

1914.
—
VICTORIA.

R E P O R T

FROM

THE PARLIAMENTARY STANDING COMMITTEE
ON RAILWAYS

ON THE QUESTION OF

RAILWAY CONNEXION WITH
SERPENTINE AND DURHAM OX ;

TOGETHER WITH

MINUTES OF EVIDENCE AND PLAN.

Ordered by the Legislative Assembly to be printed, 30th June, 1914.

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LEGISLATIVE ASSEMBLY.

THURSDAY, 19TH DECEMBER, 1912.

G. DURHAM OX AND SERPENTINE DISTRICTS CONNECTING RAILWAY.—Mr. McBride moved, pursuant to notice, That the question of connecting the districts of Durham Ox and Serpentine in the Loddon Valley with the existing railway system by means of a railway be referred to the Parliamentary Standing Committee on Railways for inquiry and report.

Question—put and resolved in the affirmative.

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON RAILWAYS.

(*Tenth Committee.*)

The Hon. E. H. CAMERON, M.L.A., Chairman ;

S. Barnes, Esq., M.L.A.,
The Hon. J. W. Billson, M.L.A.,
The Hon. A. Hicks, M.L.C.,

The Hon. D. Melville, M.L.C.
(Vice-Chairman),
E. C. Warde, Esq., M.L.A.

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REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON RAILWAYS, to which the Legislative Assembly referred the question of connecting the districts of Durham Ox and Serpentine in the Loddon Valley with the existing railway system by means of a railway, has the honour to report as follows :—

DESCRIPTION OF DISTRICT.

1. The Durham Ox and Serpentine districts contain about 200,000 acres of good agricultural land bordering on the east side of the Loddon River and lying between the Inglewood and Boort railway on the west and the Bendigo and Kerang line on the east. The country is flat, and is used for grazing and dairying, and also for the production of cereals—chiefly wheat and oats. With the exception of a few low-lying areas adjacent to the river, the land is all suitable for cultivation, the soil being of a light loamy nature. From most of the land the timber has been removed, but what box timber remains is suitable for fencing posts or firewood. The average annual rainfall is between 14 and 15 inches. In recent years, when favorable seasons have been experienced, the average yields of wheat have been from 16 to 18 bushels per acre, as high as 33 bushels being obtained from new land. The distance between the two existing railways mentioned above is from 24 miles at the Durham Ox, or northern end of the district, to 30 miles at the Serpentine, or southern end. Most of the farmers on the east side of the proposed line to Serpentine and Durham Ox who would be served by it are within 14 or 15 miles of the Bendigo and Kerang railway, but they said the trip to stations on that line with a load of grain and home again “made a very long day’s work, and was white slavery.” As the roads, though traversing fairly level country, are not metalled and are formed in parts only the trip, they stated, was severe on the teams, especially in hot weather when the bulk of the carting is done. Some of the farmers on the west side of the suggested line have at present to cart 17 or 18 miles to a railway station. When questioned, however, they admitted that if an additional bridge were built across the Loddon River they could reach one of the stations on the Boort line in about 10 or 12 miles. It was stated that the cost of cartage to the existing railway stations was from 7d. to 1s. per bag, or from 7s. to 12s. per ton, and that carting the grain occupied six or seven weeks at the time when the farmers should be using their teams to break down the fallowed land and prepare the ground for seeding. If the proposed railway were constructed the carting period, it was said, would be lessened and a larger area cropped. There are no Crown lands in these districts available for settlement.

STARTING POINT OF PROPOSED RAILWAY.

2. Both Inglewood and Bridgewater were suggested as the starting point of the proposed railway. It was claimed for Inglewood that it was the trading town of the district, having banks, the district hospital, State high school, with its agricultural classes, and ample hotel accommodation. The County Court and Court of Mines sit at Inglewood. Important sales of live stock were held at that town at regular intervals. Moreover, Inglewood was at present a junctioning station, fitted with interlocking and signalling gear, numerous sidings, turntable, and water supply for locomotives. The cross-country line to Dunolly, Maryborough, and Ballarat started at Inglewood, and by bringing the proposed railway into that town the wheat-growers at Serpentine, Jarklan, and Durham Ox would have the choice of two shipping ports—Melbourne, *viâ* Bendigo, and Geelong, by way of Maryborough and Ballarat. Abundance of ironstone and quartz rubble, which made suitable ballast for a railway, could be obtained close to Inglewood.

3. It was urged in support of Bridgewater as the starting point that one of the largest flour mills in Victoria was carrying on operations adjacent to that railway station, and as there was no flour mill at Inglewood it would be advantageous to the farmers at Serpentine, Jarklan, and Durham Ox if they had direct railway connexion with Bridgewater. The manager of the mill at that town stated that about half-a-million bushels of wheat were ground annually at Bridgewater, the yearly output of flour being approximately 11,000 tons, besides bran and pollard. About 50,000 bags of wheat were delivered each season by teams at the Bridgewater mill, and 120,000 additional bags were purchased, usually at stations along the Boort and adjacent lines, to keep the mill working the whole year round. "If," he said, "the railway connexion were made at Inglewood, instead of at Bridgewater, it would cost 2s. per ton, the minimum railway rate, to convey wheat grown in the Serpentine, Jarklan, and Durham Ox districts from Inglewood to Bridgewater, 4 miles, as 'local' rates and not 'through' rates to Bridgewater would operate on the new line until such time as it became a paying railway. This meant," he added, "that the farmers in the Lower Loddon Valley would, so far as his mill was concerned, get $\frac{3}{4}$ d. per bushel less for their wheat at Inglewood than if it were carried direct by rail to Bridgewater." Another objection raised to the Inglewood connexion was that fully 90 per cent. of the trade from the Serpentine, Jarklan, and Durham Ox districts was done with Bendigo and Melbourne, and as Inglewood was 4 miles further along the railway than Bridgewater it would compel the producers in those districts to pay the cost of that extra railage. The Committee ascertained from the Railway Department that Geelong was $135\frac{1}{2}$ miles from Inglewood, *viâ* Maryborough and Ballarat, and 140 miles from Bridgewater. In consequence, however, of the operation of the tapering rate the charge (9s. 2d. per ton) for the carriage of agricultural produce was the same from either inland town to that port. It was claimed that there was an ample supply of bluestone for railway ballast at Bridgewater, and that as the Loddon River flowed close to that station there would be no trouble in securing an abundant supply of water for locomotive purposes.

4. The railway from Inglewood could be run for nearly its full length to Durham Ox along a 3-chain road crossing the Loddon River close to Salisbury Bridge, about 12 miles from Inglewood and 3 or 4 miles south of Serpentine. Bridgewater being on the east side of that stream, a railway starting at that town would not have to cross the river. It was stated that very little land would have to be purchased for the Bridgewater route, as several land-owners along that survey had agreed to give the Government the strip required for the railway track, and the Marong Shire Council had consented to portion of the roads in its territory being used for that purpose. Both routes junctioned at Serpentine.

5. A route starting at Raywood, on the Bendigo-Kerang railway, and running north-west to Serpentine and thence northerly through Jarklan to Durham Ox, was brought under the notice of the Committee by the townspeople of Raywood. But that connexion would pass through one or two large estates, and found little favour among the residents of the Lower Loddon Valley.

COST OF PROPOSED RAILWAY.

6. Mr. M. E. Kernot, Chief Engineer for Railway Construction, informed the Committee that there were no engineering difficulties in the construction of either route, the country traversed being flat, and the bridging of the Loddon River not an expensive work. He had therefore made his estimates of cost for a 5ft. 3in. gauge railway in each case. The Inglewood route would strike off in a north-easterly direction from that town, and would continue on that course till crossing the Loddon River and reaching Serpentine, where the line would bear northwards through Jarklan to Durham Ox. The length of this connexion would be $33\frac{1}{4}$ miles, and the estimated cost £123,865, or £3,725 per mile, exclusive of land and rolling-stock, for a line having a ruling gradient of 1 in 66 feet. He stated that the Bridgewater route would have a northerly course on the east side of the Loddon River joining the Inglewood survey at Serpentine and continuing northwards to Durham Ox. This route would be 35 miles in length, and the estimated cost £130,068, or £3,716 per mile, exclusive of land and rolling-stock, for a line having a grade of 1 in 100 feet. Both estimates provided for the use of new 60-lb. steel rails, at an outlay of £1,000 per mile, exclusive of the railway freight on them from Melbourne, and also exclusive of the cost of laying the permanent way. If serviceable second-hand rails became available the estimates would be reduced by about £250 per mile. The earthworks on the Inglewood route were set down at a total of

£12,869, and on the Bridgewater survey at £11,685. Ballast and metalling and gravelling roads and station grounds and platforms were estimated at £12,380 on the Inglewood connexion, and at £14,045 on the Bridgewater line, while the sleepers required for the former were expected to involve an outlay of £17,325, and those for the latter route £18,225, the price being 4s. 6d. per sleeper. On either line a sum of £5,000 was allowed for buildings at five stations, and for eight residences for railway employes. Engineering, supervision, surveys, and general expenses totalled £8,200 on the Inglewood route, and £8,600 on the Bridgewater proposal, while the usual 10 per cent. for unforeseen contingencies ran into £11,179 for the former connexion, and £11,570 for the latter. Towards the end of 1908 Mr. Kernot furnished the Committee with an estimate for a broad-gauge line from Bridgewater to Durham Ox following the same route. He gave the total cost then at £101,500, or £2,900 per mile. At that time the average rate of wage paid to labourers was 7s. per day, while his recent estimate was based on a rate of 9s. During late years the prices of all railway and building materials had also advanced. These increases accounted for the difference in the estimated costs of the work. After visiting the district in 1909 and hearing the evidence of Mr. C. E. Albrecht, engineer of the East Loddon Shire Council, the Committee thought a cheaper line than that suggested by the Construction Branch would meet requirements. It therefore asked Mr. Kernot to personally make an inspection of the Bridgewater route, and, on doing so, he reported that after seeing the country and its character he had made a reduced estimate for the line, providing for an unfenced railway, except at the stations, for the minimum earthworks, second-hand rails, using earth instead of stone or gravel for ballast, and dispensing with all equipments which could be postponed, because the traffic would evidently be light. In that way he brought the estimate of £101,500 down to £73,075, or £2,088 a mile. Mr. Kernot stated that to build a similar light line under the ruling rates of wages and present prices of railway materials the cost would be £90,600, or £2,589 per mile.

REASONS FOR RAILWAY CONNEXION.

7. In 1909 the Committee reported against the construction of a railway from Bridgewater or Inglewood to Durham Ox, it being then stated that there was no likelihood of such a line paying "until the estates in the district have been subdivided, and also until irrigation on a large scale becomes possible around Jarklan and Durham Ox by the extension of the main western channel from the Waranga Basin into that country, bringing with it smaller holdings and increased cultivation." During the recent inquiry it was claimed by the advocates of the proposed railway that both these conditions had now been fulfilled. The Serpentine Estate, of 33,000 acres, which was in course of subdivision in 1909, has since all been settled in holdings of about 600 or 700 acres, while the East Loddon Estate, of 37,000 acres, had likewise been disposed of, mostly in similar-sized farms. Hurstwood Estate, comprising 6,493 acres on the east side of the Loddon River, was acquired in 1910 by the Lands Purchase and Management Board for £31,000 and divided into fourteen dry-farming allotments, while the Elmswood Estate, of 7,300 acres, bordering on Salisbury Bridge, near Serpentine township, had been surveyed into twenty allotments ranging from 100 to 700 acres, and was about to be offered for sale at public auction. The main western channel from Waranga Basin had been completed as far as Serpentine Creek, emptying into that stream at Bear's Lagoon, near Jarklan, thus insuring a permanent supply of water for irrigating the lands suitable for intensive culture around Durham Ox. It was stated that the compulsory charge for water, equal to 6s. per acre foot per annum, levied by the State Rivers and Water Supply Commission on such lands as were considered suitable for irrigation and for which water was available would compel the land-owners to put those areas to better use than grazing or growing cereals, and that a railway was necessary to enable them to profitably market the increased production.

CLOSER SETTLEMENT.

8. Mr. Elwood Mead, Chairman of the State Rivers and Water Supply Commission, when giving evidence before the Committee in August, 1913, said that a dependable supply of water for irrigation in the Durham Ox district, within the Tragowel Plains area, was obtainable from the Waranga Basin for the irrigation season 1912-13. Prior to then the supply of water was drawn from the Loddon River, but it had always been inadequate and unreliable in the summer months, and did not encourage land-owners

to grade their holdings and plant orchards or fodder crops which required summer irrigation. In answering a question as to the likelihood of the State being advised to resume some of the irrigable lands which would be served by the proposed railway to Durham Ox he stated that "owing to the great variation in the quality of soil and the absence of any continuous areas of first class land suitable for intensive cultivation, it is not likely that the Government will, in the near future, resume any of the land in this district for closer settlement. When the channels of the Tragowel scheme were constructed it was with the idea of having only partial irrigation, that is, the irrigation of 1 acre in 5, and to change from this kind of agriculture to that needed for closer settlement would involve the reconstruction of the channels. This does not seem warranted at present." He added that the quantity of water for irrigation could not be increased without enlarging both the Waranga-Loddon main channel and the tributary channels of the district. The re-modelling of these channels was not justified by the demand for water, which had not thus far absorbed the available supply. The variable quality of the soil did not make it a good district for closer settlement. It was better to have closer settlement where larger areas of soil of a uniform character could be obtained.

AREAS OF IRRIGATED LANDS.

9. The State Rivers and Water Supply Commission informed the Committee that there were about 60,000 acres of irrigable land within a radius of 6 miles of the proposed railway through Jarklan to Durham Ox. It furnished the Committee with the following table showing the acreage within that radius irrigated during the last three seasons:—

Crops.	From Tragowel Plains Channels.			From Boort Channels.		
	1911-12.	1912-13.	1913-14.	1911-12.	1912-13.	1913-14.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cereals	9,936	6,198	10,747	831	2,736	3,239
Perennial fodder	197	204	438	8	7	133
Annual fodder	592	2,074	2,176	541	877	957
Natural grass	8,436	7,706	11,995	546	1,018	1,212
Orchards and gardens	41	26	29	28	25	48
Totals	19,202	16,208	25,385	1,954	4,663	5,589

REPORT OF TRAFFIC OFFICER.

10. Mr. C. H. Barber, Traffic Officer, of the Victorian Railway Department, who visited Serpentine, Jarklan, and Durham Ox to report on the probable traffic over the proposed railway, stated that the area to be served by the line was on the east side of the Loddon River to within about 10 miles of the Bendigo and Kerang railway. It contained approximately 180,000 acres. The district was an old settled one, but recently some of the larger grazing estates had been subdivided and portions of the land brought under cultivation. Generally speaking, the soil throughout the district was of good quality, the average yield of wheat available for transport, after deducting seed and poultry requirements, being set down at 15 bushels per acre. The area under crop last season was 22,700 acres, and under fallow 12,000 acres. In the district tributary to the suggested railway the number of live stock was as follows:—Horses, 1,915; dairy cattle, 1,702; other cattle, 3,039; sheep, 80,225; pigs, 304. The total population was approximately 910. In preparing his estimate of traffic he assumed that when the line was opened there would be 33,000 acres under wheat, yielding on the average 15 bushels per acre available for transport. He had, in addition, provided for 500 tons of hay, chaff, and straw being sent by rail out of the district. He estimated that 2,000 tons of the wheat grown on the increased area which would be put under cultivation as the result of nearer railway facilities would be carried over the old lines, and that the remainder produced on that area would be taken by rail only as far as the flour mill

at Bridgewater. The total outwards goods traffic in the case of the Bridgewater-Durham Ox connexion was put down by him at 14,368 tons, and the inwards at 2,475 tons, including groceries, drapery, hardware, and artificial manures. Practically the same tonnage was given for the Inglewood-Durham Ox route. He further stated that he did not see in the district any large quantity of timber to warrant estimating a traffic from that source. What timber was available would be required locally for fencing and firewood. He was unable to agree with the residents that there would be a traffic in firewood for several years. Neither did he share in their expectations that there would be a large traffic in live stock, the local estimate totalling 724 trucks outwards. He had allowed for 265 trucks outwards. The operation of the "local" rate—the minimum charge for carrying live stock over the new line being £1 a truck—would lessen the gathering ground for such traffic, as a number of farmers towards the southern and eastern boundaries of the area considered tributary to this proposed railway, while transporting their grain over the new line, would drive their live stock to the existing trucking stations to save that "local" rate. For instance, it would cost £2 1s. to send a truck of sheep from Serpentine to Berdigo, while the charge from Bridgewater would be but £1 1s. 6d., and from Dingee £1 4s. 6d. The rate from Serpentine to Newmarket would be £4 19s. 6d., from Bridgewater £3 19s. 6d., and from Dingee £4 1s.

ESTIMATES OF WORKING EXPENSES AND REVENUE.

11. The Railways Commissioners furnished the Committee with the following estimates of annual charges and revenue of the proposed railways, based on a mixed train service each way on four days per week, namely, Monday, Tuesday, Thursday, and Saturday:—

INGLEWOOD TO DURHAM OX.

Annual Charges.

Interest at 4 per cent. per annum on £135,859, being cost (£123,865) of constructing 33¼ miles of 5ft. 3in. railway from Inglewood to Durham Ox, at a wage rate of 9s. per day for labourers, with £11,994 added for rolling-stock	..	..	..	..	..	£5,434	7	2
Traffic expenses	..	..	..	..	..	673	13	7
Maintenance charges	..	..	..	..	..	2,278	0	0
Locomotive expenses, including repairs and renewals of rolling-stock..	..	..	..	..	..	1,497	9	11
General charges	..	..	..	..	..	111	4	7
Total annual charges	..	..	..	..	..	£9,994	15	3

Revenue.

(Based on local rates for the carriage of all traffic over the new line.)

	On New Line.			On Other Lines from New Traffic from New Line.						
Passengers	£457	14	0	..	£108	7	6
Parcels	255	0	0	..	..	..	..
Mails	255	0	0	..	..	..	..
Class goods	650	13	4	..	..	..	..
Wool	89	8	0	..	..	..	..
Live stock	334	7	0	..	..	..	..
Manures	59	9	11	..	..	..	..
Grain, hay, straw, and chaff	2,049	13	6	..	399	6	0
All other traffic	50	0	0	..	..	..	..
				£4,201	5	9		£507	13	6
								£4,708	19	3
Estimated loss first year of operation	£5,285	16	0

BRIDGEWATER TO DURHAM OX.

Annual Charges.

Interest at 4 per cent. per annum on £142,062, being cost (£130,068) of constructing 35 miles of 5ft. 3in. railway from Bridgewater to Durham Ox, at a wage rate of 9s. per day for labourers, with £11,994 added for rolling-stock	..	..	..	..	..	£5,682	9	7
Traffic expenses	..	..	..	..	..	697	6	6
Maintenance charges	..	..	..	..	..	2,380	0	0
Locomotive expenses, including repairs and renewals of rolling-stock	..	..	..	..	..	1,534	4	3
General charges	..	..	..	..	..	115	5	9
Total annual charges	..	..	..	..	..	£10,409	6	1

Revenue.

(Based on local rates for the carriage of all traffic over the new line.)

			On New Line.		On Other Lines from New Traffic from New Line.				
Passengers	£493	12	8	..	£108	7	6
Parcels	255	0	0	..	..	..	..
Mails	262	10	0	..	..	..	..
Class goods	683	15	8	..	..	..	..
Wool	94	11	0	..	..	..	..
Live stock	341	16	0	..	..	..	..
Manures	61	17	6	..	..	..	..
Grain, hay, straw, and chaff	2,135	13	0	..	394	6	0
All other traffic	50	0	0	..	..	..	..
			£4,378	15	10		£502	13	6
							£4,881	9	4
Estimated loss first year of operation	£5,527	16	9

REDUCTION IN ANNUAL LOSS.

12. It was explained by the Railways Commissioners that if the suggested train service were limited to three days a week there would be a reduction of £300 in the annual working expenses, but against that decrease would have to be set a loss of part of the revenue from the live-stock traffic through either the Monday or Tuesday service being omitted, the former being the day for forwarding sheep to market, and the latter cattle.

13. If a light unfenced railway with second-hand rails were built, using earth instead of stone or gravel for ballast, as stated by Mr. Kernot, the capital cost would be reduced, in the case of the Bridgewater-Durham Ox connexion, from £130,068 to £90,600. This would enable a saving of £1,579 to be made in the interest charge, and would bring the estimated loss during the first year of operation down to £3,948, or, say, £3,800 if the service were a tri-weekly one, after making a rough allowance for a reduction in revenue due to a loss of part of the live-stock traffic.

COMPARISON WITH THE ESTIMATES OF 1909.

14. Notwithstanding that the estimate of revenue recently made for the Bridgewater-Durham Ox connexion shows an increase of £1,450 compared with that furnished by the Railways Commissioners in 1909, the figures being £4,881, as against £3,431, the anticipated annual loss of £3,800 is approximately £1,000 in excess of that estimated five years ago, the deficit on that occasion being set down at £2,811. This has been brought about by a variety of circumstances. In the first place, the estimated cost of the light line in 1909 was £73,075, compared with £90,600 to-day, thus increasing the interest charge by £701. Then again, on the former occasion the debit made against the proposed line for rolling-stock was only £2,597, while the cost is now put down at £11,994, causing a further increase in the interest charge of £376,

or a total of £1,077, because of the additional capital expenditure on the line and rolling-stock. It was explained by the Railway Department that in 1909 it was intended to utilize a train and crew running on the Bendigo-Korong Vale line to operate the Bridgewater-Durham Ox railway three days a week, and, consequently, only the additional truck stock had been debited against the proposed line; but as that train and crew were not now available, owing to the increase of traffic on the main line and to the re-arrangement of the service thereon, it was necessary to have a separate train and crew for the new railway. Therefore, the full cost of that train, including the locomotive, carriages, and van, had to be charged against the Durham Ox proposal, and also the full week's wages of the engine-driver, fireman, and guard, although the new line would be operated for three or four days only each week. This increased the working expenses by about 100 per cent., and to that had to be added increases in pay recently given to the line repairers and other railway employés, and the extra traffic now estimated requiring a station-master in place of a caretaker in charge. The Committee asked the Department if the train and crew could not be used on the Bendigo-Korong Vale line or on the Inglewood-Dunolly railway on two or three days of each week, and thereby free the Durham Ox connexion of part of the expenses placed on it. A negative reply was received. It was explained that the present train service on those lines was ample for the requirements, and would meet the local needs for some time to come, the percentage of loading on the Bendigo-Korong Vale section being 86·9, and on the Inglewood-Dunolly line 50·7. From the loading point of view it seemed to the Committee as though the train and crew operating the latter line could be utilized to work the proposed railway on three days a week, the remaining three days being occupied in running over the Inglewood-Dunolly section with full loads instead of hauling but half loads as at present. It was stated by the railway authorities, however, that a better service than three days a week was necessary on the Inglewood-Dunolly line to meet the passenger traffic, as it gave the public a connexion between such towns as Inglewood, Dunolly, and Maryborough.

DECISION OF COMMITTEE.

15. The first requirement mentioned by the Committee in its Report of 1909 before railway extension into this district could be recommended, namely, the subdivision of the estates around Serpentine and Jarklan, has been met. But the second essential—irrigation on a large scale in the neighbourhood of Jarklan and Durham Ox, consequent on the completion of the Waranga-Loddon main channel, bringing with it smaller holdings and intensive cultivation—has not been given effect to. Nor, according to the evidence of Mr. Elwood Mead, is closer settlement likely to take place in the near future in this district. The Government is apparently not to be advised for the present to resume any of the irrigable areas for that purpose, nor have the owners of such areas shown any disposition to plant their lands with fruit trees or vines or to subdivide their holdings with the view of settling more cultivators on the soil. As there is no probability of closer settlement on the irrigable lands in this district for some time, and as the Railway Department is unable, under existing circumstances, to provide a train service which could be operated in conjunction with the main or some other line, and so lessen the working expenses of the proposed railway, the Committee considers it inexpedient to connect the districts of Durham Ox and Serpentine in the Loddon Valley with the existing railway system by means of a railway.

16. Section 5 of Act No. 1350 prohibits a member of the Committee taking part in its proceedings when any proposed line running into or through his electoral district is being considered or reported on by the Committee. Consequently the Hon. A. Hicks, M.L.C., did not take part in the deliberations of the Committee when this question was being considered.

E. H. CAMERON,
Chairman.

Railways Standing Committee Room,
State Parliament House,
Melbourne, 24th June, 1914.

[*Minutes of Evidence are not printed.*]