence yesterday I understood you to say that in your opinion it would not be wise or safe to adopt the route from Jerilderie to Berrigan recommended by the Sectional Committee unless you had a width of 4 chains for the railway and 2 chains for the road? Yes, I said I thought it would be wise to have 4 chains. I recommended that.
2102. Was one of the considerations which influenced you in recommending this great width the fact that you thought it desirable to prevent danger of fire from sparks from the engines? That was one reason.
2103. That is not a very great reason, is it? I think so.
2104. What width would you actually require for your side drains and your roads? That would vary with the height of the earth-works.
2105. Take an average width—I mean from the outside or the extremes of the side cuttings or drains, measuring over your road? If you take 24 feet for the width of the bank at the bottom,—6 feet on each side, then 20 feet on each side for the excavation of the material, and 6 feet outside again, that gives 88 feet of net width required.
2106. Is there not a much less width than that on many of your main lines;—is there not a less width on the Albury line in parts? I do not think so. The general practice has been of late years to take 3 chains in width.
2107. Are not your railway lines very often confined between the fences within a space of a chain? No; I do not think so. I do not remember any place even on the suburban lines where the width is less than 99 feet. There may be some—I would not say, but not on any of the new lines.
2108. The railway to which I alluded just now, from Koondrook to Korang is running on an open 3-chain road. The stock, the vehicles, the waggons, the railway, and everything is running within a space of 3 chains, and it is found to work well. If it can be done there, why cannot it be done here? Is the railway on the side of the road there?
2109. Yes? As I have explained, a certain width will be taken up for the railway. You yourself will agree that it is better to make an embankment all the way along to keep the rails well off the surface of the ground, and that would involve probably more width than is the case in connection with the particular tramway referred to. Perhaps the country there is firmer.
2110. If you had your regulation distance of 80 feet, would not that give your line ample accommodation, as well as give stock and vehicles sufficient width on a 2½ or 3 chain road to meet all requirements? I could make the line on a chain and a half very likely throughout except at the stations.
2111. What is the average width of the road at present recommended by the Sectional Committee for this line? It varies from between about 1½ to 3 chains.
2112. If that were made up to 2½ chains, would not that be quite sufficient in your opinion—2½ for road and railway? No; not in my opinion.
2113. There is no difficulty where the tram line and the road from Campbelltown to Camden run alongside each other? The conditions are different there. Where a road is properly formed and metalled the traffic can run on a narrow width all right, but in the country to which we are referring the roads are not metalled, and you require a considerable width to enable the teams to look for sound ground.
2114. But if the line were constructed the road running parallel with it would not be used to the same extent that it is now? No; it would not be used so much.
2115. The traffic would be more upon the roads which feed the railway, and not upon the road running parallel with the line? There would not be so much traffic on the main road.
2116. You are aware that the Railway Commissioners in their report upon this line have recommended that the railway shall be constructed contingent only upon private owners granting the land required? Yes.
2117. You are also aware that the Sectional Committee have taken evidence, and that with one exception the private owners refuse to grant the land? Yes.

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2118. If on the deviation proposed by the Sectional Committee, and approved by you, the width required will, in your opinion, be about 4 chains, would not that necessitate a resumption of a large area of land along the whole distance, and a large consequent payment? It would necessitate a resumption amounting to 8 acres to the mile.
2119. There would be no severance, but there would be a resumption? Yes.
2120. And you are not in a position to tell the Committee what the cost of that resumption would be? No.
2121. It would not be possible to ascertain at this stage? It would be possible, I suppose, to ascertain what is the general value of the land there. But I have generally avoided looking into land matters.
2122. But in this case it is forced upon the Committee that the line, if built at all, can only be undertaken if there is no land to be purchased—that is really the Commissioners' report? Yes.
2123. In considering the proposed deviation, would it not be possible to meet their wishes by running along the roads of the ordinary character? If they were 3 chains wide. I will say this: If I am told to occupy a chain and a half of the road I will do so, and leave the other free for road traffic.
2124. Referring to the line as surveyed, and speaking of severance, you said yesterday the stock would be able to cross the line backwards and forwards, and that unless the line were fenced, in your opinion, there would be no claim for severance? Yes.
2125. Supposing this line were constructed in the centre of the road, would not the stock travelling backwards and forwards on the road be able to cross and re-cross the line just the same as if the line were taken as originally designed by your surveyor? Yes; but the road is fenced.
2126. Supposing it is fenced, cattle, sheep, and horses could cross it;—would it not be possible, at a very small additional cost, to enable heavily loaded teams to cross the line from one point to another by putting up little timber approaches? Yes.
2127. That would not materially increase the cost? Crossings would be provided and gates erected wherever they were wanted.
2128. At reasonable intervals? Yes.
2129. As a matter of fact, if the public convenience and traffic were satisfied, and you had sufficient space to run your line on this width of 80 feet, that would meet your requirements as to the railway? Not 80 feet. I think 80 feet is too little, say a chain and a half. If you divide a 3-chain road at the middle and give me half of it I will make a railway along it. I could not undertake to do that on a 2-chain road.
2130. Supposing you had a 2-chain road, and you put your line on the side of the road as nearly as possible would not that give a reasonable width for ordinary traffic? No; I do not think so.
2131. It is considerably more than is provided in many other cases? But in those cases the road is formed and metalled.
2132. Where your lines go through a township there is considerably less width, and horses and cattle are able to use the road? I think you will find that on the main roads in townships where there is much traffic, the roads are formed and metalled or gravelled.
2133. In regard to the question of fire, is it not possible to use spark-arrestors on your engines, so as to render danger from fire very remote? I do not think the danger is very great now, but still there is a danger.
2134. You are aware that the engines running on the private line from Deniliquin to Moama are fitted with spark-arrestors? I suppose they use wood as fuel.
2135. And you use wood as fuel on some of your lines—for instance, on the line from Narrandera to Jerilderie, and on other lines in remote parts of the Colony? I could not say to what extent wood is used. The American engines are always provided with an arrangement in the smoke-box for catching sparks.
2136. In countries such as that under consideration, would not the use of spark-arrestors obviate the necessity of getting so far away from the adjoining properties? You could only use these spark-arrestors on the wide funnels, where wood only is being used.
2137. I allude more particularly to the class of spark-arrestors used on the Deniliquin to Moama line? That is a point as to which I think it would be better to ask the traffic officers of the Commissioners' Department. They would give you better information than I could.
2138. You have stated that a certain width of land is required for the road and the railway, and one reason given is that it is desirable to keep the railway as far as possible from the adjoining property, to avoid any danger from fire;—would it not be wise, under those circumstances, to see if you could not remove the danger from fire, and thus be enabled to bring the railroad nearer to the private property, so as to lessen the necessity for resuming land along the route? I do not know what could be done to minimise the danger. It is not very great now.
2139. Supposing the Committee, in its wisdom, arrive at the decision that a width of 2 chains is sufficient for your railway and the ordinary road traffic, you could not work the railway on that space? Not to make the proper embankment for the line.
2140. Not on 2 chains? I think not, and have a railway and road too.
2141. If the railroad were running along the ordinary highway used by the public, and any accident happened, the Department would not be liable? No; not if the Department were protected by an Act.
2142. Then, in your opinion, the least width you could do with would be 3 chains, to make ample provision for the railway and provide for the ordinary road traffic? What I say is, that I would recommend that 4 chains be devoted to the road and the railway, but I certainly could get the railway in upon 1½ chain, leaving the other 1½ chain, or whatever the width might be, for the road.
2143. I press this point, because the Railway Commissioners have given their opinion, and although you estimate the cost at £2,000 per mile, that is exclusive of resumption, and if land has to be resumed the cost of the line will be made so great that possibly the Committee might not recommend it, or Parliament agree to it? Supposing you had to resume, the cost would not be more than £20 or £30 per mile for the land, without severance.
2144. Have you had much experience of the prices people generally ask for land? I know that sometimes they ask about ten or twenty times as much as they ought to get.
2145. I understand you to say that, in your opinion, 4 chains is required, but that you think adequate provision could be made upon 3 chains—fairly adequate, we will say? That sounds rather ambiguous.
2146. In other words, you would like to have 4 chains? I recommend 4 chains, but I could do with 3—that is to say, I could do with 1½ chain for the railway alone.
2147. *Mr. Roberts*] Have you travelled over the line from Yarrawonga to Benalla, in Victoria? Yes.
2148.

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2148. Did you notice the style of fencing adopted along that line? I did notice the fencing when I was there, but I forget exactly what it was like.
2149. It struck me as being a very inexpensive fence, and if it would answer on a line like that I should think it would answer on the projected line from Jerilderie to Berrigan. The posts were very light, and I think there were only three rows of wire, certainly not more than four. I think you said you intended putting seven rows in your fencing. Perhaps you would consider whether a cheaper fence than that contemplated might not do for this proposed line? I am afraid you would not keep sheep and other stock out with less than seven rows of wire. A fence along a railway line should be sufficient to keep sheep and other stock in the paddocks, and prevent them from getting into the paddocks.
2150. The fence of which I speak goes through similar country to that under consideration? At one time there was a great deal of discussion, and many opinions were obtained as to the style of fencing we should adopt. The present wire fence, in regard to the number of wires and the spacing of them, is the result of the experience of many. It is not an invention of the Railway Department, but it was adopted as the result of a concensus of opinion on the part of people who could speak authoritatively in various parts of the country. I should not, therefore, like to suggest any alterations.
2151. Perhaps you might ascertain particulars in regard to the fence along the line to which I have referred? Yes; I will write to the engineer.
2152. *Mr. Humphery.*] In the event of the resumption of a chain of roadway becoming necessary in order to carry out your view that a width of 4 chains should be provided for the railway and the road, would not that lead to claims on the part of the owners of property for loss of frontage? No; I think not, because they would have the frontage just the same.
2153. Do you propose to construct the railway in the middle of the road? No; on the side.
2154. By constructing the railway on the side of the road close to the fence, would you injure the property along which the railway would pass? No; because where they had openings in their fences we should construct proper crossings for them.
2155. What advantages would there be in constructing the railway close to the fence instead of in the middle of the road? The advantage would be that where stock were travelling they would not trample the line so much.

Percy Scarr, Esq., M.I.C.E., Principal Assistant Engineer, Roads and Bridges Branch, Department of Public Works, sworn, and examined:—

P. Scarr, Esq. 31 Jan., 1895.

2156. *Chairman.*] What are you? I am Principal Assistant Engineer in the Roads and Bridges Department.
2157. Have you a knowledge of the country between Jerilderie and Berrigan? Yes; a fair knowledge. I have been over it several times.
2158. A sufficiently intimate knowledge to express an opinion in regard to the roads in the vicinity? Yes; I think so.
2159. You see on the map behind you a red line indicating the present main road from Berrigan to Jerilderie? Yes.
2160. And you see also, a dotted line showing a deviation from the road? Yes.
2161. Is there any objection to the road being moved so as to take the route shown by the dotted line? I think not. From my knowledge of the country, I think it matters very little where you take the road there.
2162. You believe that position would be suitable? I think so.
2163. Is there much difference in the length of the two roads? There would be about 1¼ mile. The proposed route would be fully a mile shorter.
2164. Do you regard that as an advantage? Undoubtedly.
2165. In the cost of construction? Not only in the cost of construction, but also in the saving of time, and in maintenance.
2166. Supposing there were no consideration at all of a railway in that vicinity, and it was brought under your notice as the head of the Department, that a road through country of that kind for no engineering reason had been made as circuitous as that road has been made, would you be justified in straightening it? Certainly; and had I known there was such a bend in the road it would have been attended to before now. I knew there was a bend there when travelling over the road, but I had no idea until I looked at the map some time ago that it was so great.
2167. Have you power to close the old main road, and make a new road as suggested? The Lands Department have certain powers under one of the old Acts—4 William IV No. 11.
2168. And they work with you? Yes.
2169. In point of fact, you make the suggestion, and the Lands Department have power to carry it out? Yes.
2170. So that if the road be made direct from point to point as suggested, there can be no doubt as to your legal power to do it? No. I think in that case there would be no difficulty at all. The land is all freehold, I think, and that being so, we could proceed under that Act. If it were conditionally-purchased land, the Lands Department would have power under the 42nd clause of the Land Act.
2171. Irrespective of any consideration as to the construction of a railway, you would regard it as an absolute benefit to adopt the route indicated by the dotted blue line? Yes; as far as my knowledge of the country goes, and certainly because of the directness of it.
2172. *Mr. Lee.*] In resuming land under such circumstances, is it usual for the Department to pay compensation? I think in this case there would not be much compensation to pay, if any, because the land is all freehold, and there are rights reserved in the grants.
2173. The right, on the part of the Crown, to take as much land as may be required for road purposes? Yes.
2174. Have any cases occurred in your Department where you have taken one road and given an old road in exchange? We do not do that—it is done by the Lands Department. There are any number of cases where it has been done by the Lands Department at our request.
2175. And, as a matter of fact, it is being done to-day? Yes; continually.
2176. There is no legal difficulty in the way that you are aware of? No.

P. Scott, Esq. 31 Jan., 1895.

2177. Neither as regards old purchases or recent purchases? No; I think not. In the case of some of the old grants difficulties have arisen, but those have been very old grants—early in the century.
2178. There are no such grants in respect of the country under consideration? No; these are later grants.
2179. So that, if it were necessary, your Department and the Lands Department together would have no difficulty in putting this road wherever you thought proper? I do not think there would be any difficulty in the case.
2180. And would that involve the State in any heavy expenditure for severance? No; I think not.
2181. Do these Departments ever pay for severance under such circumstances? Severance has been paid for in some special cases where it has been shown that special injury has been done. In some cases, where damage could not be claimed legally, it has been given, rather as a matter of equity than as a legal obligation. In this case, however, I do not think anything of the kind would arise, and I do not think there would be any legal difficulty in the matter.
2182. As a matter of law and as a matter of custom, the State has the power to take any land it thinks proper for road purposes? Yes.
2183. *Chairman.*] You told us it would be a benefit to save a mile and a quarter in the length of the road? Yes.
2184. You said, also, that had it been brought under your notice, in all probability you would have straightened the road yourself? Yes.
2185. If you had straightened it you might have had to bring the fence from the old surveyed road and put it upon your new road? Yes.
2186. And, therefore, it is reasonable to believe that your Department would pay the cost of the fencing of the new road? Yes; it has been done in a good many cases. The general rule is, that where the new road severs an enclosure—that is, land enclosed by a permanent and substantial fence,—they pay the cost of re-fencing, either the moving of the old fence or the erection of the new.
2187. Would you, speaking for the head of the Department, recommend the removal of the road and the fencing on both sides? I think so. From my knowledge of the country I think it would be a desirable alteration.
2188. *Mr. Hoskins.*] The Act under which the Roads Department are empowered to take private lands for the deviation of a road is termed 4 William IV. No. 11? Yes.
2189. Supposing the party from whom it is proposed to take the land is not disposed to give it up readily; has he not an opportunity to interpose great delay in the Government getting possession of the land? He has power to make objection. According to the Act there is a certain time given to send in objections. If the objections are not considered of sufficient force to hinder the matter much delay is not caused. It is only where there is a serious objection that delay is caused. If a man sent in a frivolous objection that would not cause delay.
2190. Still, as a matter of fact, occasionally considerable delay arises in the Government acquiring legal possession of land? Only on rare occasions.
2191. *Mr. Gormly.*] Objections can only be made where there are certain improvements on the lands proposed to be resumed—where there are nurseries, homesteads, and improvements of that character? Yes; they are provided for in the Act.
2192. It is only in the case of such improvements as those that substantial objections can be made? Quite so.
2193. On looking at the map you said that the existing road was about a mile and a quarter longer than the proposed road? Yes.
2194. Therefore, there would be a greater extent of the same width in the existing road than there would be in the resumed road? Yes, taking the same width, say 1 mile, that would be 8 acres a chain wide.
2195. Therefore, in getting the new road, it could be resumed at a greater depth to contain the same quantity of land as that which would be given in exchange? Yes; in proportion.
2196. *Mr. Humphery.*] You said a chain wide in answer to Mr. Gormly? For the purpose of comparison.
2197 What is the width of the present road? Some portions of it are 3 chains wide, and other portions 2 chains.
2198. Having in view the construction of a railway, would you resume for road purposes 1 chain? No; I would not recommend a 1-chain road there under any circumstances. I only mentioned 1 chain for the purpose of comparison, to show what the difference would be in regard to the quantity of land taken.
2199. Assuming that you made a road the width of the present road what would be the increased area that would be thrown into the land through which the present road runs? It would be 8 acres for every mile, for every mile saved in length 1 chain wide; so that if you made it 3 chains wide it would be 24 acres for every mile saved in length.
2200. As a matter of fact the owners of the land through which the new road would be made would gain 24 acres? Twenty-four acres with a 3-chain road for every mile saved in length.

John Kneeshaw, Esq., Acting Secretary to the Railway Commissioners, sworn, and examined:—

J. Kneeshaw, Esq. 31 Jan., 1895.

2201. *Chairman.*] What are you? I am Acting Secretary to the Railway Commissioners.
2202. Do you come here at their instance? Yes.
2203. To give us some information in regard to the new route proposed for the railway from Jerilderie to Berrigan;—have you any statement to make with regard to that matter? No; I have no statement.
2204. You see the map behind you—you see the red curved line extending from Jerilderie to Berrigan? Yes.
2205. That was the proposed route—the dotted line is the route the Committee favour;—have the Commissioners any objection to the alteration of the route? No; the Commissioners have no objection to the proposed deviation.
2206. It meets their views? Yes; they think favourably of it.

WEDNESDAY,

WEDNESDAY, 27 FEBRUARY, 1895.

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. Frederick Thomas Humphery.
The Hon. James Hoskins.
The Hon. John Davies, C.M.G.
James Hayes, Esq.

John Moore Chanter, Esq.
Charles Alfred Lee, Esq.
James Gormly, Esq.
Edmund William Molesworth, Esq.

The Committee further considered the proposed Railway from Jerilderie to Berrigan.

Henry Deane, Esq., Engineer-in-Chief, Railway Construction Branch, Department of Public Works, sworn, and further examined:—

H. Deane, Esq.

27 Feb., 1895.

2207. *Chairman.*] Mr. Firth gave some evidence showing in detail the cost of various parts of the proposed railway from Jerilderie to Berrigan. Your statement appeared to vary from that a little, and I understand that you now desire to substitute another statement for it? I did not think it was necessary; but, on your suggestion, I am pleased to hand in an estimate which I revised after going over the route, and which I referred to in my previous evidence. [*Vide Appendix.*] In most points it is practically the same as the first estimate, though there is some difference in regard to ballasting and sleepers.
2208. There is no vital difference, but you believe that the details are more correct than in the previous statement? Yes; I now make the length 21 miles 19 chains, instead of 21 miles 10 chains.
2209. You desire this statement to take the place of Mr. Firth's? I think it would be better.
2210. According to this statement the average cost of the line would be £2,000 per mile? Yes.
2211. What will the running road cost? Deducting the cost of station buildings, ballast, earthworks at stations, and the amount put down for contingencies, engineering office, and supervision expenses, we have £1,441 a mile for the running road. That is what the Government would have to pay the contractors, including cost of permanent way.
2212. You put down £100 per mile for ballast? Yes.
2213. Is it possible to let the ballasting stand in abeyance;—may you not find that you will be able to do without ballast? I think it is possible; still, in my opinion, the money ought to be provided.
2214. Leaving it with you not to spend it unless absolutely necessary? Yes; I could undertake to do that. If, during the progress of the work, it should be found necessary, it would be very awkward not to have the money.
2215. That would make the running road £1,541 per mile? Yes.
2216. In letters which we have received from various landowners, although they acquiesce in the proposal, they point out that they should like various alterations made in the route as marked out, and the Committee would be glad if your surveyor would meet their requirements as far as possible, so long as that could be done without injury to the public interests. You realise, no doubt, how it may be possible by slight deviations to avoid improvements, wool-sheds, tanks, and so on? Yes.
2217. With regard to the cost of fencing here and in Victoria, you have sent in a plan—will you tell the Committee the difference between the cost of such works in the two colonies? The latest design for fencing which has been prepared by Mr. Rennick is, I believe, that shown on the small sheet before me.
2218. Will you describe it briefly? Yes. The posts are 3 feet 9 inches out of the ground, and 1 foot 10 inches in the ground, and are placed 10 feet apart. There are five lines of No. 10 wire, and on the top of the posts is a barbed wire, No. 12, which is fixed by means of staples, the other wires going through the posts. These posts have 21 square inches of section. There are straining-posts shown at certain intervals—probably from 4 to 5 chains. I also sent in a plan showing a fence designed by myself, with posts 4 feet 6 inches out of the ground, 7 wires of No. 6 gauge, and straining-posts every 4 chains, the ordinary posts being 10 feet apart. This design has been adopted for some years past.
2219. What is the cost of your fence? The estimate I gave to the Committee was £48 a mile.
2220. And of the Victorian fence? £45 a mile.
2221. Practically there is not much difference? No; my wires are stronger, and there are seven of them instead of six as in the Victorian fence; but Mr. Rennick's fence has a barbed wire on the top, which I have not. They are both effective fences.
2222. With regard to the samples of ballast in the four boxes before you, I understand that No. 1 was found at a depth of 11 feet, No. 2 at a depth of 15 feet, No. 3 at 11 feet, and No. 4 at 4 feet. Is not that very heavy stripping? Yes, but No. 3 is marked as having been found at a depth of 5 feet 6 inches.
2223. It is only inferior gravel at that depth? Yes; the only gravel that is really good in quality is No. 2, which has 15 feet stripping.
2224. Does 11 feet of stripping render it practically impossible to use the gravel? It is a good deal of stripping.
2225. Would it be cheap gravel? No.
2226. What about a stripping of 5 feet 6 inches? The sample found at that depth shows a very poor class of gravel. It is very dirty. I should not like to use it except as a makeshift.
2227. *Mr. Hoskins.*] When you were last here you stated in reply to a question which I put to you that you preferred to use ballast along this line in some of the soft places. There are, I believe, several places where, after heavy and continuous rains, such as we have had lately, and as we have often had previously—if heavy engines were used, although there might be a large number of sleepers upon the ground, the rails would not get their proper bearing, and the trains might run off the line? That is what I think.
2228. But I gather from your answer to the Chairman just now that you wish to have money for ballast, not with the view of actually expending it, but simply to have it at hand supposing it should be required. Before, however, you said that you would put ballast over these soft places? That was my intention. I could not tell that 5 miles of ballasting would absolutely be required—that was merely an estimate, which probably is on the safe side.
2229. Therefore, if the line is made, you intend to use ballast on those places where there is a great amount of soakage, and where the water in wet seasons cannot get away readily? Yes.
2230. This line is termed a pioneer line? Yes.
2231. The Narrabri to Moree line was also called a pioneer line? Yes. 2232.

2232. Do you not propose to use 6 inches of ballast upon that line? I did at the time intend to use 5 inches.
2233. Your estimate of cost was how much per mile—£1,800? I cannot say from memory what it was; but I do not think that I have hitherto proposed any line costing less than £2,000 a mile.
2234. *Chairman.*] I think it was £2,400 a mile? I think it was about that.
2235. *Mr. Hoskins.*] That includes a large bridge, and several large culverts? Yes.
2236. Why did you propose to ballast the whole of that line while you intend to ballast only a portion of this line? I think it is very likely that when we come to carry out the Moree line a large quantity of ballast may be dispensed with. I shall certainly do without it where I can. But there is this difference between the two lines, that there is a great deal more black soil between Narrabri and Moree than in the Berrigan district.
2237. Then it is your opinion that you should be permitted to ballast some of the weak spots along the proposed route? Yes.
2238. *Mr. Humphery.*] Have you seen an estimate of the cost of a line, somewhat similar to the proposed line, which is now in course of construction between Wycheproof and Sea Lake in Victoria? Yes; I think Mr. Rennick showed me that estimate.
2239. The difference between your details and the details shown there would appear to lie principally in the fencing, bridges, and earth-works? It is not a good line to make a comparison with.
2240. Why? It passes through mallee country where the rainfall is very small. I think Mr. Rennick said that the rainfall was only about 14 inches.
2241. The rainfall is from 15 to 18 inches, which is similar to the rainfall in the Berrigan district? ——
2242. *Mr. Gormly.*] But mallee country is very porous, and the water soaks away through it? That is a very important point. Mr. Rennick's estimate does not differ very much from mine.
2243. *Mr. Humphery.*] I suppose, he would be charged the full price for rails, and not get them at the reduced price at which you propose to purchase from the Railway Commissioners. That would increase the difference? That would be something.
2244. Is there any reason why a similar line should not be made in this Colony in similar country? There is really not very much difference between the two estimates. Mr. Rennick has less for earth-works, but then the country is more suitable.
2245. Being mallee country instead of clay? Yes; and as Mr. Gormly has pointed out, the water soaks away much more quickly.
2246. You have made provision for culverts and bridges? Yes. Mr. Rennick allows only £9 a mile for bridges and culverts.
2247. As against £115 allowed by you? It is £110 in the estimate which I furnished to the Committee.
2248. Where will those bridges be placed. We were told that no bridge would be necessary except at Berrigan Creek? We will want openings and drains every half-mile or so. They will be absolutely necessary.
2249. Speaking generally, do you think such a line as that between Wycheproof and Sea Lake would be suitable in similar country here? If it were modified to suit the different conditions.
2250. But I said, in similar country—in mallee country? Supposing we had similar country—mallee country—here, my estimate would probably be about the same as Mr. Rennick's.
2251. You think a pioneer line could be built which would be similar to that to which I have called your attention? The conditions of the country being absolutely the same.
2252. I suppose there are some parts of New South Wales very similar to the country through which this line passes? Yes; I should think so, though I have never been through exactly similar country.
2253. *Mr. Davies.*] Having visited the country, and having made a cursory investigation of the deviation recommended by the Committee, are you still of opinion that the line would cost £2,000 a mile to construct? I said that I recommended that £2,000 a mile should be available; but that I would save money where possible. I would not expend money on ballast if I found that it was unnecessary to do so. Had I stated that the line would cost £2,000 a mile, that would mean that it might cost more; but I do not think that this line will cost more. I think that it will cost less, and that we shall be able to make a saving.
2254. Are we to understand that £2,000 would be the outside cost, including the usual 10 per cent. addition? Yes; unless unforseen circumstances should render extra work necessary.
2255. After seeing the country, do you think there is any possibility of that? I do not think so. I think that we shall be able to construct the line at the estimated cost.
2256. You would not recommend that the line should be built absolutely without ballast from end to end? No; I consider that ballast will probably be necessary in certain places.
2257. Have you made further inquiries with regard to the cost of sleepers since you were last before the Committee. Are you in a position to state whether you can get them supplied more cheaply than you at first thought? I wrote to the saw-mill company at Narrandera, sending a specification and sketch showing what was required, but I have not yet received any reply.
2258. *Mr. Lee.*] Have you thought any more over the question as to what width of road is necessary to carry the proposed line? I am prepared to make it on a 3-chain road.
2259. That is what you would prefer as an engineer? Yes; I recommended that the road should be 4 chains wide; but if 3 chains are given, I will take care that the line is placed as close as possible to the fence on one side, so that the rest of the road may be left for traffic.
2260. Considering that when the line is constructed all the heavy traffic will be taken off the road, do you not think that 1½ to 2 chains will be a sufficient width? It may be so.
2261. It must be remembered that this line is a pioneer line of a cheap character, and it is therefore necessary, where possible, to avoid the resumption of land. Therefore, inasmuch as there is a road now in existence from 2 to 2½ or 3 chains wide, will it not, in your opinion, be sufficient to carry the railway as well as the ordinary road traffic? What width do you ask about—do you refer to a width of 1½ chain or to a width of 2 chains.
2262. I am speaking of that portion of the road from Jerilderie station to where you turn in to go to Wilson's property? As you go across Jerilderie Common you are not restricted by fences at all; but as soon as you get to the Peterson and Sargood property you have a road which is only 1½ chain wide. That I think is clearly not sufficient. You could, of course, make the railway along such a road, but the road traffic would have to run as it best could and it would be very dangerous. It would also be a bad thing for the railway, because stock going along would trample upon the line and spoil it. 2263.

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2263. You think there should be at least 1 chain left for the ordinary road traffic? I think that where a road is not properly formed so as to confine the traffic, there ought to be at least 2 clear chains. If the road were formed, and metal and ballasting put upon it, you could confine the traffic to a very narrow width. But where the surface of the ground was untouched, you would require a good width. When one part of the road is cut up, the teams and other conveyances must have another track to travel over.
2264. But it is contemplated that the railway will take all the heavy traffic, so that the dangers you forecast are not likely to arise? To a certain extent that is so, but the old main road will serve as a road of approach to the stations, especially where the cross-roads come in.
2265. Would the Committee then be correct in understanding that it is your intention to resume along the road frontage in some cases ½ a chain, and in other cases 1 chain, as circumstances may require? I think it will be necessary in all cases to resume enough to give a total width of 3 chains.
2266. Would not a maximum width of 2 chains be sufficient? It is perhaps a matter that should be left for others than myself to decide. If I had instructions to make the railway, I would put it as close to one of the fences as possible. But the question remains, would what was left of 2 chains be sufficient for the ordinary road traffic, and would not complaints arise about the railways monopolising the road.
2267. But supposing you adopt 2 chains as the maximum width, and it is afterwards found that that is not sufficient, do you know of any objection to resuming more land then? No, except that more favourable arrangements might, perhaps, be made in the first instance. Land could probably be purchased more cheaply in the first instance than if it had to be taken as an after consideration. In the first instance, it would be purchased under the Public Works Act, but afterwards, I take it, it would be a different matter, and excessive claims for compensation might come in.
2268. Supposing the Committee were to recommend the maximum width of 2 chains, would you be able to construct the line? Yes. Of course I should have no responsibility in the matter.
2269. Could you construct it in such a way that the ordinary road traffic would be perfectly safe? That is a point upon which I should not like to give a strong opinion. I do not think that if you put a railway line along a 2-chain road, it would be exactly safe for the road traffic. The traffic would be very close to the line sometimes, and that might be a source of danger.
2270. How are you having that portion of the line surveyed now;—are you providing for a 1-chain resumption? I am not providing for any resumption at all at present; I am only having a centre line laid out at a certain distance from the fenced line, so as to permit of the widening of the road where necessary on the other side. I am simply waiting for further instructions.
2271. In regard to resumptions? Yes.
2272. Is that delaying the work of your field survey? No.
2273. In the event of the Committee coming to a determination somewhat in opposition to your own views on this matter, would it in any way necessitate a re-survey? ——
2274. *Mr. Chanter.*] Which do you consider the best of the four samples of ballast? No. 2, it being the cleanest. Nos. 1 and 3 are dirty, and No. 4 is at the wrong end of the line and, although it is clean, it would probably cake too much. It is very good material for ordinary roads, but it is not so good for railway ballast.
2275. You think that cement which it contains would make it unsuitable for railway purposes? Yes.
2276. Would the same objection apply to No. 2 sample? No; that looks as if it would answer very well.
2277. Your estimate of the cost of procuring gravel from Cuddell was 5s. a cubic yard, placed on the line? Yes, by means of the ballast waggons.
2278. But I notice from your report that gravel can be supplied at Berrigan at 1s. a cubic yard at the pit? It is Mr. Jamieson's report to which you are referring. The 1s. a cubic yard is royalty.
2279. Would the Department have to bear the cost of procuring the gravel in addition to paying 1s. a cubic yard for it? Yes; 1s. a cubic yard is what the proprietor wants, without doing anything for it.
2280. Sample No. 4 was obtained from Mr. Badcock's paddock, which is about the same distance from the line as the granite quarries? About 1¼ mile from Berrigan.
2281. You visited the spot? Yes, I went there.
2282. What do you estimate the cost of that ballast, and the cartage from the quarries to the line? At Berrigan they told me that it cost 5s. a yard to put it on to the roads.
2283. And it would be no cheaper than to get ballast from Cuddell? No; it would cost more, because it would have to be put into the trucks, and then run along the line. The cost would be less if the ballast waggons could be run right into the quarry.
2284. Would anything be saved to the Department by obtaining No. 2 gravel, and paying the royalty of 1s. a cubic yard? I am afraid not—there would be a great deal of stripping.
2285. You think that it is absolutely necessary on the ground of safety to ballast those parts of the line where water is likely to lie? Yes.
2286. You think you have provided sufficient for that? Yes.
2287. As I was travelling back home recently my attention was particularly drawn to some first-class sleepers which were being supplied to the Victorian railway authorities. They were hewn sleepers, and were being carted 7 miles, and put on to the trucks for 2s.—that was at Rushworth? I have communicated with Mr. Rennick on the subject of sleepers, and, in reply, I received the following letter from him:—

Board of Land and Works (Railway Construction Branch), Spencer-street, Melbourne,
21 February, 1895.

Dear Sir,

I beg to acknowledge receipt of your letter of the 14th inst., and as requested to inform you that the prices at present paid for sleepers at Echuca are 2s. 4d. for 9′ × 10″ × 5″, and 2s. for 9′ × 9″ × 4½″, in quantities from 250 to 500, direct from the cutters, delivered in trucks or stacked at the option of the superintending officer. The above prices have been the standard rates for small quantities for about two years.

The Murray River Saw Mill Co. tendered (unsuccessfully) for 10,000 sleepers, 9′ × 9″ × 4½″, in August last, at 2s. 9½d. each.

Yours, &c.,
F. RENNICK,
Engineer-in-Chief.

H. Deane, Esq., M.I.C.E., Engineer-in-Chief, Sydney.

2288. *Mr. Hayes.*] This is what you said when you first gave evidence before the Committee:—

From your experience in America of lines laid without ballast, are you prepared to advocate that practice here in the case of pioneer lines worked at a low rate of speed? If I recommend them, it is scarcely because I prefer them. I should feel inclined, in all cases of new lines, from what I have seen in America, to put in a couple of sleepers more than we have been in the habit of doing. I believe it would relieve the maintenance of the line very much. But where you can get ballast easily I should always recommend its use. However, if it is desired to make as cheap a line as possible—a cheap and workable line—I would say leave out the ballast and put in more sleepers. You will make a satisfactory job and you will test the method.

• • • • • • • • • • • • You

You think it will be perfectly safe to try the experiment at Jerilderie? Yes; looking at it as an experiment no harm would be done, because if afterwards you wanted better support to the road you could ballast it. After the line is once opened you can go on improving it just as they do in America. Then, as I have already explained, they lay their lines in a very primitive way in the first instance, and go on improving them from the day the traffic starts running. H. Deane, Esq. 27 Feb., 1895.

* * * * * * * * * * * *

What would be the cost supposing it were necessary at some future time to strengthen the road by adding ballast? I suppose it would not cost more than is put down in the estimate at the present time.

Would the estimate of £308 for ballasting be sufficient to give about 6 inches of ballast? Yes, quite that, and the ballast could be run along more cheaply by the Commissioners' trains.

In view of that statement, would it not be advisable to make the line in the first place wholly without ballast, adding ballast afterwards, supposing it were found to be necessary; that would not be more costly than to put the ballast down in the first instance? I have explained that my first evidence was, of course, subject to any modifications which I might think necessary after travelling through the country. I still adhere to the opinions expressed on the occasion to which you refer, with such slight modifications. I believe in doing without ballast generally, but there are one or two places where I think the line should be ballasted, and I think money should be provided for 5 miles of ballasting.

2289. Practically then, you require so much extra in case ballast may be needed? I want to have a little in hand.

2290. But it is your intention not to use ballast where you can possibly go without it? That is my intention.

2291. *Mr. Gormly.*] Are you of opinion that it would not be worth while stripping to the depth at which the samples before you were obtained, especially since the gravel when procured would be inferior? Yes.

2292. *Mr. Chanter.*] If No. 2 gravel could be obtained at intervals along the line, might it not be wise when the line is made to ballast it all along with it? It may be found near the surface somewhere or other.

2293. I believe it would be if trial-shafts were sunk, and one or two quarries would then ballast the whole line, and could be kept always open? Yes; I think it would be better to ballast the line if there should be enough money available.

2294. Then would it not be wise to try and ascertain, as early as possible, where this gravel is to be found, with a view to reserving the land for railway purposes? Yes; if the Committee will recommend that.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

Railway from Jerilderie to Berrigan.

APPENDIX.

A.

[To Evidence of J. Barling, Esq.]

PRÉCIS OF PAPERS RELATING TO THE PROPOSED RAILWAY.

AGITATION in favour of this proposal was first made in April, 1888, when the residents of Berrigan forwarded, through the Colonial Secretary, a petition urging the construction of a tramway or railway from Jerilderie to Berrigan.

The papers were referred to Mr. Whitton (Engineer-in-Chief for Railways), who reported in December of the same year that the construction of this tramway would have the effect of taking traffic from New South Wales to Victoria. The distance from Jerilderie to Berrigan, he stated, is about 28 miles, and from Berrigan to Yarrawonga, a station on the Victorian Railways, about the same. From Yarrawonga to Melbourne is 162 miles, and the total distance from Jerilderie to Melbourne 218 miles, while to Sydney it is 412 miles. Moreover, he pointed out that the construction of the proposed line from Jerilderie to Deniliquin would place Berrigan in nearly as good a position with reference to Melbourne as it would be if the tramway were made, and, therefore, he could not advise its construction.

Messrs. Chanter and Barbour, M's.P., in April, 1889, forwarded a further petition from residents of Berrigan, urging the construction of the tramway, and asking for a survey;—they also stated that in consequence of a promise made by Sir Henry Parkes, that the line would be constructed, the area under cultivation had been largely increased, the district being admirably adapted for agriculture. No record of this alleged promise can be found with the papers.

In the Legislative Assembly, Sir Henry Parkes, in reply to Mr. Chanter, on the 17th April, 1889, stated that the Engineer-in-Chief had reported adversely on this proposal; but that if any fair reasons for its construction were discovered, the work would be proceeded with. The papers were then forwarded to the Railway Commissioners for report; none, however, was received at that time,—the matter having been subsequently taken up by the Examiner of Public Works Proposals, and dealt with in his report on Riverina Railway Proposals.

No further action appears to have been taken until January, 1891, when a deputation representing the Berrigan Progress Association and the Berrigan Tram League, introduced by Messrs. Lyne, Hawken, and Creed, M's.P., waited upon Mr. Bruce Smith, and urged that a survey of the line be made. Mr. Lyne suggested that the old rolling-stock (used on the trams) be utilised for the work, and also pointed out that the output of wheat had been increased from 5,000 to 40,000 or 50,000 bags in two years. It was stated that the price of special areas in the district had been raised by the Minister for Lands from £2 to £6 (about 14,000 acres). Mr. Lyne also said that there was a proposal to have a railway from Coonong, *via* Urana and Daysdale, to Corowa, and he would not advocate the Berrigan one in opposition to it, because he considered the Berrigan line a very necessary one, and one work would not interfere with the other, as the whole of the country required development.

Mr. Bruce Smith, in reply, regretted he could not give the deputation a decisive answer, as the Examiner of Public Works Proposals had not yet sent in his report on the proposal. The Minister, however, was strongly impressed with the fertility and productiveness of the soil in the Berrigan district. If the facts were as stated by the deputation, and they had such a vast quantity of wheat awaiting an outlet, it was an index of what the country could do. If there were no engineering difficulties, and the Public Works Examiner's report was favourable, Mr. Bruce Smith said he would lose no time in recommending the proposal to his colleagues. He wished the deputation, however, to understand that no definite answer could be given until he considered the reasons adduced by the Tocumwal people in favour of a line in another direction, viz., from Jerilderie, *via* Wait-a-while, to Tocumwal.

Mr. Alexander (Examiner of Public Works Proposals), was instructed to report upon the railway proposals for the development of the Riverina district, and in his report of the 30th March, 1891, he favours the construction of a line from The Rock to Murray Hut, which passes through Berrigan township.

Mr. Lyne informed a deputation representing the districts of Jerilderie and Berrigan, which waited upon him in February, 1892, that he had received a protest from Savernake and Murray Hut against the Jerilderie-Berrigan proposal, which showed that the people were not unanimous, The Rock to Murray Hut line being favoured. He promised, however, that if no absolute determination had been arrived at within a reasonable time with regard to constructing The Rock to Murray Hut line, he would recommend that the Jerilderie-Berrigan route be carried out.

In compliance with a request from Messrs. Chanter and Barbour, the Minister (Mr. Lyne), on the 23rd August, 1892, approved of a survey being made between Jerilderie and Berrigan, and also a survey from Coonong to Urana, and on to a junction with the Culcairn-Corowa line at a point near Quat Quatta.

Mr. Burge made an examination of the latter route, and stated that the works would not be so light as might appear from the flatness of the country, as the formation must be kept well above the surface for a great part of its length (64 miles) on account of flooding. Seven wide creeks would also have to be crossed. This line would pass through Urana, Clear Hills, and Daysdale, terminating at Hopefield. The survey was never completed. Mr. Bullard completed the survey of the Jerilderie-Berrigan Railway in January, 1893. The length is 21 miles 10 chains, and the country a dead flat throughout; the land through which the line would pass is nearly all alienated; the estimated cost of a light line of railway being £43,543 9s. 9d., or £2,061 4s. 7d. per mile, exclusive of land and compensation.

The last deputation on the subject was in May, 1894, when the residents of Berrigan urged that the proposal be sent before the Public Works Committee as soon as possible, and the Minister said it would be impossible to refer the matter to the Committee that Session, but if he (Mr. Lyne) were Minister after the election he would certainly advocate the reference of the line to the Committee.

Mr. Lyne was also asked if, in the event of the Government not undertaking the work, there would be any objection to a private company carrying it out, and the Minister replied that there were sure to be objections, but he certainly would have none.

On

On the 4th December, 1894, the Railway Commissioners, in accordance with the provisions of the Public Works Act, forwarded their report. They strongly advise the construction of the line, and urge that it be put in hand without delay, and completed within six months from the time of commencement, on condition that all landowners give the land required, free from compensation of any kind. The Commissioners consider that the district to be served would be capable of considerable development if supplied with railway communication. The line would also enable a good deal of traffic which passes through Victoria to be retained in New South Wales. The annual cost is estimated at £3,073, and the annual revenue at £3,083.

The final action taken was on 18th December, 1894, when Mr. Secretary Young moved in the Legislative Assembly that the proposal be referred to the Parliamentary Standing Committee on Public Works; and the motion was passed.

J. B.

B.

[To Evidence of C. O. Burge, Esq.]

COST OF EARTHWORKS.

Department of Public Works, Railway Construction Branch,
Engineer-in-Chief's Office, Sydney, 22 December, 1894.

Dear Sir,

In reference to my evidence yesterday in reply to Mr. Chanter, I doubt if I made myself sufficiently clear regarding the apparent discrepancy brought out between actual cost of earthwork forming by municipalities and that estimated for the above line. The latter includes cost of widening out for stations and sidings, of cutting drains to and from culverts, of approaches to level crossings, all clearing of timber for two chains wide and grubbing, proportion of contractor's establishment and his risk of damage by floods, &c., and of fluctuation of wages, most of which matters do not apply to the other case.

Yours, &c.,
C. O. BURGE.

The Secretary, Public Works Committee.

B1.

FLOOD LEVELS AND BALLAST.

Department of Public Works, Railway Construction Branch,
Engineer-in-Chief's Office, Sydney, 28 December, 1894.

AFTER my evidence before the Works Committee on 21st instant the Chairman requested me to have the following information supplied to it, viz. :—

No. 1. Flood levels.

No. 2. As to any other source of supply of ballast than that mentioned near Berrigan.

No. 1. I saw Mr. Bullard who states that he did not find any reliable flood marks, but that his information while on the ground, was against the idea that there was any general flooding of the country.

No. 2. Mr. Bullard states that he could not get any information of the existence of any ballast other than that, as already reported, near Berrigan.

C. O. BURGE.

C.

[To Evidence of H. McLachlan, Esq.]

SUGGESTED NEW LINES OF RAILWAY.

Office of the Railway Commissioners of New South Wales, Sydney, 29 December, 1888.

IN sending forward our reports upon the various new lines of Railway we have been requested to report upon, we wish to place before the Government a few general remarks upon the whole question of the construction of branch lines.

None of the new lines that have been inspected by the Commissioners can be expected to be a commercial success from their opening, but we have been obliged to look upon the subject of constructing branch lines as a necessity for opening up the country, and the light in which we have dealt with the whole question has been to see whether working expenses can be covered by the traffic likely to accrue to the branches during the first two or three years, with a probability later on of a surplus being obtained to meet the interest on the capital outlay. We think it is only just to deal with the question in this way when only short lines are concerned, as in a new country it will not be possible (except under most peculiar circumstances) to construct any branch lines which can from the outset pay their working expenses and interest on capital; and as they will act as feeders to the parent line, we consider it will be a reasonable thing for the capital expenditure in connection with such lines to be borne by the main lines for a time as a set off against the additional traffic placed thereon.

With regard to the working expenses, we have placed these on as low a basis as possible, simply debiting against the respective branches the actual additional cost incurred to the Department by the opening, and not bringing any general charges to bear against them, such as a proportion of the expenses of the head quarters staff, traffic manager, locomotive engineer, permanent way engineer, &c., as these standing charges must be maintained whether the new lines are opened or not.

Looking at the fact that in nearly all cases in which reports have been made upon suggested railways the land has passed into the hands of private individuals whose property will be largely enhanced in value by the making of the railways, and that the lines in themselves will not be self-supporting for a long time to come, we are of opinion that the land owners in the respective districts should join together and arrange for the necessary land, free from all question of compensation of any kind, to be conveyed to the Government for the construction of the railway. This, in our opinion, should be a *sine qua non* in connection with the making of lines of this character.

E. M. G. EDDY.
Chief Commissioner.
W. M. FEHON,
Commissioner.
CHAS. OLIVER,
Commissioner.

D.

[To Evidence of A. J. Stopps, Esq.]

TENURE OF LANDS AFFECTED BY THE PROPOSED RAILWAY.

SCHEDULE showing tenure of land within the following holdings, which are wholly within coloured diagram on map; also two holdings, viz., Boomanoomana and Jerilderie which are mostly within the coloured area.

Name of Holding.	Freehold.	Conditional Purchases and Leases.	Reserves.	Roads.	Crown Land.
	acres.	acres.	acres.	acres.	acres.
Baroogs	56,793	2,406	7,204	1,361	143
Boomanoomana, within coloured area	55,205	21,142	10,179	1,632	525
Boomanoomana, outside coloured area	5,630	710	2,308	123	.....
Boreegerry	1,882	1,860	.....	160	15
Jerilderie, within coloured area	58,270	1,551	14,695	863	4,361
Jerilderie, outside coloured area	6,600	980	3,000	170	100
Lalalty South	680	2,274	730	64	63
Momalong	88,359	57,928	10,806	3,439	1,509
Myall Plains	1,019	4,284	1,278	40	.....
Murray	16,540	9,789	6,285	590	3,726
Nangunia and Warmatta	18,397	10,825	1,909	442	138
Narrow Plains	9,684	16,105	3,273	970	510
Triangular Plains	6,800	6,260	250	330	.....

NOTE.—The above areas exclude all lands within town and suburban boundaries.

E.

[To Evidence of R. R. P. Hickson, Esq.]

Department of Public Works, Roads and Bridges and Sewerage Branch,
Sydney, 11 January, 1895.

MINUTE PAPER.—*Subject*:—Jerilderie to Berrigan Road.

THE total amount spent up to the end of 1894 on the Jerilderie to Berrigan road was £2,042 19s. 5d.

The road has only been scheduled since 1888, and for the three years—1888, 1890, and 1891— the total amount voted was £650.

The vote for 1894 was £1,000, and for the half-year of 1895, £550.

ROB. HICKSON.

F.

[To Evidence of H. Deane, Esq.]

BALLAST ALONG THE PROPOSED RAILWAY.

EXTRACT from Report of Mr. Surveyor Jamieson, Jerilderie, 6th February, 1895.

ALSO am forwarding two (2) small boxes showing the quality of sand and gravel obtained in the district for your information, to see whether suitable for ballast. The number painted in black on the side of the boxes is to distinguish the nature and location of same:—

No. 1. Light sand, obtained at the brickyard situated in Berrigan, and about 25 chains to the west of trial line, and almost on the surveyed line to Finley (Murray Hut). This sand is obtainable at 11 feet below the surface through stiff red clay.

No. 2. Is from the same yard and of a much coarser nature, obtained 15 feet below the surface.

No. 3. Is from a shaft I had sunk in Mr. Greggery's paddock near Berrigan, and on surveyed line. The gravel is obtained at 5 ft. 6 in. As this is on private property and near the entrance which leads to his house, did not sink to ascertain the depth of gravel. I have no doubt that on the 11-feet level the gravel would be the same as Nos. 1 and 2, as it appears to be running in an easterly and westerly direction.

No. 4. Is a decomposed granite obtained from the gravel pit situated in L. Badcock's holding, about 1¼ mile south of Berrigan. There is also a Government reserve there of about 30 acres, containing an unlimited supply. The only other place that ballast could be obtained from is Cuddell, situated near Narrandera, and from which place the ballast on the line Narrandera to Jerilderie was obtained.

The gravel marked 1 and 2, which I obtained in the brickyard at Berrigan is owned by W. Grenell. He has 1½ acres, and could obtain another ½ acre adjoining. He informs me that the depth of the sand, to his knowledge, is 10 feet, and if the Department thought it would be suitable he would, for a small remuneration, sink a shaft and ascertain for certain the depth. I believe the sand becomes coarser as it descends. Also, he would require 1s. per cubic yard for same, but I feel convinced he would take considerably less.

F 1.

JERILDERIE TO BERRIGAN RAILWAY.

Estimate of Cost—Length, 21m. 19c.

		per mile.
Earthworks	£4,754	£224
Culverts and bridges	2,345	110
Fencing 25 miles, at £50	1,250	59
Cattle stops, gates, &c.	700	33
Permanent way materials	11,237	529
Ballasting 5 miles, at 5s. £2,200		
Laying, 1s. 6d. = £132 per mile 2,803		
Sleepers, 14s. per rail.. Say 2,500 per mile 3s. = £375 per mile 21m. 19c., at £375 per mile 7,964		
	12,967	611
Platforms, signals, &c. £500		
Station buildings 750		
Goods and grain sheds 450		
Wool banks and sheep yards 400		
Sidings, 50c., at £18		
Turntable, £400 400		
Weighbridge 552		
Water supply 760		
Metalling 500		
	5,212	245
	38,465	1,811
Engineering, &c., 5 %	1,923	91
	40,388	1,902
Contingencies (say)	2,087	98
Total	£42,475	£2,000

Average cost per mile, £2,090.

G.

A CHEAP RAILWAY IN VICTORIA.

Board of Land and Works (Railways Construction Branch),
Spencer-street, Melbourne, 14 February, 1895.

Sir,

In compliance with your request of the 4th instant, for particulars of cost of, and information respecting, the Wycheproof and Sea Lake Line, I have the honor to forward particulars of cost and plan and section of this line. The country through which the line runs consists of plains covered with mallee. The soil is generally sandy loam, is porous, and absorbs ordinary falls of rain. The average rainfall is 15 to 18 inches. No creeks or rivers are crossed. Sand for ballast is obtained along the line, and is answering well, and sleepers are brought from an average distance of 100 miles nearer the coast.

I have, &c.,
F. RENNICK,
Engineer-in-Chief.

The Secretary Parliamentary Standing Committee on Public Works, Sydney.

Wycheproof to Sea Lake Line.—Length, 48 miles; nearly ready for opening.

Estimated cost per mile at opening based on expenditure to 31st December, 1894.

Description of works.	Cost per mile.
Land	Nil
Clearing and grubbing	£ 10
Fencing	3 unfenced
Cattle-pits at crossings	2
Earthworks (including stations and approaches)	135
Bridges	...
Culverts	9
Gravelling roads and approaches	7
Ballast (main line and sidings)	95 sand
Sleepers (red gum, ironbark, or box, main line and sidings)	333
Rails and fastenings (main line and sidings, including freight and laying)	692
Temporary station buildings (including platforms)	34
Water supply (temporary)	22
Signals	2
Telegraph	16
Engineering and surveying	105
Miscellaneous items	21
Interest on capital during construction	30
Total cost per mile	£1,516

Estimated total cost when additional works and equipment are completed—£1,800 per mile.

Office of Engineer-in-Chief, Railway Department, Melbourne, 14 February, 1895.

H.

Jerilderie to Berrigan Railway.

Book of Reference.

Name of Parish.	No. on Plan.	Description of Property.	Names of— Owners.	Occupiers.
County of Urana.				
Parish of Jerilderie	1	Coonong & Kennedy Sts.	Crown	
"	2	Town allotment	L. McLean	
"	3	"	F. Paul	
"	4	"	Jas. Docharty	
"	5	"	E. Horgen	
"	6	"	J. Carroll	
"	7	"	Jas. Docharty	
"	8	"	P. M. Carragan	
"	9	"	T. W. Wise	
"	10	"	Wm. Davis	
"	11	"	Ellen Horgen	
"	12	"	E. J. Spriggs	
"	13	Suburban land	Crown	
"	14	Algudgerie Creek	"	
"	15	Temporary Common	"	
"	16	Portion 75	Wm. Peterson and Frederick Th. Sargood	
Parish of Wunn	17	Road	Crown	
"	18	Portion 66	Wm. Peterson and Frederick Th. Sargood	
"	19	" 65	" "	
"	20	" 64	" "	
"	21	Road	Crown	
"	22	Portion 76	Wm. Peterson and Frederick Th. Sarg	
"	23	" 77	" "	
"	24	" 78	" "	
"	25	Road	Crown	
"	26	Portion 87	Wm. Peterson and Frederick Th. Sargood	
"	27	" 87	" "	
"	28	Road	Crown	
"	29	Portion 86	Wm. Peterson and Frederick Th. Sargood	
"	30	" 85	" "	
"	31	" 85	" "	
"	32	Road	Crown	
Parish of Mairjammy	33	Portion 45	Wm. Peterson and Frederick Th. Sargood	
"	34	" 46	" "	
"	35	" 47	" "	
"	36	" 1	James Connell	James Connell.
"	37	" 1, cultivation paddock.	"	"
"	38	Road	Crown	
"	39	Portion 98, cultivation paddock.	James Connell	James Connell.
"	40	Portion 69	A. C. Wilson	A. C. Wilson.
"	41	Road	Crown	
"	42	Portion 66	A. C. Wilson	A. C. Wilson.
"	43	" 65	"	"
"	44	" 27	"	"
County of Denison.				
Parish of Berrigan	45	Road	Crown	
"	46	Portion 32	A. C. Wilson	A. C. Wilson.
"	47	Road	Crown	
"	48	Portion 32	A. C. Wilson	A. C. Wilson.
"	49	Portion 36	"	"
"	50	Road	Crown	
"	51	Portion 26	A. C. Wilson	A. C. Wilson.
"	52	" 23	"	"
"	53	Berrigan Creek	Crown	
"	54	Portion 23	A. C. Wilson	A. C. Wilson.
"	55	Road	Crown	
"	56	Portion 92	John Dickie	John Dickie.
"	57	" 63	"	"
"	58	" 78	"	"
"	59	" 92	"	"
"	60	Road	Crown	
"	61	Portion 42	A. C. Wilson	A. C. Wilson.
"	62	" 43	"	"
"	63	" 45	"	"
"	64	Road	Crown	
"	65	Portion 69	R. McDonald	R. McDonald.
"	66	Road	Crown	
"	67	Portion 69	R. McDonald	R. McDonald.
"	68	" 79	"	"
Parish of Gereldery	69	" 71	"	"
"	70	" 72	Greggery	Greggery.
"	71	Road	Crown	
"	72	Portion 72	Greggery	Greggery.
"	73	" 70	"	"
"	74	Road	Crown	
"	75	Portion 75	Greggery	Greggery.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

SECTIONAL COMMITTEE.

RAILWAY FROM JERILDERIE TO BERRIGAN.

REPORT.

THE Sectional Committee, appointed on Tuesday, 8th January, 1895, to inspect, take evidence, and report with reference to the proposed railway from Jerilderie to Berrigan, have the honor to report to the Parliamentary Standing Committee on Public Works :—

Your Committee, consisting of the Hon. John Davies, C.M.G., Thomas Thomson Ewing, Esq., James Gormly, Esq., Charles Alfred Lee, Esq., and the Hon. Charles James Roberts, C.M.G., left Sydney at 9 p.m. on 11th January, and arrived at Jerilderie at 7 p.m. on 12th January.

The Committee opened its inquiry at 10 a.m. on 14th January, at the Court-house, Jerilderie, where, in the first instance, evidence was taken from the owners of the township allotments through which the surveyed route of the proposed railway at present passes, as to their willingness to comply with the suggestion of the Railway Commissioners as a condition precedent to the construction of the line, namely, that the required land should be handed over to the Government free of charge by the respective owners. The owners of the allotments were unanimous in their refusal to give their land. The Committee then examined Mr. Beere, the resident engineer of the Roads Department in the district of Deniliquin. This officer gave the Committee some important information as to the local contract prices of earthwork and macadamised roads. He was of opinion that the proposed 6-inch formation on the railway would be insufficient, and under no circumstances would he recommend the construction of a railway without ballast on the description of country under consideration. The Committee examined, at considerable length, Mr. W. D. Drummond, practical farmer of the Berrigan district, as to the probable grain traffic on the proposed line, and also as to the profit derived by the farmers in his district from the growth of wheat under existing conditions as to price and market.

The Committee, after hearing this evidence, proceeded to inspect the junction of the surveyed line to Berrigan with the present terminus at Jerilderie, with a view of determining, from personal observation, the value of the improvements upon the allotments traversed by the proposed railway, and to ascertain, as far as possible, the practicability of a starting point which would avoid the allotments.

The hearing of evidence was resumed at the Jerilderie Court-house on Tuesday, 15th January, at 10 a.m. The principal witness examined was the Mayor of the Municipality and the owner of the only mill in the Jerilderie district. He was in a position, from his business experience, to confirm the representations already made to the Committee regarding the immense growth in the agricultural produce of the district within the influence of the suggested railway; but speaking of the probable returns from the line, he inclined to the opinion that the departmental estimate of traffic was in some particulars excessive. He was also of opinion that the estimate of the Railway Construction Branch that the cost of the earthwork formation would

average

average £225 per mile would prove capable of considerable reduction; an expenditure of £50 per mile would provide a formation 6 in. in depth by 18 ft. in width. The railway station-master furnished returns showing a great increase in the carriage from Jerilderie of both wool and wheat. Mr. Rochfort, the acting inspector of stock of the district, handed in a return showing the number of sheep in the area likely to be affected by the railway.

The Committee completed the taking of evidence at Jerilderie on the morning of the 16th, and left immediately afterwards by special conveyance for Berrigan, accompanied by the Surveyor of the Constructing Branch of the Railway Department, and the District Engineer of Roads, and proceeding as nearly as possible by the route of the proposed railway. The country traversed was in the first 10 miles for the most part open plains, followed in the remaining distance by lightly timbered land. Nearing Berrigan the soil was of a loamy character, and more adapted to agricultural settlement than that a few miles to the northward. Depressions referred to by various witnesses as likely to hold sufficient water to imperil the stability of the proposed line were found to be inconsiderable. Berrigan Creek, the main water-course on the route, will not offer any engineering difficulties whatever. The Committee had practical demonstration of the difficulty of transportation of large quantities of grain along this, the only road from Berrigan to Jerilderie. The difficulty and expense of constructing a road suitable for such heavy loads did not seem to have been over-estimated by the Engineer-in-Chief for Roads. On the route, the Committee inspected a Government well on travelling stock reserve No. 10,111. The well had a double shaft to a depth of 114 feet, through sand and clay, and there was a reservoir with a capacity of 7,000 gallons. The expenditure upon the supply had been comparatively small; but there was apparently grave doubt as to whether the water would be suitable for railway purposes. The Committee were satisfied that the departmental representations as to the existence of a large supply of timber on reserve No. 2,587 were well founded. In such lightly-wooded country this valuable reserve would probably yield to the railway the anticipated revenue from the carriage of firewood. At a point a short distance on the Jerilderie side of Berrigan Creek the Committee inspected some earthworks in process of formation by the Roads Department. The width of the formation was 66 ft. from water-table to water-table, the centre being 20 in. above the natural surface; the contract price was 21s. per chain. In view of this information afforded to them by the District Road Engineer it appeared to the Committee that the departmental estimate of £225 per mile for earthwork was in excess of the necessary expenditure, that opinion being confirmed by the information already given to the Committee by the Mayor of Jerilderie in connection with the cost of municipal earthworks.

The Committee examined witnesses in the public hall, Berrigan, shortly after their arrival from Jerilderie, and also on the following day. Their testimony was entirely favourable to the construction of the railway. The chief reasons adduced were the rapidly increasing area under cultivation, the extreme difficulty in obtaining cartage to the Jerilderie terminus, and the probable increase of production generally if easier means of transit were afforded. It was explained that under existing circumstances, the whole of the cartage to Jerilderie, the only point of direct railway communication with New South Wales markets, had to be done within about four months, *i.e.*, the months of December, January, February, and March, the road at other periods of the year being practically impassable. The present means of transit frequently exposed producers to losses attendant upon an adverse market, and deprived them of the opportunity to avail themselves of a favourable one. The cost of haulage was also considerable. Possibly a fair instance of this would be that while the present freight under favourable circumstances from Berrigan to Jerilderie was 9s. a ton, the Commissioners propose to carry grain over the same distance at 2s. 6d. a ton. The saving to the agriculturist upon vast quantities of grain is at once apparent.

The whole of the witnesses expressed a desire to send their produce to and obtain their stores from their own Colony, if the rates for carriage permitted. The Committee completed at Berrigan the branch of their inquiry relating to the suggested transfer to the Government, free of charge, of the land required for the railway.

railway. Mr. Greggery, a farmer in the immediate neighbourhood of Berrigan, was the only landowner upon the route of the railway who expressed his willingness to give the required area free of charge. In connection with the leasing or sale of land for agricultural purposes, some valuable information was gathered from the Hon. Rupert Carington, who with Mr. John S. Horsfall is a joint owner of Momalong estate, and from Mr. Patrick McFarland, the owner of Barooga. The former had already sold 8,000 acres to agriculturists at an average price of £4 2s. 6d. per acre, and had prepared a further area of 9,000 acres for sale. The wheat yield of the estate this year would be 23,000 bags. Mr. McFarland had under cultivation upon his estate 10,000 acres, partly upon the system of "halves." He intended next season to increase this area by means of leasing. It was abundantly evident to the Committee from the statements of the two witnesses referred to, that but a very small proportion of the land in the district suited to agriculture had yet been cultivated. The witnesses, generally, were of opinion that the Railway Commissioners' estimate of the traffic upon the projected railway would be realised.

During their stay at Berrigan the Committee were shown a single shaft well, 190 feet deep, with 40 feet of good water, upon the property of Mr. W. J. Greggery. The well is situated about half-a-mile from the last peg of the trial-survey. The Committee also satisfied themselves of the existence of a very extensive granite formation about a mile distant from the town upon the Mulwala road.

The Committee proceeded to Finley at an early hour on the morning of the 18th, and there examined a large number of witnesses in the public hall. They were invariably of opinion that an extension of the railway to Berrigan would be almost valueless to those farmers who regarded Finley as a centre. The Committee were furnished with a list, which is printed as an appendix to Mr. Faulkner's evidence, showing the farmers now in occupation of land who would not use Berrigan as a loading place, but would continue to make either to the Jerilderie terminus, or, in a few instances, over the border into Victoria. Mr. Faulkner also emphasized the fact that the owner of Tuppal was prepared to lease to agriculturists a large area of excellent arable land in the vicinity of the area already leased on the estate, about 15,000 acres. When questioned as to the probability of their using the railway if constructed to Berrigan, the witnesses pointed out that it would not pay them to do so, inasmuch as the cartage to Berrigan, combined with the proposed railway charges thence to Jerilderie, would be almost equal to the present heavy freight for road carriage to Jerilderie. The Committee were impressed with the general fertility of the district through which they travelled on going to and returning from Finley; the road passing through what may be fairly described as a continuous wheat-field. It is clear from the evidence brought forward, that not only is the land extending far to the west of Finley suitable for agricultural settlement, but that there is a large number of genuine settlers already in occupation there.

The Committee left Berrigan at 8 a.m. on the 21st inst., and proceeded by special conveyance to Savernake, where further evidence was taken. The evidence generally was to the effect that the settlers to the west of Savernake would be benefited by the railway, and would utilise it for the conveyance of their produce. Beyond that point, the settlers regarded the construction of the railway as a matter of little importance to them. The farmers generally expressed the opinion that, in the matter of railway construction, they would be best served by the surveyed line from the Rock to Murray Hut. Seeing that Savernake is distant about 18 miles from Berrigan, 20 miles from Yarrawonga, and about 30 miles from Corowa, it is obvious that the districts to the eastward would not be directly interested in the construction of the proposed railway.

The inquiry of the Committee terminated at Savernake, and they returned to Sydney, *via* Yarrawonga and Benalla, on the 22nd inst.

It will be seen from the evidence that a large area of land suitable for farming settlement extends approximately from 9 miles south of Jerilderie, passing thence in a westerly direction to within a few miles of the present surveyed line from Jerilderie to Deniliquin, thence with a southward trend to within about 12 miles of the town of Deniliquin, reaching to the Murray on the south, and to the east embracing Clear Hills and Savernake and extending eastward to the Rock. Although it is apparent

that

that a large extent of this country would not be served by the proposed railway, still within these roughly defined boundaries a vast quantity of grain is already produced, and it may fairly be expected that in the near future, with improved means of communication, the present output from agricultural pursuits will be very largely augmented. The soil may be generally described as a red loam, the timber consisting principally of box and pine. The rainfall appears to be generally sufficient for the growth of cereals and fruits.

The question, therefore, for the Committee to decide was, whether the proposed railway would be the most suitable way of affording immediate relief to those already in occupation. Incidentally the Committee also considered the question as to whether the railway would eventually be antagonistic to a general scheme for the development of the whole wheat-growing area referred to. It will be apparent from the return which appears as an appendix to the evidence of Mr. Lysaght, the hon. secretary to the Berrigan Progress Association, that Berrigan is at present the centre of a large area of agricultural settlement, and that a very large development of cultivation is yet possible in its vicinity. Further, it will be seen from the return appearing as an appendix to the evidence of Mr. Faulkner, the manager of Tuppal Station, that Finley is also the centre of a large area of land at present under cultivation, and that there is a possibility of considerable agricultural development in that direction if proper means of communication be furnished. Considering the nature of the soil and the great weight of grain produced, the Committee are of opinion that a terminus at Berrigan would be scarcely adequate to meet the legitimate needs of that portion of the district to the westward of Finley.

Agreeably with the wish expressed by members of the full Committee, the Sectional Committee used every legitimate means to obtain evidence from the whole of the landowners along the surveyed route of the line as to their willingness to give free of charge the land required for the railway. The whole of the owners with the exception of Messrs. Petersen and Sargood, of Wonnamurra, through whose estate the survey passes for a distance of 7 miles, and Mr. A. C. Wilson, of Berrigan, appeared before the Committee. In regard to the former of these, their local representative informed the Committee that he was not in a position to afford them any information as to the intention of his principals in regard to the gift of land. Mr. Wilson was not in the district, but he informed the Committee, by telegram, that he was prepared to give the land. At the same time he thought that, as the severance involved would be such a serious matter to him, it should receive consideration. [*Vide* Appendix.] With regard to the allotment holders adjacent to Jerilderie, they were, as already pointed out, unanimous in refusing to comply with the suggestion of the Commissioners. From the termination of these allotments the route passes, for a distance of about 2½ miles, over the Jerilderie common. From the southern boundary of the common to the southern boundary of portion 47, parish of Wonnamurra, the line passes through the property of Messrs. Petersen and Sargood, from whom, as explained, no information was forthcoming. From this point the line passes through a small portion of the property of James Connell, who refuses to give the required land. It passes thence through Berrigan Station, the property of Mr. A. C. Wilson, from whom also the Committee had no definite information as to the gift of land. Still the evidence of the hon. sec. of the Berrigan Progress Association, together with the contents of the telegram above referred to, would leave it to be inferred that no great difficulty will probably be experienced in regard to this holding. The next property owner on the route is Mr. John Dickie, who also refuses to give the required land. Mr. McDonald, the next owner, although apparently inclined to give the land required, makes some stipulation as to platform accommodation as an equivalent. The last landowner on the route, Mr. Greggery, was prepared to give the land. The difficulty the Committee experienced in obtaining any evidence of uniform compliance with the suggestion of the Railway Commissioners will be at once apparent. They have, however, arrived at the conclusion that a district so well deserving of the advantages of railway communication as is Berrigan should not have its development arrested through an illiberal spirit which might be displayed by any of the large landowners on the route of the proposed work. It was clear that although the residents of the Berrigan district had done all in their power to obtain the gift of the land in question they had

had failed, and it appears almost impossible to obtain that cohesion among them which would furnish the large sum that might be required to cover the probable large demand for resumption and severance on the part of the large landowners. In their reference to the reluctance of some of the landowners to give the required land free of charge, the Committee do not desire to include several small owners whose properties would apparently be subjected to worsement rather than betterment. As indicating the value to the large owners of railway extension, and the disposition of some of them to recognise that fact, it may be mentioned, that in giving evidence at Berrigan, the Hon. Rupert Carrington said that had the line passed through his estate he would have given the area required, but that as that was not the case he intended to send the whole of his wool and grain by the railway, although at some loss in comparison with Victorian rates.

The Committee endeavoured to devise some scheme, which, while giving the district the required means of communication, would remove the necessity for a large area of resumption. With this end in view, the Chairman of the Committee and Mr. Gormly, accompanied by an officer of the Construction Department, were deputed to inspect the suggested deviation shown by the blue line on the plan which appears as an appendix to the Committee's Report. From the plan it will be seen that this route passes from Jerilderie in a south-easterly direction till it intersects a road 1 chain wide in possession of the Crown between portions 61 and 62. Following that road in its continuation south it passes across the main road at the south-east corner of reserve 2,587, thus almost wholly avoiding resumption upon the Wonnamurra Estate; following the eastern boundaries of portions 80, 75, 74, and 93; thence by reserved roads and the main road to the point where a junction is effected with the original departmental survey near portion 98. Although the road for most of the distance is but 1 chain wide, still the Committee are of opinion that, having regard to the nature of the country and the character of the proposed work, that width would be sufficient. As a further result of the inspection, another route, shown by the dotted blue line upon the plan, was discovered, and it eventually commended itself to the Committee as the better of the two. A description of the route, and the reasons for its acceptance, will be found in the next paragraph of the Report. The Committee placed before the Engineer-in-Chief, by letter, particulars of the suggested routes and their views thereon.

The Committee, seeing that Berrigan is the centre of a very large and undoubtedly genuine settlement, and that it will eventually be the depôt for a vast quantity of produce, are of opinion that a railway should, as soon as practicable, be constructed to the district from Jerilderie at a cost not exceeding the estimate of the Engineer-in-Chief for Railway Construction, namely, £1,830 per mile. The route recommended by the Committee, which is practically the same length as the departmental survey, would be that approximately following the road and shown upon the annexed plan by a dotted blue line from points C to D; thence by the route of the departmental survey into Berrigan. The Committee are of opinion that the main road at present in existence would be placed contiguous to the railway, thus doing away with any further severance. Such alteration would be of great benefit in the location of the road itself and of permanent benefit to the railway.

It is abundantly evident to the Committee from their investigation that a good deal of traffic which now passes through Victoria from this district will be retained to New South Wales if the proposed railway be constructed. The Committee are further of opinion that the railway can be constructed within the final estimate of the Engineer-in-Chief, engineering difficulties being totally absent; that no better district in the Colony could be selected for the construction of a pioneer line of railway; and that the work offers every prospect of furnishing a return equivalent to the estimate of the Railway Commissioners from the date of its completion.

Having regard to the fertility of the soil and the general settlement, extending from Berrigan to Finley, the Committee are of opinion that the immediate construction of a cheap line of railway between these two points would be justifiable, either by utilising the road, or upon land which would be given by the local landowners free of charge, it being apparent that such a line might eventually form part of a railway for the fuller development of the previously described agricultural area.

THOS. EWING,
Chairman.

22 January, 1895.

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

MINUTES OF EVIDENCE.

RAILWAY FROM JERILDERIE TO BERRIGAN.

[TAKEN BEFORE THE SECTIONAL COMMITTEE.]

MONDAY, 14 *JANUARY*, 1895.

[*The Sectional Committee met at the Court-house, Jerilderie, at* 10 *a.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

The Sectional Committee proceeded to consider the proposed Railway from Jerilderie to Berrigan.

Mr. Gerald Butler Beere, Resident Engineer, Deniliquin Road District, sworn, and examined :—

Mr. G. B. Beere. 14 Jan., 1895.

1. *Chairman.*] What position do you hold? I am resident engineer of the Deniliquin road district.
2. Have you been long in the district? Something over four years.
3. What has been your previous experience? A long course of rail-road engineering, principally in other parts of the world. I have done a good deal of work in Victoria and in New Zealand.
4. Have you carried out extensive rail-road and other works in other parts of the world? Yes; I was assistant engineer in the province of Auckland for some years.
5. And you are competent to express an opinion, not only as to the roads of the district, but also as to the railway under consideration? Yes; I consider myself competent to do so.
6. The area under consideration in connection with the proposed railway is bounded on the west by Murray Hut, on the south by a line running 6 or 8 miles from Berrigan, and on the east and north-east by Savernake and Clear Hills;—can you tell us what is your present road expenditure within that area? I could not say definitely without reference to my books, but speaking roughly I should say it would be about £3,000 a year.
7. What would be your main roads within that area? The road from Jerilderie to Clear Hills, from Jerilderie to Berrigan, from Berrigan to Corowa, from Jerilderie to Finley, from Berrigan to Cobram, from Berrigan to Mulwala, from Jerilderie towards Urana.
8. Portions of all those roads would be within the area under consideration? Yes.
9. You are aware of the line which it is proposed to construct from Jerilderie to Berrigan? Yes.
10. Would the construction of that line do away with the need for maintaining any of these roads? I do not think it would do away with the maintenance of any road, although it might diminish the maintenance expenditure upon the road from Jerilderie to Berrigan.
11. As the district became more settled would not the settlers be likely to use portions of the main road very much, in order to reach the railway stations? The road, of course, would be very serviceable for approaching the railway.
12. Therefore, the main road itself would not fall absolutely into disuse? No; I think it would be still very much used.
13. As population became denser the road might become as much used as ever? Yes; and I think there is every probability of a great increase of population within the area of which you are speaking.
14. Can you suggest any way in which your road expenditure would be affected by the construction of the proposed line? Well, it would obviate the necessity for keeping the particular road to which you refer in what might be termed first-class repair, but at the same time the railway would add materially towards the cost of other roads—that is, in making them sufficiently good for use as approaches to the railway.
15. Would the tendency of the construction of the line be to increase or lessen the road expenditure of the district? I think the expenditure would have to go on just the same. The amount which you would save on this particular road would be expended on by-roads.
16. *Mr. Davies.*] Did you furnish the data of the estimate of the Engineer-in-Chief for Roads of the cost of constructing a road from Jerilderie to Berrigan, dated 8th January, 1895? Yes.
17. What is your estimate? My estimate was pretty close to the estimate to which you direct my attention.
18. What were the details of your estimate? I see that the Engineer-in-Chief has 25 miles of formation at £66. I think my estimate was £100. There is a difference there. Then, as against that, there are 50 miles of side drains, estimated at 4d. per lineal yard.

Mr. G. B. Beere. 14 Jan., 1895.

19. Did you furnish that estimate of 4d. per lineal yard? No; my estimate was nil. You can get the work done for practically nothing.
20. You think that item could be struck out? Perhaps the better way would be to take the estimate as a whole. The Engineer-in-Chief has made reductions in some instances, and has added to my estimate in others. The total works out pretty much the same as mine.
21. What is your total estimate per mile? £2,062.
22. For what width of road? Sixty feet.
23. What is the metal formation? Eighteen feet.
24. With a depth of how much at the crown? Eight inches throughout.
25. What height will the centre of the road be? About 20 inches. The crown of the road would be altogether 4 feet above the bottom of the side drains. The formation would cost about £1 0s. 4d., and I do not think the formation required for a railway would cost more. We have let contracts for work of this kind at 20s. a chain. I think you ought to get your railway formation at that price, unless contractors generally became dearer in their prices.
26. Have you any contracts let at that price now in the vicinity of the proposed railway? Yes; at about that price.
27. What would be the average price? £1 0s. 4d. per chain is the price in one case. In another case £1 1s. 7d.; in another, £2. Those prices will give you an idea of what kind of work can be done for the money.
28. What, in your opinion, should it cost them to carry out the earthworks in connection with a cheap line of railway 22 miles long, such as that proposed? I should put it down at 30s. a chain, or £120 per mile.
29. Supposing the Construction Branch of the Railway Department had submitted for earthworks £225 per mile, would you regard it as an excessive estimate? I think it would be ample, but, of course, I do not know what basis they are working on.
30. From your experience in connection with your own contracts in the district, you are satisfied that the earthworks for the proposed railway could be carried out at £120 a mile? I am quite satisfied that the earthworks could be done at that price by contract.
31. You have come to that conclusion after having let many contracts in connection with the roads of this district? Yes.
32. Have you any road in your district costing £2,060 a mile? There are little bits of metalled road which have cost at that rate—some at Tocumwal, and some in the Berrigan streets.
33. Was that work carried out under your supervision? Some of it.
34. Could you send us the details of the expenditure? Yes; from records in the local office when I obtain them.
35. Where did you get your metal ballast? There is splendid granite metal within 7 miles of Tocumwal.
36. What gauge is it broken up to? A 3-inch gauge.
37. I suppose you use 3-inch ballast? Yes.
38. What would the 3-inch ballast cost in the case of a road of £2,060 a mile? It would cost 11s. at Tocumwal, broken and spread on the road. At Berrigan we could get it broken and spread at 7s. per cubic yard. Here at Jerilderie we could get Cuddell gravel from the railway for about 11s. per cubic yard. Then there is the cost of carting, which would bring the amount up to 13s.
39. What is the cost of the blinding of a road of this character per mile? We can get sand blinding at 1s. a yard.
40. With metal so easily obtainable, how do you arrive at the expenditure of £2,060 per mile? It is not only the metal, but there are other details to be considered. I have already explained that the total estimate works out at the amount you have given. Of course, if a railway were constructed it would not be necessary to expend £2,060 per mile, but as I pointed out to the Chairman, there will be no saving in the annual cost for maintenance.
41. *Mr. Lee.*] Which do you think would be the preferable work—a metal road at a cost of £2,060 per mile, or the proposed railway? My private opinion is that the road would be better.
42. Why do you arrive at that conclusion? Supposing the railway were constructed to-morrow, the farmers living 6, 7, 8, or 10 miles away from here would invariably drive their own teams. They would bring their own produce to Jerilderie. Even going down as far as Murray Hut, I do not think they would be likely to travel for 13 miles across to Berrigan.
43. How far is it from Finley to Jerilderie by the travelling stock reserve? About 24 miles.
44. Do you expend any money on that road? We have expended some. We are having a good bit of work done on that road.
45. You think that if the teamsters once had heavy produce such as wheat upon their drays, they would be more likely to come to Jerilderie than to go to Berrigan? Decidedly.
46. Is the travelling stock road available for dray traffic all the year round? It is bad in winter time; still they make use of it—they bring waggons along it at all times.
47. What are the usual loads they put on the waggons here? From 7 and 8 to 14 tons.
48. What is the width of tyre? Two and a half inches.
49. Do you manage to keep the roads in sufficiently good order to carry 14 tons on a 2½-inch tyre? No; it would be simply a waste of time.
50. I suppose the metal simply goes out of sight? Yes; until it is thoroughly bound.
51. You think there would be a chance of the farmers using their own drays in competition with any railway which might be constructed from Jerilderie to Berrigan? Yes. I do not think you would get the Murray Hut traffic to Berrigan. You might get some of the traffic to the south and to the east, because the roads to Mulwala and Corowa are not very good roads. I think that most of the trade which now goes in that direction would, if there were a railway, come towards Berrigan.
52. Do you think that if the Finley farmers could get their wheat carried from Berrigan to Jerilderie at 2s. 6d. a ton, they would bring it into Jerilderie in a dray? Yes; I think the distance and the nature of the road between Berrigan and Murray Hut would prevent their coming across with the traffic.
53. Even with the low rate I have named you think they would still bring their wheat to Jerilderie by dray? Yes.
54. The quantity of wheat grown in that locality is very great, is it not? Yes.

55.

55. Supposing a main road would serve the people better than a railway, it would be necessary to metal that road from Jerilderie to Berrigan, and from Berrigan to Finley would it not? Yes.
56. And it would cost £2,060 a mile to make such a road? Yes, but the metal would last some time.
57. In your opinion either a metal road or a railway in this district will become a necessity? An absolute necessity.
58. If it could be shown that a railway could be made for about the same cost as a road, which would you suggest, having in view the benefit of the whole district? I think the railway would be the best.
59. No revenue is derived from roads? No.
60. No matter how much more money is expended upon roads no revenue is derived from them? No.
61. On the contrary, whenever a railway is made it produces a certain amount of revenue immediately it is open for use? Of course.

Mr. G. R. Beere. 14 Jan., 1895.

62. It is estimated that the cost of maintaining a road costing £2,060 per mile, would be £150 per mile per annum? That is at the first start off, but as the roads became consolidated you would not require to expend that amount in maintenance.
63. If it can be shown that the railway, taking all charges into consideration, can be maintained for a less sum than that, upon what do you rely for your argument that a metal road would be the best for the district? I think it will afford better accommodation to the public.
64. But viewing the matter as one of £ s. d.? From that point of view the railway would be best, but looking at the matter from the point of view of public convenience, I think the road would afford greater accommodation.
65. Quick communication is a great advantage to the public, is it not? Undoubtedly.
66. You know the route of the proposed railway; do you think the 6 inches of earthwork formation would be enough to carry it? Not on the average. The water lies about at different points along the route. At certain times there is an immense amount of water on the country between here and Berrigan. A great deal of water settles in basins and passes down over old water-courses. The depth will vary from a foot to 18 inches.
67. And you think that a 6-in. formation would be under water? At times.
68. And the traffic would have to be suspended for the time being? The line would be endangered.
69. After the water had subsided would there be any danger of the line sinking? There is always a danger of that, when water rises above the formation, and where embankments are subjected to its influence.
70. You think from the nature of the soil that there will be a good deal of erosion? Yes; the soil is red and blue loam, and is very sugary; water will erode it very rapidly.
71. Supposing that it were proposed to build a line with a 6-in. formation with no ballast at all, but with the sleepers laid close together, do you think there would be any danger of any portions of the line sinking? In country of this nature it does not matter how many sleepers you put down, you want ballast. An engine of 38 or 40 tons, if the sleepers were laid down without any ballast, would fairly drive them into the soil.
72. You think it would not be possible to construct the line without ballast with any degree of safety? Yes; I should not like to see it done.
73. You say that after four years of road-making in the district? Yes.
74. You know that in this particular instance there is a departure from the ordinary method of railway construction in this Colony, and that it is proposed to make the line on a cheaper principle than any heretofore constructed? I am aware of that.
75. That being so, one of the objects of the Committee is to ascertain whether ballast could be dispensed with? Of course, there would be a saving in the first instance, but I am afraid when you came to work the line you would find it very expensive. If an engine came to grief, and if lives were lost, you would very soon have to pay more than the cost of the ballast.
76. You think there is no doubt that a portion of the line would be submerged at some time or other? Yes.
77. Have you yourself seen water on the portions of the country to which you refer? Several times.
78. Do you know the proposed route? I have seen some of the pegs.
79. Is there any point you can suggest where the line should be deviated and taken along the main road? I could not say without making a personal inspection.
80. Is there much stock coming along the stock route from Finley? I do not think so. I have seen the road with cattle and flocks of sheep upon it, but not to any great extent.
81. Do you have to put many culverts in your roads? Four to the mile.
82. Third-class culverts, I suppose? Yes.
83. Do they answer the purpose? In some cases they do, and in a great number of cases they do not. I do not believe in box culverts at all in this country. Persons see the country when it is dry, and they think that a box culvert will do; but when the winter rains fall you want culverts of a much larger capacity. I would put in third-class culverts, and would keep them from 10 to 12 feet wide.
84. Has there been any current in the flood-waters to which you have referred? It depends upon the position of the water. If it is an old river-bed, of course there is a good current; if it is open country of course it is still water.
85. Where does the water come from? From the higher country. There are slight undulations. For instance, there is an overflow from the Billabong, and the Yanko floods a large extent of country.
86. Would that affect the particular country through which the railway passes? As I have already said, I have seen water lying at different points from a depth of 1 foot to a foot and a half. The water comes from various directions.
87. During flood time is the ordinary dray traffic suspended? To a great extent it is. Sometimes they flounder through, but oftener the traffic is completely stopped.
88. *Mr. Roberts.*] Where are your head-quarters? At Deniliquin.
89. What are the boundaries of your district? It extends on the east to Urana to close to Mulwala on the south-east; on the west it extends close to Swan Hill; on the north for about 20 miles, north of Wanganella; and on the south to the river Murray.
90. You have had an opportunity of acquainting yourself with the whole of that district? Yes.
91. It is pretty well all the same class of country? It varies. Some parts are far richer than others. The tract from Clear Hills to Deniliquin is rich wheat-growing country. In other parts, although the country will produce cereals, it will not produce them to the same extent.

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92. It is all level country? Fairly level all through.
93. The present cost of the construction and maintenance of the road between Jerilderie and Berrigan amounts to £1,000 per annum? Last year was the first year we got £1,000.
94. What did you get previous to that sum? Sums varying from £200 to £500.
95. But an increased expenditure became necessary on account of the increase in the traffic on the road? I proposed that the road should be made a third-class instead of a fourth-class road so as to give us more per mile. I saw that it was absolutely necessary to have more money for the road, and to keep it in working order for the traffic.
96. What state of repair is it in now? Medium. It is very bad in parts.
97. Is it ever rendered impassable? Whenever there are heavy rains it is rendered absolutely impassable for heavy traffic.
98. During the four years you have been in this district have you noticed a constant increase in the traffic between Berrigan and Jerilderie? Yes. When I first came here Berrigan was nothing, but it is really something now. There is a good big population there, and there are good buildings in the town. It is a much more prosperous place than it was.
99. What has been the cause of the increased settlement during the last few years? The large landowners have either sold or leased portions of their estates for agriculture. For instance, Mr. Faulkner, the proprietor of Tuppal has leased a portion of his estate with the option of purchase. The men who have taken it up appear to be doing very well. The price of wheat has been very much against them lately but still they seem to be comfortable well-to-do people.
100. From your knowledge of the production round about Berrigan you think that the Government should afford the settlers some better means of getting to market, either in the shape of a first-class road or in the shape of a railway? Yes. I may say as a man professing to be a railway engineer I do not like the idea of constructing these small cockspurs; I do not believe in them anywhere. In this instance I should prefer to see a line made from the Rock through Clear Hills and onwards through the whole wheat-producing country. A line like that would be sure to pay. Take a short line such as that which it is proposed to make to Berrigan: The Berrigan people may use it, but the outside settlers will not.
101. Do you not think there would be a large traffic on the railway? I think a good deal of the wheat in the district would come upon the line, but I do not think it would serve the radius you think. I do not think a cockspur to Berrigan would serve the Murray Hut district or the western part of the wheat-growing area.
102. Is there not a large number of farmers to the south of Berrigan? A good deal of wheat is produced there but there is nothing like the number of farmers there that you find in the west.
103. And you think the settlers there would still continue to send their produce along a very indifferent road instead of upon a railway *via* Berrigan? Yes, they would prefer to come to Jerilderie direct unless there were a good macadamised road connecting them with Berrigan.
104. And you are bearing in mind that the road from Jerilderie to Murray Hut would be in the same position that it is in now? Yes.
105. If a railway were constructed would it still be necessary to expend £1,000 a year upon the road between Jerilderie and Berrigan? I think so.
106. Do you not think there would be a certain amount of saving which might be expended upon new cross-roads? Some money might be expended in that way.
107. *Mr. Gormly.*] In regard to the contracts you have let. You have mentioned a contract price of £1 0s. 4d. per chain for earthworks;—how many cubic yards of earth per chain were used in the formation of that road? About 50 or 60 cubic yards.
108. That is not much over 4d. per cubic yard. Do you expect the contract to be completed at that price? Yes.
109. You have stated that at times there would be a good deal of water lying on the proposed route of the railway between here and Berrigan, and that it would be necessary to make more than a 6-in. formation on the proposed railway? Yes.
110. If there were only that formation, you think the line would be damaged by the water? Yes.
111. Do you know the rainfall of the district? I believe it is a little over 20 inches.
112. You know the country between here and Berrigan? Yes.
113. It is moderately level, is it not? Yes.
114. What proportion of the 20 inches of rainfall would be likely to fall in one or two months at any time of the year? There might be a fall sometimes of from 2 to 3 inches in twenty-four hours. That would be a heavy downfall in a level country, where there is no get-away.
115. If there be a fall of only 3 inches in twenty-four hours on level country, how can that cover large areas of it, as you have suggested, with flood-waters, up to 18 inches? There are slight undulations in the country, and the water runs down into basins.
116. Does any of it run away? It gets away eventually.
117. Have you travelled over the country at times when, as you say, there has been a depth of water upon it of from 12 to 18 inches? I have not been over the country when there has been that depth; but I have seen large areas covered with a depth of from 6 inches to a foot.
118. Is it not the practice, in constructing railways, to fill up the depressions so as to obtain an uniform surface? Yes; but if you can make the gradient, conforming to the natural surface, so much the better; it takes away expenditure upon earth-work.
119. Supposing the formation was to be 6 inches, would not an engineer fill up the depression, so as to have an uniform surface? Yes; in this country you would fill them all up.
120. Then what makes you anticipate that there is any danger of the line being flooded? There are places where, if the line were only constructed 6 inches over the present natural surface, it would at times be flooded.
121. Where do you think the flood-waters will come from? From the Billabong and other creeks. There are ana-branches of the Billabong.
122. Do the flood-waters of the Billabong cross the route of the proposed line? I could not give you the exact details without taking the levels of the country. But take the Berrigan Creek. There is a heavy lot of water coming down in a wet season.
123. Are there any other depressions between Jerilderie and Berrigan? Yes; there is one at Wonnamurra. It extends over ¼ of a mile.

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124. What height of embankment would be necessary there? Perhaps from 3 to 4 feet.
125. You said there was a danger of an engine coming to grief and an accident occurring if the line were flooded? I do not think the engines would be able to run over the kind of line you propose in wet weather, even if you were to double the number of sleepers.
126. But even supposing engines could run over the line, would there be any danger of a serious accident? Yes; an engine might run off the line if it were higher on one side than on the other.
127. If this railway were not constructed, it would be necessary to make well-formed metal roads for the accommodation of the traffic coming into Jerilderie from Murray Hut and other places? Yes.
128. The present roads, in certain periods of the year, are almost impassable for heavy loads? Practically impassable.
129. It would cost a considerable amount of money to provide different roads in the direction of Berrigan, and also to provide a road to bring the produce from that point to Jerilderie? Yes; you would want to spend a good sum upon these roads. In some cases it would cost a little more than in others, because there would be increased cartage of the metal.
130. There would be need, I suppose, for about three good metalled roads, equal in length to the suggested road from Jerilderie to Berrigan? Two, at any rate.
131. Probably three? Probably.
132. I suppose you do not contend for a moment that a metalled road would provide the same accommodation for the traffic of a large extent of country as would be provided by a railway? If anything the railway would serve a larger extent of country than the metalled road.
133. Then does it not follow that if a railway can be constructed at a less cost than a metal road, it would be more beneficial both to the country and to the district? For heavy freight it would, but not for light freight.
134. There is also the consideration that the railway would be available for every period of the year, whereas a road might not? Yes.
135. *Chairman.*] You have been in the district four years? Yes.
136. Have you seen the country between Jerilderie and Berrigan flooded? Yes.
137. Seriously flooded? Badly flooded.
138. How much water have you seen on it? In places it has been up to the hubs of our wheels, say for 200 yards.
139. Up to 2 feet? Yes, and sometimes over. In other places it might not be more than 3 or 4 inches.
140. I suppose it would be still back water? No; running in some instances.
141. Did you see any heavy run? No serious run.
142. That is your personal experience? Yes.

Mr. Frederick Paul, carpenter and joiner, Jerilderie, sworn, and examined:—

Mr. F. Paul. 14 Jan., 1895.

143. *Chairman.*] What are you? I am a carpenter and joiner living at Jerilderie.
144. Are you the owner of allotment 14 of one acre, through which the proposed extension of the railway to Berrigan passes, at the corner of Kennedy and Coonong Streets? Yes.
145. Are you aware that the Railway Commissioners have suggested that the land required for the railway should be given free of charge by the landowners? I do not know anything about that.
146. Are you prepared to allow the Government to resume, without cost, the portion of your land they require for the proposed railway? I am not prepared to do so.
147. What do you value your land at? At 5s. a foot for building allotments. I am ready to put up some cottages at the present time.
148. What is the value of the acre? £30.
149. And you have come to that conclusion because of the value of other land in the vicinity? Yes.
150. Apparently you will be left with about 2 chains frontage, with a depth of a little over a chain to Kennedy-street? The value of the land left would be a mere nothing; you might perhaps put up one cottage.
151. You would require compensation if the Government took your land? Yes.

Mrs. Ellen Horgen, Jerilderie, sworn, and examined:—

Mrs. E. Horgen. 14 Jan., 1895.

152. *Chairman.*] You reside at Jerilderie? Yes.
153. You are the owner of an acre of land adjoining Paul's allotment, and facing Kennedy-street? Yes, I own one-half of that acre. I have sold one-half of it to Margaret Harvey.
154. You are a widow? Yes.
155. Are you willing to give your land for the purposes of the proposed railway? No.
156. What do you consider your acre would be worth? I think the half acre would be worth £10.
157. All that would be left, after the land required for the construction of the railway had been taken, would be a chain frontage to Kennedy-street, running back about two chains on the south, and a chain and a half on the north? That would be of no use to me.
158. If the Government took any at all, you would expect them to take the whole of the acre, and give you £10 for it? Yes.

Mr. James Docharty, clerk, Jerilderie, sworn, and examined:—

Mr. J. Docharty. 14 Jan., 1895.

159. *Chairman.*] What are you? I am a clerk residing at Jerilderie.
160. You are the owner of allotment numbered 17 on the village map, containing one acre and fronting Kennedy-street? Yes.
161. The extension of the railway from Jerilderie to Berrigan will pass through your land. Are you prepared to give the area required to the Government? No.
162. What do you consider the land worth? £20.
163. If the Government took the land they require, your frontage to Kennedy-street would be left intact, and you would have about 2½ chains in depth; what would the area taken be worth? I think it would be worth about £10.

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164. And you would require that amount from the Government if they took the rest of your land? Yes.
165. You would take nothing less? No.
166. You also own block No. 13, adjoining F. Paul's allotment to the west? Yes.
167. What do you consider that worth? £20.
168. Imagine a line going from where your allotment joins Paul's allotment in Coouong-street, passing straight across to your south-western corner where you adjoin William Clark's allotment, cutting your allotment in half, and leaving you with a triangular piece? I do not think the balance of the land would be worth anything to me if it were cut up in that way.
169. If the Government cut up your land approximately in that way, you would require from them £20, the full value of it? Yes.
170. You would insist upon their resuming the whole allotment if you could? Yes.

Mrs. Ellen Horgen, Jerilderie, sworn, and further examined:—

Mrs. E. Horgen. 14 Jan., 1895.

171. *Chairman.*] You own allotment 45, fronting Kennedy-street, with an area of 2½ acres? Yes.
172. What do you value it at? At £50. I would not take less than that from anyone.
173. Have you any buildings on it? No.
174. Have you any cultivation from it, or do you get any return from it? No.
175. Is it fenced? No; I have only had it twelve months.
176. Did you buy it from the Crown then? Yes. I gave £32 for it, and I now value it at £50.
177. The railway passing through your property would leave you all your frontage to Kennedy-street on your northern boundary, and where you join William Davis you will have a length of about 3 chains; on your southern boundary you will have a length of about 2 chains;—what would you value the portion taken at? At £30.
178. You estimate that the remainder would be worth £20? Yes.

Mr. Thomas Walter Wise, Mayor of Jerilderie, sworn, and examined:—

Mr. T. W. Wise. 14 Jan., 1895.

179. *Chairman.*] You are Mayor of Jerilderie, and you are also a miller here? Yes.
180. You own allotment 47, through which the proposed railway would pass? Yes.
181. What do you value it at? At £10 per acre.
182. The railway would take off the eastern portion of your land about a chain and a half, right along the back line, leaving you, apparently, 3 chains;—what would you value that land at? I would let it go at the rate of £10 per acre.
183. I suppose you would not be prepared to give the land for the purpose? No; not for nothing. But I would point out that if it could be arranged to keep the line to the east side of Kennedy-street, it would be a great advantage. I think the curve might be taken so as to escape Kennedy-street. If the whole of the land interfered with by the railway were resumed, and the residue, after the railway had been constructed, were re-sold, I think the Government would be recouped their resumption money.

Mr. William Douglas Drummond, farmer, Berrigan, sworn, and examined:—

Mr. W. D. Drummond. 14 Jan., 1895.

184. *Chairman.*] What are you? I am a farmer residing at Berrigan.
185. Do you know the route of the proposed railway? Yes.
186. You have a good knowledge of the district? Yes.
187. How long have you been resident at Berrigan? For about 7 years.
188. You have a good knowledge of the products of the district? Yes.
189. *Mr. Lee.*] Did you give evidence before the Sectional Committee which visited this district in 1892? Yes; in connection with the proposed railway from Jerilderie to Deniliquin.
190. You supplied that Committee with certain statistics? Yes.
191. I believe you gave the Committee among other things a list of the number of acres under cultivation? Yes.
192. Are you prepared to give us data to-day showing whether there has since been an increase or decrease in the number of acres under cultivation? Approximately. The area extends, taking Berrigan as the centre, towards Jerilderie about 8 miles to the west, about 10 miles to the south, and about 8 or 10 miles to the east. In that area there would be about 30,000 acres under cultivation this year. Just outside that area and between Berrigan and Finley there would be about 6,000 acres more, the produce of which would come to the Berrigan line. I have not taken the land on the other side of Finley into consideration at all. You may say that the produce of 40,000 acres, approximately, would come on to the railway if it were constructed.
193. The wheat growing country would be more directly tapped by an extension to Berrigan than by an extension to Finley on the one side, or to Savernake on the other? Yes; I consider that Berrigan is about the centre of the wheat-growing area.
194. How does this increase of cultivation area come about. Is it due to additional land being taken up, or to the original holders increasing their area under cultivation? It has come about from the original holders increasing their area under cultivation, and also from other persons coming to the Colony and leasing land at 5s. an acre with the option of purchasing it.
195. From whom have these persons leased or purchased their land? From the owners of Momolong, Barooga or Tuppal estates. From 7,000 to 8,000 acres are under cultivation upon what is called the "halves" system.
196. At any rate there has been a considerable increase in the cultivation in the district since 1892? Yes.
197. Can you assign any reason for so great an increase in so short a time? I think the increase has been caused mainly through farmers coming over from Victoria. Land was dear over there, and they could get it for so much less here. They could make a good deal more by growing wheat on this side also. Speaking for myself, I expected to see a railway made long before this. That was one of my reasons for putting in a crop there.

198. Do you wish the Committee to understand that a large proportion of the increase in the cultivated area is due to the fact that the residents of the district anticipated that a railway would be taken to it? I believe that is one reason. Another reason is that the price of wool has gone down, and many settlers saw that more was to be made out of wheat than wool. They have therefore combined wheat-growing with sheep-farming. From these causes the area under cultivation has been considerably increased. Mr. W. D. Drummond. 14 Jan., 1895.
199. What was the price of wheat in 1892? I think it was about 4s.
200. And in 1893? About 3s. 1d.
201. In 1894? From 2s. 3d. to 2s. 8d.
202. And in the present year? From 1s. 9d. to 1s. 11d. The price has gone up to 2s. in some cases.
203. To what extent has the cultivation increased since 1892 proportionately? There is about three times as much land under cultivation now.
204. Do you really think there has been an increase of from 40,000 to 170,000 bags of wheat produced in the district? Yes; there must be that increase.
205. Notwithstanding that the price of wheat now is less by one-half than it was in 1892? Yes.
206. Do you think the fact of wheat being at so low a price this year will cause a quantity of land to go out of cultivation? I hardly think so, as the cultivators at the present time cannot turn their attention to anything which will bring them in any more.
207. Can they make a living out of farming with wheat at 1s. 9d. or 1s. 11d. per bushel delivered here? I think that if they are not too much involved they can make a fair interest yet at that price.
208. Supposing there is no immediate prospect of an increase in price, do you think the acreage under wheat will continue to be what it is? If the price goes much lower than it is at the present time, I do not think there will be any increase in the area; but I think that at present prices there will be fully as large an area, if not a greater area, under crop next year. I know of several instances in which farmers have cleared more land with a view to cropping it next season.
209. There is still a large area of wheat-growing land in the district which has not yet been brought under cultivation? A considerable area.
210. Have many of the farmers in the locality sold out lately? None.
211. Does any portion of the wheat raised in the district you have named find its way to Victoria for shipment? Not of the area I have stated.
212. What is the distance from Berrigan to the nearest railway station on the Victorian side? I suppose it would be about 22 miles to Cobram.
213. Wheat grown nearer the river would naturally cross the Murray for disposal? It depends. If the millers were giving what they should give, wheat should come here this year instead of going to Victoria.
214. Is any wheat finding its way to Victoria for sale? No; the duty is too high.
215. Supposing there is no prospect of an increased price, and the quantity produced is largely increased, the only outlet would be shipment through Victoria to Great Britain? If there were a railway to Berrigan, I do not think it could go through Victoria at the present rates.
216. Supposing you had a railway to Berrigan now, and the price of wheat remained the same, would you be able to send it along our lines, and ship it from Sydney to Great Britain, or would it be cheaper to send it by way of Victoria for shipment? If there were a railway to Berrigan it would be cheaper to send it to Sydney.
217. Have you gone into the cost of carriage? I know the rates between Jerilderie and Sydney, and between Cobram and Melbourne. The rate from Jerilderie to Sydney is 15s. 6d., and from Cobram to Melbourne, 13s.
218. Is there not a decided balance in favour of the Cobram route? As against that, the wheat going to Sydney goes down to Darling Harbour, and can be shipped from there direct. In Melbourne, it costs 1s. to cart the wheat from the railway to the ship. Then there is the cartage from Berrigan to Cobram—that would be from 1s. to 1s. 3d. per bag. The price is about 10s. per ton roughly.
219. You think that would decidedly close that route? Yes. Then for the last two years the road before you reach Cobram has been in a very bad state. It is sand-hilly, and the punt there will not carry large waggons. If you had a load of 15 or 16 tons you could not get across at Cobram.
220. You know the Finley district? Yes.
221. Do you know the stock route from there to Jerilderie? Yes.
222. If the proposed line is extended to Berrigan do you think the farmers in the direction of Finley will cart their wheat, as at the present time? Those on the western side of the stock route may do so, but all those on the eastern side of the route will come in to the line—either at sidings or at the terminus.
223. Does the country on the western side of the stock route include the whole wheat-growing area of Finley? No; there are from 7,000 to 8,000 acres grown between Berrigan and Finley, but outside of the line I have already given you.
224. Once they have loaded their drays there you think they would come in direct to Jerilderie? Some of them may do so.
225. What is the rate of carriage per ton from that district to Jerilderie? About 10s.
226. Do you think they will continue to cart at 10s. per ton if by carrying it to the Berrigan terminus they can get it taken on the railway to Jerilderie for 2s. 6d. per ton? They could get it taken to a nearer point on the Berrigan line than Berrigan itself. Many farmers on the west of Finley would not be more than 12 miles to the west of the proposed railway.
227. If the price of wheat were very low do you not think there would be some danger of the farmers themselves competing with the line? None whatever.
228. You think the Government would get the whole of the produce of the district on the railway? So long as the road from Berrigan to Jerilderie is left as it is.
229. But supposing the road were improved;—it does not follow that because the railway is made the road would fall into disrepair? No. Still the rate from Berrigan to Jerilderie is from 9s. to 10s. a ton. Many farmers will not cart their grain here even now at that price, for the simple reason that it does not pay them. If the railway were constructed and they could get their wheat carried at 2s. 6d. per ton they certainly would not cart it here themselves.
230. Will the wheat stand 2s. 6d. per ton? It has to stand from 10s. to 12s. 6d. now; surely it will stand 2s. 6d.
231. Is all your wheat sold in Jerilderie at the present time? Some of it is sent on to Sydney or to Cootamundra for storage.

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232. Is all your wheat gristed here? No; a lot of it goes to Sydney. The bulk of it goes to Brunton and Gillespie. I think Mr. Wise himself took about 25,000 bags. The balance goes to Sydney.
233. In 1892 the farmers offered to pay 2d. a bushel for produce from Berrigan to Jerilderie until the line paid;—how much would that be per ton? It would be 6s.
234. If you were willing to pay 6s. a ton when the price of wheat was 4s. a bushel are you prepared to pay 2s. 6d. now that the price is 1s. 11d. a bushel? We are better able to pay 2s. 6d. at the present price than we were able to pay 4s. at the price we obtained in 1892.
235. I suppose the price of wheat fluctuates from day to day and from week to week? Yes.
236. And it would be a gain to the producer to be able to take advantage of a rise in the market, if he could get cheap and safe transit by railway? Yes; at the present time we are compelled to send in our grain whatever the price may be, before the roads get bad, or it would cost us half as much more again to get it in. We are compelled at the present time to send it in and to pay for storage. If we had a railway we could hold it at home on our farms and save storage, being able at the same time to send it away with certainty when prices suited.
237. The railway would give you the advantage of all the intermediate markets between here and Sydney? Yes, as well as up Hay way.
238. What else is produced in your district besides wheat? The produce there is principally wheat. Oats, barley, and wool, of course, are produced. We could produce large quantities of fruit and butter, but the absence of a railway is a great drawback.
239. Is it suitable country for dairying? Yes.
240. Have any creameries been established there? No; on account of there being no railway.
241. On account of the warm climate you could not get your butter to market in time? Just so.
242. You will notice that the proposed railway passes through a number of selection holdings in the vicinity of Berrigan? Yes.
243. Do you think the owners of those selections would be prepared to give the land required for the railway? I do not know whether the whole of them would be prepared to give the land required, but there are other farmers who are served by the railway who would be prepared to buy the land from the others at a reasonable price. In that case, of course, it would cost the Government nothing.
243½. On what authority do you speak? Has there been any public meeting or organisation of which your statement is the outcome, or does it amount to merely a surmise? A good many farmers have thought the matter over, and they have arrived at the resolution of contributing towards the purchasing of the required land.
244. That is to say the farmers through whose land the line does not pass, but who would be benefited by the construction, will be prepared to contribute towards the cost of the land which is taken? Yes.
245. Is that so far as the farmers only are concerned? Of course the purchase, if it became necessary, would include the station property as well, within a reasonable distance of Berrigan.
246. What is the average value of land in the Berrigan district? From £3 10s. to £4 per acre.
247. Has any land changed hands lately at that price? Yes; it changed hands last year at £3 15s.
248. If the extension of the line is conditional upon the owners giving the land, and if neither the owners nor the farmers benefited can arrive at any arrangement, you see what a predicament you may be in? Of course, when you go to Berrigan you will be able to interview the landowners themselves and the farmers of the district, and they will tell you what they are prepared to do.
249. So far as your knowledge goes there is a disposition among the farmers to make an arrangement for the purchase of the required land, so that it may not cost the State anything? Yes; when Mr. Eddy was down here he said that that would be one of the conditions attaching to the construction of the line. There were a good many farmers present that day, and they talked the matter over. It was then understood that if the landowners along the line wanted compensation it would be contributed in shares, and made it up in that way. I understood from what was said that that was the intention.
250. Were you present at the interview between the farmers and Mr. Eddy? Yes. As it happened some of the farmers who had land along the route were in Melbourne at the time. For instance, there were Mr. Greggery, Mr. M'Donald, and Mr. Wilson, but I think you will receive their evidence at Berrigan.
251. From your knowledge of the district, do you think the best route has been selected for the proposed railway? I know where it goes at the other end, but I have not been over it at this end.
252. *Mr. Roberts.*] How long have you lived at Berrigan? About seven years.
253. What is the size of your holding? Five hundred and fifty acres. We purchased the land at from 30s. to £2 per acre about seven years ago.
254. And now you think that the land in the district is worth from £3 15s. to £4 an acre? That is the average price. Places close to the town would be worth more.
255. What has caused this increase in the value of the land? Persons who were previously on it were not putting it to purposes to which it is now put. Since farming has been started it has been found that the occupiers are able to make more out of it than they were making previously.
256. What is the average yield per acre? About 17 bushels, taking it over a number of years.
257. What is the largest yield you have obtained? The largest average yield I have obtained has been 22 bushels.
258. Where is your holding? It adjoins the township to the south-west.
259. In which direction from Berrigan is the largest number of farmers? Berrigan is surrounded by farmers.
260. You estimate fully 30,000 acres under cultivation would be served by this railway? Thirty thousand acres under crop at the present time.
261. Is the land easily cleared? It costs from 7s. to 14s. an acre, according to the timber on it.
262. Is there much clearing going on now? Generally people do clearing just after harvest, and in the winter time.
263. If this line could be constructed, you think it is likely that more of the large landed proprietors would throw land open to agriculture? Mr. Wilson himself told me that he would split his station into two, and that all the land on the west side of the line he intended to sell.
264. What is the area on the western side? Probably 10,000 acres.
265. Increased cultivation there would materially increase the traffic? Yes.
266. Supposing a first-class metalled road were constructed between Jerilderie and Berrigan, do you think it would be received with more favour by the farmers than a railway? Not at all.
267. They would much prefer a railway? Certainly.

Mr. W. D. Drummond. 14 Jan., 1895.

268. Do you think it likely that the farmers living towards Murray Hut would make much use of the railway? Some of them may say that they would not, but, speaking for myself as a resident of Berrigan, I know that if a railway were taken from here to Finley I should make use of it.
269. What is the exact distance from Berrigan to Finley? Thirteen miles. The advantage that a farmer would have as against the present state of affairs is that he would be able to leave his own home in the morning with his load of wheat and get back at night. Farmers much prefer a distance which would admit of their getting home on the same night. Speaking for myself, I know that if I lived within 14 miles of a railway I should take advantage of it, and I think most other farmers would do the same.
270. You think that a railway to Berrigan would serve a much larger number of farmers than a railway to Finley or Savernake? Yes.
271. *Mr. Davies.*] You are a practical farmer? Yes.
272. You have been following that pursuit all your life? Pretty well.
273. What does it cost to plough, sow, reap, and bag per acre? About 10s.
274. Including the seed? Yes.
275. What would be the cost of haulage from Berrigan to Sydney? About 4d. per bushel.
276. Do you think that rate of carriage, supposing wheat remains at its present price, would be sufficient to induce the agriculturist to stick to farming pursuits? I think that if the present price does not recede, the farmers will continue to increase their acreage under wheat.
277. Supposing a farmer has his holding free, and has to incur the expenditure you name, what profit would be left? He would be left with about 14s. an acre profit.
278. Taking the capital cost of his farm, and all the additional charges you have spoken of, with the present prices of wheat, you think there would be a reasonable profit? There would be a profit.
279. And you think that the farmers at present prices will continue wheat-growing? They cannot do better at anything else.
280. Could they not combine sheep-farming with wheat-growing? Nearly all the farmers combine the two things. One assists the other. Of course many farmers grow wheat alone.
281. To what extent would the railway be of benefit, if it went to Berrigan, as far as carriage is concerned? It would mean 10s. a ton to Berrigan.
282. It would also enable the farmers there to secure the best market? Yes; they would be able to send the wheat away when it suited them.
283. They would be able by direct communication with the metropolis to secure better prices for their products? Yes.
284. Do you think that would lead to a larger area being put under cultivation? If they can make wheat-growing pay at the present prices of carriage, they can surely make it pay with a railway, and that being so, it is pretty certain that more land would be cultivated. Speaking for myself, I should certainly put more wheat in.
285. Does much of the wool grown in this district go from New South Wales to Victoria? Yes.
286. Where does it cross? At Yarrawonga. Cobram is the nearest point, but there is a bridge at Yarrawonga, while there is only a punt at Cobram.
287. How near would a line to Berrigan be to the stations that send wool *via* Victoria? It would run through the property of some of them.
288. And would their wool still go to Melbourne? I do not think so. Some of the clips have already gone to Sydney by special arrangement, and I think that in other cases, even though at a slightly increased cost, the clip would go to Sydney if the railway were made.
289. But that is only a surmise on your part? Yes.
290. What would be the difference in freight? I do not know, but a man would hardly trouble to cart 25 or 30 miles with a railway at his door. Of course, the difference in railway rates is very much in favour of Victoria.
291. How far does the rebate line extend as regards wool? The line runs between Jerilderie and Berrigan.
292. Is there any wool coming from the Berrigan district to the Jerilderie railway station at the present time? The Wonnamurra wool went to Sydney this year, and the Tuppal wool also went to Sydney under special arrangement. There were 2,500 bales at a reduced rate.
293. You think that if the railway were made to Berrigan the squatters would send their wool over it to Sydney? Yes; if the charge were not higher than for taking it by team to Yarrawonga, and thence by rail to Melbourne.
294. You advocate the construction of the line as shown on the plan? I want a line from Jerilderie to Berrigan. I am not particular which way it goes, but I should advocate as straight a line as you can possibly make.

Miss Margaret Harvey, Jerilderie, sworn, and examined:—

Miss M. Harvey. 14 Jan., 1895.

295. *Chairman.*] You are a resident of Jerilderie? Yes.
296. You are the owner of half an acre of land, which previously belonged to E. Horgen—part of allotment 16, I think? Yes.
297. The Government desire to construct a railway from Jerilderie to Berrigan, which will pass through that land; do you feel inclined to give to the Government any portion of your land which may be required? No.
298. What do you think your half acre is worth? £25.
299. Are you of age? No; I am 19 years old.
300. Have you any guardians? My mother is alive, but my father is dead.
301. Supposing the Government took one-half of your land, leaving you the half fronting Kennedy-street, what do you think the portion they would take would be worth? The land is so small that if they took one half of it the remainder would be of very little use to me.
302. What do you think the half would be worth? About £18.
303. Are there any improvements on it? If you took the back half we should have to remove some improvements.
304. What did you give for the land? £10.
305. How long ago? Nine months ago.

Mr. William Davis, Jerilderie, sworn, and examined:—

Mr. W. Davis. 14 Jan., 1895.

306. *Chairman.*] You are a resident of Jerilderie? Yes; at present.
307. You are the owner of allotment 18, containing 1 acre, fronting Kennedy-street? Yes.
308. What do you estimate the land is worth? It will be worth very little if the railway is taken on to Berrigan.
309. Are you prepared to give a portion of it to the Government for railway purposes? No.
310. What do you consider it worth? I will take £10 for it if the railway goes through it.
311. Supposing the half fronting Kennedy-street were taken, and the other half were left to you? I will give the Government the back half for £5.

Mrs. Eliza Jane Spriggs, Jerilderie, sworn, and examined:—

Mrs. E. J. Spriggs. 14 Jan., 1895.

312. *Chairman.*] You are a resident of Jerilderie? Yes.
313. Are you a married woman? Yes.
314. Is your husband alive? Yes.
315. Are you the owner of allotment 46, containing 2½ acres? Yes; it is my own private estate.
316. You can dispose of it as you think fit? Yes; it is my own property.
317. Are you prepared to give the Government any land they may require for the construction of the proposed railway? No; I could not do that.
318. What do you think your 2½ acres are worth? I gave £18 for them, and I daresay I should want about £20 if I sold them.
319. Supposing a "V" shaped piece were taken out of the back of your property, coming about a chain and a half along Mr. Wise's line, what would you want for it;—would you sell it at the same rate as that which you have put upon the whole area? Yes.

Mr. John Carroll, herdsman of Jerilderie Common, sworn, and examined:—

Mr. J. Carroll. 1 4 Jan., 1895.

320. *Chairman.*] What are you? I am the herdsman of Jerilderie Common.
321. You are the owner of allotment No. 15, of 2 acres, fronting West-street? Yes.
322. The Government have an idea of building a line from Jerilderie to Berrigan, and it appears that a portion of the back of your land will be required;—are you prepared to give the area of that land to the Government? No.
323. At what do you value the 2 acres? At £30.
324. Are you prepared on that basis, to sell the Government any portion of your land. Supposing they took ¼ of an acre at the back, would you be prepared to sell it at that rate? If they took any I should prefer to sell the lot of it.
325. How long ago did you buy it? Twelve months ago.
326. What did you give for it? £10.

TUESDAY, 15 *JANUARY*, 1895.

[*The Sectional Committee met at the Court-house, Jerilderie, at* 10 *a.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

The Sectional Committee further considered the proposed Railway from Jerilderie to Berrigan.

Mr. Thomas Walter Wise, Mayor of Jerilderie, sworn, and further examined:—

Mr. T. W. Wise. 15 Jan., 1895.

327. *Chairman.*] What are you? I am Mayor of Jerilderie. I also own a mill in the town.
328. Have you been living in the district long? A little over ten years.
329. Have you a good knowledge of the resources of the district? Yes.
330. And you have a special knowledge of its wheat trade? Yes.
331. I suppose wheat would furnish the main traffic for the railway under consideration? Yes.
332. *Mr. Roberts.*] When you first came to Jerilderie, had the railway been opened to Narrandera? I came here at the latter end of 1884, and the railway was opened early in 1885.
333. You then erected a mill here? Yes.
334. It was the fact of the railway coming to Jerilderie, I presume, which induced you to erect the mill? Yes.
335. Was there much wheat produced in the district at that time? None. In the first year I did not buy 100 bags of local wheat.
336. But you had an idea that this would become a wheat-producing district? Yes.
337. How far from here, and in what direction, do you get into the wheat-growing country? The country which is principally used for growing wheat commences about 10 or 12 miles out, in a south-easterly and south-westerly direction. It extends from that to the Murray. The country nearer—that is to say, about 4 or 5 miles out—is also fairly well adapted for wheat-growing, but the land is not available; it is held in large estates.
338. I suppose you have personally visited pretty well the whole of the wheat-growing country between here and the Murray? Yes; from Tuppal, on the west, to Clear Hills, on the east, right down to the Murray. Of course, there is wheat-growing country further out, but it is outside the reach of this district.
339. From how far would the wheat come into Jerilderie from the southward? From within about 14 miles of the Murray, it has a tendency to come this way. Further on it has a tendency to go the other way, but it depends upon local conditions—market, and so forth.
340. Have the farmers much difficulty in getting their produce to Jerilderie? They have. 341.

Mr. T. W. Wise. 15 Jan., 1895.

341. The roads are at times impassable? Yes; the farmers commence harvesting on the 1st December, and the harvest generally continues till the latter end of January. They get the wheat carted by teams at an average price of 1s. a bag. Further off nearer the Murray they have to pay 1s. 3d. The wheat has to be carted during December, January, February, and March. It must be carted within these months, because if the rain comes on at the latter end of March, the roads become so bad that the farmers cannot get it carted at all; they have to pay as much as 1s. 6d. a bag, and it is often difficult to get it carted at any price. Some are getting their carting done this year at about from 10d. to 1s. a bag; that is about 9s. a ton.
342. From your knowledge of this large wheat-growing district, what locality would you put down as the centre? It would be hard to give a definite answer to that question. One part may be as central as another—anywhere between Berrigan and Finley, or either of those places would be considered central. Berrigan would be considered fairly central.
343. If you will look at the map before you, you will see that the coloured portion embraces a 20-mile radius from Berrigan. Could you tell us from that map where you think the centre would be? The bulk of the agricultural settlement is between Berrigan and Finley.
344. Is there more settlement to the west of Berrigan than to the east and south? Yes; and some of it would be affected by the railway. Of course Berrigan would be more central for Savernake.
345. You think one would be justified in speaking of Berrigan as the centre of this large wheat-producing district? Well, it is well within the mark—you might call it the centre. The conditionally-purchased land is more to the west, but then on the other hand Berrigan is more central for some of the conditionally purchased land in the neighbourhood of Savernake.
346. Does the Berrigan district or the Finley district send most wheat to Jerilderie? I could not say. I think if anything, Berrigan sends most. The figures last year were not so good for Berrigan, because there was no water on the road. The wheat that otherwise would have come from Berrigan, went across to Victoria. The Finley road is a much better road for teams. With the facilities which exist this year, however, there will be a good deal more from Berrigan.
347. Have you in your possession any record of the increase in the production of wheat in this district during the last ten years? When we started ten years ago, there was very little wheat grown here. We imported our wheat from Coolamon and Junee. Next year from 8,000 to 10,000 bags were produced, and the yield has been gradually increasing every year with the exception of one year, when there was generally a bad harvest. We expected in the present year 150,000 bags, and but for the bad weather, that estimate would have been fully realised. I think, however, that the estimate will not be fulfilled because of the rainy weather. It is unfavourable harvesting weather.
348. From your knowledge of the requirements of the district do you think it would be a wise thing for the Government to construct a railway from Jerilderie to Berrigan? I do, certainly. I think it would do a good deal towards helping those already on the land to remain upon it, and to conduct their holdings with some profit.
349. You thing it would give a further impetus to farming? Yes; it would enable the farmers to go into other things besides wheat growing. They would not be so entirely dependent on wheat. The land is suitable for other things besides wheat.
350. If this railway is constructed, do you think any of the holders of land would be inclined to either sell or lease it to persons requiring it for farming purposes? I do.
351. In other words you think the construction of the line would tend to open up the country? Yes.
352. And to the settlement of a large farming population upon the land? I do.
353. *Mr. Gormly.*] Is there any quantity of agricultural land about Jerilderie except in the direction of Berrigan, Savernake, and Clear Hills? There is any amount. From Deniliquin right up to Albury there is good agricultural land. The land immediately south of Jerilderie is not considered good for agriculture, but immediately you get into the timbered country you find good agricultural land.
354. Has there been a considerable quantity of this land used for wheat growing? Not a great deal, considering the whole area.
355. Are you aware of the quality of the crops produced from the land? It is very good. I think you might put down the average for the last ten years at 16 bushels to the acre.
356. That would be within a few miles of Jerilderie? Yes; we get into timbered country 4 or 5 miles away.
357. If this line is constructed do you think there is a probability of land within 5 or 6 miles from Jerilderie being used for agriculture? The railway would not influence it a bit, but the land at the same time is suitable for agriculture.
358. I presume it would bring traffic to the proposed railway if used for that purpose? A certain amount perhaps, but it is very close to the existing railway terminus.
359. Have any other crops but wheat been produced in the neighbourhood of Jerilderie? Not much has been done, but there has been sufficient to show that other things could be grown. Barley, for instance, has been grown to some extent, no finer barley is grown anywhere in the world than is produced here.
360. But at the present time there is no market for it? No.
361. That I suppose is the reason why barley has not been produced here? Yes; a few thousand bags have been produced this year, but there is no market. We import our malt from New Zealand and other places, and the growers find it impossible to sell their barley.
362. I suppose you know that barley can be harvested some time earlier than wheat? Yes.
363. If the farmers devoted some of their land to barley they would be enabled to get that crop harvested before the wheat crop came in? Yes.
364. Do you not think it would make some of the farms more profitable if the harvest were extended over a greater number of months. Would it not give the farmers much more to do in the months when they are comparatively idle? Of course the one thing necessary is a market. If all the malt in New South Wales were made from local barley, it would put thousands into the pockets of the farmers.
365. Do you know of any other crops which have been grown here besides wheat and barley? Yes; oats—Algerian oats—especially.
366. Are oats produced in quantities in such a dry climate as this? Yes; I have seen as much as 40 bushels to the acre produced.
367. Have any of the farmers grown lucerne or artificial grasses for the carrying on of dairying? To a limited extent some have gone in for lucerne.

Mr. T. W. Wise. 15 Jan., 1895.

368. Have the lucerne crops been found to be a success? When the crops have been put into new soil they have been a success. I know one farmer who has 20 or 30 acres of lucerne. He reared all his late lambs upon it, and they have come on so well that they are better than the earlier lambs.
369. Do you think that dairying might be carried on here in connection with wheat-growing? Yes; mixed farming would be a great deal better.
370. Do you think that if there were greater facilities for sending produce to market the district would become more productive? Yes.
371. If this line were constructed to Berrigan would it be a means of putting more traffic on to the existing line to Narrandera and other lines extending further on to Sydney? Yes; it is bound to do that.
372. Is the population of the district to the south of Jerilderie increasing or diminishing? It is slowly increasing in the district all round.
373. Is it diminishing in any portion of the district? No; I do not think so.
374. Do you see any indication of the population located in the direction of the proposed railway becoming smaller? I see no such indication.
375. The farmers have not been leaving the district? No.
376. Do you think the area of land under grain in the district of Berrigan, Savernake, Clear Hills, and Murray Hut is likely to increase? I do.
377. I suppose you often come into contact with the farmers and know pretty well what they propose to do? Yes.
378. And you think they are likely to increase the area under cultivation? I think they are.
379. Are the farmers fairly well satisfied with the profits attaching to the cultivation of the land? Not at present prices. They are not remunerative enough. As far as I know the present price is lower than has ever been known in any of the world's markets.
380. Do you think the lower price would be likely to cause the farmers to discontinue the growth of wheat? I do not think so, unless it continued for several years. Of course the farmers are living on in the hope of a change. Some of the farmers who are in a bad way, of course, will have to go down. They cannot continue at the present prices. They may make another start under different conditions. Those who own their land and implements, and who do not owe any one 1s., may be able to keep on for a few years, but those who are in difficulties will not be able to do so at present prices.
381. Since you have been in Jerilderie has the cost of cultivating the land here increased or diminished? It has diminished.
382. Do you not think that cultivation is now carried on more cheaply than in former years? There has been very little diminution in cost during the last ten years. There has not been much improvement in that way.
383. Agricultural machinery has not improved very much? Not more than to the extent of 1s. per acre.
384. And without improved agricultural machinery wheat would not likely be produced at a cheaper price? There is no probability of its being produced more cheaply than at the present time. There is only one way, and that is to cheapen the land.
385. I suppose a farmer and his family who do most of their own work are to a great extent compelled to cultivate a portion of their land in order to find work for the members of the family? Yes.
386. And for that reason they may continue to cultivate at a small profit? Yes.
387. And be fairly satisfied with the result of their industry? They have to be. Of course many farmers are continuing in the hope that the market will improve.
388. I suppose you have a pretty intimate knowledge of the commercial and grazing pursuits of the district, and the profits attaching to them? Yes.
389. Have the profits of those industries gone down as well as the profits from farming? Not to the same extent.
390. You think farming has become more unprofitable than other occupations? Yes.
391. Will not that be the means of diminishing the yield of wheat? It will certainly check it. If the farmers knew for a certainty that wheat would be 2s. 6d. a bushel next harvest, I think the acreage under cultivation would be increased 25 per cent. Many of them would employ labour; but fearing that prices would not be better, they confine themselves to what they can do with their own hands or with as little labour as possible.
392. If the land goes back to grazing again, not only the agricultural population but the population of the towns will be likely to decrease? Decidedly it will. This part of the country will go back into the condition of the western plains.
393. Do you see any prospect, if the farmers do not continue to produce wheat as extensively as they do now, of any other agricultural industry making up for that form of production at a profit? Yes; with facilities to get to market, and to send their produce to the centres of population, such as Sydney and Goulburn, they could grow hay, and they could produce butter at a profit, to say nothing of fruit.
394. Are there any extensive orchards on the farms in the district? There are not very extensive ones here, but some in the Berrigan district have been very successful. Some of them are close to the town.
395. I suppose the fruit will be sold principally in the local market? Yes; it might be sent down to Narrandera sometimes.
396. It has not been proved that fruit could be produced here and sent to Sydney at a profit? I do not know of any being sent.
397. If there were any considerable production the local market might soon be over supplied? Easily.
398. It has not been proposed to carry on the industry of canning or drying fruit? Some of the farmers are proposing to do some drying. The apricots here are very prolific, and I have heard the farmers thought of drying some themselves; but it has not been done yet to any extent.
399. *Mr. Davies.*] How long have you held the office of Mayor? Three years.
400. How long has the borough been incorporated? Five years.
401. What has been the growth of your municipal revenue during the last few years? There has been no material increase. Including the subsidy, the revenue is a little over £700.
402. You get a subsidy of £1 for £1 for the amount raised within the limits of the municipality? Yes; we raise about £350 of ordinary rates.
403. How many ratepayers are there within the municipal area? I could not say. There is a population of from 730 to 750.

404. Has there been an increase in the population here? It has been increased by about 150 since I gave evidence before the last Sectional Committee which visited the district. Mr. T. W. Wise. 15 Jan., 1895.
405. Your revenue has not increased much? No; it has increased very little. More houses have gone up, but the effect has been to reduce rents and to reduce the amount of the rates.
406. What are your liabilities? We owe about £40 or £50 on the municipal account. We are trustees of the common, and we owe money on account of that.
407. You have a water supply? Yes; we have a liability to the Government in connection with that.
408. What was the cost of the works? About £6,000.
409. What revenue is derived from them? We have not struck a water rate; we are just doing so now.
410. How long have you had a water supply? It was handed over to us a few months ago.
411. You propose to strike a water rate of how much? One shilling in the £. We think that will be sufficient to pay interest and working expenses.
412. I suppose the reason the district has not progressed more is that the land is locked up in the hands of so few persons? Yes. Hundred of persons in Victoria are anxious to come over here and take up agricultural land when it is available.
413. Do you think the construction of a railway from Jerilderie to Berrigan would improve matters in that respect? It may induce some of the larger land-holders to throw their land open. They would throw it open to-morrow if they thought there was a demand for it. Until the price of land comes down, and profits increase, there will be no prospect of the large owners selling much of their land.
414. With the present price ruling for wheat, would it pay the agriculturist to take up land under the terms and conditions upon which it has been taken up at Tuppal and other places? It would not pay on the terms which have hitherto been paid to the landholders.
415. You do not think the agricultural lessees, with the present price of wheat, would be able to continue to pay the estate owners the rental they are now paying? No.
416. Even though the railway may give them better facilities for getting their produce to market? Quite so.
417. You think the whole question depends upon an alteration in the price of the produce? Yes; and in the price of the land.
418. Have you, in your long milling experience, known wheat so low in price as it is now? No.
419. What has been the increase in the production of wheat during the last two and a half years? Within the last two years the acreage has increased from 35 to 40 per cent., and the yield proportionately.
420. Where has that increase principally taken place? Due south on the Barooga country, and also on Tuppal and Momolong.
421. Is the land more suitable for the cultivation of wheat at or near Berrigan than in other parts of the district? I do not think there is a bit of difference in the land between Clear Hills on the east and Tuppal on the west. But as you get further east beyond Clear Hills I do not think the land is quite so good.
422. Will the produce from this additional area of cultivated land find its way by Jerilderie to Sydney? Some of it. The produce of all the land within a certain radius of Berrigan would go on to the proposed line. Of course, when you get a certain distance to the west it will come in by team. Any wheat on the eastern side of the travelling stock reserve would, I think, go to Berrigan, but the wheat produced on the western side of the reserve would come to Jerilderie by team. Of course, a good deal depends upon the state of the roads.
423. What would it cost, in your opinion, to haul wheat from the Berrigan district to Jerilderie? About 9s. a ton on the average.
424. From any portion of the Berrigan district? Yes. As you get further on to Finley it comes to 11s. 3d. per ton.
425. How much a bushel is it? About 3d. a bushel at 9s. per ton.
426. If the farmer can get his grain carried on the railway from Berrigan at 2s. 6d. a ton will that not be inducement to him to send it by Jerilderie and other markets? Decidedly.
427. Would that reduced carriage help to compensate farmers and producers to any large extent for the low price of wheat? It would help those who took full advantage of the rates to a very great extent.
428. How much a bushel would 2s. 6d. a ton be? About five-sixths of a penny. Of course the farmers living alongside the line would be in a better position than those further off, but within a distance of 10 or 12 miles the farmers would be able to cart themselves.
429. You think that the proposed railway to Berrigan will be a substantial advantage to the producers of the district? Yes.
430. How far on each side of the proposed railway do you consider the farmers would be served by it? Till you get out about 10 or 12 miles. As you go to the south the distance would be greater. Of course if a farmer were 5 miles from the railway and 10 miles from Jerilderie, and if we had to pay 2s. 6d. a ton on the railway, he would give cartage to Jerilderie the preference.
431. The railway would be a great advantage to those living to the extreme south of the Berrigan district? Yes.
432. Would any additional wool beyond that already sent on our railways come to them if this line were made? It would depend a good deal upon the local rates. If the Victorian rates were lower the wool would of course go *via* Victoria. I have seen the Yanko wool go to Deniliquin. It is entirely a question of local rates. I think the Momolong wool will go on to the railway, and a good many of the graziers from Berrigan would send there.
433. Is it not a fact that a good deal more wool has gone on to the railway from the present clip than any previous clip? A good deal more.
434. I suppose it is likely that the increased railway facilities might draw other wool on to our line? Yes.
435. I presume a good deal of the wool in the district finds its way over to Victoria? The Wonnamurra clip has always gone to Sydney. The Yanko and Coree clips also go there, but as a rule the clip from stations to the south and south-east of that go to Melbourne.
436. What would be the production of those stations which are sending their wool to Melbourne? I could hardly say, but I should imagine that it would not be less than 5,000 bales.
437. You think a portion of that wool, if liberal rates were offered, would be carried on the proposed railway? Yes.

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438. Do I understand you to say that the farmers combine wool-growing with wheat-growing? To a limited extent the farmers do so. On some of the farms the wool crop is just as valuable as the wheat crop.
439. What is the primary cause of so much land being put under wheat cultivation during the last few years? You see, when the farmers first go on their land they have only their stock. It takes some time to get the land ready for agriculture. After the timber has been rung for a few years it is comparatively easy to clear. Then there has been the low price of stock and wool. The farmers and graziers want to supplement their produce, and they have increased their agriculture.
440. What is the lowest price wheat should realise to leave a margin of profit to the producer? Two shillings and sixpence delivered at the railway or 2s. 3d. on the farm. That is the lowest price which would give them any fair return for their labour.
441. You know the country through which the proposed line will go to Berrigan? Yes.
442. From your general knowledge of it, you advocate the construction of the line? Yes.
443. You know the character of the railway it is proposed to construct;—do you think such a line with a speed of 15 miles an hour, and with a daylight traffic, will be sufficient to meet the requirements of the district for many years to come? Yes; thoroughly well. If the speed were only 10 miles an hour it would be enough for a great deal of the traffic which would pass over it.
444. You have had some experience in earthwork formation? Yes.
445. Take a uniform rise of 6 inches with about 18 feet in width,—what should that cost? Of course, an ordinary road formation is different from a railway formation.
446. But do you think an estimate of £225 per mile is too much for the earthworks required for the proposed railway? If it were not more than 6 inches in depth it could be done for about 10s. a chain.
447. Have you had work of this kind carried out in the municipality? Yes; we have had much heavier work done for very little more.
448. The country between here and Berrigan is pretty level? Yes.
449. Therefore, no considerable earthworks would be required? No.
450. From what distance by train do you have to bring your ballast? Fifty miles.
451. What did it cost you per cubic yard? Eight shillings. We get screened gravel at 5s., and freight and unloading are about 3s., and it makes very good ballast—much better ballast than you see on the Jerilderie line.
452. If ballast were required for the proposed railways there would be no difficulty in getting a good supply? No.
453. But it would have to come a distance of 50 miles? At this end—yes; but at the Berrigan end you could get an abundance.
454. It has been suggested that the line should be constructed without ballast, but that additional sleepers should be laid, forming practically a wooden floor;—do you think that would stand the traffic? I should think it would answer very well at the proposed speed.
455. You think such a line would be perfectly safe? Yes.
456. And not likely to cause accident? No.
457. I suppose, in your opinion, the construction of a railway from here to Berrigan would be better than the making of a macadamised road? Yes; it would take more in proportion to make a macadamised road than the benefit from its construction would be worth.
458. Do you think a macadamised road between these two points could be made for £1,800 a mile? I do not.
459. And you think that a light railway of the character proposed would be sufficient for many years to come? Yes.
460. *Mr. Lee.*] You gave evidence before the Sectional Committee, in 1892, when it was inquiring into the proposed extension between Jerilderie and Deniliquin;—you then said that the quantity of wheat produced in 1891 was 29,150 bags, and that 6,000 bags went to other buyers, making a total of 35,150 bags; in 1892, you said that 35,000 bags went through your hands, and that 15,000 bags went to other buyers, making a total for the year of 50,000 bags;—those figures showed a large increase in the growth of wheat in your opinion, and you attributed the increase to the fact that the railway had been constructed;—have you seen any reason since then to alter your estimate? No. Of course, the figures I gave represented the wheat which came into Jerilderie. It did not represent all the wheat grown in the district. I suppose that about 20,000 or 30,000 bags went across the Murray through Victoria.
461. For what purpose? It was bought by Sydney millers and went into Victoria in bond, and round to Sydney by ships. The Victorian railway authorities offered special rates, which were an inducement, but they were abolished this year.
462. Mr. Harper, of the Railway Department, was in the district a few weeks ago;—did you see him? Yes.
463. Did you supply him with information? I think I did.
464. He has reported that the estimated quantity of wheat produced in the district this year is 153,000 bags;—do you think that is an exaggeration? It was not an exaggeration at the time the estimate was made—the crops promised it—but since then, on account of bad harvesting weather, I think it would be fair to reduce the estimate to 130,000. I estimate that fully 20,000 bags will be lost owing to the weather.
465. Since the season of 1892 there has been an increase in wheat production in the district of from 50,000 to at least 130,000 bags? You would have to add to the 50,000 bags the quantity which went to Victoria.
466. Mr. Harper's estimate is confined to a radius of about 20 miles of Berrigan? That would be about right.
467. You are aware that the Railway Commissioners rely almost solely on the wheat traffic to give them a return on the contemplated extension? Yes.
468. The Committee would be glad to know if there is likely to be any leakage, which would make the estimate subsequently unreliable? The only thing is this—the quantity of wheat which will pass over the line will depend upon the relative prices in Melbourne and Sydney. New South Wales, up to the present time, has not been producing enough for her own needs. The price in Sydney has been higher than the price in Melbourne per bushel, and it has paid the farmers to take this wheat a long way to the Sydney market. When New South Wales once has wheat for export the farmers within 10 miles of the Murray will send every bag of their wheat into Victoria. The cost of sending to Melbourne will be only about 18s. or 19s. a ton, including all charges, whereas to Sydney, even with a railway from Berrigan, the charge would be about 25s.

469.

469. Under those circumstances, the contemplated traffic by the railway would be almost entirely lost? There would be a certain radius which would not be affected by the Victorian railways, and within that I think you would get the necessary revenue. Before we attain the position of an exporting country, there will be a general increase in the area under cultivation, and in this particular district that increase is more likely to take place in the area affected by the proposed railway than nearer the Murray.
470. Is there sufficient good agricultural land to produce for the extension the revenue expected from cultivation in this direction? Yes.
471. In the event of our having federation and a free border, would that be likely to divert traffic towards Victoria? If once we reach the position of an exporting Colony, whether we federate or not, it will not make a bit of difference. If the duty were off to-morrow it would not make any difference, because the farmers ship their wheat, *via* Melbourne, in bond.
472. Inasmuch as Berrigan is a wheat-growing locality, is it not likely that flour-mills will, in course of time, grow up there;—if the wheat grown in the district were thus dealt with locally, how would that affect the traffic on the line? If the flour were ground at Berrigan, it would still have to be sent this way. In fact, they are more likely to send the flour than the wheat this way.
473. You see no probability of the district finding an outlet in another way? No. Several times last year an attempt was made to send the produce to Victoria, but it has always paid better to send it this way.
474. You are aware of the rebate line fixed in this district by the Victorian Railway Commissioners? Yes.
475. What effect has that line had upon the general traffic of this place? It has caused a good deal of general merchandise to be brought to Sydney, which otherwise would have come through from Melbourne. In the case of galvanised iron and certain heavy goods it might pay to get them from Melbourne, but in the case of other goods it would be cheaper to get them from Sydney.
476. How does the rebate system affect Jerilderie as a centre for store goods? It depends upon carriage. If the storekeepers find that it costs less from Sydney, he gets the goods there. In the first place, he is not bothered by the carriage from the Murray by dray, and he gets the goods straight from the merchants into his shop. He can get the goods, *via* Sydney, at all seasons of the year, and he is not bothered by teams.
477. As Berrigan is no great distance from Cobram, do you think that any great portion of the traffic which has now the benefit of the rebate, would be diverted on to the Berrigan line? Yes; I think so.
478. Do you know whether the construction of the line as far as Jerilderie has had the effect of inducing the large landholders to throw open the land for settlement? No.
479. The landowners close to Jerilderie have taken no advantage of it? No. But it has had the effect of causing wheat to be grown at Tuppal, Momolong, and Barooga. There has been no cultivation on the line itself between here and Narrandera.
480. What is the price of wheat in Jerilderie to-day? From 1s. 9d. to 1s. 10d. per bushel delivered here. Extra good samples would bring 1s. 10d.
481. It costs 3d. a bushel to get it carried from Berrigan here? Yes.
482. So that the farmers are really receiving 1s. 6d. per bushel net? Yes.
483. Seeing that the railway depends upon the continuation of wheat production in this district, do you think that if the present prices continue wheat production will continue here? I do not.
484. Do you see any sign of improvement in the price;—in other words, do you know any outlet which will encourage the farmers to go on? It is the general opinion among people in the trade that prices will harden. Producers in other parts of the world are affected, just as we are, by the low price of wheat, and they cannot afford to grow it cheaper than we can grow it, nor so cheaply. Producers elsewhere would starve at present prices. The probability is that there will not be so much wheat grown. Then, again, wheat may be used for other purposes—stock, for instance. Wheat is the most valuable cereal grown. It is far more valuable than oats and barley, and for the last fifteen years the price has ranged higher than the prices of those things. Now, however, it is very low. Owing to the over-production it stands at present lowest on the list. Of course, when it comes to be so cheap, and when it comes to be used for the purposes for which other grain is used, its price will go up to the price of those grains.
485. You have considered the question from all points of view, and notwithstanding the extremely low price ruling at this moment, you are of opinion that the wheat industry will continue to flourish in this district where the land is suitable for it? Yes.
486. Your impression is that the price will improve? Yes.
487. And looking at it from that point of view, you think the country will be justified in undertaking the construction of a cheap pioneer line in this district? Yes.
488. I suppose the time has come when some improved means of communication must be extended to this particular district, whether by metal road or by railway? Yes.
489. Which do you think the best? A railway would be the best unquestionably from every point of view. Every man with experience of the district must admit that road-making on an extensive scale is out of the question. You might drain the roads a little, and make them better to drive over, but road-making in this district, to carry heavy traffic, is out of the question.
490. It has been estimated that the cost of a metal road in this district would be £2,060 a mile? It would cost fully that. Close to a town you might make a metal road a little under that price. But taking a road, for instance, from here to Berrigan, there is no metal along it, and even supposing they had metal at Berrigan, it would still have to be carted a distance of 20 miles to this end. One of the first things a contractor for the metal would do would be to lay down a line of tramway along the line of the road to bring the metal on to it.
491. It is estimated that it would cost at least £150 per mile per annum to maintain the road;—if it can be shown that a railway can be constructed for less money than a metal road, and that the cost of its maintenance would not be greater than that of a metal road, then there can be no doubt as to which would be the more desirable? No doubt, whatever. And even if the returns were not so favourable to the railway, still the railway would be the best. There would be the interest on the road expenditure, and that would have to be put against the interest on the railway.
492. Would you favour the construction of a light pioneer line in the first place, instead of a line like that from Narrandera to Jerilderie, for instance? Yes.
493. You think it would be sufficient for all requirements, and that this would be a good part of the country in which to make the experiment? Yes. The Government cannot afford to construct railways and run them at a loss. The farmers would be very well satisfied if the Government were to spend very much less money on their railways and to carry goods at a lower rate.

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494. *Mr. Gormly.*] In the case of this particular line, do you think the estimate of 10s. a chain for earthworks would be enough to fill up the depressions? Yes; I think that on the average, £50 a mile ought to be sufficient for the whole distance between here and Berrigan.
495. *Chairman.*] You have referred to the wheat-growing country on the Murray;—how far west does it go from Murray Hut;—will it run in a direct line from Jerilderie to Deniliquin? Yes; wheat can be grown right through that country.
496. Does it go beyond that? I could not say how much further than the Moama line it goes, but it goes a considerable distance. The railway surveyed line from Jerilderie to Deniliquin intercepts the timbered country 6 miles from here, and goes right through it until it enters Deniliquin. It is agricultural country all the way.
497. *Mr. Davies.*] You say the average yield per acre is 16 bushels? Yes.
498. How long would land in the district continue to produce that yield in fair ordinary seasons? Practically for ever with the system of farming which obtains in this district. The farmers fallow the land—they combine agriculture and grazing. They spell the land for a year or two at times, and run sheep upon it. In this way the quality of the land is kept up.
499. You know that the yield of wheat in South Australia has fallen off to less than one-half of what it was? Yes.
500. You do not anticipate the same result in this district from continuous cultivation? Not in this district.
501. Supposing the land were cropped year after year, how long would the farmers be able to keep it up? I suppose that generally in this district you could reckon on an average of 16 bushels for five or six years. The yield would then gradually diminish until it became absolutely necessary to rest the land.
502. *Mr. Gormly.*] An officer of the Roads Department has said that a greater portion of the distance from here to Berrigan is composed of swamps, containing from 1 foot to 18 inches of water in times of rain; do you think that is the case? There is not more than a mile of swampy country in the whole distance, and even where it does exist, I doubt whether the water would be 18 inches in depth.
503. Upon no considerable portion of the line would high embankments be necessary? No.
504. Would your estimate of 10s. per chain for earthwork formation apply to the whole line? Yes; £50 a mile would allow a margin to meet swamps and depressions.
505. That is your conclusion, after considerable experience as Mayor of the borough, in connection with earthwork formation? Yes.
506. What are the appliances you have for road-making? Up to now we have used ploughs and scoops, but we have at the present time the American patent road-forming machinery. My estimate of £50 a mile was not for the use of the American machinery, but for the use of the plough and scoop.
507. If it is necessary to fill up depressions, the earth can be removed by dray to lower portions and the cartage will not increase the cost of the line to any great extent? No.
508. With the use of the plough and scoop the earthwork formation in your borough would not cost 8d. per cubic yard? It used to, but it does not cost that now.
509. *Chairman.*] What does it cost now? Earthworks, 32 feet wide, with a 20-inch water table, would cost 12s. per chain.
510. By how much does the American machinery lessen the expenditure? We have only recently got it, but we can get formation done for about 10s. a chain where formerly the cost was £1.
511. It has lessened the cost of road-making in the district by 50 per cent.? Yes.
512. What is the cost of the grader? £75 in Melbourne.
513. It would cost about £100 here, I suppose? Yes.
514. Is there any other information you can give us? Only as to the probable traffic from firewood. I suppose about 1,000 tons of wood would come into the town, and the rates would amount to about £120 a year. There would be a great saving to people here. The wood would cost them much less than it costs them now. I reckon there would be about 80,000 bags of wheat carried on the line, giving a revenue of about £1,000. That is allowing for a reasonable increase in cultivation by the time the railway is made.
515. You consider that in making that estimate you have taken the minimum amount? Yes.
516. What area would that come from? It would include Savernake, some of the Barooga country, some of the Tocumwal country, the whole of the Berrigan district, and the Finley district, to the east of the stock route.
517. Do you think the estimate of live-stock traffic is likely to be realised? I could not speak as to that, but I should imagine that there would be about 3,000 bales of wool. I think the difference would be made up by general traffic.
518. Do you think it would be made up by wood, live stock, and other produce? Yes.
519. All that you are prepared to definitely express an opinion upon is the wheat traffic and the wood traffic? Yes.
520. Do you think the estimate of £1,522 is too much for goods, live stock, and wool? I think it is, a little.
521. What would you put the amount down at? I should be inclined to put it down at £1,000. It is hard to form an opinion, because a railway creates traffic.
522. You think the Commissioners would be nearer the mark if they estimated a revenue of £2,000 instead of £2,600? Yes.
523. *Mr. Davies.*] You will see that Mr. Harper estimates 400 trucks of live stock at 7s. a truck—do you think that is too much? Yes; I think it is, a little.
524. He also estimated 700 tons of wool at 3d. per ton per mile? I do not think there will be quite as much as that.
525. Do you think there will be 17,000 tons of wheat carried at 2s. 6d. per ton? I do not think so. I think there will not be more than about 80,000 bags.
526. But you think that the difference may be made up in the carriage of other things—in the carriage of general goods, for instance? Yes.
527. Do you think there will be 300 tons of general goods? Yes, fully that.

Mr.

Mr. Joseph Thomas Mawson, Station-master, Jerilderie, sworn, and examined:—

Mr. J. T. Mawson. 15 Jan., 1895.

528. *Chairman.*] What are you? I am station-master at Jerilderie.
529. How long have you been in charge here? Five years.
530. Can you give us information as to the traffic on the railway for the last two or three years? I have prepared some returns as to the traffic in wool, wheat, and stock.
531. For what years? From 1892 up to date.
532. You hand in a return showing the live stock, wool, and wheat carried from Jerilderie by rail for the seasons ending 1892-3, 1893-4, and 1894-5? Yes. [*Vide Appendix.*]
533. Does the return show an increase in the railway traffic? Yes; in wool and wheat.
534. Is the traffic from Jerilderie gradually increasing? Yes.
535. The freight appears to be coming more profitable to the railway? Yes.
536. Have you any knowledge from what portions of the district the wool, wheat, and live stock included in the return come from? I think the greater portion will come from the Berrigan district.
537. Some will come from Savernake, I suppose? From Savernake and Murray Hut, and a small quantity from the direction of Deniliquin. Some also from Clear Hills.
538. Would much agricultural produce come from the northern side of the Billabong Creek? I think the greater portion of that would go to sidings between here and Narrandera.
539. Where does the general passenger traffic of the Jerilderie line come from? It is made up chiefly of Jerilderie and Deniliquin residents. Of course I could not account for a good deal of the passenger traffic, because I do not know the residents of the other districts.
540. Do you know some of the stations from which the wool comes? Yes; Coree would be one.
541. About what quantity annually? About 2,000 bales.
542. What other stations send wool to this line? Wonnamurra about 700 bales, Goolgumbla about 1,500 bales.
543. What stations on the south of the line? We had 2,700 bags from Tuppal last year; we also had Boonoke wool.
544. Can you tell us of any quantity of traffic coming from the direction of Berrigan and Clear Hills, beside that you have referred to? In addition to the wheat there would be a small quantity of wool, but a large proportion of it goes to Victoria.

Reverend John Dykes, Jerilderie, sworn, and examined:—

Rev. J. Dykes. 15 Jan., 1895.

545. *Chairman.*] What are you? I am a Presbyterian clergyman.
546. How long have you been resident in the district? Fourteen years and six months.
547. Have you a full knowledge of it? A pretty good knowledge of it.
548. *Mr. Davies.*] Do you know the country lying between this point and Berrigan? I know it pretty well.
549. Are you conversant with the surveyed route of the proposed railway? I do not know it.
550. You only know the terminal points? Yes, and the country between.
551. The country is much of the same character right through? Yes.
552. What is the general character of the country all round;—is the land in the Berrigan district within a radius of 20 miles suitable for agriculture? It is generally superior agricultural land; it is not uniformly so. There are portions on which the water lies in the winter, and which are not so suitable. Then there are portions of soft, oozy clay; that also would be unsuitable for agriculture. In winter time you could hardly cross it in a buggy.
553. Is much of the area I have spoken of unsuitable for agricultural purposes? Not a large proportion.
554. What is the greatest depth of water you have seen upon the land here? It would be, perhaps, a foot on stretches of ground for a few weeks after rain. Take the tract between Momolong Station and Berrigan. I have travelled over it in the winter when the sun has been shining and when the air has been clear, and almost one-half the whole distance would be under water.
555. Then, if it were proposed to construct a railway with an earthwork formation of not more than 6 inches, and if sleepers were placed on the top of that formation without any ballast, do you think it would be safe? I do not think so.
556. If the sleepers were laid more closely together than upon ordinary railway lines, and if the trains only ran at a speed of 15 miles—the traffic being restricted to daylight traffic; do you think that would be safe? I do not think so. I think it would be necessary to have a higher embankment in many places. In the case of red soil it would do right enough; but there are stretches of low-lying ground where water accumulates. For instance, there is a paddock when you leave Wonnamurra Station, on the road to Berrigan.
557. Whose paddock is that? It belongs to Berrigan Station. It is beyond Connell's selection. It is now enclosed in a lane. Formerly the whole country was open; I have been over it all picking my way. There is about a mile there where the horses would be above the fetlock in water for the whole way, and that for perhaps 2 or 3 months.
558. Have you, during your residence in the district, seen water 6 inches deep for months on portions of the road between Berrigan and Jerilderie? Yes; and much deeper than that in places on the country between Berrigan and Jerilderie.
559. Would it be a heavy rainfall to produce the flooded state you speak of? Somewhat exceptional perhaps.
560. Do you know the normal rainfall of the district? Sixteen or 17 inches. I have the details of the rainfall at Yanko Station from 1869 to 1884.
561. Did you observe a uniformity in rainfall there? There is a considerable variation from year to year.
562. And the flooded roads you have described existed during one of the wet seasons? Yes.
563. How long ago was it that you saw the country in the flooded state you describe near Connell's selection? About seven years ago previous to the fencing in of the road.
564. Have you any doubt as to the stability of such a line as I have described between here and Berrigan? Very grave doubts.

Rev. J. Dykes. 15 Jan., 1895.

565. Supposing there were side drains and that box drains were made to conduct the overflow under the line, do you think that that would be sufficient provision to carry off the water? I should be very much inclined to doubt if it would be sufficient under the circumstances. I should doubt the safety of the line unless there were a very complete system of drainage to carry the water away from the railway altogether to a lower level.
566. Is there a fall to the west? There is a general fall to the westward all over this country, but very slight.
567. Do you favour the construction of a line between Jerilderie and Berrigan? I think if a line is to be constructed into this district a better direction for it to take would be towards Finley.
568. Why do you think that? I think such a line would be more advantageous to the community at large.
569. Is not Berrigan the centre of this great wheat district? I do not know that it is—I do not think so.
570. Do you think Finley is the centre? I think it is; I think that in the near future it is likely to be the more populous and the more productive district.
571. But dealing with the present, would you not regard Berrigan as the centre of some very excellent country? Yes, on the whole.
572. Country which is likely to produce very large crops of cereals? Yes.
573. It already does so? Yes; but I fancy that part of the district has reached its maximum of production, or very nearly so.
574. Why? Because the greater portion of the available land there is already in the hands of agriculturists. That is one of the reasons why I favour a line to Finley. There is a large amount of good agricultural land in that district, which is still available for settlement.
575. You think there is more land available for agricultural purposes at Finley than at Berrigan? Yes, taking a radius of 20 miles. If you take that radius from Finley, it would take in the best part of Berrigan, and a large area of splendid agricultural land to the westward.
576. Would the line you suggest serve the district of Berrigan as well as the proposed line? Not so well, of course, as if the line were taken to Berrigan itself.
577. Would not a line to Berrigan serve a larger number of persons than a line to Finley? I question it very much. I speak from my knowledge of the country on this side of Berrigan. I am not so thoroughly acquainted with it beyond. There is no settlement on this side until you reach Berrigan, and there is no prospect of it. I do not profess, however, to speak with any degree of authority further than, perhaps, 8 miles beyond Berrigan.
578. Then, taking a radius of 20 miles, it would be difficult for you to say whether, from the point of view of serving agriculturists, it would be better for the line to go to Finley or to Berrigan? I give my opinion for what it is worth. I thought it might be a hint to the Committee to obtain more particulars as to settlement, taking the Berrigan district within a radius of 20 miles in comparison with that of Finley, within a similar radius.
579. You know the Finley district much better than the Berrigan district? I know it pretty well. I know it for a distance of 10 miles or so on the other side. In a sort of way I also know it beyond; but I do not profess to speak with any degree of authority about the localities further over.
580. You favour a line to Finley because of your better knowledge of that district? No; because of my comparative knowledge of both districts.
581. Do you think, then, that a larger number of persons would be served if a railway went to Finley? I think there is a larger area of land available for agricultural purposes on the Finley side, for instance, there is the Tuppal Estate. The owners have manifested their willingness to put it into the hands of farmers. They are prepared to make an indefinite amount of land available for agricultural purposes.
582. Do they propose to sell or to lease the land? It is understood to be a sale; it is actually a lease with the right of purchase. A good deal of land has been taken up in that way in the Finley district.
583. Do you know where the wheat brought to Jerilderie has come from during the present season? No, not as to particulars.
584. You do not know whether the bulk of it has come from Berrigan or Finley? No.
585. I suppose the district from which the bulk of the wheat came would be a good criterion as to the direction the railway should take? I daresay.
586. If the bulk of the produce has come from the Berrigan district, taking a radius of 20 miles, as against the Finley district, I suppose you would say that the railway should go where the larger amount of produce would be brought to it? I would not quite say so, because I think there are other considerations to be taken into account. For instance, the general interests of this district, and of the district to the north of the Billabong, should also be considered in connection with any line to the south. I think it would be a great mistake, and I say it advisedly, to construct such a line as proposed to Berrigan, because you could not extend that line so as to bring this large district into touch with the Victorian lines of railway. I hold very strong opinions on this point.
587. Do I understand you to say that you advocate the construction of a line from Jerilderie to Finley, with the view of bringing our railway system into touch with that of Victoria? That would be one reason. The interests of this community, of this large district, are such as to render it a matter of true statesmanship to see that it has the best access to market for its produce, which can be afforded it. To take a line down to Berrigan would be simply to run into a *cul de sac*, and the hope of this district of obtaining access to the Victorian seaboard would be indefinitely postponed.
588. When that happy time arrives the duties will have to be abolished on the Victorian side? That is a matter for the Victorians themselves to consider.
589. You advocate then that the Government of New South Wales should bring its railway system into touch with the Victorian system, in order to divert the traffic of this Colony into Victoria. You advocate that the Government of this Colony should raise loans for that purpose? I do not advocate any such thing as that the New South Wales Government should raise money for that purpose, but I think that the function of the Government is to remove as far as possible any difficulty in the way of citizens carrying out their business and their enterprise successfully and profitably to themselves, and, therefore to the Colony.
590. *Chairman.*] Do you advocate an immediate junction of the railway system of New South Wales with the railway system of Victoria? Not in advance of need.
591. *Mr. Davies.*] You are looking forward to the days of federation? Yes. 592.

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592. Do you think it will be wise in the meantime to saddle the Colony with large loans for the purpose of constructing railways to divert our trade to Victoria? My opinion is that the matter should not be pushed on too rapidly until federation is further advanced. We should do nothing which would interfere with a more perfect system of intercommunication between the colonies at some future time.
593. In the meantime you would sacrifice your agricultural producers; you would deny them the benefit of communication with the railway system of their own colony? I do not know that the sacrifice would be so very great.
594. Are you aware of the cost of the transit of produce from the Berrigan district, taking a radius of 20 miles to Jerilderie;—do you know that it costs from 10s. to 12s. a ton? Yes.
595. Would you be surprised to know that if a railway were constructed the cost would be reduced to 2s. 6d. a ton? That would be a big difference.
596. Would it not be a great advantage to the producer? There is no question of the advantage from the producer's point of view. I am looking to the benefit of the greatest number, and I think a railway to Finley would serve the larger number, and would be preferable even from that point of view, while it would not have the effect of interposing any barrier to a more perfect system of railway intercommunication when the Governments of these colonies have come to be more in touch with each other, and are working in a federated community.
597. Then, viewing the matter in the light of direct communication between Jerilderie and Victoria, you think Finley would be the best point to which to take the line? I think so.
598. Because you could continue the line on to the Victorian Border? Yes; that is one reason why I would be more favourable to that route.
599. Then, upon the whole, you do not think it would be an advantage to this district to construct a cheap line between Jerilderie and Berrigan? I think it would be a waste of money to construct a cheap railway such as that proposed—I do not think it would last.
600. You would not put your opinion against that of the Engineer-in-Chief for Railways, I suppose? Certainly not; but I know the country, and I know the exceedingly soft melting nature of a great deal of the soil.
601. If the Engineer-in-Chief is of opinion that a railway sufficiently strong for the traffic of the district could be constructed for £1,800 a mile, would you still hold to your opinion that such a line would be insufficient for the district? I do. I believe that an average embankment of 6 inches, without ballast would, in many parts of the country between here and Berrigan, be totally insufficient.
602. You must remember there would be 5 inches of sleeper above that and 5 inches of rails above that? But the sleepers rest on the soil, and I do not think that, generally, the soil is of a suitable character for such a purpose.
603. If it were found that the road was not sufficiently stable, it would be cheaper to ballast it afterwards, would it not, than in the first instance. You could run your ballast trucks along the line, and deliver the ballast where required? No doubt, but that will add largely to the cost of construction. It will no longer be a line at £1,800 a mile.
604. This work is suggested as a pioneer line—the first cheap railway attempted in the Colony. Do you think it is worth a trial? I think it would be an unfortunate thing to make the trial at this particular point.
605. Your idea is that a line of a more permanent character should be constructed to Finley, with a view to the ultimate connection with the Victorian system? I do not advocate the connection at once, but in the meantime I think nothing should be done to hinder the construction of such a railway.
606. *Mr. Lee.*] You described one portion of the road between here and Berrigan, which you said was very bad—can you locate it? It is 2 miles on the other side of Connell's—about 12 miles from here.
607. You do not know the proposed route of the railway? No, except generally.
608. You did not know that it was not proposed to go near that road at all—that the line will not touch the main road until within a few miles of Berrigan, so that the country spoken of will not be touched? I was speaking generally of the paddock through which the main road passes.
609. Do you not think that if there were side drains, and if suitable provision were made for the water passing under the line at various places, that that would be enough to keep the line free of water? I do not think so, unless provision were made to carry the water away from the line.
610. Supposing advantage were taken of depressions at convenient sites to let the water pass away? I daresay that would minimise the difficulty.
611. Have you seen any running water along the road? No; it is mostly still water.
612. Yet I understood you to say that it should be treated by way of drainage? I have stated that that is the difficulty. It would take a long cutting to reach a lower level.
613. You advocate a line to Finley for the ultimate purpose of getting to Victoria. Supposing that line were made, what produce would there be to send to Victoria. This district is at present mainly a pastoral district, and there would be the usual products of such a district—wool and tallow.
614. There is absolutely no wheat-growing just about here? Not a great deal.
615. The wheat-growing commences somewhere in the neighbourhood of Berrigan and Finley? No doubt—still there is a considerable area of wheat-growing country to the north.
616. If that is so, would it not be better to construct a line from Berrigan towards the Victorian border at once? I am not a partizan of Victoria, but facility of access to market tends to produce business, and there is an excellent area of agricultural land to the north of us as well as in the Berrigan district.
617. How far to the north would the agricultural land go? It is found anywhere around us almost. It is not likely to be made available for agriculture in the near future, because already, apparently, we have over-production. But on the Yanko, and spreading northwards towards the Murrumbidgee there is an immense breadth of country capable of being utilised in agriculture more or less successfully.
618. If your idea of building a trunk line to connect this district with Victoria is the right one, would it not be better to connect Jerilderie with Deniliquin at once? I think it would be a most valuable line for many reasons. To begin with, it would pass through a great deal of good agricultural land.
619. How many settlers are there between here and Deniliquin? Not a great number; but there is every reason to think that the settlers who do exist would not under certain circumstances object to have a great many neighbours.

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620. Therefore we are not to give relief to those who are already on the land, in consideration of something that might happen in the future? As I have said, I think a line to Finley would be the preferable line.
621. *Mr. Roberts.*] I suppose you are fully aware of the high prices which the farmers of Berrigan have to pay to get their produce carried to Jerilderie? Yes.
622. Having regard to the settlers to the east of Berrigan, do you not think the Government would be justified in constructing this railway in the direction proposed? I question whether the farmers at Clear Hills would cart their wheat to a railway station at Berrigan.
623. Where would they send it to? I hardly think it would go to Berrigan. A railway there might be a slight advantage to them, but it would not be very great.
624. Putting aside the question of uniting our railway system with that of Victoria, from which direction do you think a railway should be taken with a view to afford immediate relief to the agriculturists to the south of this point? I suppose that most of the present agricultural settlement is to the east of Finley.
625. Towards Berrigan? It would take in Berrigan and all the agricultural communities in that direction.
626. At what period of the year did you see the water which you describe as lying between here and Berrigan? During the winter months, from May to September.
627. *Mr. Gormly.*] You are acquainted with the means adopted in level countries to carry water away from depressions? Yes.
628. If those means were adopted in connection with the proposed railway, do you not think they would prove sufficient? If there were side drains, and if advantage were taken of such opportunities as might offer to cut to some distance in order to reach a lower level, it might, perhaps, be adequate. I have noticed, however, that on the Narrandera line the side drains are not very efficient.
629. Will not the side drains be the means of carrying the water to depressions? If depressions exist.
630. Must there not be a depression when the water remains for the length of time you speak of? Certainly there are depressions. The question is whether the water can be carried away from the line.
631. You are aware that the water-courses, although shallow, tend to the westward? Where there is a water-course the water can be carried away without question.
632. In constructing a railway such as this, where depressions exist, embankments will be raised to the height of the higher portions of the country, will they not—there will be an uniform level? Yes.
633. If such an embankment were made in the depressions you have described, do you not think it would be sufficient to prevent the line at that particular point from being flooded? The line itself would be above water. What I should fear would be the erosion or subsidence of the earth upon which the line had been built.
634. Do you know of similar embankments between here and Narrandera which have not melted away? One accident—the most noted accident since the line has been constructed—occurred through that very circumstance.
635. Was not that caused by an extraordinary overflow from the Yanko Creek? No; there was simply a subsidence caused by the rain softening the embankment.
636. Do you know the point where the accident actually occurred? Yes.
637. What would be the height of the embankment? Possibly about 6 feet perpendicularly.
638. Would there be any need for an embankment of 6 feet between here and Berrigan? No.
639. Therefore such a serious accident would not be likely to occur? The mere fact of the embankments not being so high would offer no security against accident, in the case of an unballasted line.
640. Which district, Berrigan or Finley, at present has the larger area under cultivation? Berrigan, I believe, at the present moment.
641. Where is the considerable number of farmers you refer to to the west of Finley? They are mainly on the Tuppal land.
642. What is their tenure? Leasehold, with a right of purchase, also in many cases conditional purchasers.
643. What is the tenure or occupation of the landowners about Berrigan? There is a considerable number of conditional purchasers among them.
644. Is the land at Finley under occupation by conditional purchasers? A considerable area of it.
645. Is there not a considerable number of farmers in the neighbourhood of Savernake? Yes.
646. Would they send their produce to Berrigan? The railway would undoubtedly benefit some of them.
647. *Chairman.*] Your position is this, in the first place you doubt the wisdom of constructing such a line over such country? Yes.
648. Then you doubt whether Berrigan would be the true centre of the wheat-growing district to the south? Yes, distinctly.
649. Further, you doubt the wisdom of complicating the question of railway extension in this part of the country by any minor lines? Yes; at least by this line at the present moment.

WEDNESDAY, 16 *JANUARY*, 1895.

[*The Sectional Committee met at the Royal Hotel, Jerilderie, at* 8·30 *a.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

The Sectional Committee further considered the proposed railway from Jerilderie to Berrigan.

Mr. Joseph Augustine Thomas Rochfort, Inspector of Stock, Jerilderie, sworn, and examined:—

Mr J. A. T. Rochfort. 16 Jan., 1895

650. *Chairman.*] You are acting inspector of stock in the district of Jerilderie? Yes.
651. You hand in a return showing the holders, areas, and sheep in that portion of the district of Jerilderie likely to be affected by the construction of the railway under consideration? Yes. [*Vide Appendix.*]

WEDNESDAY,

WEDNESDAY, 16 *JANUARY*, 1895.

[*The Sectional Committee met at the Public Hall, Berrigan, at* 2·30 *p.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

The Sectional Committee further considered the proposed Railway from Jerilderie to Berrigan.

Mr. Emanuel James Gorman, auctioneer and farmer, Berrigan, sworn, and examined:—

Mr. E. J. Gorman. 16 Jan., 1895.

652. *Chairman.*] You are an auctioneer and farmer? Yes; residing principally in Berrigan.
653. The Committee would like you to locate exactly the position of the town of Berrigan? It is as follows:—It commences at the north-west boundary of portion 67, G. Mitchell's original portion of 40 acres, going from thence to the main road from Jerilderie to Yarrawonga, following that road down till it intersects the south boundary of Susan Macdonnell's portion 75 of 279 acres; thence along the south boundary of that portion to its south-eastern corner; thence by a line running north forming the eastern boundary of the said portion 75, and part of the eastern boundary of portion 70; thence by the northern boundary of portion 76 to the north-western corner of portion 77; thence on the east by the eastern boundaries of portions 76 and 79 to the south-east corner of 79; thence on the remainder of the north by a line forming the southern boundary of portion 78 to the road from Berrigan to Momolong; thence by that road south-westerly to the north-eastern corner of portion 20; thence by the north boundary of portion 20 to its north-west corner; thence by part of the boundary west of portion 20 to the south-eastern corner of portion 82; thence on part of the south by the south boundary of portion 82 to the road from Jerilderie to Yarrawonga; thence by that road upward to a point 10 chains south from the south-east corner of portion 86; thence by a line east almost to the east boundary line of portion 87; thence by a line north till it strikes the south boundary of portion 84; thence on the remainder of the south by the south boundary of portion 84 of 65 acres to the south-west corner of that portion; thence on the remainder of the west by a line forming the western boundary of portions 84 and 67, to the point of commencement, embracing portions 67, 84, parts of portions 85 and 86, these being private subdivisions—and embracing also portion 76, which is at present unused Crown land, and also portions 80, 79, and 82, which are the village of Berrigan.
654. *Mr. Lee.*] How long have you resided in this district? I have been resident in this district for about sixteen years, that is, 10 miles to the east of here, at a place called Warmatta. I have been four years in Berrigan.
655. When did settlement first take place about Berrigan? About fifteen years ago.
656. How long is it since the township came into existence? It is between five and six years, since the subdivisional sales took place.
657. Your period of residence covers the progress of the district we now see? Yes.
658. The object of our inquiry is to ascertain from you residents what reasons you have to advance in support of the proposed railway extension from Jerilderie to Berrigan. We should like you, shortly, to offer reasons why the line should be extended here. We should like you to show us that the proposal is a reasonable one, and that it is likely to pay if carried out? In the first place, there is the suitability of the soil for intense culture, including the growth of all cereals, fruit culture, and the dairying industry, with the pastoral industry, of course, added. The district is eminently adapted to all these things. As a further reason, I might point to the large growth of population in this district within the last seven or eight years—that is, the agricultural population. These persons have expended a lot of money in opening up the country and enriching the district. Then there is the necessity for a better means of transit to market than the means at present at our command. There is also the fact that an extension from Jerilderie could be constructed so cheaply that it would not be a great tax upon the consolidated revenue. Those are the principal reasons. I have put them as clearly as I can. This part of New South Wales is capable of much greater development than already exists. We have only started so far on several new lines; but we have proved that the district is eminently adapted to this new departure. For instance, we know that fruit-growing can be carried on successfully. We know that the drying of apricots, peaches, and other fruits would pay handsomely, if we had a means of transit to market. Further, we know that the district is suited to butter factories and creameries if we had a better means of transit. We have already proved that for grain-growing the district is second to none in New South Wales.
659. Are the fruits and vegetables exhibited in this hall to-day all grown in this district? Yes; within a few miles of the township.
660. I see the exhibition includes potatoes;—is this considered a potato-growing district? There are a few sorts of potatoes which grow splendidly here—they sow them twice in the year. The Vermont and Early Rose give very good results.
661. What is the chief product? Wheat.
662. Do you remember the Railway Commissioners being here a short time ago? Yes.
663. Were you one of the deputation who waited upon them at that time? Yes.
664. Do you remember the Commissioners telling the deputation that they would advise as a condition precedent to the construction of the line that the landowners should give the necessary land? Yes.
665. What reply did the deputation give? I do not know that there was any definite reply. We said we would use our best efforts in approaching the landowners, and would see what could be done.
666. Has anything since been done? The landowners have since been approached, but nothing definite has been done pending the arrival of this Committee.
667. Inasmuch as the construction of the line will largely depend upon the settlement of the land question, are you in a position to give us any definite evidence upon the point to-day? I am not; but the landowners, with one or two exceptions, are here and can speak for themselves.
668. Have you had a public meeting with reference to the matter? The secretary of the Progress Association waited upon some landowners who expressed their willingness to be reasonable in the matter. I do not know exactly what they are going to do.
669. The line would not pass through your land? No.

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670. In the event of the landowners giving their land to the Railway Commissioners for the purpose of a railway, what do you propose to do in the case of those persons who may derive benefit from the line although it does not go through their property? Nothing definite has been arranged. It was proposed that they should contribute towards the cost of the land; but seeing that there is no law compelling them to do so, it has been thought that some might contribute and that a number might not feel disposed to do so.
671. We are to understand, then, that the residents have not done anything definite with regard to the gift of the land? Nothing further than waiting on the landowners and pointing out to them the necessity, if possible, of giving the land.
672. I suppose you are aware, in common with the rest of the residents, that the proposed line is to be a pioneer or grain line? Yes.
673. It is an experiment in this kind of line, and it is the first time it has been tried in the Colony? Yes.
674. Do you regard this as a suitable district for the experiment? Yes.
675. Do you know that the line will have to be constructed cheaply? Yes; and I think it can be.
676. One of the questions for the Committee to determine is whether the district will be able to support the line after it has been built? I think it will.
677. The Railway Commissioners, after close inquiry, have come to the conclusion that the chief and almost only source of revenue will be the carriage of wheat;—are we correct in assuming that that will be the chief freight? It will be the chief freight.
678. If there were a line running here at the present moment, there would no doubt be plenty of freight for it? Certainly.
679. What are the prospects of the district in connection with the cultivation of wheat and other cereals? During the last two years the area under agriculture has increased to a wonderful extent, and I see no reason why it should not go on increasing. There is an immense area of splendid agricultural land still uncultivated.
680. What has been the price of wheat while cultivation has been extending? It has gradually fallen from 4s. to what it is at the present time.
681. Within what years has cultivation made the most marked progress? It has made the most rapid strides within the past two years.
682. What was the price of wheat then? This time last year it was worth from 2s. 2d. to 2s. 8d. The year previous it was worth from 3s. to 3s. 2d.
683. As a farmer, you will admit that if wheat falls below a certain price it would be unprofitable to grow it? Yes.
684. Can you fix that price? It depends entirely on the conditions. At the present time wheat is apparently at as low a price as it can be consistently with growth at a profit. We thought that, however, three years ago, when the price was 3s. a bushel, but we have managed to live, notwithstanding the fall, and have gone on increasing the cultivated area.
685. What is the present price? 1s. 9d. in Jerilderie.
686. What will that be net to the growers? About 1s. 6d.
687. What do you think of the price now? I am just as hopeful as I was a few years ago.
688. Supposing wheat went down to 1s. 3d. per bushel? We can grow it at 1s. 3d., as well as it can be grown anywhere else at that price.
689. If the price goes down, will the present cultivated area continue to be placed under wheat? We shall have to put the wheat in this year in the hope of a rise. Quite as big an area will be sown this year as was sown last year, and probably more. People have embarked in agriculture. They have bought horses and machinery, and they have cleared the land. Now there is no other outlet for them. They must go on growing wheat.
690. Do you think they will continue to grow it at 1s. 6d. per bushel net? I think the bulk of them will. At the present price of wool and other products there is no other outlet.
691. What is about the average crop per acre? This year is rather an unfortunate year, and I do not know what it will be, but we consider 16 bushels a fair average crop in this district.
692. What do you actually get? It depends to some extent upon the farming. I had an average last year of 26 bushels.
693. Can you give me the average of the district;—have you any data? It is not possible to get at the exact average locally.
694. What do you think will be the yield this year? If the present weather continues the yield will be lessened very much, but I should say that it would run from 12 to 16 bushels. It will probably be about 14 bushels on the average.
695. Have you gone into figures to find out how many acres there are under crop, and what is the gross number of bags raised in the district within a radius of 20 miles of Berrigan? Not in a radius of 20 miles. I have taken the district for 10 miles round. I reckon there are about 30,000 acres under crop from 10 to 12 miles from Berrigan, going to Finley on the west, embracing portion of Barooga on the south, going a little beyond Warmatta to the east, and 10 miles to the north.
696. What do you reckon you will have from that 30,000 acres? I should say from 120,000 to 130,000 bags. There would have been considerably more, but under present circumstances I should think that it is a fair estimate.
697. How many bags to go to the ton? About nine.
698. In the event of prices improving, and there being more inducements to persons to farm, can the area of wheat cultivation be extended? Certainly; three or four fold, I should say.
699. Do you mean by taking up fresh land, or by bringing under cultivation land already held? The large landowners will, I think, lease or sell their land. There is any number of persons coming over from Victoria for farming land.
700. You mean that the holders of large areas will increase the area under cultivation by means of sale or lease? Yes. In view of the present price of wool, I think the small owners will also increase their areas.
701. Do you think it possible that the Berrigan district has reached its limit of wheat production? I think not. There is an immense quantity of virgin soil here; and there is any number of people who are ready to go on to it if the prices improve at all.
702. What is the population of the Berrigan district? I could not say exactly.

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703. What is the average size of the holdings? From 1,200 to 1,500 acres.
704. As a rule how much of that area would the holder cultivate? From one-fourth to one-sixth, and in some cases only one-eighth.
705. I suppose you have a good personal knowledge of the district? Yes.
706. And the evidence you have given upon those points may be taken as approximately correct? Yes; I know every farmer personally.
707. You think that even under present conditions there is a possibility of cultivation being extended? Yes.
708. The next point to consider is that of a market. Situated as persons are at this end of the Colony, so close to the Victorian Border, which do they look upon as their natural and proper market? Sydney is the only market for wheat, because the duty of 1s. 10d. per cental on wheat entering Victoria is practically prohibitive.
709. But in the event of federation and a free border what would take place? With a railway to Berrigan I think the wheat would go to Sydney. With no railway there it would go the other way.
710. Supposing the railway were constructed, and there were at the same time a free border? I think the bulk of the wheat would go to Sydney. It would cost 4d. per bushel to take it to Melbourne from Cobram.
711. Notwithstanding that the produce is so much closer to Melbourne than to Sydney you think that it would go to the latter place? The land-carriage would make up the difference. If the railway were taken right on to Cobram I could not say how it would go.
712. If you wished to ship from Melbourne you could do so in bond? Yes.
713. Are the transit rates prohibitory now? There is a difference of 3½d. per bushel in favor of the Jerilderie to Sydney route, over Cobram to Sydney. But owing to the millers giving the same price on the Victorian border so as to prevent wheat going out of the Colony, the price is equal. The farmers, however, prefer the other road. The punt on the river at Cobram cannot take big loads.
714. What are you paying per ton for the carriage of wheat from here to Jerilderie? It averages 9s. a ton, or 3d. a bushel.
715. If you could get it carried to Jerilderie for 2s. 6d. a ton, in lieu of 9s., there would be a saving of 2d. a bushel? Yes.
716. Do you think that margin of profit would be sufficient inducement to the farmers here to continue producing wheat? I think so—it would be a great assistance to them. It is not altogether a question of rates. There is a difficulty in securing teams in certain months of the year, when the farmers want to get their produce away. We have to send all our wheat away by road between the months of December and March. It has to be done then at any cost. If the teamsters liked to organise, they could ask 1s. 6d. a bag, and we should have to give it.
717. Would not the same thing exist if there were a railway? No; the farmers could then cart their own grain. There would probably be grain-sheds built, in which the grain could be stored. The farmers would either store it at these sheds, or keep it in their own barns until the market suited.
718. At the present time have not the farmers to sell their crop as soon as they gather it? I do not find it so, and I am a buyer of grain.
719. What is the greatest inconvenience to which, as a grain producer, you are put? The want of market. At the present moment I have 4,000 bags of wheat, and I cannot get a solitary offer to cart it away. If the railway were constructed I would cart the wheat to it, choosing my own time.
720. Supposing wheat came down to 1s. 3d. per bushel, would there be any probability of the farmers carting it at their own risk, and in their own drays? No, I do not think so.
721. Drays are competing with the railways in many parts of the Colony? They cannot do it here. There is no grass, there is a scarcity of water, and the roads are not suitable for heavy traffic, except for a couple of months of the year. Farmers do not consider it pays them at the present rate to carry the grain with their own teams.
722. Have you included in your area of 30,000 acres any portion of the Finley district? I have included the district pretty well to the stock route on a level with this; but not very far towards Jerilderie. I have taken about a 10-mile radius.
723. You think that the producers within that radius will bring their wheat to Berrigan as the nearest point on the railway? I think so.
724. Do you think this the most centrally situated portion of the wheat-producing area? Yes.
725. And carrying in proportion the largest population? Yes.
726. It is not probable that there will be any leakage of traffic from this district towards Victoria? I think there will be no leakage.
727. You think that the rate of 2s. 6d. a ton from here to Jerilderie by railway will control all the wheat traffic from here? I think so; but I could not speak in regard to a point further south than 10 miles.
728. In your opinion the proposed extension will give an impetus to wheat-growing? I certainly think so.
729. You think it will afford very considerable traffic to the railway? Yes.
730. And that the estimate of traffic from this source is, if anything, likely to be exceeded? I think so. The railway will remove a number of disabilities and disadvantages from which we now suffer. We have been confined to wheat-growing so far, but I have planted 3 acres of peaches and apricots, and I hope to start in course of time a fruit-canning or fruit-drying industry. I think pigs would do splendidly here, and that bacon could be produced as cheaply as in any other part of the Colony.
731. Have you known the wheat crops to fail in this district? No; I have seen a partial failure in small and isolated cases.
732. Owing to what? The locusts on one occasion. One paddock was badly affected by rust, but these are isolated cases.
733. You are a buyer of wheat? Yes.
734. That necessitates your going among the farmers a good deal; what is your own impression;—are the farmers making a living, or are they only existing, and waiting for some persons to come along so that they may sell out? There is no disposition to sell out. People have great faith in the district. They think that if they cannot live here it is of no use their going anywhere else.
735. Do you think the railway agitation is an honest agitation, or that it has only been got up to enable the landowners to sell? It is an honest agitation, it has been in existence for ten years, and it is admitted even by our enemies, by persons who do not want to see a line constructed here, that we are deserving of railway communication.

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736. In addition to your occupation as a land agent and auctioneer, you carry on a farm? Yes.
737. What is the extent of your holding? I hold at present 5,000 acres.
738. How much of it is under cultivation? About 1,000 acres.
739. Is it all wheat? Principally.
740. What else do you grow? Oats and barley.
741. Do you run sheep? Yes.
742. What quantity of wool do you obtain? I had 120 bales last year.
743. Where do you send it? To Melbourne.
744. If this line were constructed would you send your wool to Sydney? I think so. It would be entirely a question of rates. My place is 12 miles to the east of Berrigan, and it is only 21 miles from the Yarrawonga railway station.
745. I presume you have sent your wool to Melbourne because the freights in that direction have been lower? There has been a prejudice against Sydney as a market up to the last year, but that prejudice is dying away, and a number of persons now think that it was a better market than Melbourne last season.
746. You are not in a position to say which way you would send your wool? If I did not lose too much I would make an effort to send it to Sydney.
747. Is there much wool produced within a radius of 10 miles of Berrigan? Yes.
748. Do you think about 700 tons of wool would be sent from Berrigan if the railway were constructed? I do not think that would be an over-estimate.
749. As a producer of wool, rates being equal, you would send the product to Sydney? Yes.
750. I suppose almost all the wool-growers here send their produce to Melbourne? Principally.
751. Up to what point to the south of Jerilderie does wool now go to Sydney? Wonnamurra, and most of the places within 5 miles from here send it to Sydney. Wool was sent to Sydney this year from Tuppal Station.
752. Would much wood be carried from Berrigan? I am sure all the Jerilderie fire-wood would go on the line. It would be much cheaper than getting it hauled there as at present, especially in winter time when the roads are impassable.
753. What quantity of live stock would be sent on the line? I could not give you a definite idea. It would depend upon several things. The Sydney market was a little better than the Melbourne market last year. Adding the duty to the Melbourne prices it paid better to send to Sydney.
754. Do you think there would be 400 trucks? That does not seem too large an estimate. It depends very much on the season. I have known sheep to go from Momolong to be trucked at Jerilderie for the Narrandera Chilling-works. I believe a good number would go there.
755. Respecting the carriage of wheat, up to what point to the south of Berrigan would the farmers send their wheat upon the line? I do not think you could go further south than 10 or 12 miles. It would depend upon the rates farther than that.
756. How far is Savernake from here? About 18 miles.
757. Is much wheat grown in that district? A good deal between here and Savernake.
758. That would all be sent to Berrigan? The bulk of it.
759. Does the wheat-growing country extend up to Clear Hills? Yes; but it is more irregular there.
760. Does the country there cease to be as good as it is round about Berrigan? I would not say that, but it is more irregular. There is not the same quantity of good wheat land.
761. Would the people of Clear Hills send their wheat here, or would it pay them to send it to Jerilderie? A portion of the Clear Hills district would be 15 or 16 miles from this point, and it would still be 25 miles from Jerilderie. A portion of the traffic would come to Berrigan, I think.
762. And you say the farmers to the west of Berrigan would send to the line? Up to the stock route, at any rate.
763. There is a supply of granite here suitable for road-making? Yes; it has been used in the streets. It is admitted to be very good for road-making.
764. Probably, that would bring a certain amount of freight to the railway? Yes. The Municipal Council of Jerilderie called for tenders for 100 tons, but the freight from Berrigan was excessive, and it could not be carried.
765. If the freight were reasonable, a lot of road metal would be carried northward? Yes; and I believe that some of the granite could be used for building purposes if it were properly dressed.
766. *Mr. Gormly.*] The want of camping reserves and of water between here and Jerilderie increases the rate of cartage? Yes; the teamsters do not like the road between here and Jerilderie at all—they prefer almost any other route.
767. What camping reserves are there between here and Jerilderie? There is only one.
768. Is there any great difficulty in obtaining water? Very great difficulty. There is only one well, and at the rate of 1d. per head it comes very heavy. There is a private well which Mr. Dickie sometimes gives the use of.
769. There is a charge for grass, and a charge for water on the camping reserves? There is no charge for grass at present, but when the area is fenced in it is intended to make a charge.
770. What time would it take the teams within a radius of, say, 10 miles of Berrigan to go to Jerilderie? From three to four days on the average.
771. What is the distance from Savernake to Jerilderie? About 35 miles.
772. And the farmers there would have to cart 18 miles to the railway at Berrigan and 35 miles to Jerilderie? Yes.
773. Are there any greater facilities for travelling on the road between Savernake and Jerilderie than on the road between Savernake and Berrigan? The facilities are not much greater. There is a slight advantage in regard to water, but as against that the sand-hills would be a great disadvantage.
774. What facilities in the shape of water and camping reserves exist in the case of those farmers residing 8 or 10 miles to the south of Berrigan? There is a small township reserve which they use at the present time, and there is also a Government tank.
775. How many bags of wheat have you on your farm, at present, ready for transit? 4,000. A lot of persons might have got 1s. 11d. for their wheat a week or two ago, but through not being able to put it on the market at once they lost 2d. a bushel.
776. How will your 4,000 bags compare with the produce of the previous year? It is an increase on the previous year's produce.

777.

Mr. E. J. Gorman. 16 Jan., 1895.

777. In what proportion? It is not very great, because I have an average crop this year.
778. What is the average? Eighteen bushels.
779. What is your opinion of the continuous cropping of the land here;—does not the average yield per acre become considerably diminished? I propose to leave out portions each year, and to grow rape upon it. I feel sure that I will be able to keep up the average cropping then.
780. You will replenish your soil by running sheep on it? Yes; I do not believe in taking too much out of it.
781. Can the average of 16 bushels per acre be maintained for any length of time, if some such course as you propose is not adopted? I think you might get it for five or six years. You might get as high an average one year as 30 bushels, and I do not think it would go below from 10 to 12.
782. Has 30 bushels to the acre been produced anywhere here? I myself produced 30 bushels on a certain area.
783. By resting your land in alternate seasons, you think you can make your yield from 16 to 20 bushels? Yes.
784. How many sheep do you run? About 5,000. I shore 7,000, but I have sold some since.
785. *Mr. Davies.*] I gather from your answers to some questions a short time ago that you send a lot of your produce to Victoria. You are a strong advocate for the construction of this line, while admitting that you send a large proportion of your produce into the other colony? We are compelled to send our wool to Victoria for the present.
786. For financial reasons? Yes. If the Sydney people found we could deal with them, they would send their agents here, and then I have no doubt that a large proportion of wool would go that way.
787. Do you think the proposed rate for wool reasonable? I cannot say, until I have figured it out, but I believe that if the rates quoted for Tuppal last year were quoted here, all the wool would go to Sydney. We have to pay nearly £1 a ton to cart our wool to the Victorian terminus. I think the rate you quote is a fair rate put alongside the road carriage.
788. Do you think the estimate for wheat traffic is excessive? It may be slightly in excess, taking the present season.
789. But it is approximately correct? Yes.
790. If the railway were constructed, a larger area of land would be put under wheat? I think so.
791. When you were last examined with reference to the proposed railway from Jerilderie to Deniliquin, you said that a large proportion of landowners were putting their land at the disposal of agriculturists on reasonable terms, either on sale or lease? Yes.
792. That has been done? Yes.
793. Has Mr. M'Farland sold any of his land? He has sold some, but he found that persons preferred the "halves" system. On Momolong a considerable area has been sold. I think nearly 10,000 acres have been disposed of on that station, and a good part of it is under crop. On Booroobandilly, between here and Finley, a considerable area has also been disposed of.
794. How far would the bulk of this land be from the proposed railway terminus? At Momolong it would not be further than 7 miles away. From Finley the distance would be from 12 to 13 miles.
795. You know the route of the proposed railway and the number of properties through which the surveyed route passes? Yes.
796. Who among the owners will benefit most extensively from the construction of the railway? Of course the large holders will get a greater benefit than the small holders. Every owner will be benefited in proportion to the size of his holdings.
797. The railway will also be of advantage to the whole district? Yes.
798. You think the Commissioners are warranted in expecting a revenue of £3,080 a year from the railway? I think that is a fair estimate.
799. If the Engineer-in-Chief for Roads had estimated that a macadamised road from Jerilderie to Berrigan, 18 feet wide, would cost £2,060 a mile, would you consider that an excessive estimate? I do not think it could be built for that sum, unless it were rushed through in summer time. They could not do anything with it in winter time. It would take an immense amount of money to make a good road there.
800. Coming back to the railway, what do you think of the proposal to construct a line for £1,830 a mile, dispensing with ballast, and with an earthwork formation of 6 inches? I think that estimate should be well within the mark, considering the speed at which it is proposed to work the line. I have been over the railway from Dookie to Kalamatite, in Victoria. That line seems to answer requirements, and it was constructed for about £2,000 a mile, I think.
801. You think such a line as that contemplated would answer all the requirements of the district? At present.

Mr. William James Greggery, farmer and grazier, Berrigan, sworn, and examined:—

Mr. W. J Greggery. 16 Jan., 1895.

802. *Chairman.*] Where do you reside? At Berrigan.
803. What are you? I am a farmer and grazier.
804. How long have you resided here? I have been here off and on since 1881. I have resided here permanently for the last six years.
805. Through what portions of your holding does the surveyed route of the line run? Through portions 72, 70, and 75.
806. You are aware that it has been suggested that the landowners should give the land required for the construction of this line? I am.
807. How are you prepared to act in the matter? I am prepared to give most of the land required for the railway, but I think that some concession should be made in regard to a few acres—I mean the south-west corner of portion 75. Still I should not insist upon it if I found that eventually the construction of the railway would be jeopardised by any demand on my part.
808. The products exhibited in the hall to-day have been grown in the vicinity of Berrigan? Yes.
809. You brought them here as samples of the produce of the district? Yes.
810. Will you state what they are? There are varieties of plums, figs, apples, oranges, grapes, peaches, nectarines, greengages, together with barley, oats, and wheat. Then there are cucumbers, potatoes, carrots, parsnips, tomatoes, water-melons, vegetable-marrows, pumpkins, onions, passion-fruit, turnips, mulberries,

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mulberries, and French beans. There is also a sample of butter made during the very hot days in November, and some specimens of sun-flower seed and flax.
811. *Mr. Roberts.*] What area of land do you hold? 3,500 acres.
812. What part of it is under cultivation? About 600 acres. I produce wheat, barley, and oats, and I use the remaining portion of the land for grazing sheep, cattle, and horses.
813. Do you produce much wool? About 90 bales.
814. To which market do you send it? I have been in the habit of sending it to Victoria, but if this railway were constructed, I should, of course, send it to Sydney.
815. You know the surveyed route between Berrigan and Jerilderie? Yes.
816. How much of your land would be required? About 18 or 19 acres.
817. What frontage to the line would there be? About a mile and a half, I think.
818. Have you felt the want of a better mode of carriage to Jerilderie? Very grievously. We had to enter into an agreement with Victoria last year, owing to the dry season. We had to beg them to give us a chance to use their lines. We had nowhere else to send our produce. We could not get the teams to travel this way. Our only chance was to send through Victoria and ship round to Sydney.
819. If this railway should be constructed to what point south of Berrigan would produce be sent along it? Under present circumstances fully 12 miles to the south, and possibly more.
820. Do you think we may look for much wool in this district? I think you will get some of the wool. It is a question of sending the cheapest way, and, as far as I can hear, the cheapest way would be by the proposed railway. I think the Commissioners are quite within the mark in estimating that there would be 700 tons of wool carriage.
821. Do you consider Berrigan the centre of this fine agricultural district? I have always considered it so. It is generally acknowledged here to be the centre.
822. *Mr. Gormly.*] Have you travelled much over the agricultural portion of this district? I have.
823. You are fairly well acquainted with the different holders? Yes.
824. The coloured map before you shows a radius of 20 miles around Berrigan. From how much of that district do you think agricultural produce would be sent on to the railway at Berrigan? I think you might safely rely for a certain distance upon getting the produce from within 10 miles on each side of the railway. I daresay in some cases you would get the produce from beyond that; but 10 miles embrace the most thickly settled portions of the district.
825. What particular portions of that area would send their produce to the line? The smallest proportion of the produce would come from the north-west. The south and east are so evenly balanced that it would be hard to say which would best support the line.
826. Are there good facilities for carting produce along the route from Jerilderie to Finley? Pretty good.
827. Can they get water? Yes; but I think that so long as the farmers can go and return with their own teams, say a distance of 10 or 12 miles in the day, they will do so in preference to hiring teams. If the railway is made the farmers in the distance I have named will be able to cart their produce to the railway when it best suits them.
828. I suppose to the south of Berrigan farmers would cart to the railway from a still greater distance? Yes; because they would have the border duties to contend with.
829. And there is no other railway in the Colony to which they could send their produce? None.
830. From what distance towards Savernake do the people send their produce to Berrigan? I think the farmers of Savernake have been the strongest supporters of this railway since it was first mooted. I think they would send at a distance of from 9 to 10 miles out.
831. Will not the estates through which the line passes be materially benefited by its construction? Yes. I know that some of the large estate owners are being put to great inconvenience through their fences being cut in all directions by the teamsters.
832. I suppose cross-roads would have to be constructed through some of the estates to reach the railway; what would the owners think of that? If necessary, I suppose it would have to be done.
833. You think, nevertheless, the estates should be benefited? Yes.
834. Do you think they would be benefited to an extent equal to the value of the land taken? Up to a reasonable valuation they would at any rate; but I am not in a position to say whether the betterment would be equal to the value of the land taken. For my own part, I am willing to give the land.
835. Is any other produce besides wheat grown in any considerable quantities in the district? Yes; other things are grown. But in addition to this produce, there would be considerable timber traffic along the line for firewood. There would also be a traffic in road metal.
836. But as regards agricultural produce? Well, there might be potatoes and onions.
837. But they are not produced in tons? Yes, they are in many instances; but they cannot be sold. I myself have produced tons and tons of potatoes and onions.
838. Could you produce pumpkins? Yes; but they all rot on the ground. We cannot dispose of them.
839. Do you send fat stock from this district to the chilling works at Narrandera? Yes.
840. What area of the land round about Berrigan would it take to feed a sheep? It goes about two sheep to the acre.
841. Will your land carry that? Yes.
842. Do you know of other land in the district carrying two sheep to the acre? Yes; I expect Mr. McFarland's land will go a little more.
843. *Mr. Davies.*] You understand agriculture thoroughly? I think so.
844. What does it cost per acre to plough, sow, reap, and bag your wheat? About 12s. 6d. per acre.
845. What does it cost to cart your grain to Jerilderie? Nine shillings a ton.
846. Do you think the present selling price, 1s. 9d. a bushel, leaves a sufficient margin of profit to the farmers to induce them to continue growing wheat? I do not think the present price does.
847. What price would give a fair margin of profit? I think we could grow wheat at 2s. 6d. a bushel. The margin of profit then left would not be very great.
848. With the present charges for carriage? Yes.
849. But unless there were an increase in the price, you could not continue very long growing wheat? When you have gone to a lot of expense in buying the land and the plant you must make use of it. You go on in the hope that things will take a turn for the better. If you attempted to sell your plant you would practically have to give it away.

850.

Mr. W. J. Greggery. 16 Jan., 1895.

850. Suppose the cost of carriage from this point to Jerilderie were reduced from 9s. to 2s. 6d. per ton, would the difference of 2d. per bushel be a sufficient inducement to you to continue growing wheat? It would be a great inducement to us from the point of view of carriage. The railway would also render us independent, and we should not have to rush our produce in as we do at the present time. The conditions of the road traffic at present compel us to take our produce to market at once, but with a railway we should have barns, and could take the wheat out of our barns as it suited us. That would be a great advantage.
851. You think that would induce the farmers to put a larger area of land under cultivation? It would be the life of the agricultural industry. The promise of Sir Henry Parkes of a railway some six years ago infused new life into the industry. At that time you could have calculated the cultivated area by hundreds of acres, now you have to count it by thousands. We have been induced to open up the country in consequence of the promise of a railway. Every year the area under cultivation is increasing.
852. At what price can you produce potatoes per ton? I am selling at £4 per ton.
853. Would you be surprised to know that in the present season potatoes have been sold at Goulburn at 20s. per ton? No; but our potatoes are grown for the local market.
854. You think, however, that you could produce fruit and all kinds of vegetables in great abundance? Yes.
855. *Mr. Lee.*] You remember a Sectional Committee visiting this district in 1892? Yes.
856. Did you not sign a paper which was laid before that Committee to the effect that you would be prepared to pay 2d. per bushel on your wheat until the line paid, if it were extended to Berrigan? I think I did.
857. That would be about 6s. 6d. per ton? Yes.
858. You know that the rate proposed to be charged on the railway is 2s. 6d. per ton? Yes.
859. You are satisfied with that rate? I think it is reasonable, and that it will give a great impetus to agriculture in this district.
860. You think your fellow residents here will be perfectly satisfied with the rate? They seem perfectly satisfied with it.

Mr. Patrick McFarland, farmer and grazier, Barooga, sworn, and examined:—

Mr. P. McFarland. 16 Jan., 1895.

861. *Chairman.*] What are you? A farmer and grazier.
862. Where do you reside? At Barooga, on the Murray.
863. *Mr. Gormly.*] How long have you been in the district? Thirty-five years.
864. To within what distance of Berrigan does your land extend? Six miles.
865. Is there land in that portion of your property used for agriculture? Yes.
866. Does your land extend from 6 to 12 miles from Berrigan in that direction? Yes.
867. Is much of that portion of your property under agriculture? About 10,000 acres at a distance of from 6 to 12 miles from Berrigan.
868. What proportion of the produce from that land would be sent to a railway at Berrigan if the rate for its carriage were fixed at 2s. 6d. per ton? All of it.
869. Are you aware of what quantity per acre the land has produced within the last two years? It produced five bags to the acre last year.
870. Have you any other product on your estate likely to be sent to the railway? Live stock. Of course it depends upon the rates. If the rates were favourable as compared with the rates from Cobram to Melbourne, the stock would be sent to Sydney. I have sent away as many as 20,000 fat sheep per annum.
871. The New South Wales railways would get the benefit of those sheep for the whole distance to Sydney if the rates were favourable? Yes.
872. Would you send any wool to Sydney? If I could send it that way more cheaply than by Melbourne, not otherwise.
873. You know the present charges upon the New South Wales lines? Yes.
874. Are those charges sufficiently favourable to induce you to send your wool to Sydney? No.
875. Fat stock and grain are the only products you would send to Sydney at the present rates? Yes.
876. I suppose you have a considerable knowledge of the district outside your own property? I have.
877. Do you consider it a good agricultural district? I do.
878. I suppose you know other parts of the Colony? I know the bulk of New South Wales.
879. What do you think of this district as a wheat-producing district? I think it is unequalled in any part of New South Wales.
880. There has been a considerable increase in agriculture in this district? Within the last two years it has increased rapidly, notwithstanding the fall in prices.
881. I suppose you have a good knowledge of the cost of producing wheat? Yes.
882. What do you consider the cost would be when the wheat is bagged on the farm? Fifteen shillings per acre would include everything.
883. What would be the average yield from your land? Twenty bushels.
884. Then the cost of production would be about 9d. per bushel? Yes; that includes everything but carriage.
885. What is the present price of wheat on your farm? The price is always varying. At the Cobram railway station I can get 1s. 10½d; at Jerilderie I can get only 1s. 9d.
886. What is the cost of carriage from your farm to Jerilderie? One shilling per bag.
887. Then your wheat, delivered at Jerilderie, costs you, for production and carriage, 1s. per bushel? Yes.
888. What price would you get in Jerilderie now? 1s. 9d.
889. Therefore, there would be an actual profit over the cost of production and carriage of 9d. per bushel? Yes.
890. Would that be a sufficient inducement to you to continue the growth of wheat? Undoubtedly.
891. Inasmuch as you produce 20 bushels per acre you derive an annual profit from the use of your land of 15s. per acre per annum? When I say that wheat can be grown for 15s., I am considering that the farmer puts in his own labour, and that he does not employ outside labour. Of course, I only get one-half of the 15s. per acre—the producer gets the other half.
892. For about how many years can you so cultivate your land that it would give a return of 20 bushels to the acre? As long as you like, providing you keep sheep at the same time.
893. But could you cultivate it continuously from year to year? You can cultivate it for five years in succession, then you can throw it out of cultivation for a time.

Mr. P. McFarland.

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894. The yield in the five years would amount to a considerable portion of the value of the land? Yes. Of course, I have not included any interest.
895. Is the interest on the value of the land equal to 15s. a year? No.
896. Then, after paying interest on the value of the land and all expenses, you would be still drawing a considerable profit? Yes.
897. I suppose you have seen returns as to the average yield of wheat in New South Wales and Victoria? Yes.
898. Taking those returns into consideration, do you think your estimate is a high one or a moderate one? I think it is about right.
899. For how many years has your estate been cultivated to the extent of 10,000 acres? Only for two years.
900. Considering the length of time you have known the district, do you think your crop would be affected many seasons by drought? No; I have had as good a crop with 10 inches of rainfall as with 26 inches.
901. You have seen the effects of drought in the district;—does wheat suffer so much as grass? Not so much.
902. I suppose the soil is sufficiently deep to retain a quantity of water which will enable the crops to resist the drought? Wheat does not require so much rain.
903. Do you know what crops suffer from drought in different parts of the Colony? It depends upon when the rain comes. A moderate rainfall will grow wheat, if it falls at a certain time of the year.
904. In a year in which the rainfall would be about one half of the average, would such a drought affect this district as much as other parts of this Colony? I do not think so.
905. What is your reason for thinking so;—is the soil deep? Whatever the reason may be, I think there is no part of the Colony where a better growth can be obtained from a moderate rainfall.
906. Can timber be cheaply cleared in this district? At about 5s. per acre.
907. Does that include the removal of the stumps, making the land perfectly clear? Yes.
908. That is the cost where most of the timber has been ringbarked some time ago? Yes.
909. The timber burns away easily? Yes: that is the reason why it is so easily cleared.
910. Cannot cultivation be carried on more cheaply where the plough can travel long distances, and where the country is not broken up, so as to cause short work? I do not think it makes very much difference.
911. What are the holdings on your estate? 320 acres.
912. Have the working stock to get hay and grain while ploughing or harvesting, or do they feed on the grasses? We feed them on grass and chaff.
913. It is not costly to feed the working stock? No.
914. Is the climate suitable for ploughing and sowing in the autumn and winter months? As a rule.
915. Does the working stock need shelter when it is ploughing? No.
916. Then you think agriculture can be carried on cheaply in this district? Yes; in comparison with other districts.
917. *Mr. Davies.*] What was the primary reason of your giving up sheep-farming, and going in for wheat-growing? To get more money out of the land.
918. Does it pay better to grow wheat than to grow wool? Undoubtedly, acre per acre.
919. What profit would there be on wool-growing in a fair season, taking the cost of carriage and the present prices of wool into consideration? I do not think there will be any profit.
920. You are not likely to go back to wool-growing if you can make 15s. an acre from growing wheat? No: I think sheep return a profit of about 3s. an acre.
921. Would that be the average throughout the district? On good flocks, yes.
922. And the primary cause of the landowners in this district taking to wheat-growing is that it pays best? I think so.
923. You base your estimate on the rate of carriage you have now to pay to reach a railway station? Yes.
924. If there were a railway station at Berrigan, I suppose it would be a great advantage to you and other producers of the district to get your grain carried to Jerilderie from that place at 2s. 6d. a ton? It would.
925. It would increase your profit per acre from 15s. to 21s. 6d.? Yes.
926. Would that be an inducement to a larger number of landholders to put their land under cultivation? Most decidedly.
927. You are content to go on growing wheat for the low prices which exist at the present time? No.
928. Not if it gives you 15s. an acre as against 3s. per acre for sheep? I have taken acre per acre wheat against wool, but if I leased a man 320 acres he could not put the whole 320 acres under wheat. There may be swamps, or green timber, and other drawbacks, and probably he will not be able to put in more than 280 acres. You would have to take the profit on 280 acres as against the profit on 320 acres, where the whole area would be grazed.
929. You initiated a system of selling a portion of your estate? Yes.
930. Are those who purchased from you cultivating the land now? Yes.
931. They are all producing wheat? Yes; and they have all paid off except one.
932. You intend to carry out that principle to a greater extent? No; not selling.
933. But you have adopted other means of putting the land under agriculture? Yes; I have leased some.
934. Do you find that plan work satisfactorily to both parties? Yes.
935. Where does the produce from the holdings go? It is in abeyance yet. There are 3,000 acres of crop within a few miles of this township which will either go to Jerilderie or Cobram—in whichever direction we can get the most money.
936. If there were a railway to Berrigan it would all come here? Undoubtedly.
937. If you had a railway passing through your land I suppose you would be prepared to give the area required for its construction? At the original cost price.
937½. *Mr. Roberts.*] How many acres of freehold have you? About 70,000 acres.
938. How much under cultivation? There will be prepared for cultivation next year 19,000 acres. There are about 10,000 acres under cultivation this year.
939. *Chairman.*] How far is your settlement from the proposed terminus at Berrigan? About 6 miles.
940. That is the first settlement of land which you cleared? Yes.

941.

Mr. P. M'Farland. 16 Jan., 1895.

941. What is the area? About 3,000 acres.
942. How many purchasers are there? About four purchasers. Another settlement of 3,000 acres is held under the tenant system in "halves." Upon the next settlement of 7,600 acres there are about fifteen settlers, distant about 8 miles from the proposed terminus. They are also upon the share system.
943. These are areas which have passed into the occupation of grain producers, which will be affected by the railway in question? Yes.
944. As you get further south from the third settlement, below the parish of Nangunya, it appears probable that the produce will find its way along the Victorian line? No.
945. Where will it go? If you carry wheat at 2s. 6d. a ton it will go to Berrigan. Victoria being an exporting Colony, the grain would have to go through Victoria in bond, and come round to our own Colony. The total cost would be about 1s. a bushel, whereas the total cost from Berrigan to Sydney would be about 18s. a ton.
946. But when the time comes when the produce of the district will have to be exported, what will happen. The grain would then go to Cobram, and along the Victorian line.
947. Then it follows that, although temporarily the proposed railway would get the wheat almost down to the Murray, as the produce increases in volume it is likely to seek the cheapest route to the port of shipment? Yes.
948. Does your land extend down to the Murray? Yes.
949. Which would be the shorter distance—to a railway station at Berrigan, or to the Cobram railway station? Cobram would be 5 miles from the front land, and Berrigan 6 miles from the back land.
950. As far as you individually are concerned, the railway would be no advantage to you as regards the carriage of wheat, wool, or live stock? It would be a great advantage as regards the carriage of wheat.
951. What approximately is the quantity of wool grown on your station? About 300 tons a year.
952. Does the whole of that go to Melbourne at present? Yes.
953. All things being equal, would you give the preference to New South Wales, and send it by way of Berrigan? Yes.
954. As one having a large stake in the Colony, and putting your personal advantages aside, you are of opinion that it would be the right thing to construct the proposed line to Berrigan? Yes.
955. *Mr. Lee.*] It was reported to the Government about a month ago by a very high authority indeed, that if the Jerilderie line were extended to Berrigan, it would retain for New South Wales a good deal of traffic that now passes through Victoria;—can you endorse that opinion? Yes.
956. Have you any doubt about it? No doubt whatever. Where the produce goes the stores come from. At the present time we are compelled to deal with Victoria for all our stores, and these come to an immense amount of money. If there were a railway to Berrigan I should get all my goods from Sydney.
957. Is there any further statement you desire to make to the Committee? Well, I think there will be a good deal of traffic upon the line in the shape of hay or chaff. We could grow hay at the rate of 2 or 3 tons an acre.

Mr. Andrew Rutherford Brown, farmer, Berrigan, sworn, and examined:—

Mr. A. R. Brown. 16 Jan., 1895.

958. *Chairman.*] What are you? I am a farmer.
959. How long have you been in the district? Twenty-eight years.
960. *Mr. Davies.*] How long have you been farming? Three years.
961. I suppose you have been growing wheat in combination with sheep-farming? Yes.
962. You have heard the evidence already given;—can you give the Committee any information which has not yet been given to us? No. I think the evidence covers most of the points which ought to be considered.
963. *Chairman.*] Can you locate on the map the exact position of your holding? Yes.
964. The block adjoining the reserve shown as 108 is your holding, embracing 4,040 acres? Yes.
965. Was the land you hold, originally a part of the Barooga Estate? Yes.
966. What do you grow? Wheat, wool, lucerne, barley, and oats. We have horses and cattle also.
967. How do you send them to market? All *via* Melbourne.
968. Why? Because we cannot get the teams to cart to Jerilderie.
969. Do you do your ordinary business with Melbourne? Yes, everything.
970. How would a railway to Berrigan benefit you? It would save me about £200 a year in duty, and it would benefit the New South Wales railways by about £500 in freight. That is what I pay the Victorian Government. I have paid them £419 in freight alone since last May.
971. That means that if you had an opportunity you would send your produce this way? Certainly—everything.
972. You strongly endorse the opinion that a great deal of the trade now going to Victoria would be conserved to New South Wales if this railway were constructed? Certainly. We are obliged to go to Victoria at the present time, very much against our will.
973. You are strongly in favour of the construction of this line? Very strongly.
974. Do you know the rate it is proposed to charge for grain? I believe 2s. 6d. a ton.
975. Will that rate suit you? Yes; we shall be able to carry a little cheaper than *via* Melbourne.
976. That would be an extra inducement to you to use the railway? Yes. It is impossible to cart 6,000 bags to Jerilderie at the present time. We have to get it either to Jerilderie or to Cobram as soon as we possibly can, on account of the state of the roads later on.
977. The same argument would apply to your neighbours? Yes; they are all of my opinion.
978. The Railway Commissioners could safely depend upon getting this traffic from your end? Certainly. I am within 7 miles of the border, and they will get the traffic to within 2 or 3 miles closer.
979. How does the present low price of wheat affect you;—will you be able to go on with its production? Yes; and do rather better than we can out of sheep. That is about all you can say.
980. But you have every hope of a slight rise? Yes. Even a rise of 2d. a bushel means a great deal to us, although at the present time we can carry on and do fairly well out of it.
981. What do you now pay per bushel from Cobram to Melbourne? 4½d.; and there is 1½d. for cartage from my farm to Cobram. Then the shipping charges are a little over 2d. It makes the cost for carriage round approximately 8d.
982. Or 24s. a ton? Yes.

Mr. A. R. Brown. 16 Jan., 1895.

983. If you could get the grain carried *via* Berrigan at 18s. a ton it would certainly be a wonderful saving? Yes; we can make £1 an acre out of the land with a fair crop.
984. There can be no doubt that when the line is made to Berrigan the Victorian Commissioners will fight to retain the trade? They will have to come down very low to get my traffic on the Victorian lines;—they will have to take it for almost nothing.
985. You think you will stick to New South Wales when the proposed railway is constructed? I can say so for my own part, and I think I can answer for a great many more.
986. Is there anything else you desire to say? It would be easy to send chaff *via* Berrigan if there were a railway, but for the next five or six years wheat will be the chief traffic.
987. *Mr. Gormly.*] Do you know the route the line will take from Berrigan to Jerilderie? Fairly well.
988. You have driven along it both or the existing road and off it? Yes.
989. Did you ever see any considerable stretch of water over that country? Only once, and that was last year. There was then a little water in the swamps. There are about three swamps between here and Jerilderie, but you could walk through them without wetting your ankles.
990. What would be the depth of water? About 8 inches in the deepest part.
991. What distance would they cover? About a mile, perhaps.
992. You do not think it would be necessary in constructing the railway to make high embankments over these swamps? There is not the least occasion for it.
993. How far back can you take your memory as regards this district? I can remember twenty years back very well. I have driven on the road you speak of for fifteen or sixteen years.
994. And during that time you have never seen such a rush of water as would be calculated to damage the railway line? I have seen no rush of water at all—it has been all stagnant water. The deepest water I ever saw there was last year, and then it was only about 8 inches in places. I drove 40 miles in four hours along the road, so that it could not have been very bad.
995. You remember the floods of 1870? Yes.
996. You know that there was a good deal of flood-water during nine months of that year on the frontages of the Edwards, the Murray, and the Billabong? Yes.
997. Did any of the flood-waters then go over the route of the proposed line? No.
998. You were over the country, I suppose, between May and December, 1870? Yes.
999. And you saw no flood-waters extending over it? No; it would be almost impossible for flood-waters from either of the rivers you name to run over it.

Mr. Patrick Connell, Spring Valley, near Jerilderie, sworn, and examined:—

Mr. P. Connell. 16 Jan., 1895.

1000. *Chairman.*] Where do you live? At Spring Valley, about 10 miles on this side of Jerilderie.
1001. You own some land through which the proposed railway passes? I am part-owner of 1,100 acres.
1002. Are you prepared to give the Government the land required for the construction of the line? No. The line does not benefit me at all.
1003. You would not use it? No; I do not think so.
1004. You would continue to cart your produce 10 miles to Jerilderie? Yes.
1005. What do you think your land is worth? From £4 or £5 an acre.
1006. You would expect to get that amount for every acre taken? Yes.
1007. You have thought carefully over the matter? Yes.
1008. Do you think the people of Berrigan would be benefited by the railway? I am sure I do not know. I suppose they would.
1009. If the fact of your not giving your land prevented them from getting a railway, how would you view the matter then? I am prepared to act as reasonably as I can in the matter.
1010. Supposing all the rest of the landowners were willing to take a certain price, would you stand out for the price you have named? I suppose I would have to fall in with the view of the bulk of them.
1011. *Mr. Davies.*] Supposing the betterment principle were applied, and it were discovered that your property had been benefited to a larger extent than the value of the land taken, and that instead of giving you anything for the land you were made to pay something towards the cost of the railway, how would you like that? I would not like it at all. I do not believe in the betterment principle.
1012. Would not your property be benefited by the construction of the railway? I reckon it would decrease the value of my property. I am quite close enough to Jerilderie to cart my own produce.
1013. Would you not get a double frontage to the railway? Yes, and my property would be divided into two besides.
1014. How did you acquire your land? Partly conditional purchase, partly freehold.
1015. What was the original price? I suppose it would be about £1 per acre.
1016. Would you accept the amount you have actually paid for your land, as regards the portion which might be required for a railway, coupled, of course, with the interest you have paid on your instalments? The value of the land has been increased very largely since it was first taken up.

Mr. Robert McGeoch, farmer and grazier, near Berrigan, sworn, and examined:—

Mr. R. McGeoch. 16 Jan., 1895.

1017. *Chairman.*] Where do you reside? At West Kylnyana between Berrigan and Mulwala.
1018. How far from Berrigan? The homestead is 15 miles.
1019. You adjoin Mr. McFarland's property on the north? Yes.
1020. What is your holding there? 6,000 acres, on Carlyle.
1021. You have another holding? Yes, 2,560 acres, at Nangunya.
1022. What is the distance of the first holding from Berrigan? About 7 miles.
1023. *Mr. Lee.*] What are you? I am a grazier principally; I have gone into farming during the last two years.
1024. How long have you been living in the district? About twenty years.
1025. How did you acquire your property? By conditional purchase and by freehold purchase.
1026. You have grown a good deal of wheat? During the last two years.
1027. What do you do with it? I send it to Sydney *via* Yarrawonga and Mulwala in bond.
1028. If the railway were made to Berrigan you would send your produce there? Yes, of course it would be much cheaper.

1029. And you would cart it from your property to Berrigan some 13 miles? Yes.
1030. Do you get all your stores from Victoria? Yes. I should be glad to deal with the Sydney merchants, but it is a question of freight.
1031. Could you not get your goods round from Sydney in bond? No, there is a good deal of trouble about that.
1032. Could not the goods be sent round under a re-entry certificate? I do not know. Small holders have not done that.
1033. How much do you pay the Victorian Government for freight in the course of the year? I should think about £200.
1034. And what duty do you think you pay the New South Wales Government on goods coming on? I should think from £60 to £70 a year.
1035. Have you any particular business arrangements with Victoria; do you prefer to do your trade with her? No. I am an old Victorian, but I left it twenty years ago. I came here because I could do better.
1036. So far as the railway is concerned as a matter of abstract business it would pay you to use it, and you would use it? Yes. I have only gone into cultivation lately. If there were a railway to Berrigan, where we now have hundreds of acres under cultivation we should have thousands. The land here is superior to any other land in the Colony for wheat-growing.
1037. Could you continue to grow wheat at the present low prices? I do not think so.
1038. Being on the land, if you did not produce wheat you would have to produce something else? We could combine it with grazing.
1039. Supposing the farmers and graziers along the route of the railway refused to give the required land free of charge, would you make one to recoup them for the land taken? Yes; and if the amount was spread over a number of producers it would be infinitesimal.
1040. You think that if the line were constructed a large part of the traffic which now goes through Victoria would be retained in New South Wales? Yes.
1041. *Mr. Roberts.*] How many sheep have you? From 17,000 to 18,000.
1042. What is your annual clip of wool? From 270 to 300 bales.
1043. How much wheat do you produce? This year we shall have nearly 2,000 bags.
1044. From your success last year you were encouraged to put in a larger crop this year? Yes,
1045. And you would send all your produce to Sydney and also get your stores from there if the proposed railway were constructed? Yes.
1046. *Mr. Gormly.*] Do you also send your fat sheep to Melbourne? Yes.
1047. Do you think it would be possible to send your fat stock to Sydney instead of to Melbourne if the line were constructed? Yes.
1048. You would still have a margin of profit? Yes.
1049. Have you many fat sheep during the year? From 2,000 to 3,000.
1050. Is there any other produce you could send to Sydney? This tract of country is suited to the production of hay. I have grown 3 tons to the acre. The cost of carriage now debars us from sending it to Sydney, but I know of some producers who have cut it up into chaff and who have sent it to Sydney.
1051. Were they satisfied with the return? Yes.
1052. What would be the average per acre? From 2 to 3 tons.
1053. Have you had experience in other parts of the Colony in growing chaff? In Victoria.
1054. And have you seen that quantity produced to the acre in Victoria? Yes; I have done it myself on the Murray, both oaten and wheaten chaff.
1055. *Mr. Davies.*] I suppose you have found that the growth of wheat pays better than growing wool? Yes.
1056. Does the price of wool leave you as large a margin of profit as the low price of wheat? No.
1057. Is there anything else you would produce if your district were connected with the Sydney market by railway? Pigs, perhaps, and all kinds of dairy produce.
1058. Would they pay better than sheep? Yes; but I think dairying would pay better than either at the present time.
1059. Do you think that butter could be produced abundantly? Yes.
1060. The only difficulty you have is in the matter of carriage? Yes.
1061. If you had a railway you think butter would be a source of wealth to you and other farmers? Yes.
1062. You think that, having regard to the suggested rates on the proposed line, the producers would send their produce that way instead of into Victoria? Yes.
1063. You regard this as very rich country for agriculture and grazing? Yes; and I have no hesitation in saying that if the proposed railway were made, 10 acres would be put under tillage where one exists at the present time.

Mr. R. McIlcoch. 16 Jan., 1895.

THURSDAY, 17 *JANUARY*, 1895.

[*The Sectional Committee met at the Public Hall, Berrigan, at* 10 *a.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

The Sectional Committee further considered the proposed Railway from Jerilderie to Berrigan.

Mr. John Jamieson, Surveyor, Railway Construction Branch, Department of Public Works, sworn, and examined:—

1064. *Chairman.*] You are a railway surveyor? Yes.
1065. You know the location of the line under consideration? Fairly well.
1066. *Mr. Roberts.*] Did you make the trial survey of the proposed railway? No; Mr. Bullard made it.
1067. And you have been instructed to carry out the permanent survey of the line? Yes.
1068. You are now in the locality for the purpose of carrying out that duty? Yes.
1069. Have you traversed the line from Jerilderie to Berrigan? A portion of it.

Mr. J. Jamieson. 17 Jan., 1895.

Mr. J. Jamieson. 17 Jan., 1895.

1070. You have not actually been over the whole of the trial survey? I have been over about 7 or 8 miles of the line.
1071. You have seen sufficient of the route to give an opinion as to its suitability? Yes.
1072. The country is perfectly level? Practically. Berrigan is 28 feet higher than Jerilderie.
1073. Are there any creeks between here and Jerilderie? According to the section there are two creeks the Algudgerie and the Berrigan.
1074. Which is the deeper of the two? Algudgerie.
1075. Has the Algudgerie Creek any banks to it? No.
1076. Has the Berrigan Creek any banks? As far as I can see from the section it has not. The present survey crosses on a dam.
1077. You are aware that at times in this part of the country the water lies to some extent? I believe so.
1078. Do you think there will be any difficulty in dealing with this water;—would it exist to such an extent as to create any difficulty? There is no difficulty but could be easily dealt with by the Department.
1079. There would be no difficulty in draining the water off the land? No difficulty whatever.
1080. Are you aware of the width of the land required for the construction of the railway? I believe Mr. Firth said about 2 chains would be necessary, but I think that as it is suggested that the landowners should give the land, a chain and a half would be sufficient.
1081. Do you think 1 chain would be sufficient? I think it would be hardly wide enough.
1082. How long will it take you to make the permanent survey? If an assistant is sent to me we ought to be able to do it in two months. The actual staking of the centre line would take a very short time. It is picking up the boundaries in connection with the survey that takes the time.
1083. You are acquainted with the mode of drainage which is contemplated? Yes; I see the Engineer-in-Chief proposes a side ditch.
1084. You think that it will answer all purposes? Yes. Of course there will be box-drains independently of the side ditches.
1085. Will you make inquiries as to the supply of ballast in the district? Yes.
1086. Can you recollect a railway going through any similar country unfenced? Not on any survey on which I have been engaged; but I believe the line from Nyngan to Cobar is unfenced.
1087. You know that this line is of a purely experimental character, and that the fencing is to be done away with, if possible, with a view to keep down expense? Yes.
1088. Should you say, from your experience, that fencing could be dispensed with in this case? I think so, especially if there were only day running.
1089. *Chairman.*] Will you ascertain if the railway station cannot be brought a little closer to the town? Yes.
1090. *Mr. Roberts.*] Have you any further information to give which you think would be of service to the Committee? No; I think the Engineer-in-Chief said everything that was necessary in his evidence.
1091. *Mr. Davies.*] Do you know whether a deviation would be possible at the junction at Jerilderie? Of course it is possible, as I think Mr. Burge pointed out. I will bring the matter under the notice of the Engineer-in-Chief.
1092. After having seen this part of the country, do you think it is necessary to incur an expenditure of £225 a mile for earthworks? I think the work might be done at about £120 a mile.
1093. You think that would be ample? Yes. The clearing and grubbing of the line, of course, would have to be added to that. That would mean a little extra.
1094. That would not amount to more than 10s. an acre, I suppose? I suppose the clearing would amount to £18 a mile. Of course there is some of the line which is perfectly clear.
1095. The greater part of the line would not want any clearing? No.
1096. Then you think that the earthwork and clearing could be done for about £100 less than the estimate? Yes.
1097. How long will it be before you have finished? About two months if I get assistance. Of course there would then be the working plans to be prepared in the office; but the line might be constructed in a very short time.
1098. *Mr. Gormly.*] What proportion of the length of the line would require clearing? I suppose about one-half.
1099. You know the contract price for clearing in this district? No.
1100. Would you be prepared to endorse the statement that land here could be cleared for 10s. an acre, where the timber is ringbarked? That would be a very low price; it might be possible to do it.
1101. Have you had any experience in connection with the burning-out of box timber? I have seen trees burnt sometimes instead of being grubbed.
1102. What proportion of the line would require an embankment, and what would the height of the embankment be? I suppose about one-tenth of the line would require an embankment of from 2 to 3 feet.
1103. On the other portion you think an embankment of about 1 foot would be quite sufficient? Yes.
1104. From conversations you have had with the district road engineer, you know that he has had earthwork formations made at about 6d. per cubic yard? Yes.
1105. Would such a formation as that which the Committee saw on the road when driving down from Jerilderie be suitable for railway construction? I think so.
1106. The cost per cubic yard for railway formation would not be considerably over the cost in the case of road formation? No; not a great deal.
1107. On the formation of the road between here and Jerilderie have you observed that the formation made by the Engineer-in-Chief has been simply in depressions? Yes; chiefly.
1108. Therefore, you think that the formation in depressions, in the case of the railway, could be carried out at the same cost per cubic yard? I see no reason why it should not be.
1109. You think that the formation could be completed on the average for £120 a mile? Yes; I base that estimate on prices which the District Engineer for Roads says are given in the district.
1110. That would be the price of the complete formation upon which the sleepers could be laid? Yes.

Mr. John Curtis Drummond, farmer, Berrigan, sworn, and examined :—

Mr. J. C. Drummond. 17 Jan., 1896.

1111. *Chairman.*] You are a farmer, resident in Berrigan? Yes.
1112. For how long? Six years.
1113. You desire to give the Committee information—first, as to the general trade and produce of the district; and secondly, with regard to your own share in it? Yes.
1114. *Mr. Gormly.*] You have a fair knowledge of the number of farmers carrying on the production of wheat and other cereals, and the quantity of land under cultivation in the neighbourhood of Berrigan within a radius of (say) 20 miles? Yes.
1115. Has the quantity of land under cultivation in the district increased rapidly? Yes; it has been increased about 4 times over since I came here, chiefly in consequence of the promise of a railway.
1116. Has there been much increase in the present season? Yes; there is a large increase upon last year.
1117. In what proportion? I could not say.
1118. Has it increased one-fourth during the last year. Fully that, I should think.
1119. What is the average number of bushels produced per acre? In that respect I think I could corroborate the information given to the Committee on that point yesterday.
1120. Is it costly to clear land in the neighbourhood of Berrigan? Where there is pine scrub and the scrub has not been cut down it varies from £1 an acre downwards. It has been cleared at as low as 10s. per acre.
1121. What would the average cost be? If it is dry timber it would vary from 10s. to 15s. If there were green timber among the ringbarked timber it would run to £1 an acre.
1122. Do the settlers here appear to be permanent? Yes; cultivation has been gradually increasing ever since I have been here.
1123. Have any of the farmers allowed the land to go out of cultivation;—have they gone back to grazing? Not that I know of.
1124. Have you had any general expression of opinion from the farmers to the effect that it would not be advisable for them to continue to cultivate their land? No; most of the farmers have their machinery and horses, and they put in another crop in the hope of prices rising. They have their horses and plant, and they might as well put the crop in.
1125. Have you seen any other agricultural production besides wheat carried on in your district on a large scale? Nothing further than wool.
1126. What acreage goes to a sheep in this district? Nearly every farmer in this district is running one and a half sheep to the acre. The land has carried more since they have gone into cultivation.
1127. By cultivating a portion of the land they find that they can carry more stock than by running the whole of the land under natural grasses? Yes. Nearly every farmer cultivates in this district now.
1128. What proportion would be cultivated to enable the farmer to run as much stock as before? Well, if a man has 1,500 acres he can cultivate 500 or 600 acres and still carry the same amount of stock.
1129. So that the cultivated land, while increasing the farmer's income, does not diminish his stock? No.
1130. Cultivation has made the occupation of the land much more profitable? Yes.
1131. Are there many stock leaving the district? A good many.
1132. To what market are the fat sheep sent? In some cases they have gone to Melbourne, and I think out further some have been sent to Sydney.
1133. But in most cases to Melbourne? Yes.
1134. You would have to pay a stock tax in sending the stock over the border into Victoria? Yes.
1135. At no time has there been a considerable number of fat stock sent from the district? Not as a general rule.
1136. Are you satisfied with the profits derived from the land you have cultivated? Yes.
1137. You have made sufficient profit out of it to induce you to continue cultivating? Yes.
1138. You intend to go on wheat-growing? Yes.
1139. What area have you under cultivation? About 400 acres.
1140. What has been your yield per acre? From 25 bushels down to 10 and 12.
1141. How many years in succession have you cultivated your land? Six years.
1142. Has the yield fallen off? Yes; but I think it is due to the wet seasons we have had.
1143. You do not attribute the falling off to the land being exhausted? No; I have seen good crops in this district from land from which nine successive crops have been taken.
1144. Have you observed that the first and second crops are usually the best? Yes; the first, second, and third.
1145. Then the yield falls off to a certain extent? It keeps at from 16 to 18 bushels an acre in ordinary years. You will often find land which for five years will not go under four bags to the acre.
1146. I thought you said just now that the yield fell off after the third year? In some cases I have seen the yield in the third year go up to 30 bushels per acre.
1147. Is there any means of providing against the exhaustion of the soil here? By letting it rest a year or so.
1148. After it has had one or two years' rest, does it again produce an increased quantity? Yes.
1149. By periodically resting the land, the farmers could make it continue to return a good yield of wheat? Yes.
1150. You have not sent chaff from the district? Not in any quantity.
1151. Is the yield of hay in this district fairly good? In some cases we have a yield as high as 2 tons to the acre.
1152. There is no considerable number of milch cows kept in the district? No.
1153. Have you had experience in the growth of lucerne and other grasses in the district? No; but other farmers have gone in for lucerne and artificial grasses, and have done very well. They are grown largely at Warmatta.
1154. On hundreds of acres? 500 and 600 acres in some cases.
1155. What do the grasses consist of? Lucerne chiefly.
1156. Do those who grow lucerne cut it? They generally stock the land; in some cases they cut it.
1157. Have you observed that where the stock are kept continuously on lucerne land the lucerne is eaten out in the course of a few years? No; I have not noticed that.

Mr. J. C. Drummond. 17 Jan., 1895.

1158. How long is it since the lucerne has been sown in the district? I know of one paddock at Barooga, which was sown six or seven years ago.
1159. Does the lucerne still grow luxuriantly in that paddock? Yes; I do not think it has been sown since.
1160. Has it been continuously stocked since then? Yes; I have seen it heavily stocked.
1161. More than one sheep to the acre? Yes; I think more than twenty to the acre.
1162. Is that similar land to the land about Berrigan? Exactly the same kind of land.
1163. How far from the Murray is it? About 2 or 3 miles from the river.
1164. What is the character of the soil? Sandy loam.
1165. Are any other holdings in the neighbourhood sown with artificial grasses to any extent? Mr. Brown of Naranghi Park has sown some.
1166. To what extent has he grown lucerne? I think he has got in about 1,000 acres.
1167. How long ago did he sow it? I think it is about two years since he started.
1168. Has the lucerne come to great perfection in that instance? It is carrying a lot of stock.
1169. Is there any other produce grown in the district in considerable quantities? I think the district will compare with any in the Colony for its fruit.
1170. What are the chief varieties that can be grown here? We have about a dozen varieties of stone-fruit; grapes also grow well. A number of farmers look upon fruit-growing as one of the coming industries of the district.
1171. Have you had experience of fruit-growing in other districts? I have not.
1172. In what way could the fruit grown be used so as to render its production profitable? It could be either dried or preserved.
1173. Have you noticed any considerable drought in the district since you have been here? No.
1174. Have the crops suffered from drought during the time you have been here? No; it has been rather the other way.
1175. And have you not noticed that the stock has suffered? No.
1176. What are the chief months in the year in which you get your rainfall? From July to about November.
1177. You have not kept a rain-gauge? No.
1178. Is there any other information you would like to give to the Committee? I have made a rough calculation of what we have paid for sending grain to Jerilderie from our 400 acres during the last six years and it comes to £460.
1179. If the railway were constructed you would save a large proportion of that amount? Yes.
1180. And I suppose the agricultural produce of the whole district would be increased? Yes.
1181. You yourself would have a greater tonnage to send by railway than you have hitherto sent by team? Yes.

The Hon. Rupert Clement George Carington, grazier, Momolong Station, sworn, and examined:—

The Hon. R. C. G. Carington. 17 Jan., 1895.

1182. *Chairman.*] What are you? A grazier and part owner, with Mr. J. S. Horsfall, of Momolong Station.
1183. You have a fair knowledge of the railway under consideration? Yes.
1184. *Mr. Davies.*] How long have you been a grazier? Two years.
1185. What is the size of your holding? I have 19,000 acres of freehold and 4,000 acres of leasehold.
1186. Will the railway pass through any portion of your property? No.
1187. How close will it pass? It will be 12 miles from our woolshed, and about 12 miles from where we shall cultivate in future.
1188. Have you much land under cultivation? This year about 900 acres.
1189. Where does the wheat grown on your station go to? To Jerilderie by team.
1190. If the railway were constructed you would send your produce to Sydney by it? Yes; we should send all our wool and all our produce to Sydney by it.
1191. Where does your wool go to now? To Melbourne.
1192. What quantity? About 80 tons, or 486 bales.
1193. That wool, if the railway were constructed, would find its way to Sydney? We should send it to Sydney even if rates were higher.
1194. No matter what the difference might be? The rates are sure to be higher, but we should send the wool that way on account of the great advantages the district would receive from the railway.
1195. You are strongly impressed with the necessity for a railway in this district? It is absolutely necessary. We paid £2 6s. 4d. last year to the Victorian railways for freight, and only £1 2s. 6d. for cartage was spent in New South Wales.
1196. That is for wool? Yes.
1197. Did you send any of your grain to Victoria? No.
1198. What quantity did you ship last year? About 6,000 bags. We bought it from persons to whom we had sold 8,000 acres of the Momolong Estate. It was delivered at the woolshed about the middle of March, and it was December before I could get it away, on account of bad roads and the want of teams, and even then we had to pay a very high rate of cartage.
1199. Is it your intention to increase the cultivated area of your estate? Yes; we have 9,000 acres available for sale now.
1200. Is all of it good agricultural land? Yes.
1201. How many purchasers have you on your estate? About twelve. The holdings vary from 1,700 to 320 acres.
1202. The men are settled upon the 8,000 acres you have sold? Yes.
1203. Can you tell us exactly how much of the area is under cultivation? 6,580 acres are actually under cultivation. When I came to Momolong two years ago the only cultivation on the Momolong Estate was our own, and that would be about 200 acres. This year we shall send away from Momolong 23,000 bags. That would include the produce of the sold land together with our own. I think the estimate of wheat traffic is very much under the mark.
1204. The quantity you mention will find its way to Jerilderie? Yes; every bag of it will go to Berrigan if the railway be made.
1205. You know that the proposal of the Department is to lay down a cheap line, costing about £1,835 a mile? Yes.

The Hon. R. C. G. Carington. 17 Jan., 1895.

1206-7. The cheapest kind of railway ever attempted in the Colony? Quite so.
1208. You believe that such a line would benefit your district very much? Yes; it is all we want.
1209. A speed of 15 miles an hour, and a day service, would serve the district for a long time? Yes.
1210. I suppose the existence of the railway would be an inducement to property-owners to put their land at the disposal of those who were willing to take it up for cultivation? Yes. I think a large quantity would be put under cultivation on the "halves" system.
1211. You have not tried that yourself? We have a little, but only about 500 acres.
1212. Has the result been satisfactory? Yes; I think so. But we would rather sell.
1213. You know the rates proposed to be charged on the railway? Yes; I understood that 2s. 6d. a ton was to be charged for wheat, as long as the railway did not pay, and that the rates were to be gradually reduced if the line paid, until they reached a point which would give a fair rate of interest. For instance, if the line would return 3½ per cent. at low rates, I suppose we should get the advantage of them.
1214. Do you send any live stock away? I am making arrangements to breed sheep for freezing, so that we shall probably be sending to the Narrandera works by this line.
1215. Do you send your stock to Melbourne? When we first came here we did, but what with the expense and the stock tax, we shall send no more that way. I send as little as I can to Victoria.
1216. Do you think much stock would be trucked in this district if the line were constructed? A certain amount. I think the previous witnesses have rather under-rated the probable stock traffic. I think that if prices keep up, the stock traffic will be very much above their estimate. We ourselves would freeze about 5,000 sheep a year if things turn out well. Of course a great deal depends upon the prices at home.
1217. Is it too much to estimate that there will be 700 tons of wool carried on the railway yearly, seeing that you yourselves propose to send 80 tons? I could not say as to the wool.
1218. Do you think the other large wool producers would send their wool by this line? I think it very probable that Mr. Wilson will send his wool by it. Of course, I cannot say definitely, but the line would be close to his woolshed.
1219. Do you think 170,000 bags of wheat would be carried on the line? A great deal more than that I should think. We get 23,000 bags on Momolong already. I think the wheat traffic might be put down at 200,000 bags at least.
1220. You know that wheat is regarded as the principal item of traffic to the railway? Yes.
1221. You think there will be an increase in wheat production if the railway is constructed? Yes. At the present time we are paying 1s. 1d. a bag, and I have paid as much as 1s. 3d. a bag. A producer next to me is paying 1s. 3d. a bag.
1222. You think that the difference between the present prices of carriage to Jerilderie and the rates which will exist upon the railway would induce settlers to have more cultivation? Yes.
1223. The railway rates would be an advantage to them? An enormous advantage.
1224. You do not think an estimated revenue of £3,059 for the railway is too much? No; I think it is probable that the line will develop the country a great deal, and that other things will be grown if there is a chance of getting the produce away. A great deal more would be grown now if there were a chance of getting it away.
1225. Do you think dairying, and other things of that kind, would be adopted by the farmers if they saw a means of getting their produce away? Yes.
1226. The district grows fruit very well, does it not? It would grow almost anything. It is simply a question of getting the produce to market.
1227. You advocate the line as being absolutely necessary for the development of the district? Yes.
1228. Is there any further statement you wish to make to the Committee? I should like to say this:—If the line is not made we shall be driven to Victoria. I do not see how it is possible to go on paying present prices for carriage, having regard to the existing price of produce. What we should do personally if the line were not made would be to look to the English market, and to send goods, in bond, through Victoria. Of course it would be much cheaper to send to Sydney if we had a railway.
1229. It is proposed to dispense with fencing on the proposed railway; what effect do you think that would have upon stock. I have not had sufficient experience to tell you, but Mr. Wilson is a man who has had experience, and I understand he prefers that the line should not be fenced. The traffic, of course, would be run in daylight and there would be only a few trains.
1230. You do not think there would be any serious objection on the part of station owners to the line being unfenced? I should think it would be an advantage to the station owner because he would not be cut off from his tanks.
1231. What is the general value of land in this district? About £4.
1232. Would the land you are offering for sale realise £4 an acre? I think so. Of course the value of land varies in this district as in others. Some land is much better than other land. It depends whether it is fit for agriculture. A great proportion of this country is fit to grow anything. Mr. Brunskill, a well known farmer, said the crops he found here were the best he had ever seen in his life, either in England or Australia.
1233. Have you seen any better wheat crops in Australia than you have seen here? I have never seen anything like it. The average in this country last year was the highest in New South Wales.
1234. Supposing the proposed line went through your land, would you be prepared to give the Government the portion required for it? Certainly, and as we cannot give it we are sending our wool by the railway.
1235. Even at a temporary loss? Yes; but I do not suppose that the loss will be very much.
1236. You regard the railway passing through your estate as likely to improve it? Yes.
1237. Giving it an additional value? Yes.
1238. Is there anything further you wish to say? No. All that I wish to impress upon the Committee is this, that if the railway were constructed it would bring a larger traffic to the centres of New South Wales. It would be a great feeder to the main line.

Mr. Herbert Royse Lysaght, Manager of the Commercial Banking Company of Sydney, Berrigan, sworn, and examined:—

Mr. H. R. Lysaght. 17 Jan., 1895.

1239. *Chairman.*] What are you? I am the manager of the Berrigan branch of the Commercial Banking Company of Sydney.
1240. How long have you been resident here? Rather over three years.
1241.

Mr. H. R. Lysaght. 17 Jan., 1895.

1241. *Mr. Lee.*] You are connected with the Progress Association of Berrigan? I am the honorary secretary.
1242. You have taken an active interest in the railway question? Yes.
1243. You remember the Railway Commissioners being here a short time ago? Yes.
1244. Were you one of the deputation which waited upon them in reference to this line? Yes.
1245. Did you make the statement to the Commissioners that in your opinion the landowners would be prepared to give the land through which the proposed railway would pass? I made no definite statement to them as to that.
1246. It was merely an expression of opinion on your part? Yes.
1247. Have you prepared any statistics which you wish to lay before the Committee? I prepared statistics for the Railway Commissioners, but I have not a copy of them with me. I can, however, give you a list of holdings within 10 mile of Berrigan [*Vide Appendix.*]
1248. Do you remember meeting Mr. Harper of the Railway Department, when he was collecting information to enable the Commissioners to form an opinion as to the probable traffic? Yes. I made up a return for him.
1249. How did you arrive at your statistics? I had by me for my own use a return of all the holders in the district. It was made two or three years ago, and I have added to it gradually. The return I have already handed in will show you the position of the holding, the description of holding, the total area and the area under crop. I have taken a great interest in the area under cultivation.
1250. The particulars you furnished to Mr. Harper may be accepted as being approximately correct? Yes.
1251. Will you tell the Committee your opinion of this district from a banker's point of view? I think it is one of the soundest districts I have been into in New South Wales. The land is good; in fact, there is a larger area of consistently good land than in any other district I have seen.
1252. What, generally, is the position of the small settlers? They are very well to do as a class.
1253. Is there a tendency on their part to dispose of their farms, and to go to other districts? None whatever. A good deal of land was thrown open here in 1879 and 1881, and since then not an acre has gone back to the big holders. Either the original selectors live here, or they have sold out to other small holders.
1254. There is a disposition on the part of the large land holders to throw their land open for cultivation? Yes.
1255. Have you observed that there has been a gradual increase every year in the production of the district? Yes.
1256. Would this year be the biggest year from the point of view of production? This year would be the largest of the four I have seen.
1257. So that you are in the happy position this year of having the largest area under crop and the lowest price? Yes.
1258. Do you think the farmers will continue to grow wheat at the present price? Not with a continuance of that price. They might continue for a year or two, but I do not think they would continue if the price extended over a series of years. They would gradually fall out, I think.
1259. Has the district agricultural possibilities outside those of wheat growing? I think it is eminently adapted for the growth of all cereals, also for fruit growing. I think also that dairying and grazing can be carried on to a far greater extent than it has been. Lucerne has been put in largely lately, and places which only carried one sheep to the acre formerly, now carry two and three.
1260. The produce sent to market from the district now is confined to wheat, wool, and stock? Yes, chiefly.
1261. But you think there would be a considerable traffic in other produce if cheap carriage could be obtained? Yes, and a market.
1262. Are you of opinion that the suggested rates are such as to permit of the farmers using the line? Yes.
1263. On the whole they are satisfied with the proposed rates? Yes; they are perfectly satisfied to pay 2s. 6d. a ton for wheat—it would give them 2d. a bushel better price.
1264. Have you seen a dry season since you have been here? No.
1265. Have you travelled round the district since you have been here? Yes; continually.
1266. As to the location of the railway, how would Berrigan stand as regards the centre of the agricultural settlement? The most central place you could pick would be in the immediate neighbourhood of Berrigan.
1267. Could that statement be verified by reference to the area of land under cultivation? There is no doubt about it.
1268. What is the distance to Finley? Fourteen miles.
1269. What is the opinion of the Berrigan people as regards the settlement of Finley;—do they think the settlers there would come to the railway terminus here? We think that all the people to the east of the stock route would use the line at some point or other. If not here, at a siding between here and Berrigan.
1270. To what distance do the farmers extend here on the northern side? About 14 miles.
1271. Do many lie back from the main road? Not a great many.
1272. Is there more settlement to the north or to the south? There is more to the south.
1273. And to the east and west? Yes.
1274. Have you known instances where wheat has been ready for market, and where there has been no means of taking it to Jerilderie? Yes; this year that has been so more than in any other year.
1275. Has the absence of carrying facilities led to a loss of produce? Yes; it has often been a great inconvenience to men wanting money. They have not been able to get their wheat into a market to obtain it.
1276. I suppose that immediately the produce is ready the farmers have to sell it? A certain proportion of them.
1277. Is that not the rule? No. I suppose there would be one-half of them who would want to get money; the others can afford to wait.
1278. If there were a railway line, you think a large number of farmers would store their wheat and await a suitable market? A large proportion would do so.
1279. Whereas at present many of them are compelled to send into Jerilderie when they can get teams—that is to say, during the dry weather? Yes.

1280. From that point of view the railway would put the producer on a fair footing with the markets of the country? Yes.
1281. Does anyone in the district offer any objection to the construction of the line? Not in this district.
1282. The residents are unanimous on the point? Perfectly unanimous. Men who are actually outside our original returns are strongly in favour of the line.
1283. You have been agitating here for a considerable time for some sort of railway? Yes.
1284. I suppose it is due to continuous representations made by people here that the Railway Commissioners were induced to come down to the district and see it for themselves? I daresay.
1285. You have heard the evidence of previous witnesses;—if there is any point which has not been made clear, can you make it clear to us now? There is only one point which I might refer to, and that is the difference between the settlement here and at Finley. The bulk of the farmers here are men who own their land. At Finley the bulk of the settlers are leaseholders. I think that is a strong point in favour of the line coming to Berrigan.
1286. I suppose the leaseholders at Finley have a right of purchase? I think they have a right of purchase, but I have not heard of any of them purchasing.
1287. What is the rent they are supposed to be paying? Five shillings an acre; the land is valued at £1 2s. 6d. an acre.
1288. From what you have been able to see of the district, do you think there is any reasonable probability of its present output decreasing? Not unless we have a continuance of the present price of wheat for a period of years.
1289. From every other point of view you think the district ought to increase in population and production? Yes.
1290. *Mr. Gormly.*] With reference to the Government acquiring the land for the railway without cost, do you think there is likely to be any combination of local residents to provide a fund for the purchase of the necessary land in cases where the owners will not give it? I think that if it were absolutely necessary we could obtain the money; but this year has been such a bad year as regards the price of wheat, and also as regards the yield, that there might be some difficulty in obtaining it just now.
1291. Will the association, of which you are the secretary, take the matter into their consideration, and see what they can do in the event of some of the owners refusing to give their land without payment? If we found the line was in jeopardy by reason of the owners not giving the land, we would take some steps in that direction.
1292. You are acquainted with the Railway Commissioners' report? Yes.
1293. Has the Berrigan Progress Association considered that report, or is it likely to consider it? We have not considered it, because we never knew exactly what steps the landowners were prepared to take in the matter.
1294. I should have thought that if the people of this district were anxious to get the line constructed, the Commissioners' report would have been one of the first things the association would have considered? We have some difficulty in obtaining the views of the different landowners concerned.
1295. Persons owning small areas of land, a considerable area of which might be taken from them, would not have their property benefited very much by the railway? Exactly so.
1296. And it would not be reasonable to expect them to give their land? No.
1297. Do you think there is any probability of the district making some arrangement to compensate land owners in that position? I think the district would probably take steps in that direction.
1298. You think it is desirable for the Progress Association to consider the matter, and if possible to secure united action? Yes.
1299. *Chairman.*] In your opinion, in regard to any farming or pastoral property, is the betterment which comes from railway construction greater than the injury done to the property by the resumption of the land? I think so.
1300. That is beyond doubt? Yes.
1301. Therefore, the Government can depend upon the people of Berrigan and other persons interested in the railway enabling them to prove that no compensation should be given in many instances for land resumption? I think that in some cases where the small owners would have their land cut up the railway would not be of much advantage to them.
1302. But, generally speaking, men in the district would come forward and see that the Government were not looted for land resumption? Yes.
1303. As a rule, do you think the betterment quite compensates for the resumption? Yes.
1304. One of the landowners concerned, Mr. A. C. Wilson, is not here? No.
1305. Can you say what he intends to do in the matter? I have received a telegram from Mr. Wilson stating that he could not be here, but he told me that he would throw no obstacle in the way of the line.
1306. Do you think, from your knowledge of him, that he will take the view you have expressed? Yes.
1307. You think the Committee are justified in thinking that Mr. Wilson will view the matter as you do, and that he will allow the Crown to have the land? My impression is that if he does ask for any price at all it will be a very moderate one—about the first cost, perhaps.

Mr. H. R. Lyeaght. 17 Jan., 1895.

Mr. Roderick McDonald, farmer and grazier, Berrigan, sworn, and examined:—

1308. *Chairman.*] Where do you live? Two and a half miles from here.
1309. How long have you been here? Thirteen years.
1310. What are you? A farmer and grazier.
1311. Do you know the position of the proposed railway from Jerilderie to Berrigan? Yes.
1312. You are the owner of portions 79, 69, and 71? Yes.
1313. Are you aware that the railway passes either adjacent to or right through those properties? Yes.
1314. Are you prepared to give the Government the land necessary for the railway? I should like to get money for it. I had to pay for the land.
1315. How much did you give for it? I gave 30s. an acre for part of it.
1316. What did you pay the Crown for the rest? One pound per acre. If the Government would give me a small platform opposite my place, I am prepared to give the land altogether free.
1317. Is there anyone else but yourself growing wheat in the locality who would come to the platform you suggest? Yes, Mr. Jones would be one.

Mr. R. McDonald. 17 Jan., 1895.

Mr. R. McDonald. 17 Jan., 1895.

1318. What quantity of wheat would be grown within say, a couple of miles of the platform? A good deal—I suppose about 5,000 bags. There would be wool besides.
1319. You think that surrounding the platform there would be a sufficient production of wheat and wool to justify its erection? Yes.
1320. Do you know the road running along the north boundary? Yes.
1321. Would somewhere close to that point be a good place to put the platform? I think it should be a little nearer Berrigan.
1322. *Mr. Roberts.*] How many acres have you under cultivation? A little over 200.
1323. Is it all under wheat? Yes; I have 20 acres under lucerne in addition to that.
1324. The rest of your holding is devoted to grazing purposes? Yes, and I have a few dairy cattle
1325. Where do you now send your wheat, live stock and wool? The wheat goes to Jerildere and the wool to Melbourne.
1326. If this railway were made you would send all your wheat towards Sydney? Yes; if the rate were not too high.
1327. It is proposed to charge 2s. 6d. a ton on the new line;—do you think you would be satisfied to pay that rate to Jerilderie? Certainly.
1328. Does the wheat yield of the present year come up to that of last year? No; the weather has been bad. The wheat at the beginning was good—I believe very nearly as good as last year—but the heat and rain between them have spoilt it a good deal.
1329. You have no difficulty in getting your wheat taken to Jerilderie? No; there are plenty of teams, but I have not sent any yet.
1330. If the present low price of wheat continues, would you continue to grow it? I expect so.
1331. What amount of capital would be lying idle if you discontinued the production of wheat on your farm? It would mean a great deal, although I have not gone in very heavily for implements yet. This is only my second year of wheat-growing. Previous to settling in this district, I grew wheat in Victoria.
1332. How many bushels to the acre did you grow there? About 8. I have grown about as many as 40 to the acre here.
1333. That was on a special piece of land? Yes.
1334. Are you particularly anxious for the construction of the proposed railway? Yes; I should like to see it constructed.

Mr. John Jones, farmer and grazier, Berrigan, sworn, and examined:—

Mr. J. Jones. 17 Jan., 1895.

1335. *Chairman.*] What are you? A farmer and grazier.
1336. Where do you reside? Three miles from Berrigan.
1337. What land have you? I have an interest in 1,280 acres, of which 640 acres are freehold.
1338. *Mr. Gormly.*] The other portion of your holding is leasehold land? Yes.
1339. Do you desire to give evidence as to the production of this district? Yes.
1340. You have been here how long? Six years.
1341. You have a considerable knowledge of wheat production in other districts? I have a considerable knowledge of the Goulburn Valley district.
1342. Have you a knowledge of the wheat-growing districts of New South Wales? Yes; within a radius of (say) 30 miles.
1343. How would the Berrigan district compare with the Goulburn Valley district? Very favourably.
1344. Have the farmers been successful in cultivating land in the Goulburn Valley district? Yes; a number have.
1345. Do you think the land in this district is as well suited for agriculture as the land there? Yes; rather more so. The land runs more evenly through this district than through the Goulburn Valley district.
1346. What is the difference in the cost of cultivation here and in the Goulburn Valley? It is very much the same I think.
1347. Is the land cheaply cultivated? Yes.
1348. At about what time do you usually do your ploughing? We start about April as a rule, and finish up at the end of June.
1349. Can you plough the land here before the autumn rains? We can do it; but it is not advisable to plough it when dry.
1350. Is it costly then? Yes; and if you plough the land when it is not suitable, you break it up, and you have a lot of trouble to make it mellow afterwards.
1351. You have, as a rule, to wait for the autumn rains, before you commence to plough? It is advisable.
1352. Since you have been in the district, have the autumn rains come on in sufficient time to enable you to plough large areas of land? Yes: the rain generally comes on from March to April;—you can look for them not later than April.
1353. You have tried fallowing the land I suppose now and again? Yes; there is no other way of farming well.
1354. You find that by doing that you keep the land free of weeds? Yes.
1355. How do you deal with the land which has been fallowed in the spring, when you are going to sow the grain in the next autumn? We use 6-furrow ploughs.
1356. And you turn over a good deal of land in the day with a comparatively small amount of traction? Yes.
1357. When you fallow your land, is there an increased yield? Yes.
1358. Anything considerable? Yes.
1359. If a portion of your land were fallowed, it would distribute the work for you over a greater number of months? Yes.
1360. And you would keep your men permanently employed? Yes.
1361. Do your observations apply to the radius to which you have referred? Yes; the richer the land, the greater tendency it has to grow weeds. Be as careful as you may, rich land will grow weeds. The only thing to do is to graze it heavily with sheep, and to plough it next year.
1362. Do you leave your stubble on the land? No; it is burnt. You have to burn it, for you cannot get through it with a plough.

1363. Is there any other produce beside wheat and wool which has been generally grown in the district since you have been here? Wheat is the principal produce, but if there were a market the district would be suitable enough for many other things.
1364. Is there any considerable quantity of lucerne grown in the district? Yes; I have 22 acres.
1365. How do you find it answer? I think no farmer should be without a lucerne tract.
1366. Would you graze your lucerne, or cut it? We graze it. There is a lot of trouble in cutting it.
1367. Have you had considerable experience in growing lucerne? Not much.
1368. You do not know whether the crop would become ultimately extinct with continuous grazing? Of course you want to nurse it.
1369. You can only graze it periodically? Any stock would get tired of it after a time. You would have to give them a change for the good of their health.
1370. Do you keep sheep? Yes.
1371. Do all the moderate holders keep sheep? Yes.
1372. I suppose some have a considerable number? Yes.
1373. What are the general carrying capabilities of the district? It depends upon how the holding is improved. If there is plenty of fencing you could keep up to three sheep to the acre. If you have only one ring fence, and the stock have the run of the whole place, they trample down more than they eat.
1374. Do you know of any holdings which carry more than three sheep to the acre? Yes. Mr. Greggery's land, and Mr. McDonald's land would do it.
1375. For a number of years in succession? Yes.
1376. For how many years? Say six years.
1377. Are there many holdings carrying that number of stock? A fair number.
1378. What quantity of land in the district is generally required for a sheep? I suppose one and a half sheep or two sheep to the acre would be a fair thing.
1379. Is the district a fairly good fattening one? You cannot beat it in spring time.
1380. Is any considerable quantity of live stock sent to Sydney market for export? My own impression is that if freezing prices keep up a number of farmers will breed sheep for that purpose.
1381. Do you know of any farmers who have gone into cross-bred sheep for fattening purposes? Yes, they have just started.
1382. Are many fat sheep sent from here to Narrandera? Not from here.
1383. Has dairying been carried on to any considerable extent in the Goulburn Valley District? Yes.
1384. Has that industry paid fairly well? Yes.
1385. Are the farmers who went into dairying there satisfied with the results? Yes, there was a number of farmers there whose farms got dirty, and they were compelled to go into dairying to keep things going.
1386. Do you think this district would carry a better population if it went into the dairying industry? I think it would carry more.
1387. But there would not be the same produce sent by rail? No.
1388. The population however, would be increased? Yes. You would require more hands to do the milking.
1389. Would the district produce more wealth? At present prices I believe it would.
1390. You think the farms would produce an equal annual income? Yes.
1391. You are speaking now from your knowledge of similar country on the other side of the Murray? Yes.
1392. If the present low price of wheat continued and it no longer paid the farmers here to grow it, you think then that they would go into dairying and other industries? Yes. But you must bear in mind that if you have not been breeding a dairy herd it means a lot of expense to buy it.
1393. You think a dairy herd should be gradually worked up while you were carrying on your farming? Yes, that is the only way in which it could be done.
1394. Do you think there is any risk attaching to the construction of a line from this point of view;—that the prices of produce may become so low as to considerably lessen the production and consequent traffic? No; I think wheat can be grown as cheaply here as in any part of the world, and the general opinion is that the price must rise. I saw wheat sixteen years ago at ruinously low prices. Since then it has been much higher, and I suppose the same thing will happen again.
1395. Berrigan is further removed from centres of population than are other parts of the Colony, where wheat-growing is carried on? I think it is as favourably situated for the production of wheat as are most other places.
1396. You think from what you have seen that the growth of lucerne and other artificial grasses would increase the carrying capabilities of the land? Yes, tenfold.
1397. Have your neighbours grown lucerne and other artificial grasses extensively? Yes.
1398. Is there anything else you would like to tell the Committee? I may mention that it has cost me in freight between here and Jerilderie in six years £700. It has been paid principally on wheat, and the amount is well within the mark.
1399. If the railway were constructed, would you be frequently a passenger upon it? Yes. I may also say that I think a line costing £1,800 a mile is too expensive. I have a knowledge of the line from Numurkah to Shepparton in Victoria. It cost less than £1,000 per mile. That would include everything excepting rolling-stock. The line carried 300,000 bags in the first season. The sleepers are 2 ft. 6 in. apart, and the trains run over the line at the usual speed. There was no ballast in the first instance. The Government ballasted it a few years afterwards, because the traffic on the line warranted them in doing it.
1400. Was that country easier for construction than the country between Berrigan and Jerilderie? I think it was more difficult. There is a lot of swamp about 10 miles out of Shepparton.*
1401. Would it cost more or less to clear the line? More, because the timber was all green.

1402.

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* Note (*on revision*):—I may say that the land in this district is also splendidly adapted for the growth of the peach and apricot, which have a large commercial value when dried; also for the vine, both table and wine grapes. I am also satisfied that if a line were constructed to Berrigan, it would induce a number of the farmers to go into the pig-raising industry, with a view to exporting the bacon.

Mr. J. Jones. 17 Jan., 1895.

1402. Do you know of any reason why a line between Numurkah and Shepparton should be constructed more cheaply than a line here? No.
1403. Are there any further statements you desire to make to the Committee? This year I have a paddock of 400 acres ready to cut for hay. It would have given me 800 tons of chaff. I could place it in the Sydney market, if a railway were here, at 35s. a ton. That is allowing £1 for carriage on the railway. The railway not being here, I am compelled to use it for grain. Chaff is selling in the Sydney market at £3 17s. 6d. I should therefore have a net return very much greater than the return I should receive from the land, allowing five bags of wheat to the acre. The Government would have had for the carriage of the hay £800, and for the wheat £220 making a difference of £580.

Mr. John Dickie, landowner, near Berrigan, sworn, and examined:—

Mr. J. Dickie. 17 Jan., 1895.

1404. *Chairman.*] Where do you reside? Seven miles towards Jerilderie.
1405. You are the owner of portions 92, 78, and 63, in the parish of Berrigan, and portions of that property are affected by the railway? Yes.
1406. Are you prepared to give the Government the land they require for railway purposes? Not as a gift.
1407. What do you consider the land worth? I gave £4 an acre for it.
1408. What are you prepared to take from the Government? I have not gone into that question. I could not give it to them for nothing.
1409. You would expect for your land what you gave for it? I should not like to take any less. I am not prepared to say at this moment what I would take. Of course the line does a certain amount of damage to my property by cutting me off from my tank.
1410. If the line were unfenced would it still be a great inconvenience to you? I could not say; I have no experience of trains running through my property.
1411. Would it be as injurious to your holding as if the line were fenced in on each side? I do not think so, providing it did not injure the stock. Often in hot weather milking cows and cross-bred sheep would, I am afraid, not get out of the way of the train. Besides, there may not be a fence in the first instance, but it might be fenced afterwards, and that would have to be taken into consideration.
1412. You would be prepared to act as reasonably as you could in the matter? I do not wish to be unreasonable.
1413. You desire to see a railway here? I am not very particular about it.

Mr. James Pyle, farmer, near Berrigan, sworn, and examined:—

Mr. J. Pyle. 17 Jan., 1895.

1414. *Chairman.*] What are you? I am a farmer.
1415. How long have you been resident here? Sixteen years; to be strictly correct, sixteen "harvests."
1416. How far from here? Six miles from here towards the north-west.
1417. *Mr. Davies.*] What is the size of your holding? I hold 980 acres of conditional purchase, and I rent, with the option of purchase, 625 acres.
1418. What proportion of it have you under cultivation? I have 1,260 acres principally under wheat.
1419. Where does the wheat go to? To Jerilderie by team. I paid in carriage last year £117, and I shall pay about £130 this year.*
1420. In the event of there being a railway between here and Jerilderie would you put a larger area under cultivation? Yes.
1421. Do you grow any other cereals? No, except a little oats which I am growing for my own use.
1422. Have you grown maize? I have never grown it for a crop, but I have seen splendid heads here. Maize is not grown in the district generally.
1423. Do you grow sheep on your farm? Not many. I fatten a few and send them away.
1424. Do you combine anything else with wheat production? Nothing but the sheep.
1425. If there were a railway here would you go into the raising of pigs? I have been thinking of it.
1426. You think that if there were a better means of transit by rail, you would be able to send a large number of pigs to market? Yes.
1427. Wheat would make good food for the pigs, would it not? Yes.
1428. Would you and your neighbours go in for dairying? Yes. We expect to start a creamery here by-and-bye.
1429. Your chief draw-back now is the want of communication with the metropolitan market? Yes.
1430. Have you any other information to give to the Committee? Ninety thousand bags went across the river last year. Supposing a railway were constructed here, and it were to attract one-third of that to Sydney, it would yield to the New South Wales railways, independently of what would be charged from Berrigan to Jerilderie, £2,500.
1431. How close would you be to the proposed line of railway? It would be about 1½ mile from the corner of my ground.
1432. Then I suppose you strongly advocate its construction? Yes.

Mr. George Whiting, farmer, Momolong, sworn, and examined:—

Mr. G. Whiting. 17 Jan., 1895.

1433. *Chairman.*] You are a farmer? Yes.
1434. Where do you live? At Momolong, 4 miles from Berrigan.
1435. You desire to give the Committee special information as to the production of flax and of sun-flower seed? Yes. I produce a specimen of flax. It is grown from some flax imported by the Victorian Government, and for which they are giving a bonus of £2 per acre. It is Russian flax, and gives a large proportion of linseed. I obtained the seed in August last, and planted it in September. What you see is about three months' growth. I have grown it for about ten years in Tasmania and Gippsland, having a

* Note (*on revision*):—My crop, stripped after I gave my evidence, turned out such a failure, that my carriage, instead of being £130, will only be about £90.

a guarantee of £40 per ton for all dressed fibre, and 18s. a cwt. for seed. For seed purposes or manufacture, I have carried on an experimental plot here. I sent a supply to Melbourne, not knowing that there were any manufactories in Sydney, and I received word back that they would give £40 for it if it were properly rotted and scutched. Mr. G. Whiting. 17 Jan., 1895.

1436. You believe it would be possible for considerable quantities to be grown here? Yes.

1437. You think it would be a thriving industry, and furnish freight to the railway? Yes, besides being a good thing for the district. With reference to the specimen of sun-flower seed which you see, I have never grown it before; but I have brought this in to the Committee to show them the plant will grow here. It is very nearly 6 feet in height, and there are flowers from the base to the top. I have read that Mr. Harper, in Victoria, is getting machinery out to treat the seed, and to extract the oil. Something like £8,000,000 worth of this seed is exported from Russia annually.

1438. For what purposes is it used? For different manufacturing purposes. I may state that the fibre of flax produces largely to the acre, and there would be about 6 bushels of seed in a good crop. Flax grows wild in the district, and I gather from that that the soil is suited to it.

FRIDAY, 18 *JANUARY*, 1895.

[*The Sectional Committee met at the Public Hall, Finley, at* 11 *a.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (Chairman).

The Hon. John Davies, C.M.G.	Charles Alfred Lee, Esq.
The Hon. Charles James Roberts, C.M.G.	James Gormly, Esq.

The Sectional Committee further considered the proposed Railway from Jerilderie to Berrigan.

Mr. William Blair, farmer, Finley, sworn, and examined:—

1438½. *Chairman.*] What are you? A farmer. Mr. W. Blair. 18 Jan., 1895.

1439. Where do you reside? Two miles to the east of Finley, in the direction of Berrigan.

1440. What area have you? 1,874 acres.

1441. What portion of that is under crop? 1,130 acres.

1442. How do you own your land? On lease from the owner of Tuppal.

1443. Have you the right of purchase? Yes; I am paying 5s. an acre rent, with the option of purchase at the expiration of the lease at £4 per acre.

1444. How long will the lease run? Seven years.

1445. What is your yield on the average? Of wheat, from 16 to 17 bushels.

1446. Where do you take your produce? To Jerilderie.

1447. How much does it cost you? Nine shillings a ton.

1448. What is the cost to Berrigan? I cannot say; I never carted to Berrigan.

1449. What are the respective distances? It is between 12 and 13 miles from my place to Berrigan, and it is between 22 and 23 miles to Jerilderie.

1450. What do you infer that the rate of carriage would be to Berrigan from your experience? From about 6s. to 7s. a ton.

1451. Then that rate with the suggested railway rate to Jerilderie added would bring the cost up to 8s. 6d. a ton? Yes.

1452. How far does the class of country known as the Murray fringe extend in that direction? To within 8 miles of Deniliquin. It then runs north-west to within about 4 or 5 miles of the proposed line from Jerilderie to Deniliquin. There may be some slight variation here and there, but, generally speaking, that defines it.

1453. The same land extends from 10 miles south of Jerilderie right down to the Murray? Yes.

1454. That is the land where the bulk of the farming settlement will be? Yes.

1455. Can you tell us the number of settlers to the west of Finley, and their area? I could supply you with it later on.

1456. *Mr. Davies.*] How long have you resided in the district? Three years.

1457. Where were you living previously? In Tasmania.

1458. There are a large number of Tasmanians who have leased land in this district? Yes; there are about twelve altogether, I think.

1459. They are all growing wheat? Yes.

1460. Do they combine sheep farming with it? Yes.

1461. To any great extent? Until this year they have done so. But finding that sheep farming would not pay, they have put the greater part of their area under wheat.

1462. Can they make it pay at the present price of wheat? They have to put nearly the whole of their area under crop to make it pay.

1463. By that means you think they could make it pay? Yes.

1464. Would there be a small margin of profit? There would be something to live upon anyway.

1465. Do you think that if the present prices were maintained there would be sufficient inducement to you to continue cropping your land with wheat? Until the land had run out.

1466. How long would it take you to exhaust the land? About five or six years I should think, although I have known land to be cropped five years in succession and yield a fair crop.

1467. Your present year's crop, I suppose, is not equal to the first year's crop? No; although I have known some of the heaviest crops in the district come from the third year.

1468. For five or six years you think that with constant cropping the land would give a reasonable yield? Yes.

1469. What would be the annual decrease approximately? It is not always the first year that is the best It was, in my case, because it happened to be a fine season. There would have been a fairly heavy crop this year, but the bad weather will affect the yield.

Mr. W. Blair. 1470. What would be the difference in the yield, comparing the first year with the fifth or sixth year? There would be a difference of about 4 bushels to the acre.

9 Jan., 1895. 1471. You think you would average 16 bushels to the acre for five years? Yes.

1472. Have you sent your wheat to Jerilderie this year? Yes.

1473. What did you have to pay for it? Nine shillings a ton.

1474. By contract? Yes.

1475. Has not a higher price obtained for the carrying of wheat this year? It depends upon where the farm is situated. I am near the stock route, and have a certain advantage.

1476. Supposing a railway were constructed to Berrigan, would that reduce the cost of haulage to you? It might, by competing with the carriers.

1477. Would it be advantageous to you in other ways;—would it not enable you to be independent of the carriers? Not by any means.

1478. Would you not have your own drays and horses? Not to cart that distance; you could not do it.

1479. You would still depend upon teamsters to carry your wheat to the railway, even if the terminus were at Berrigan? Yes.

1480. You know the surveyed route of the proposed railway? Yes, fairly well.

1481. You know to what extent it would serve the Berrigan district and a portion of this district? Yes.

1482. Do you regard Berrigan as being in a central position in the cultivated area? It is not central, although it is fairly so.

1483. Is there not more land under cultivation on the east side of Finley than on the west? Yes, I think so.

1484. Very much more? Not much more.

1485. What, approximately, would be the difference? I suppose there would be from 4,000 to 5,000 acres more on the east side, towards Berrigan.

1486. On the other side of the proposed railway there is also a large proportion of land under cultivation? I do not think so. I think if you came 7 miles this side of Berrigan you would come pretty well to the centre of the agricultural area. The proposed route passes on one side of it.

1487. Would a railway at the point you indicate serve the whole of the district of Berrigan, as well as the district of Finley? I do not think it would. It would serve Berrigan, but the farms to the east of Berrigan and the farms to the west of Finley would not be served.

1488. So that if the railway were brought 7 miles nearer this way it would be a greater advantage you think than if the terminus were at Berrigan? It would serve a greater number of farms altogether, and it would be more central.

1489. What would you regard as the central point for a railway to serve the whole of this district including Berrigan? In my opinion, no line will serve the whole district unless it touches Berrigan and Finley.

1490. Would a branch line coming from Berrigan serve this district? Certainly.

1491. Would the surveyed line from The Rock to Murray Hut suit you? Yes; that line runs right through the centre of the district.

1492. Supposing a junction were made with the Berrigan line at Berrigan, how would that do? It would do very well.

1493. In the event of that branch line being constructed, where would your produce go? While the produce of New South Wales is not up to the local demand it would go to Sydney, but if we had to export to outside markets, the nearest and cheapest route would be *via* Melbourne. It is 150 miles from the Murray to Melbourne, but from here to the Murray there are about 25 miles of cartage. If the railways were constructed here it would mean an advantage to the New South Wales railways of 9s. a ton. We have to pay the same to cart produce to the Victorian railway as to Jerilderie. If there were a railway here the Sydney market would have the advantage of the difference between the haulage by the railway from Finley to Jerilderie and the cartage to the Victorian railways.

1494. Have you hitherto sent any wheat into Victoria in bond? No.

1495. Does much wheat go to Victoria? There was a good deal last year.

1496. What was the inducement to send it there? Principally cartage.

1497. Then, if a line were constructed at Berrigan, would it not be an advantage to you? Only in the way I have explained—that the railway would be competing with the carriers.

1498. Would not fully one-half of the wheat grown between this point and Berrigan go to Berrigan, or to some point on the proposed railway? I quite believe it would.

1499. The producers themselves would have their own drays to take it? Yes.

1500. The roads are very bad between Jerilderie and this district? Yes.

1501. Especially in winter? Yes; it is almost impossible to travel along the road in winter.

1502. The railway to Berrigan will serve a large number of persons to within, say, 6 or 7 miles? Yes.

1503. It would enable those persons to be independent of the teamsters at all events? Yes; in a great measure.

1504. It would enable them to take advantage of the best market for their produce? Yes. If a railway were built, I presume the farmers would do as they have done on the Victorian side, that is, they would have sheds built near the railway for their wheat. They would not keep it at their own places, because in winter time if they had only 3 miles to cart they would not be able to do it on account of the condition of the roads.

1505. I suppose the wool grown on your place has gone to Victoria? Of course.

1506. Where would the wool go if the proposed railway were constructed? At present prices we are not likely to grow much wool. We must go in for cultivation.

1507. Do you produce anything but wheat and wool? Barley.

1508. For export? Yes; but up to the present time I have not sold it. Last year there was a fair market in New South Wales—this year there is none at all. I have sent it to store, and am holding it for a better price.

1509. It is stored in Jerilderie? Yes.

1510. If you had better means of transit do you think the farmers would go in for dairying? I could hardly say. The country, however, is just as well adapted to it as is the Goulburn Valley.

1511. Would it not pay you to grow pigs? Yes, because you can feed a great many pigs on the grain which is sometimes lost. There is more in producing bacon than in any other industry if you can get 3d. a lb. for it.

1512.

1512. If there were better means of communication you think more pigs would be grown in the district? Yes; it has been very much spoken of lately. Mr. W. Blair. 18 Jan., 1895.
1513. You know there is a good market for butter through the English market being open? Yes.
1514. With a railway in the district would not the production of butter pay? Yes.
1515. Is there any other industry which could be carried on in the district if there were improved means of transit? Yes, fruit-growing. I believe this part of the Colony could compete with any other part of it in summer fruits.
1516. Has any attempt been made to grow fruit in the district? There are small orchards for home consumption.
1517. You could grow it abundantly? Yes; apricots, peaches, and plums can be grown here splendidly.
1518. Is there any further information you would like to give the Committee? No; except that there is a great stretch of country to the west of the travelling-stock route which remains undeveloped by reason of the present road cartage.
1519. *Mr. Lee.*] What is your own candid opinion as to the route which the proposed railway should take? I believe that taking it from the standpoint of the settlers that it would make very little difference whether it came from Jerilderie to Berrigan and Berrigan to Finley, or from Jerilderie to Finley and Finley to Borrigan.
1520. Do you think the line should include both Finley and Berrigan? I do.
1521. To whichever point it may be brought in the first instance, you think that both places require it? To serve the district effectually it will require to touch both places.
1522. Supposing the line could be brought a little more to the westward than has hitherto been contemplated, would that help the Finley people? It would help them a little, but it would not serve the district.
1523. You know where the 12-mile well is in the Berrigan district—in the forest reserve? Yes.
1524. Supposing a line were to come in 2 miles to the west of that, how would that serve the farmers here; A number of them would be within 6 or 7 miles of it then, would they not? I do not think that would be of much advantage.
1525. Are there many farms to the north of Finley? There are not many on the north-east; there are more to the north-west.
1526. You understand that the railway would be a means of communication for all time, and that it will depend chiefly for its living upon wheat freight;—do you think that at the present price of wheat you would be able to continue cultivating? We hope that the present price will rise. Probably there has never been such a wave of depression affecting the whole commercial world as that which affected it recently. We have to live somehow through these times of depression, and to wait for better times.
1527. If it did not pay the farmers to grow wheat they would not grow it? No; they would have to grow something else.
1528. Supposing the growth of wheat were abandoned, what would become of the prospective freight for the railway? There would be live stock and many other things of that kind the farmers would be able to produce. In a newly-settled district you cannot produce fruit and things of that kind in any quantity at the outset.
1529. It would take you a long time to produce 17,000 tons of pork? Yes; but on the other hand the freight would not be the same for pigs as for wheat.

Mr. Walter James Burbury, hotel-keeper, Finley, sworn, and examined:—

1530. *Chairman.*] What are you? I am an hotel-keeper residing at Finley. Mr. W. J. Burbury. 18 Jan., 1895.
1531. How long have you lived there? Eighteen months. I am the Secretary of the Finley Progress Association.
1532. Have you prepared any statement as to the cultivation in the district? No.
1533. Have you no detailed information to give us on that matter? Only the area under cultivation and the yield.
1534. Can you give us the information accurately? As nearly as possible.
1535. Will you describe the limits within which you have obtained the information? Yes, in a radius of about 7 miles from Finley.
1536. What is the acreage under cultivation? 20,000.
1537. It is nearly all under wheat I suppose? Yes.
1538. What would the return be? Nearly four bags to the acre.
1539. To which market does the wheat from this district go? It mostly goes to Jerilderie. Some of it goes to Tocumwal for shipment to Sydney.
1540. Supposing a railway is extended to Berrigan, will it be cheaper for the Finley farmers to send their wheat by that route to Sydney than to send it *via* Victoria to Sydney? It would be very much the same.
1541. It would be cheaper for the farmers at Berrigan to send their wheat *via* Jerilderie than *via* Victoria? Yes; because that would save cartage.
1542. And the difference between the two districts would be the cartage from Finley to Borrigan? Yes.
1543. What is the general desire of the people here as to railway extension? The people to the west of Finley, and those within 3 miles to the east of it, would like the line to come to Finley along the stock route. That would be the more convenient way for them.
1544. Supposing the line does not come further than Berrigan, what will become of the produce grown to the west of Finley? It will be still carted to Jerilderie with the exception of the bags which cross the river.
1545. You think there is no doubt about that? Not the slightest.
1546. Although the distance to Jerilderie would be longer than the distance to Berrigan? Yes; once the carriers have their loads on they are not particular to a mile or two, and they prefer a road where they can get a good supply of grass and water.
1547. Whom did Mr. Harper see when he came to the Finley district? No one that I know of.
1548. Was your Association called upon to furnish him with statistics? No.
1549. Then any information he received would be gathered from individual sources? Yes; to the east of Finley.
1550. Is not nearly all the land under cultivation here leasehold? The larger part of it.

Mr.

Mr. Frank Faulkner, Manager of Tuppal Estate, sworn, and examined:—

Mr. F. Faulkner, 18 Jan., 1895.

1551. *Chairman.*] What are you? The manager of Tuppal Estate.
1552. You are the son of the owner? Yes.
1553. What area have you? 160,000 acres of freehold.
1554. You have a good knowledge of the country generally? Yes.
1555. What do you consider the agricultural area in this part of the country starting from Deniliquin to the eastward? Starting within 12 or 13 miles of Deniliquin, it takes in part of Tongaboo, part of the back of Corec, and part of Hartwood approaching the surveyed line from Jerilderie to Deniliquin, but not passing it. It would extend to about 10 miles south from Jerilderie passing on to the east.
1556. That in your opinion is the great wheat-growing area of this part of the country? Yes.
1557. In your opinion great development is possible here? Yes. There is great uncertainty existing at the present time as to what the Government are going to do with the leases, whether they are going to throw them open indiscriminately at a low rate or not.
1558. What area of Government land is there in this district suitable for agriculture? I do not know definitely.
1559. Is there any large area on Tuppal? There are 12,000 acres of leasehold, but only 3,000 acres are fit for agriculture.
1560. You cannot give us the information with regard to the Crown lands on other runs? No.
1561. You have had in existence for some years past an arrangement by which the farmers can obtain from you land for growing wheat? Yes.
1562. Will you tell us the terms? Yes. A seven years' lease at 5s. an acre, with the right to purchase at £4 an acre.
1563. Do you believe the right of purchase will be exercised? The lessees forfeit their improvements if they do not exercise it, but it depends a great deal on the price of wheat. I do not think the land will come back to the station for sheep at any rate, because, if the present lessees do not purchase it we shall release it.
1564. You think it will be permanently devoted to agricultural purposes? Yes.
1565. What area have you already set aside in these leases? About 15,000 acres.
1566. Is there much more of your run suitable for such purpose? The bulk of the run is suitable for it. There is the Retreat block of 35,000 acres, immediately to the west of Finley.
1567. Does the proprietor intend to throw open the whole of that area? Yes.
1568. I suppose it would pay him better than anything else? It pays us better than sheep.
1569. Do you think that land will be taken up? It depends upon what the Government do with the leases. If a man can get land from the Government at £1 an acre, with twenty years in which to pay for it, he will not take it from the squatter on the terms I have named.
1570. You hand in a return prepared by yourself and Mr. Blair, showing the names of the holders, the position of the holdings, the area, the mode in which they are held, and the area under crop, as regards the land adjacent to Finley to the west, to the north, and to the east of the travelling stock reserve? Yes. [*Vide Appendix.*]
1571. If there were a railway in this district, I suppose the settlement would increase? Yes. It would pay us better to grow grain. There are men growing grain outside the coloured portion of your map, who are paying 1s. 3d. for cartage.
1572. If there were a good means of communication they would be prepared to extend their operations? Under a system of leasing—yes.
1573. *Mr. Roberts.*] How long have you been manager of Tuppal Station? Four years.
1574. The area you have referred to has been put under crop within that time? Yes.
1575. What area did you first decide to lease? 15,000 acres.
1576. Was it all taken up? We gave the particulars in the summer time, and it was all taken up in the autumn.
1577. How long is it since the land was taken up? On the east of the stock route three years, on the west of the stock route, two years ago.
1578. Have the farmers done well on these leases? The smaller ones have done fairly well. Those who took up the land merely for speculative purposes went under, but the others are coming on very well now.
1579. Have any of the leases been forfeited? Only one, and that was not the fault of the land; it was due to outside speculation.
1580. Is there any difficulty experienced in getting wheat to market? This year there were very few teams.
1581. The road is fairly good between here and Jerilderie? In the summer time, but not in the winter time. We carted 2,700 bales over it this year.
1582. Do you send all your wool to Sydney? We did this year.
1583. Would the construction of a line from Jerilderie to Berrigan be of advantage to the people in its immediate vicinity? I have never advocated a railway south from Jerilderie to Berrigan or Finley, because in a great measure it is a question of freight, but if the line should be constructed at all it should be taken to Finley, because at Berrigan you are within easy distance of the Victorian line, which taps the Murray. The settlers to the west of Finley, to get to Melbourne, have to pay all the Deniliquin and Moama railway charges additional. Beyond Berrigan the people, therefore, are in a better condition to deal with Melbourne, being within the rebate district of the Victorian lines.
1584. How far is Berrigan from the Murray? About 20 miles.
1585. And Finley? About 15; but I was speaking of the country to the west of Finley.
1586. But where do the people to the west of Finley send their wheat;—is there a market to Deniliquin? Only for the local miller.
1587. From what point to the west of Tuppal does the wheat go to Jerilderie? None to the west. We run to within 12 miles of Deniliquin.
1588. How far to the east of Berrigan might the Government look for wheat? I do not know; I have never been to Berrigan.
1589. Do you consider Berrigan the centre of this agricultural district? I do not think so. No doubt it is the centre of a large agricultural population.
1590. How far this way would you require to come to find the centre of the area under crop? I cannot say. I have never been to Berrigan or the other side of it.

1591.

Mr. F. Faulkner. 18 Jan., 1895.

1591. Do you think that if a line should be constructed from Jerilderie to Berrigan it would be used by the people of Finley? Within a certain distance it might.
1592. There is a good deal of cultivation between Finley and Berrigan? Yes; but if they make a railway to Berrigan they will have to compete with only 150 miles of Victorian railway carriage. If the line goes to Finley there will be an advantage of nearly 200 miles, and the Deniliquin and Moama line charges are very heavy.
1593. You know that it is proposed to make this railway a light experimental line? Yes.
1594. You do not favour the construction of the line to Berrigan? No, I do not. It is entirely a question of freight either at Berrigan or Finley. We are comparatively near to Melbourne, and the freights will determine where the produce will go, especially if there is a customs union.
1595. Do you not think, seeing that the line is an experimental line, and that it is to be a very light line, that the Government might be asked to bring it on to Finley? It might be brought on to Finley, and it still might pay us better to send to Melbourne. It is entirely a question of freight.
1596. You know that the Government has fixed 2s. 6d. as the rate per ton between Berrigan and Jerilderie? I have heard so.
1597. Does not that appear to you to be a very liberal charge compared with what you have to pay now? Yes; it is a saving of 6s. 6d. a ton at the railway station.
1598. Is there any further statement you desire to make? Well, the land to the north of Berrigan is affected by the rebate to Melbourne, whereas the land more to the westward is not so affected.

Mr. William Blair, farmer, Finley, sworn, and further examined:—

Mr. W. Blair. 18 Jan., 1895

1599. *Chairman.*] In conjunction with Mr. Faulkner you prepared the return which is now before the Committee? [*Vide Appendix.*] Yes.
1600. You believe it to be an accurate and practical explanation of the position of the farmers in this vicinity? Yes.

Mr. John Howe, farmer and grazier, near Finley, sworn, and examined:—

Mr. J. Howe. 18 Jan., 1895

1601. *Chairman.*] What are you? I am a farmer and grazier.
1602. How long have you lived here? Sixteen years. I am 15 miles to the westward from here on the road to Deniliquin.
1603. *Mr. Gormly.*] What pursuits have you been engaged in? Farming and grazing.
1604. Have you a knowledge of any considerable extent of the country in this neighbourhood? Yes.
1605. What area have you? 640 acres on Tuppal and 640 acres on Wopenna.
1606. At what distance is your land on Tuppal from Finley? Fifteen miles; the other is about 20 miles south-west from here.
1607. And what distance from the Murray? Two miles.
1608. What portion of your holdings do you devote to agriculture? On the Tuppal portion 250 acres.
1609. You know all the settlement to the west of Finley? Yes. There is a good deal of land there under agriculture.
1610. Where do you send the produce which you grow at Tuppal? It has been sent to Jerilderie since the railway came there.
1611. What direction does your neighbour's produce take? It goes to Jerilderie also.
1612. At the prices now ruling for agricultural produce do you think that you will continue to cultivate your land? I do not think we can.
1613. If the prices do not improve do you intend to let your land go out of cultivation? I do not know—we must do something. Grazing is almost as bad as cultivating.
1614. Even if prices do not improve it will be necessary for you to cultivate some of your land? Yes, we shall have to cultivate more or less.
1615. If there were an improvement in prices would you cultivate more? I do not think so.
1616. What yield do you have from your land? About four bags to the acre.
1617. How long have you cultivated it? For the last sixteen years.
1618. And by resting your land occasionally do you find it turns out as good a crop as before? I shall have about five bags to the acre this year.
1619. By fallowing the land and allowing it to rest occasionally, will it be as productive as in the first few years of its cultivation? No.
1620. The soil deteriorates from continual cultivation? Yes.
1621. Does it get over-run with weeds? There is nothing but thistle.
1622. I suppose you keep some stock? Yes.
1623. Your wool goes to Melbourne? Yes.
1624. If a railway went to Berrigan would you still continue to send your wool to Melbourne? Yes; it is too far from Berrigan to here.
1625. Would you still continue to send your wheat by team to Jerilderie? Yes.
1626. It would be no advantage to you to take it to Berrigan? Not the slightest.
1627. The construction of a line to Berrigan would not draw any wheat there from your neighbourhood? No.
1628. Are there places on the stock route where the bullocks can be turned out? Yes.
1629. Is there water on the road? Yes; by going to tanks until they get on the Billabong.
1630. You would like to see a railway constructed into the district? Yes.
1631. To what part of the district should it be constructed? If I had my way I would bring it to Finley.
1632. You think it would there serve a large number of agriculturists? Yes.
1633. You have not sent any of your agricultural produce to Victoria? No.
1634. What is the carriage to Jerilderie? It has been 1s. 6d. a bag up to this year, we are now paying 1s.
1635. What is the distance? Thirty-four or 35 miles.
1636. Has there been much increase in agriculture in the district during the last two years? There is now double the quantity there was four years ago.

Mr.

Mr. Matthew George Hamilton, selector, Finley, sworn, and examined:—

Mr. M. G. Hamilton. 18 Jan., 1895.

1637. *Chairman.*] What are you? A selector.
1638. Where do you live? About 2 miles from Finley.
1639. What area have you? Five hundred and eighty acres of my own selection—in all 1,480 acres.
1640. What area have you under crop? Three hundred acres.
1641. How long have you been here? About twelve years.
1642. *Mr. Davies.*] How long have you been cultivating your 300 acres of land? About three years.
1643. When did you first send wheat to market? I was the first to send to Jerilderie when the mill started there.
1644. You have increased the number of acres under cultivation every year? Yes. I crop the land a few years and then let it rest awhile.
1645. What do you grow? Wheat and barley.
1646. How long do you allow the soil to rest? About three years. I have 600 acres cleared for cultivation and I have 300 acres under crop every year.
1647. Have you sent your wheat to market this year? No, I have it at home stacked.
1648. In the event of the railway being constructed to Berrigan would you still send your produce to Jerilderie? Yes.
1649. Would a railway to Berrigan be of no advantage to you? No advantage at all. My own teams will take the produce to Jerilderie.
1650. Would the railway if constructed between this point and Berrigan be of any advantage to your portion of the district? I do not think so.
1651. Where is your land? It adjoins the stock route.
1652. Where does your wool go to? To Melbourne.
1653. I suppose if a line were brought down the stock route to Finley it would suit you? Yes.
1654. How many sheep have you? About 1,400.
1655. Have you increased or decreased your number of sheep during the last few years? Decreased them. It pays better to grow wheat. I cannot say whether that is so at the prices ruling this year, but at the prices ruling last year it paid me better than sheep-farming. Wheat was 2s. 5d. last year.
1656. If wheat continues at its present low price, would you still continue your cropping? I think I would keep on with it. I do not pay much labour.
1657. What does it cost you per acre to plough, sow, and bag your wheat? I could not tell.
1658. Do you produce anything but wool and wheat? I have in a little fruit.
1659. Do you do anything in the dairying line? Not now; but if the railway were here I think we should go in for it. We could grow lucerne well.
1660. Would it pay to produce butter for export if you had better means of transit? Yes.
1661. If a line were brought even to Berrigan, would it not be an inducement to you to go in for piggeries and butter manufacturing? It would depend upon the prices, I suppose.

Mr. George Robinson Jeffries, Station Manager, Tocumwal, sworn, and examined:—

Mr. G. R. Jeffries. 18 Jan., 1895.

1662. *Chairman.*] What are you? I am engaged in the management of the estate of the late Edward Hilston, at Tocumwal.
1663. Where do you reside? At Tocumwal.
1664. Of what does the Hilston estate consist? It is a grazing and farming estate, combined with a storekeeper's business. I have been engaged in wheat-purchasing during the last few years at Tocumwal.
1665. You have attended to give evidence to the Committee, well knowing that the matter under reference to them is the proposed construction of a railway from Jerilderie to Berrigan? Yes. I was about to refer to the fact that for the last three years I have been engaged in wheat-purchasing for a Melbourne firm who ship wheat to Sydney through Victoria.
1666. How much have you purchased? The year before last I purchased only 2,000 bags. I was late in the field. Last season I purchased 8,000 bags of wheat and about 520 bags of barley, all of which crossed the river at Tocumwal for Yarraweyah.
1667. Did the wheat come from this district? Hardly so far north as this. I should say about 8 miles north and 10 miles west, and probably about 7 miles east of Tocumwal.
1668. Does any other produce go that way? Nothing but wool. This year I am purchasing wheat for a firm in Moama, who are having it delivered in a shed on the bank of the river. As soon as the river rises it will go down to Moama.
1669. What are your views as to the construction of a line from Jerilderie to Berrigan? It would not affect Tocumwal beneficially in any way.
1670. Supposing it were brought from Jerilderie to Finley? Then I should say that a great deal of the wheat which I now purchase would find its way here.
1671. Why? Because the difference in land carriage is in favour of the shorter distance.
1672. The farmers from whom you purchase would be resident about 10 miles from Finley? Yes.
1673. And the object of your evidence is to show that if a line were constructed by the stock route to Finley it would take some of the produce which now goes into Tocumwal? Yes.
1674. It would not go over the Murray, as in the past? No; the difference in freight would prevent it.
1675. What would be the dray carriage from the point you refer to? The farmers would be in a position to cart their own produce. The distance would be comparatively short. I suppose they would not have to cart more than 12 miles.
1676. Could they do so profitably? I do not think there is any doubt about that. They cart it into Tocumwal now—12 miles—because they cannot cart it into Jerilderie.
1677. What is the road from here to Tocumwal like? It is pretty good.
1678. If the farmers at Tocumwal are able to cart wheat over the 12 miles here, why cannot the farmers here cart their wheat 12 miles to Finley? I do not know what the Finley farmers can do.* 1679.

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* NOTE (*on revision*):—I should have answered this question by showing that a Tocumwal farmer, in taking his grain to Finley to be sent *viâ* Berrigan, would have to pay for the covering of that much trainage extra, whereas the direct line would bring him nearer his head market, Sydney, without such extra trainage. And, too, a Finley farmer carting his grain 13 miles to Berrigan would be no nearer his head market, Sydney, than when he started.

1679. Supposing the line were brought here by way of Berrigan how would it suit the Tocumwal people? It would not much matter where the line came from so that it went to Finley. The district would be equally well served whether the line went from Jerilderie to Berrigan or Jerilderie to Finley.* Mr. G. R. Jeffries. 18 Jan., 1895.
1680. Have you considered a probable extension from Finley to Tocumwal? I have not considered that, although I think it would be a very good thing.

Mr. Charles M'Alister, farmer, near Finley, sworn, and examined:—

1681. *Chairman.*] What are you? I am a farmer. Mr. C. M'Alister. 18 Jan., 1895.
1682. Where do you live? Eight miles west of Finley.
1683. What area have you? 4,540 acres.
1684. How much have you under cultivation? 400 acres myself, but I am leasing a portion of my land on "halves," and 1,000 acres of it are under cultivation.
1685. Some of your land is freehold and some conditional purchase? It is mostly conditional purchase.
1686. *Mr. Roberts.*] How long have you been here? About sixteen years.
1687. How long have you been producing wheat upon your farm? Nine years.
1688. During all that time prices have been more favourable than they are now? Yes.
1689. How long is it since wheat has taken such a downward tendency in price? We were getting, eight or nine years ago, from 4s. to 5s. a bushel.
1690. How long did that keep up? The price kept up fairly well till the season before last.
1691. What does it cost you per bushel to get your wheat ready for market on the farm? Nine-pence per bushel on the farm.
1692. Does that include bagging? Yes.
1693. Where do you send your wheat? To Jerilderie.
1694. Have you ever sent any wheat to Melbourne? No.
1695. What does it cost you to Jerilderie? One shilling a bag.
1696. Would a railway between Jerilderie and Berrigan be of any advantage to you? None whatever. I am within 2 or 3 miles as far from Berrigan as from Jerilderie.
1697. You would still take your produce to Jerilderie? Yes; if there were no nearer railway.
1698. I suppose the railway to Finley would suit you best? Yes; along the stock route.
1699. Why do you advocate that in preference to any other route? I advocate it as being most beneficial to the district. Finley, I maintain, is a better centre for a railway than is Berrigan. The line might be made altogether on the stock route, and there would be no resumption, and then there would be settlement along the route to support the railway. There are 1,300 acres on the stock route between here and Jerilderie, and it is all good agricultural land.
1700. Is it under cultivation? No; it is Crown land. The reserve is a mile wide. If the railway were constructed the reserve would not be wanted as a road, and it might be thrown open to selection.
1701. You think the land could be taken up for farming? Yes.
1702. How far have you been east from Finley? No further than Momolong station.
1703. Have you been to the south-east of Berrigan at all? No.
1704. Is it a fact that there is a large area of cultivation to the south and south-east of Berrigan? I believe there is a certain amount.
1705. Having in view that fact, are you of opinion that Finley is really more in the centre of cultivated land than is Berrigan? That is my opinion.
1706. Could you name a spot between both these two places which would be more central than either of them? No.
1707. You think Finley is the very centre? I think so.
1708. You think a line here would serve a larger number of agriculturists than a line taken to any other place in the district? I am of opinion that Finley is the most suitable place at present.
1709. You do not view with favour the construction of a line to Berrigan? No.
1710. If there were no idea of constructing a line to Finley, would you like to see it taken to Berrigan? No, that would be of no use to us.
1711. You are aware that the proposed line is to be a very light line? Yes.
1712. If the line were constructed, and turned out satisfactorily, do you not think that would be a very good basis upon which to ask the Government to bring it on to Finley? That view never struck me.
1713. Do you grow any crops but wheat? Not to any extent.
1714. You appear to be able to grow almost anything here? Yes; we get a satisfactory return from everything.
1715. Is the land suitable for dairying? Yes.
1716. Have you considered whether if the wheat fails it would not be practicable to utilise the land in some other way—for the rearing of pigs for instance? I have thought of all these things, but it is the want of a railway that keeps people from going into twenty other things, which they could go into if the railway were here.
1717. Unless the prices went lower, you would continue to grow wheat? Yes.
1718. Is there a large area of land available for agricultural purposes in the district? Yes; all the land about Finley could be made available under favourable circumstances.
1719. If the railway were brought to Finley you think that every acre of land within a radius of say 12 miles would be used for agricultural purposes? Yes.
1720. Do you produce any wool? Yes; I send it to Melbourne.
1721. If a railway were brought to Finley, would you still send it to Melbourne? I could not say.

Mr. Charles Uphill, farmer and grazier, near Finley, sworn, and examined:—

1722. *Chairman.*] What are you? I am a farmer and grazier. Mr. C. Uphill. 18 Jan., 1895.
1723. How long have you been in the district? Between eighteen and nineteen years.
1724. Where do you live? Eighteen miles from here in a westerly course. 1725.

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* Note (*on revision*):—I certainly never intended to convey this; I advocate the Finley-Jerilderie line as being undoubtedly the best for Tocumwal, seeing that by Tocumwal I would include the Tuppal Creek and Woperana districts to the west of Tocumwal, and I do not think that the district would be equally served by the one, as the other.

Mr. C. Uphill. 18 Jan., 1895.

1725. Is portion 125, parish of Narrima, approximatoly the centre of your holding? Yes.
1726. What area have you? 4,600 acres.
1727. How much do you cultivate? I have 480 acres under cultivation this year.
1728. *Mr. Gormly.*] What is the nearest centre of population to you? Deniliquin.
1729. Where do you send your produce? To Jerilderie, a distance of 30 miles. Last year I paid 1s. 1d.; I have paid 1s. 6d.; this year I am paying 11d. per bag.
1730. About what quantity of wheat does your land generally produce? From four to eight bags per acre. Different areas produce different yields owing to sowing early, and rain falling soon after sowing. I have sometimes had an average of five or six bags.
1731. What is your average this season? I have just completed the harvesting of 250 acres, and it has averaged five bags to the acre.
1732. What was your average last season? Four and a half bags.
1733. Do you feel satisfied that you can continue to grow wheat at the present price? We can as far as I am concerned. I am a freeholder, and I have the plant and stock.
1734. You think you cannot put the land to a more profitable use than by growing wheat? Not at the present time.
1735. You must cultivate a portion of your land? Yes; to keep things going.
1736. Do you intend to continue cultivating it? Yes; but I do not think it would be of any use increasing the plant, because at present prices I think we have about reached the maximum. To increase the area would mean an increase in the plant; but I should be likely to increase if a railway were nearer.
1737. Where do you send your wool? To Melbourne.
1738. Would the construction of a line from Jerilderie to Berrigan benefit you in any way? No.
1739. Therefore you would not be likely to send any of your produce to any portion of the proposed line? Not any—I could not think of it.
1740. To what particular point do you think the line should go in this particular district to be of benefit to you? To Finley.
1741. It would serve a larger number of persons you think? It would serve a far larger area of country—north, south, east, and west.
1742. Do you know whether the land is more suitable for agriculture at Finley than at Berrigan? I know it is of about the same quality—quite as good in every respect.
1743. Is there a larger population around Finley than around Berrigan? Taking the centre to the right and left there is a larger population around Finley. A railway here, I consider, would embrace a district of 5,000 souls to the westward of the stock route including Deniliquin. To the east of the stock route between here and Corowa I do not think there would be one-half that number of souls.
1744. To what distance would the people in this district be benefited by the construction of a line from Jerilderie to Finley? To the point from which they are sending their wheat now. The Deniliquin railway is over 20 miles from me, and people send it still 10 miles further to the west, and within 10 miles of the Deniliquin railway.
1745. Yet they prefer sending their wheat to Jerilderie than to Deniliquin? Yes.
1746. Is any wheat in your neighbourhood sent to Deniliquin? No; not within 10 miles of me.
1747. You prefer to send your produce 30 miles to Jerilderie than 20 to Deniliquin? Yes.*

Mr. Frank Faulkner, Manager of Tuppal Estate, sworn, and further examined:—

Mr. F. Faulkner, 18 Jan., 1895.

1748. *Chairman.*] You have a further statement you wish to make to the Committee? Yes. I heard you ask several witnesses what it costs to put in wheat. These are cases in which farmers employ their own time, and put in a lot of work themselves, but at contract prices I put in 1,400 acres, buying the seed-wheat, ploughing, sowing, reaping, and bagging, allowing interest on the money from the time I put the crop in till I took it off, and the cartage to Jerilderie at 24s. per acre estimated; it produced from three and a half to four bags, and I got 2s. a bushel in Jerilderie.

MONDAY, 21 *JANUARY*, 1895.

[*The Sectional Committee met at the Public Hall, Savernake, at* 11 *a.m.*]

Present:—

THOMAS THOMSON EWING, Esq. (CHAIRMAN).

The Hon. JOHN DAVIES, C.M.G.	CHARLES ALFRED LEE, Esq.
The Hon. CHARLES JAMES ROBERTS, C.M.G.	JAMES GORMLY, Esq.

The Sectional Committee further considered the proposed Railway from Jerilderie to Berrigan.

Mr. William Miller, farmer and grazier, Savernake, sworn, and examined:—

Mr. W. Miller. 21 Jan., 1895.

1749. *Chairman.*] Where do you live? At Savernake.
1750. Close to the town? Within a mile of it.
1751. How long have you been here? Twelve years.
1752. What area of land have you? 1,920 acres.
1753. How do you hold it? It is a conditional purchase.
1754. *Mr. Lee.*] Do you know the route of the proposed railway from Jerilderie to Berrigan? Yes.
1755. How will the construction of the line affect you in this particular place? It will not do us any good at all.
1756. What do you produce here chiefly? Wheat and sheep.
1757. Where is your market for it at the present time? Sydney. 1758.

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* NOTE (*on revision*):—I beg leave to point out that owing to the development that has taken place in settlement and agriculture in the Murray Valley during my residence here, viz., nineteen years, defines the stock route from Jerilderie to Tocumwal as the true and best centre south for any extension from Jerilderie, with a line nearly due east and west from Berrigan to Deniliquin, crossing the stock route at a point at or near Finley, as the national and most adjustable lines to open up the Murray Valley and so place the district in a much desired equal position for communication with Sydney.

Mr. W. Miller. 21 Jan., 1895.

1758. By which route? We have to send now either to Jerilderie or to Corowa.
1759. Which route do you usually use? Corowa.
1760. It being the cheaper? Yes.
1761. What is the distance? About 30 miles.
1762. What is the distance to Jerilderie? About 35 miles.
1763. If a line were constructed to Berrigan, would it not bring you within 18 miles of the railway? Yes.
1764. Would not that be a great advantage to you? It would be just as cheap for us to cart from here to Jerilderie as to cart to Berrigan and put the produce on the train there.
1765. What cartage do you pay from Jerilderie? One shilling and twopence per bag.
1766. That is for the 35 miles? Yes.
1767. What would be a fair proportion to allow for carriage to Berrigan, a distance of some 18 miles? They would charge 1s. to take it to Berrigan. I do not think you could get it done for anything less.
1768. Do you know the rate proposed to be charged on the proposed line from Jerilderie to Berrigan? I do not.
1769. If it were half-a-crown a ton that would be equal to 3d. a bag? Yes.
1770. If there were a constant dray traffic from here to Berrigan, do you think they would make you a charge as high as 1s. a bag? They charge us a shilling for 18 or 20 miles—we cannot get it done for less from here.
1771. Admitting that you had to pay 1s. a bag to Berrigan, and 3d. a bag from Berrigan to Jerilderie, making 1s. 3d. in all, would not the difference of a more convenient and quick market compensate you for the extra 1d.? I do not think so.
1772. You are not favourable to the construction of the line from Jerilderie to Berrigan? No.
1773. What is your reason? My reason is that it will not benefit us here at all.
1774. Are you opposed to any railway construction into the district? No.
1775. Then you have some other route in view? Yes; from The Rock to Murray Hut.
1776. Supposing that, as a matter of policy, the country adopted that route, it would probably be three years before the line reached you, while the construction the other way would reach you in six months? We are satisfied to wait three years.
1777. You would sooner wait three years than have a railway coming *via* Berrigan? Yes.
1778. What is your tonnage a year in wheat? About 40 tons.
1779. You would rather continue for the next three years to drag that 40 tons 35 miles by road to Jerilderie than have railway extension within 18 miles of you in six months? Yes; in view of the ultimate benefit.
1780. Do you produce anything besides wheat? Yes; grasses.
1781. Which way do you send your wool to market? *Via* Melbourne.
1782. Why Melbourne way? I do not think you could get it carted the other way. The railway carriage is too much from Jerilderie to Sydney.
1783. It is cheaper to export through Victoria? At the present time.
1784. If it were cheaper to send your wheat that way, you would do that also? Yes.
1785. You always send the cheapest way? Yes; we have to do so in these times.
1786. If there were fifty railways here, and you could get your produce carried to the port of export more cheaply in Victoria you would send it that way? Yes.
1787. Could you tell me about what settlement there is about Savernake? I could not tell you. This visit is unexpected. We did not expect you.
1788. You are the president of the local Farmers' Association? Yes.
1789. Are your views upon the railway question identical with those of the majority of the farmers? The majority of the farmers in my direction.
1790. How about the farms situated to the west of Savernake? When you get 8 or 10 miles the other way some of them are in favour of the Berrigan line.
1791. Not all? Not all.
1792. What is the average size of the holdings here? I could not say.
1793. How is the land held? It is pretty well all conditional purchase.
1794. Is any land here held from station holders under lease with the right of purchase? No that I am aware of.
1795. At the present price of wheat, and the present rate of carriage, are you sending your wheat to market at a profit? No.
1796. In the event of wheat continuing at its present low price for thirty years, what would the output be for this district? If it keeps at the present price there would be nothing in growing wheat.
1797. Will you yourself continue growing wheat? If it keeps at its present price I shall have to discontinue, because there is no profit in it.
1798. Where were you living before you came here? At Deniliquin.
1799. Were you farming there? Yes.
1800. How many years were you there? Four years.
1801. You have seen the effect of railway extension on that side; was not that extension of great benefit to the farmers there? The only railway goes from Moama to Deniliquin.
1802. Did not that railway afford a convenient outlet to the produce of the district? It did.
1803. Even to those within 12 or 18 miles of it? Yes.
1804. Would it not be the same in this district if it were pierced by a railway? Yes; if there were a line from The Rock to Murray Hut.
1805. But any railway brought nearer a few miles to you than any existing line would be a great advantage to you, would it not? It would do us a certain amount of benefit.
1806. It would be impossible to construct a line into this district to any point without doing a certain amount of benefit? Yes.
1807. But the settlers here are of opinion that the railway from The Rock to Murray Hut should be made? Yes.
1808. If it were a question of having the railway from The Rock to Murray Hut or no line at all, which would you sooner have? No line at all.
1809. You would sooner remain as you are than have a line within 18 miles of you? Yes.
1810. *Chairman.*] You say that you are charged 1s. a bag for the carriage of 18 miles from here to Berrigan? Yes.

Mr. W. Miller. 21 Jan., 1895.

1811. Supposing you were offered a contract at 1s. to carry goods for 18 miles or a contract at 2d. to carry them for 24 miles, which contract would you take? If I were a carrier, of course I would rather take the highest.
1812. Yet you tell us that the carriers prefer to carry 18 miles to Berrigan for 1s., and go the next 24 miles for 2d., and that they think that both those are the same sort of contract? When they have the wheat on the waggons they would sooner take it to Jerilderie.*
1818. You think the carriers are that sort of men that when they are constantly running backward and forward from here to Berrigan, 18 miles, at 1s., that they would rather waste their time by going on to Jerilderie for the extra 2d.? When the wheat is on the waggon they would just as soon go to Jerilderie for the extra 2d. as cart the 18 miles for 1s. It does not take them so very much longer.
1814. How far are you from the proposed Rock line? Five or 6 miles.
1815. That would suit you much better than the proposed railway? Yes.
1816. If you thought that the Berrigan extension would endanger The Rock line you would rather not have the Berrigan extension made? Yes.

Mr. William Patrick O'Dwyer, farmer, near Savernake, sworn, and examined:—

Mr. W. P. O'Dwyer. 21 Jan., 1895.

1817. *Chairman.*] What are you? A farmer.
1818. Where do you live? On Killyana.
1819. How far from here? Eight miles.
1820. In what direction? In a south-westerly direction, between Mulwala and Berrigan.
1821. Towards Barooga? Yes.
1822. What area have you? Between myself and brothers, we have 4,000 acres of land.
1823. How long have you been here? I selected in 1877, and I have resided continually on the land since.
1824. *Mr. Davies.*] Where do you send your produce to? It is about seven years ago since I started growing wheat, and five years out of the seven it has always gone to Jerilderie.
1825. Where did it go last year? To Yarrawonga, mainly owing to the Victorian railways giving us a reduction.
1826. Where will this year's crop go? I have not fully decided. It depends upon the local market price.
1827. But at the existing price? I think it would go to Yarrawonga.
1828. Would there be sufficient inducement to you to send your produce by the proposed line from Berrigan to Jerilderie if you could get it carried on that line for 2s. 6d. a ton? Judging from past experience, I should certainly patronise the Berrigan line. We cannot tell what the prospects of the future are for these things.
1829. But at the present prices would it not be a greater advantage to you to have your wheat carried from here to Berrigan, paying from there 2s. 6d. a ton, than to pay 1s. 2d. a bag from here to Jerilderie? I have always paid 2s. with the exception of last year, when I got it carted at 1s. 9d.
1830. The present rate is almost prohibitive? Yes; the carriers have to pay for water.
1831. Then you think that the proposed line would be a great advantage to you? Certainly.
1832. If the railway were constructed from Berrigan, would you in future send your produce by that line? I certainly should do so.
1833. You could not get your produce carried any similar distance in the district for 2s. 6d. a ton? No.
1834. What is the distance between your district and the Victorian border? Eighteen miles.
1835. What is the rate of cartage? It has been about 1s. a bag up to the present time.
1836. Do you employ your own horses and drays? I always employ carriers.
1837. How long have you been in the district? Eighteen years.
1838. Have you increased your sheep from year to year? No, I have not.
1839. What area have you under cultivation? We grow from 400 to 500 acres of wheat.
1840. What is your average yield? Thirteen bushels. Of course, we do not continually crop the land. After three or four years we allow it to lie fallow.
1841. If the railway were made would you also send your wool to the Sydney market? I could not speak with certainty on that point. I never tried the Sydney market.
1842. Would the proposed charge of 3d. a ton for wool be too high a charge on the proposed railway? I have not made a calculation—I cannot say.
1843. How many miles would you be from the Berrigan station? About 10 miles. I could go and come in the same day if I had a team of my own.
1844. You would use your own drays in a case of that kind? Yes.
1845. You favour the construction of the proposed line? I am in favour of The Rock line, but it is nine years since I signed a petition for the Berrigan line, and considering my experience of that agitation I reckon it would take twenty years before The Rock line would be built. I have given that line all the support I could, but I am now inclined to think that half a loaf is better than no bread.
1846. How far would you be from the surveyed route of the line from The Rock to Murray Hut? About 6¼ or 7 miles.
1847. Then there is not a great deal of difference between your distance from the line from The Rock to Finley and the line from Jerilderie to Berrigan? About 4 miles difference. Of course, the rates have to be taken into consideration.
1848. You think the proposed railway would serve you fairly well? Yes.
1849. Would you regard it as a reasonable railway service to your property from the point of view of a distance? Yes; I should be satisfied with 15 miles.
1850. And you say that you would be within 10 miles of the proposed railway, and that you regard that as a very fair service? Very fair.
1850½. Have you anything further to state? When Mr. Miller was giving his evidence I heard him say that a majority of the farmers in the local union were in favour of The Rock line; that is not the case. The question was never put to the union as a test question.

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* Note (*on revision*):—I beg to state that it is not 24 miles extra, as it is only 35 miles from my place to Jerilderie; that would leave 17 miles extra cartage. Berrigan is not in a line from my place to Jerilderie, and the carriers would as soon cart direct to Jerilderie from here for 1s. 2d. as cart to Berrigan for 1s. if they have a good few trips to make.

Mr.

Mr. Edmund Daniel O'Dwyer, farmer and grazier, near Savernake, sworn, and examined :—

Mr. E. D. O'Dwyer. 21 Jan., 1895.

1851. *Chairman.*] Where do you live? About 8 miles from here, towards Barooga.
1852. What are you? A farmer and grazier.
1853. How long have you been here? I selected here in 1879, and I have been residing here ever since.
1854. Are you Secretary of the Farmers' Union? Yes.
1855. *Mr. Gormly.*] As Secretary of the Farmers' Union, I suppose you have an extensive knowledge of the country round Savernake? Fair knowledge.
1856. Is there any considerable quantity of land under cultivation? A considerable quantity.
1857. What is the number of holders within a radius of 10 miles, approximately? I will hand in a list, showing the holdings within a radius of 10 miles of Savernake, together with the area under cultivation in each case. [*Vide Appendix.*]
1858. You have had some experience in agriculture here? I have.
1859. What do you think of the probability of land continuing to be cultivated here, if the present price of wheat continues? I think a continuance of the present price would have a very bad effect upon cultivation.
1860. You think the farmers will not increase the area of land they now cultivate? It all depends upon the area. Take the case of a man with a limited area—of, say, 400 or 500 acres. If he continue cropping it at the present price, he is really ruining his farm—the land will become more and more exhausted every year. Seven years' continuous cropping here leaves the land in a very poor state. It will depreciate in value fully 30 per cent.
1861. Then there are a number of landowners who do not continually cultivate the whole of their land—who cultivate only a portion of it? Yes.
1862. Are you of opinion that the number of landowners in the district will continue to grow wheat even at present prices? Yes; they have nothing else to do.
1863. They find that they can put the land to more profitable use in that way than in any other way? Yes; there is only one industry—that is, the dairying industry—which will enable them to utilise the land with greater profit.
1864. You think it would pay better to grow wheat than wool and fat stock? Yes.
1865. You have tried both? Yes.
1866. If a line were constructed to Berrigan, would the farmers be likely to send their wheat to that terminus, or to some other point? Speaking without the slightest prejudice, I certainly think that the wheat would go to Berrigan from the neighbourhood of Savernake.
1867. To what distance to the south-east of Savernake would the farmers send to Berrigan? To the south-east the wheat would go to Corowa.
1868. What is the distance from here to Corowa? About 30 miles.
1869. And it is 18 miles to Berrigan? Yes.
1870. How would the railway to Berrigan serve those persons residing generally to the east of Savernake? The produce of any settlement to the east of here would be divided equally between Corowa and Berrigan.
1871. You think, then, that the proposed railway to Berrigan would serve settlers to the east and south-east of Savernake? Not to any considerable extent.
1872. Is there a considerable quantity of wheat produced between here and Berrigan? Yes.
1873. Is there also a considerable quantity produced going in the same direction, but more towards the Murray? Not very much is produced directly to the south of this point. It is all station property.
1874. Produce would come chiefly from the south of Berrigan? Yes; it would be sent to Berrigan until it reached my place.

Mr. Patrick Gorman, farmer, near Savernake, sworn, and examined :—

Mr. P. Gorman. 21 Jan., 1895.

1875. *Chairman.*] What are you? A farmer.
1876. Where do you live? Five miles from here, to the north of Savernake.
1877. *Mr. Roberts.*] What area do you cultivate? I am cultivating 300 acres this year.
1878. Is it all wheat? Pretty well all. I have a little hay, and a few acres of oats.
1879. Do you grow any lucerne? I have about 30 acres in at present.
1880. Where do you send your produce? I sent it to Yarrawonga last year, and I am likely to send it there this year.
1881. For what reason? It is more convenient, and I get a better price.
1882. How far is it from Yarrawonga to your place? Twenty-four miles.
1883. What is the cost per bag from your farm to Yarrawonga? I daresay I could get it done at 1s. a bag. I cart my own wheat, and it would not cost more than that. A few miles make very little difference. It is the loading and unloading that the carriers consider.
1884. Do you sell at Yarrawonga? Yes.
1885. Have you ever sent to Jerilderie? Yes.
1886. Do you find it more expensive to send to Jerilderie? It is entirely a matter of prices;—I never send to Sydney direct.
1887. You send to Yarrawonga on a local demand? Yes.
1888. Have you ever sent to Corowa? Yes.
1889. To sell in the local market? Yes.
1890. Do you view the construction of the proposed line from Jerilderie to Berrigan with favour? No; The Rock line would suit me much better.
1891. There has been a trial survey of the line from The Rock to Murray Hut? Yes.
1892. How near would that trial survey be to your farm? From 3 to 4 miles.
1893. Then it is not difficult to understand that you prefer The Rock line? No; but a line 10 or 12 miles away would suit me.
1894. What distance would you be from the railway at Berrigan? About 17 miles.
1895. You would be nearer to Berrigan than any other line—nearer than you would be to Yarrawonga and Corowa? Yes.
1896. Would you use the line? I could not get the wheat carted under 1s. a bag to Berrigan, and 1s. 2d. to Jerilderie. The road between my place and Berrigan is fairly bad. I could draw more to Jerilderie than to Berrigan; that is another consideration.

Mr. P. Gorman. 21 Jan., 1895.

1897. You are a member of the local Farmers' Union? Yes.
1898. Can you tell this Committee what is the opinion of a majority of the members of that union regarding the proposed line to Berrigan? No; because one-half of the members reside within 10 miles of Berrigan and the others reside 20 miles away. There must be a difference of opinion about the line in such a case as that.
1899. Would it be fair to assume that any farmer within 10 miles of Berrigan would be favourable to the Berrigan line? I should think so. I certainly should be if I lived there.

Mr. Alexander John MacDougall, farmer and grazier, Savernake, sworn, and examined:—

Mr. A. J. MacDougall. 21 Jan., 1895.

1900. *Chairman.*] What are you? A farmer and grazier.
1901. Where do you live? About a quarter of a mile from Savernake.
1902. Your holding adjoins Savernake? Yes.
1903. Have you been here long? Six years.
1904. You have been engaged in growing wheat and raising wool during that time? Yes.
1905. Will you state briefly where your market has been, and the reason why you have adopted it? I have always carted to Yarrawonga. It is 30 miles from my place to Corowa, and 30 miles to Jerilderie.
1906. I should like to know whether, in your opinion, this portion of the district would be brought under the influence of the proposed extension from Jerilderie to Berrigan? Well, the western portion of Savernake might, but to the eastward of Savernake the produce will all go the other way—to Yarrawonga or to Corowa.
1907. That would be contingent on prices to a large extent? Yes.
1908. If the rate of carriage by dray and the freight by rail to Jerilderie were cheaper than the rate to Yarrawonga by dray, you would adopt the cheaper route? Yes. We always go in for the best price and the lowest cartage.
1909. But taking a wider view of the matter, do you not think it would be a certain advantage to the district to have a railway terminus within 18 miles of it? No; I do not think so. If we get the line to Berrigan we may never get it any closer. There may never be a chance of getting the other line. That is my idea. We should be left permanently at some distance from railway communication.
1910. You will perceive that there will be so many others resident in other portions of the district who would be in the same position as yourself? Yes.
1911. And it is a difficult matter to take a railway to every man's door? I do not want a railway to my own door, if it be for the good of the public that it should be taken further off.
1912. Will the proposed extension to Berrigan be of no advantage to this district? No; I do not think it will. It would be right enough so far as those to the west are concerned, but it would be of no benefit to those to the east.
1913. With an improved road to Berrigan, would it not be an inducement to you? It might be a little inducement, but I think the road is about as far away as the railway.
1914. As far as you can see at the present time, the extension of the line known as the Rock line would be the most advantageous to the district? Yes.
1915. Have you considered that that is rather a question to be dealt with in the distant future? No; I have not thought much about it.
1916. Has it occurred to you that a line nearly 100 miles in length would have to be constructed to get down to the district which would be touched by the proposed extension of 20 miles? That, of course, is another matter.
1917. If such a work were undertaken it would be many years before the railway was brought to your door;—would it not in the meanwhile be an advantage to you to have communication of some kind as rapidly as possible? Not to myself, speaking individually.
1918. But to the district? I can only speak for myself on that point.
1919. Supposing it became a question of an extension from Jerilderie to Berrigan or no railway at all, which would you prefer? No railway at all would be just as well.
1920. You are so situated that it is a matter of little moment to you whether the railway is taken to Berrigan or not? That is about the state of the case.
1921. *Mr. Davies.*] Do you regard Berrigan as the centre of a large agricultural district? I do not know that it is the centre of a large farming district.
1922. Do you know it a little? I have not been much through it.
1923. Do you know it sufficiently to express an opinion? I think I do. I have not been further west than Berrigan.
1924. You do not know the whole of the wheat-producing country there? No.
1925. You think that it would be better to have no line than that the railway should be constructed to Berrigan? Yes.
1926. Would you have the whole of the farmers of the Berrigan district deprived of railway communication because you prefer the line from The Rock than the line from Berrigan? The Rock line would also serve the Berrigan people.
1927. You would rather wait until you could get The Rock line? Yes.
1928. In the meantime you would deprive the farmers of the Berrigan district of any improved means of getting to market? I suppose that would be so. With regard to The Rock line we were led to believe that there was a chance of our getting it. I am not viewing the question as if there were no chance whatever of our getting that line.
1929. How long have you been led to believe that you would get The Rock line? For some time.
1930. Do you see any approach to the consummation of your desire on that subject? Not much.
1931. How far to the eastward of Berrigan towards Savernake would the proposed railway serve the farmers? For a distance of 10 or 15 miles, I should say.
1932. So that this district would be within 3 miles of being served by the Berrigan railway? This portion of it.
1933. *Mr. Gormly.*] Are you acquainted with the route of the surveyed line from The Rock to Murray Hut, and with the centres of settlement of that route? I know the portion from here to Clear Hills.

1934. Is there a greater quantity on land under cultivation within the same radius of Savernake as of Berrigan? I do not think so. Mr. A. J. MacDougall.
1935. You think that there is a greater area under cultivation around Berrigan? I should think so. 21 Jan., 1895.
1936. Do you see any immediate prospect of an increased quantity of land going under cultivation at Savernake? Yes.
1937. Is the land here well suited to the growth of wheat? Yes.
1938. If the district had railway communication do you think the landowners would cultivate a greater area of land? I think so. I know that I should.
1939. Are there many landowners owning from 320 to 2,000 acres in the neighbourhood of Savernake and to the eastward of it? A good few. Very few hold over 640 acres.
1940. Does that class of holders extend considerably to the eastward along the proposed line from The Rock to Murray Hut? Yes; right along the route as far as I know it.
1941. You know the Clear Hills district? Not too well.
1942. Have you been among the holdings there? Yes.
1943. What distance is it from here to Clear Hills? From 18 to 20 miles.
1944. Is the land there well suited to agriculture? It is very goodwheat growing land.
1945. You think that land would be put under cultivation if a railway were constructed from The Rock to Murray Hut? I think it would.
1946. But you yourself would derive no benefit from the construction of the proposed line from Jerilderie to Berrigan? I should rather see the line come that way than no way, but I should derive no benefit from it.
1947. You think that a more suitable line for the development of these districts could be constructed—namely, a line from The Rock to Murray Hut? Yes.

Mr. Robert Edward Young, farmer and grazier, Savernake, sworn, and examined:—

1948. *Chairman.*] What are you? I am a farmer and grazier. I am a member of the firm of Young and Killin. Our boundary is about 3 miles east from Savernake. Mr. R. E. Young. 21 Jan., 1895.
1949. How long have you been there? Since 1880.
1950. *Mr. Davies.*] Would the proposed line to Berrigan be of advantage to you? Not the slightest.
1951. How many miles are you from Berrigan? Our homestead would be about 24 miles.
1952. What is the nearest point of your property from the proposed railway? About that distance.
1953. Where do you generally send your produce? To Corowa and Yarrawonga. The wool goes to Yarrawonga. The wheat is sold in Corowa generally, but the last lot we sold went to Wagga.
1954. What acreage have you under cultivation? Two thousand three hundred acres, and we propose to increase it.
1955. That is the largest area you have ever had? Yes.
1956. Notwithstanding the bad prices you have that area? Yes; we are farming on the "halves" system.
1957. Has the price ruling for wheat during the present season been satisfactory to you and those working with you on the "halves" system? Yes; it has been satisfactory to us. We consider that the cropping improves the land for grazing.
1958. The property owner has an advantage in that case? Yes.
1959. How much wheat do you expect from your holding this year? About 10,000 bags.
1960. What will be the yield per acre? From four or five bags down to three.
1961. Has the land, bringing in three bags, been long under cultivation? It is the first year, and it is considered to be a fair crop.
1962. And as to the land bearing five bags? That is the second year's crop. We only propose to crop the land for three years, and then to graze it.
1963. Do you run sheep? From 25,000 to 30,000.
1964. How many miles are you from the Victorian border? About 20 miles from Yarrawonga, and about 26 miles from Corowa.
1965. How far would you be from the proposed Rock line? The nearest point would be 8 miles away.
1966. A line in that direction would suit you better than the Berrigan line? Yes.

Mr. James Smart, farmer, near Savernake, sworn, and examined:—

1967. *Chairman.*] What are you? A farmer. Mr. J. Smart. 21 Jan., 1895.
1968. Where do you reside? At Killyan.
1969. Where is that? About 8 miles from Savernake, towards Barooga.
1970. *Mr. Gormly.*] You have been many years cultivating land in this district? Since 1884.
1971. About what quantity do you hold? Five hundred odd acres.
1972. What area have you cultivated? About 170 acres altogether.
1973. What area have you under cultivation this year? About 100 acres.
1974. How many years have you cultivated that? Nine years continuously.
1975. What was your yield this season per acre? About 3½ bags.
1976. Where do you send it? To Victoria this year.
1977. If the railway were made to Berrigan would you use it? Yes; I am twelve miles from Berrigan.
1978. Have you anything more to state to the Committee? I do not care where the line goes from Jerilderie to Berrigan, or from The Rock to Berrigan. I think, from what I hear, that if a railway is constructed here there will be extensive dairying in the district.
1979. Have you seen lucerne grown successfully here? Yes.
1980. Why do you think the dairying industry would be carried on extensively? I have seen it carried on in many other districts, and this country is far better suited to it than are many other districts in which it is a success.
1981. *Mr. Lee.*] You appear to be a comparatively small cultivator? Yes; I am in heavily-timbered country, and it is a job to clear it.
1982. Do you keep sheep? A few.
1983. Have you been able to make a living off the land with your small cultivation and your sheep? Yes.

Mr. J. Smart. 21 Jan., 1895.

1984. How will you get on this year? It will take me all my time this year to make both ends meet.
1985. If wheat does not improve in price, how will you small holders get on? We shall have to cultivate more, I suppose. The small holders will have to combine wheat-growing and dairying.
1986. As long as you can make a living off your holding you will stick to it? Yes.
1987. Have many of the holders parted with their land to the larger men? No.
1988. Is it a common practice in this district for the selectors to keep their farms? Yes; it has been since 1884.
1989. Is there much dummying in the district? No.

Mr. Robert MacFarlane, farmer, Savernake, sworn, and examined:—

Mr. R. MacFarlane. 21 Jan., 1895.

1990. *Chairman.*] Where do you reside? Three miles east from Savernake.
1991. What are you? A farmer.
1992. *Mr. Roberts.*] Where do you send your wheat? To Corowa.
1993. Do you produce anything but wheat? Wool.
1994. Where does it go to? To Yarrawonga.
1995. Will the proposed line to Berrigan be of any use to you? None at all.
1996. How far would you be from the Berrigan railway? About 18 miles.
1997. Would carriage to the Berrigan railway station be as high as it is to Corowa and Yarrawonga? Yes; quite. Yarrawonga is the cheapest. Of course it is the nearest point.
1998. Would the surveyed line from The Rock go near your property? Within 8 or 10 miles.
1999. That line would be much more convenient to you than any other proposed line? Yes.
2000. What area have you under cultivation? 130 acres.
2001. What is the extent of your holding? Eight hundred acres altogether.
2002. How many sheep do you run? About 1,000.
2003. Have you ever sent your wheat to Jerilderie? I did about seven or eight years ago.
2004. It is immaterial to you whether the line is made to Berrigan or not? If The Rock line is not likely to be carried out, I am not against the Berrigan line, but The Rock line would suit me best.
2005. Would you use the Berrigan line? I do not think so. I know the country between here and The Rock. It is grand farming land right through. When you get higher it is a little hillier than the flat country. I think the line ought to be made in that direction.
2006. Is the country generally adapted for the cultivation of wheat? Yes; taking it right through from here to The Rock.
2007. You favour The Rock line? Yes; because I think it suits everyone.
2008. Have you ever travelled to Murray Hut? Yes.
2009. Apart from the fact of the line from The Rock being of more use to you, as one knowing the country well from here to Murray Hut would you consider Berrigan the centre of this rich agricultural district? No; I would not. I think it is only one end of it. I reckon that Savernake is pretty well the centre of the district.
2010. *Mr. Gormly.*] Have you been over the country between here and The Rock several times? Yes.
2011. Do you know the country between Green's Gunyah and Urangeline? Yes.
2012. Is the land from Clear Hills on to The Rock, good agricultural land? Yes.
2013. Is it cleared? Some of it; some of it is heavily timbered.
2014. You think that a line starting from The Rock, and coming through the districts you have named on to Savernake and Murray Hut, would serve the largest extent of country? I do.
2015. Is there not a large number of small holders in the direction of The Rock line? Yes, holders of from 640 to 1,000 acres.
2016. There is no considerable area of that land on the line? No.
2017. You know the surveyed route? Yes.
2018. And you know that there is a considerable amount of farming carried on upon it? Right through.
2019. And you think the agricultural resources of that part of the country would be considerably increased by constructing the line? Yes.
2020. That is the reason you advocate it? Yes.
2021. The line would pass within a moderate distance of your holding? Yes; I think it would suit everyone.
2022. Apart from your personal interest in the construction of the line, you think it would be a line serving an extensive agricultural country, including Berrigan and Finley, as well as other agricultural centres? Yes.
2023. Which would be the more direct line for produce? From here to The Rock, to Sydney; or from here around by Berrigan and Jerilderie to Sydney? From here to The Rock.
2024. That would be the most direct route? Yes.
2025. For the reasons you have given you favour a line in that direction? Yes.
2026. And your experience in the district extends over twenty years? Yes.

Mr. Samuel McKenry, farmer and grazier, Savernake, sworn, and examined:—

Mr. S. McKenry. 21 Jan., 1895.

2027. *Chairman.*] What are you? Farmer and grazier.
2028. Where do you reside? Adjacent to Savernake on the north.
2029. *Mr. Lee.*] You are not favourably disposed towards the proposed extension from Jerilderie to Berrigan? No.
2030. You think the proposed line from The Rock would be the most advantageous to the district? Yes.
2031. Supposing notwithstanding your opinion and the opinion of so many of your neighbours, the extension should be carried out from Jerilderie to Berrigan—would you be able to use it? No, it would not benefit me much.
2032. As a matter of fact would you use it? No. I do not think we could.
2033. At present which way do you send your produce? Chiefly to Yarrawonga and Corowa.
2034. You do not know where your wheat goes to after it has been sent to Corowa? It is generally all sold locally in Corowa; sometimes it goes on to Sydney.
2035. You have the advantage of intermediate markets? Yes.

2036. And nothing more could be given you along the Berrigan line? No.
2037. You attach great importance to getting the extension from The Rock? Yes, I consider it would serve the public generally. There is good agricultural land from the Rock to Murray Hut. It would suit the people of Urangeline, Boree Creek, and Green's Gunyah.
2038. Your place is situated about midway between Yarrawonga, Corowa, and Berrigan? Yes.
2039. And unless some line were brought to within a short distance of you it would make very little difference to you whether the Berrigan line were constructed or not? Very little.
2040. *Mr. Gormly.*] Have you any considerable knowledge of the country between here and The Rock? Yes. I have been through it several times.
2041. Do you think the extension of the line from The Rock to Murray Hut would serve a larger extent of agricultural country than the line from Jerilderie to Berrigan? Yes, it would cause more land to be put under cultivation. At the present price of wheat and carriage it does not pay.
2042. The Rock line would be the most direct line from the Murray wheat-producing districts to Sydney? Yes.
2043. And the produce would be carried by the shorter distance? Yes.

Mr. S. McKenry. 21 Jan., 1895.

Mr. Thomas Joseph O'Dwyer, farmer, near Savernake, sworn, and examined:—

2044. *Chairman.*] What are you? A farmer.
2045. Your brothers have already given evidence? Yes.
2046. Have you anything further to state to the Committee? Yes. I should like to say that there is apparently a co-operation at the present time among the firms of millers; and on account of the shippers operating at Yarrawonga, the New South Wales wheat is costing the Sydney millers 2½d. more at Yarrawonga than at Corowa or Jerilderie. If the millers were giving the price for wheat they should give at Corowa and Jerilderie, a great deal of the wheat which now goes to Yarrawonga would go to those places.

Mr. T. J. O'Dwyer. 21 Jan., 1895.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

Railway from Jerilderie to Berrigan.

SECTIONAL COMMITTEE.

APPENDIX.

A.

[To Evidence of Mr. J. T. Mawson.]

RETURN of Wool carried from Jerilderie by Rail for Seasons ending 1892-93, 1893-94, and 1894-95.

Season, 1892-93.			Season, 1893-94.			Season, 1894-95.		
Month.	Bales.	Weight.	Month.	Bales.	Weight.	Month.	Bales.	Weight.
		tons cwt. qr.			tons cwt. qr.			tons cwt. qr.
Aug., 1892 ...	707	125 12 1	Aug., 1893 ...	1,209	215 7 3	Aug., 1894 ...	649	116 3 3
Sept., 1892 ...	2,098	383 11 3	Sept., 1893 ..	2,358	434 1 0	Sept., 1894 ...	4,136	715 19 0
Oct., 1892 ...	1,526	265 9 1	Oct., 1893 ...	1,974	348 10 0	Oct., 1894 ...	3,310	563 19 0
Nov., 1892 ...	371	55 8 3	Nov., 1893 ...	285	34 9 1	Nov., 1894 ...	1,421	232 15 0
Dec., 1892 ..	3	0 9 1	Dec,, 1893 ...	7	1 0 3	Dec., 1894 ...	42	7 6 0
Jan., 1893 ...	.....	.. ..	Jan., 1894 ...	1	0 5 3	Jan. 15, 1895...	.....	.....
Feb., 1893 ...	1	0 3 1	Feb., 1894 ...	.....	.....			
Mar., 1893 ...	1	0 5 1	Mar., 1894 ...	.....	.....			
April, 1893 ...	.....	.....	April, 1894 ...	1	0 2 2			
May, 1893 ...	4	1 1 0	May, 1894 ...	.....	.....			
June, 1893 ...	.....	.....	June, 1894 ...	1	0 4 0			
July, 1893 ...	.....	.....	July, 1894 ...	.....	.....			
Totals ...	4,711	832 0 3		5,836	1,034 1 0		9,558	1,636 2 3

RETURN of Live Stock carried by rail from Jerilderie Station for years 1893 and 1894.

Year 1893.			Year 1894.		
Month.	Horses.	Sheep.	Month.	Horses.	Sheep.
January	11	540	January.....	.....	3,417
February.....	.....	6,611	February	.....	873
March	....	5,165	March	9	330
April	.....	959	April	8	202
May.....	.....	1,572	May	.....	192
June.....	.....	346	June	.....	2,895
July.....	.....	577	July	9	1,564
August	13	2,671	August	.....	104
September	.....	3,210	September.....	.....	67
October	.....	6,391	October	.....	5,921
November	.....	3,767	November.....	.....	3,654
December	.. ..	4,839	December	.....	1,062
Totals	24	36,648	Total.....	26	20,281

RETURN of Wheat carried by rail from Jerilderie Station for Season 1892-93, 1893-94, and 1894-95.

Season 1892-93.		Season 1893-94.		Season 1894-95.	
Month.	Bags.	Month.	Bags.	Month.	Bags.
December, 1892.....	6,508	December, 1893	13,478	December, 1894	8,519
January, 1893	14,798	January, 1894.....	25,012	15 January, 1895	9,856
February, 1893	9,010	February, 1894	15,282	.....	.....
March, 1893	1,794	March, 1894	2,625	.....	.....
April, 1893.....	179	April, 1894	1,438	.....	....
May, 1893	659	May, 1894	4,391	.....	.....
June, 1893	3,649	June, 1894	1,081	....	....
July, 1893	6,626	July, 1894	325	.....	.....
August, 1893	542	August, 1894	148	.....	.....
September, 1893	16	September, 1894.....	262	.....	.....
October, 1893	2,423	October, 1894	1,644	.....	.....
November, 1893.....	10	November, 1894	1,157	.....	.....
Totals	46,214	.....	66,843	....	18,375

15 January, 1895.

J. T. MAWSON.

B.

B.

[To Evidence of Mr. J. A. T. Rochfort.]

ALPHABETICAL List of Stockowners on or within the radius of the proposed Berrigan Railway, and number of Stock in the Sheep District of Jerilderie, for the year 1894, taken between 1st and 31st December.

Names of Owners in Alphabetical Order.	Acreage.	No. of sheep.	No. of pigs.	Names of Owners in Alphabetical Order.	Acreage.	No. of sheep.	No. of pigs.
Aitken, Peter	1,320	70	38	How, E. R.	320	.....	.....
Badcock, L.	740	334	.....	Jones, Jno.	1,280	800	.....
Bakie, Jas.	320	.....	.....	Jones, John, junr.	74	.....	.....
Batten, Jas.	640	90	.....	Lapthorne Bros.	40	.....	.....
Batten, Geo.	732	200	.....	Leura Brothers	640	250	.....
Blair, Jno.	3,500	600	.....	Moodie, J. R.	1,280	865	.....
Brown, Mrs.	810	90	.....	Moulton, R. J.	1,244	460	.....
Burwood, Ed.	320	.....	.....	M'Allister, Chas.	4,550	4,035	.....
Cameron, Alex.	1,200	1,550	.....	M'Donald, D.	320	.....	.....
Carter, B.	197	.....	.....	M'Donald, Geo.	640	.....	.....
Connell, Jas., Exors. of	2,420	2,873	.....	M'Donald, Mur.	3,400	1,000	.....
Cooper, W.	800	.....	.....	M'Donald, R.	3,011	3,800	.....
Corbett, D.	640	.....	85	M'Gee, B.	150	.....	.....
Corbett, Mrs. M.	1,706	1,700	3	M'Grogan, John	800	800	.....
Creed, W. and E. H.	3,800	3,593	.....	M'Lellan, Mrs.	1,177	1,000	3
Dalgleish, Alex.	2,720	2,520	.....	O'Brien, John	6,000	5,115	.....
Dickie, Jno.	2,800	3,100	.....	O'Shannassy, Jno	3,070	3,000	.....
Drummond, Bros.	580	.....	.....	Pyle, Jas.	1,605	114	7
Fox Bros.	600	350	.....	Quadde, Wm.	3,000	4,012	.....
Gillespie, David	1,280	1,327	.....	Reynoldson & Russell	2,370	150	.....
Gorman, E.	2,200	1,706	.....	Robertson, Alex.	2,231	1,960	.....
Gorman, E. T.	5,416	5,480	.....	Shand, Wm.	640	180	.....
Gorman, D.	340	41	5	Union Mortgage and Agency Company.	5,284	6,000	.....
Gorman, R. F.	2,360	1,690	.....	Watson, T. M.	960	43	.....
Graham, R.	1,140	900	.....	Wilson, A. C.	21,000	28,719	.....
Greggery, W. J.	3,500	5,817	2	Atkinson, C. M.	1,280	2,000	.....
Harris, L.	224	.....	.....		Approximately	returned.	
Hazlewood, E. H.	640	415	.....				
Horsfall and Curington	32,720	21,420	.....				
How, G. and M.	1,300	103	.....	GRAND TOTAL	143,331	119,772	143

This return includes 56 holdings, 1 of which exceeds 30,000 acres; 1, 20,000 acres; 1, 6,000 acres; 2, 5,000 acres; 1, 4,000 acres; 7, 3,000 acres; 7, 2,000 acres; and 12, 1,000 acres; 24 being under 1,000 acres.

The character of the land is indicated by the fact that, notwithstanding there are fewer sheep kept now than at any other season of the year, and the great proportion of the holdings under crop, there still remains ·835 sheep to the acre.

As the returns from which the results quoted are obtained are made for the purpose of assessment it is quite safe to assume they are by no means exaggerated.

J. A. T. ROCHFORT,
Acting Inspector of Sheep.

Jerilderie, 16th January, 1895.

C.

[To Evidence of Mr. H. R. Lysaght.]

LIST of Holdings within 10 miles of Berrigan.

Name.	Area.	Under crop.	Particulars of land.	Position and distance from Berrigan.
	Acres.	Acres.		Miles.
Drummond, Bros.	600	250	C.P.	1 W.
Batten, John	640	500	Freehold	1 W.
Jones, Jno.	1,280	800	C. P.	2 W.
Reynoldson, J. R.	640	550	Freehold	2½ W.
McDonald, G. E.	640	500	C.P.	2½ W.
Pyle, Jas.	2,000	800	,,	3 W.
Lapthorne Bros.	40	20	,,	1 W.
M'Lellan, Elizabeth	1,100	300	,,	2½ W.
Graham, R.	1,140	350	,,	4 W.
Quade, Wm.	3,000	500	,,	5 W.
M'Lelland, John	600	50	,,	1 S.W.
Cameron, Alex.	1,280	350	,,	3 S.W.
Gillespie, D.	1,280	350	,,	3 S.W.
Dalgleish, A.	2,720	500	,,	3 S.W.
Reynoldson and Russell	2,370	1,000	,,	5 S.W.
Kilpatrick, Geo.	1,280	350	Freehold	6 S.W.
Kilpatrick, M.	640	100	C.P.	7 W.
Burns, Wm.	3,000	600	,, and freehold	6 W.
Cooper, Wm.	700	300	,,	7 W.
Corbett, Margt.	1,066	400	,,	6 N.W.
Corbett, D.	640	350	,,	6 N.W.
O'Shannassy, John	3,070	350	,,	7 N.W.
Dickie, Jno.	2,800	300	,,	6 N.
Greggery, Wm.	3,500	500	,,	1 N.
Greggery, Donald	320	70	,,	3 N.
Greggery, Ronald	320	70	,,	3 N.
M'Donald, Rodk.	3,000	200	,,	3 N.
M'Donald, Duncan	640	.....	,,	4 N.
M'Donald, Angus	640	.....	,,	4 N.
Wilson, A. C.	21,000	.....	Freehold	6 N.
Chand, Wm.	640	350	C.P.	6 N.
Brown, J. E.	807	200	,,	7 N.

Name.	Area.	Under crop.	Particulars of land.	Position and distance from Berrigan.
	Acres.	Acres.		Miles.
Miller, Wm.	320	100	Special area	6 N.
Miller, D. J.	320	60	,,	6 N.
Miller, Jno.	320	60	,,	6 N.
Miller, W., sen.	320	.....	,,	6 N.
Monahan, J.	640	.....	C.P.	7 N.
Jackson, Jas.	320	50	Special area	6 N.
Whiting, Geo.	320	250	Freehold	4 N.E.
Burwood, E.	320	250	,,	4 N.E.
Batten, Jas.	640	400	,,	2 E.
Baikie, Jas.	320	[illegible]	Leasehold	2 E.
Fox, Bros.	600	300	Freehold	2 E.
Watson, T. M.	960	350	,,	3 E.
How, E. R.	320	200	,,	3 E.
How, E. and M.	1,300	700	,,	4 N.E.
Cameron, S.	1,400	1,000	,,	4 N.E.
Carter, B.	160	40	C.P.	1 E.
Batten, Geo.	900	400	Freehold	4 E.
Gorman, Daniel	340	250	C.P.	5 E.
Badcock, L. S.	640	300	Freehold	2 E.
Hegglewood, E. H.	640	250	,,	2 E.
Horsfall and Carington	32,000	900	,,	6 to 12 E. and N.E.
Landers, Mary	600	150	C.P.	8 N.E.
Creed, Wm.	2,000	200	,,	7 E.
Creed, E. H.	1,800	200	,,	7 E.
Robertson, Alex.	2,200	700	,,	6 E.
Moulton, R. J.	1,280	500	,,	7 E.
Gorman, E. J.	3,000	1,000	,,	7 E.
Gorman, Ed.	2,400	400	,,	9 E.
Gorman, R. F.	2,300	300	,,	9 E.
Gorman, David	2,300	100	,,	10 E.
Gorman, Jno.	1,920	250	,,	10 S.E.
M'Donald and Sons	2,500	100	,,	7 S.E.
M'Donald, Murdock	1,280	160	,,	10 E.
M'Kenry, S.	1,280	200	,,	10 E.
Cahill, A.	1,280	200	,,	10 E.
Ratcliffe, W. H.	400	200	,,	8 E.
Ratcliffe, T. R.	300	200	,,	8 E.
Wealands, W., sen.	640	300	,,	8 E.
Wealands, W., jun.	160	50	Special area	9 S.E.
O'Shea, M.	160	30	,,	9 S.E.
O'Dwyer, W. P.	1,000	300	C.P.	9 S.E.
O'Dwyer Bros.	3,000	400	,,	9 S.E.
Smart, Jas.	640	160	,,	10 S.E.
Fuller, Jas.	340	300	,,	10 S.E.
M'Cracken, Wm.	320	200	,,	10 S.E.
M'Geoch, R.	2,000	300	,,	7 S.
Smith, Robt.	160	50	,,	6 S.
Thompson, Wm.	640	200	,,	4 S.
Thompson, Walter	320	.....	,,	7 S.
Hinton, E. D.	2,300	.....	,,	6 S.
Tynan, Jno.	640	200	,,	5 S.
Aitken, S.	1,280	900	,,	3 S.
Johnson, Jno.	640	160	,,	3 S.
Westerdale, Hy.	200	100	,,	1 S.
Harris, L.	224	160	,,	1 N.
Wales, C.	160	100	Freehold	1 S.
Blair, Jno.	3,500	2,000	,, and C.P.	7 W.
Atkinson, Wm.	2,300	450	C.P. (leased)	8 N.W.

HALVES-MEN ON BAROOGA 6 TO 10 MILES S. OF BERRIGAN.

Dwyer, W. J. Daly, P. Jowett, Thos. Egan, Thos. Keating, Jno. Keating, P. Lee, Wm. Roney, P. Roney, J. Flaherty, P. Burke, J. Burke, H. Scott Bros. And several others.	10,000 acres under wheat.

There are a number of other men on the halves system in the district, of whom, at the present moment, I am unable to give the names.

H. R. LYSAGHT.

D.

[To Evidence of Mr. F. Faulkner.]

RETURN relating to Holdings adjacent to Finley, to the West, to the North, and to the East of the Travelling Stock Reserve.

Name.	Location.	Area held.	How held.	Area under crop.
		acres.		
Matthew Hamilton...	1½ mile N.W. from Finley	1,500	C.P.	500 acres.
David Hamilton.....				
David Hamilton.....				
Wm. Gibson	4 miles W. from Finley	1,280	"	1,000 "
Thos. Johnson	2 " " "	320	"	Grazing.
Erskine and Gibson..	3 " " "	640	"	320 acres.
F. Deakin	3 miles S. from Finley	300	"	100 "
Burke Bros.	6 miles S.W. from Finley	1,280	Leasehold with right of purchase—4s.–£4	700 "
— O'Brien	7 " " "	640	" " "	350 "
W. Crew.....	8 " " "	1,600	C.P.	200 acres; grazing and wool.
J. Crew	8 " " "	1,600	"	150 acres.
Lang Bros.	11 " " "	7,000	Freehold	350 acres; wool.
— Canning.....	14 " " "	1,280	Purchased C.P.	600 " "
— Williams	14 " " "	1,280	" "	600 " "
T. Fallon.....	14 " " "	415	" "	200 " "
J. Howe	14 miles a little N. of W. from Finley	640	" "	250 " "
C. Uphill	18 " " " "	4,600	C.P. and Freehold	480 " "
W. Doel	16 " " " "	2,000	" "	400 " "
Springfield Estate ...	4 miles N.W. from Finley	5,000	Union Mortgage and Agency Co.	700 " "
— McNab	6 " " "	640	Leasehold—5s.—£4.	500 "
— Thomson	6 " " "	240	" "	200 "
— Mitchell	6 " " "	320	" "	300 "
Fuller Bros.	5 " " "	320	" "	300 "
Bourchier Bros.....	5 " " "	640	" "	600 "
— Westerdale	6 " " "	337	" "	300 "
— McIntyre	6 " " "	240	" "	200 "
— Barratt	6 " " "	400	" "	350 "
— Marantelli.....	4 " " "	180	" "	130 "
— Holder	4 " " "	118	" "	90 "
Hoyer and Carlsen...	7 " " "	320	" "	290 "
— McAlister	10 " " "	4,000	C.P.	1,500 "
F. Doel	10 " " "	416	"	200 "
C. Egan	6 miles S. from Finley	640	"	350 "
— M'Intosh	5 miles S.E. from Finley	2,800	"	600 acres & wool.
R. Fitzpatrick	6 " " "	640	"	340 "
— Guries	7 " " "	640	"	500 "
East of Travelling Stock Reserve.				
W. Blair	2 miles East	1,874	Rent, 5s.; right of purchase, £4.	1,130 acres.
C. Breaden	3 " "	1,280	" "	500 "
J. Beveridge	1½ " "	960	" "	640 "
Z. Dent	2 " "	840	" "	400 "
W. Kirkland	4 " "	1,800	" "	840 "
F. S. Falconer	4 " "	.....	Station Agreement—Tuppal	1,400 "
F. W. Giles	4½ " "	640	Rent, 5s.; right of purchase, £4.	400 "
J. Blair	6 " "	1,280	" "	960 "
J. Blair	6 " "	1,800	" "	1,000 "
J. J. Beveridge	5 " "	1,280	" "	520 "
M. Burke	7 " "	320	" "	300 "
J. R. Moody	3 " "	1,300	C.P.	700 "
Sutton Bros.	5 " "	1,700	"	740 "
W. Burns	6 " "	3,000	"	800 "
— M'Grogan	4 " "	640	"	200 "

E.

[To Evidence of Mr. E. D. O'Dwyer.]

AREA and Cultivation within 10 miles of Savernake.

Name.	Area of Holding.	Area of Crop.	How Held.	Name.	Area of Holding.	Area of Crop.	How Held.
A. J. M'Dougal	2,240	580	C.P.	— Cockburn	264	80	C.P.
C. Boxer	640	165	"	T. Ratcliffe.....	130	80	"
R. M'Farlane	800	130	"	W. Wealands.....	780	300	"
Young and Killin	28,000	2,300	Halves.	Creed Bros.....	4,000	500	"
W. Miller, sen.	1,920	120	C.P.	A. Robertson	1,800	600	"
E. Sandral...	2,700	300	"	R. F. Gorman	2,400	300	"
S. M'Kenry	1,820	325	"	— Power	180	180	Halves.
J. Dunn	3,000	300	Halves.	— Tighe.....	180	180	"
M. Nagle	480	250	C.P.	Edmund Gorman	2 200	400	C.P.
— Izon	640	100	"	E. J. Gorman.....	5,220	800	"
— Bott	2,200	.....	"	Hogan and Lawler	200	200	Halves.
— D'Arcy.....	2,000	300	"	W. Cahill	1,800	300	C.P.
— Gleeson	160	80	"	P. Gorman	1,280	300	"
W. Ryan	1,280	300	"	E. Dixon.....	1,280	.....	"
E. Ward	320	200	"	J. Kennedy	640	.....	"
W. Sloane.....	15,000	Station.	Freehold.	P. O'Keefe.....	1,500	300	"
M. M'Donald	3,000	340	C.P.	P. E. Whitty	200	90	"
W. Ratcliffe...	400	200	"	— Simmonds	300	300	Halves.
J. Smart	550	100	"	D. Murchison.....	3,600	.....	C.P.
O'Dwyer Bros.....	4,000	500	"	P. Aitken	1,920	300	"
John Gorman	1,920	280	"				
Jas. Fuller	295	280	"	42 Holders.	.....	12,460	

F.

TELEGRAM FROM MR. A. C. WILSON, BERRIGAN, TO MR. H. R. LYSAGHT, WITH REFERENCE TO GIVING LAND FOR THE RAILWAY.

Athenæum Club, Melbourne.

WILL give land; but, as severance will be serious matter to me, think Committee should consider this. Will they make a proposition? Going Ringwood Monday. Reply.

A. C. WILSON.

G.

[To Evidence of Mr. G. B. Beere.]

COST OF CONSTRUCTING METALLED ROADS IN THE VICINITY OF BERRIGAN AND TOCUMWAL.

Roads Office, Deniliquin, 7 February, 1895.

Sir,

I have the honor to enclose herewith the printed copy of evidence given by me before the Sectional Committee at Jerilderie, on the 14th January, 1895.

I have made some corrections, and attach an extract from the District contract book showing the cost of constructing metalled roads in the vicinity of Berrigan and Tocumwal.

Note that the amount of metal used is in both instances only 1 cubic yard to 1 lineal yard of road. This amount answers very well, but it would be better to use 1½ to 1¾ cubic yards which would increase the cost considerably, and bring the total cost per mile up to nearly the estimate given to the Committee, viz., £2,060.

I have, &c.,
G. B. BEERE, R.E.

The Secretary, Parliamentary Standing Committee on Public Works.

DENILIQUIN DISTRICT.

Cost of Metalled Road at Tocumwal.

Copy of Contract 7-U.

	£	s.	d.
27½ chains of formation, 45 feet wide, with a convexity of 18 inches, at per chain, 30s.	41	5	0
606 cubic yards of granite metal, 3-inch gange, spread at the rate of 1 cubic yard to the lineal yard of road, at per cubic yard, 12s.	363	12	0
202 cubic yards of blinding, spread at the rate of ⅓ cubic yard to the lineal yard of road, at per cubic yard, 1s. 6d.	15	3	0
	£420	0	0

This constructed road is at the rate of about £1,500 per mile. Metal was carted a distance of 8 miles.

Cost of Metalled Road at Berrigan.

Copy of Contract 1-94.—Chanter-street.

	£	s.	d.
6 chains of formation, 45 feet wide, with a convexity of 18 inches, at per chain, 40s.	12	0	0
132 cubic yards of metal, granite, 3-inch gauge, spread at the rate of 1 cubic yard to the lineal yard of road, at per cubic yard, 7s.	46	4	0
195½ cubic yards rotten granite blinding, spread at the rate of 1½ cubic yards to the lineal yard of road, at per cubic yard, 5s.	48	15	0
	£106	19	0

This constructed road is at the rate of about £1,427 per mile. Metal was carted a distance of 1½ mile.

G. B. BEERE, R.E.

[Two Plans.]
