

1859.

VICTORIA.

VICTORIA RAILWAYS.

REPORT

OF

THE ENGINEER-IN-CHIEF,

FOR THE YEAR ENDING 31st DECEMBER,

1858.

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REPORT.

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RAILWAY DEPARTMENT,
21st February, 1859.

SIR,

In forwarding to you a Report of the progress made by this Department in the construction of the main trunk lines of railway, and of the line from Melbourne to Williamstown, during the year 1858, it may not be out of place to state briefly the progress of the railway undertakings during the year 1857, and their position at the commencement of 1858.

As stated in my Report of the 24th November, 1856, addressed to the Honorable Captain Clarke, the then responsible Minister of this Department, great progress was made during the year 1856 in selecting and setting out the permanent lines of railway between Geelong and Ballarat—and Melbourne and Gisborne, on the line to the River Murray—and that a survey was in progress to connect the Yan Yean tramway with the line from Melbourne to Seymour *via* Broadford, surveyed in 1855.

It may be mentioned here that contracts had been entered into for the importation of permanent way materials for one hundred miles of single way, and for the supply of sleepers sufficient to lay a double line from Footscray to the Diggers' Rest, and also for fencing in this part of the main line; the execution of this latter contract was, however, afterwards postponed.

It was also stated in a Report bearing the same date, addressed to the Trustees of the Melbourne and Mount Alexander and Murray River Railway, that as regarded the line from Melbourne to Williamstown the whole of the earthwork, road bridges, culverts, and fencing, and a small part of the ballasting were in progress or completed.

The iron-girder bridges, rails and chairs, machinery for stations, and locomotives and rolling stock, had been contracted for to be delivered from Europe, or to be constructed in Victoria.

The sleepers had been contracted for and were about to be delivered.

The ballasting of a great part of the line, and the laying of the whole of the permanent way, the masonry of the bridges, and the erection of the girders, the completion of the pier at Williamstown, and the formation of the station sites, and the erection of the stations, had not been contracted for.

Owing to failures on the part of some of the contractors to complete their contracts within the specified times, the failure arising in some cases from the great difficulty in procuring timber, and in other instances from their being unable to carry on successfully the works undertaken by them, owing to causes which it is unnecessary in this place to particularize, the progress made on the Williamstown Line was much less than had been anticipated at the beginning of that year, and at the commencement of the year 1858 there still remained a considerable amount of heavy work to be undertaken and brought to completion before the line could be opened throughout for public use. During this year a great part of the permanent way materials were delivered from Europe at Williamstown and Melbourne. It may, however, be stated that on the 26th June, 1857, the Geelong and Melbourne Railway Company opened their railway to the public from Geelong to the

Junction with the Williamstown Line, and on the 17th September the line from the Junction to Williamstown was ready for traffic, although the Geelong and Melbourne Railway Company did not make use of it until the 3rd of October.

The progress made with regard to the trunk lines during the year 1857 may be briefly summed up as follows:—The surveys of the lines from Geelong to Ballarat and from Melbourne to Sandhurst, and from Melbourne to Ballarat, as also the line from Melbourne to Seymour by way of the Yan Yean tramway, were completed. On the 24th November, 1857, the Act was passed to authorize the construction of a main trunk line of railway from Melbourne to the River Murray, and of a main trunk line of railway from Geelong to Ballarat. Consequent upon this, tenders were called for the construction of those lines on the 14th day of December, 1857.

During the year a large portion of the permanent way materials, ordered from Europe for the main lines, were delivered at Williamstown, and were ready for use when required. The contract for the supply of sleepers was also being carried out, the delivery taking place at certain points on the line between Footscray and the Diggers' Rest, so that the sleepers might be ready to be laid wherever wanted.

Having thus brought the proceedings down to the close of 1857, I have now the honor to report the proceedings of the year 1858. The tenders for the construction of the main line, which were invited in 1857, were to be sent in by the 1st February, 1858, but owing to certain postponements authorized by the Minister of Land and Works they were not received until the 24th day of March. In consequence of other delays the tenders were not opened until the 29th of that month, when they were referred to a Professional Board, who were required to report as to the most eligible of the tenders received.

The Professional Board reported in favor of the tender of Messrs. Cornish and Co. for constructing that part of the Melbourne and River Murray Railway between Melbourne and Sandhurst, and that of Messrs. Musson and Co. for constructing the Geelong and Ballarat line; and recommended that the acceptance of any tender for the completion of that part of the Melbourne and River Murray Railway from Sandhurst to Echuca should be postponed "until there was some assurance of the line to Sandhurst being completed within a comparatively limited time, when it might be supposed that the anticipated reduction in the transport of materials arising therefrom, and the increase of population and consequent abundance of labor, which might reasonably be expected within the two following years, would, they were convinced, enable the Government to let the construction of the line from Sandhurst to the River Murray at a very considerable reduction on any of the tenders then before them." The recommendation of the Board having been adopted by the Government, Messrs. Cornish and Co.'s tender for the construction of the Melbourne and Sandhurst Railway, at a cost of £3,356,937 2s. 2d., was accepted—the dates for the completion of the various sections of the line being as follows:

No. 1, or Keilor Plains section, 1st January, 1859.

Nos. 2 to 5, being from the Diggers' Rest to Woodend, 1st January, 1861.

And for sections Nos. 6 to 13, being from Woodend to Sandhurst, 1st January, 1862.

On the foregoing terms Messrs. Cornish and Bruce signed the contract on the 7th of June, stipulating that in consequence of the delay which had arisen in letting the contracts, if found necessary, the time for completing the first section should be extended to the first day of April, instead of the first of January, 1859, so that the time originally contemplated should be allowed for the work. This was verbally acceded to.

Since the date of signing the contract Messrs. Cornish and Bruce have prosecuted the works generally with considerable vigor. They have, however, more especially devoted themselves to opening the line from Footscray to the Diggers' Rest and Sunbury, which they were enabled to do the more readily, that the permanent way materials ordered in 1856 were on the ground and ready for immediate use.

A single line was opened to the latter place, twenty-four miles from Melbourne, by His Excellency the Governor, on the 13th January, in the present year, and trains have run regularly between Melbourne and Sunbury since the 10th instant.

With regard to the other parts of the line, the Contractors have at the desire of the Government, refrained from incurring an expenditure on those sections where the works are light and require but a short period for their completion, and have confined themselves more to the prosecution of the heavier portions of earthworks, as at Sunbury, in the Black Forest, and the approaches to the tunnels at Elphinstone and the Big Hill at Ravenswood.

The Contractors have also been called upon to proceed with those bridges and viaducts on the line which are of a heavy character and require a considerable time for their completion. Hitherto the Contractors have not gone on with this description of work as quickly as might be desired, but they allege that they are preparing the stone in the quarries for the work, and that no delay will take place in opening the line through the present apparent dilatoriness in going on with the masons' work.

I am aware that the Contractors have had difficulties to contend with which have up to this time prevented their going on as fast as could be desired ; but I am not prepared to take these as valid reasons for not proceeding more rapidly, and shall look for their prosecuting during the present year the heavier portions of the works with increased vigor.

Messrs. Musson and Company having failed to comply with the requirements of the Government, after the contract for the Geelong and Ballarat Railway had been conditionally awarded to them, fresh tenders for the construction of that line were invited, and on being opened they were referred to the same Professional Board which had examined and reported upon the tenders formerly received.

The Board reported that the tender of Messrs. Musson and Company was again the lowest, the contract was therefore open to them, but they failing to comply with the conditions of the contract, the next lowest tender, that of Messrs. Evans, Merry and Company, was accepted, for the sum of £1,271,841 12s. 2d., the date of completion being the 31st day of July, 1861.

On these terms the contract was signed by Messrs. Evans, Merry and Little, on the 22nd July, 1858.

The contractors have entered actively upon the construction of the four heaviest sections of this line, namely—

- No. 20, or Cowie's Creek and Moorabool Section.
- No. 24, or Burnt Bridge Section.
- No. 25, or Warrenheip do.
- No. 26, or Ballarat do.

It has been considered desirable, as far as possible, to delay prosecuting the lighter parts of the line, when the works are of an inexpensive character, and require but a short time for completion. I have every reason to believe that if no unforeseen difficulties arise the contractors will have the line completed by the time specified in the contract deed.

As regards the line from Melbourne to Williamstown, the progress made during the year 1858 was, owing to many unforeseen circumstances, very much slower than was desired. By the end of the year, however, all the works were about completed ; and on the 13th January, 1859, the line

was opened by His Excellency the Governor, who, as already stated, on the same day passed over the main trunk line to the Murray as far as Sunbury.

Since the 17th January the trains have run over the line every hour from each terminus with great regularity; although, owing to the main line being opened so much earlier than was originally anticipated, the two lines are being worked with the rolling stock intended for the shorter line only.

This inconvenience will be obviated, however, in a short time, as a contract was entered into with Messrs. Raleighs, Daugleish and Company, on the 11th day of September, 1858, for the importation from Europe of an additional supply of locomotive engines, carriages, and other rolling stock, engine stores and fuel, which will shortly arrive, and render the working of the traffic more effective and economical.

In addition to the rolling stock, the contract with Messrs. Raleighs, Daugleish, and Company includes the supply of a quantity of permanent way materials, machinery, and tools for the trunk lines of railway; and also the iron girders for the Jackson's Creek, Coliban, and Tarradale viaducts, on the Melbourne and River Murray railway, and for the Moorabool viaduct on the Geelong and Ballaarat railway.

During the Parliamentary Session of 1857-8, an Act was obtained for a short deviation in the line of the Melbourne and River Murray Railway in the Black Forest. This deviation was made to avoid some natural obstacles at the foot of Mount Macedon, the carrying the line over which would have been found difficult and expensive; and which a more accurate acquaintance with the locality enabled the Engineer in charge to effect without injuriously affecting the course of the line, and by which the gradients were improved.

During the progress of the inquiry before the Committee of the Legislative Assembly in 1857, an application was made to the Committee by the inhabitants of Kyneton, to have the course of the line between Woodend and Malmsbury so altered as to bring it within, or close to the south boundary of the Town of Kyneton; they, however, failed to get the line altered to meet their wishes—the line as originally laid out by this Department being sanctioned by the Committee, and authorized by Parliament.

Subsequently, in 1858, the inhabitants of Kyneton and the neighborhood sent in a memorial to the Government, requesting that a diversion of the line should be made, commencing at the foot of Mount Macedon, passing to the east of Woodend through Carlsruhe, to the north of Kyneton, and joining the authorized line somewhat to the south of Malmsbury.

Another application from the same locality that a shorter deviation still keeping the line to the south of, but closer to Kyneton was also made, the latter application was unaccompanied by estimates of the cost of the proposed alteration.

The advocates of the deviation to the north of Kyneton furnished plans, sections, and estimates, of the cost of their proposed line; but which, as it was unaccompanied by a comparative estimate of the corresponding portion of the authorized line calculated upon the same basis, was valueless for the purpose for which it was intended.

The comparative estimate of the two lines, based on the contract prices of Cornish and Bruce, by which only can any deviation be carried out, shew a result in favor of the authorized line of £51,318, and it is also 34 chains shorter than the proposed deviation to the north of Kyneton.

In reference to this, I have the honor to state that it is highly desirable that a final decision upon the deviations proposed should be arrived at without delay, as the construction of the northern end of section 5 must be postponed until it is settled whether the line is to be taken on the north or the south of Kyneton; and which portion of section 5 the Contractors are bound to complete twelve months earlier than the sections beyond.

The line from Sandhurst to Echuca has now been permanently set out, and the surveys completed; the specifications, drawings, quantities, and

schedules, will be prepared with all convenient dispatch so that the work may be advertised for a considerable period previous to being let.

During the last five months only one party has been employed in finishing the survey of the line to Echuca, as when the works commenced the services of those engineers, who had been employed in setting out the lines, were required and made available for superintending their construction.

The surveys of the line to the Murray being now completed the survey party latterly employed thereon has been removed to Ballarat, and will be employed in selecting the best route for a line of railway towards Raglan, Ararat, and the Western Districts, in accordance with the desire of the Committee of the Legislative Council as expressed in their report of the 27th October, 1857.

Before concluding this report I have to observe that the work at present completed has been done within the Estimates, and as regards the trunk line for less than the contract amount, and I have every hope that a similar result will attend the completion of the whole of the sections of the trunk lines. This result may probably be received as evidence of the reliability of the original estimates, and also a shewing a desire on the part of this department not only to avoid exceeding, but, if possible, to keep within the original contract amounts.

I have the honor to be,

Sir,

Your obedient servant,

GEO. C. DARBYSHIRE,
Engineer-in-Chief.

The Honorable
The Commissioner of Public Works.

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SIR,

Railway Department,
Melbourne, 13th May, 1859.

Referring to that paragraph in my Report for the year 1858, in which I alluded to the cost of constructing the trunk lines being less than the sum for which the contracts had been taken, I have now the honor to report, that the actual sum expended upon the first section of the Melbourne and Sandhurst railway, up to the present date, is one hundred and seventy-six thousand four hundred and thirty-three pounds nine shillings and tenpence (£176,433 9s. 10d.), as against two hundred and fifteen thousand two hundred and sixty-five pounds two shillings (£215,265 2s.), at which the contract was let, thus showing a reduction of thirty-eight thousand eight hundred and thirty-one pounds twelve shillings and twopence (£38,831 12s. 2d.); but there has been expended on station works and sidings (including the south junction at Footscray), not comprised in the original contract, eleven thousand eight hundred and ninety-one pounds fifteen shillings and threepence (£11,891 15s. 3d.); thus showing an actual difference of fifty thousand seven hundred and twenty-three pounds seven shillings and fivepence (£50,723 7s. 5d.), which, in fact, may be considered a saving to that amount, as it is available and will be required for additional sidings and station accommodation, the funds for which must otherwise have been taken from the general fund provided for the construction of trunk lines of railway.

I have the honor to be,

Sir,

Your most obedient servant,

GEO. C. DARBYSHIRE,
Engineer-in-Chief.

The Honorable G. S. W. Horne,
Commissioner of Public Works.