

1913.

LEGISLATIVE ASSEMBLY.
NEW SOUTH WALES.

PARLIAMENTARY STANDING COMMITTEE ON
PUBLIC WORKS.

REPORT

TOGETHER WITH

MINUTES OF EVIDENCE AND PLAN

RELATING TO THE

PROPOSED RAILWAY

FROM

CRABOON TO COOLAH.

Presented to Parliament in accordance with the provisions of the Public Works Act,
64 Vic. No. 26.

Ordered by the Legislative Assembly to be printed, 23 July, 1913.

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1913.

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1913

Legislative Assembly

NEW SOUTH WALES

PARLIAMENTARY MANAGING COMMITTEE ON

PUBLIC WORKS

REPORT

PRESENTED TO

MEMBERS OF LEGISLATIVE ASSEMBLY

BY

THOMAS BULLOCK

AND

GRAHAM TO GOVALL

Printed by the Government Printer, Sydney, New South Wales.

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(P. 21)

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MEMBERS OF THE COMMITTEE.

LEGISLATIVE COUNCIL.

The Honorable WILLIAM FERGUS HURLEY.
The Honorable JOHN TRAVERS.
The Honorable WILLIAM ROBSON, Vice-Chairman

LEGISLATIVE ASSEMBLY.

JOHN STOREY, Esquire, Chairman.
ROBERT THOMAS DONALDSON, Esquire.
ROBERT SCOBIE, Esquire.
GEORGE ARTHUR BURGESS, Esquire.

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

RAILWAY FROM CRABOON TO COOLAH.

REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS, appointed during the first Session of the present Parliament, under the Public Works Act of 1900 (64 Vic. No. 26), the Public Works Committee Election Act of 1901 (1 Ed. No. 58), the Public Works Committee Act of 1904 (4 Ed. No. 5), and the Public Works Committee (Amendment) Act of 1906 (6 Ed. No. 43), to whom was referred for consideration and report "the expediency of constructing a line of railway from Craboon to Coolah," have, after due inquiry, resolved that it is expedient the proposed railway be carried out; and, in accordance with subsection (d) of clause 28 of the Public Works Act of 1900, report their resolution to the Legislative Assembly :—

INTRODUCTORY.

The official evidence placed before the Committee at the opening of their inquiry shows that the first trial survey of a proposed cross-country line from Wellington to Werris Creek passed through the township of Coolah, but this route was abandoned in favour of one *via* Merrygoen, owing to the difficult range to cross beyond Coolah.

The question of connecting Coolah by rail was revived in November, 1910, by a deputation to the Minister for Public Works, comprising representatives of Martindale, Geurie, Coolah, and districts, who urged that either the Wellington to Werris Creek or the Dubbo to Werris Creek line be constructed, and that the route through Coolah be specially looked into. The Minister promised a further investigation of that route, and this was made in April, 1911. The surveyor's report showed that the proposal was open to objection compared with the amended trial lines—Dubbo to Werris Creek and Wellington to Werris Creek—on account of the increased length, steeper grades, and sharper curves.

Another proposal put before the Department on behalf of the Coolah Railway League was for a deviation of the Dunedoo-Coonabarabran Railway, *via* Coolah, instead of *via* Merrygoen, as proposed by the Department, and referred to the Public Works Committee. The Minister had an investigation made of this proposal. The surveyor's report was opposed to the deviation as suggested.

A few days later a deputation waited upon the Minister for the purpose of urging the construction of a branch line of railway from Craboon or some point near there on the Mudgee-Dunedoo line, up the valley of the Coolah River to Coolah. In replying, it was stated by the Minister that his officers had reported very favourably on the line, and he promised to include the proposal in the list of works to be referred to the Public Works Committee for investigation.

The trial survey was then put in hand, the necessary plan was prepared, and the expediency of constructing the line was referred by Parliament to the consideration of the Committee in December, 1912.

DESCRIPTION

DESCRIPTION OF PROPOSED LINE.

This proposed railway commences by a junction with the Mudgee to Dunedoo railway at 234 miles 30 chains from Sydney, and a few chains north of Craboon platform, and proceeds in a generally north-easterly direction, crosses the Talbragar River, and follows along the south-eastern valley of Coolaburragundie Creek, and through the parishes of Wargundy, Talbragar, Terraban, Collier, and Collielblue. The line crosses the creek at about 254 miles 66 chains; thence ascends its right bank to the village of Coolah, and ends at 258 miles 26 chains from Sydney.

The works are light, with the exception of the bridge across the Talbragar River.

Practically all the land passed through is alienated.

ESTIMATED COST.

The original estimated cost of a single line 23 miles 70 chains in length, with 60-lb. rails, a ruling grade of 1 in 100, and the sharpest curve of 20 chains radius, was £104,327, or £4,356 per mile.

The principal items of expenditure were: Permanent-way materials (rails taken at £7 per ton), £18,515; earthworks, £12,625; sleepers (2,376 per mile) at 5s. each, £14,226; station works, including junction, sidings, and signals, £8,870; station buildings, £7,520; water supplies, £6,000; timber bridges, £6,563; larger bridge over the Talbragar River, £2,838; and engineering and contingencies (15 per cent.), £13,607.

The estimate was exclusive of land and compensation.

The foregoing estimate was prepared in June, 1912, but was subsequently brought up to date on the basis of the prices obtaining for labour and materials at the time of the Committee's inquiry.

The revised estimate increased the cost of the line to £110,580, or £4,617 per mile. The principal increases were in rails, which had advanced by £1 13s. 6d. per ton, and in sleepers, which had increased 6d. each.

The estimate with 70-lb. rails is £117,921, or £4,924 per mile; and with 80-lb. rails £123,203, or £5,144 per mile.

ESTIMATED REVENUE AND EXPENDITURE.

In view of the extensive and rich area of land to be served, and having in mind that wheat, oats, maize, lucerne, and tobacco can be successfully produced, with dairying and mining to assist, the Assistant Railway Commissioner is of the opinion that the proposed line has big possibilities in the direction of closer settlement, and its earnings, he states, would be quite equal to *pro ratâ* of the section between Gulgong and Dunedoo (30 miles) which was opened in November, 1910. The latter has shown good results and is rapidly improving with increased cultivation and settlement.

Under these circumstances, an estimate based upon the experience of the Gulgong-Dunedoo section has been submitted. From this it appears that the estimated annual revenue is £5,505, and the estimated annual expenditure £7,073. The latter comprises £4,173 for interest at 4 per cent. on the capital cost, and £2,900 for permanent-way, traffic, and locomotive charges. The estimated annual deficiency is £1,568.

In view of the advance in the estimated cost of the line by, approximately, £6,000, it is necessary to increase the estimated annual deficiency by 4 per cent. on this amount, namely, £240.

The estimate is based upon a tri-weekly service.

THE AREA TO BE SERVED.

The area to be served consists principally of the tract of country known as the Coolaburragundie Valley, the two centres of population, Leadville and Coolah, and the district north-west of the terminus as far as Bomera Station, and northerly to
near

near Weetaliba Station. The country along the valley is rich in quality, timbered with box and apple trees, and is being used principally for grazing. There is, however, no doubt as to its capabilities for wheat and lucerne growing and mixed farming. The line to Dunedoo was opened in the latter part of 1910, and although since that time the area under crop in the valley has not shown any appreciable increase, farmers are engaged in clearing their land, and making it ready for the plough. The bulk of the land is suitable for general farming, and there are several extensive flats along the valley. Much of the land is held in large areas, which are being cut up and offered for sale, or for occupation by farmers on the share system. Beyond Coolah the country consists mainly of black-soil ridges, suitable for pastoral purposes, merging a dozen miles from Binnaway, on the Dunedoo line, into soil of a light sandy nature, with patches of red and black country, capable, in parts, of wheat production.

The average rainfall is $26\frac{1}{2}$ inches, and no difficulty is experienced in obtaining water by sinking on the flats.

The proposed line will serve an area of 720,623 acres, including 551,800 acres of alienated lands; 27,500 acres of reserved lands; 111,863 acres of leased lands; and 29,100 acres of untenanted Crown lands. Of the latter about 14,600 acres are mostly remnants of lands set apart for conditional purchases and conditional leases, additional holdings and homestead selections, and about 2,000 acres are lands set apart for Crown leases and homestead farms under the provisions of the Crown Lands (Amendment) Act, 1912. The prices of these lands, exclusive of the lands set apart for Crown leases and homestead farms, range from 5s. per acre to £2 10s. per acre. Out of the total area of 16,600 acres set apart as mentioned above, about 3,300 have lately been applied for. This country generally is undulating, partly precipitous, rocky and stony, with sandstone formation, and varies from good to poor for grazing, with patches of good agricultural land. The soil is generally sandy and poor—red and brown in parts. The timber consists of ironbark, stringybark, yellow and white box, gum, and apple, also a little pine and oak.

There are eight forest reserves within the limits of the area affected, having a total area of about 12,800 acres, of which about 8,600 acres are held under improvement leases. The country is partly undulating, but generally hilly, rough and rocky; marshy in places, and in others difficult of access. The formation is sandstone, with fair grazing land in parts.

The area affected contains twenty improvement leases, with an aggregate area of about 65,900 acres, of which about 47,800 acres are covered by reserves. The leases have a tenure varying from fifteen to twenty-eight years, and have from about three to twenty-two years to run. The rents range from .23d. per acre to 5.45d. per acre.

Only one scrub lease is affected by the proposal under review, having an area of about 500 acres. It has a tenure of twenty-one years, and has about eleven more years to run. Its rental is 1.25d. per acre.

There are two 18-section leases, both partly within the limits of the area affected by the proposal in question; their aggregate area is 5,800 acres, of which 3,500 acres are covered by reserves. Only one inferior lands lease, with an area of 1,865 acres, a tenure of thirteen years, and ten more years to run, is affected by the proposal.

In addition to the 29,100 acres of untenanted Crown lands mentioned above, there are 27,500 acres of reserved lands not held under any tenure, and 74,063 acres of lands held under inconvertible leases, making a grand total of 130,663 acres of unalienated Crown lands.

It may also be mentioned that the area affected contains parts of Pine Ridge Settlement Purchase Area, No. 13, and the Wargundy Settlement Purchase Area. The former area was acquired by the Government under the provisions of the Closer Settlement Acts, and, together with 197 acres of Crown lands, was set apart in farms for application for settlement purchases on 2nd March, 1910. All the farms therein were applied for and allotted by the Land Board, the disposal average price being £3 15s. 11d. per acre. Wargundy Settlement Purchase Area was also acquired

acquired by the Government, but under the provision of the Closer Settlement Promotion Act, 1910, there is only part of a farm of this area (about 200 acres) in the area affected by the proposed railway. The total number of farms in the affected area is eight, of which three are partly within its limits, and the aggregate area thereof is about 3,100 acres.

THE INQUIRY AND EVIDENCE.

In carrying out their inquiry the Committee have paid a visit of inspection to the district to be served, and have also had the advantage of traversing the country when investigating the proposal to construct a line from Dunedoo to Coonabarabran. Evidence has also been heard in Sydney and the centres affected by the proposed line.

The principal settlement along the route is 6 miles to the east of Craboon, at Leadville, a small mining township at which mining operations at the lead and silver mine have, except on a small scale, been suspended. The ore reserves at Mount Stewart, close to the township, are estimated at 169,800 tons, of which 120,000 tons of iron pyrites are stated to be worth £2 10s. per ton on the trucks in Sydney or Dapto. The proposition is a low-grade one, and some of the ore bodies carry lead, gold, and silver. The equipment consists of one 80-ton per diem blast furnace, with engines and blowers, whilst the main shaft is equipped with winding gear. The cartage rate of ore is at present 10s. per ton, which renders successful mining work impossible. A special report on the field, prepared by a geological surveyor to the Government, concludes with the following sentence:—

In my opinion, the extension of the railway from Craboon to Leadville would be justified on the mining possibilities alone. The distance is only 6 miles; there are no engineering difficulties to be encountered; and large bodies of low-grade ore occur at Leadville which should be enabled to be worked profitably in connection with a railway extension to the actual mines.

Very little agriculture is being conducted in the neighbourhood of Leadville, but it is anticipated that, with the cutting up and sale of Lawson estate of 5,396 acres, arrangements for which were being made at the time of the Committee's inquiry, there will be considerable cultivation of wheat, lucerne, hay, maize, and fruit. The area under wheat in the police patrol district of Leadville in 1911 was a little over 3,000 acres, and although the season was a poor one, an average of a little over 8 bushels to the acre was obtained. The average yield in fair seasons appears to be from 18 to 20 bushels, and in good seasons from 20 to 40 bushels to the acre.

The terminus of the proposed line, Coolah, is a thriving township, supported principally by the grazing industry, and surrounded by country suitable for agriculture. In spite of distance from railway communication, the town and district have made rapid development, the unimproved capital value of alienated lands, including conditional purchases and leased Crown lands, having increased during the last three years from £394,067 to £501,351. The unimproved value of land within the township area has also increased from £6,102 in 1907 to £12,130 in 1912.

Within a radius of 15 miles of Coolah are sixty holders of 182,826 acres, of which 4,143 acres are under cultivation, and 29,560 acres suitable for cultivation. The acreage suitable for dairying is estimated at 62,190 acres. Portions of these areas are within the influence of the existing line. A considerable area of lucerne is being cultivated, principally for home consumption, but the character of the soil is such that it is anticipated that, with railway construction, large quantities will be forwarded to market.

In view of the distance to a railway, combined with the fact that the country has been largely used for grazing purposes, agriculture has not been generally followed in the Coolah district, but where wheat has been grown, the yields have been exceptionally good. Although the rainfall during 1912 was only 16 inches—or 12 inches less than the average—a yield of 13 bushels to the acre was obtained, without fallowing, on land in close proximity to the township. In good seasons the yields have ranged to 30 bushels to the acre.

Immediately adjoining the township is the Oban estate of 23,000 acres, which has been surveyed into thirty-eight blocks. Sales have been effected of

13,000

13,000 acres in grazing and farming blocks, ranging from 50 to 2,000 acres. The whole of the estate has been ringbarked, and its carrying capacity is estimated at a sheep to the acre.

The possibilities of the district, from a timber point of view, are good. The principal timber in use for commercial purposes is known locally as white stringy-bark, obtained from the ranges outside Coolah, and used extensively for building purposes, and stated to be admirably adapted for railway construction.

CONCLUSION.

The Committee have arrived at the conclusion that it is expedient the proposed railway be constructed. Although, owing to the rugged nature of the country to the north of the terminus, the area to be served will be limited principally to the Coolaburragundie Valley, the prospects of the proposed line are favourable. From other portions of the Report it will be seen that the country through which the line will pass, whilst comparatively small in area, possesses exceedingly rich agricultural land awaiting development, and that the mining prospects are likely to be materially advanced by means of railway construction.

A noticeable feature in connection with the financial possibilities of the line is that the estimated revenue exceeds the estimated working expenses by £2,600 per annum, and in view of the fact that, if the revenue is realised, interest on the cost of construction will represent the increment which will accrue to the existing line, the financial prospects of the proposal may be regarded as satisfactory.

RESOLUTION PASSED.

The resolution passed by the Committee is shown in the following extract from their Minutes of Proceedings:—

Mr. Donaldson (*with concurrence*) moved—"That, in the opinion of the Committee, it is expedient the proposed railway from Craboon to Coolah, as referred to them by the Legislative Assembly, be carried out."

The motion was seconded by Mr. Robson, and passed on the following division:—

Ayes, 4.	Noes, 3.
Mr. Storey,	Mr. Hurley,
Mr. Robson,	Mr. Travers,
Mr. Donaldson,	Mr. Scobie.
Mr. Burgess.	

JOHN STOREY,
Chairman.

Office of the Parliamentary Standing Committee on Public Works,
Parliament House, Sydney, 5 May, 1913.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

MINUTES OF EVIDENCE.

RAILWAY FROM CRABOON TO COOLAH.

THURSDAY, 9 JANUARY, 1913.

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.
The Hon. JOHN TRAVERS.
The Hon. WILLIAM ROBSON.

ROBERT THOMAS DONALDSON, Esq.
ROBERT SCOBIE, Esq.
GEORGE ARTHUR BURGESS, Esq.

The Committee proceeded to consider the expediency of constructing a line of Railway from Craboon to Coolah.

William Hutchinson, Chief Engineer, Railway and Tramway Construction Branch, Department of Public Works, sworn, and examined:—

1. *Chairman.*] Have you prepared any statement for the information of the Committee? Yes, my official statement is as follows:—

PROPOSED RAILWAY, CRABOON TO COOLAH.

Estimated cost, exclusive of land and compensation, £104,327; length, 23 miles 76 chains; ruling grade, 1 in 100; sharpest curve, 20 chains radius.

This proposed railway commences by a junction with the Mudgee to Dunedoo railway at 234 miles 30 chains from Sydney, and a few chains north of Craboon platform, and proceeds in a generally north-easterly direction, crosses the Talbragar River, and follows along the south-eastern valley of Coolaburragundie Creek, and through the parishes of Wargundy, Talbragar, Terraban, Collier, and Collieblue. It crosses that creek at about 254 miles 66 chains, thence ascends its right bank to the village of Coolah, where the line ends at 258 miles 26 chains from Sydney.

The works are light, with the exception of the bridge across the Talbragar River.

Practically all the land passed through is alienated.

The following is the statutory report of the Chief Railway Commissioner, dated 8th November, 1912:—

“In accordance with the request of the Honorable the Minister for Public Works, and in pursuance of the provisions of section 28

of the Public Works Act, 1900, I beg to report as follows in regard to the above proposed railway:—

Estimated cost of construction:—	£
Chief Engineer's estimate of cost of construction, exclusive of land and compensation	104,327
Estimated annual expenditure:—	
Interest on capital cost, at 4 per cent. per annum	£4,173
Working expenses	2,900
	7,073
Estimated annual revenue.....	5,505
Difference	£1,568

“As indicated by the figures, this proposal presents a favourable aspect. It will open up a considerable area of very rich land, and probably may assist in the development of the mineral prospects in the area through which it passes.

The common seal of the Chief Commissioner for Railways and Tramways was hereunto affixed this 8th day of November, 1912, in the presence of,—

T. R. JOHNSON,
Chief Commissioner.

J. S. SPURWAY,
Secretary.”

Following is the detailed estimate of the cost of construction:—

CRABOON TO COOLAH.

ESTIMATED cost of a single line of railway, 23 miles 76 chains in length, with 60-lb. rails. Ruling grade, 1 in 100 against, and 1 in 95 with the load. Sharpest curve, 20 chains radius.

Description.	Estimated cost.	Summary.	Average per mile.
	£ s. d.	£ s. d.	£
Earthworks	12,625 0 0	.....	527
Timber bridges.....	6,563 6 2	.....	274
Larger bridge over Talbragar River ..	2,838 12 6	.....	119
Level crossings, cattle-stops, fencing, and road diversions	3,639 0 0	.....	152
Permanent-way materials (rails taken at £7 per ton).....	18,515 18 3	.....	773
Freight	2,731 3 2	.....	114
Platelaying, at 2s. lineal yard	£4,215 4 0		
Earth ballast, at 15s. lineal chain	1,350 0 0		
Ballasting bridge approaches, at 6s. cubic yard	330 0 0		
Sleepers (2,376 per mile), at 5s. each	14,226 5 0		
	20,121 9 0	.....	840
Station works, including junction, sidings, and signals		67,034 9 1	
Station buildings, passenger station, £655; waiting-sheds, £700; platforms, £675; loading banks, £525; cottage, £770; goods-shed and platform, £550; 5-ton crane, £180; 20-ton weighbridges, £600; engine-shed and pit, £1,100; ashpit, £75; turntable, £600; carriage-shed, £440; trucking yards, £650		8,870 2 7	370
Water supplies.....		7,520 0 0	314
Gradient and mileage posts		6,000 0 0	251
Telegraph		97 4 0	4
		1,197 10 0	50
Engineering and contingencies, 15 per cent.....		£ 90,719 5 8	
		13,607 17 10	568
Total	£ 104,327 3 6		4,356

Average cost per mile, £4,356.

Witness—W. Hutchinson, 9 January, 1913.

THE foregoing estimate was prepared in June, 1912, but it has recently been brought up to date on the basis of prices at present obtaining for labour and materials, and now stands as follows:—

Description.	Estimated cost.		Summary.		Average per mile.
	£	s. d.	£	s. d.	£
Earthworks	12,625	0 0	.....	.....	527
Timber bridges	6,563	6 2	.....	.....	274
Large bridge over Talbragar River	2,838	12 6	.....	.....	119
Level crossings, cattle-stops, fencing, and road diversions	3,639	0 0	.....	.....	152
Permanent-way materials (rails taken at £8 13s. 6d. per ton)	22,298	1 3	.....	.....	931
Freight	2,731	3 2	.....	.....	114
Platelaying, at 2s. per lineal yard	£4,215	4 0	.....	.....	.....
Earth ballast, at 15s. lineal chain	1,350	0 0	.....	.....	.....
Ballasting bridge approaches, at 6s. cubic yard	330	0 0	.....	.....	.....
Sleepers (2,376 per mile), at 5s. 6d. each	15,648	17 6	.....	.....	.....
			21,544	1 6	899
Station works, including junction, sidings, and signals.....			72,239	4 7	380
Station buildings—passenger station. £655; waiting-sheds, £700; platforms, £675; loading banks. £525; cottage, £770; goods-shed and platform, £550; 5-ton crane, £180; 20-ton weighbridges, £600; engine-shed and pit, £1,100; ashpit, £75; turntable, £600; carriage-shed, £440; trucking yards, £650			9,102	16 7	.....
Water supplies			7,520	0 0	314
Gradient and mileage posts			6,000	0 0	251
Telegraph			97	4 0	4
			1,197	10 0	50
Engineering and contingencies, 15 per cent.....			£	96,156	15 2
				14,423	10 3
					602
Total			£	110,580	5 5
					4,617

Average cost per mile, £4,617

Estimate with 70-lb. rails, £117,921 5s., or £4,924 per mile.

„ „ 80-lb. „ £123,203 3s. 2d., or £5,144 per mile.

The first trial survey of the proposed cross-country line from Wellington to Werris Creek passed through the township of Coolah, but this route was abandoned in favour of one *via* Merrygoen, owing to the difficult range to cross beyond Coolah.

The question of connecting Coolah by rail was revived in November, 1910, by a deputation, comprising representatives of Martindale, Geurie, Coolah, and districts, introduced by Mr. Horne, M.L.A., who urged that either the Wellington to Werris Creek or the Dubbo to Werris Creek line be constructed, and that the route through Coolah should be specially looked into. The Minister promised a further investigation of that route, and this was made by Mr. Surveyor Edwardes in April, 1911. His report, which is available if required by the Committee, showed that the proposal was open to objection as compared with the amended trial lines—Dubbo to Werris Creek and Wellington to Werris Creek—on account of the increased length, steeper grades, and sharper curves.

Another proposal, which was put before the Department by Mr. Horne, M.L.A., on behalf of the Coolah Railway League, was for a deviation of the Dunedoo-Coonabarabran Railway, *via* Coolah, instead of *via* Merrygoen, as proposed by the Department, and referred to the Public Works Committee. The Minister had an investigation made of this proposal, and this was also carried out by Mr. Surveyor Edwardes. The report was opposed to the deviation as suggested, and the Committee were advised by letter, dated 26th June, 1911, that in the opinion of the Department the question of serving Coolah by rail was one to be considered rather in the light of a separate branch line.

On the 6th July, 1911, Mr. Horne, M.L.A., accompanied by Messrs. P. H. Morton, Scully, and Deane waited upon the Minister for the purpose of urging the construction of a branch line of railway from Craboon or some point near there on the Mudgee-Dunedoo line, up the valley of the Coolah River to Coolah.

Mr. Horne, in support of the request, stated that he had special opportunity for knowing the nature of the land to be served by the proposed railway, and he could say without hesitation that there was no richer district in New South Wales, with the exception perhaps of some of the best on the North Coast. A great portion of the district to be traversed was admirably adapted for cultivation and dairying, with which a start had been made with every prospect of success.

Mr. Scully said he had been living in the district for a number of years, having started when very poor, but owing to the richness of the soil, he had been able to get along very well; in fact, all the settlers in the district were well off from just the same cause, namely, the superiority of the land for cultivation. For lucerne growing it was unequalled. He had taken up his land at Coolah rather than at Craboon simply because it was richer, although further away from a railway. He could not say in miles what the width of the valley was, but it was so wide that one could not see across it. A settler could do well on a few hundred acres with lucerne, dairying, potato-growing, &c. It was also a rich mineral district in copper, iron, &c.

Mr. Deane endorsed Mr. Scully's remarks, and said that from 50 acres of lucerne last year (1910) he had got five cuts; from a small area under wheat he obtained 22 bushels to the acre. His particular line was sheep, which he fattened off the natural grasses. For these he obtained from 7s. to 8s. each, and for fat lambs he had recently received 12s. 7d. each.

Mr. P. H. Morton said he advocated the construction of the line from personal interests, as well as for public reasons. He had been attracted to the district by its richness, his intention being to go in for farming when the extension to Dunedoo was completed. The country, however, could not be utilised to its best advantage unless the settlers were given a branch line to bring their produce to the main line. He had been all over the valley, and there was no bad land in it. The rainfall ranged from 27 to 29 inches. The valley was wide in some places, narrow in others, and here and there breaking out into open places. A very large area would be put under cultivation if the railway were constructed; cultivation was at present out of the question owing to the distance—24 miles from a railway.

In reply to the Minister, Mr. Morton stated that Cassilis was not in the same valley as Coolah, there being a range of mountains between. The Decentralisation Commission travelled over the Coolah route, and then went on to Cassilis, with the object, he presumed, of seeing how it would work in with a line to Merriwa. A line could be taken down there, but for the present they were only asking for a line to Coolah, which the residents were absolutely certain would pay within a very short time, if not from the commencement. At Coolah, a Mr. Bowman was putting up a large cheese factory, and intended going in for dairying. Another factory was also proposed.

The Minister, in reply, said that his officers had reported very favourably on this line, and he promised the deputation that he would include the proposal in the list of works to be referred to the Public Works Committee for investigation.

The trial survey was then put in hand, and the necessary plan prepared.

On his journey through Leadville on the 24th June, 1912, a deputation from the Local Railway League (introduced by Mr. Dunn, M.L.A.) waited upon the Premier to urge the construction of a railway from Craboon to Leadville, and thence to Coolah.

Mr. L. Bowman advocated the line from a pastoral, agricultural, and dairying standpoint. There had been a heavy increase in lucerne-growing in the district, and with cheaper transit there were great possibilities for dairying. A cheese and a butter factory had already been erected, and there were two dairy farms with 100 cows each, in the locality.

Mr. U. Scoble urged the construction of the line from a mining point. In this respect, he stated, there were great possibilities in Leadville. There were 250,000 tons of low-grade ore in sight which would pay if railway facilities were provided. The cost of bagging and carting this ore to Craboon was 13s. per ton, and this prevented it being payably worked. The ore in sight would not be worked out for ten years, and would give employment to between 1,000 and 2,000 men. The proprietors of the Mount Stewart Mine had spent £20,000 in developmental work, and about £8,000 had been spent in the same direction on the Mount Scott Mine. All work had proved rich deposits to a depth of 200 feet.

On the 4th December, 1912, the Minister for Public Works moved in the Legislative Assembly, "That it be referred to the Parliamentary Standing Committee on Public Works to consider and report upon the expediency of constructing a line of Railway from Craboon to Coolah."

Question resolved in the affirmative.

Witnesses—W. Hutchinson, 9 January, and J. Harper, 10 January, 1913.

In moving the resolution, the Minister stated that he had had an opportunity of visiting the district, and came to the conclusion that there would be a very dense wheat development nearly all along the route. It was only the absence of a line that had prevented the whole of the country in the vicinity of Leadville and Coolah from being put under agriculture. The estimated loss of £1,500 a year he thought would be a rapidly diminishing quantity.

2. In the past it has been the custom to specify the Commonwealth duty upon the rails;—do you know if Commonwealth duty is included in the estimate that you have given? Yes; we now include the duty on rails.

3. The increase would appear to be very slight. The cost used to be £6 5s. per ton, exclusive of the Commonwealth duty, which, at 35s., raised the cost to £8? When the price was put down at £8, it was on the assumption that

the rails would be got at Lithgow. There was then no need to add anything for duty; but when we have to import the rails, we add the amount of duty to the price.

4. It used to be £8 per ton; here it is only £8 13s. 6d., so it would appear that there is an increase of only 13s. 6d.? As far as my experience goes, we have never paid, till quite lately, £8 per ton, inclusive of everything. Now it has gone beyond that. The price in this estimate is on the basis of tenders just received, and is the highest we have ever paid for rails. This is a higher rate than I have ever had to submit to the Committee.

5. Sleepers, too, have gone up? Yes; another shilling has been added to the price.

FRIDAY, 10 JANUARY, 1913.

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.
The Hon. JOHN TRAVERS.
The Hon. WILLIAM ROBSON.

ROBERT THOMAS DONALDSON, Esq.
ROBERT SCOBIE, Esq.
GEORGE ARTHUR BURGESS, Esq.

The Committee further considered the expediency of constructing a line of Railway from Craboon to Coolah.

John Harper, Assistant Railway Commissioner, sworn, and examined:—

6. Chairman.] Have you prepared any statement with regard to this railway proposal? Yes, the following information is submitted in regard to the proposed railway from Craboon to Coolah:—

Length of construction, 23½ miles: estimated cost, £104,327; ruling grade, 1 in 80; sharpest curve, 15-chains radius; weight of rail, 60 lb.

The proposed line would leave the existing railway, Mudgee to Dunedoo, near Craboon Siding, at 234½ miles from Sydney, thence running easterly, crossing the Talbragar River and the main road to Leadville and Coolah; thence following the Coolah-road to Coolah, and terminating on the western side of the village of Coolah.

Country to be served:—The line would serve a rich area of agricultural land along the Coolah River Valley, which extends a distance of about 22 miles, and beyond the terminal point traffic would be attracted for a distance of 30 miles north-west as far as Bomera station, and to Cassillis South, 22 miles; while in a northerly direction, an area extending to near Weetalibah Station, 15 miles, might be credited.

Much of the land along the Coolah Valley is suitable for lucerne-growing.

The proposal is one which will benefit agricultural, pastoral, mining, and dairying industries, and will induce closer settlement.

The general statistics of the districts concerned are as follow:—

	Leadville.	Coolah.	Cassillis.	Totals.
No. of holdings, 1 acre upwards	102	112	180	394
Area alienated, acres	86,172	172,419	351,289	609,880
Area of Crown lands occupied, acres	60,062	401,998	108,188	570,248
Total area cultivated, acres	4,933	2,693	2,183	9,809
No of sheep in district	76,582	265,000	337,127	678,709
Population of village and district	1,000	1,697	1,004	3,701

It is admitted that, owing to the long cartage distance, combined with the fact that the land has, until recently, been largely used for pastoral purposes, very little attention has been given to agriculture. But it should be mentioned that the Oban Estate, of 23,000 acres, which adjoins the township of Coolah has been surveyed into thirty-eight blocks, fourteen of which have been sold. Other private subdivisions have also taken place. A cheese and butter factory has lately been established, and the town is making rapid advancement.

In regard to Mining:—The proposition is a low-grade one, situated at Leadville, 6 miles from Craboon railway station. The ore bodies are:—

- 1 Zinc ore body 47 feet wide.
- 1 Zinc ore body 16 "
- 1 Silver ore body 30 "
- 1 Iron pyrites (silver) ore body 40 "
- 1 Copper ore body 25 "

Some of these ore bodies also carry lead, gold, and silver. There is also a lime quarry. The equipment consists of one 80-ton per diem blast furnace with engines and blowers, whilst the main shaft is equipped with winding gear. A large dam for holding water has been constructed. The pyritic ores are essentially suitable for the manufacture of sulphuric acid, which it is intended to use in the manufacture of superphosphates. When the sulphur is extracted

from this ore and turned into sulphuric acid, it is expected that the residual iron will find a market with the proposed Broken Hill Proprietary Smelting Works near Newcastle, or other public smelting works.

The Under Secretary, Department of Mines, has had a special report prepared by one of his geological surveyors, from which the following information has been extracted:—

" ORE RESERVES of Mount Stewart above 250-foot Level.	
	tons.
Engine shaft sulphide shoot	9,400
A. Sulphide shoot at No. 4 shaft, from 260-foot level up to 157 feet.	41,000
B. From above shoot north to end of 157-foot level and down to 260-foot level: estimated sulphide ore.	70,000
C. Paddock shaft: Shoot of lead ore above 160-foot level.	1,800
(Below this, large body of unprospected gold and zinc ore.)	
D. Western lode (zinc)	44,000
Western lode (lead ore)	500
E. Extended shaft: Copper ore above bottom drive.	500
F. Dry silver ore in Extended	600
G. Ore at grass	2,000
Total	169,800

"Of this, Mr. Garland (part owner) estimates 120,000 tons of iron pyrites, worth about £1 10s. per ton on trucks in Sydney or Dapto. He claims to have at least an offer of £1 8s. 6d. per ton on trucks as value of sulphur alone in ore. In my opinion, Mr. Garland's company could make the mining of the iron pyrites pay at this figure, provided the railway be extended to Leadville. For comparison purposes, a double table may be prepared on this basis, one representing costs before railway extension, the other after:—

	£	s.	d.
Mining—per ton of ore, about	0	10	0
Development, per ton of ore, about	0	2	6
Bagging and freight to Craboon	0	10	0
Railway freight, say	0	10	0
Total	£1	12	6

" With railway communication established with mines:—			
	£	s.	d.
Mining, per ton	0	10	0
Development	0	2	6
Railway freight, say	0	10	0
Total	£1	2	6

"From outside and reliable sources it has been ascertained that iron pyrites should be worth from 28s. to 30s. per ton in Sydney for their sulphur contents.

"If Mr. Garland's figures as to value are correct, there is a distinct profit shown, even allowing for contingencies. Without railway extension, however, they would be working at a dead loss.

"It is highly probable, however, that this mass of iron pyrites is of much greater extent than at present exposed in the workings.

"The silver-lead bodies appear to have also a definite value.

Witnesses—J. Harper, 10 January, and E. S. Vautin, 22 January, 1913.

"The zinc bodies, although large, cannot be considered at present as a great asset in themselves. Contracts for large parcels only are taken, and unless the company is prepared to concentrate and smelt their zinc ores in large quantities they can scarcely hope to dispose of their zinc product. Should the mining be started, however, on the iron sulphide ores, it would doubtless give encouragement to the company to concentrate their lead and zinc ores in a large way. If necessary, tables of approximate costs of treatment could be supplied for the information of the Chief Commissioner."

In concluding his report the Geological Surveyor writes:—"In my opinion, the extension of the railway from Craboon to Leadville would be justified on the mining possibilities alone. The distance is only 6 miles; there are no engineering difficulties to be encountered; and large bodies of low-grade ore occur at Leadville which should be enabled to be worked profitably in connection with a railway extension to the actual mines. It is well known that sulphur is needed in connection with the superphosphate works, and Mr. Garland mentions a definite price offered to him (£1 8s. 6d.) for large tonnages. With railway extension this price should leave a margin of profit to the company. Side by side with this, the concentration of ore; could proceed with the smelting of same either on the spot or at Lithgow.

"It may also be stated that the land lying between Craboon and Leadville, and also that between the latter town and Coolah, 18 miles on, appears to be admirably adapted for wheat-growing."

Probable Earnings.—In view of the extensive and rich area of land to be served, possessing an average annual rainfall of 26 inches, and having in mind that wheat, oats, maize, lucerne, and tobacco can be successfully produced, with dairying and mining to assist, I am of the opinion that the proposed line has big possibilities in the direction of closer settlement if given railway communication, and its earnings would be quite equal to *pro rata* of the section between Gulgong and Dunedoo (30 miles) which was opened in November, 1910. The latter has shown good results and is rapidly improving with increased cultivation and settlement.

The following estimate is therefore submitted, based upon the experience of the Gulgong-Dunedoo section:—

Estimated cost of construction:—	
Chief Engineer's estimate of cost of construction.....	£
(exclusive of land and compensation)	104,327
Estimated annual expenditure:—	£
Interest on capital cost, at 4 per cent.	4,173
Permanent-way, Traffic and Loco. charges	2,900
	7,073
Estimated annual revenue.....	5,505
Difference	£1,568

The working expenses are for a tri-weekly train service.

7. *Mr. Robson.*] Does this line go through Leadville? Yes, the survey is in the immediate neighbourhood of the town.

8. *Chairman.*] The line dips in towards Leadville? Yes.

9. *Mr. Hurley.*] The distance from Craboon to Coolah is 23½ miles;—is there any possibility of the railway being extended beyond Coolah? I do not see any immediate necessity for it.

10. But is there any prospect of it being extended beyond Coolah in the future? No, I do not think so.

11. It will run, then, into a dead-end valley? Yes; construction beyond that would be very expensive.

12. *Chairman.*] To make a connection at Cassilis you would have to get over the Dividing Range? Yes, you would have to get over some very rough country.

WEDNESDAY, 22 JANUARY, 1913.

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.

The Hon. JOHN TRAVERS.

The Hon. WILLIAM ROBSON.

ROBERT SCOBIE, Esq.

GEORGE ARTHUR BURGESS, Esq.

The Committee further considered the expediency of constructing a line of Railway from Craboon to C.o'ah.

Ernest Stafford Vautin, Chief Draftsman, Department of Lands, sworn, and examined:—

13. *Chairman.*] You have prepared a map showing the area to be served by this proposed railway, together with the usual figures? Yes. My official statement is as follows:—

PROPOSED RAILWAY—CRABOON TO COOLAH.

Alienated lands (tinted blue)—	acres.
Including conditional purchase, conditional leases, and homestead selections	551,800
Reserved lands, 80,200 acres—	
*27,500 acres not held under any tenure (tinted green)	27,500
52,700 „ held under leases and included therein (edged green) }	
80,200 acres.	
Leased lands (hatched blue)—	
Settlement leases (including 1,300 acres reserves) 37,600 acres	
Special „ („ 100 „ „) 200 „	
Improvement „ („ 47,800 „ „) 65,900 „	
Scrub „ „ „ „ „ 500 „	
13th section „ (including 3,500 acres reserves) 5,800 „	
Inferior lands „ „ „ „ „ 1,863 „	
52,700 acres reserves 111,663 „	
Crown lands (tinted brown)—	
(Untenanted)	*29,100
Total area	720,263

* It is probable that a considerable area of untenanted Crown lands and reserves may be held under annual leases, particulars of which are not available at Head Office.

Untenanted Crown Lands.

The area of the untenanted Crown lands within the limits of the area affected by the proposed railway Craboon to Coolah, as shown by a red band on map produced, is about 29,100 acres. Of this area about 14,600 acres are mostly remnants of lands set apart, from time to time between 23rd November, 1901, and 27th November, 1912, for conditional purchases and conditional leases, additional holdings and homestead selections, and about 2,000 acres are lands set apart for Crown leases and homestead farms, under the provisions of the Crown Lands (Amendment) Act, 1912. The prices of these lands, exclusive of the lands set apart for Crown leases and homestead farms, range from 5s. per acre in parish of Terraban, to £2 10s. per acre, in parish of Wargundy, both in county Bligh. Out of the total area of 16,600 acres set apart as mentioned above, about 3,300 have lately been applied for as follows:—About 1,400 acres as homestead selections and conditional purchases, and about 1,900 acres as Crown lease and homestead farms. No confirmation of these applications as yet been reported at Head Office.

Country.—Generally undulating, partly precipitous, rocky, and stony; sandstone formation generally; basaltic, slate and granite in parts; it varies from good to poor for grazing, with patches of good agricultural land.

Soil.—Generally sandy and poor; red and brown in parts.

Timber.—Ironbark, stringybark, yellow and white box, gum, and apple; also a little pine and oak.

Forest Reserves.

There are eight forest reserves, four wholly and four partly, within the limits of the area affected by the above proposal, having a total area of about 12,800 acres, of which about 8,600 acres are held under improvement leases.

Country.—Partly undulating, but generally hilly, rough, and rocky; marshy in places, in others difficult of access; sandstone formation; fair grazing lands in parts.

Soil.—Generally sandy.

Timber.—Ironbark, stringybark, pine, gum, box and apple, generally of good quality.

Improvement Leases.

The area affected by the proposal under consideration contains twenty improvement leases, ten wholly and ten partly, within its limits, having an aggregate area of about 65,900 acres, of which about 47,800 are covered by reserves.

Tenure.—The above improvement leases have a tenure varying from fifteen to twenty-eight years, as follows:—One lease has a tenure of fifteen years; one twenty years; six leases have each a tenure of twenty-one years; two leases each twenty-seven years; and ten leases each twenty-eight years. They have from about three to about twenty-two years more to run.

Rentals.—The rents range from 23d. per acre (improvement lease 494, parish of Carlisle, county of Napier), to 5 45d. per acre (improvement lease 1492, parish of Warung, county of Bligh).

Scrub Leases.

There is only one scrub lease within the limits of the area affected by the proposal under review, having an area of about 500 acres. It has a tenure of twenty-one years, and has about eleven more years to run. Its rental is 1 25d. per acre.

Eighteen Section Leases.

There are two eighteen section leases, both partly within the limits of the area affected by the proposal in question; their aggregate area is about 5,800 acres, of which about 3,500 acres are covered by reserves.

Tenure.—One lease (18 section, lease 47, parish of Bundulla, county of Pottinger), has a tenure of fourteen years, and has about six years

more to run, and the other lease (18 section, lease 39, parishes of Neible and Allison, county of Napier), has a tenure of fifteen years, and has about seven more years to run.

Rentals.—The rent of 18 section, lease 47, is 2½d. per acre, and that of 18 section, lease 39, is a 1½d. per acre.

Inferior Lands Lease.

Within the limits of the area affected by the proposed railway there is only one inferior lands lease, having an area of about 1,863 acres. It has a tenure of thirteen years, and has about ten more years to run. Its rental is 1d. per acre.

It may be stated that, within the limits of the area affected by the proposal under consideration, in addition to the 29,100 acres of untenanted Crown lands mentioned above, there are about 27,500 acres of reserved lands not held under any tenure and about 74,063 acres of lands held under inconvertible leases, making a grand total of about 130,663 acres of unalienated Crown lands.

It may be also mentioned that the area affected by the proposal in question contains parts of Pine Ridge settlement purchase area No. 13 and Wargundy settlement purchase area, as shown by yellow bands on map produced. The former area was acquired by the Government under the provisions of the Closer Settlement Acts, and, together with 197 acres of Crown lands, was set apart in farms for application for settlement purchases on 2nd March, 1910. All the farms therein were applied for and allotted by the Land Board; the disposal average price being £3 15s. 11d. per acre. The latter area, Wargundy settlement purchase area, was also acquired by the Government, but under the provisions of the Closer Settlement Promotion Act, 1910. There is only part of a farm of this area (about 200 acres) in the area affected by the proposed railway. The total number of farms in the affected area is eight, of which three are partly within its limits, and the aggregate area thereof is about 3,100 acres.

Rainfall.

The average annual rainfall on the area affected by the proposed railway is about 26½ inches.

Power of Withdrawal by the Crown for purposes of Settlement.

Of the twenty improvement leases wholly or partly within the limits of the area affected by the proposal under consideration, the Crown, under the conditions governing same, has power of withdrawal for purposes of settlement without compensation, except for the lessee's interest in the improvements on the land withdrawn, only in respect of the following eleven leases, viz. :—

In six leases, improvement lease 838, parish of Bullinda, county of Napier; improvement lease 830, parishes of Mumbedah and Bullinda, also in county of Napier and parish of Bullinda, county of Lincoln; improvement lease 841, parish of Malcolm; improvement lease 878, parish of Lowe; improvement lease 880, parish of Carlisle, all in county of Napier; and improvement lease 902, parish of Bligh, county of Bligh, the Crown has power to withdraw any land required for purposes of settlement in the event of a railway being constructed within 10 miles of any boundary of the land under lease.

In two leases, improvement lease 1477, parish of Durridgee, and improvement lease 1492, parish of Warung, both in county of Bligh, the Crown has power to withdraw the whole or any part or parts of these leases after 28th January and 10th June, 1916, respectively.

In one lease, improvement lease 1,214, parish of Warung, county of Bligh, the Crown has power to withdraw the whole or any part or parts of this lease :—(a) In the event of forest reserves 143 and 143 extension becoming, in the opinion of the Minister for Lands, wholly, or in part useless for forestry purposes, and (b) at any time.

In one lease, improvement lease 1,491, parish of Turill, county of Bligh, the Crown has power to withdraw the whole or any part or parts of this lease :—(a) In the event of forest reserve 124 becoming, in the opinion of the Minister for Lands, wholly or in part useless for forestry purposes; and (b) after 10th June, 1916. It may be pointed out, however, that condition (b) in this, as in the preceding lease, is only operative after the forest reserves have been revoked.

In one lease, improvement lease 1,514, parish of Neible, county of Napier, the Crown has power to withdraw the whole or any part or parts thereof :—(a) In the event of a railway line being constructed within 10 miles of the land leased, and at any time, and from time to time after the completion of such railway; or (b) after 9th August, 1916, failing the construction of such railway.

In the remaining nine leases, viz. :—Improvement lease 56, parish of Morven; improvement leases 369 and 611, parish of Queensborough; improvement lease 494, parish of Carlisle; all in county of Napier; improvement lease 470, parish of Tomimbil; improvement leases 717 and 747, parish of Bobaderry; and improvement leases 908 and 909, parish of Warung, all in county of Bligh, the Crown, under the conditions attached to these leases, has no power of withdrawal for purposes of settlement, but has a general power under the Closer Settlement (Amendment) Act, 1912, to acquire with compensation for closer settlement any land comprised in these leases, if they be situated within 15 miles of any existing or duly sanctioned railway.

It may be mentioned that improvement leases 841, 878, 880, 902, and 1,514, referred to above, are situated more than 10 miles from the proposed railway, the Crown, therefore, can only acquire with compensation any land comprised therein required for closer settlement under the general power conferred by the Closer Settlement (Amendment) Act, 1912, above quoted.

In the scrub lease within the limits of the area affected by the proposed railway (scrub lease 158, parish of Coolah, county of Napier), the Crown has only the general power conferred by the Closer Settlement (Amendment) Act, 1912, just mentioned, to acquire with compensation any land comprised in this lease for purposes of closer settlement.

In the two 18th section leases partly within the limits of the area affected by the proposal in question, the Crown has power to withdraw for purposes of settlement the whole or any part or parts of these leases without compensation, except for the lessee's interest in the improvements on the land withdrawn, as follows :—

In one lease, 18th section lease 39, parishes of Neible and Allison, county of Napier, after 26th March, 1915.

And in the other lease 18th section 47, parish of Bundulla, county of Pottinger :—(a) In the event of forest reserve 2,700 becoming, in the opinion of the Minister for Lands, wholly or in part useless for forestry purposes; and (b), after 26th March, 1915. In this lease, as in improvement leases 1,214 and 1,491 mentioned above, the latter condition is only operative after the forest reserve has been revoked.

It may be also mentioned that since the coming into force of the Forestry Act, 1909, although the Minister for Lands may be of opinion that any forest reserve is wholly or partly useless or forestry purposes, the matter of its revocation must be referred to the Minister for Agriculture for his concurrence.

In the inferior lands lease (inferior lands lease 70, parish of Narangarie, county of Napier), within the limits of the proposed railway, the Crown, under the conditions attached hereto, has power to withdraw the whole or any part or parts of it :—(a) In the event of a railway being constructed within 10 miles of the lease; and (b), after 6th August, 1919.

It may be pointed out that, apart altogether from whatever specific conditions, regarding withdrawals for purposes of settlement, may be embodied in the instruments covering all the above improvement, scrub and 18th section leases, the Crown has also a general power under the Closer Settlement (Amendment) Act, 1912, before referred to, to acquire for closer settlement any land comprised in any improvement, scrub, or 18th section lease situated within 15 miles of any existing or duly sanctioned railway, on payment of such compensation as may be agreed upon or determined in accordance with the provisions of section 4 of the said Act.

It may be mentioned also that in connection with improvement, scrub and inferior lands leases, the holder of such lease, under section 27 of the Crown Lands Act of 1895, may, at any time during the last year of the lease, apply for the portion of the leasehold which contains the lessee's dwelling house, not exceeding 640 acres in area, as homestead selection, subject to the following provisions :—

- (a) Area to be improved, with permanent fixed and substantial improvements to the value of £1 per acre before the date of application, and to be the property of the applicant.
- (b) Before the homestead grant is issued to pay the full cost of survey.
- (c) The value of the land granted as homestead selection to be determined in accordance with the provisions of section 6 of the Crown Lands Act of 1889, and to be subject to reappraisalment.
- (d) Land granted to be withdrawn from lease, but lease to continue otherwise in full force and effect.

Police Patrol Districts.

The area affected by the proposed railway, Craboon to Coolah, contains five police patrol districts, all partly within its limits, as follows :—

Coolah	About half.
Cassilis	„
Leadville	„
Tambar Springs	Small part.
Wollar	Very small part.

14. *Mr. Robson.*] Half the country between Craboon and Coolah is really served already? Yes; taking a 20-mile limit of the existing and the authorised lines.

15. Excepting the Coolah Valley, the land is inferior? I could not say that. I am dealing only with the untenanted Crown lands.

16. *Mr. Travers.*] You have taken the 20-mile limit north-east of Coolah? Yes.

17. Do you know the country on from there? No.

18. On the western side you split up the country between the line from Dunedoo-Coonabarabran and the proposed line? Yes.

19. *Chairman.*] On the eastern side you go right across Cassilis? Yes; that is so. The map just includes it. Probably the traffic would not go east of the range, but there is no railway within the 20-mile limit on the other side.

20. *Mr. Scobie.*] Do you think that Tambar Springs is really within the influence of this railway? No; I have only included Tambar Springs on the map to show the location.

FRIDAY, 31 JANUARY, 1913.

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.
The Hon. JOHN TRAVERS.
The Hon. WILLIAM ROBSON.

ROBERT THOMAS DONALDSON, Esq.
ROBERT SCOBIE, Esq.
GEORGE ARTHUR BURGESS, Esq.

The Committee further considered the expediency of constructing a line of Railway from Craboon to Coolah.

Ernest Clayton Andrews, Geological Surveyor, Department of Mines, sworn, and examined:—

21. *Chairman.*] How long have you had your present position? Thirteen years. I have made the following extracts from official reports, including my own:—

Notes on Ore deposits in the neighbourhood of Leadville, parish Talbragar, county Bligh.

1. Tallewang magnetic iron ore deposit worked by Messrs. C. & G. Hoskins. This valuable iron deposit already served by light line from main railway between Gulgong and Dunedoo.

2. Mount Laut.—Copper deposit. Extracts from report of Mr. J. E. Carne, Copper Mining Industry, 1908, pp. 292, 293, private land, parish Bullinda, county Lincoln. In slate, dip S.W. at 68° to 70°. Lode from 18 inches to 4 feet wide, slate and quartz gangue.

Lode apparently proved between 200 and 300 feet in depth. Ore very siliceous. Sample by Mr. Carne, from 91-foot level, yielded:—

Copper	...	...	4.40 per cent.
Iron	...	...	5.04 "
Sulphur	...	...	6.16 "
Silica	...	...	65.45 "
Gold	...	...	a trace "

No promise of solid sulphides at depth, but rather of leanly distributed sulphides in a vast proportion of gangue. Mr. Carne reports that the ore would be a useful flux for the basic Mt. Stewart ore.

The ore appears to be amenable to concentration.

It is possible that this deposit would be served by the proposed line to Coolah.

3. Mount Scott.—M.L.'s. 6 and 22, 40 acres each, parish Talbragar, county Bligh; opened up by three shafts; Strike of deposit North and South, dip West at 45°; lode channel from 5 to 6 feet wide. A little galena and zinblende making on hanging wall. The channel filling is mixed with country. (Notes by Mr. J. E. Carne.) A sample taken by Mr. Carne gave the following result by assay. Copper Mining Industry, 1908, p. 296.) :—

No. 08—172.

Zinc	...	...	12.79 per cent.
Silica	...	...	25.38 "
Lead	...	...	1.00 ", (about).
Copper	...	...	none.
Gold	...	...	a trace.
Silver	...	...	16 dwt. 8 grs. per ton.

4. Mount Stewart mine.—In 1891, Professor T. W. E. David estimated iron ore to the extent of 400,000 tons, in this deposit. (Annual Report, 1891, p. 214.)

In 1901, Mr. J. B. Jaquet reported on the same deposit. "The ores are not suitable for iron smelting, but they would be of value as a flux." (Iron Ore Deposits, 1901, p. 123.)

In 1906, Mr. Jaquet reported on the same deposit:—

"It probably contains a high percentage of zinc, and the lode deserves attention as an important zinc deposit.

"At 157 feet a level has been driven for a length of 600 feet upon the lode. Below the 157-foot level the sulphide zone is entered. The sulphide ore consists mainly of iron pyrites, with a small quantity of galena. It is said to contain from 14 to 17 ounces of silver per ton. A small sample, which I took at random, only contained 2 oz. 14 dwt. The lode is strong, and from 15 to 25 feet wide. Some of the ore is said to have yielded as much as 1½ per cent. copper in places."

Extracts from report by Mr. J. E. Carne, Copper-mining Industry, 1908, pp. 296-299 inclusive; also attached map of workings.

Mount Stewart Mine, Mining Leases 1, 2, 3, parish Talbragar, county Bligh, 6 miles from Craboon, on Dunedoo railway line:—

"Opened in 1888 as a silver-lead mine; water-jacketed blast furnace was erected in 1892.

"Several large parallel lenses, with strong gossan outcrops, occur in quartz-felsite, quartzite, granulite, and limestone. Striking from N. 25° to N. 75° E., and dipping westerly at 60° to 75°. The provings extend for about 2,000 feet along the strikes, but are not continuous, the principal workings being at the north-east and south-west ends.

"The main lode has been driven on for about 600 feet at the north-east end; at the 157-foot level the oxidised ore being stoped to surface in parts for lead and silver. Below 157 feet sulphides begin, principally solid pyrites, with appreciable quantities of silver in limited areas, though the general average is unfortunately low; lead sulphide, however, is not prominent for the most part. The width averages from 15 to 40 feet. The composition of the pyritic ore is shown approximately in assays Nos. 108-165, 168, and 171.

"Zinc-blende makes strongly on the hanging wall of the east lode at 200-foot level, averaging 4 to 5 feet in width, and assaying 41.32 per cent. of zinc.

"Zinc also makes strongly in a cross-cut under the west lode; it is, however, of low grade, being mixed in part with limestone."

Extracts from report on Mount Stewart to Railway Commissioners, by E. C. Andrews, October, 1912.

Workings along the large Eastern, Paddock, and Extended lodes are supplied in the report:—

"Main Lode.—From the 157-foot level a winze has been sunk for 16 feet in a cross-cut up in to the south-east from the northerly part of the workings and to the north-east of the large iron sulphide body. Large zinc body exposed in winze. The cross-cut itself has been put in 55 feet through a zinc-blende ore, cemented with dense ironstone.

"Winze, 57 feet deep, also put down from 157-foot level. Cross-cut thence passed through solid iron pyrites apparently about 45 feet wide. At the 217-foot level a large body of solid iron ore pyrites is exposed."

Reported values of Ore.—Assays of the lode have been taken by Mr. Carne, for which see attached report. Other assay values have been supplied by Mr. C. L. Garland, and these are here reproduced:—

"Main Lode.—217-foot level, hanging to footwall, 30 feet; average of 30 feet in five sections of 6 feet each, 43.2 oz. silver, gold reported up to about 2 dwt. average, and about .75 per cent. copper." (See, however, Mr. Carne's samples from this lode, .21 per cent. copper, .20 per cent. lead, 4 dwt. 8 grs. gold, and 15 oz. silver per ton.)

From about 14,000 tons mined from the main lode above this massive pyritic body, Mr. Garland claims to have won about 1,500 tons of lead and 300,000 oz. of silver. From this about £60,000 were recovered, and about £3,000 to £4,000 spent in dividends. Mr. C. L. Garland quoted:—

Western Lode.—150-foot level, 7 feet from footwall lode average 43 per cent. zinc, while next 20 feet yielded 16 per cent. zinc, and 20 feet thence to hanging wall gave 18 per cent. zinc.

250-foot level.—0 to 7 feet from footwall, 11 per cent. zinc, 3 oz. silver; 7 to 15 feet, 8.6 per cent. zinc, 2.8 per cent. lead, 3 oz. 8 dwt. silver.

Eastern Lode.—Slightly better values of zinc than in Main and Western lodes.

Extended Lode.—Low copper values; zinc and low grade lead values.

Superphosphates.—On two levels large body (30 ft. to 40 ft wide) on Main lode of almost pure iron pyrites, containing, at least apparently, from 45 to 50 per cent. sulphur.

Superphosphates in demand. Influential companies seeking to purchase iron pyrites of 50 per cent. sulphur.

	£	s.	d.
Japanese sulphur, per ton	4 10 0
Iron pyrites (50 per cent. sulphur) best Spanish in Sydney (on rails)	1 8 6
C. L. Garland reports offers of £1 8s. 6d. per ton for Leadville pyrites	1 8 6
Mining costs per ton (say)	0 10 0
Development	0 2 0
Railway (say)	0 10 0
			1 2 0

This leaves margin of profit.

Zinc sulphide needs concentration, to (say) 50 per cent. zinc, at from 8s. to 10s. per ton crude ore. Then £5 15s. returning charge, then deduct mining costs.

I desire further to say that the question of superphosphates seems to be the main consideration. It all hinges on the price at which the best Spanish pyrites can be landed in Sydney. The price quoted for that is £1 8s. 6d. per ton for the manufacture of sulphuric acid in the production of superphosphates for agricultural purposes. Mr. Garland has been offered £1 8s. 6d. per ton for his Leadville iron pyrites. Our assays show them very rich in sulphur. He estimates the quantity at 100,000 tons, and I think he is possibly within the mark. The question is whether they will maintain the average value of sulphur, and whether the superphosphate demand is great enough for the running

of a railway there, because there are only about 25,000 tons of superphosphate manufactured in New South Wales each year. As to the other States, Mount Lyell is a great producer, but unless they were to manufacture the article in New South Wales the question of freight would be prohibitive. An article must give the purchaser a margin of profit over and above his own cost. The cost of mining at Leadville could not be less than 10s. per ton, the cost of development could scarcely be lower than 2s. per ton, railway freight could scarcely be less than 10s. to Sydney, and if there is no railway there are 6 miles of country to be crossed by teams, the freight of which would be at least 1s. per ton and the handling 2s. per ton. I do not know if the Railway Commissioners would grant a special rate of 10s. per ton to Mr. Garland; if not, he would have to pay $\frac{1}{2}$ d. per mile. Adding the 10s., 6s., 2s. and 10s., there is little or no margin of profit for the miner. If a railway were to go to the mine, it would dispense with 8s. of the costs. There would be 10s. mining and 10s. railway freight. That would leave a margin of profit of 7s. or 8s. per ton. If Victoria wished to purchase they would have to pay the added railway freight to Victoria. That is why outside States would be unable to use Leadville pyrites. The cost of carriage and production would swallow the margin of profit. Then there is the question of zinc lodes. Although, on paper, the zinc lodes look very well, one has to remember the cost of mining, the cost of concentration, and the ratio of concentration. You have to find how many tons of crude ore it will take to make a ton of finished product. The cost per ton to concentrate it to a marketable value will be 8s. The ratio of concentration will be about 5 to 1. That will be about £2. In addition to those costs, one has to think of what is called the returning charge on the smelting of zinc and lead. That could scarcely be less on the concentrates than £5 15s. per ton. Then there are all the other charges such as freight, mining, bagging, wharfage duties, and the other duties. There is also the deduction of 8 units of zinc before smelting. If your marketable product is 50 per cent. of zinc before the smelter buys it, he takes off 8 units, bringing it to 42 per cent., and you are paid on 42 per cent., less 5 per cent. of 42 per cent., *i.e.*, on 40 per cent. For lead the deduction is 8 units before smelting; for silver the deduction is 5 oz. For gold there is no reduction. I think the railway is a question more of possibilities than probabilities. I do not say it would pay Mr. Garland even if the railway did go, but it is an area of great possibilities, and in the hands of some person or concern with sufficient money, the Leadville proposition should pay. I do not know Mr. Garland's financial position, but any company that could afford to develop the land and put a large supply of zinc and lead concentrates, besides iron pyrites for superphosphate purposes on the market, should make it pay. If I were making a recommendation, as I did to the Railway Commissioners, I would recommend that a line be constructed. It is only a length of 6 miles, and there are no engineering difficulties. There is a large mine that cannot pay unless it has railway connection, and there is a great probability of making it pay if the railway be established.

22. *Mr. Hurley.*] When were you at the mine? About October, 1912.

23. What was the cause of your going there? The result of an application from the Railway Commissioners to have a report furnished on the ore deposits round Leadville with a view to railway connection.

24. To make an estimate of any deposit you necessarily want the stopes opened up. Was that done in this case? The ground is so developed that stoping could proceed almost at once.

25. Are the faces in view? Yes, mostly.

26. To enable a man to make an estimate as to the contents of any site, the faces should be exposed so that they can be measured; are the faces exposed in this mine? Yes, I think so. I should have no compunction in making an estimate on the work done and the data offered by the mine.

27. You know that the only way to get at the contents of any deposit is on the floors when it has been sampled,

but to take a few assays across the lode and make an average is not reliable? Sometimes that is so. It would not be reliable in the case of gold. If it were coal a good average sample or two would give a good idea.

28. Coming to your own words, you say if the lode would carry an average value of sulphur? Iron pyrites is to the ordinary miner of no value, it has a definite mineral composition, and if it is fairly pure it contains 55 per cent. of sulphur. The iron pyrites I saw appeared to be in large masses fairly pure. That conclusion is based on the evidence of two samples that Mr. Carne took and one or two others that Mr. Garland took. If those assays are *bona-fide*, and I have every reason to believe they are, they would indicate a good sample of iron pyrites as exposed in the mine.

29. There is such a thing as the lode pinching out; many things may happen with that 100,000 tons? Yes.

30. Is there any such thing as arsenical iron entering into the composition? I looked for it and did not see it. Arsenic would spoil it for superphosphate purposes. I cannot say there is none present, but I did not see any.

31. What is that cost of 8s. per ton for 5 tons of crude ore, making 40s. of which you spoke? That is the question of concentrating.

32. What would your crude zinc ore body be? Seven feet from the wall on the western lode average 43 per cent.; the next 7 feet averaged 20 per cent. and the next 18 per cent. You would mine the whole width and attempt to bring it up to 50 per cent. zinc concentrates.

33. Where there is not a very large bulk sample taken from a deposit of this description though there is no telling the value of the ore in the main? That is so. There has been no bulk sample of the sulphides, but I read to you about a sample of the oxide ore.

34. But that is pretty well all gone? In one place it is.

35. That is in the gossans? Yes; the best ore for smelting is gone.

36. Several times in your prepared statement you say "it is said"? For Mr. Carne's statement we vouch, Mr. Garland has given me supplementary evidence in proof of his statements, and it is that which I refer to as being "said." We can accept what he states about the 14,000 tons mines from the main lode.

37. As to the value of the sulphide ore for its sulphur contents, we have nothing to show that extensive bulk samples have been made to enable us to report on the deposit in the mine. Stopes may vary? In this particular case it is what we call pyrites that is mined. Usually such material is considered as worthless gangue.

38. What about the percentage of zinc in the walls? I saw no zinc.

39. Would it mean much labour in preparation? The iron pyrites would simply be mined and shovelled into the trucks and shipped to Sydney. You do not concentrate it, it is pure iron pyrites.

40. What assurance have we that there will be a market in Sydney for that product? I have seen the representative of an influential company who imports Japanese sulphur at £4 10s. per ton. There is a limited demand at present for the superphosphates. When I was in Melbourne last week another influential company's representative approached me on the subject of finding large bodies of pyrites. People are looking in all directions for supplies of iron pyrites for superphosphate manufacture, but the question of cost comes in. You can land the best pyrites at £1 8s. 6d. per ton. I am assured that is so by various competent authorities. Dr. Elliott told me people would give £1 8s. 6d. for unadulterated pyrites going 50 per cent. They produce sulphuric acid from that. One ton of sulphur is made from 2 tons of iron pyrites. That is then made into sulphuric acid. The phosphate rock is brought from Christmas Island in the Indian Ocean, I believe.

41. It is impossible to make an average unless a very large bulk sample is taken? That is so with gold and silver.

42. To what depth did you personally go? At the 157-foot level I saw a body about 40 feet in width. I do not know the depth that the roof of the stope at the back of the chamber was pure iron pyrites. They had unlegged, Mr. Garland proposes to mine as ore the mineral iron

Witnesses—E. C. Andrews, 31 January, and L. Bowman, 4 February, 1913.

pyrites which is usually considered mere useless gangue, and so utilise what is at present a waste product. I have every reason from geological considerations to believe that the floor of the chamber and the floor on the next level will be solid iron pyrites, and we have no reason to believe that it is going to cut out underfoot. I believe there will be another lift of 50 or 100 feet.

43. Did you go to the water level? Yes; it is where the sulphides come in at 157 feet. The gossan ceases and the sulphides begin to make. These solid pyrites above water level would be represented by the gossans. There was carbonate of lead and sulphur.

44. In the carbonate of lead you have galena? Yes, a little.

45. Would that be injurious to superphosphates? I do not know.

46. Is there much silica in the formation? About 25 per cent. That would be favourable for concentration.

47. Do you know of anything else that would help to create freight to the railway? Nothing except agriculture?

48. What is the bearing of the deposit? It varies. It is more north-east and south west than anything else.

49. What is the western rock? A belt of felsite runs through the field, and at its junction with the slates the ore deposit seems to have formed. If the railway went to Leadville Mt. Scott would be a mile or a mile and a half away. There is a break in the ore body, but I think the latter is more or less continuous. The ground at present exploited is nearly 2,000 feet long.

50. *Mr. Scobie.*] A statement has been made by Mr. Hugh Scobel that there are 250,000 tons of low grade ore in sight which would employ between 1,000 and 2,000 men for ten years? I do not support that statement. What I say is that the construction of this railway would be a great inducement to capital to go there, and if the deposit were proved to be a payable one, then Mr. Scobel's statement might be modified to 500 men for several years, but we do not know. No bulk sample has been sent away.

TUESDAY, 4 FEBRUARY, 1913.

[The Committee met at the Court-house, Leadville, at 10 a.m.]

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.

The Hon. JOHN TRAVERS.

The Hon. WILLIAM ROBSON.

ROBERT THOMAS DONALDSON, Esq.

ROBERT SCOBIE, Esq.

GEORGE ARTHUR BURGESS, Esq.

The Committee further considered the expediency of constructing a line of Railway from Craboon to Coolah.

Leslie Bowman, grazier and farmer, near Leadville, sworn, and examined:—

51. *Chairman.*] Where is your property situated? It is 9 miles towards Cassilis, on the Talbragar. I am one of the firm of Bowman Bros. Merotherie consists of 11,000 acres, freehold.

52. You know the country between Craboon and Coolah? Yes.

53. How far will you be away from a railway, where your home is? Nine miles.

54. And from the existing railway? We are 7 miles from Birrawa.

55. Yours is essentially grazing land? Yes, at present.

56. And you can be said to be fairly well served already? Yes.

57. You are not likely to put the plough into your land if you are already doing well? There is every likelihood of our going in for farming.

58. But not as the result of the building of the proposed railway? No.

59. The trend of the times is to use land for agriculture rather than for grazing? That is so.

60. What can you state in justification of the construction of a railway which in its length is only $23\frac{3}{4}$ miles from the present line, you being within 7 miles of the line, and this district being within 6 miles of a railway? The number of acres alienated in the police district of Leadville is 86,172, and the Crown lands occupied comprise 60,000 acres. The area under cultivation in this district is 4,933 acres. The area under wheat is 3,266 acres, and in 1911 the wheat taken off the area amounted to 26,776 bushels. The sheep trucked from Craboon between the 31st December and 30th April, 1911, numbered 9,129, with 135 head of cattle. The number of stock in the district on the 31st December, 1911, was 76,582 sheep, and 2,836 cattle, and 1,000 horses. The majority of the stock trucked at Craboon came from the Coolah valley and the district further out. It nearly all goes through Coolah. The country between here and Coolah is estimated to contain 5,000 acres fit for lucerne—that is from the junction of the Coolah Creek and the Talbragar. At present there are only a few hundred acres under lucerne, but it is proved to be as good lucerne country as any in New South Wales. I am sure that, if

the railway were constructed, nearly all this area would be cultivated, and dairying would also be started. There is one gentleman with two dairies built ready to start work, with the latest plants, and they will start milking about 200 cows.

61. Taking 12 miles as a carting distance leaves practically 12 miles to be served in a narrow valley where the land, until recently, was held in large areas;—as the line will cost £104,327, and carries with it an annual loss of £1,568, we should like to know whether you consider such a narrow strip of land, rich though it be, is likely to wipe off that anticipated loss? I think there will be a great deal more land which will reap the benefit of this railway than that on the line between here and Coolah—further out than Coolah for 30 or 40 miles all round will be served by this line.

62. In which direction? Out towards Quirindi and Mullally.

63. What is the range behind Coolah? There is a range running practically east and west, but on the other side it is all splendid grazing country.

64. But you would not expect people to cart stuff over those ranges? The land is all occupied now, and the produce comes round the other side.

65. Does it come through Coolah? Yes.

66. Is not there a better road into Merrygoen? It is all closer to Coolah than Merrygoen.

67. Is not the road over Butheroo Creek better? No, that road is not nearly as good. I am referring to the country from Coolah out towards Binnaway, and further north and north-east.

68. But if a line is built from Dubbo to Werris Creek, it would serve all that country? It will be some distance from Coolah, and the country north-east from Coolah. It will serve all north and north-west, but they will not be as close to the railway as the other way.

69. But is not the country sufficiently ridgy and rangy to make it almost impossible to do anything with it properly, except in patches? I do not think so. A lot of it could be used for dairy farms, and a good deal on the creeks for cultivation.

70. But are the people who own it likely to cut the country up when their property gets the enhanced value, and will not the enhanced value retard settlement rather than advance it? I do not think it would make any difference. If the railway came there, the land would certainly be worth £1 an acre more, and, if the owners asked that, they would probably get it; but I think that would help settlement more than retard it.

71. Do you consider going along the good road from Coolah into Craboon an impossible distance to cart produce from such rich country? No, I do not think so; but I think there is enough traffic on that route to warrant a railway.

72. To justify the Government in spending £110,000 carrying a loss of £1,500 annually? Yes; in a few years I think the loss would be nothing like that.

73. Where do you think the reduction will come from; will those who hold the land put it under such intense culture that it is likely to reduce the loss? Between here and Coolah nearly all the land capable of being cultivated would be cultivated, and there is also a great deal of land further back which would be put under cultivation also.

74. Then why is not all the good land we see about us within 6 to 10 miles from a railway cultivated? In this district, since the railway has come to Craboon, there has been a great deal of country put under cultivation. Wherever you go you see them clearing fresh ground. Between Craboon and Merotherie, there was no land under cultivation before the railway came, and now there are farms everywhere.

75. What is the country like on both sides of the proposed line from here to Craboon? It is very good.

76. Is it suitable for anything other than grazing? Yes, for wheat growing.

77. Then how do you account for the fact that people will not cultivate it? There is a great deal being put under wheat, but inside of the road most of the ground is black soil. That is not suitable for farming, but is best for grazing.

78. Taking 10 miles each side of the line, from here to Craboon, what percentage of the land would be suitable for agriculture? On the left hand side from here fully 75 per cent. of it is fit for farming.

79. And how much of it is being farmed at present? I cannot say, but 5,000 acres of Wargundy has been taken up within the last few years, and it is practically all being put under cultivation. The farmers round that locality have put in double the wheat they were putting in before, and are all clearing land.

80. What about the right-hand side? Fully 50 per cent. of that is fit for farming.

81. You cannot get away 10 miles each side of the proposed line to Coolah? No; but as far as I know there are about 5,000 acres of first-class agricultural land there.

82. Held by whom? By a number of people.

83. You say there are 5,000 acres of lucerne land between here and Coolah;—would that be sufficient to wipe off the anticipated loss on the railway? Not altogether; but all the Cainbal Creek side would come to Leadville. There is a lot of wheat land right from Tungay which would all be served by this line.

84. Are you connected with the railway league? No; I have no interest whatever in the proposition.

85. You think that over the ranges there is sufficient good country to further help the proposed line? Yes; the total amount of stock fattened north and north-east of Coolah goes to Sydney *via* Craboon, and it would all be trucked at Coolah, and some that goes to Quirindi would also come to Coolah.

86. Would Bundella be likely to use the Coolah line? I think so.

87. What is the road like from Cassilis to Coolah? It is good, but hilly—of course, it is black soil. You can drive the 26 miles in 2½ hours.

88. Would the Cassilis people be likely to use it at all? do not know.

89. Would there be any hope of extending the line through from Coolah? I do not think so.

Arthur Beauchamp Stacy sheep-farmer, near Coolah, sworn, and examined:—

90. *Chairman.*] What size is your property? I have 1,848 acres conditional purchase and conditional lease.

91. *Mr. Scobie.*] If the proposed railway is built, do you think any of the people will cut up their estates? I think Mr. Scully would be quite prepared to cut up if a railway were built. He told me he would.

92. What proportion of your land is fit for agriculture? About 1,200 acres.

93. And is that a fair sample of the land around you? Yes, but mine is not as good as some.

94. What would you think a proper living area for a mixed farmer? About 2,500 acres.

95. Have you done any cultivation? Yes, lucerne. I have sold some, and have grown seed and sold that.

96. What prices rule? The seed I sold at 1s. 6d. a pound, and got about 3 cwt. to the acre.

97. How much lucerne land have you? Two hundred acres.

98. It must be a profitable pursuit out there? Yes.

99. Could you grow it to put it on the general market? Yes, I think so.

100. What is the freight on lucerne to Craboon? I have never sent any, but I pay 1s. a cwt. cartage generally. That is the ruling district rate; but I suppose I could get lucerne carted for 10s. a ton.

101. What would that lucerne land bring in per acre for lucerne and for seed in an ordinary year? Gross, £20 for lucerne, and I sold £400 worth of seed from 14 acres, and had the hay myself.

102. How long has it been established there? Six years.

103. What has been the average rainfall whilst you have been there? Between 24 and 25 inches.

104. How will you do this year with the rainfall holding off? I have had three cuts this year.

105. And in other years, how many? I have had five and six, but I have eaten off this last crop; it was a poor cut.

106. Could you profitably engage in growing lucerne for the outside market, paying 10s. a ton to put it on the railway? Yes, I could.

107. But, so far, you have been able to sell it in the vicinity? Yes.

108. Is there a large amount of lucerne land in that locality? Yes; all above me is better than mine.

109. Once that industry becomes established the local market will disappear? Yes.

110. And how will you get the product on the market in the future? I do not know what the people above me will do. I do not think it will pay people from Coolah, where the best land is, to cart it to market.

111. You have travelled in the State? Yes.

112. Have you seen any place of equal richness, and of such small compass, as the Coolah Valley? I think so.

113. But there is a large area there? Yes; it is almost equal to the good lucerne land.

114. So far there is very little product from the land. There is no lucerne practically.

115. Do you think this railway, once it is constructed into that valley, will give a great impetus to the business out of which you have done so well? I think so—lucerne and dairying combined.

116. Do you know anything of the Crown reserves there? Yes, but there is really nothing of them.

117. Are they of any use for timber? Yes. There is only one reserve between here and Coolah, and that is a very good one, but it is only 600 acres.

118. There are eight forestry reserves wholly or partly within the influence of the railway proposal? They are on homestead selections.

119. Mr. Vautin's statement of lands which could be made available for settlement included an area of scrub leases;—do you think that land held under that tenure is

Witnesses—A. B. Stacey and U. Scoble, 4 February, 1913.

suitable for more valuable purposes than grazing, provided the railway came through? The majority of it I do not think is.

120. You think the best land has already been taken up? Yes.

121. And what would you say with regard to the large amount of land that must be outside conditional purchases and conditional leases;—will it prove to be land that will encourage settlement if thrown open under any form of tenure? There is very little agricultural land in those areas.

122. Do you think, if the railway came there, the graziers would be able to send fat lambs to market under better conditions than to-day? Yes.

123. Would they be able to stock up their land to better extent? Yes.

124. In the meantime, any person sending fat stock to market from that valley has to drive them to Craboon? Yes.

125. Would it not be better for the condition of the stock to truck them in the valley? It would certainly be better, but it is not very far to drive them.

126. But you could not drive fat lambs? No.

127. In that case, they would be able to send the ewes down with the lambs to the railway, truck the lambs, and send the ewes back? Yes.

128. That cannot be done to-day? No.

129. What is your experience of the rainfall? Mine has been between 24 and 25 inches, on an average, for six years.

130. The average before that might have been heavier? Yes.

131. How deep do you require to sink for water in your country. About 23 feet. There is water under all these black flats.

132. In your opinion, how much added value would be given to the land about here if this railway were built? I think all the lucerne land would go up to £25 an acre.

133. And what is land worth to-day? I suppose lucerne land is worth £8 an acre at present.

Urias Scoble, mining manager, Leadville, sworn, and examined:—

134. *Chairman.*] How long have you lived here? For twenty years. I have been a mine manager for about twenty-five years.

135. We may assume you know a good deal of the mining industry? Yes.

136. And any opinion you may express with regard to the possibilities of that industry in this district may be accepted as reliable? Yes.

137. *Mr. Hurley.*] Evidence has been given by the Railway Commissioners with regard to this mining property;—I take it, all the information has actually come from you in the first place? They may not have got it all from me direct; they may have got information from the proprietors.

138. But the proprietors would have got it from you? Yes.

139. The engine shaft is not the first working of the mine? Yes; it was the first working. That is where we are working now.

140. Was not your most western lode the first lode worked here? That was one of the first. But the first one worked under the company was the engine-shaft lode.

141. How many parallel lodes are there? Five.

142. Figures of the ore in sight have been given as 169,800 tons;—were those your figures? Yes.

143. Have you a plan of the underground workings? I have one at the office.

144. Does that show the stopes underground? It is not right up-to-date, but it shows all the big stopes.

145. Does it show each lode separately? Yes; I can remember pretty well all the distances.

146. In measuring quarries, or road metal, how many feet go to the ton? It depends on the specific gravity.

147. How many with this dense ore of yours? About 8 feet would go to the ton.

148. What has been done in the western working;—what quantity of stuff has been sent away in bullion or ore, and what is the character of the ore left in the property? In the western lode there has been no ore sent away in bullion or metal. There has been a shaft sunk there 200 feet deep, and a cross-cut at 150 feet shows a lode 45 feet wide of zinc ore. At 250 feet, the cross-cut is not carried right through, but is into it about 40 feet. That is also a zinc lode, carrying a little silver and lead.

149. That cross-cut of 40 feet is all in zinc ore? Yes.

150. And the result of that drive is the dump on the surface containing that zinc ore? Yes; in portion of the dump the zinc is on the surface, but at the time that work was done the zinc was tipped out among mullock and other stuffs got from prospecting in that portion of the mine.

151. But zinc is the principal thing in that deposit? Yes.

152. What is the percentage? Taking the top and the bottom cross-cut, the percentage would be about 20 per cent.

153. Was that tried in your laboratory here? No; it was ascertained by sending samples to the authorities in Sydney.

154. To get a fair average sample of the zinc out of that 40 feet drive, have you got floors on the mine where you can sample it? No; not for sampling any quantity properly.

155. A plum would not be taken out of the pudding, so to speak? No.

156. It would be a faithful average sample? Yes.

157. A little gangue would go with the sample? A proper proportion of all gained through driving the cross-cut.

158. There is nothing but zinc to back up that proposition? There is the oxidised ore on top, but that is not the making of a mine, it is just the croppings.

159. Can you say anything about that? At present there is a very bold outcrop riding the zinc formation, and there are shoots of lead and silver ore 30 feet long in one shoot, which have given 15 per cent. for lead and 8 ounces for silver, and then this bold iron outcrop.

160. Can we look on the lead and silver in that proposition to be part and parcel of the value of the mine at present? It has not been used.

161. Would it pay for mining? If it is taken out in big quantities and worked properly it will pay. In that lode there was a length driven on the course of that lode for 150 feet at the 150-foot level, on the foot-wall side of the lode. That is a very strong zinc body, and will go 30 per cent. all the way in that drive.

162. Is that a lenticular lode or a fissure lode? I think it is lenticular.

163. By the developments? Yes.

164. The next is the engine-shaft lode No. 2;—what is the nature of the ore that has been smelted, and is there the same character of ore left in the mine? There have been 17,000 tons of oxidised ore smelted, taken out to a depth of 157 feet. That occurs in shoots in the big iron-stone formation. The average of that was 21 ounces of silver per ton, and 9½ per cent. of lead.

165. That came from carbonates of lead? Yes. Then the sulphide came in at the 157-foot level. There have been a few thousand tons of that taken out in prospecting work which is on the surface now, but there has not been any taken away—none calcined. Some was partly calcined, but it was not fit to use with the oxidised ore and it was left on the surface.

166. The property was a public company then? Yes.

167. You produce sufficient lead for the fluxing? Yes; no metallic lead had to be got.

168. Did you send any away to market from that 17,000 tons? Yes, lead and silver bullion, but I do not remember the amount.

169. I suppose they know the values of the ore before it went into the furnace? Yes.

170. Were the furnaces water-jacketed? Yes.

171. Have you run reverbs at all? No.

172. Is there any ore in sight of the same character as that 17,000 tons? There is none opened up in that particular lode.

173. There is no prospect in the future, as far as you can see, of that nature of ore being tried on the mine? The prospects so far do not show any.

174. Then you get into the sulphide zone? Yes; in No. 2 lode, at the 217-foot level, there is a lode of sulphide iron carrying silver and lead, about 25 feet wide.

175. Proved by cross-cut? Yes; and one stope cut off from the back of the cross-cut. The ore is on the surface out of that. The shaft is in the foot-wall rock from 100 feet down to the 260 feet.

176. It has gone away from the underlie? Yes.

177. Did you come back on it? Yes; a cross-cut was put from the bottom of that shaft into the lode.

178. What was the distance between that bottom cross-cut and the other? 210 feet.

179. And did she still keep her average size of 25 feet? No, not at the bottom. At the bottom there is a fault in the lode, which cuts off the ore in the bottom, but the shoots have a south-westerly dip as well as the westerly underlie.

180. Are you sure that is a slide, or is it an intrusion? It appears to be a slide, but perhaps it is an intrusion too. The slide comes in from the hanging-wall side of the lode, and cuts the ore clean off in the bottom of the drive. But it still dips away towards the foot-wall on the foot-wall side of the drive.

181. That is, the iron pyrites? Yes.

182. Have you put a winze down to see whether it would live below that level? No; there is no winze below that level; we are working there now. That is as far as the work goes, in that portion of the mine.

183. Is there anything else opened up on that iron deposit to enable you to give figures as to the tonnage of the deposit? No; the calculation I made from the 260-foot level to the 157 will give quite as much ore as I estimated when giving my report before.

184. And it is on that measurement that Mr. Andrews, the geological surveyor, got his information? Yes.

185. Is that the iron pyrites mentioned in Mr. Harper's evidence, as got from Mr. Garland, as to the making of superphosphates? Yes; he got that information from Mr. Garland. There is another shoot of the same lode between the lode we have just dealt with and the one north-east from the shoot at the levels above. We had a fault in the lode similar to the fault at the bottom level. When we have gone through that fault we have come into a very big body of sulphide again, 45 feet wide, and that has been driven on from where this body starts for 250 feet.

186. So the lode thickness has actually changed from both sides of the fault? Yes; and there is a winze down in the north-east shoot about 60 feet, which brings our working on that lode to over 200 feet. At the bottom of that the lode was 45 feet wide, proved by cross-cut, of solid sulphide of iron, carrying silver, a trace of gold, and a little lead.

187. How was the average sample of the big bulk ascertained? So much taken out weekly as the driving was done.

188. Not taken from any particular part of the lode? No; but it is practically alike right through.

189. Was that an assay made, or an analysis? I am not certain.

190. An assay would not give the arsenical contents, would it? I think Mr. Garland got an analysis of the whole composition. I have not been posted up with the proper analyses of all the compositions. Until lately a great many of those things have not been taken into consideration, which they reckon is a big factor towards paying at the present time.

191. You have not gone any further on that level with the pyrites? No; but on the 157-foot level above, so far as we have gone, there is a big, bold, strong outcrop of iron gossan, and sometimes as high as the back of the drive the sulphide occurs, and there is a little copper and silver, but we have not proved the length of it.

192. With regard to the sulphide deposit, is there any change in the silicious mixtures associated with the iron? No; except that it was more friable when we first struck it. After a few feet it is a solid body.

193. Only it is the character of the mine to have those intrusions here and there? Yes.

194. Does it alter the course of the lode at all? None whatever. The hanging-wall is as true as it was before striking the intrusion.

195. Is there any indication of feeders going away from one formation to the other? Yes.

196. So there is a possibility, at great depth, of all going into one lode? Yes, that is my opinion.

197. Where the men are working now there is the best prospect to prove the future of the mine? Yes.

198. Mr. Harper estimates, in his evidence, the costs of production before and after the railway extension at £1 12s. 6d. and £1 2s. 6d. respectively.

Mr. Garland (part owner) estimates 120,000 tons of iron pyrites, worth about £1 10s. per ton on trucks in Sydney or Dapto. He claims to have at least an offer of £1 8s. 6d. per ton on trucks as value of sulphur alone in ore. In my opinion, Mr. Garland's company could make the mining of the iron pyrites pay at this figure, provided the railway be extended to Leadville. For comparison purposes, a double table may be prepared on this basis, one representing costs before railway extension, the other after:—

	£	s.	d.
Mining—per ton of ore, about	0	10	0
Development, per ton of ore, about	0	2	6
Bagging and freight to Craboon.....	0	10	0
Railway freight, say.....	0	10	0
Total.....	£1	12	6

With railway communication established with mines:—

	£	s.	d.
Mining, per ton.....	0	10	0
Development	0	2	6
Railway freight, say.....	0	10	0
Total.....	£1	2	6

From outside and reliable sources it has been ascertained that iron pyrites should be worth from 28s. to 30s. per ton in Sydney for their sulphur contents.

The item of "bagging and freight to Craboon" in the former estimate is given without experience? Yes, there has been none sent away yet; that is an estimate. With a railway to the mine, the profits would be 6s. a ton if he sold at £1 8s. 6d.

199. Without anticipating that you have to put in large floors for a very large proposition like this, and that you have to send that ore to Sydney, do you think with the work necessary to bring that up to a standard, that 6s. per ton will pay for the extra labour? Provided we can get the shoots of ore to carry on as they have done without altering. You can blast up pretty well clean; the ore needs no dressing.

200. Is it a wet or a dry mine at that level? It is not very wet. We do a day's pumping every week, but there is no great quantity of water.

201. Does the water soak to the deepest place from one line of lode to the other? Yes.

202. Showing there are open floors from one formation to the other? Yes.

203. Have you tried any bulks at all in desulphurising those things to bring them back to a gossan? No.

204. You have not tried all the methods with the sulphide deposit to make a fuel for itself in the way of calcining it? No.

205. You have not got cross-cuts from one lode to the other? No.

206. In taking your bearings, do they seem to have a trend one into the other? Slightly.

207. What is the distance from one lode to the other? In some places, from No. 1 to No. 2, there is 308 feet at the bottom level. That is a cross-cut right through.

208. That is the horizontal cross-cut against the underlie of the lodes? Yes.

209. What is the underlie? About 1 in 5.

210. Are the floors horizontal, or at an angle with the underlie? At an angle with the underlie.

Witnesses—U. Scoble and F. A. Venables, 4 February, 1913.

211. Now, with regard to No. 3? There have been two shafts put down to the 157-foot level; they connect through by cross-cut. In No. 1 shaft, about 30 feet from the bottom, there is lead carbonate ore. The shoots in that extend about 130 feet long, the average being 9 feet wide; but the lode is 42 feet wide, and it is not the full width of good ore. On the hanging wall it is good ore. That occurs in the big gossan formation.

212. In what length of lode have you proved that? I think there is 350 feet from that shaft on to the next, which has been driven nearly from one to the other.

213. But with no big stoping? No; and no ore taken out, excepting from the driving in the second shaft, where a lode shoot of ore occurs at the surface from the lode to the bottom. At 108 feet it is about 7 feet wide—that is the shoot of ore. The lode formation is very large. At that depth, I think it is about 25 feet.

214. Have you ever seen a floor cut that shoot off, and it will make again? Yes; in one lode it did that here at the 157-foot level. That shoot extends in lead carbonate ore for over 100 feet.

215. And that strikes the sulphide zone? Yes.

216. And the carbonates have gone? Yes.

217. Below that, have you gone into the sulphides? About half the depth of our drive there was in the sulphide, which showed very strong bodies of zinc ore and iron sulphide, and in the zinc body there is a heavy percentage of lead and about 8 ounces of silver.

218. That lead in a state of galena? Yes.

219. But no extensive bulk have you had tried? No; only to prove it is there. In No. 4 there has been very little done.

220. Are all the foot-walls of those lodes the same character of rock? Yes.

221. And all the hanging walls are a distinctly opposite kind of rock? Yes; the hanging walls are porphyry.

222. And what is the foot? Slate.

223. Mr. Andrews said there was a deposit of felsite in the mine? Yes, there is one intrusion in the mine. There is a very large deposit of felsite.

224. But the proposition is so large that it takes a lot of money to develop it? Yes, that is the secret of the whole thing.

225. What is the size of the leases of the mine? One hundred and twenty acres.

226. If you had money enough to go on cross-cutting east you could cut more parallel lodes? I think so, by the appearance of the surface. There is a little working done on the other lodes, but not much. One lode is 80 feet wide.

227. The deposit has not been opened up sufficiently in a line to know whether it is a straight lode? No, but pretty nearly the full length of the lease you can trace the outcrop, giving an idea that through the lease they are fairly straight.

228. You know the slope of the rocky hills going towards the valley? Yes.

229. Have you any idea how far the slope of this rock will go before picking up the water drifts in the valley? About $1\frac{1}{2}$ mile.

230. Have there been any tests? Yes, they have got the water.

231. In the absence of a river on the surface, you think there is a current representing a river underneath? Yes, that is proved. At Coolah there is always a running stream and big holes of water. That water disappears coming down here. The same creek-bed comes down, but the water goes under. Anywhere across that valley you can get water by sinking. I may say, further, there are two 80-acre leases taken out adjoining Mount Stewart by Sydney and Newcastle parties, who gave me to understand last week that they would put on labour. They think it is sufficiently promising to work on. The lodes are the same as at Mount Stewart, but the property is further on.

232. You are of opinion that, if you had a railway to the mine, you could raise the stuff into bins and feed the trucks, and have no bagging to do;—which scheme would

be the salvation of the property? Yes; if we could manage with one handling the ore would give a slight profit—that is, without speaking of the future possibilities of the mine.

233. *Chairman.*] What is the cost of cartage from here to Craboon? The rate at present is 10s. a ton.

234. That would wipe out the anticipated profits from your iron pyrites? Yes.

Francis Albert Venables, estate manager, Leadville, sworn, and examined:—

235. *Chairman.*] How long have you been here? Since the latter end of April, 1911.

236. You know the country surrounding the railway proposal now before the Committee? Principally about Leadville, not much otherwise. It is practically only on the estate I am on that I would care to say anything.

237. *Mr. Donaldson.*] What evidence can you give on the proposition? Messrs. Litchfield Brothers, who have purchased the Lawson estate from Mr. Triggs, purpose cutting it up into farming blocks of 20 to 500 acres early in September or October next, giving very liberal terms.

238. That property is adjoining the town? Yes.

239. What is the character of that land? There is some splendid wheat land, and land suitable for maize and lucerne; also a fair proportion near the town suitable for fruit growing.

240. You have used it only for grazing? Yes.

241. Have the creek flats been proved for lucerne or maize? Not on that estate, but outside on similar lands.

242. From what you know of the demand for land, do you think the property will meet with a ready sale? I do.

243. And will place a dozen or more families in the neighbourhood? Yes; twenty I believe. Messrs. Litchfield Brothers' representatives are here at present to go over the designs and make final arrangements for the subdivision.

244. What is the area? It is 5,396 acres ex road, which is about 16 acres.

245. What proportion of that would you call cultivable land? The whole of it except about 50 acres could be cultivated, and I take about two-fifths of it to be wheat land. I cannot say how much you could put into hay or maize. Close on 2,000 acres would be suitable for lucerne.

246. Do you think the rainfall is suitable for the growing of the crops you have named? Yes; once they get the crop established there is no difficulty.

247. The rainfall has been below the average since you have been here? Yes; but yet lucerne crops are flourishing on similar ground.

248. Have you noticed any great increase in the area put under cultivation by your neighbours? I can notice the increase where I have been, within, say, 10 miles of here. But it is really splendid fattening property.

249. You would not make as much in grazing as in growing wheat? Not taking the average.

250. Have you heard inquiries made by people about the subdivision? Yes; I have had several inquiries during the last six months for portions of this estate.

251. You have reason to believe that when it is ready to be put on the market, it will go off? Yes; I have every reason to believe so. From the inquiries I have had, I have no hesitation in saying the whole lot will go.

252. Is the surface dry, or is there any natural water on the surface? There is no natural water.

253. Will people who come here be able to make certain of water by conservation or sinking? I have put down two wells since I have been here. The first is 32 feet from the surface, and I have watered 3,000 sheep and 400 cattle for weeks, without the supply of water being lowered.

254. What character is the water? It is slightly hard.

255. Is it good water for settlers for domestic purposes? Yes; the townspeople have been using it lately.

256. Had the people who owned property previously put down wells? No, none whatever, but there were dams on the boundaries.

257. Is it good holding ground? Yes.

258. Did they ever have to send stock away starving for water? No; there is beautiful water at present, and we have had no rain since July.

259. You have no doubt the incoming settler would have no difficulty in getting water both for domestic purposes and for stock? No; going by the divining rod, you can get streams of water everywhere.

Albert Henry Lowe, farmer and grazier, Dynevor, near Leadville, sworn, and examined:—

260. *Chairman.*] What is the size of your property? 2,560 acres freehold.

261. What are you engaged in? Grazing and mixed farming. The country is similar to Mr. Bowman's, and my evidence is similar to his. I am one of the oldest residents in the district.

262. Do you think this railway proposition is one that should be carried out? I think it would be an undoubted benefit to the district.

263. But will it be of any value to the State? I think it would be. I lived at Coolah some years ago, and the country there is well adapted for mixed farming; and if the line is carried on, it may eventually be taken past Coolah. It would serve Coolah and a radius of several miles round, whence people have to bring produce down here.

264. *Mr. Robson.*] Is your farm between here and Coolah? No, between here and Merotherie; but I am well acquainted with all the country.

265. Is the country between here and Coolah, in your judgment, as good, or better, or worse, than the country described by the previous witness? It is very similar.

266. Is there plenty of water? Water is to be obtained almost anywhere on the flat by sinking to a shallow depth.

267. The annual loss on this line is anticipated to be £1,568;—do you think there would be such a development of the passenger and freight trade on the line as to wipe that out within a few years? Yes, I do.

268. The Chief Commissioner says in his report:—

It may also be stated that the land lying between Craboon and Leadville, and also that between the latter town and Coolah, 13 miles on, appears to be admirably adapted for wheat-growing.

Do you agree with that? Yes.

269. He also says:—

In view of the extensive and rich area of land to be served, possessing an average annual rainfall of 26 inches, and having in mind that wheat, oats, maize, lucerne, and tobacco can be successfully produced, with dairying and mining to assist, I am of opinion that the proposed line has big possibilities in the direction of closer settlement if given railway communication.

Do you believe that to be a correct judgment? I do.

270. And that this development would follow if the line were built? Most undoubtedly. I think every acre available for cultivation would be put under the plough. Of course there is undulating country which is not suitable for cultivation, but that would do for grazing, and I think dairying would be very extensive. I myself would put in a large dairy herd, if there were given means of communication.

271. How far would you be from the line if it were built? About a mile.

272. Do you think others would be likely to go in for dairying? Yes.

273. Would that be true of all the people up to Coolah? I am pretty certain they would do so. The country is suitable.

274. Do you grow any lucerne? Not of late years. A few years ago I had over 150 acres in, but there was no demand for it then. It did very well, especially on the red soil, almost better than on the flats. I have grown wheat, but I had to send my produce to Sydney, which swamped all the profit.

275. When you grew it on the red soil had you a drought? Yes, we have had some of the severest droughts I think the country has experienced for many years since I came here. The lucerne stood till the rabbits came, but they seemed to exterminate it.

276. Can you say anything further in favour of the proposition? I am satisfied that if the line were carried on to Coolah all the properties along the line would convert into small holdings, whereas at present the cartage is too heavy to send produce to market.

277. What big estates are there likely to be subdivided? I think almost all the estates would be cut up into farming blocks.

278. How many of them are there? There are several, but I cannot say the areas of the land. Around Coolah it is splendid agricultural land.

279. What about the country beyond Coolah? There would be all the traffic round about there for miles.

280. Is there good agricultural land beyond Coolah which this line would serve? Yes. There is McMaster's estate, Weetalibah, Honeysuckle, Binnaway, and Bowman's, all contiguous.

281. Will not the line from Dunedoo to Coonabarabran serve Binnaway? I think this line would serve the general public better than that other line.

Thomas Auld, farmer and grazier, Campbell Creek, near Leadville, sworn, and examined:—

282. *Chairman.*] How far is your property from here? Thirteen miles.

283. Does the road run in the direction of Uarby? Yes.

284. You are south-east from Leadville? Yes; I have only about 400 acres of my own, but I have some of my brother's. We manage it between us. The total area is about 2,000 acres, pretty well all conditional purchase.

285. Have you been farming there long? A good many years.

286. *Mr. Burgess.*] How far are you from a railway now? About 14 miles.

287. What farming do you go in for? Principally wheat and corn.

288. How much do you put under wheat? Two hundred acres.

289. What yield do you get? In some seasons we have a good yield, but this year it was not so good.

290. What is your average? About 18 to 20 bushels.

291. What corn do you cultivate? Not a great deal.

292. Do you find the land suitable for corn? Yes. I got about 20 bushels to the acre in this last dry season.

293. With a decent season, what would you get? From 30 to 40.

294. Are you in the lucerne belt? No.

295. Are you acquainted with the country westerly from Coolah, towards Merrygoen? Yes, I know it pretty well.

296. It is pretty rough country? It is until you get over the range from Coolah.

297. What is the extent of that range? It is about 5 miles over it. It is a spur from the Liverpool Range.

298. Is that country suitable for grazing? Yes, it would carry three sheep to 2 acres.

299. That mountainous country? Yes.

300. Is not that mostly leased land? I believe there are a lot of leases on it.

301. Is there any timber? Yes, ironbark.

302. Is it suitable for sleepers? Yes.

303. If this line were approved, do you think timber could be got there to help build it? Yes, I believe so.

304. In towards Bundella do you think the country would be served by this Coolah line? Yes, I think so.

305. They have nowhere to go now but Quirindi? Yes; but by coming to Coolah they come round the point of the range, they do not go over it.

306. Do you run sheep on your land? Yes, 700 or 800.

307. Cattle and horses as well? Yes.

308. The Railway Commissioner says there will be a loss of £1,568 on this line;—do you think that will be swallowed up in time? I think so.

309. What is the width of the Coolah Valley? I should think, on an average, it is 7 miles from one range to the other.

Witnesses—T. Auld and H. E. Horne, 4 February, 1913.

310. If the railway is built on to Coolah, what would you think a fair average area for a man to hold for mixed farming and dairying? From 1,500 to 2,000 acres.

311. In that rich valley there are not many people holding that much? Yes, there are a good few. In the valley itself I suppose 500 acres would be sufficient, but not if you have to take the bad with the good.

312. Within 2 miles of the railway they could grow lucerne? Yes. You would want 500 acres there.

313. What is the depth for water there? I have seen wells sunk 20 to 25 feet.

Henry Edwin Horne, farmer and grazier, near Leadville, sworn, and examined:—

314. *Chairman.*] What size property have you? I have 3,300 acres—freehold, conditional purchase, and conditional lease. It is about 3 miles from Leadville, towards Coolah.

315. How long have you lived in these parts? Twenty years.

316. You introduced a deputation, in 1911, to the then Minister for Works in connection with this proposition? Yes.

317. *Mr. Travers.*] How much of your area have you under cultivation? I have 200 acres under wheat, and 250 more prepared, and 40 acres of lucerne.

318. What has been the result of the wheat cultivation? I have only been farming three years, and have struck three bad seasons. The last crop I grew without rain, except that in June and July. I only got 11 bushels to the acre. On some land I had fallowed I had up to 18 bushels. Many people in this district have caught the storms, and, despite the bad season, got up to 25 and 30 bushels to the acre.

319. What proportion of your property is suitable for wheat-growing? I have about 800 acres of wheat land and 200 of lucerne. The balance is grazing.

320. Is this the first time you have put in lucerne? Yes; I sowed it in the spring, and it is not up yet. There has been no rain.

321. How far are you from a railway? I am only 8 miles from Craboon.

322. How far from the proposed line? The line would run through portion of my land.

323. What statement have you to make? One witness said that 2,500 acres was required for a living area; but the same gentleman said previously that he got £400 for lucerne in one year off 14 acres. On the lucerne country my opinion is that if we had a railway to Coolah, one could make a good living on from 50 to 100 acres.

324. That is close to the line? It would be all on the line. The black soil suitable for lucerne is on the line all the way. On wheat land a man could make a good living on 400 acres.

325. What would you say is the value of lucerne land now? If I wanted to sell mine to-morrow, I could not get more than £6 an acre. But it is not so much the fact that we have not a railway as the fact that the land is not properly tested. The people with experience do not know sufficient of this district. If the railway comes, values will undoubtedly increase, largely owing to the fact that experienced men will come along.

326. Have you tried for water on your property? Yes; but I have a lot of surface water. About 100 yards from the road going to Coolah, I have a splendid spring of water. With regard to the depth of water, 4 or 5 miles from here the water on the black soil is only 12 feet down, and Mr. Bowman is growing a large area of lucerne where the water is only 12 or 13 feet down.

327. What about the dairying proposition? I do not know much about dairying, but Mr. Bowman, who owns property between here and Coolah, is establishing a cheese and butter factory. If dairying was properly established, the living areas would grow smaller, and a man would make a good living on the area I have mentioned for wheat land.

328. The estimated cost of the railway is £194,327;—do you know if there is any country beyond Coolah which this line would serve? Yes; I should say there is a large area.

329. In which direction? In almost every direction. One proof of the superiority of the land about Coolah is this: We are in Wyaldra shire, which includes a large area of inferior land. That, and the adjoining shire of Cobborah, are three times as large as Coolah shire. The Commissioners, thinking of the land about Coolah, made Coolah a very small shire; and whereas the Wyaldra shire received 30s. in the £ subsidy recently, the Coolah shire never received any at all.

330. Do you think the proposed line would draw anything 20 miles north or north-west of Coolah? Yes; in the direction of Quirindi, I think by coming to Coolah, they could avoid a lot of the black-soil roads which they have to pass over at present. One witness stated the area of lucerne land between here and Coolah is 5,000 acres. In Coolah they will be able to give you exact figures, but I should say the area was nearer 14,000 or 15,000 acres—certainly over 10,000.

331. If the valley only extends $3\frac{1}{2}$ miles each side of the line, what about the other side of the ranges? There is a lot of good basaltic country over the ranges.

332. Would it be influenced by this line? Yes; there are good roads coming on to the main roads from every quarter; but I do not think the valley is so wide as the last witness stated. A valley of that width would give about 30,000 or 40,000 acres of lucerne land. I may add that hundreds of acres of land have been cleared within a mile or two of this town within the last two or three months. Between here and Craboon the land you see is principally the Lawson estate, which will be cut up within a few months. A great number of owners would be disposed to cut up in the event of the railway being constructed. The owner of Pine Ridge estate, near the town, is clearing his land and offering it on the third-share system, and the owner finds seed wheat also, and there are other concessions made as well; so the terms offered here are better than the terms offered to share farmers in other parts.

333. Have you noticed any increase in settlement or disposition on the part of large owners to cut up as a result of the Gulgong-Dunedoo line? I have not heard of any estates being cut up; but Mr. E. J. Lowe, who owns some thousands of acres on that line, is getting most of his land settled on the third-share system. He has thirteen or fourteen share farmers at present doing very well.

334. When a railway comes within 6 or 7 miles of a district, it is only reasonable to assume that a great deal of land, if it is any good at all, will be put under cultivation? Yes; and about here, I think, that is happening everywhere.

335. How far does that extend from here? I should say 7 or 8 miles along.

336. What do you say about the route of the proposed line? I think it is in the best possible position.

337. And from your knowledge of the country, you think a railway is justified? Yes, undoubtedly. Mr. Lowe was asked with regard to his lucerne land, and said that, in his opinion, red soil was better than black soil. He forgot to mention that he was not living in the Coolah Valley, but in the Talbragar Valley. That statement is true of the Talbragar, but not of the Coolah Valley. The black soil in the Talbragar is said to be not good for lucerne growing, but it is different from that in the Coolah Valley.

338. *Chairman.*] Why, in your opinion, is it that in this rich valley so close to a railway, out of a total of 180,000 odd acres of alienated land, only 7,622 acres are cultivated? One reason is that the line has only recently got to Craboon, and it takes time to prepare land for cultivation. Another is that the land is very often in the hands of the wrong people. If he can make an easy living by grazing, a man does not trouble to go in for wheat-growing. Between here and Coolah there are no particularly large holders. Beyond Pine Ridge no man has more than 3,000 acres.

339. Having said that 50 to 100 acres of lucerne land is enough for one man, would you not consider 3,000 to 10,000 acres too much? Yes, I would.

Witnesses—H. E. Horne and N. Cox, 4 February, and P. G. Hart, 5 February, 1913.

Norman Cox, farmer and grazier, near Leadville, sworn, and examined:—

340. *Chairman.*] What size is your property? Five thousand odd acres, on settlement lease.

341. What do you do with that country? Grazing and farming.

342. How long have you lived here? For six years; before that I was at Mudgee.

343. You know the country fairly well? Yes. It would be of benefit to me, if the line came here, in going in for agriculture. It would be very much closer than having to cart. I have to pay £1 a ton cartage from my place to Craboon, or, if I cart myself, it means a two days' trip. All ordinary carting is £1 a ton, and that takes all the profit off lucerne-growing.

344. But if you are growing wool, and getting £108 a ton? That is a different matter. You could pay £1 a ton then, but it is much better to get it done cheaper.

345. Do you think the proposed line will be of much benefit to people here? Not so much about this part, because we are fairly well served. It is the people around Coolah.

346. Coolah is a thriving place? Yes.

347. Would not everybody get too rich to work if the railway went there? They would not grumble.

348. But might not the productivity of the district diminish? I think not; but it would be a big thing for the lucerne district.

349. Where would you dispose of your lucerne? There is always a market in Sydney. I grew lucerne in Mudgee.

350. Is there a greater profit associated with the growing of lucerne in that rich valley than with growing sheep? Most decidedly.

351. So, if a man can do well with sheep, he is not likely to go in for wheat? That may be.

352. Generally speaking, you endorse all the previous evidence? In confirmation of the proposal—yes.

353. Do you think it requires more than 100 acres of lucerne land for a man to make a living here? Yes, I do; the present year is an instance.

354. If the water is within 10 or 12 feet, the lucerne will not diminish for want of rainfall? Yes, it will. In Mudgee, on land worth £50 an acre, they can cut lucerne and hardly rake it up at present.

355. Then what is the value of the lucerne? The land here in time ought to be worth anything from £15 to £20 an acre.

356. Lucerne ought to be growing when it is wanted for stock? It will grow now for grazing, though you cannot cut it.

357. At Tamworth and other places the weather does not affect it—they get seven or eight cuts a year? They are very light. I have always seen lucerne affected by dry weather in the best country.

358. Has it not been your experience that where water is within 8 or 10 feet the lucerne will go down to it? I

have seen lucerne roots go down 20 feet. It will grow well, but it will not grow as well as if it has the rain.

359. You cannot get too much wet for lucerne? Yes and you can have the water too close.

360. If it gets it at both ends will it not be all the better for it? No, not at all.

361. However, this is considered good lucerne country? Exceptionally good.

362. If the railway is built will not the chief crop be lucerne? On the black soil flat it will be chiefly lucerne, although the ground will grow very good wheat.

363. Do you agree with the witness who said that the ranges will carry three sheep to 2 acres? I do not know it, but I should not think it would be as much.

364. In these valleys do the sheep suffer from the complaints they usually have in damp country? I have not seen them; they are generally free from disease.

365. *Mr. Burgess.*] In your six years' experience here, how long have you been cultivating lucerne? My oldest paddock is not three years old.

366. What kind of seasons have you had? They could not have been worse; they have been very dry.

367. How does this land compare with the Mudgee land? Very favourably. There are flats in Mudgee which are exceptional, but I have had lucerne land in Mudgee which I sold for £15 an acre seven years ago, and I consider the lucerne grows as well here as it did there.

368. What number of cuts do you get here in a year? Last year I cut it twice; this year I only cut it once, but I had the stock on it.

369. How much country have you put under lucerne? I have only 22 acres sown at present, but I am ploughing now for lucerne, and intend to put in about 100 acres.

370. How much stock would you turn in on 20 acres? In a good season lucerne will carry eight or ten sheep to the acre.

371. What do you have on here? It is hard to say. I put a lot of sheep in at once to eat it down.

372. In your opinion, this land will be valuable for lucerne-growing if you get railway communication? Yes.

373. *Mr. Scobie.*] Do you think the estimate of three sheep to 2 acres is true of the rough pastoral country around here held under various tenures? Taking the back country all in all I should say it is more like one sheep to 2 acres.

374. What do you allow on your holding without feeding? I run between 2,000 and 3,000 sheep on my place; but my black soil is heavy-carrying.

375. Are your sheep from the Mudgee flock? No; practically anything.

376. How many fleeces to the bale is your estimate in this district? It is hard to say.

377. Have you any that will go thirty to the bale? An average of about forty fleeces to the bale.

378. Do you think it would pay to displace the sheep and put on dairy cattle? Yes; dairying pays better.

WEDNESDAY, 5 FEBRUARY, 1913.

[The Committee met at the Court-house, Coolah, at 10 a.m.]

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.

The Hon. JOHN TRAVERS.

The Hon. WILLIAM ROBSON.

ROBERT THOMAS DONALDSON, Esq.

ROBERT SCOBIE, Esq.

GEORGE ARTHUR BURGESS, Esq.

The Committee further considered the expediency of constructing a line of Railway from Craboon to Coolah.

Peter Giles Hart, newspaper proprietor, Coolah, sworn, and examined:—

379. *Chairman.*] How long have you lived here? About five and a half years.

380. Do you know the country to be served by this proposal? Yes, most of it fairly well.

381. Do you represent any public body? Yes, I am secretary to the Coolah Railway League.

Witness—P. G. Hart, 5 February, 1913.

382. And they have discussed this railway proposal? Yes. I produce the following returns:—

Returns from signed statements of landowners in a 15-mile radius from Coolah:—

No. of landowners	60
Acreage held	182,826
No. of sheep	120,450
No. of large stock	1,470
Acreage under cultivation	5,143
Acreage suitable for cultivation	29,560
Acreage suitable for dairying	62,199
Acres lucerne land.....	8,107

This return does not include the stations of Tongy, Binnia Downs, Weetalibah, Queensborough, Oakey Creek, and Pilka Butta.

Number of acres in these stations, with an estimate of the agricultural and lucerne lands:—

	Agricultural.		Lucerne.
	Acreage.	Land.	Land.
Tongy.....	18,592	12,500	3,000
Binnia Downs	31,730	15,000	500
Weetalibah	60,934	17,000	1,000
Queensborough.....	55,010	14,000	400
Oakey Creek.....	34,125	12,000	500
Pilka Butta	1,547	1,200	700
	201,933	71,700	6,100

Return supplied by the Shire Clerk of the value of land in the Shire and town of Coolah, showing the increases:—

Unimproved capital value of land within the Shire:—

For the year 1909—	£
Alienated lands (including conditional purchases).....	337,149
Leased lands.....	56,918
Total	£394,067
For the year 1912.....	452,634
	and 48,717
Total	£501,351

Lands within the township—

For the year 1907	6,102
For the year 1912	12,130

Population of Shire, according to figures issued by the Government Statistician:—

In the year 1907.....	800
In the year 1911.....	1,366

There are several owners who have not sent in returns, whose area is 17,000 acres, and their agricultural land is estimated at 7,500 and their lucerne land 2,500.

These figures give a total of 109,760 agricultural land and 16,707 lucerne land.

383. Might not the increase shown in land values be the result of boom times only? No, the increase has been steady from year to year.

384. As the result of what? Of more settlement. I estimate the value of the buildings to-day is also more than 100 per cent. in excess of what it was. The town has increased year by year, and the demand has increased. Estates have been cut up and values have risen accordingly.

385. Have you any figures as to the number of houses that have been erected? No.

386. Is it not a fact that it is the properties that were here previously that have increased in value rather than that more places have been put up? Yes, I should say that. The demand for property has caused the increase.

387. And the improved prices obtained for land are the result of demand rather than of an increase in agriculture? No, I consider the increase in agriculture has caused the increase in the town.

388. Have you noticed any appreciable increase? Yes, I have. I know that, as a result of subdivision, some land, which was sold with one or two buildings on, for £2,500, was sold at £20, £30, £50, and £80 a block, subdivided into $\frac{1}{4}$ -acre blocks; whereas of the land at the back none was sold for less than £20.

389. But is not that more the result of a successful agent than of the work done by the local people? No, the town has grown to that extent. Business people have come and settlement has increased, and therefore land has been more in demand and of greater value.

390. You have had six months dry weather? Yes, we were unfortunate last year. Instead of our average rainfall of 26 to 28 inches, we have only had about 16 $\frac{3}{4}$ inches last year.

391. Is not the high average rainfall spoken of here the result of counting in some floods and excessive rains in years gone by—the average being made at 26 inches, whereas for a number of years, you have not had anything like that? The figures I have procured from the official returns, year by year, taking flood years and dry years together.

392. It is singular that, although the people give us a high rainfall, they always say they have not had rain for ten years or so? The records I obtained from the post office here show that it averaged 23 inches for the last four years.

393. How is it that coming from Craboon, until after two-thirds of the journey, no activity is noticeable by farmers;—it is only this end that any active operations appear noticeable, and then it does not seem as though it would ever justify the construction of a railway? They are all waiting for a railway; they will all get along when the railway comes. Mr. Morton has started to open up his estate and let it out to share farmers, who are all doing very well. Mr. Lowe, of Birrawa, has also done the same thing.

394. This railway proposal, according to the later estimates, will cost £110,580, and the annual loss will be something over £1,500;—do you think it possible for development to take place to such an extent as to wipe off that annual loss? That loss is only estimated for a couple of years. I think any railway that only shows a loss for two years is a splendid asset.

395. Supposing the proposition would just make ends meet;—if it does not do anything to increase settlement, it is only the giving of facilities without doing any good, whereas the inconvenience now of being 20 miles from a railway is easily got over by wealthy people using their motor cars? For agricultural purposes it will make a very large increase in settlement.

396. Where can it take place? There are 22 miles of good land between here and Craboon, and another 18 miles further up. At present they cannot successfully cultivate that without a railway. Instead of a dozen share-farmers there will be hundreds.

397. But even within 15 miles of Craboon, where the railway exists, they have not even been burning off the timber? But that land is not like it is in this valley.

398. What constitutes the valley, to your idea? When you get inside the gap, beyond Pilka Butta, the land is capable of intense closer settlement.

399. Is the existing line any use to the land all round Leadville? I should say it is.

400. If it is, why is it not being used more? I should have said it would be used, but we have had three bad seasons.

401. And if those are taken for the average rainfall, what becomes of it? We call 16 to 20 inches a bad rainfall. Last year there was only 16 inches, but the year before that we had about 23, and before that 25 here. They are worse off further down. But we call those bad seasons up here.

402. How will the loss be wiped off—sheep will still be trucked from Craboon, they will drive them from here? Wheat and lucerne-growing and dairy-farming are the developments we look for. They are beginning already, and, with the railway, will be increased.

403. But if you cannot grow lucerne when they want it elsewhere, what is the use of it? But even in our bad seasons people can get two and three cuts a year.

404. Coming in here, we could see scarcely any lucerne at all? I cannot say as to that. I should like to read a statement by Mr. Fallick in the Assembly on 21st December, 1910 (*Hansard*, page 1470). He said:

I have been over this country, and I am fully convinced that, in order to develop it, it is necessary that this line should be extended, notwithstanding the enormous cost involved. I should like to know that the best country will be tapped by the railway, and that the Committee are empowered to investigate all the proposals, because the Coolah Valley is, in my opinion, one of the richest districts in that

part. I have no doubt that although there will be a considerable loss on the railway at the outset, its construction will be ultimately found to be in the interests of the country.

405. Do you know the country north and north-west of here? No; but I have been over the spur that leads over the Liverpool Range.

406. Can carting be done over that? Yes.

407. Have you been over the Cassilis-road? Yes.

408. Would there be any traffic from Cassilis in this direction? Yes. Mr. Goddard was speaking of the value of the land to the east of Coolah, and although the road is hilly, no doubt a good deal of traffic will come from that way.

409. Have you been along the road from here to Merrygoen? No; but I would also say that the railway coming to Coolah would bring a lot of the traffic from that direction. I consider a lot of traffic would also come from the north-east, on account of the heavy roads towards Quirindi. A good deal would come from the beginning of the rich Liverpool Plains, the outlet for which now is Quirindi.

410. That is almost easterly from here? North-easterly

411. Supposing the line were built from Dubbo to Werris Creek, or from Gilgandra to Curlewis, either of those would serve that country? That is so,

412. But this railway up the valley would have the advantage of being much closer to one of those railways, and if lucerne was important to feed stock in the north-west, a junction with either of those lines would bring Coolah within a very important zone? It would, and that is the reason why I have always advocated a connection with some line for Coolah, rather than the valley alone.

413. How far up the valley does the lucerne go? Right to the head of the creek—18 miles; but I think every inch of the country along the river is lucerne land. Some farmers came here from Victoria, and one asked me if I could secure him a flat of this lucerne land at anything between £20 and £30 an acre.

414. It is not much use growing lucerne now to cart it 24 miles? No; it is not profitable to grow lucerne with the railway that distance away, and there is Mudgee, a great lucerne centre, with the railway already there.

415. The point, then, is that people will not go in for growing lucerne much without some encouragement? That is the whole position.

Edward James Scully, farmer and grazier, Coolah, sworn, and examined:—

416. *Chairman.*] How long have you lived here? For fourteen years. I own Coolahville, comprising 8,800 acres, containing 6,800 acres freehold, balance conditional purchase and conditional lease. I also lease in the Coolah district from private owners 8,910 acres of land, all first-class country. At present I farm about 166 acres of land. This year I had 87 acres of wheat cut for hay, which averaged about 30 cwt. to the acre. One paddock of 33 acres averaged 2 tons. I cut for wheat 7 acres, which yielded 24 bushels to the acre, also stripped 9 acres of barley, which yielded 10 bushels to the acre, owing to having been sown late. I had 28 acres of oats and 35 acres of lucerne, with satisfactory results. I have a tenant farmer who stripped 130 acres for wheat and 35 acres for hay, both of which pay him well—his wheat averaged about 12 bushels to the acre, and his hay crop about 25 cwt. The rainfall this year was not too good, being about 16 inches, against an average of 25. I have from 2,000 to 3,000 acres of land on Coolahville suitable for agriculture, about 300 acres of which I have prepared for the plough, besides the land under crop already. I intend to share farm this land should the railway come along. I have four applications for blocks already. There are about 2,000 acres of suitable farming land on the Turee property, which I have leased. Fully 1,500 acres of Coolahville is suitable for lucerne. About 1,000 acres of the Turee property is suitable for lucerne. I have about 1,500 acres suitable for lucerne along the valley. You can get water at from 15 to 20 feet. The reason more land is not put under lucerne is that it does not pay, because the market is so far away. I shored about 9,500 sheep, and the wool brought

14½d. in Sydney and topped the market that day. With the railway I could go in for raising fat lambs, and send to Sydney. Before I came to Coolah there was no cultivation here, and I have had my property cultivated ever since, and never had a failure. That is about thirteen years. Even in the 1902 drought I still had a crop.

417. *Mr. Robson.*] Did you lose any stock in 1902? Yes; a good many.

418. How far is Craboon from you? Twenty-four miles.

419. How comes the difference between the yield per acre of wheat with the share farmers you referred to and your own? Mine was 24, and theirs 12; but mine was Federation wheat, a harder wheat.

420. Not from any difference in the soil? No.

421. Is your farm typical of others in the district? Yes.

422. What extent of land equal to yours would be brought under cultivation with the railway? About 14 miles.

423. Is your lucerne land near the river? Yes, right on it.

424. And is all the river land good lucerne land? I think so. There are three kinds of lucerne land on the river. Where the wash is is the best, and Coolah Creek would be better than Talbragar.

425. Taking 15 miles of the line, from here towards Craboon, how would that be for lucerne? I think very good.

426. All the way? Yes; Mr. Bowman has a crop. In this drought he got good cuts, with no rain at all.

427. What average width would the lucerne land be along the river? About 1½ mile.

428. A mile for 15 miles would be 9,600 acres? Yes.

429. How has dairying gone on recently? Very favourably; but I am not well up in that.

430. Would this line tend to develop that industry? Yes; there are good creeks and springs of water around here.

431. What extent of wheat land do you think would be brought under the influence of the proposed line, and would be likely to be cultivated? About 20,000 or 30,000 acres could be put under wheat.

432. Are there any places you know of which would produce wheat? Turee Station, about 9 miles away, and Mogidor could produce wheat.

433. Are they doing it now? No; the roads are not too good, and they are growing wool.

434. In your opinion, would they be likely to break up their estates for wheat-growing? Yes; with a railway handy. At present it is too expensive.

435. Is there any other place? At Weetalibah there is a good deal of land. That is about 15 miles distant.

436. But they would be served with a cross-country line? Yes; but there are a great many selectors about Queensborough who will give evidence later.

437. With a railway, would it pay to grow lucerne here to send to Sydney? Yes, well.

438. It will not pay to cart it, but it would pay with a railway? Yes; my lucerne is equal to Mudgee lucerne, and I could get orders from Sydney for it. With land cheaper here than at Mudgee you could make it pay, land here being £10 an acre as against theirs at £50. No doubt the land here is capable of growing lucerne equal to that in any other part.

439. What has your average yield been while growing wheat? About 17 bushels. This has been a very bad year. The Federation wheat surprised me by turning out 24 bushels.

440. This is ordinarily good fattening country? Yes.

441. What is the carrying capacity? About a sheep to the acre on an average. At first I ran about 10 sheep to the acre on the flats, but there were no rabbits then.

442. What is the condition of stock in the drought time now? It is not too good, but sheep are not dying. There are so many kurrajong trees.

443. Do you think with the increase of production and population the anticipated loss of £1,568 per annum on the proposed line would soon be overtaken? Yes, I do.

Witnesses—E. J. Scully, T. Goddard, and D. Niven, 5 February, 1913.

444. You know the development that has occurred at Craboon and Dunedoo since the construction of that line? Yes.

445. A lot of land has been brought into cultivation there? Yes; and I think our rainfall is better than at Craboon.

446. And you hold to the opinion that, as on that line, so here; there would be a substantial increase in production? Yes; people would go in for farming.

447. Under present circumstances, it pays you better to graze? Yes; I have grown oats here, and got 50 bushels to the acre in a good year. Any grain grows well in the valley.

Thomas Goddard, property owner, Coolah, sworn, and examined:—

448. *Chairman.*] How long have you lived in Coolah? Thirty years.

449. *Mr. Donaldson.*] You remember the Committee inquiring into another line? Yes.

450. Have you any practical knowledge of the character of the country comprised in the unalienated Crown lands in this district; we have evidence of forest reserves amounting to 12,800 acres;—do you know where they are? No; I am not prepared to give information on that, but I know there are reserves.

451. We have evidence of 65,900 acres of improvement leases;—can you state whether any part of that land is suitable for settlement? I know some of them are very good lands, higher up the creek.

452. The Chief Draftsman, Department of Lands, states there are about 130,000 acres of unalienated Crown lands within the influence of the railway proposed;—do you think that is all mountain, or is there a fair proportion that would grow wheat? From here to Craboon is all good land, and for 18 miles further there are thousands of acres of land fit to cultivate. There is the main river, and creeks on both sides.

453. We may take it that pretty well all the valley is alienated? Yes.

454. How long have you been threshing wheat? About fourteen years.

455. Have you found that the wheat area has increased much? Yes; we have threshed more every year, and they have threshed more since I have left off, which is thirty years ago.

456. Do you know of more land that has not been brought under cultivation? Yes, thousands of acres.

457. Why is it not cultivated? Because it would not pay for carting.

458. Do you think owners would be inclined to farm more with the railway, or would they rather follow the easier line of raising sheep? I think they would cultivate if the line came; it would pay them much better. The mountains are very good grazing country.

459. We had evidence that the mountain country would carry three sheep to 2 acres, while another witness said one sheep to 2 acres;—which do you think is the nearer estimate? I am satisfied the ranges here will carry a sheep to the acre.

460. All the year round? Yes.

461. Is there plenty of water about here? Yes.

462. Are they stocked? Yes; but I cannot give much information about that.

463. Do you know that there is much demand here for land for agricultural purposes, anticipating a railway? Yes.

464. Do you think, if a railway were recommended, many people would come looking for a home? I do; and there is better land 14 miles out than there is between here and Craboon.

465. But though there is good lucerne and wheat land 10 miles from Craboon, very little of it is cultivated;—is it not strange that that railway did not give it an impetus? Yes.

466. If those people do not think it worth while to go in for cultivating, is it likely the Coolah people will? Yes; I think we have a better rainfall than Craboon. I produce a specimen of white stringybark timber off the ranges, which is suitable for commercial purposes.

467. Is there much timber in the forest reserves which would be suitable for railway purposes? I have not been much on them.

468. You do not think the Railway Commissioners could count on an adequate supply of sleepers from that quarter? No.

David Niven, sawmill proprietor, Coolah, sworn, and examined:—

469. *Chairman.*] How long have you been living here? Fifteen years.

470. You gave evidence before the Committee on a previous occasion? I did.

471. *Mr. Travers.*] How long have you been in the sawmill industry? Twenty odd years, on and off, in this and other districts.

472. What is the output of your mill? Fifty thousand or 60,000 feet.

473. What timber do you principally cut? Ironbark, stringybark, and pine.

474. How far do you draw your timber? It is 7 miles to the sawmill from here. I had it in town when the Committee were here last.

475. Is there much ironbark where you are cutting? The forest there is pretty well 20 miles square—ironbark and pine.

476. What size is the ironbark? Some trees measure about 1,000 feet and over. The average would be about 500 feet. The pine would average 180 to 200 feet.

477. Is that free from knots? Yes.

478. Is there much timber on the unalienated Crown land within the influence of the proposed line? I am on an improvement lease, and the next lease is 12,200 acres.

479. If this line were recommended, do you think sufficient ironbark could be got for sleepers? Certainly. There is plenty of it. There is a good deal of ironbark between here and Leadville.

480. Are there any other forest reserves in this district that you know of? No, only the one I am on.

481. Do you think they could get sufficient ironbark for railway purposes from that? Yes.

482. Do you cut to order? Yes; mostly here, and for bridge timber.

483. Have you done any farming? Yes, but I have no land now. I was farming at Cullenbone, and I did farming here for eight years, and then sold out. I had 1,280 acres, but only cultivated 17 acres.

484. What is your estimate of the width of the valley? About 2 miles average right through. There are places where it is 5 miles, and others where it is only a mile.

485. Do you think it would be possible to get produce from the other side of the ranges? Yes, there are main roads through.

486. Could the ranges be used for anything? Only for grazing.

487. Would the country north of Coolah contribute anything to this line? Yes.

488. What sort of country is it? It is black flats, and box and kurrajong. It is mixed land, but a lot of it is suitable for wheat-growing.

489. Would the country east of Coolah contribute anything to the line? Yes, there is a lot of wheat country there.

490. We may assume that the country north, north-west, and north-east within a radius of 20 miles would contribute a good deal to the traffic of this proposed line? Yes.

491. Do you think white stringybark is suitable for sleepers? I think it would be. I consider it next to ironbark.

492. Is there much box here? No; and it is not much good. It does not grow to any length; but there would be some sleepers from the box. They are rather harder than ironbark to cut.

493. Is there any other timber here suitable for sleepers? No.

494. Do you anticipate that this line would connect with any other line, or would it remain a dead-end? It could be extended from here to Werris Creek.

495. Would the ironbark you have mentioned be suitable for the construction of timber bridges? Yes; you get it 40 and 45 feet long, though the average is only about 25 feet.

496. Do you get long lengths of pine? Yes.

497. Does stringybark grow to any length? Not about here, but where the exhibit came from, you can get it from 70 to 80 ft.

Frederick William Peterson, station manager, Coolah, sworn, and examined:—

498. *Chairman.*] You are the manager of Mr. H. Morton's estate? Yes; it is now 10,000 acres.

499. How long have you been manager? About two years.

500. *Mr. Burgess.*] What was the extent of that estate when you took charge of it? Twenty-three thousand acres. It has been subdivided.

501. There have been 13,000 acres sold as farms, and privately purchased? Yes.

502. None distributed under the Closer Settlement Promotion Act? No.

503. Is the balance surveyed? Yes.

504. Did you find a ready demand for those farms? Yes.

505. How long is it since you first got them surveyed? It was in November, 1910.

506. What are the areas? From 50 to 2,000 acres for grazing, and the farming blocks average 300 acres. The 50 acres was exceptionally small, being cut off by the main road and sold for what it was worth. There are ten small blocks of 50 acres specially designed for lucerne flats, with a building site enough for a house and yards.

507. The grazing land runs into the hills? Yes.

508. Is there arable land in that? Yes, on the frontages.

509. What do you estimate to be the carrying capacity of the hilly country with the larger areas? One sheep to the acre.

510. Is it rung country? Yes.

511. You had experience of the quality of land before coming to this district? Yes; I have had good experience in agriculture, and in many parts of the State in connection with subdivisions.

512. Have any of the farms mentioned started working yet? Yes.

513. Have the proprietors gone in for agriculture? Yes, wheat and lucerne.

514. What results did they get from wheat? Very good, considering the year.

515. What was the rainfall? Sixteen inches. Without fallowing, we averaged 13 bushels. About three parts of the rain fell between June and August.

516. Do you grow any lucerne? Yes, but it is mostly used for grazing.

517. Have you any old paddocks? Yes, twelve years old. It will cut a ton to the acre.

518. If all the rich land gone now? No; the whole of that held now is good agricultural land.

519. On easy terms? Yes. We sell straight out on eight years' terms. The applicants take loans from the savings banks mostly.

520. Have you run sheep as well? Yes, about one-and-a-quarter sheep to the acre.

521. If the mountainous land runs a sheep to the acre, the rich agricultural valley should run more? Yes, about two sheep to the acre netted, without other feeding. You cannot estimate with rabbits.

522. Have you many rabbits? Yes, but in some sections they are cleared out. The land I have put the plough in I class as wheat land. The black is first-class wheat land.

523. Is it not hard to work? No, very easy; it is alluvial. The ridges are first-class wheat land.

524. At what depth is the water on the flats? Fourteen feet at 30 chains from the river.

525. The lucerne roots would reach that? Yes.

526. It is hard to grow lucerne for sale without ready means of getting to market? The inducement is hardly sufficient unless there is a market by rail. The rail freights are low. It would cost more to take it to Craboon from here than from there to Sydney.

527. What capital would a man require to go on a 300-acre mixed block and make a success? If he had £300 he would have a good start.

528. You have not taken notice of the Crown lands about here? No. I have no doubt that Honeysuckle would grow a good deal of wheat. We are growing wheat on the same class of country.

529. How does fruit grow about here? Very well. I have just put in an orchard of 100 fruit trees—peaches, nectarines, apples, figs, and plums, also grapes. I have no doubt that 100 acres would be a good living area in the rich land, with dairying. We got 20 bushels of oats last year.

530. What is the highest yield of wheat you have got? This year, 18 bushels.

531. Do you consider that good? I consider it fair, considering the ground was not fallowed. When worked, the land should average 20 bushels.

532. What is the smallest yield of any of the sharefarmers? Between three and four bags.

533. Have you been in the Grenfell country? Yes, but we have quite as good land here. By fallowing we can use the whole of the rainfall. In the southern country the system is half in and half out. Here, it would be two-thirds in and one-third out, and by so doing we should beat the southern country.

James Edward Lang, station manager, Turee Vale, near Coolah, sworn, and examined:—

534. *Mr. Hurley.*] What size is your station? It is 17,630 acres, all grazing land, of which 6,733 acres is improvement lease. It is 18 miles east of Coolah.

535. Are you in favour of the proposed line? Yes.

536. Do you know of the valley from here to Craboon? Fairly well.

537. Have you been long in the district? Over ten years.

538. Do you know any gaps on either side of the valley where settlers can get through to contribute trade to the railway if it is established? No, I do not.

539. The reason people are not settled in the valley is because the land is held in large blocks? Yes.

540. And if the railway is established, I suppose the cutting-up of land and closer settlement will follow? I am of opinion that it will.

541. Is it not risky to prepare farms before the railway is established? Yes. I know nothing about farming, but from what I see they just plough and put in the crop, and get the crop straight away. They have to cart it from here to Craboon.

542. Would your district contribute to the proposed railway? Yes.

543. Are you between Cassilis and here? Yes, I am 18 miles from each place.

544. Then, if the railway is established from Cassilis to Merriwa, that will get the trade of your district? No, not at all; this will be our best road.

545. Have you worked any timber? Yes, I know the different timbers.

546. What do you know about the timber? I know 6,000 or 7,000 acres of stringybark in the forest reserves, on the range, about 20 miles out from here.

547. Has any timber been taken off that reserve? Yes, for building, about there, thirty and forty years ago

Witnesses—J. E. Lang and T. A. Wright, 5 February, 1913.

548. What is its character? Some stringybark and black ash.

549. Have you taken any yourself? No, I have split the fencing timber.

550. How many trees would it average to the acre? Of good timber, twenty trees to the acre.

551. Is there any ironbark there? No.

552. Would that timber be any good for sleepers? I should say just as good as ironbark.

553. Have you had experience of putting timber in the ground? Yes; the stringybark has been in the ground forty years out there, and is good yet.

554. What is that timber good for? For building, and for railway bridges and sleepers.

555. Is there a road from Coolah to that reserve? Yes, teams have drawn from there.

556. Is there anyone living there? I live about 2 miles from it. We have an annual lease of part of the reserve. You can get trees there 60 and 70 feet long, and 3 and 4 feet through.

557. Has any other timber been used than what you have used for the station? All the houses and fencing there have been made with this stringybark.

558. Has much of it come to this township? They used some in the building of the "Central Hotel" here.

559. You think that is an asset to this railway? Yes.

Thomas Alexander Wright, dairy-farmer, near Coolah, sworn, and examined:—

560. *Chairman.*] Where do you live? Three or 4 miles up the creek north of Coolah, towards Gundare.

561. How long have you been in the district? Fourteen months.

562. *Mr. Scobie.*] Where were you before coming to this district? In Mudgee? I was sixteen years there.

563. Where did the people here send their produce before the railway was constructed to Craboon? To Mudgee. I have seen Coolah teams come to Mudgee.

564. Was not that the nearest station to this valley? It must have been the most accessible.

565. The Commissioners stated there was a loss on the Mudgee line of £30,000 per annum until it was taken forward to Dunedoo, and that in five years it was anticipated it would pay its way;—do you think the country in this valley is equal to the country from Mudgee to Craboon? I think it is considerably better.

566. Then, as the Commissioners estimate a loss of but £1,500 per annum on this railway, you think it should not take long to wipe that out. I think that. I think this proposed line would be considerably to the profit of the Dunedoo extension.

567. Then how is it this country did not go ahead in days gone by? Until the Dunedoo line was constructed it was too far to cart produce.

568. But even since the construction of that line, it does not seem to go ahead fast. We have seen people in other districts carting produce 30 miles and upwards;—why have they not been able to cart here? I think because the land was all held in large estates for grazing purposes.

569. What is your area? I have 500 acres.

570. You are going in for dairying? Mixed farming.

571. Do you think with dairying the railway would pay better than with mixed farming? I think it is necessary to combine the two. Without farming, dairying would be of no use.

572. You have a knowledge of lucerne land? Yes, there is some very good land in Mudgee.

573. How do you compare lucerne land in this valley with what you have seen in Mudgee? I think we have some here equal to that at Mudgee.

574. Were you farming at Mudgee? No, I had a dairy factory.

575. Do you think this valley would be a good place for such an industry? Yes, I think that on the river frontage, with a decent area, a farm is better than one in the Mudgee district, except in the most favoured parts of Mudgee. The

water here is considerably better, and the cows will give a better yield here on the natural grasses, without cultivating anything, than the cattle will at Mudgee.

576. Probably that is because it has not been much depastured here? But the sheep have eaten it out more than cattle would.

577. You think that around here the people have a better chance of succeeding in dairying than even at Mudgee? Yes.

578. How many cuts of lucerne would you get here? I would expect five or six off my land. I have none in, but I expect to have in about 50 acres.

579. Can you say whether owners here are prepared to cut up their land and make it available for small farmers? I know it is being cut up by some, and others have said they are going to cut theirs up.

580. With the railway into this town, what would you anticipate? I think it will send the place along by leaps and bounds.

581. Before taking up your property did you inspect the land in this valley? Yes.

582. It extends for about 18 miles? Yes.

583. What is your estimate of the distance between the two ranges on either side of this valley? It varies from about half a mile to 3 or 4 miles. That is not the actual river flat, but from foot of range to foot of range. My ground is about 2 miles long, and has a gradual fall to the creek. But it is all cultivation ground, except about 70 acres.

584. What proportion of the land around you is cultivable? It nearly all is, in the same proportion as mine. There are a few creeks, but the land is practically all the same. In some parts the soil is different.

585. How many acres of the natural pasturage would you consider necessary for a milking cow? We have about sixty head on our 500 acres, and a good part of it under the plough.

586. But with hand-feeding you will carry more than that? Yes, double it easily.

587. Do you think you would carry 150 cows in milk? Yes, allowing me to cultivate I could do more than that.

588. Then do you not think a smaller area would admit of a farmer making a living? To carry on well, I think a person would be better with 100 acres; but in the Mudgee district some have land not as good as this who live on 30 and 40 acres. I would not like to take under 100 acres myself. I wanted a smaller area myself, but it was not available.

589. Had you experience of the rainfall here before coming? I wrote to the Government Meteorologist; he told me the rainfall here was better than at Mudgee and Gulgong, and he gave me the average for twenty-five years. I think Mudgee was 25; Gulgong, 26½; and this was 28.

590. More depends on the time of the fall than the quantity; does the rain fall usually at the right time of year here? Yes, except that the present is a dry time.

591. Do you know of any tobacco land in this district? I was two years at the Government Agricultural College as dairy expert, and during that time they grew tobacco there, and the land here is considerably better.

592. Would you say that the most valuable of the land along the river would be suitable for tobacco cultivation? I would not say that, because I do not know exactly the class of soil required by tobacco, except that it grows on very poor ground at the Hawkesbury College, and the poorest ground here is equal to that.

593. Do you know that ironbark and pine country is generally excellent wheat land if cleared? I have heard so.

594. Can you say anything about your crops? I have got 70 acres stacked. I have had one crop.

595. What was the rainfall? There was practically none.

596. What was your return? Some of it was over 30 cwt. to the acre, and some not quite a ton. It averaged a ton. We cut it all for hay.

597. Were you satisfied with the crop you got, considering the rainfall? I was more than satisfied. With a proper rainfall we would have no trouble in getting from 2 to 3 tons.

598. If a creamery were established, would it be of benefit to the district? I think so. We also had a crop of potatoes. There was a small shower just after putting them in, and nearly an inch fell after. We harrowed the ground, and there has been practically no rain since, but there is a fair lot of potatoes for our own use.

599. Can there be any dairying carried on here without a railway? It would be at great inconvenience. I do not think you could cart your cream; it would be necessary to manufacture it here, and then it would have to be carried 24 miles to the railway, which would not be satisfactory. It would be second-grade produce. If the railway came here, it would make dairying a success from the jump. Every farmer could have twenty or thirty cows, which would practically pay the expenses of his place. We have twenty-two cows milking, and they were bringing in £35 a month, while the feed was good. We manufactured the butter and sold it locally.

600. Do you know of any others doing the same? I do not think there is another.

601. Have you ever noticed the river dried up? Never. I am told it has never been known to cease running.

602. In the face of the bad season you are quite satisfied with the results of your farm generally? Yes.

Charles William Winter, farmer and grazier, near Coolah, sworn, and examined:—

603. *Chairman.*] How far do you live from Coolah? Eight miles west.

604. What size is your place? It is 1,280 acres, homestead selection, and I have been there four and a half years.

605. Had you any knowledge of the district previously? No.

606. You know the country north, west, and east of Coolah? To a certain extent.

607. Do you think a railway, as proposed, would be justified by the scope of the country? Yes. The valley I reside in is on the Butheroo Creek, and there are a great many hundreds of acres suitable for cultivation.

608. How far are you from Merrygoen? Twenty-five miles.

609. Do you know the road there from Coolah? Yes.

610. You think there is sufficient land in that direction to assist in making this a payable proposition? Yes.

611. What is the road? It is a mountain road, but fairly good. It would be preferable to going to the Coonabarabran line; I would not think of going there. This would be only 8 miles, while that would be 25 miles.

612. What is the timber like between Merrygoen and Queensborough? There is very good ironbark, 50 feet long, suitable for sleepers and fencing. I suppose there are 15,000 to 20,000 acres of it.

613. Have you anything else to state? I have been farming for four years, and last year I had about 120 acres in, principally wheat.

614. What were your results? Exceptionally good. I had 30 bushels to the acre. I produce a sample of the wheat.

615. Is your land generally good? I have 800 acres fit for cultivation. I think some is too rich to grow wheat. I have grown corn up to 50 bushels per acre.

616. You are over towards the red country? It is mixed; mine is volcanic, but the lower lands in the valleys are friable black soil.

617. Do you endorse the evidence given by previous witnesses? Yes.

618. *Mr. Burgess.*] Where do you send your wheat, and what do you pay for cartage? Up to this year I have disposed of it locally. This year I have it stacked, with no hope of selling it for some time, but in the event of a sale it is necessary, at present, to take it to Craboon.

619. *Chairman.*] What is the country like between the Bothero and Weetalibah Creeks? On the Bothero there is some exceptionally good wheat land, and it is principally held under improvement lease. On the range near Weetalibah Creek it would not be suitable, but there are a number of acres suitable on each side.

James Colley, farmer, near Coolah, sworn, and examined:—

620. *Chairman.*] What size is your farm? I hold 1,280 acres of conditional purchase, partly grazing and partly farming. It is adjacent to Mr. Winter's.

621. How long have you been farming here? Six years.

622. Had you any knowledge of the district prior to that? None whatever.

623. What part did you come from? I have been all over New South Wales. I was in the railways prior to coming here. I had no previous experience in farming.

624. What is your experience now? It is with wheat and barley, wool and lucerne growing.

625. You have been successful in those undertakings? Yes; I produce samples of my wheat and barley.

626. Where do you send your barley? To Tooth & Co., brewers, and it has been very favourably reported on. They say that the district must suit the growth of barley. I got 4s. 9d. per bushel for it from 21 acres.

627. Where do you send your wheat? The last was sent to a mill at Gulgong. I had 100 acres altogether, but 60 acres were cut for hay. I have about 500 acres cleared. The first year I had a splendid crop, but got a very low figure for it. I could not take it to Mudgee, and I only got 2s. 2d. a bushel, which does not pay.

628. Which wheat do you find does best on your land? I think the Federation for grain, and the Cleveland for all-round purposes. After the first year, I did principally sheep farming, but each year we have produced some wheat. It would pay handsomely if we had a railway here.

629. With your present experience to start with, you would not have gone so far from the railway? There was no land available closer. I was aware of the importance of the railway when I first went out, but I depended chiefly on the sheep. If we do not get the railway, I think it will pay me better now to rely on the sheep altogether and grow feed for them.

630. What is the carrying capacity of your land? About $1\frac{1}{2}$ at times, but an average of a sheep to the acre.

631. Do you think the proposed route for this railway the most suitable? I do.

632. And you are of opinion that the line should be built? Yes.

633. You would not be far away from a line from Dubbo to Werris Creek, or from Gilgandra to Curlewis? Yes; the line from Dunedoo to Coonabarabran would be the nearest, and that would be 25 miles from me.

634. How far are you from Coolah? Eight miles west. Although the rainfall of this place is low, there are other places where wheat is grown with no better results. Years ago, if wheat growing had been suggested in the Narromine district, people would have laughed; but now, although the rainfall there is smaller than here, an abundance of wheat is grown there. This land is far superior, and the weather not so hot.

John Aloysius Tucker, senior-constable, Coolah, sworn, and examined:—

635. *Chairman.*] How long have you been in this district? I have been nine years in Coolah, but in this district and Mudgee for twenty-eight years.

636. There are a number of leases mentioned in a report we have received, under the heading of reserved lands—27,500 acres not held under any tenure, and 52,000 acres held under leases;—did you compile those figures? Some of them I did, but I know where the leases are.

637. Is any of that land included in the ranges? Yes, a portion is included in the forest reserves, and another portion is a stock route out towards Weetalibah. Another is Butheroo, and there is a portion of it down the other side of Hannah's Bridge.

Witnesses—J. A. Tucker, 5 February, and J. J. Jamieson, 20 March, 1913.

633. What is the quality of those ranges, and the class of timber thereon? The easterly forest reserve is principally stringybark, with some gum. The stock route on the northern portion is ironbark, and also on the west.

639. Does it exist in any quantity? Yes, an enormous lot.

640. With regard to the reported scarcity of suitable timber for sleepers, there should be a great quantity there available for railway and bridge work? So there is. In the western district, nearly to Dubbo, and from Dunedoo to Coonabarabran, they will get sleepers nearly within sight of the line.

641. Do you know that in the Coonabarabran district they are paying 5s. 6d. apiece? I cannot understand that. They are all in sight there, and you cannot see where they have taken them out. There is plenty of timber there now. Once they go towards Binnaway there are miles of good ironbark country.

642. Is the timber on the ranges of good quality? Yes, as good as in any part of Australia. There are thousands of trees there now. I have made arrangements with the forest guard to go and see that timber. Mr. Elliott, of Dubbo, was to inspect it, but did not do so.

643. The forest ranger should have a knowledge of all the timber in his area? Yes, he should; but I know that the timber is there. I have been over the greater part of Australia, and there is ironbark on those ranges equal to that in any part of it, and in large quantities. None has ever been used, except what little has been taken by the old sawpit mill. There has never been a steam mill there at all.

644. Do you refer to the spurs from the Liverpool Ranges and the Warrumbungle Mountains? Yes; I have been over that country, and I know what timber is there from my actual experience.

645. How far along those ranges is the timber from here? You can strike the timber at 20 miles, and you can go through it for 30 miles.

Charles Frederick Dean, station manager, near Coolah, sworn, and examined:—

646. *Chairman.*] What are you doing on your station? Running sheep, farming, and growing lucerne. I farm 50 acres of wheat for hay, and 40 of lucerne for my own stock. I sell the hay. If the railway came I could put about 1,300 acres in share-farms.

647. You endorse the evidence already given? Yes.

648. Do you find the country good for sheep-breeding? Fairly good. They get no foot-rot or fluke. It is very healthy country for sheep.

649. What is the carrying capacity of your land? This last two years, about a sheep to the acre. This year I have cut good lucerne four times since October. It is a river flat. There have been two wells sunk, one 13 feet to the water, and the other 16 feet.

650. You grow crops for your own stock? I sell hay and chaff.

651. Do you know anything about the timber referred to? On the other side of the river we have 6,000 acres fenced in with white stringybark—5 x 4 posts, which have been there thirty-eight years, and most of them are as good as the day they were put in. That is different stringybark from what is on this side of the river. Here they only last about eight or nine years.

652. Is there much of it? There is a tremendous lot on this side of the range; some run to 80 feet.

653. Is it big, and heavy, and good? Yes, some of the finest timber in the State.

654. The forest guards have reported that they have none? It is there, and none has been used out of it this eight or nine years, except for fencing.

655. Can you get enough sleepers to build 24 miles of railway? I have no experience of that.

656. Does this timber split with the sun? Not the stringybark.

THURSDAY, 20 MARCH, 1913.

Present:—

JOHN STOREY, Esq. (CHAIRMAN).

The Hon. WILLIAM FERGUS HURLEY.

The Hon. JOHN TRAVERS.

The Hon. WILLIAM ROBSON.

ROBERT THOMAS DONALDSON, Esq.

ROBERT SCOBIE, Esq.

GEORGE ARTHUR BURGESS, Esq.

The Committee further considered the expediency of constructing a line of Railway from Craboon to Coolah.

John James Jamieson, Supervising Surveyor, Department of Public Works, sworn, and examined:—

657. *Chairman.*] In connection with this proposition, I had placed before me a statement to the effect that a better route could be found than the one submitted to the Committee, in so far that it would serve the mines at Leadville, and would improve the trade generally; with that end in view we asked your Department to make an exploration;—you have attended to-day for the purpose of explaining that exploration? Yes. I do not think the mines can be brought any closer than the present survey. The Mount Stewart Mine is only about 15 chains from the present survey. The line might be brought even closer, but it would cut up the streets at Leadville, and destroy the design of the town, without any material gain. It would be much cheaper to run a branch line in to the mine. Mount Scott Mine is about 1½ mile from the survey. On

the map which I produce the red line shows the present survey from Craboon. Then it is proposed to go 1½ mile south. I was asked to look into the proposal of carrying out the line that distance on the Mudgee side of Craboon, and I did so; but find that will not bring the mine any closer, and there is no advantage to be gained. It would be 45 chains longer to construct, and would not give so good a crossing of the Talbragar River. On the present proposal the flood crossing is only about a quarter of a mile wide, but on the suggestion mentioned it would be much wider. I then looked into a proposal to start from Birriwa Station to Leadville, thence common to the present survey; but that route would be 5 miles longer to construct than the proposal, though giving a 3½ mile shorter distance to Sydney. The country there is very similar to that on the proposed line, and there is no advantage that I can see from adopting a route of that sort.

[One Plan.]

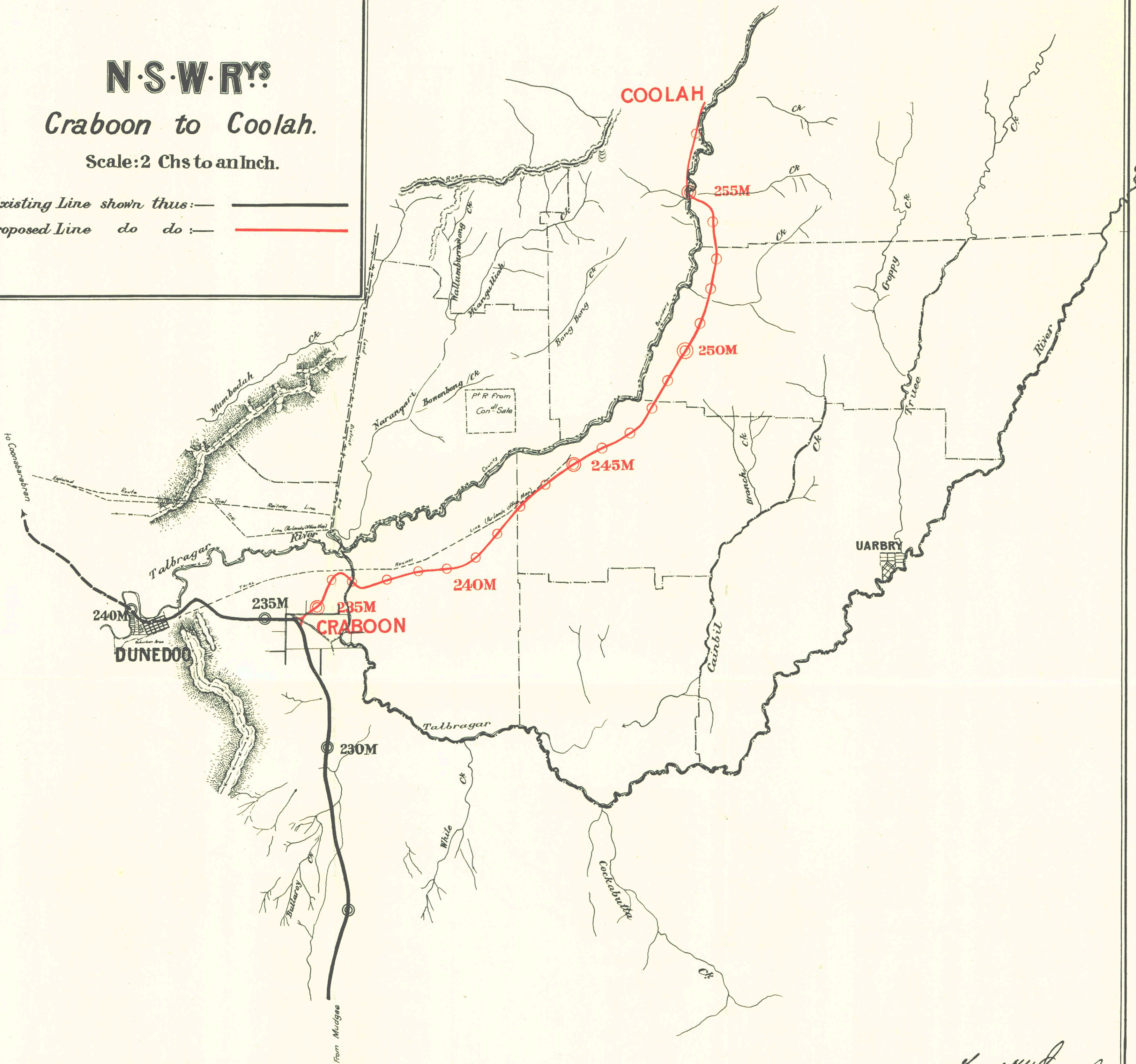
N.S.W. RY'S

Craboon to Coolah.

Scale: 2 Chs to an Inch.

Existing Line shown thus: —————

Proposed Line do do: —————



UARBRY

Fred H. Small
for Chief Engineer,
Railway and Tramway.
6. 5. 13 Construction.