

1879.

VICTORIA.

VICTORIAN RAILWAYS.

REPORT

OF THE

BOARD OF LAND AND WORKS

FOR THE YEAR ENDING 31st DECEMBER.

1878.

PRESENTED TO BOTH HOUSES OF PARLIAMENT BY HIS EXCELLENCY'S COMMAND.

By Authority:

JOHN FERRES, GOVERNMENT PRINTER, MELBOURNE.

APPROXIMATE COST OF REPORT.

	£	s.	d.
Preparation, Lithographing, &c.—Not given.			
Printing (1,800 copies)	102	10	0

R E P O R T.

DEPARTMENT OF RAILWAYS,

Melbourne, 25th June 1879.

To His Excellency the Governor in Council.

MY LORD,

I have the honor to submit to Your Excellency the Report of the Board of Land and Works on the proceedings of the Department of Railways during the year 1878, together with sundry accounts and returns showing the progress made with works of construction, the Revenue and Expenditure for the year, &c., &c., to which I respectfully beg to draw Your Excellency's attention.

DEBENTURE CAPITAL.

No addition to the Debenture Capital took place during the year, but on the 30th September last a Bill authorizing a further loan of £5,000,000 received the sanction of both Houses of Parliament. Act No. 608.

Of this amount, £4,152,235 was to be set apart for the purposes of Railway extension and completion, and to repay sums advanced on Railway Construction Account, by means of votes from the Consolidated Revenue.

The following extract from the Second Schedule to the Loan Act will show the purposes to which the portion set apart for Railways was to be devoted:—

Act No. 608, Second Schedule.

	£
Item 1. Towards the purchase of the undertaking and property of the Melbourne and Hobson's Bay United Railway Company ...	1,043,520
„ 2. For the Construction of Railways already authorized by Parliament ...	150,000
„ 3. Rolling-stock for Railways ...	180,000
„ 4. For Railway Station at Melbourne, and other works connected with Railway extension, as Parliament may by any Act direct ...	150,000
„ 5. For repaying the Consolidated Revenue certain sums expended and to be expended on Railways and other public works ...	128,715*
„ 6. For the Construction of such State Railways and works connected therewith as Parliament may by any Act direct ...	2,350,000
	£4,152,235

* Railway proportion of £229,480.

The amount of indebtedness on Railway Account for moneys borrowed still remains as at the date of my last Report, £13,503,693, with a total yearly charge for interest of £732,217 14s. 5d., equal to £5 8s. 5³/₄d. per cent.

The net Revenue of the year, after providing for all maintenance and renewals of way, works, stations, rolling-stock, &c., and all and sundry expenses of working and administration, amounted to £590,976 2s. 6d.

This leaves £141,241 11s. 11d. to be met by the Consolidated Revenue, for the purpose of liquidating that portion of the interest not recouped by the net revenue derived from the lines.

The net revenue of the year is equal to 4.376, or £4 7s. 6d., per cent. upon the total capital borrowed, being an improvement upon last year's results of 0.356 per cent.

The total cost of construction, including the non-interest bearing moneys expended, was, however, £15,343,240 6s. 2d., and on this the net revenue paid was 3.85, or £3 17s., per cent.

To show the actual results of the year's work, however, it will be necessary to eliminate from the expenditure on construction all moneys which had been spent on lines not opened for traffic at 31st December last, a proportionate amount from such other lines as were only open during a portion of the year, and half the cost of the bridge over the Murray at Echuca.

The total of these deductions approximately amounts to £438,000, after allowing for which, the net revenue gives a return upon the capital productively employed, of, as nearly as possible, 4 per cent.

Until last year, and as stated in previous Reports, the Department had never received credit for the interest allowed by the associated banks on the balances of the loan moneys deposited with them, or lying to the credit of the Public Account, although it has been faithfully debited with every penny of the interest paid to the bondholders.

During 1877, as shown in my last Report, a sum of £39,018 2s. 6d. was credited to the Railways by the Treasury on account of interest allowed by the banks on Loan moneys deposited with them; but this is only one item of what must in the aggregate amount to a very considerable sum, and, as it is only fair that the Department should receive credit for all interest received on unspent balances of the Railway Loans, as well as be debited with the interest payable to the bondholders, an attempt is being made to obtain from the Treasury full particulars of such interest, so that in its accounts the Department may be duly credited with the same.

There is no doubt but that such interest reduces considerably the amount to be made good annually by the Consolidated Revenue on account of the railways, and I trust in my next to be enabled to lay before Your Excellency a complete statement in this respect, and thus to show (as is only fair) that the loss sustained by the difference between the net revenue derived from working the lines, and the amount payable for interest on the borrowed capital, is much less than has hitherto been shown by the accounts.

CAPITAL ACCOUNT.

Return No. 6. The total expenditure on Capital Account reached, at the 31st December last, a sum of £15,343,240 6s. 2d., exclusive of a further sum of £170,006 15s. 9d., the value of the unused plant and materials available for purposes of further construction, or completion of those lines still in progress.

The expenditure incurred during 1878 amounted to £780,255 19s. 8d., and the following will show in detail the various heads under which the expenditure took place :—

		<i>General.</i>			
Sheds and Workshops, Melbourne	£950	13	3	...	Additions to Workshops.
" " Williamstown	1,562	0	5	...	Ditto.
New Lines to Dock, &c., "	146	5	10	...	
Machinery, Tools, &c., "	1,900	18	0	...	
General Construction Account	2,512	6	9	...	Administrative charges.
" " ...	7,481	14	0	...	{ Loss on sale of old and useless plant, &c.
Continuous Brake ...	1,681	9	1	...	
Engineer-in-Chief's Offices ...	507	1	2	...	{ Alterations and additions to offices.
Exchange and Discount Account	306	16	10	...	{ Exchange on remittances to London.
Fitting up Williams's Workshops	134	18	6	...	
Proposed Locomotive Workshops, Williamstown Junction ...	13	0	0	...	
Total General Account ...	...	...	...	£17,197	3 10

Northern System.

Melbourne Station	45,166	10	8	...	See page 6.
Main line to Sandhurst	3,187	14	8	...	Completing line.
Echuca line	9,387	1	0	...	Echuca station, wharf, &c.
Castlemaine and Dunolly line	1,034	5	1	...	Completing line.
Ballarat and Maryborough line	1,020	13	10	...	Ditto.
Maryborough and Avoca line	1,162	4	6	...	Ditto.
Sandhurst and Inglewood line... ..	500	6	1	...	Ditto.
Dunolly and St. Arnaud line	104,706	10	7	...	Construction of line.
Carlsruhe and Daylesford line... ..	3,551	5	10	...	Ditto.
Total Northern System ... ..	...	169,716	12	3	

Western System.

Williamstown line	7,513	17	10	...	Construction of Western pier, &c.
Geelong and Melbourne line	4,861	9	6	...	Additions and alterations, Geelong station, &c.
Geelong and Ballarat line	2,911	6	3	...	Additions to Ballarat station, &c.
Ballarat and Ararat line	3,635	1	11	...	Completing line.
Ararat and Stawell line	936	9	1	...	Ditto.
Ararat and Hamilton line	19,181	7	5	...	Construction of line.
Geelong and Colac line	30,672	18	1	...	Ditto.
Portland and Hamilton line	36,598	6	6	...	Ditto.
Stawell and Horsham line	127,844	11	6	...	Ditto.
Geelong and Queenscliff line	36,610	1	3	...	Ditto.
Warrenheip and Gordons line	20,970	1	5	...	Ditto.
Total Western System ... ..	...	291,735	10	9	

North-Eastern System.

Essendon line	627	4	8	...	Additional station accommodation, &c.
North-Eastern line	10,819	3	3	...	Ditto.
Wangaratta and Beechworth line	1,397	19	0	...	Completing line.
Springs and Wahgunyah line	33,151	4	5	...	Construction of line.
Avenel and Shepparton line	6,645	6	7	...	Ditto.
Total North-Eastern System ... ..	...	52,640	17	11	

Eastern System.

Oakleigh to Sale line	77,742	1	7	...	Construction of line.
South Yarra and Oakleigh line	38,835	6	6	...	Ditto.
Spencer and Flinders streets Connection	156	6	8	...	Surveys and plans.
Total Eastern System ... ..	...	116,733	14	9	

Rolling-stock.

Engines	42,986	10	7	...	{ Completing 9 engines, and payments on 19 in course of construction. Completing 10 passenger vehicles and 390 wagons, &c., and payments on 18 passenger vehicles and 145 wagons, &c., in course of construction.
Carriages, Wagons, Vans, &c.	73,826	9	2	...	
		116,812	19	9	
Preliminary Surveys... ..	...	2,103	6	0	Trial surveys of lines not authorized.
Murray River Bridge (Echuca) ... ..	...	13,315	14	5	Half to be paid by N.S.W. Government.
Total Expenditure for the year 1878	£780,255	19	8		

The items comprised in the foregoing which call for more than a passing remark are those of the

MELBOURNE STATION,

£45,166 10s. 8d., and rolling-stock, £116,812 19s. 9d.; the remaining expenditure being generally for the construction of lines authorized by Parliament, and which were, during the year past, in progress.

The expenditure upon the additions and alterations to the Melbourne terminus is thus divided :—

Additions and alterations to the station yard,	
signals, platforms, &c., &c.	£24,985 15 4
Additions to timber station at lower level ...	5,649 4 11
Embankments, &c., in connection with new	
goods station and approaches, silt works, &c. ...	14,531 10 5
Total	£45,166 10 8

I stated in my Report for 1877 that it was my intention, as far as practicable, to have all the alterations and additions made in accordance with the general plan of the station adopted by me, a copy of which appeared in the Appendix to that Report.

This has been carried out as far as the works have progressed, and although much necessarily remains to be done, sufficient advancement has been made with the work to enable trains to leave or enter the Melbourne station in safety, which twelve months ago was almost an impossibility.

The large number of shunters, pointsmen, yardsmen, &c., has disappeared, and the expense connected with them, and in their stead three signal-boxes fitted with McKenzie and Holland's patent interlocking apparatus have been erected, which easily and effectively control every movement in the yard, whether of ordinary trains or shunting, with the chances of accident reduced to a minimum. The savings in the cost of employing a special shunting engine, together with the wages of the men above referred to, amount to £4,108 per annum, irrespective of other contingent savings consequent on the reduced wear and tear of the permanent way, &c.

The additions to the timber station (known as the "lower-level sidings") have been rendered necessary by the alterations required in the goods station yard, and the increase in the timber and firewood traffic. On these sidings, 175 allotments had been leased on 31st December last, at an aggregate yearly rental of £1,338 10s., or 18·23 per cent. upon their total capital cost of £7,343 8s. 6d.

Having in view the low rate at which firewood is carried by the Department, it is the more satisfactory to find that the leasing of these allotments gives a good return upon the capital expended upon their construction.

In order to carry out the plan of the goods station yard, and to obtain the required room at a proper level, it has been found necessary to continue the extension of the embankments on the western side, and for this purpose all the available spoil in and around the station has been made use of, and the arrangement with the Harbor Trust as to the silt dredged by them from the River Yarra, and noticed at page 7 of my last Report, has been continued.

The enormous amount of earth required, however, necessitated some cheaper and more expeditious plan of obtaining spoil for the purpose, than either cutting down rocky banks, or hauling silt from the river bank, which latter also contained a large proportion of water; and to this end it was at first proposed to purchase a block of ground near the Melbourne Racecourse, consisting of about ten acres, at a cost of about £2,000.

The proposed method of procedure, had this course been adopted, was to remove the whole of the hill of which the land consisted, with the exception of the surface-soil, and after bringing the whole of the block to nearly one common level; only leaving sufficient slope for drainage, to re-spread the surface soil over the whole area and re-sell the land.

In the meantime some trial shafts put down in the swampy ground on the western side of the station reserve, in order to test the fitness or otherwise of the soil for the purposes required, revealed the fact that it was of a nature specially fitted for the work, and obtainable at a much less cost per cubic yard than either the silt or any land along the line of railway.

The cost of its removal also would necessarily be much less, as the material was close to where it was required, and a line on which to carry it already existed on the ground in the shape of the silt line.

I therefore determined to obtain the necessary spoil for the extension of the station embankments from this source, and to this effect a large side-cutting pit has been commenced.

In order to utilize to the fullest extent the labor employed upon this side-cutting pit, I gave directions that the excavation should be made in the form of the dock shown on the plan of the new Melbourne station attached to my last Report, so that while the spoil is being obtained more cheaply than hitherto, the excavation also can be further utilized at any future time should it be deemed advisable to construct a railway dock on the station reserve.

About 505,374 cubic yards have been used in connection with the embankments referred to, and the reclamation of land on the reserve, and the following will show as nearly as possible the sources from which this quantity was obtained and the cost per cubic yard of each :—

	Cubic yards.		Cost per c. y. (Approximate.)	
			s.	d.
Wet silt from Harbor Trust dredges	165,522	222,404	1	3
Dry silt from Harbor Trust dredges	56,882			
Spoil from cuttings between Melbourne and North Melbourne ...	24,528	74,430	1	6
Spoil from La Trobe street cutting	49,902			
Spoil from side-cutting pit on station reserve for station embankments	169,914	208,540	1	0
Spoil from side-cutting pit on station reserve to reclaim land near gas works	38,626			
		505,374		

The total area of the land reclaimed by means of spoil taken from the side-cutting pit is about 9 acres, exclusive of the land made available for the requirements of the Melbourne station. The number of workmen employed upon this excavation, and the removal and deposit of the spoil, averages about 400.

ROLLING-STOCK.

The amount expended under this head was—

For Engines	£42,986	10	7
And for Wagons, Vans, Carriages, &c. ...	73,826	9	2
Making a total of	£116,812	19	9

The additions in 1878 were 28 engines, 28 passenger vehicles, and 535 goods and other vehicles, inclusive of such as were in course of construction but not completed at 31st December.

But there were also added during the year 104 more miles of line; the whole of which were opened for traffic at the end of the year, and it will be seen, therefore, that, notwithstanding all the efforts of the Department, the rolling-stock is still far from adequate to the requirements of the lines, and is in fact considerably behind what it

was in 1876, and only slightly improved as regards the stock of engines and goods vehicles as compared with last year.

As regards passenger vehicles, the lines are more poorly equipped than ever, as will be seen by a glance at the column headed "Number per line mile" in the following table :—

Date.	Miles Open.	Engines.			Passenger Vehicles.			Goods Vehicles.		
		Total Number.	Number per Line Mile.	Train Miles run per Engine.	Total Number.	Number per Line Mile.	Train Miles run per Passenger Vehicle.	Total Number.	Number per Line Mile.	Train Miles run per Goods Vehicle.
1876 ...	702	124	0·176	20,367	258	0·367	9,789	2,146	3·057	1,177
1877 ...	931	139	0·149	20,048	276	0·296	10,097	2,318	2·490	1,202
1878 ...	1,035	167	0·161	18,536	304	0·293	10,182	2,853	2·756	1,085

In drawing Your Excellency's attention to the above, I can only reiterate the remarks made by me on this subject, at page 9 of my last Report, and again state that a considerable sum is necessary for the proper equipment of the lines. The £180,000 authorized by Parliament in the Second Schedule to the Loan Act No. 608 will meet this urgent want to a great extent, whenever such moneys become available; but at present the revenue derivable from the working of the traffic is kept down from want of sufficient stock to cope with the steadily increasing tonnage of goods requiring conveyance.

This subject has been so fully set forth and dealt with in the Reports for 1876 and 1877 respectively, and has been at various times so thoroughly brought under the notice of Parliament in different ways, that to dwell upon the subject further is I feel unnecessary.

NEW LINES.

During the past year the following new lines of railway were duly sanctioned by Acts of Parliament :—

1878.	No. of Act.	Line.	Length.			Rate per Mile.
			Miles	chs.	lks.	
1st August ...	42 Vict., 603 ...	Goulburn Valley Railway ...	45	20	64	£ 5,750
26th August ...	42 Vict., 604 ...	South Yarra and Oakleigh...	6	63	93	25,000
9th September ...	42 Vict., 606 ...	Carlsruhe and Daylesford ...	22	20	77	6,775

The following contracts for construction of lines authorized were let by tender during 1878, at the various dates shown :—

Dates, 1878.	Line.	No. of Act.	Length.			Amount.	Contractors.	Amount per Mile.
			Miles	chs.	lks.			
2nd Mar.	Dunolly and St. Arnaud ...	580	32	79	68	£ 71,974 0 8	Monie and Mattinson ...	£ 2,181
18th Mar.	Stawell and Murtoa } ...	580	53	40	70	118,271 13 6	D. Leslie and Co. ...	2,210
18th Mar.	Murtoa to Horsham }							
20th July	Springs to Wahgunyah ...	580	13	76	83	30,463 11 3	Fishburn and Morton ...	2,182
21st Aug.	Geelong to Queenscliff ...	580	20	56	85	58,977 7 6	Topham, Angus, and Smith	2,848
13th Sept.	Warrenheip to Gordons ...	580	13	5	82	40,901 12 4	King and Co. ...	3,129
24th Sept.	South Yarra to Oakleigh ...	604	6	63	93	48,868 4 2	J. F. Higgins and Co. ...	7,188

Of the foregoing, the only one which calls for special comment is that from South Yarra to Oakleigh, a distance of nearly seven miles.

This extension will form, with the aid of that portion of the late Melbourne and Hobson's Bay United Railway comprised between South Yarra and Melbourne,

the connecting link between the metropolis and the Gippsland line, or the Eastern system, at Oakleigh.

In the remarks upon the revenue accounts of this system, it will be found that the extensions of this line and the increased facilities for traffic have been duly followed by largely increased revenue ; and it may fairly be assumed that the still greater facilities for traffic which will be afforded by the stations of this system being brought into direct communication with Melbourne, will result in a further considerable accession to its revenue.

For the purposes of construction of this extension Parliament sanctioned the expenditure of a sum not exceeding £25,000 per mile.

This large expenditure was rendered necessary from the following causes :—

First. The high value of land in the suburbs through which this line was to pass.

Second. The number of road-side stations, averaging one to each mile.

Third. The expense of preparing a portion of the Flinders-street Terminus, on the eastern side of Prince's Bridge, for the dispatch and reception of passengers and goods, without which the line would have been incomplete, as the traffic could not be carried by the Government rolling-stock, under the approach to Prince's Bridge, to the Hobson's Bay Railway Station ; neither would that station have furnished the requisite accommodation.

There now remains but one other link to be added, viz., that between Spencer and Flinders streets stations, to unite the *Southern-Suburban* and Eastern systems with the rest of the lines in the colony.

The advantages of this being done are so obvious, both to the Department as regards the interchange of rolling-stock, and to the public as regards the convenience of passengers and the facilities for goods and live stock traffic, that, in my opinion, it cannot be completed too soon.

REVENUE ACCOUNT.

The gross Revenue earned by all lines during 1878 amounted to £1,216,675 4s. 10d., being £80,876 12s. 10d. in excess of that for 1877.

The average miles open for traffic during 1878, however, exceeded those of 1877 by 180 miles, and the remarks which appeared in my last Report, to the effect that the increase of Revenue does not keep pace with the increased length of mileage opened for traffic, will again apply with increased force to the results of the year under review, as the following table will show :—

TABLE showing the Gross Earnings, Working Expenses, and Net Earnings, per Mile, for the last Five Years.

Year.	Average Miles Open.	Earnings per Mile.	Expenses per Mile.	Net Profits per Mile.
		£	£	£
1873-4 ...	414	2,056	905	1,150
1874-5 ...	541	1,701	890	810
1875-6 ...	608	1,636	821	815
1877 ...	787	1,443	753	690
1878 ...	967	1,258	647	611

It will be seen from the foregoing that while in 1877, with an average increased length of 179 miles above that which was open for traffic in June 1876, the decrease in the receipts was £193 per mile per annum, as stated in my last Report.

In 1878, with an increased length of 180 miles over that of 1877, a decrease in the receipts took place to the further extent of £185 per mile open.

The details of the increase of £80,876 12s. 10d. are thus shown :—

	1877. (787 miles.)			1878. (987 miles.)			Increase.			Decrease.			
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	
Passengers	378,118	9	3	424,504	5	3	46,385	16	0				
Parcels, &c.	30,470	11	9	28,665	11	8				1,805	0	1	
Horses, Carriages, and Dogs	12,727	8	5	13,881	6	5	1,153	18	0				
Mails	22,143	5	8	29,449	1	8	7,305	16	0				
Rents	12,323	7	8	13,774	6	3	1,450	18	7				
Miscellaneous	4,675	17	11	5,076	2	0	400	4	1				
Live Stock	56,481	14	2	52,480	17	2				4,000	17	0	
Goods	618,857	17	2	648,843	14	5	29,985	17	3				
	1,135,798	12	0	1,216,675	4	10	86,682	9	11		5,805	17	1
	Net Increase										80,876	12	10

It will be observed from the preceding figures that there has been a general increase in every branch of traffic with the exception of the items of parcels and live stock.

In the former the decrease is owing to the large reductions made in the rates for carriage of parcels, by the bye-law of the 13th December 1877, which came into operation on the 1st January 1878, and a copy of which was attached to the last Report. (*Vide* Appendix to Report of 1877, pages 51-2.)

The decrease in the revenue derived from the carriage of live stock is attributable principally to the long drought, extending during the past year over the greater portion of the Australian continent, and in a lesser degree to the Stock Tax, which has, to some extent, diverted that branch of traffic from Melbourne to Sydney.

In the case of the parcels traffic, it is hoped that the facilities given for their carriage, together with the reduced rates, will give such an impetus to this branch of the Railway Revenue as will soon more than compensate for the present trifling loss, and result in a largely increased business, and consequent receipts. If, however, this branch of the business does not improve shortly, it will be necessary to revise the rates, so as to render them remunerative.

The expenditure on working expenses amounted to £625,699 2s. 4d., or 51·43 per cent. of the receipts.

In this sum is included, in addition to the ordinary expenditure for maintenance of way, works, stations, and repairs of rolling-stock, &c., all amounts expended on renewals, together with the various sums paid as compensation to officers of the working branches whose services were dispensed with; also, all the cost and charges of remodelling the Stores Branch, having the whole of the stock thoroughly taken, properly arranged and classified, and its value accurately ascertained, and the useless and obsolete articles disposed of by auction or tender.

In fact every item of expenditure not strictly chargeable to capital account has been faithfully charged against the Revenue, and with this result, that the working expenses for 1878 were 0·73 per cent. lower than they were in 1877.

The following shows that this reduction took place in the Maintenance Branch :—

	PERCENTAGE TO REVENUE.			
	1877.	1878.	Increase.	Decrease.
Maintenance	14·67	12·77	...	1·90
Loco. Charges	15·94	16·83	0·89	...
Traffic Charges	20·26	20·43	0·17	...
General Charges	1·29	1·40	0·11	...
	52·16	51·43	1·17	1·90
	Net Decrease		0·73	...

While, however, the foregoing shows the maintenance as having been kept up at a smaller cost in proportion to the revenue earned, it must be borne in mind that the cost of working the various branches is affected more by the amount of work done than by the revenue earned, as it is evident that the expenditure would still remain if the work were performed for nothing.

The succeeding return will show how each branch was worked in proportion to the work performed :—

	Cost per Train Mile.		Increase.	Decrease.
	1877.	1878.		
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Maintenance	1	2·35	1	0·05
Loco. Charges	1	3·59	0	0·29
Traffic ditto	1	7·82	1	7·27
General ditto	0	1·27	0	0·05
	4	3·03	4	0·52
Net Decrease		...	0	2·51

The net Revenue, after providing for all working expenditure, was £590,976 2s. 6d.

The number of passenger journeys made, including holders of periodical tickets, was 3,829,255½, being an increase over 1877 of 433,547, as shown by the following table :—

System.	1877.		1878.		Increase.		Decrease.
	Average Miles Open.	Passengers.	Average Miles Open.	Passengers.	Average Miles Open.	Passengers.	
Northern	291	799,323½	296	777,454	5	...	21,869½
Western... ..	253	1,895,186	348	2,178,056½	95	282,870½	...
North-Eastern	210	683,168½	210	774,888½	...	91,720	...
Eastern	33	18,030½	113	98,856½	80	80,826	...
	787	3,395,708½	967	3,829,255½	180	455,416½	21,869½
Net Increase		...	...	...	...	...	433,547

The average distance travelled by each passenger was 23·21 miles, at an average revenue of 2s. 2·61d., or at the rate of 1·15d. per mile.

The goods carried totalled 3,829,256 tons, carried an average distance of 65·47 miles, at an average rate of 13s. 11·37d., equal to 2·56d. per ton per mile.

The train mileage, including special trains, totalled 3,095,590 miles, being 309,009 in excess of 1877.

The piloting and shunting represented 670,917 miles, or a gross total of 3,766,507 miles.

NORTHERN SYSTEM.

This system has been increased in length during the past year by the addition of the line from Dunolly to St. Arnaud, a distance of 33 miles.

As, however, this extension was only open from Dunolly to Bealiba, 12 miles, from September the 3rd, and from Bealiba to St. Arnaud, 21 miles, from December 23rd, the average extra length of line open in 1878 above that of 1877 was 5 miles only.

The gross revenue earned was £512,953 4s. 5d., showing a falling off, as compared with 1877, of £10,532 18s. 10d.

The decrease has taken place in the revenue derived from the carriage of passengers, parcels, and live stock, as the following will show :—

	1877. (291 miles.)			1878. (296 miles.)			Increase.			Decrease.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Passengers	157,294	10	9	154,372	1	10				2,922	8	11
Parcels, &c.	13,755	11	7	10,339	7	3				3,416	4	4
Horses, Carriages, and Dogs	5,552	6	3	5,173	7	9				378	18	6
Mails	7,599	1	8	7,715	7	6	116	5	10			
Rents	4,822	7	11	5,415	16	7	593	8	8			
Miscellaneous	2,030	14	5	2,006	1	5				24	13	0
Live Stock	41,424	16	4	29,513	14	7				11,911	1	9
Goods	291,006	14	4	298,417	7	6	7,410	13	2			
	523,486	3	3	512,953	4	5	8,120	7	8	18,653	6	6
Net Decrease							10,532	18	10			

The working expenses amounted to £241,000 3s. 4d., being equal to 46·98 of the receipts, or at the rate of 2·50 per cent. lower than in 1877.

This low rate of working, as compared with the previous year, has more than counterbalanced the falling off in the receipts, as the balance of profit, after paying all working expenses, is £271,953 1s. 1d., as against £264,436 6s. 5d. in 1877, or a difference in favor of 1878 of £7,516 14s. 8d.

The average earnings per mile have fallen from £1,797 to £1,734.

The reduction in the expenditure is owing entirely to the decrease in the Maintenance Account, the heavy renewals made during 1877 having naturally the effect of lightening the charges in this respect during the past year.

The following will show the expenditure under the different branches for the two years :—

	1877.			1878.			Increase.			Decrease.		
	Amount.	Cost per Train Mile.	Per Cent. to Revenue.	Amount.	Cost per Train Mile.	Per Cent. to Revenue.	£	s.	d.	£	s.	d.
Maintenance	75,105 13 9	1 2·93	14·35	55,460 10 0	0 11·24	10·81				19,645 3 9		
Loco. Charges	81,089 6 8	1 4·12	15·49	82,664 14 11	1 4·76	16·11	1,575	8	3			
Traffic ditto	96,079 5 11	1 7·11	18·35	95,715 19 2	1 7·49	18·66				363	6	9
General ditto	6,775 10 6	0 1·35	1·29	7,158 19 3	0 1·45	1·40	383	8	9			
	259,049 16 10	4 3·51	49·48	241,000 3 4	4 0·85	46·98	1,958	17	0	20,008	10	6
Net Decrease							18,049	13	6			

The train miles run were 1,184,012.

The number of passenger journeys made were 777,454, or 21,870 less than in 1877.

The decrease of live stock carried was 6,776 tons, the figures for the two years being—1877, 22,984 tons; and 1878, 16,208 tons.

The goods tonnage was 351,203 tons.

The revenue per train mile run averaged 8s. 7·98d., and the expenses 4s. 0·85d.

The total cost of the 324 miles of line included in this system was—at the 31st December, £6,476,487 1s. 10d., and on this, the net revenue of the year (£271,953 1s. 1d.) was equal to 4·20 per cent.; but as £112,975 was expended on the

Dunolly and St. Arnaud and Karlsruhe and Daylesford lines, of which £98,000 was not remuneratively employed at 31st December, the capital cost will thus be reduced to £6,378,487, showing a return of 4.26 per cent.

WESTERN SYSTEM.

A considerable extension of this system has taken place during the past year, the total length at 31st December last being 383 miles, as against 343 at the close of 1877.

But as a considerable length of the 343 miles was only opened towards the end of 1877, it follows that there is a still greater increase in 1878 in the average mileage open for traffic when compared with 1877.

The average length in 1877 was 253 miles only, whereas in 1878 the average was 348 miles, so that, although there was only an increase in length of 40 miles during 1878, the average length worked was 95 miles in excess of 1877.

The gross revenue amounted to £391,091 15s. 4d., being an increase over the previous year of £45,796 11s. 6d.

The average amount earned per average mile open, however, decreased from £1,365 to £1,125.

This is accounted for by the fact of the extensions between Ararat and Portland, and Geelong and Colac, representing 170 miles of line passing through very thinly populated districts, and consequently reducing the average earnings per mile.

The following gives the items showing the increase and decrease alluded to :—

—	1877. (253 miles.)			1878. (348 miles.)			Increase.			Decrease.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Passengers ...	142,598	4	4	166,624	19	9	24,026	15	5	...	...	...
Parcels, &c. ...	10,290	16	0	10,167	15	8	...	...	...	123	0	4
Horses, &c. ...	4,222	18	3	4,572	19	1	350	0	10	...	...	...
Mails ...	6,472	5	4	11,097	1	10	4,624	16	6	...	...	...
Rents ...	4,714	14	10	4,898	16	5	184	1	7	...	...	...
Miscellaneous ...	2,320	9	11	2,817	16	3	497	6	4	...	...	...
Live Stock ...	4,419	16	6	9,702	6	6	5,282	10	0	...	...	...
Goods ...	170,255	18	8	181,209	19	10	10,954	1	2	...	...	...
	345,295	3	10	391,091	15	4						
	Net Increase			...	...	...				45,796	11	6
							45,919	11	10	45,919	11	10

The expenditure amounted to £225,908 5s. 9d., or 57.76 per cent. of the receipts.

The details of the items showing the increase of expenditure over 1877, and amounting to £28,254 6s. 2d., are given in the subjoined table :—

—	1877.				1878.				Increase.		
	£	s.	d.	Per Cent. to Revenue.	£	s.	d.	Per Cent. to Revenue.			
Maintenance ...	57,890	16	9	1 4.07	59,680	14	7	1 1.17	1,789	17	10
Loco. ...	57,202	6	11	1 3.88	70,475	1	10	1 3.55	13,272	14	11
Traffic ...	78,092	15	3	1 9.67	90,306	18	2	1 7.92	12,214	2	11
General ...	4,468	0	8	0 1.24	5,445	11	2	0 1.20	977	10	6
	197,653	19	7	4 6.86	225,908	5	9	4 1.84	28,254	6	2

The train miles run amounted to 1,087,898, at an average cost of nearly 4s. 2d. per mile.

The number of passenger journeys made amounted to 2,178,056 $\frac{1}{2}$, being an increase of 282,870 $\frac{1}{2}$ on that of 1877.

Of live stock, 6,001 tons; goods and general merchandise, 367,988 tons, were carried during the year on the lines comprised under this system.

The cost of construction at the 31st December 1878 amounted to £4,654,861 5s. 6d., and on this the net revenue of £165,183 9s. 7d. was equal to 3.55 per cent., and allowing for the non-productive capital (£187,000) spent on lines not open for traffic, to 3.70 per cent.

NORTH-EASTERN SYSTEM.

The mileage length of the system remains the same as last year, no additions having been made during 1878.

The gross revenue again shows an increase over that of the previous year, being £266,711 6s. 1d., or £5,846 5s. 2d. more than 1877.

The percentage of working expenses to revenue is slightly increased, being 50.17, as against 49.61.

The amount is £133,813 11s. 5d., leaving a profit on working of £132,897 14s. 8d., which is equivalent to 7.27 per cent. on the cost of the lines, viz., £1,827,162 7s. 6d.

Deducting, as in the case of previous systems, the capital expended on extensions not open for traffic, and which may be stated at £40,000, the net revenue shows a profit of 7.44 per cent. In 1877 the result was 7.41 per cent.

The details of the increase of revenue are shown as follows :—

—	1877. (210 miles.)		1878. (210 miles.)		Increase.			Decrease.		
	£	s. d.	£	s. d.	£	s. d.	£	s. d.		
Passengers ...	74,339	4 5	77,952	0 8	3,612	16 3	...	...
Parcels, &c. ...	5,959	17 2	6,355	12 5	395	15 3	...	...
Horses, &c. ...	2,916	10 7	3,264	8 10	347	18 3	...	...
Mails ...	7,659	6 2	7,473	12 6	...	...	185	13 8
Rents ...	2,782	12 5	3,451	9 6	668	17 1	...	...
Miscellaneous ...	324	13 7	51	2 10	...	...	273	10 9
Live Stock ...	10,637	1 4	12,894	5 8	2,257	4 4	...	...
Goods ...	156,245	15 3	155,268	13 8	...	...	977	1 7
	260,865	0 11	266,711	6 1						
Net Increase ...								5,846 5 2		
					7,282	11 2		7,282 11 2		

The details of the working expenses were as under :—

—	1877.				1878.				Increase.			Decrease.			
	£	s.	d.	Per Cent. to Revenue.	£	s.	d.	Per cent. to Revenue.	£	s.	d.	£	s.	d.	
Maintenance	31,530	14	5	11.05	29,867	13	6	10.51	...	...	...	1,663	0	11
Loco. ...	41,358	4	5	15.85	44,875	0	1	16.83	3,516	15	8	...	...	...
Traffic ...	53,153	6	6	20.37	55,355	13	10	20.75	2,202	7	4	...	...	...
General ...	3,380	8	1	1.18	3,715	4	0	1.39	334	15	11	...	...	...
	129,422	13	5	49.61	133,813	11	5	50.17							
Net Increase ...													4,390	18	0
									6,053	18	11		6,053	18	11

The increase in the number of passengers travelled amounted to 91,720, the numbers being 683,169 and 774,889 for 1877 and 1878 respectively.

The live stock carried amounted to 7,634 tons, and that of the goods to 196,250 tons.

There was a decrease of 2,708 train miles run, the numbers being 685,006 in 1877, against 682,298 in 1878.

EASTERN SYSTEM.

The remaining portion of this line between the 1st and 3rd section was opened for traffic on the 1st of March, and the line was thus made continuous from Oakleigh to Sale, a distance of 118½ miles.

The average length opened throughout the year was 113 miles, and on this a gross revenue of £45,918 19s. was earned.

This is equivalent to £406 7s. 3d. per average line mile opened, as against £189 6s. in 1877, when the length was 32½ miles, showing conclusively, that the revenue of this line increased largely with the facilities for traffic.

On this system remarks on the comparison of the accounts for the two years would be valueless, as there was only a small portion of it available for traffic in 1877.

The amount spent on construction was £736,538 7s. 9d., the net revenue being £20,941 17s. 2d., equivalent to 2.84 per cent. on capital cost.

On this system the capital not remuneratively employed in 1878 amounted to £69,000, and deducting this from the total cost, the net revenue earned gives a return of 3.14 per cent.

The following tables will show the particulars of the revenue and expenditure on this system :—

REVENUE.

	1877. (39 miles.)		1878. (113 miles.)		Increase.	
	£	s. d.	£	s. d.	£	s. d.
Passengers	3,886	9 9	25,555	3 0	21,668	13 3
Parcels, &c.	464	7 0	1,802	16 4	1,338	9 4
Horses, &c.	35	13 4	870	10 9	834	17 5
Mails	412	12 6	3,162	19 10	2,750	7 4
Rents	3	12 6	8	3 9	4	11 3
Miscellaneous	...	...	201	1 6	201	1 6
Live Stock	...	...	370	10 5	370	10 5
Goods	1,349	8 11	13,947	13 5	12,598	4 6
	6,152	4 0	45,918	19 0	39,766	15 0

EXPENDITURE.

	1877.			1878.			Increase.
	£	s. d.	Per Cent. to Revenue.	£	s. d.	Per Cent. to Revenue.	
Maintenance	2,053	5 9	33.38	10,401	10 2	22.65	8,347 14 5
Loco...	1,427	16 8	23.21	6,791	1 11	14.79	5,363 5 3
Traffic	2,799	10 11	45.50	7,140	6 11	15.55	4,340 16 0
General	73	9 6	1.19	644	12 10	1.40	571 3 4
	6,354	2 10	103.28	24,977	11 10	54.39	18,622 19 0

On this system 141,382 train miles were run, 98,857 passenger journeys made, and 14,934 tons of goods and 261 tons live stock carried.

STORES.

In my last Report allusion was made to the alterations which had been affected in the general management of the Stores Branch, and of the beneficial results arising therefrom as regarded economy and despatch of business.

The experience of the past year fully confirms what I then stated.

Since the close of 1876 the large reduction of 30 per cent. in the value of stores kept in stock has been made, and that in the face of an increased line mileage of from 702 to 1,035 miles, or $47\frac{1}{2}$ per cent.

It will of course be understood that this has no connection with the plant and material on hand for purposes of construction, but alludes only to the general stores kept in stock for working purposes.

The decrease of 30 per cent. on the value of the general stores gives, however, a very inadequate idea of the diminution in quantity.

At the time of the alteration in the management a large stock of stores of every description for the use of all branches of the Department was kept on hand, and as there were continual improvements being effected in the various kinds of materials, it followed that a large portion became obsolete, while other portions became of little or no value through deterioration.

These useless stores also occupied much valuable space and required the same attention as if they had been useful stock.

The whole of the stock has now been carefully inspected, and the useless portion eliminated and sold either by tender or auction.

Perhaps, however, the most satisfactory and independent testimony to the value of the alterations made, is that supplied by Mr. Audit Commissioner Symonds, in his annual report to the Honorable the Treasurer, dated 31st December 1878, written after his inspection of this branch of the Department during the month of November 1878.

Mr. Symonds states as follows :—

“The Stores Accounts have always been a source of difficulty, as well to the Department as to the Commissioners of Audit; for it seemed impossible to place that branch upon a thoroughly satisfactory footing. On the present occasion, therefore, I was exceedingly gratified, not to say surprised, at witnessing the great change for the better which had comparatively recently taken place.”

“By bold, but, as I think, well considered measures, large quantities of material and miscellaneous articles considered by the Department to be now useless and never likely to be useful for the service of this colony, have been got rid of, though at a great loss considered with reference to their original cost; the remaining articles have been carefully re-arranged, or are in course of being so, and stored in places suitable for their preservation. In the general storeroom the arrangement of the different articles required by the workmen seemed to be perfect, for they were made up in suitable parcels for delivery, and clearly labelled, so that even a stranger might in a short time acquaint himself with the whereabouts of each of the numerous descriptions of articles the store contains. Attention has been given also to the storing and preservation of the valuable machinery and railway material on the railway grounds. There is much yet to be done in the same direction; but great progress has already been made, and it is to be hoped that nothing will occur to prevent the work now going on being brought to a complete and satisfactory finish. I think that large savings of expense have been, and will yet be effected, which will go far to compensate for whatever loss is sustained through the necessity of disposing of useless though costly material.”

Of the materials in stock for purposes of construction, also considerable quantities were utterly useless, being of patterns now obsolete.

These consisted of various descriptions of truck-turntables, narrow-seated chairs, points and crossings, crossing chairs, old-fashioned axle-boxes and other castings, traversers, cranes, and sundry machinery, representing in the books of the Department large sums of money, but most of which had been lying in stock from twelve to eighteen years, and for which no use could be found.

It will be seen, therefore, that in addition to the general stores at Williamstown that the plant and material lying at the Williamstown Junction has been subjected to a thorough overhaul both as regards its condition and suitability for future use.

As above stated by Mr. Audit Commissioner Symonds, the clearing out of useless stock has not been done without a considerable sacrifice, having regard to the price at which it was originally purchased, but it will be apparent that such a sacrifice had to be made at sometime or other, and it was infinitely better to sell the articles not required while they still possessed some pecuniary value, than to allow them to remain on hand until their gradual and sure decay rendered them valueless.

In addition to the general working stores it has been found necessary to have on hand a large quantity of blackwood timber, for the purpose of building new rolling-stock. The reason for keeping a large stock of this timber always on hand arises from the necessity of having it thoroughly seasoned before being brought into use.

The large amount of blackwood required by this Department for rolling-stock purposes renders it imperative that it should keep its own stock of thoroughly seasoned timber, which otherwise would not be obtainable at the time when it was required.

In order to secure a sufficient quantity of blackwood, and to allow the same ample time for seasoning before it is used, a contract was entered into on the 7th June 1878 for supplying nearly £16,000 worth.

For the storing of the timber under this contract, together with the other valuable timber already held by the Department, most of which latter is thoroughly seasoned, two of the old store sheds at Williamstown Junction have been converted into timber sheds, and an entirely new timber shed has been erected at Williamstown, in which, while protected from the influences of the sun and rain, a current of air has free access to every portion of the timber stored there.

For the latter, a sum of £500 was placed on the Estimates for 1878-9, which has proved sufficient for the purpose.

In this shed the whole of the valuable timber at Williamstown, large quantities of which had previously been stacked in the open air exposed to all weathers, has been properly stored.

The saving thus effected in the preservation of the timber will therefore in a short time fully repay the cost of the building, to say nothing of such timber being consequently better fitted for the construction of rolling-stock, and less liable to warp, shrink, or decay.

While on the subject of stores I need scarcely point out the fact, that the fuel necessary for locomotive power forms the most considerable item in the yearly expenditure for stores.

During 1878, 45,594 tons of coal were used by the locomotive branch, at a cost of £71,019, the contract price being at the rate of 30s. 8d. per ton screened and delivered in bags at Melbourne station, which, with sundry other charges, brought this cost up to 31s. 3d. per ton.

With a determination to reduce as far as possible the cost of this item, I, in October last, called for tenders for the supply of coal direct to the Department from the collieries at Newcastle, New South Wales, and at the same time for tenders for the carriage of the coal from Newcastle to Melbourne, Williamstown, and Geelong, as required.

The result proved that the Department could obtain its coal delivered into the trucks at either of the three places above named at an average cost of slightly under 24s. 3d. per ton.

To this must be added the cost of weighing, shunting, haulage from Williamstown to Melbourne, clerical expenses, &c., amounting in the aggregate to nearly 3s. a ton, or a total cost to the Department of say 27s. per ton.

The estimated consumption for the year 1879 is 50,000 tons, and on this the difference between 31s. 3d. and 27s. amounts to £10,625 per annum.

After making all allowances for non-screening after arrival in Victoria, which would slightly reduce the above, it is evident that a large saving will be effected in this item during 1879.

As soon as proper accommodation for the vessels bringing the coal has been provided, at a point on the River Yarra within the Melbourne Station reserve, the expense of hauling the coal from the Williamstown Pier to Melbourne, a distance of over nine miles, as is at present being done, will be saved, and this will reduce the cost of the coal to the Department at least another shilling per ton, or £2,500 in addition to the £10,625 above quoted.

It is also intended to construct hopper trucks for the carriage and discharge of coal at the various depôts, which will effect a further large saving by doing away with the present expensive method of discharging the coal out of the ordinary trucks by hand labor.

With all this saving, however, it is evident that the cost of coal still remains an extraordinarily heavy charge upon the railway revenue, and I think the time has now arrived at which some thorough and systematic search for workable seams of coal should be inaugurated amongst the coal measures of Victoria.

At present we are totally dependent upon the neighboring colony of New South Wales for our supplies, while, for all that has hitherto been proved to the contrary, we may possess the same in abundance almost at our very doors.

At several points on the Gippsland railway the carbonaceous rocks are found *in situ* close to the line, and the discovery of a workable seam or seams at any of these points, so readily accessible, would prove not only most advantageous from a railway, but also from a national point of view.

A Victorian coalfield would mean cheaper coal for railway uses, and consequently reduced rates for railway carriage, the retention of the money in Victoria at present paid by the Department to New South Wales, and the employment of a large number of persons in a new industry, to say nothing of the immense benefit the colony would derive from such a discovery, and the impetus that would be given to manufactures and trade of all kinds. It is evident, also, that in the event of the mother country engaging in a conflict with any maritime power, the blockade of either the port of Melbourne, or that of Newcastle in New South Wales, would very seriously interfere with the working of the Railways, and would in fact bring them to a standstill.

The discovery of a workable coalfield in Victoria would render such a state of things an impossibility.

In a minor degree the supply of fuel to stations has also received my attention.

By purchasing the firewood at the places where required, instead of, as heretofore, accepting large contracts for the same at two or three centres, and hauling the wood along the lines to the various stations, often considerable distances, a direct saving of £700 was made in the supplies of 1878, while the trucks hitherto used for this purpose were available for the ordinary traffic, in itself a very great desideratum, considering the scanty equipment of the lines with this description of rolling-stock.

BREAKING PASSENGER JOURNEYS.

It has for some considerable time past been a source of complaint amongst the travelling portion of the public that passengers having once purchased a ticket for any station could only break the journey short of that destination provided it was resumed and completed within the day.

In cases where such journeys extended over long distances this was often found to be a great hardship.

After some little difficulty a very simple system of check at stations has been devised, which will completely protect the Department, and at the same time enable me to extend to passengers the privilege of breaking the journey at any intermediate point they may desire between the starting station and their destination; the privilege to be in force for a limited period from the date of issue of each ticket, and in order to carry out which the ordinary tickets as at present used will suffice.

ECONOMY IN THE ADMINISTRATION

of the various branches of the Department has also received my earnest attention.

I have already alluded to the changes made in the Stores Branch, and the savings effected in its re-organization during the latter half of 1877.

These were but the beginning of a series of alterations in the management of the administrative branches contemplated by me, especially in the Engineering Branch, in order to assimilate its organization to that which obtains in the principal railways of Europe, America, and the neighboring colonies.

The political complications which occurred towards the close of 1877 and the early part of 1878, and in consequence of which the services of a number of officers were dispensed with, forced on the consideration of the intended alterations somewhat earlier than I had anticipated.

Every opportunity for perfecting the re-organization thus somewhat prematurely forced upon the Department has been taken advantage of, and experience has since proved that, although initiated under these somewhat unfavorable circumstances, they have been attended with satisfactory results.

It is impossible to give the pecuniary value of many of the improvements effected, but the following list of annual savings in salaries and wages, and one or two other items, will give some idea of what has been done in the way of reducing a large amount of expenditure :—

STATEMENT of AMOUNTS Saved Annually by Reductions and Re-organization of Offices, Station Works, &c.

Particulars.	Capital			Revenue.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
Reduction of Officers in the Construction and Maintenance Divisions of the Engineering Branch ...	7,228	6	6	3,558	13	3	10,786	19	9
Reduction of Officers in Traffic Branch ...	...	...	...	3,161	13	0	3,161	13	0
Reduction of Officers in Accounts and Stores Branch ...	...	...	...	3,303	12	6	3,303	12	6
Reduction of Officers in Secretary's Office ...	...	...	...	455	0	0	455	0	0
Reduction of Cost of Coal by alterations of method of supply, calculated on the results of the first quarter of the present year ...	...	...	...	10,880	0	0	10,880	0	0
Savings effected by the alterations in Melbourne Yard in connection with the Suburban Traffic, Expense of Shunting Engine, and Wages of Pointsmen, &c.	...	...	...	4,108	0	0	4,108	0	0
	£	7,228	6 6	25,466	18	9	32,695	5	3

During the past year an event of more than usual importance has taken place in connection with the extension of the Government lines of railway.

I allude to the purchase of the lines communicating with the southern metropolitan suburban districts, heretofore the property of the

MELBOURNE AND HOBSON'S BAY UNITED RAILWAY COMPANY.

The capital account of the Company showed at 30th June 1878 an expenditure of £1,016,266 13s. 10d., which may be thus classified:—

Share capital—10,694, at £50 per share	...	...	£534,700	0	0
Debenture capital	...	...	465,300	0	0
Charged to revenue	...	...	16,266	13	10
Total	...	...	£1,016,266	13	10

This does not, however, represent the real cost of the construction of these lines, as, on the failure of the Suburban Railway Company, in 1865, the Melbourne and Hobson's Bay United Railway Company purchased their undertaking for the sum of £367,000, at which price it stands in their capital account, whereas the actual cost to the Suburban Railway Company was £800,830.

The difference between these two sums amounts to £433,830, added to the capital cost, as shown in the accounts of the Melbourne and Hobson's Bay United Railway Company, will give the actual cost of these lines as £1,450,097.

The purchase by the Government was sanctioned by Parliament on the 14th November 1878 under Act No. 617, the price given to the shareholders being at the rate of £80 per £50 share, with interest added at the rate of 5 per cent. until the purchase was completed by the payment of the money.

The amount paid by the Government for these lines was:—

10,694 shares at £80 per share	...	...	£855,520
Debenture capital	...	...	465,300
Total	...	...	£1,320,820

All liabilities in connection with debenture capital, current contracts, leases, &c., were taken over by the Government, and the stores in stock taken at a valuation.

In the meantime and until the completion of the purchase, these lines are being worked on behalf of the Government by the officers and staff of the Company, under the control of the Company's Board of Directors.

Careful calculations show that, after paying for all working expenses, the interest to debenture holders and on the amount of £855,520 paid to the shareholders, the revenue derived from these lines will produce a clear profit of 1 per cent. to the Consolidated Revenue of the colony, with a fair prospect of increase.

But this fact represents only a portion of the advantages which have accrued to the Victorian Railway system by the purchase of these lines.

Prior to that being accomplished it will be remembered that the question of the connection of the Eastern railway system with the metropolis was beset with difficulties, which this purchase at once solved.

The whole of the railways in Victoria are now the property of the State, and their continual growing extent, value, and importance to the community renders it extremely improbable that the State will ever part with the control of them.

Appended to this Report will be found the annual reports of the Engineer-in-Chief, Locomotive Superintendent, and Telegraph Engineer on the working of the Branches under their control.

Also complete Balance-Sheets of the Accounts of the Department, brought up to the 31st December 1878, statements of the Revenue and Expenditure on each of the four systems, and sundry statistical and other returns, diagrams, plans, &c., giving a variety of practical information, and to these I beg to direct your Lordship's attention.

RECAPITULATION.

The results at the close of 1878, as regards the work of the year, may be summed up generally as follows :—

The year closed with a total length of 1,035 miles open for traffic, 72 in progress, and 67 more authorized, making in all 1,174 miles of railway.

The average length open during 1878 was 966½ miles.

The total borrowed capital was £13,503,693, and the yearly interest payable £732,218.

The total expenditure on construction at the close of the year was £15,343,240, giving an average cost of £14,824 per mile for the 1,035 miles open.

On this the net revenue paid 3·85 per cent., or calculated on the interest bearing capital 4½ per cent.

The amount expended on capital account during 1878 was £780,256.

The gross earnings of the year were £1,216,675.

The expenditure was £625,699, or 51·43 per cent. of the earnings.

The balance of profit on working was £590,976.

The amount contributed by the Consolidated Revenue to make good the balance of interest not recouped by the net profit on working the lines was £141,242.

The passenger journeys numbered 3,829,256, of an average length of 23¼ miles, at an average cost to each passenger of 1·15d. per mile.

Nine hundred and thirty thousand three hundred and seventy-five tons of goods were carried an average distance of 65½ miles, at an average rate of slightly over 2½d. per ton per mile.

Thirty thousand one hundred and four tons of live stock travelled an average distance of 118 miles, at an average rate of 3½d. per ton per mile.

The mileage run totalled 3,766,507 miles, divided thus:—Train miles, 3,095,590; piloting and shunting, 670,917 miles.

There were employed in working the traffic 148 locomotive engines, 231 passenger vehicles, and 2,763 goods wagons and other vehicles.

The earnings per line mile open were £1,258, and per train mile run 7s. 10·33d.

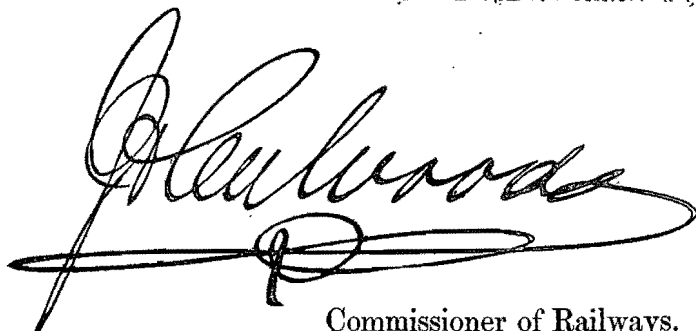
The expenses per line mile were £647, and per train mile 4s. 0½d., divided as follows :—Maintenance, 1s. ; locomotive charges, 1s. 3¾d. ; traffic charges, including coaching, 1s. 7½d. ; and general charges, 1¼d.

The different systems gave the following returns on their capital expenditure:—

Northern System	...	...	4·26 per cent.
Western System	...	...	3·79 " "
North-Eastern System	...	...	7·44 " "
Eastern System	...	...	3·14 " "

I have the honor to be

Your Lordship's most obedient servant,



Commissioner of Railways.

APPENDIX

VICTORIAN RAILWAYS.

APPENDIX TO THE ANNUAL REPORT OF THE BOARD OF LAND AND WORKS ON THE DEPARTMENT OF VICTORIAN RAILWAYS FOR THE YEAR ENDING 31ST DECEMBER 1878.

1. Report of the Engineer-in-Chief.
2. " Locomotive Superintendent.
3. " Telegraph Engineer.
4. Statement showing the contracts in progress at 31st December 1878 for stations, rolling-stock, and other works.
5. Statement of the funds authorized to be obtained on loan for the construction of Victorian Railways, and of the expenditure charged against the same.
6. Statement of the receipts and expenditure on capital account.
7. " " " in account with the consolidated revenue.
8. General balance-sheet.
9. Statement of revenue and expenditure on Victorian Railways, all systems.
10. " " " " Northern system.
11. " " " " Western system.
12. " " " " North-Eastern system.
13. " " " " Eastern system.
14. Return of wool consigned to Melbourne, Williamstown Pier, Geelong, and Portland.
15. Amount, mileage, and traffic at each station.
16. Return of free passes issued.
17. " rolling-stock.
18. Detail of locomotive charges per train mile.
19. Comparative statement for seven and a half years, ending 31st December 1878.
20. Detail of cost of construction of each line open for traffic, highest and lowest levels, steepest gradients, &c., &c.
21. Return of casualties during 1878.
22. " " since lines were opened for traffic.

Diagrams showing revenue, expenditure, and net earnings of each system, and average of same per train mile and mile open.
Map of Victoria showing railway system.

VICTORIAN RAILWAYS.

No. 1.

SIR,

Engineer-in-Chief's Office, Railway Department,
Melbourne, 28th April 1879.

I have the honor to report that the permanent way and works of the Victorian Railways were efficiently maintained during the year ending 31st December last.

The total expenditure on account of maintenance for the year was £155,409 18s. 3d., for an average length of 1,099 miles of *single* line, as against £166,580 10s. 8d. during the previous year, for an average length of 934 miles, or at the rate of £141 8s. 2d. per mile of single line in 1878, as compared with £178 7s. in 1877.

It will be seen that, although an additional average length of 165 miles of way has been maintained, the total cost of maintenance was £11,170 1s. 5d. less last year than for the previous year. This decrease is principally accounted for by the very small issues of permanent-way materials during the year 1878, £9,483 15s. 1d., compared with the issues in 1877, £21,976 3s. 5d.; but there is no doubt that large issues of permanent-way materials will be necessary during the present year to keep the lines in proper working order.

The number of redgum sleepers used for renewals and repairs during the year was 52,714, against 47,453 in the previous year.

The following lines were opened for traffic during the year:—

- Branch line to Geelong Racecourse, 2 miles, on 1st February.
- Bunyip to Moe, 32 miles, on 1st March.
- Dunolly to Bealiba, 12½ miles, on 3rd September.
- Stawell to Murtoa, 35½ miles, on 17th December.
- Bealiba to St. Arnaud, 20½ miles, on 23rd December.

The contractors for the Dunolly and St. Arnaud and the Stawell and Murtoa lines, having completed the lines so far as to enable them to be opened for traffic before the specified dates, obtained the bonus to which they were in each case entitled under their respective contracts, viz., £3,000 on the former contract, and £500 on the latter.

The following new lines were maintained by the Department for a portion of the year:—

- Dunkeld to Hamilton, 19 miles, for 11 months.
- Branch line to Geelong Racecourse, 2 miles, for 11 months.
- Oakleigh to Pakenham, 25¾ miles, for 11 months.
- Portland Jetty to Hamilton, 54 miles, for 9½ months.
- Moe (River) to Morwell, 19 miles, for 8 months.
- Bunyip to Moe (River), 21½ miles, for 5½ months.

Contracts were entered into during the year for the construction of the following lines:—

No. of Act.	Date.	Line.	Length.			Average per Mile.
			m.	ch.	lks.	£
580	2nd March ...	Dunolly to St. Arnaud (exclusive of the above-mentioned bonus of £3,000)	32	79	68	2,181
"	18th March ...	Stawell to Horsham (exclusive of the above-mentioned bonus of £500)	53	40	70	2,210
"	20th July ...	Springs to Wahgunyah	13	76	83	2,182
"	21st August ...	Geelong to Queenscliff	20	56	85	2,348
"	13th September	Warrenheip to Gordons	13	5	82	3,129
604	24th September	South Yarra to Oakleigh, including works for double line ...	6	63	93	7,188

or, omitting the South Yarra and Oakleigh line, at an average of £2,429 per mile. This is exclusive of land, stations, permanent-way materials, engineering, rolling-stock, &c.; but there is no doubt that the lines will be completed for the amounts authorized.

Considerable alterations have been made in the Melbourne yard for facilitating the Suburban traffic; the outlay will be about £10,000, and the saving effected will be about £4,000 per annum, besides greater safety to the public being secured.

The alterations in the yard affecting the general traffic are being proceeded with. The new approaches to the goods station will be finished about October next, and those to the passenger station about the end of December.

In the general working of the Engineering Branch of the Department the separation of "Construction" from "Maintenance" has been attended with very satisfactory results, and everything is going on well.

The adoption of uniform drawings for all the requirements of the different new lines affords great facilities to contractors, which they are not slow to appreciate; and I am convinced the Department gets the work done much cheaper in consequence.

I have the honor to be, Sir,

Your obedient servant,

ROBT. WATSON,

Engineer-in-Chief.

The Honorable John Woods, Commissioner of Railways.

VICTORIAN RAILWAYS.

No. 2.

Locomotive Superintendent's Office,
Melbourne, 5th June 1879.

SIR,

I have the honor to report that the rolling-stock upon the Victorian Railways has been well maintained during the twelve months ending 31st December 1878. Some of the repairs have been of a very extensive nature, and all have been charged to working expenses.

The locomotives are in fair condition. Some very heavy repairs were effected to both boilers and engines during the past year.

Extensive renewals are required to the boilers of some of the earlier engines, and a large amount of material is now on the way from England for that purpose.

Extensive repairs have been effected to carriages generally, all worn-out tyres having been "trued up" or renewed, and a new system of roof ventilation has been introduced. Twenty (20) composite carriages require stronger underframes.

A few wagons yet remain with weak underframes, but these I am gradually altering.

The horse boxes, carriage trucks, and brake vans are all in good condition.

The detailed accounts will show that 3,095,590 train miles were run during the year, against 2,786,581 in 1877, or an increase of 309,009 miles; the cost of working has been 1s. 7⁴/₂d. per train mile.

For comparative purposes, I beg to show by following return the working expenses and mileage since 1870:—

WORKING EXPENSES AND REPAIRS, REPAIRS TO ENGINES, WAGONS, AND CARRIAGES—YEARS 1870 TO 1878.

Year.	Train Miles.	Repairs to Engines.		Repairs to Carriages, &c.			Repairs to Wagons.		Running Branch.		Total Working Expenses and Repairs.		
		Amount.	Cost per Train Mile.	Amount.	Cost per Train Mile.	Amount.	Cost per Train Mile.	Amount.	Cost per Train Mile.	Amount.	Cost per Train Mile.	Amount.	Cost per Train Mile.
1870	1,116,218	21,590 5 5	4 64	4,998 8 11	1 07	7,390 4 1	1 59	67,512 16 9	1 2 52	101,491 15 2	1 9 82		
*1871	530,326	9,789 18 6	4 43	2,729 1 6	1 24	3,453 6 9	1 56	32,866 3 7	1 2 87	48,838 10 4	1 10 10		
1871-2	1,173,434	24,344 0 2	4 98	5,513 7 5	1 13	6,996 10 1	1 43	66,499 7 5	1 1 59	103,353 5 1	1 9 13		
1872-3	1,354,131	22,073 10 7	3 91	6,954 17 0	1 23	9,271 19 4	1 65	80,771 12 5	1 2 31	119,071 19 4	1 9 10		
1873-4	1,667,124	25,427 0 9	3 66	10,710 6 3	1 55	12,906 0 8	1 86	102,435 15 8	1 2 73	151,479 3 4	1 9 80		
1874-5	2,051,710	31,511 12 6	3 69	12,571 19 2	1 47	13,188 7 1	1 54	125,291 17 8	1 2 65	182,503 16 5	1 9 35		
1875-6	2,280,092	31,434 7 11	3 31	14,778 16 3	1 56	17,104 9 11	1 80	129,850 12 10	1 1 66	193,168 6 11	1 8 33		
1876	1,262,782	13,127 1 4	2 49	10,609 11 11	2 01	10,519 10 2	1 99	71,543 9 8	1 1 61	105,799 13 1	1 8 10		
1877	2,786,581	34,273 7 4	2 95	15,863 15 10	1 36	14,799 12 7	1 28	154,842 15 9	1 1 33	219,779 11 6	1 6 92		
1878	3,095,590	41,152 6 6	3 19	15,039 6 2	1 17	20,090 18 9	1 56	174,243 13 10	1 1 50	250,526 5 3	1 7 42		

* For six months only.

It will be seen that during the last two years the working expenses have been much lower than in previous years.

During the year the work performed in the Railway workshops, exclusive of running shed repairs, has been—59 locomotive engines, thoroughly repaired; 10 locomotive engines, slightly repaired; 11 boilers, nearly made new; 2 boilers, entirely renewed; new plates in barrels of 2 boilers; also, 6 new crank axles, 98 new tyres, and 12 pairs of new cylinders have been put in the engines.

These, together with other sundry repairs to engines, amounted to £41,152.

In the carriage shops, the following work has also been executed:—3 new brake van bodies rebuilt; 2 second class carriages converted into combined composite and brake carriages for light lines; extensive repairs to 16 first class carriages, including retrimming, new panelling, and varnishing; 28 first class carriages revarnished, &c., and new steel tyres put on the wheels; extensive repairs to 9, and ordinary repairs to 53 second class carriages; extensive repairs to 9, and ordinary repairs to 22 composite carriages; extensive repairs to 11, and ordinary repairs to 25 brake and 5 travelling post office vans.

These, with other general repairs to carriages, &c., cost £15,039.

There were also under construction (and are now nearly completed) 2 first class American saloon carriages.

Two travelling post office vans have been built from new designs, and these are now running, and have given every satisfaction.

In the wagon shop, 184 wagons have been very extensively repaired, almost entirely rebuilt; 105 wagons have had a good general repair; 42 wagons have been entirely remade; 10 wagons, with light iron under frames, have had new strong wood and iron ones put under them; 50 iron wagons have had very extensive repairs; 253 wagons have been lifted, and 500 old wheels have had new steel tyres put on.

Ordinary repairs have also been effected to 11 horse boxes, 2 carriage trucks, and 400 wagon buffers.

The total cost for wagon repairs amounts to £20,091.

There have also been built 12 wagons and a pattern double bogie covered wagon with double doors. These two items have been charged to construction account.

Contracts have been let during the year for the construction, in the colony, of 100 medium open goods wagons, 3 first class and 4 second class American double bogie saloon carriages, 15 horse boxes, 15 carriage trucks, 10 luggage brake vans, 10 locomotive engines and tenders, supply of engine, tender, carriage, and wagon wheels as required for three years, and 1,500 wrought iron buffers.

Considerable loss and expense has accrued to the department for some time past from the necessity which has arisen for the employment of unseasoned blackwood timber in the construction of carriages, wagons, &c.

To obviate this, a large contract has been entered into for the supply of sawn blackwood from the forests of South Gippsland, instead of as hitherto obtaining our supply (through the contractors) from Tasmania.

In the contract alluded to very stringent conditions have been embodied regulating the periods at which trees shall be felled, and such other conditions as are considered best conducive to the obtaining of the timber in the best possible condition.

I am glad to be able to state that the timber already delivered, the product of trees felled during last winter (June 1878) is of excellent quality, and will compare most favorably with any hitherto obtained by the department.

To ensure thorough seasoning before use, it is being properly stacked, under shelter, at Williamstown Junction.

It is obvious that this timber will improve in value the longer it is kept, and by the time it is required for use it will be in such condition as to insure the stability of the rolling-stock, in the construction of which it will be employed, thus effecting a saving in the cost of general repairs.

YEAR 1879.

During the current year (1879) contracts have also been let for the manufacture, in the colony, of 5 first class and 5 second class American double bogie saloon carriages, 100 medium open goods trucks, 70 double bogie medium open goods wagons, 19 double bogie covered goods wagons, and 20 sets of automatic continuous brake gear.

An additional workshop (the Yarra Bank Works, formerly occupied by Mr. Williams) has been provisionally purchased by the department, subject to the approval of Parliament.

At the present time there are 12 luggage brake vans being constructed in it, and as soon as the necessary lines of way are laid down, I purpose executing some of the ordinary running repairs there.

Those trains upon the main line having to stop at Chewton station, are fitted with Woods' Continuous Brake, which acts very satisfactorily.

The train on the Williamstown line, fitted with the same continuous brake, has been in constant running since December 1877, making 180 stoppages per day, and has run over 98,000 miles, requiring only the ordinary renewing of worn-out parts, viz., brake blocks and indiarubber couplings.

With regard to brake power upon passenger trains, I beg to quote extracts from the report of the Royal Commissioners in England upon railway accidents in 1877.

Lord De La Warr and Buckhurst, one of the commission, in his separate report with regard to brake power, wrote—

“The Commissioners have had this subject much under their consideration. The result of their enquiries and of experiments which have been made, lead to the conclusion that brake power has been insufficiently applied on railways generally.

“Several systems of applying brake power are in use in this country, and it has been adopted with great success in America.

“It does not seem desirable to recommend any particular form of brake; this would be better decided by railway companies themselves.

“I am of opinion it should be made obligatory upon railway companies to employ sufficient brake power upon all passenger trains, with due regard to speed and inclines, to bring them to a stand in a distance not exceeding 500 yards.”

Mr. Galt, another eminent member, in a separate report states—

“One of the most important subjects connected with railway management, and to which we devoted much more time and attention than to any other, related to brake power, the insufficiency of which was the most fruitful cause of accidents in the long catalogue of railway disasters. Out of 85 cases Col. Hutchinson investigated last year, 35 cases could either have been mitigated or prevented by continuous brakes in the hands of the drivers.

“In my opinion the use of such brakes should be made compulsory on all passenger trains.

“The brake that brings to a stand both portions of a train, in case of it being divided by an accident, is certainly the only kind thoroughly effective.”

The Commission found with regard to brakes—

“We recommend that railway companies shall be required by law, under adequate penalties, to supply all trains with sufficient brake power to stop them within 500 yards, under all circumstances.

“We are of opinion that the amount of controlling power generally supplied with trains is at present insufficient, and we recommend that companies be required by law to provide every train with sufficient brake power to stop it absolutely within 500 yards.

“We recommend the fitting of brakes upon engines, and we think it of great importance that a large proportion of the general brake power of the train should be under the control of the driver.”

I believe that the Woods' Continuous Brake complies with the conditions laid down by Captain Tyler, late Railway Inspector of the Board of Trade, and also Mr. Galt, one of the Royal Commissioners above quoted.

At the commencement of this year a new system of coaling has been introduced, viz., the supply of pit screened coal in bulk, and the expensive system of bagging and weighing the coal in 1½ cwt. quantities has been abolished.

From the accountant's returns it appears that a saving has been effected in the cost during the three months ending 31st March last of £2,720, or at the rate of £10,880 per annum.

I have to state that by the provision of proper sheds and appliances for the discharge of the coal at the various locomotive depôts, without handling, a further saving of 9d. per ton could be effected, which would decrease the present cost by at least £2,000 per annum in addition.

I would again beg to call attention to the increased number of train miles run during the year, caused by the opening of new lines, necessitating an increase in the quantity of rolling-stock, whilst little or no provision is being made in the shape of suitable workshops for the efficient and necessary repairs of the same.

The returns of working expenses for the first three months of this year (1879) furnished by the accountant show a reduction of 2d. per train mile in the cost of working as compared with the same period last year. Of this large sum, 84d. per mile is due to the saving on coal and charges in connection with same; 26d. per mile is due to the larger number of junior drivers (in the 3rd and 4th classes) and firemen out on the lines, and other savings in consumption of stores and material have operated to bring the cost of working so low, whilst the general efficiency and maintenance have I think been increased.

In the running branch better time has been kept on the lines than formerly. I can say that I do not know of more than two cases during the past six months where late trains have been caused by the Locomotive Branch.

I have the honor to be, Sir,

Your obedient servant,

S. MIRLS,

Locomotive Superintendent.

The Honorable J. Woods, Commissioner of Railways.

THE VICTORIAN RAILWAY SYSTEM
 NO. 3

Telegraph Engineer's Office,
 Melbourne, 27th May, 1879.

Sir,

I have the honor to report on the state of the Telegraph Branch of the Department at the conclusion of the year 1878.

Before the commencement of that year, the telegraph wires used, belonged to the Postal Department, which provided them in consideration of having all moneys received at railway stations for telegrams transmitted, paid to its credit. This arrangement was proved to be unsatisfactory, and at the end of 1877 the principle that the department should construct its own telegraph lines was adopted, and a commencement made with one wire along the North-Eastern Railway, that line being first selected, as the one upon which the telegraph arrangements required to be most perfect, on account of the necessity for working it upon the block system.

This line was completed in July 1878, and it is gratifying to know that since that date the only interruption which has occurred on it was when it was cut by the Kelly outlaws. The cost of the North-Eastern line, which is also about that of the others constructed by the department, was a little less than £18 a mile, an amount which will compare favorably with the cost of telegraph lines elsewhere. From a report of the New Zealand Telegraph Department, I find that the lines in that colony cost considerably more—£53.11s. per mile in the case of one line, and £25 17s. per mile in the case of another, being recorded. Our lines have been constructed of the best materials procurable, and test admirably in every way.

The total number of telegrams sent from the railway stations during 1878 was 267,636. The cash collected during that period amounted to £2,838 6s. 1d., and the value of telegrams transmitted O.H.M. Service £13,841 3s., being a total money value of £16,679 9s. 1d. These figures do not by any means represent the work done in the offices. In addition to the messages mentioned a monthly average of nearly 6,000 are repeated between stations on different lines.

The establishment of electrical return signals at semaphores, and the maintenance of the electric signals, batteries, &c., which are used at signal-boxes to indicate the passage of trains, form a not unimportant part of the duties of this branch.

Attending to the clocks and watches of the department also add to the work done. The consideration of the best means of keeping correct time has occupied my attention, and I am arranging for the fixing of electro-magnetic clips, by means of which all the station clocks and those in the signal-boxes will be set right every hour.

During the year very successful experiments were made in the matter of signalling in trains between passengers, guards, and engine-drivers. Numerous experiments were made also with a dynamo-electric machine, to ascertain the feasibility of lighting the station-yard and platforms by electricity. I was obliged to discontinue the experiments, but I expect to be in a position to recommence them very shortly, as well as to see if the electric light cannot be used to illuminate trains in motion.

A considerable amount of labor is occasioned, and time lost, by the system of settling daily accounts between offices. This I hope to have altered from the 1st July next, by arranging that all money receipts be paid into railway revenue, and the accounts examined by the departmental auditors when they visit the stations.

From the class for instruction in telegraphy and the practice and class-room, much good has resulted, which will increase as the employes become better acquainted with the advantage of using them. I hope to be able to establish similar rooms at a number of central stations, so as to give the employes wider facilities for learning the theory and practice of telegraphy.

The following comparative statement will show how the Telegraph Branch of the Department has progressed during the last two years:—

COMPARATIVE STATEMENT showing the Amount and Value of Railway Telegraph business transacted during the Years ending 31st December 1876 and 1878.

Particulars.	1876.	1878.
Total number of messages sent	104,857	267,636
Actual cash received	£1,789 2s. 6d.	£2,838 6s. 1d.
Value of O.H.M.S. telegrams sent	£4,572 7s. 0d.	£13,841 3s. 0d.
Total value of business transacted	£6,361 9s. 6d.	£16,679 9s. 1d.
Miles of wire open	702	1,147
Number of offices open	53	85

In making this comparison, I can refer to the very great improvement which the new lines have effected in our working. Much yet remains to be done before our system is as perfect as it should be; but I hope gradually, as circumstances will allow, to be able to have all necessary improvements made.

Since the end of 1878 considerable progress has been made with the construction of our telegraph lines, and by the end of the financial year over 1,300 miles of wire will be in use, of which over 800 miles are the property of the department; 97 to 100 stations will be connected with these lines, and therefore in telegraphic communication with Melbourne and with the whole railway system of the colony.

I have the honor to be, Sir,

Your obedient servant,

K. L. MURRAY,

Telegraph Engineer.

The Honorable J. Woods, Commissioner of Railways.

VICTORIAN RAILWAYS.

No. 4.

STATEMENT showing the Contracts in progress at the 31st December 1877 for Construction of Lines, Stations, Rolling-stock, and other works; also the Contracts entered into during the Year ending 31st December 1878.

Contract No.	Date.	Contractor.	Description of Contract.	Line of Railway.	Contract Amount.	Expenditure to 31st Dec. 1878.	Balance Unexpended.	Remarks.	
Engineer-in-Chief's Gazette.					£ s. d.	£ s. d.	£ s. d.		
630	466	1875. July 16	Fishburn and Morton	Construction of 9 miles 79 chains 56 links of railway from Everton to Beechworth	Wangaratta to Beechworth ...	70,018 1 8	69,244 9 9	...	Not completed at 31st Dec. 1878.
632	776	1875. Sept. 17	John Thomas ...	38 miles 34 chains 76 links of railway from Freshwater Creek to Colac	Geelong to Colac ...	97,325 2 3	92,242 9 6	5,082 12 9	Completed.
*635	1541	1875. Feb. 12	James Leggat ...	34 miles 38 chains 69 links of railway from Oakleigh to Bunyip	Oakleigh to Sale ...	98,520 13 8	101,375 2 3	3,354 7 6	"
635	1942	1875. Apr. 5	James Leggat ...	Extra on ditto	" ...	6,208 16 1			
636	974	1877. Dec. 17	Noonan Brothers ...	Construction of 40 miles 26 chains 33 links of railway from Bunyip to Morwell	" ...	170,994 5 7	100,775 4 11	...	Not completed at 31st Dec. 1878.
636A	1172	1874. Jan. 26	Fishburn and Morton	Completion of 21 miles 14 chains 69 links of the second section of the Oakleigh and Sale line	" ...	89,528 19 5	83,000 10 0	...	"
637	1443	1877. Dec. 18	Millar and James ...	Construction of 40 miles 44 chains 64 links of railway from Morwell to Sale	" ...	127,500 8 10	102 13 8	...	"
637	1863	1878. Apr. 6	Millar and James ...	Extra on ditto	" ...	9,200 0 0	140,498 6 6	2 16 0	Completed.
637	1501	1875. Feb. 8	Millar and James ...	Extra on ditto	" ...	3,800 13 8			
656	772	1875. Sept. 9	Milne, Gartly, and Tout	Construction of 14 miles 69 chains of railway from Maryborough to Avoca	Maryborough to Avoca ...	37,185 0 3	27,525 12 1	9,659 8 2	"
†697	951	1876. Dec. 10	Walker and Halliday	bridge over Murray at Echuca	Sandhurst to Echuca ...	81,825 16 2	81,825 16 2	...	Not completed at 31st Dec. 1878.
699	1028	1876. Jan. 21	Overend and Robb	66 miles 7 chains of railway from Ararat to Hamilton	Ararat to Hamilton ...	177,326 9 1	162,397 15 7	14,928 13 6	Completed.
727	1494	1878. Mar. 24	Overend and Robb	55 miles 3 chains 66 links of railway from Portland to Hamilton	Portland to Hamilton ...	153,017 7 7	154,752 9 9	...	"
727	880	1877. Oct. 18	Overend and Robb	Extra on ditto	" ...	1,735 2 2			
766A	1871	1876. Apr. 13	Wright and Edwards	Manufacture of 12 brake vans	Lines authorized under Act 37 Vict. 475	3,360 0 10	3,360 0 0	...	"
783	760	1876. Sept. 15	Phoenix Foundry Company	Manufacture and supply of 10 first-class and 10 second-class carriages	" ...	10,373 10 0	10,355 16 0	17 14 0	"
792	750	1877. " 8	Phoenix Foundry Company	Building and finishing complete 8 locomotive engines and tenders	" ...	22,812 0 0	22,778 0 0	34 0 0	"
834	1184	1877. Nov. 16	C. B. Retallack ...	Construction of iron-foot-bridge at Ballarat West station	Geelong to Ballarat ...	1,797 7 10	752 18 1	44 9 9	"
841	1207	1877. Feb. 16	Walker and Halliday	Additions to passenger station, Echuca	Sandhurst to Echuca ...	1,289 0 0	1,835 18 2	203 11 0	"
841	422	1877. July 6	Walker and Halliday	Extra on ditto	" ...	750 0 0			
846	1171	1877. Jan. 26	Humble & Company	Manufacture of engines, boilers, pumps, tanks, &c.	Oakleigh to Sale, Ararat to Hamilton, Geelong to Colac, & Portland to Hamilton	5,128 17 8	15,017 10 15	11 11 3	"

* This contract was transferred from Neil MacNeil to James Leggat on the 16th May 1876. —† A portion of this contract, 21 miles 14 chains 69 links, was surrendered by the contractors to the Board of Land and Works on 6th January 1877, and re-let to Messrs. Fishburn and Morton on 7th January 1877. —‡ One-half the cost of this contract will be paid by the Government of New South Wales.

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No. 4.—STATEMENT showing the Contracts in progress at [the 31st December, 1877 for Construction of Lines, Stations, Rolling-stock, and other works; also the Contracts entered into during the Year ending 31st December 1878—continued.

Contract No.	Engineer-in-Chief's Gazette.	Date.	Contractor.	Description of Contract.	Line of Railway.	Contract Amount.	Expenditure to 31st Dec. 1878.	Balance Unexpended.	Remarks.
						£ s. d.	£ s. d.	£ s. d.	
860	1858	1877. Apr. 6	James King ...	Erection of passenger station, &c., at Winchelsea...	Geelong to Colac	1,716 12 9	2,062 5 2	15 0 0	Completed.
860	2196	1878. Feb. 1	James King ...	Extra on ditto	"	360 12 5			
861	1859	1877. Apr. 6	James King ...	Erection of passenger station, &c., at Birregurra...	"	1,799 10 9	1,896 15 8	20 0 0	"
861	2197	1878. Feb. 1	James King ...	Extra on ditto	"	117 4 11			
867	1861	Apr. 6	Robert Thornton ...	Construction of dock, timber wharf, &c., at Echuca	Sandhurst to Echuca	14,948 12 3	9,035 15 7	...	Not completed at 31st Dec. 1878.
868	1200	Feb. 9	Alfred Day ...	Asphalting Sandhurst platform	"	175 14 8	153 15 4	...	"
869	2136	June 22	Atlas Company of Engineers	Manufacture of 4 two-ton cranes for Echuca wharf	"	640 1 7	640 1 2	0 0 5	Completed.
872	...	Mar. 14	Patent Composition Pavement Company	Asphalting platform, Footscray station	Footscray Junction to Williamstown ...	15 2 6	15 2 6	...	"
885	1974	Apr. 27	Henry Turnbull ...	Construction of western pier, Williamstown ...	" " " " " " " " " " " "	11,828 19 0	9,490 3 8	...	Not completed at 31st Dec. 1878.
*894	2035	May 18	J. H. Robinson and Sons	Manufacture and supply of 320 tons of fishbolts and 400 tons of dogspikes	Lines authorized under Act 41 Vict. 580	14,200 0 0	11,399 7 2	...	Completed.
894A	2038	" 18	Wright and Edwards	" " 160 tons of pins for permanent way	" " " " " " " " " " " "	2,672 0 0	2,672 0 0	...	"
901	2114	June 8	Isaac Summerland	Erection of a passenger station at Dunkeld ...	Ararat to Hamilton	1,175 8 10	1,087 5 11	88 2 11	"
906	2037	May 18	A. McKenzie and Son	Supply of 5,000 split rails and 8,000 split posts ...	Footscray Junction to Sandhurst ...	324 15 0	324 15 0	...	"
908	456	July 20	Walker and Halliday	Works in connection with water supply, Echuca ...	Sandhurst to Echuca	2,200 0 0	2,199 7 11	0 12 1	"
914	718	Aug. 17	Isaac Summerland	Erection of a brick residence for station-master, Sandhurst	Footscray Junction to Sandhurst ...	1,996 0 2	1,800 6 5	195 13 9	"
916	421	July 6	J. Horwood and Son	Supply of 10 pairs of locomotive engine cylinders	All lines	1,017 17 6	967 17 6	50 0 0	"
918	968	Sept. 28	Langlands Foundry Company	" 2,000 wrought-iron spoke wheels ...	Lines authorized under Act 41 Vict. 580	9,550 0 0	1,924 6 6	...	Not completed at 31st Dec. 1878.
918A	944	" 14	Victoria Iron-rolling Company	" 1,000 wrought-iron axles	" " " " " " " " " " " "	4,625 0 0	832 10 0	...	"
921	417	July 19	Taylor and Duguid	Erection of a passenger station at Colac	Geelong to Colac	3,024 12 0	1,725 19 10	...	"
922	422	July 6	Wright and Edwards	Supply of cast-iron pipes for Echuca wharf ...	Sandhurst to Echuca	720 0 0	584 16 1	...	"
924	2160	June 7	John Lewis ...	" sawn blackwood	Lines authorized under Act 41 Vict. 580	15,847 15 2	...	...	"
927	892	Aug. 31	Phoenix Foundry Company	Construction of 7 locomotive engines and tenders	" " " " " " " " " " " "	24,010 0 0	18,220 17 3	...	"
929	893	" 31	Phoenix Foundry Company	Building and finishing 100 cattle wagons ...	" " " " " " " " " " " "	14,595 0 0	14,595 0 0	...	Completed.
931	694	" 3	James Mackintosh	Supply of 15,500 redgum sleepers and 1,500 l. ft. sawn timber	Williamstown Junction to Geelong and Ballarat and Footscray to Sandhurst	3,066 13 4	3,066 11 2	0 2 2	"
934	950	Sept. 14	Taylor and Duguid	Erection of a goods shed at Geelong	Geelong to Colac	11,882 14 6	11,995 9 0	...	"
934	881	Oct. 18	Taylor and Duguid	Extra on ditto	"	112 14 6			
936	943	Sept. 14	George Anderson ...	Erection of a goods shed at Hamilton	Ararat to Hamilton	4,266 14 7	4,026 12 5	240 2 2	"
940	969	" 28	A. Roberts and Sons	Supply of 300 axle-boxes	All lines	243 15 0	243 15 0	...	"

941	945	1877. Sept. 14	E. Cummings ...	Erection of a passenger station, &c., at Heywood ...	Portland to Hamilton ...	1,149 15 0	1,106 19 4	42 15 8	Completed.
942	946	" 14	E. Cummings ...	" " " Condah ...	" " " " ...	1,281 0 0	1,206 7 6	74 12 6	"
943	947	" 14	E. Cummings ...	" " " Braxholme ...	" " " " ...	1,149 15 0	1,127 4 0	22 11 0	"
945	942	" 14	Jas. McGregor and Sons	Construction of gatekeepers' cottages ...	" " " " ...	2,157 6 8	2,237 19 8	...	"
945	2097	1878. May 17	Jas. McGregor and Sons	Extra on ditto ...	" " " " ...	80 13 0			...
951	952	1877. Sept. 14	Cocks, Broom, and Company	Additions and alterations to buildings and foundations to foot-bridge at Ballarat West station	Geelong to Ballarat ...	2,194 14 0	2,020 5 7	174 8 5	"
952	1272	1878. Dec. 21	John Foot ...	Erection of a goods shed and platform at Oakleigh	Oakleigh to Sale ...	473 7 11	472 15 4	0 12 7	"
953	2161	1878. June 7	W. McCulloch and Company	Supply of redgum sleepers ...	Footscray to Sandhurst ...	280 0 0	387 19 6	...	"
953	691	1877. Aug. 21	W. McCulloch and Company	Extra on ditto ...	" " " " ...	107 19 6			...
954	965	1877. Sept. 28	Blair and McGrowther	Supply of 15,000 redgum sleepers, and 1,000 l. ft. sawn timber	" " " " ...	2,801 0 10	2,785 12 2	15 8 8	"
955	1052	1877. Oct. 12	Philip Bevan ...	Manufacture and supply of 100 goods wagons	All lines ...	16,152 18 4	15,622 18 4	530 0 0	"
956	1050	" 12	A. Harkness and Company	Building and finishing 100 open goods wagons	" " " " ...	10,400 0 0	10,400 0 0	...	"
958	964	1877. Sept. 28	Robert Thornton ...	Erection of a goods shed, &c., at Portland	Portland to Hamilton ...	2,310 0 0	2,144 7 11	165 12 1	"
961	1051	1877. Oct. 12	Thomas Tozer ...	Manufacture and supply of 24 double bogie wagons	All lines ...	6,202 0 0	6,122 2 3	79 17 9	"
962	966	1877. Sept. 28	Thomas Tozer ...	" " " wrought ironwork for goods wagons	" " " " ...	Rate	1,619 7 9	...	"
963	1041	1877. Oct. 5	James Silk ...	Erection of a goods shed at Ondit	Geelong to Colac ...	513 10 10	467 2 3	46 8 7	"
965	1047	" 12	Robert Thornton ...	" " temporary booking office, &c., at Portland	Portland to Hamilton ...	189 0 0	189 0 0	...	"
966	1234	1878. Dec. 7	Paterson and Quayle	" " goods shed, &c., at Braxholme	" " " " ...	339 14 8	332 1 4	7 13 4	"
967	1941	1878. Apr. 5	W. Evans ...	Supply of 160 wagon springs	All lines ...	Rate	477 19 9	...	"
968	1417	1877. Jan. 11	A. G. Corbett and Son	Conveyance of a locomotive engine from Spencer street to Oakleigh	Lines authorized under Act 37 Vict. 475	129 0 0	129 0 0	...	"
969	1069	1877. Oct. 26	H. Luth ...	Supply of 4,050 sleepers	Melbourne terminus ...	1,112 10 0	1,004 8 6	108 1 6	"
972	1235	1877. Dec. 7	Paterson and Quayle	Erection of a goods shed, &c., at Condah	Portland to Hamilton ...	331 18 3	322 0 3	9 18 0	"
973	1236	" 7	Paterson and Quayle	" " " Heywood	" " " " ...	323 14 0	318 12 9	5 1 3	"
981	1240	" 7	James Kennedy ...	Erection of wooden building for offices, Batman's Hill	Melbourne terminus ...	166 13 10	166 13 10	...	"
985	1233	" 7	Pritchard and Blackwood	Erection of a wooden building at Stawell...	Ararat to Stawell ...	155 7 7	153 15 7	1 12 0	"
986	1232	" 7	James Silk ...	" " turntable, &c., at Colac	Geelong to Colac ...	477 11 3	477 10 7	0 0 8	"
987	1273	" 21	John Foot ...	" " goods shed and platform at Dandenong	Oakleigh to Sale ...	495 8 0	478 19 7	16 8 5	"
988	1274	" 21	John Foot ...	" " " Berwick	" " " " ...	506 8 0	485 13 8	20 14 4	"
991	1275	" 21	John Foot ...	" " " Drouin	" " " " ...	550 8 0	512 7 11	38 0 1	"
992	1984	1878. Apr. 12	D. Leslie and Company	Construction of 36 miles 20 chains 53 links of railway and telegraph line between Stawell and Murtoa	Stawell to Horsham ...	77,999 13 4	67,009 5 5	...	Not completed at 31st Dec. 1878.
993	1985	" 12	D. Leslie and Company	" " 17 miles 20 chains 17 links of railway and telegraph line between Murtoa and Horsham	" " " " ...	40,272 0 2	6,886 1 3	...	"
995	1412	1877. Jan. 11	James Mackintosh...	Supply of 2,323 c. f. of redgum timber	Footscray Junction to Williamstown ...	253 5 3	203 5 3	50 0 0	Completed.
996	1276	1877. Dec. 21	Charles Beauchamp	" " 5,000 c. y. of 2½-inch metal at Williamstown Junction	Williamstown Junction to West Geelong	1,281 5 0	1,261 15 6	19 9 6	"

* In consequence of the contractors having made an assignment of their estate for the benefit of their creditors this contract was determined by the Board of Land and Works on 22nd November 1878.

No. 4.—STATEMENT showing the Contracts in progress at the 31st December 1877 for Construction of Lines, Stations, Rolling-stock, and other works; also the Contracts entered into during the Year ending 31st December 1878—*continued.*

Contract No.	Engineer-in-Chief's Gazette.	Date.	Contractor.	Description of Contract.	Line of Railway.	Contract Amount.	Expenditure to 31st December 1878.	Balance Unexpended.	Remarks.
						£ s. d.	£ s. d.	£ s. d.	
998	1277	1877. Dec. 21	C. Nash	Supply of 5,000 c. y. of 2½-inch metal at Lethbridge	Williamstown Junction to West Geelong and Geelong to Ballarat	875 0 0	875 0 0	...	Completed.
998A	1241	" 7	Langlands Foundry Company	" roller for plate-bending machine, docks, Williamstown	Footscray Junction to Williamstown	130 0 0	130 0 0	...	"
999	1237	" 7	Scott Brothers	" 3,000 sleepers, &c.	Line to racecourse, Geelong	885 0 0	885 0 0	...	"
1000	1238	" 7	Scott Brothers	" 2,600 posts and 2,600 rails	"	188 10 0	188 10 0	...	"
1001	1239	" 7	James King	" 4,500 c. y. of gravel for ballast	"	900 0 0	900 0 0	...	"
1003	2200	1878. Feb. 1	Langlands Foundry Company	" 5 pairs of locomotive engine cylinders	All lines	470 0 0	470 0 0	...	"
1004	1921	Mar. 8	Robert Barbour	" timber, &c., for silt siding	Melbourne terminus	641 13 4	547 2 7	94 10 9	"
1005	1414	Jan. 11	John Foot	Erection of engine-shed at Oakleigh	Oakleigh to Sale	326 7 2	324 11 11	1 15 3	"
1006	1415	" 11	Thomas Pescatt	" Colac	Geelong to Colac	307 7 7	307 7 7	...	"
1007	418	July 19	T. Cockram and Company	Construction of passenger station at Sale	Oakleigh to Sale	2,995 10 0	2,133 17 3	...	Not completed at 31st Dec. 1878.
1009	1411	Jan. 11	John McGaghran	Supply of 2,000 c. y. of quartz tailings	Geelong to Ballarat and Ballarat to Ararat	124 10 0	124 10 0	...	Completed.
1011	1413	" 11	A. McKenzie and Son	" 1,000 fence posts and 2,000 fence rails	Ballarat to Maryborough	70 10 0	70 10 0	...	"
1012	1416	" 11	W. H. Lamond	" 44 iron tanks	Portland to Hamilton	197 0 0	197 0 0	...	"
1013	1418	" 11	George Cooper	Excavation, &c., for reservoir at Warrigal station	Oakleigh to Sale	889 7 0	82 17 6	...	Not completed at 31st Dec. 1878.
1014	" 9	" 9	W. H. Lamond	Supply of 12 406-gallon tanks	"	51 0 0	51 0 0	...	Completed.
1015	2198	Feb. 1	James Hodgins	Clearing a portion of the Dandenong creek	"	326 14 0	297 0 0	29 14 0	"
1016	1295	1877. Dec. 28	T. Davey and Company	Supply of portable engine for workshops, Ballarat	Geelong to Ballarat	245 0 0	245 0 0	...	"
1017	1907	Mar. 1	A. Braid	Manufacture of platelayers' tools, &c.	Oakleigh to Sale	321 9 10	271 15 4	49 14 6	"
1018	1933	" 22	Thompson and Company	" points and crossings	Lines authorized under Act 41 Vict. 580	3,805 15 0	2,485 10 8	...	Not completed at 31st Dec. 1878.
1019	"	July 4	Wright and Edwards	" " " For Portland jetty	Portland to Hamilton	34 5 0	34 5 0	...	Completed.
1020	2199	Feb. 1	W. B. Hoffman	Supply of 8,000 redgum sleepers	Melbourne terminus	2,255 0 0	2,070 4 9	184 15 3	"
1021	1900	" 22	J. Stewart and Company	Erection of passenger station, &c., at Craigieburn	Newmarket Junction to Wodonga	583 19 0	...	...	"
1021	2230	June 28	J. Stewart and Company	Extra on ditto	"	563 0 0	1,111 13 1	35 5 11	"
1022	1901	Feb. 22	Phillips and Markwell	Erection of passenger station, &c., at Kilmore	"	506 11 11	486 9 1	20 2 10	"
1023	1902	" 22	James Richardson	" " " Broadford	"	516 15 11	493 16 9	22 19 2	"
1024	1903	" 22	James Richardson	" " " Tallarook	"	516 15 11	501 8 6	15 7 5	"
1025	1419	Jan. 11	Robert Barbour	Supply of 2,667 redgum sleepers	Footscray Junction to Williamstown, Williamstown Junction to West Geelong, and Geelong to Ballarat	436 9 6	436 9 6	...	Completed.
1026	1448	" 18	A. G. Corbett & Son	Conveyance of a locomotive engine from Melbourne to Oakleigh	Lines authorized under Act 37 Vict. 475	129 0 0	129 0 0	...	"
1027	1920	Mar. 8	Monie and Mattinson	Construction of 32 miles 79 chains 68 links of railway and telegraph line between Dunolly and St. Arnaud	Dunolly to St. Arnaud	71,974 0 8	60,132 1 6	...	Not completed at 31st Dec. 1878.
1028	1936	" 22	Paterson and Quayle	Erection of gatekeepers' cottages on middle section of the Oakleigh and Sale line	Oakleigh to Sale	1,350 6 0	...	...	"
1028	856	Oct. 4	Paterson and Quayle	Extra on ditto	"	422 3 4	1,772 9 4	...	Completed.

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1029	1899	Feb. 22	Richard Jack	Supply of 4-in., 5-in., and 6-in. water pipes	Oakleigh to Sale	396 15 2	396 15 1	0 0 1	Completed.
1030	2136	May 23	Langlands Foundry Company	Manufacture of points and crossings for Warrigal station		182 13 4	182 12 10	0 0 6	"
*1031	1934	Mar. 22	James Nation & Co.	Manufacture and supply of 60 cast-iron semaphores	Lines authorized under Act 41 Vict. 580	1,894 19 5	495 0 0	...	Not completed at 31st Dec. 1878.
1032	1551	Feb. 15	A. G. Corbett & Son	Conveyance of a locomotive engine from Melbourne to Oakleigh	" " " 37 Vict. 475	119 0 0	119 0 0	...	Completed.
1033	1938	Mar. 29	J. A. Wood	Construction of a goods shed, &c., at Sale	Oakleigh to Sale	991 14 6	936 9 4	55 5 2	"
1034	1935	" 22	Robison Bros. & Co.	Supply of 12 water-cranes	Lines authorized under Act 41 Vict. 580	612 19 9	583 16 0	29 3 9	"
1035	2093	May 3	Lonie Dingle and Co.	Manufacture and supply of engines, boilers, pumps, and tanks		4,884 14 0	1,741 0 6	...	Not completed at 31st Dec. 1878.
1036	1937	Mar. 29	Humble & Nicholson	Construction of 4 engine turntables	" " " " " "	1,890 0 0	1,194 6 0	...	"
1037	1927	" 15	A. G. Corbett & Son	Conveyance of a locomotive engine from Melbourne to Oakleigh	" " " " 37 Vict. 475	129 0 0	129 0 0	...	Completed.
1038	1926	" 15	J. W. and J. Robson	Supply of 2,500 redgum sleepers	Footscray to Sandhurst	354 0 0	353 17 8	0 2 4	"
1039	1986	Apr. 12	James Mackintosh	Supply of redgum crossing timbers for Geelong station	Geelong to Ballarat	376 7 7	326 7 7	50 0 0	"
1040	2149	May 31	Blair & McGrowther	Supply of 10,000 redgum sleepers and 1,000 l. ft. of crossing timbers	Footscray Junction to Williamstown, Geelong to Ballarat, Footscray to Sandhurst and Echuca, and Newmarket Junction to Wodonga	1,846 17 6	1,846 15 3	0 2 3	"
1041	2138	" 23	Noble, Mahood & Co.	Manufacture of 750 wrought-iron buffers	Lines authorized under Act 41 Vict. 580	2,334 7 6	945 0 0	...	Not completed at 31st Dec. 1878.
1042	2196	June 21	Johnson and Co.	Construction of wrought-iron girders for bridge at Brougham Place, Geelong	Geelong to Ballarat	163 1 4	129 1 1	34 0 3	Completed.
1043	420	July 19	Cormack and Hogan	Supply of 10,000 c. y. of gravel ballast	Newmarket Junction to Wodonga	985 8 4	918 14 2	66 14 2	"
1044	...	...	Oliver and Youn	Supply of 500 c. y. of quartz tailings for Talbot station	Ballarat to Maryborough	32 9 4	32 9 4	...	"
1045	1998	Apr. 18	John Blyth and Co.	Supply of 485 water pipes	Oakleigh to Sale	357 13 11	357 13 11	...	"
1046	2149	May 31	Charles Beauchamp	Supply of 10,000 c. y. of metal	Geelong to Colac	2,704 3 4	2,655 19 3	...	Not completed at 31st Dec. 1878.
1047	2231	June 28	Fishburn and Morton	Forming and metalling road to Oakleigh station	Oakleigh to Sale	706 16 9	706 16 9	...	Completed.
1048	2232	" 28	J. H. Robinson and Sons	Supply of wrought-iron pins and ferrules	All lines	463 0 0	463 0 0	...	"
1049	2194	" 21	Fishburn and Morton	Supply of 1,400 c. y. of bluestone metal at Oakleigh and Dandenong	Oakleigh to Sale	608 13 4	608 13 4	...	"
1049A	2195	" 21	J. S. White	Supply of 600 c. y. of bluestone metal at Berwick		195 0 0	195 0 0	...	"
1050	2147	May 31	Richard Jack	Supply of pipes for water supply, Traralgon		340 19 8	340 13 8	0 6 0	"
1051	630	July 26	J. Slater and Co.	Supply of 5-in. cast-iron water pipes for water supply, Elmore	Sandhurst to Echuca	124 7 6	124 7 6	...	"
1052	2137	May 23	Robert Barbour	Supply of 4,000 redgum sleepers	Footscray Junction to Williamstown, Williamstown Junction to Geelong and Ballarat	700 0 0	700 0 0	...	"
1053	637	July 26	Fishburn & Morton	Construction of 13 miles 76 chains 83 links of railway and telegraph line from Springs to Wahgunyah	Springs to Wahgunyah	30,463 11 3	15,210 15 0	...	Not completed at 31st Dec. 1878.
1054	2098	May 17	Hugh Owen	Supply of 10,000 c. y. of gravel ballast	Ararat to Hamilton	710 8 4	709 2 6	1 5 10	Completed.
1055	419	July 19	T. Cockram and Co.	Construction of a passenger station at Warrigal	Oakleigh to Sale	3,403 6 6	2,276 2 3	...	Not completed at 31st Dec. 1878.
1056	395	" 12	Richard Jack	Supply of 480 cast-iron water pipes for water supply, Traralgon	"	258 14 9	254 1 9	4 13 0	Completed.
1057	402	" 19	Robert Aitchison	Erection of 5 gatekeepers' cottages	Stawell to Horsham	497 10 0	496 13 11	0 16 1	"
1058	403	" 19	Robert Aitchison	" 5	"	516 0 0	452 11 6	...	Not completed at 31st Dec. 1878.
1059	404	" 19	Robert Aitchison	" 5	"	524 6 8	446 7 1	...	"
1060	405	" 19	Robert Aitchison	" 5	"	537 17 6	385 0 8	...	"
1061	406	" 19	Robert Aitchison	" 5	"	551 7 6	294 8 4	...	"
1062	407	" 19	Robert Aitchison	" 5	"	558 17 6	321 6 10	...	"
1063	408	" 19	Jason Fraser	" 5	"	566 7 6	180 0 0	...	"

* This contract was transferred from Thomas Tozer to James Nation and Company on 27th December 1878.

No. 4.—STATEMENT showing the Contracts in progress at the 31st December 1877 for Construction of Lines, Stations, Rolling-stock, and other works; also the Contracts entered into during the Year ending 31st December 1878—*continued.*

Contract No.		Date.	Contractor.	Description of Contract.	Line of Railway.	Contract Amount.	Expenditure to 31st December 1878.		Balance Unexpended.		Remarks.
Engineers-in-Chief's.	Gazette.						£	s. d.	£	s. d.	
		1878.									
1064	409	July 19	Jason Fraser	Erection of 5 gatekeepers' cottages	Stawell to Horsham	567 17 6	192 1 1	...	...	Not completed at 31st Dec. 1878.
1065	410	" 19	Jason Fraser	" 5 "	"	570 12 6	...	...	...	"
1066	411	" 19	Jason Fraser	" 5 "	"	572 12 6	...	...	...	"
1067	412	" 19	Jason Fraser	" 4 "	"	461 2 0	94 16 5	...	...	"
1068	415	" 19	J. Faulkner	" 5 "	Dunolly to St. Arnaud	481 13 6	453 5 5	28 8 1	...	Completed.	
1069	2233	June 28	George Thomson	" 5 "	"	575 0 0	536 12 11	38 7 1	...	"	
1070	2234	" 28	George Thomson	" 5 "	"	602 11 8	564 18 1	37 13 7	...	"	
1071	2235	" 28	George Anderson	" 5 "	"	622 10 0	577 5 6	45 4 6	...	"	
1072	2236	" 28	George Anderson	" 3 "	"	379 10 0	331 5 8	48 4 4	...	"	
1073	421	July 19	A. McKenzie & Son	Supply of 5,000 split rails and 5,000 split posts	Footscray to Sandhurst	262 10 0	262 10 0	...	...	"
1074	2139	May 23	Phoenix Foundry Co.	2 locomotive engines and tenders	Lines authorized under Act 41 Vict. 580	5,200 0 0	2,406 7 2	...	...	Not completed at 31st Dec. 1878.
1075	799	Sept. 13	Topham, Angus, and Smith	Construction of 20 miles 56 chains 85 links of railway and telegraph line from Geelong to Queenscliff	Geelong to Queenscliff	58,977 7 6	16,220 0 0	...	...	"
1076	800	" 13	William Quayle	Construction of a passenger station, &c., at Murtoa	Stawell to Horsham	592 10 0	308 1 2	...	...	"
1078	801	" 13	William Quayle	" " " Glenorchy	"	579 4 6	487 17 9	...	...	"
1079	638	July 26	Isaac Summerland	" " " Bealiba	Dunolly to St. Arnaud	574 16 9	493 4 0	...	...	"
1080	740	Aug. 23	Ainsworth Harrison	" " " Goldsbrough	"	568 4 6	561 16 9	6 7 9	...	Completed.	
1082	631	July 26	R. C. Brown	Construction of a passenger station, &c., at Essendon	Newmarket Junction to Wodonga	581 9 2	543 14 0	37 15 2	...	"	
1083	632	" 26	David Spence	" " " Broadmeadows	"	553 17 10	447 1 4	...	...	Not completed at 31st Dec. 1878.
1084	822	Sept. 27	William Marsh	" " " Longwood	"	572 15 8	267 2 6	...	...	"
1085	807	" 20	T. H. Amery	" " " Euroa	"	553 16 4	248 4 3	...	...	"
1086	633	July 26	James Williams	" " " Violet Town	"	579 16 9	473 0 1	...	...	"
1087	634	" 26	T. W. Cowley & Co.	" " " Springs	"	538 8 11	457 15 4	...	...	"
1088	943	Nov. 22	Howard and Cooke	Manufacture of points and crossings	Melbourne terminus	3,295 7 11	...	...	...	"
1089	928	" 15	Thompson and Co.	" " "	"	2,980 12 8	473 13 8	...	...	"
1090	929	" 15	Fulton Foundry Co.	" " "	"	2,776 8 0	525 3 8	...	...	"
1091	978	" 29	J. Horwood and Sons	" " "	"	2,721 6 0	320 9 2	...	...	"
1092	414	July 19	J. Haworth and Son	Supply of posts and rails	Geelong to Queenscliff	541 12 9	541 12 9	...	...	Completed.
1093	413	" 19	J. Reynolds	Erecting 6 miles of fencing	"	188 0 0	188 0 0	...	...	"
1094	635	" 26	Fishburn & Morton	Supply of ballast at Pakenham	Oakleigh to Sale	1,208 6 8	1,700 7 4	...	...	"
1094	944	Nov. 22	Fishburn & Morton	Extra on ditto	"	492 0 8	...	...	...	"
1096	2237	June 28	Walker, Hickman, and Co.	Supply of 10 pairs locomotive engine cylinders	All lines	950 0 0	95 0 0	...	...	Not completed at 31st Dec. 1878.
1097	639	July 26	James Thorpe	" 3,000 c. y. of White Hills gravel	Sandhurst to Echuca	165 0 0	165 0 0	...	...	Completed.
1097A	...	" 12	W. Arnold	" 500 "	"	29 19 0	...	...	...	"
1098	855	Oct. 4	Williamstown Stone Crushing Company	" 664 " metal	Williamstown Junction to West Geelong	170 3 0	170 3 0	...	...	"
1099	825	Sept. 27	King and Co.	Construction of 13 miles 5 chains 82 links of railway and telegraph line from Warrenheip to Gordons	Warrenheip to Gordons	40,901 12 4	7,048 17 0	...	...	Not completed at 31st Dec. 1878.
1100	741	Aug. 23	Samuel Lacey	Construction of foundations and erection of turntable at Sale	Oakleigh to Sale	226 9 10	203 16 10	...	...	"
1101	692	" 2	John Paterson	Erection of turntable at Warrigal	"	339 3 9	339 1 2	0 2 7	...	Completed.	
1102	941	Nov. 22	Buchanan & Nodrum	Manufacture of three steam crab-winchies	Sandhurst to Echuca	324 11 4	...	...	...	Not completed at 31st Dec. 1878.
1103	...	July 10	William Watson	Conveyance of ballast trucks from Oakleigh to Spencer street	Melbourne terminus	48 15 0	48 15 0	...	...	Completed.

VICTORIAN RAILWAYS.

No. 5.

FUNDS authorized to be obtained on Loan for the construction of the Victorian Railways, and of the Expenditure charged against the same, to the 31st December 1878.

Loans Authorized.			Expenditure on Construction charged against Loans.				
	£	s. d.	£	s. d.	£	s. d.	
Loan 21 Victoria No. 36 ...	8,000,000	0 0			Expenditure on construction of Victorian Railways, charged against the Railway Loans, to 31st December 1877, including Rolling-stock, Plant, and Material ...		
Loan 25 Victoria No. 150 ...	300,000	0 0					
Loan 29 Victoria No. 287 ...	250,000	0 0					
Loan 32 Victoria No. 331 ...	2,107,000	0 0					
Loan 37 Victoria No. 468 ...	1,450,000	0 0					
Loan 39 Victoria No. 531 ...	1,396,693	0 0				12,839,480 11 0	
			13,503,693	0 0			
Less Discount and Expenses on Sale of Debentures—							
Loan 37 Victoria No. 468...	159,182	10 7					
Loan 39 Victoria No. 531...	91,286	18 0					
	250,469	8 7					
Deduct Net Premiums on Debentures of—							
Loan 21 Victoria No. 36	234,772	5 1					
Loan 25 Victoria No. 150							
Loan 29 Victoria No. 287							
Loan 32 Victoria No. 331							
			15,697	3 6			
			£ 13,487,995	16 6		£ 13,487,995 16 6	
					Balance unexpended ...	648,515 5 6	

P. P. LABERTOUCHE,
Secretary.

GEO. T. A. LAVATER,
Accountant.

Railway Department, Accountant's Office,
20th March 1879.

VICTORIAN RAILWAYS.

No. 6.—RECEIPTS and EXPENDITURE on Capital Account to the 31st December 1878.

	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
To Net Amount raised on Loans, as per Statement No. 5	13,487,995	16	6									
„ Railway Loan Liquidation and Construction Account (Act 360)	1,800,000	0	0									
„ Advances on account of ditto	367,579	0	6									
„ Advances on account of Loan 608	77,589	6	6									
„ Amount from Consolidated Revenue (see Return No. 7)	441,800	2	2									
„ Remittance Account	15,060	1	0	16,174,964	5	8						
„ Sundry Creditors	10,453	16	1									
				25,513	17	1						
By Construction (General Account)												
<i>Northern System.</i>												
By Construction, Main Line, Melbourne to Sandhurst	5,014,418	8	0									
„ Ditto, ditto, Sandhurst to Echuca	602,944	12	0									
„ Ditto, Castlemaine and Dunolly Line	282,055	8	8									
„ Ditto, Ballarat and Maryborough Line	251,909	12	10									
„ Ditto, Maryborough and Avoca Line	60,131	11	0									
„ Ditto, Sandhurst and Inglewood Line	152,051	18	8									
„ Ditto, Dunolly and St. Arnaud Line (in progress)	108,035	4	4									
„ Ditto, Carlsruhe and Daylesford Line (in progress)	4,940	6	4									
Total Northern System							6,476,487	1	10			
<i>Western System.</i>												
By Construction, Williamstown Line (Footscray to Williamstown)	405,635	16	3									
„ Ditto, Geelong Line (Williamstown Junction to Geelong)	1,050,736	16	10									
„ Ditto, Ballarat Line (West Geelong to Ballarat)	1,717,881	16	6									
„ Ditto, Ballarat and Ararat Line	310,063	11	10									
„ Ditto, Ararat and Stawell Line	110,093	3	9									
„ Ditto, Ararat and Hamilton Line	298,763	19	8									
„ Ditto, Geelong and Colac Line (including Branch Line to Racecourse)	310,813	18	3									
„ Ditto, Portland and Hamilton Line	260,106	17	1									
„ Ditto, Stawell and Horsham Line (in progress)	132,610	12	9									
„ Ditto, Geelong and Queenscliff Line (in progress)	37,154	4	1									
„ Ditto, Warrenheip and Gordons Line (in progress)	21,000	8	6									
Total Western System							4,654,861	5	6			
<i>North-Eastern System.</i>												
By Construction, Essendon Line (Essendon Junction to Essendon, including Racecourse Branch)	76,648	13	6									
„ Ditto, North-Eastern Line (Essendon to Wodonga)	1,556,485	0	0									
„ Ditto, Wangaratta and Beechworth Line	153,730	9	4									
„ Ditto, Springs and Wahgunyah Line (in progress)	33,652	18	1									
„ Ditto, Avenel and Shepparton Line (in progress)	6,645	6	7									
Total North-Eastern System							1,827,162	7	6			
<i>Eastern System.</i>												
By Construction, Oakleigh and Sale Line	697,546	14	7									
„ Ditto, South Yarra and Oakleigh Line (in progress)	38,835	6	6									
„ Ditto, Spencer and Flinders streets connection (in progress)	156	6	8									
Total Eastern System							736,538	7	9			
By Rolling-stock—Engines	577,623	19	7									
„ „ Carriages, Trucks, and all other Vehicles	674,799	15	1									
„ Preliminary Surveys of Lines (not authorized for construction) ... ..	...						1,252,423	14	8			
„ Bridge over Murray at Echuca ... ..	...						40,817	6	10			
							88,406	15	2			
<i>Plant and Materials.</i>							15,343,240	6	2			
By Balance on hand	154,946	14	9									
„ Amount in hands of Agent-General for further purchase of Plant, &c.	15,060	1	0									
							170,006	15	9			
By Unadjusted Advances ... ..	...									15,513,247	1	11
„ Sundry Debtors ... ..	...									26,000	0	0
„ Balance of Funds unexpended—Loan 32 Vict. 331 ... ..	...									12,715	15	4
„ „ „ Loan 37 Vict. 468 ... ..	...									303	12	0
„ „ „ Loan 39 Vict. 531 ... ..	...									477	14	3
										647,733	19	3
										648,515	5	6
							£			16,200,478	2	9

Railway Department, Accountant's Office,
20th March 1879.

P. P. LABERTOUCHE, Secretary.
GEO. T. A. LAVATER, Accountant.

VICTORIAN RAILWAYS.

No. 9.

STATEMENT of Revenue and Expenditure on ALL LINES for the Year ending 31st December 1878.

DR.					REVENUE.					CR.	
EXPENDITURE.											
Miles open	1,035				Number of Passengers carried	3,829,255½				Revenue per Train Mile.	
Through Mileage	1,054			Cost per Train Mile.	Tons of Live Stock carried	30,104					
Average open for the Year	960½			Per Cent. to Revenue.	„ Goods carried	930,375					
Train Miles run	3,095,590										
	£	s.	d.	£	s.	d.	£	s.	d.	s.	d.
MAINTENANCE OF WAY AND WORKS:											
Salaries, Wages, and Services	123,583	17	7				424,504	5	3		
Materials	31,826	0	8				28,665	11	8		
				155,409	18	3					
										1	0'05
											12'77
LOCOMOTIVE CHARGES:											
Loco. Superintendent and Clerks	2,882	15	4								
„ Foremen	3,124	8	5								
„ Drivers and Firemen	44,447	16	9								
„ Cleaners	8,600	16	6								
„ Coalmen and Laborers	4,424	16	3								
„ Sundries	12,179	2	3								
Coal	68,069	19	1								
Wood	1,708	2	2								
Water	4,631	18	10								
Oil, Tallow, and Waste	6,350	2	1								
Sundry Stores for Cleaners	3,633	15	8								
Repairs of Engines—Wages	25,916	6	0								
„ „ Stores	15,236	0	6								
„ Tools, &c.—Wages	2,106	8	3								
„ „ Stores	1,493	10	8								
				204,805	18	9					
										1	3'88
											16'83
TRAFFIC CHARGES:											
Traffic Manager's Office	4,463	9	4								
Melbourne Terminus, Passenger Station	14,816	14	3								
Melbourne Terminus, Goods Station	35,369	16	0								
North Melbourne Station	2,613	18	9								
Footscray Station	1,677	16	4								
Ballarat Station	6,366	12	11								
Station Masters	12,440	10	3								
Clerks	6,904	9	2								
Porters, Laborers, &c.	30,545	8	4								
Pointsmen, &c.	4,676	12	4								
Gatekeepers	26,960	17	4								
Guards	12,760	19	11								
Stores for Stations	10,655	11	1								
Compensation	10,480	15	5								
Advertising	2,318	12	9								
Travelling & Incidental Expenses	3,291	13	7								
Repairs of Carriages and Wages	19,798	14	2								
Wagons	15,331	10	9								
„ „ Stores	4,504	3	6								
Greasing Carriages and Wages	6,085	18	1								
Wagons	9,114	17	3								
Sundry Charges	7,339	16	7								
Williamstown Pier Expenses											
				248,518	18	1					
										1	7'27
											20'43
GENERAL CHARGES:											
Secretary's Office	3,223	10	3								
Accountant's „	10,632	17	5								
Superannuation Allowances	2,102	6	10								
Insurance of Buildings	1,005	12	9								
				16,964	7	3				0	1'32
											1'40
Total				625,699	2	4				0	5'52
											51'43
Balance				590,976	2	6					
				1,216,675	4	10				1,216,675	4
											7
											10'33

From the practice which obtains of running a large number of Mixed trains on all the Lines, the Passenger and Goods train mileage and charges cannot be separated.

Railway Department, Accountant's Office,
20th March 1879.P. P. LABERTOUCHE, Secretary.
GEO. T. A. LAVATER, Accountant.

VICTORIAN RAILWAYS.

No. 11.

STATEMENT of Revenue and Expenditure on the WESTERN SYSTEM for the Year ending
31st December 1878.

DR.				EXPENDITURE.				REVENUE.				CR.						
				Miles open	382½	Cost per Train Mile.		Number of Passengers carried				2,178,056½	Revenue per Train Mile.					
				Through Mileage	397½			Tons of Live Stock carried				6,001						
				Average open for the Year	347½			" Goods carried				367,988						
				Train Miles run	1,087,898													
MAINTENANCE OF WAY AND WORKS:				£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.			
Salaries, Wages, and Services ..				46,464	3	2					Passengers		166,624	19	9			
Materials				13,216	11	5					Parcels, &c.		10,167	15	8			
							59,680	14	7	1	1'17	15'26	Horses, Carriages, and Dogs ..		4,572	19	1	
LOCOMOTIVE CHARGES:													Mails		11,097	1	10	
Loco. Superintendent and Clerks ..				1,014	3	0					Rents		4,898	16	5			
" Foremen				1,235	4	4					Miscellaneous		2,817	16	3			
" Drivers and Firemen				15,641	7	1					Live Stock		9,702	6	6			
" Cleaners				3,102	5	0					Goods		181,209	19	10			
" Coalmen and Laborers				1,522	0	0												
" Sundries				4,379	1	6												
Coal				24,072	14	8												
Wood				549	4	7												
Water				1,542	1	8												
Oil, Tallow, and Waste				2,063	9	4												
Sundry Stores for Cleaners				1,322	19	1												
Repairs of Engines—Wages				8,017	12	8												
" " Stores				4,696	3	11												
" Tools, &c.—Wages				763	1	0												
" " Stores				553	14	0												
							70,475	1	10	1	3'55	18'02						
TRAFFIC CHARGES:																		
Traffic Manager's Office (proportion of)				1,432	15	4												
Melbourne Terminus (proportion of)				17,065	15	6												
North Melbourne Station (proportion of)				873	1	2												
Footscray Station (proportion of)				726	10	0												
Ballarat Station (proportion of)				4,244	8	7												
Station Masters				3,594	4	0												
Clerks				1,375	17	1												
Porters, Laborers, &c.				9,938	5	2												
Pointsmen, &c.				1,690	8	3												
Gatekeepers				8,969	1	10												
Guards				4,346	10	5												
Stores for Stations				3,854	2	11												
Compensation				4,958	4	10												
Advertising				744	5	8												
Travelling & Incidental Expenses				1,331	19	6												
Repairs of Carriages and Wagons				6,557	5	0												
" " " Stores				4,978	2	0												
Greasing Carriages and Wagons				1,404	16	0												
" " " Stores				1,955	11	0												
Sundry Charges				2,925	17	4												
Williamstown Pier Expenses				7,339	16	7												
							90,306	18	2	1	7'92	23'09						
GENERAL CHARGES:																		
Secretary's Office (proportion of)				1,034	15	0												
Accountant's Office (proportion of)				3,413	3	0												
Superannuation Allowances (proportion of)				674	17	0												
Insurance of Buildings (proportion of)				322	16	2												
							5,445	11	2	0	1'20	1'39						
Total							225,908	5	9	4	1'84	57'76						
Balance							165,183	9	7									
							391,091	15	4					391,091	15	4	7	2'28

Railway Department, Accountant's Office,
20th March 1879.

P. P. LABERTOUCHE, Secretary.
GEO. T. A. LAVATER, Accountant.

VICTORIAN RAILWAYS.

No. 13.

STATEMENT of Revenue and Expenditure on the EASTERN SYSTEM for the Year ending 31st December 1878.

DR.		EXPENDITURE.				REVENUE.				Cr.			
		£	s.	d.	s.	d.		£	s.	d.	s.	d.	
Miles open	118 $\frac{1}{2}$				Cost per Train Mile.	Per Cent. to Revenue.	Number of Passengers carried ..	98,856 $\frac{1}{2}$			Revenue per Train Mile.		
Through Mileage	118 $\frac{3}{4}$						Tons of Live Stock carried ..	261					
Average open for the Year	113						„ Goods carried	14,934					
Train Miles run	141,382												
MAINTENANCE OF WAY AND WORKS:							Passengers	25,555	3	0			
Salaries, Wages, and Services ..	10,304	9	7				Parcels, &c.	1,802	16	4			
Materials	96	10	7				Horses, Carriages, and Dogs ..	870	10	9			
					10,401	0	2	1	5	66	22	65	
LOCOMOTIVE CHARGES:							Mails	3,162	19	10			
Loco. Superintendent and Clerks ..	123	10	0				Rents	8	3	9			
„ Foremen	63	18	2				Miscellaneous	201	1	6			
„ Drivers and Firemen	1,792	8	11				Live Stock	370	10	5			
„ Cleaners	297	10	5				Goods	13,947	13	5			
„ Coalmen and Laborers	193	13	4										
„ Sundries	969	0	1										
Coal	2,287	5	11										
Wood	168	3	8										
Water	21	4	9										
Oil, Tallow, and Waste	250	1	7										
Sundry Stores for Cleaners	128	13	11										
Repairs of Engines—Wages	301	11	6										
„ „ Stores	148	3	2										
„ Tools, &c.—Wages	31	2	6										
„ „ Stores	14	14	0										
					6,791	1	11	0	11	53	14	79	
TRAFFIC CHARGES:													
Traffic Manager's Office (proportion of)	169	12	2										
Station Masters	681	10	11										
Clerks	250	14	8										
Porters, Laborers, &c.	1,957	17	3										
Pointsmen, &c.	10	17	0										
Gatekeepers	717	9	3										
Guards	531	15	1										
Stores for Stations	1,059	5	9										
Compensation	2	14	0										
Advertising	88	2	2										
Travelling and Incidental Expenses	379	9	2										
Repairs of Carriages and Wagons	313	16	0										
„ „ „ Stores	135	0	0										
Greasing Carriages and Wagons	277	12	3										
„ „ „ Stores	218	3	11										
Sundry Charges	346	7	4										
					7,140	6	11	1	0	12	15	55	
GENERAL CHARGES:													
Secretary's Office (proportion of)	122	9	10										
Accountant's Office (proportion of)	404	1	0										
Superannuation allowances (proportion of)	79	17	10										
Insurance of Buildings (proportion of)	38	4	2										
					644	12	10	0	1	09	1	40	
Total					24,977	1	10	3	6	40	54	39	
Balance					20,941	17	2						
					45,918	19	0				45,918	19	0
											6	5	95

Railway Department, Accountant's Office,
20th March 1879.P. P. LABERTOUCHE, Secretary.
GEO. T. A. LAVATER, Accountant.

VICTORIAN RAILWAYS.

No. 14.—RETURN of Wool from the undermentioned Stations to Melbourne, Williamstown Pier, Geelong, and Portland for Year ending 31st December 1878.

From—	To Melbourne.		To Williamstown Pier.		To Geelong.		To Portland.		Total.	
	Bales.	Revenue.	Bales.	Revenue.	Bales.	Revenue.	Bales.	Revenue.	Bales.	Revenue.
	£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.	
Melbourne .. .. .	..	..	84,199	3,062 5 3	17	1 16 0	..	..	84,216	3,064 1 3
Kellor Road	1,237	78 10 8	797	59 7 6	21	2 19 6	..	..	2,055	140 17 8
Digger's Rest	110	7 4 11	86	7 14 5	..	..	..	..	196	14 19 4
Sunbury	25	1 12 3	..	..	..	..	..	..	25	1 12 3
Lancefield Road	1,074	110 15 0	714	89 5 0	..	..	..	..	1,788	200 0 0
Riddell's Creek	45	4 17 8	..	..	..	..	..	..	45	4 17 8
Gisborne	161	16 18 4	..	..	..	..	..	..	161	16 18 4
Woodend	121	13 16 3	..	..	..	..	..	..	121	13 16 3
Carlsruhe	30	3 9 4	..	..	..	..	..	..	30	3 9 4
Kyneton	1,250	192 15 5	15	2 13 9	..	..	..	..	1,265	195 9 2
Malmesbury	559	85 2 7	..	..	..	..	..	..	559	85 2 7
Taradale	5	0 19 6	..	..	..	..	..	..	5	0 19 6
Elphinstone	352	65 19 9	..	..	..	..	..	..	352	65 19 9
Castlemaine	259	57 8 1	117	30 14 3	..	..	..	..	376	88 2 4
Harecourt .. .. .	..	..	74	15 14 6	..	..	..	..	74	15 14 6
Kangaroo Flat	123	33 2 2	..	..	..	..	..	..	123	33 2 2
Sandhurst	1,227	337 7 6	57	16 11 6	59	20 13 6	..	..	1,343	374 12 6
Goornong	203	60 2 10	..	..	..	..	..	..	203	60 2 10
Elmore	1,555	487 12 10	321	104 9 9	..	..	..	..	1,876	592 2 9
Rochester	780	273 8 10	93	32 0 11	7	2 17 0	..	..	880	308 6 9
Echuca	45,186	13,152 18 9	31,727	21,395 11 10	21	8 11 6	..	..	76,934	34,467 2 1
Werribee	42	3 6 4	1,009	75 13 6	..	..	..	..	1,051	78 19 10
Little River	13	1 9 10	82	10 6 4	314	15 19 3	..	..	409	27 15 5
Lara	177	17 15 6	..	..	24	1 4 0	..	..	201	18 19 6
Geelong	338	36 7 6	1,570	197 14 1	..	..	..	..	1,908	234 1 7
Leigh Road	32	4 1 4	..	..	1,314	85 15 3	..	..	1,346	89 16 7
Lethbridge .. .. .	..	..	..	..	110	6 18 0	..	..	110	6 18 0
Meredith	3	0 12 0	..	..	659	66 0 0	..	..	662	66 12 0
Elalze	8	1 12 0	..	..	1,044	104 19 3	..	..	1,052	106 11 3
Yendon	207	46 12 2	..	..	187	23 5 11	..	..	394	69 18 1
Ballarat East .. .. .	..	..	..	..	15	2 7 6	..	..	15	2 7 6
Ballarat	949	230 17 1	..	..	6,908	994 6 9	..	..	7,857	1,225 3 10
Craigieburn	52	2 13 0	..	..	..	..	..	..	52	2 13 0
Beveridge	196	20 10 11	..	..	..	..	..	..	196	20 10 11
Wallan Wallan	127	13 1 1	..	..	..	..	..	..	127	13 1 1
Wandong	30	3 0 0	..	..	..	..	..	..	30	3 0 0
Killmore	500	39 2 5	..	..	..	..	..	..	500	39 2 5
Breadford	578	71 3 3	..	..	..	..	..	..	578	71 3 3
Tallaroek	1,024	259 16 0	73	12 15 6	..	..	..	..	1,097	272 11 6
Seymour	948	163 15 4	77	14 12 10	..	..	..	..	1,025	178 8 2
Avenel	1,539	285 2 6	508	125 5 11	..	..	..	..	2,047	410 8 5
Longwood	2,093	446 10 3	126	29 18 6	..	..	..	..	2,219	476 8 9
Enrola	983	80 16 7	67	17 11 9	..	..	..	..	1,050	98 8 4
Violet Town	400	119 19 3	..	..	..	..	..	..	400	119 19 3
Nenalla	2,137	619 10 2	90	28 10 0	..	..	..	..	2,227	648 0 2
Glenrowan	111	36 12 7	..	..	..	..	..	..	111	36 12 7
Wangaratta	689	236 1 2	81	32 5 0	..	..	..	..	770	268 6 2
Springs	6,919	2,236 11 6	4,318	1,516 8 4	..	..	..	..	11,237	3,752 19 10
Chiltern	36	15 11 0	..	..	..	..	..	..	36	15 11 0
Barnawartha	26	13 5 5	..	..	..	..	..	..	26	13 5 5
Wodonga	13,678	4,857 5 2	1,068	384 1 0	..	..	..	..	14,746	5,241 6 2
Burrumbeet	42	11 5 5	..	..	927	156 12 3	..	..	969	167 17 8
Trawalla	1	0 7 3	..	..	337	67 8 0	..	..	338	67 15 3
Beaufort	392	115 6 4	..	..	1,703	359 12 5	..	..	2,095	474 18 9
Middle Creek .. .. .	..	..	..	..	44	10 3 0	..	..	44	10 3 0
Buangor	118	37 14 8	..	..	1,004	252 7 6	..	..	1,122	290 2 2
Ararat	154	58 14 1	..	..	710	194 12 8	..	..	864	253 6 9
Great Western	8	3 4 2	..	..	169	50 8 9	..	..	177	53 12 11
Stawell	2,909	962 12 9	140	54 5 0	8,262	2,579 18 10	..	..	11,311	3,556 16 7
Murtoa .. .. .	..	..	..	..	27	9 13 6	..	..	27	9 13 6
Tarravinee	15	5 18 0	..	..	..	..	..	..	15	5 18 0
Everton	128	46 13 4	..	..	..	..	..	..	128	46 13 4
Beechworth	109	43 8 8	..	..	..	..	..	..	109	43 8 8
Guildford	26	5 19 4	..	..	..	..	..	..	26	5 19 4
Newstead	372	92 3 10	..	..	..	..	..	..	372	92 3 10
Moolort	145	37 19 0	..	..	..	..	..	..	145	37 19 0
Carisbrook	277	81 10 7	..	..	..	..	..	..	277	81 10 7
Maryborough	170	42 8 4	..	..	10	2 13 10	..	..	180	45 2 2
Bet Bet	32	10 11 4	..	..	..	..	..	..	32	10 11 4
Dunolly	322	101 17 5	..	..	264	72 18 6	..	..	586	174 15 11
Bealiba	844	271 9 7	..	..	101	29 16 6	..	..	945	301 6 1
St. Arnaud .. .. .	..	..	..	..	4	1 8 0	..	..	4	1 8 0
Creswick	254	68 8 0	..	..	67	11 15 5	..	..	321	80 3 5
Clines	423	127 4 2	..	..	4	0 18 0	..	..	427	128 2 2
Talbot	19	5 19 6	..	..	168	36 3 5	..	..	187	42 2 11
Maroona	112	40 4 6	..	..	536	158 14 8	..	..	648	198 19 2
Wickliffe Road	374	143 13 11	..	..	1,386	352 0 4	..	..	1,760	495 14 3
Glen Thompson	30	11 5 0	..	..	808	271 9 3	..	..	838	282 14 3
Dunkeld	629	248 8 6	..	..	2,590	1,009 15 11	279	50 11 3	3,498	1,308 15 8
Condam	13	5 9 5	..	..	..	..	384	41 8 4	397	46 17 9
Hamilton	2,020	754 5 3	17	7 4 6	1,887	685 12 10	5,333	423 18 11	9,257	1,871 1 6
Branxholme	121	50 16 2	..	..	6	2 5 6	1,442	144 9 1	1,569	197 10 9
Heywood .. .. .	..	..	..	..	..	..	32	1 12 0	32	1 12 0
Eaglehawk	45	13 11 6	313	93 17 6	..	..	..	..	358	107 9 0
Marong	7	1 18 6	..	..	..	..	..	..	7	1 18 6
Leichardt	31	9 13 5	..	..	..	..	..	..	31	9 13 5
Bridgewater	3,918	1,199 0 0	1,118	363 19 10	..	..	..	..	5,036	1,562 19 10
Inglewood	2,764	867 1 9	375	125 0 0	61	22 13 5	..	..	3,200	1,014 15 2
Avoca	1,676	506 19 2	..	..	816	229 6 2	..	..	2,492	736 5 4
Mount Morine .. .. .	..	..	..	..	12	0 12 0	..	..	12	0 12 0
Winchelsea	198	37 2 11	..	..	253	16 3 9	..	..	451	53 6 8
Biregurra .. .. .	..	..	..	..	575	57 18 0	..	..	575	57 18 0
Ondit Road	16	3 16 0	..	..	1,106	130 3 9	..	..	1,122	133 19 9
Colac	1,125	281 19 11	..	..	2,019	268 10 4	..	..	3,144	550 10 3
Denilquin	23,730	*10,302 6 6	..	..	625	*335 5 1	..	..	24,355	*10,637 11 7
Total	132,434	41,455 12 2	129,292	27,815 18 3	37,181	8,714 15 0	7,470	661 19 7	306,377	78,648 5 0

* These amounts include the full charge from Denilquin.

Railway Department, Accountant's Office,
20th March 1879.

P. P. LABERTOUCHE, Secretary,
GEO. T. A. LAVATER, Accountant.

No. 15.—Amount, Mileage, and Traffic at each Station for the Year ending 31st December 1878.

Main data table with columns for Stations, Passengers, Parcels, ETC., Goods, and Live Stock. It includes sub-sections for Outwards, Inwards, and Station Traffic, with detailed numerical data for each station.

RAILWAY DEPARTMENT, ACCOUNTANT'S OFFICE, 20th MARCH 1879. * These stations were open for traffic for only portion of the year.

P. P. LABRETTOUCHE, Secretary. G. E. T. A. LAVATER, Accountant.

VICTORIAN RAILWAYS.

No. 16.

RETURN of the Number of Passes issued during the Year ended 31st December 1878.

Visitors of distinction	347
On occasions of opening and closing of Parliament	222
Directors and Officers of the Melbourne and H. Bay and Deniliquin and Moama Railway Companies	16
Secretaries of Mechanics' Institutes when travelling to purchase books and promote Art Exhibitions	12
Inmates of Blind and Deaf and Dumb Asylums visiting country to give Charitable Concerts, &c.	97
Inmates of Melbourne Orphan Asylum, with attendants	20
Ditto ditto to Ballarat Exhibition	500
	520
Exhibition Commissioners and Secretaries	22
Clergymen attending New South Wales Wesleyan Conference	22
Intercolonial Rifle Match	33
Discharged Prisoners under the Prisoners' Aid Society	125
Aborigines	35
Ditto, children to Ballarat Exhibition	25
	60
Charity to Destitute Persons	68
Press	1,602
Post and Telegraph Department	1,245
Members of Pharmacy Board	36
Attending Governor's Levee	98
Cricketers and Footballers (Australian Eleven and Intercolonial Players)	64
	64
Total	4,589

P. P. LABERTOUCHE, Secretary.

Railway Department,
20th March 1879.

VICTORIAN RAILWAYS.

No. 17.

RETURN of Rolling-stock on the Victorian Railways at 31st December 1878.

LOCOMOTIVE ENGINES.		CARRIAGES.									WAGONS.							VANS.					HORSE BOXES.		CARRIAGE TRUCKS.	
Passenger.	Goods.	State.	1st Class.		2nd Class.		3rd Class.	Composite.	Total.	Low-sited.	Double Fogie.	Hopper, Coal.	High-sited and Covered.	Medium.	Cattle.	Sheep.	Ballast.	Total.	Brake.	Mail.	Powder.	Hearse.	Total.			
80	68	1	65	3	99	1	2	60	231	312	37	39	890	836	157	165	166*	2,602	90	10	11	1	112	26	23	

* Including 50 ballast wagons recently purchased by Engineer-in-Chief's Branch.

RETURN of Rolling-stock Ordered and in course of Construction at 31st December 1878.

11	8	6	...	7	13	10	100	110	10	10	15	15
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Locomotive Superintendent's Office,
Melbourne, 31st March 1879.S. MIRLS,
Locomotive Superintendent.

VICTORIAN RAILWAYS.

No. 19.

COMPARATIVE Yearly Statement of Miles of Line Open, Cost of Construction, Rolling-stock Employed, Gross and Net Revenue, Working Charges, and Percentages of the same to Gross Revenue, &c., on the Victorian Railways, for Seven and a half Years, from 1st July 1871 to 31st December 1878.

Year.	Miles open at end of Year. Average Miles open during the Year.		Construction.		Rolling-stock.			Number of Passengers conveyed.	Tonnage of Goods and Live Stock conveyed.	Gross Receipts.				Total Train Miles run.	Gross Receipts per Train Mile.	Maintenance.		Locomotive.		Traffic.		General.		Total Working Cost.			Net Earnings.					
			Capital Cost, exclusive of Stores in hand, &c.	Average Cost per Mile open.	Passenger Engines.	Goods Engines.	Carriages.			Wagons, Vans, &c.	From Passenger, &c. Traffic.	From Goods and Live Stock Traffic.	Total.			Per Average Mile open.	Amount.	Per Cent. of Gross Receipts.	Amount.	Per Cent. of Gross Receipts.	Amount.	Per Cent. of Gross Receipts.	Amount.	Per Cent. of Gross Receipts.	Amount.	Per Cent. of Gross Receipts.	Amount.	Per Cent. of Gross Receipts.	Per Train Mile.	Per Average Mile open.	Amount.	Per Average Mile open.	Per Train Mile.	Per Cent. of Capital Cost.
1871-2	313	267	£ 10,034,772	£ 32,060	51	41	144	1,564	1,508,671	489,126	236,671	400,961	637,632	2,388	1,173,434	10/10 4/2	£ 69,180	10 85	£ 85,739	13 45	£ 110,845	17 38	£ 14,042	2 20	£ 279,804	43 88	s. d. 2/9 23	£ 1,048	£ 357,828	1,340	s. d. 6/11 18	3 57
1872-3	360	335	10,815,868	30,128	51	43	145	1,644	1,720,815	569,871	269,756	442,972	793,728	2,101	1,354,131	10/4 7/2	72,083	10 25	97,822	13 99	132,594	18 84	18,792	2 67	321,291	45 66	4/8 94	959	382,437	1,142	5/7 78	3 54
1873-4	441	414	11,557,484	26,207	52	54	160	1,772	2,039,030	681,710	304,073	546,969	851,042	2,056	1,667,124	10/2 5/2	74,999	8 81	121,878	14 32	161,245	18 95	16,593	1 95	374,715	44 03	4/5 94	905	476,327	1,150	5/8 57	4 12
1874-5	586	541	12,411,672	21,143	58	63	183	2,002	2,699,519	732,772	350,417	569,591	920,008	1,701	2,051,710	8/11 5/0	130,435	14 18	148,999	16 19	182,042	19 79	20,241	2 20	481,717	52 36	4/8 35	890	438,290	810	4/3 27	3 53
1875-6	620	608	13,239,405	21,354	58	63	205	2,129	2,978,139	928,300	388,228	606,539	994,767	1,636	2,280,092	8/8 7/1	128,679	12 94	153,617	15 44	196,195	19 72	20,916	2 10	499,407	50 20	4/4 57	821	495,360	815	4/4 14	3 74
† 1876	702	652	13,710,364	19,558	61	63	210	2,194	1,582,057	494,864	206,520	345,441	551,961	848	1,262,782	8/8 9/0	54,430	9 86	81,206	14 71	107,828	19 54	9,939	1 80	253,403	45 91	4/0 16	389	298,557	459	4/8 74	4 36
1877	931	787	14,562,984	15,642	76	63	221	2,373	3,395,709	1,030,558	460,459	675,340	1,135,799	1,443	2,786,581	8/1 8/2	166,581	14 66	181,078	15 94	230,125	20 26	14,697	1 29	592,481	52 16	4/3 03	753	543,318	690	3/10 79	3 73
1878	1035	967	15,343,240	14,824	80	68	231	2,713	3,829,256	960,479	515,351	701,324	1,216,675	1,258	3,095,590	7/10 3/3	155,410	12 77	204,806	16 83	248,519	20 43	16,964	1 40	625,699	51 43	4/0 52	647	590,676	611	3/9 82	3 85
Totals	4988	4571	101,675,789	180,916	487	458	1499	16,391	19,753,196	5,887,680	2,722,475	4,289,137	7,011,612	13,431	15,671,444	73/10 9/1	851,797	94 32	1,075,145	120 78	1,369,391	154 91	132,184	15 61	3,428,517	38 53	35/4 74	6,412	3,583,093	7,017	38/6 29	30 44
Averages	624	571	12,709,474	22,615	61	57	187	2,049	2,633,759	785,024	362,997	571,885	934,881	1791	2,089,526	9/2 8/6	113,573	11 79	143,353	15 10	182,585	19 36	17,625	1 95	457,136	48 20	4/5 09	855	477,746	936	4/9 79	3 81

† Six months only.

* Including repairs and renewals of carriages and wagons.

Railway Department, Accountant's Office,
20th March 1879.

P. P. LABERTOUCHE, Secretary.
GEO. T. A. LAVATER, Accountant.

VICTORIAN RAILWAYS.

No. 20.

STATEMENT showing the Cost of Construction at 31st December 1878 of each Line, and Average Cost per Mile; also Highest and Lowest Levels, Steepest Gradients, &c.

	Length in Miles.	Single or Double Line.	Height of Rail-level above Low-water Mark, Hobson's Bay.		Steepest Gradient.	Cost, exclusive of Rollingstock.	
			Highest.	Lowest.		Total.	Average per Mile.
			Feet.	Feet.		£	£
NORTHERN SYSTEM.							
Main Line—Melbourne to Sandhurst (including Melbourne terminus)	100 $\frac{1}{2}$	Double	1,902	17	1 in 50	5,014,418	49,771
Echuca Line—Sandhurst to Echuca Wharf ...	55 $\frac{1}{2}$	Single	753	320	1 " 90	602,945	10,913
Castlemaine and Dunolly Line ...	47 $\frac{1}{2}$	"	949	580	1 " 40	282,055	5,938
Ballarat and Maryborough Line ...	42 $\frac{1}{2}$	"	1,525	732	1 " 40	251,910	5,927
Maryborough and Avoca Line ...	15	"	883	721	1 " 40	60,132	4,009
Sandhurst and Inglewood Line ...	30	"	778	442	1 " 43	152,052	5,068
Dunolly and St. Arnaud Line ...	33	"	945	611	1 " 50	108,035	3,274
Total open for traffic ...	324	...	...	...	...	6,471,547	19,974
WESTERN SYSTEM.							
Williamstown Line—Footscray Junction to Williamstown Pier	6	Double	66	12	1 in 100	405,636	67,606
Geelong Line—Williamstown Junction to Geelong Pier	1 $\frac{1}{4}$ 37 $\frac{1}{4}$	Single	113	12	1 " 81	1,050,737	26,942
Ballarat Line—West Geelong to Ballarat ...	53 $\frac{1}{2}$	Double	1,725	47	1 " 52	1,717,882	32,110
Ballarat and Ararat Line ...	57	Single	1,517	960	1 " 44	310,064	5,440
Ararat and Stawell Line ...	18 $\frac{3}{4}$	"	1,086	759	1 " 50	110,093	5,872
Ararat and Hamilton Line ...	66 $\frac{1}{2}$	"	1,028	572	1 " 50	298,764	4,493
Geelong and Colac Line, including Racecourse branch	52 $\frac{1}{2}$	"	465	17	1 " 50	310,814	5,920
Portland and Hamilton Line—Hamilton to Portland Wharf	54	"	605	11	wharf line 1 " 40	260,107	4,817
Stawell and Horsham Line *	35 $\frac{1}{2}$	"	759	423	1 in 50	132,610	3,735
Total opened for traffic ...	382 $\frac{1}{2}$	...	...	...	...	4,596,707	12,010
NORTH-EASTERN SYSTEM.							
Essendon Junction to Essendon and Racecourse branch	2 $\frac{1}{2}$ 2 $\frac{1}{2}$	Double Single	148	14	1 in 67	76,649	16,137
North-Eastern Line—Essendon to Wodonga...	182 $\frac{1}{4}$	"	1,148	105	1 " 50	1,556,485	8,540
Wangaratta and Beechworth Line ...	23	"	1,831	502	1 " 30	153,730	6,684
Total opened for traffic ...	210	...	...	...	...	1,786,864	8,509
EASTERN SYSTEM.							
Gippsland Line ...	118 $\frac{1}{2}$	Single	513	32	1 in 50	697,547	5,899

* Eighteen miles more of this line to open at 31st December 1878.

Railway Department, Accountant's Office,
20th March 1879.

P. P. LABERTOUCHE, Secretary.
GEO. T. A. LAVATER, Accountant.

VICTORIAN RAILWAY

No. 21.

TURN of the Number and Nature of the Accidents to Life and Limb which have occurred on each of the several Lines of Victorian Railways from 1st January to 31st December 1878.

Date of Accident.	Line of Railway.	Passengers Killed or Injured.				Servants of Department or of Contractors Killed or Injured.				Persons Killed or Injured whilst crossing at Crossings.		Trespassers.		Miscellaneous.		Nature and Cause of Accident.	
		From causes beyond their own control.		From their own misconduct or want of caution.		From causes beyond their own control.		From their own misconduct or want of caution.		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.		
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.								Killed.	Injured.
1878.																	
January	Geelong Station ...	...	3	...	...	...	I	...	...	...	...	...	...	...	...	...	Collision between pilot-engine and 7 p.m. mail train from Melbourne.
January	Ballarat Station ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Fuelman caught between the buffers of two engines.
January	Gippsland ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Contractor's gatekeeper at Dandenong run over by ballast engine when he was running to open his gates.
January	Williamstown ...	...	...	...	I	...	...	...	...	...	...	...	...	...	...	...	Little girl fell out of the train and the train passed over her foot.
January	North-Eastern ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Gatekeeper killed by a train in shunting while attempting to open his gates.
January	Melbourne Yard ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Carpenter thrown off trucks which were being shunted.
March	Portland and Hamilton	...	...	...	...	...	...	...	...	...	...	...	I	...	...	...	Man killed in attempting to jump on to a train in passing Heywood station.
March	Williamstown ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Pointsman knocked down by a train while crossing the line.
March	Ballarat and Ararat...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Guard injured in discharging and re-loading a horse-box at Buangor.
March	Williamstown ...	...	...	...	I	...	...	...	...	...	...	...	...	...	...	...	Boy slightly bruised through falling between couplings of American carriages in attempting to alight before train had stopped.
March	Main Line ...	...	...	...	...	...	...	...	...	...	...	...	...	I	...	...	Man fell into ashpit at Sunbury and broke his collar bone.
March	Geelong and Colac ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Porter injured his hand when coupling up at Colac.
March	Melbourne Goods Shed	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Employé broke a rib in unloading grain.
April	North-Eastern ...	...	...	...	...	...	...	...	...	...	...	I	...	...	...	...	Man committed suicide by allowing train to run over him.
April	Williamstown ...	...	...	...	I	...	...	...	...	...	...	...	...	...	...	...	Lad injured through jumping out of a train while in motion.
May	Sandhurst & Inglewood	...	...	...	...	...	...	...	...	...	...	I	...	...	...	...	Man knocked down by special train while trespassing on the line.
May	Melbourne & Geelong	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Porter had one of his ribs broken through door of truck falling open while
May	Castlemaine Station	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Cleaner injured through lamp falling on him. [he was covering it.
June	Ballarat & Maryborough	...	...	...	...	...	...	...	...	...	...	I	...	...	...	...	Man run over by train while trespassing on the line.
June	Williamstown ...	...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	Man run over by train while crossing the line at Footscray.
June	North-Eastern ...	...	...	...	...	...	...	...	...	...	...	I	...	...	...	...	Man killed in crossing the line at Seymour.
June	Melbourne Yard ...	...	...	...	...	...	...	...	...	...	...	I	...	...	...	...	Watchman crushed between trucks at Benalla when assisting to shunt.
July	Avoca Station ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Lad crushed between trucks in crossing the line.
July	Ballarat Station ...	...	...	...	...	...	...	...	...	...	...	I	...	...	...	...	Guard injured his hand in assisting to turn an engine.
August	North-Eastern ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Lad killed in attempting to jump on to buffer of a truck being shunted.
August	Geelong and Colac ...	...	...	...	...	...	...	...	...	...	...	...	...	I	...	...	Gatekeeper killed by train while opening gate.
August	Melbourne Yard ...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	Woman—relative of ganger—injured in attempting to save a child which had been left in a trolley on the line.
October	Geelong Station ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Collision on 28th Aug., between Williamstown train and some goods trucks.
October	Williamstown ...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Workman killed through falling with a hod of mortar.
November	Main Line ...	...	...	...	...	...	...	...	I	...	...	...	...	...	...	...	Guard injured through pilot-engine coming into collision with some trucks at Williamstown junction.
December	Stawell and Horsham	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Man killed at Kyneton, by special train, when crossing the line.
December	Stawell and Horsham	...	...	...	...	...	...	I	...	...	...	...	...	...	...	...	Contractor's workman killed by some trucks, at Gravel Pits, Glenorchy.
December	Sandhurst Station ...	...	...	...	...	...	...	...	...	...	...	...	...	I	...	...	Contractor's workman killed by contractor's engine.
December	Sandhurst Station ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Lessee of Sandhurst refreshment rooms fell down one of the coal-bays at Sandhurst and fractured his skull.
December	Melbourne Yard ...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	Man killed at Sandhurst station by a truck while trespassing.
	Totals ...	...	22	...	3	...	6	7	5	2	...	6	1	1	3		Collision between Essendon train and pilot-engine, on 24th December.

VICTORIAN RAILWAYS.

No. 22.

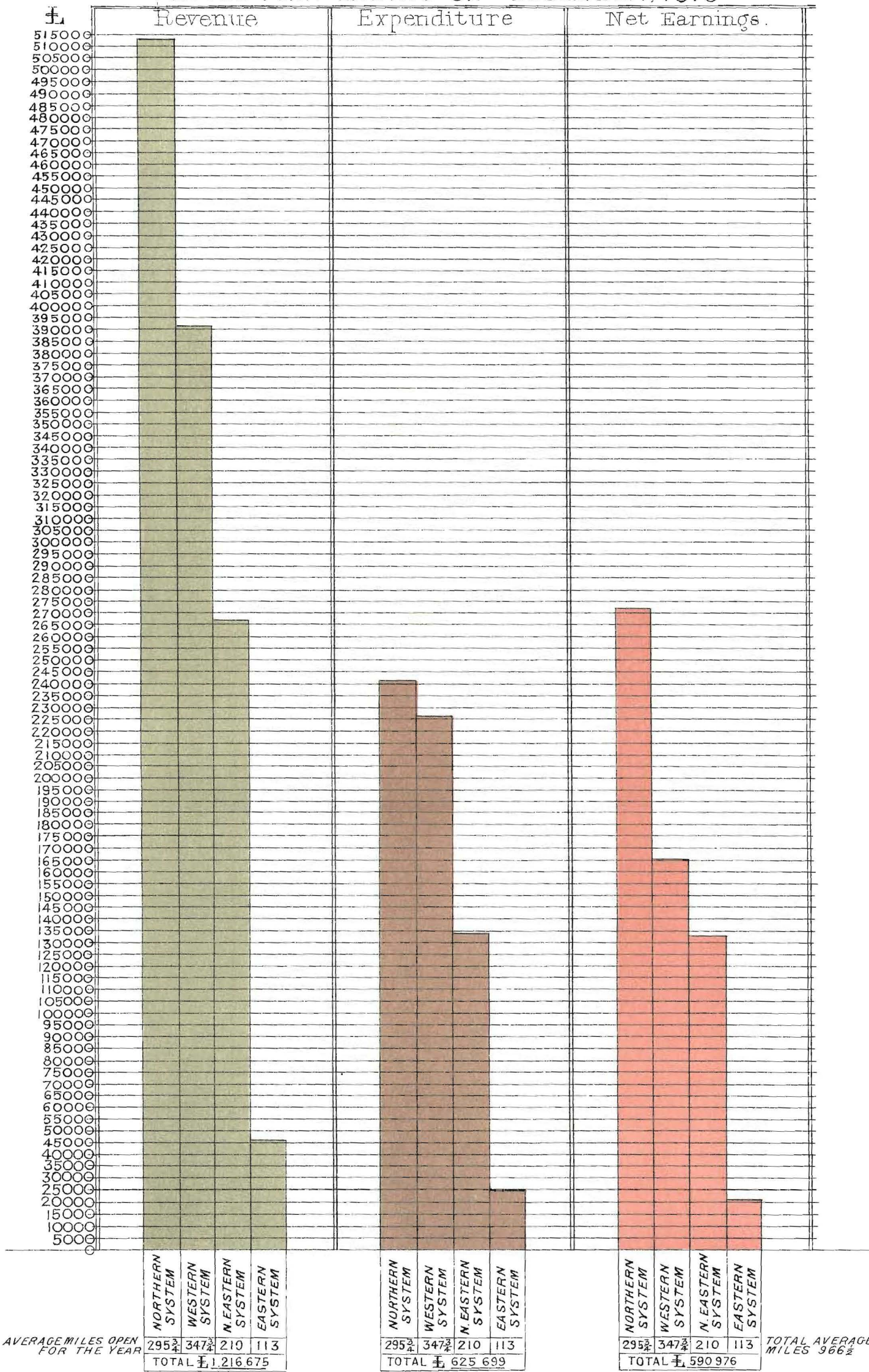
RETURN of Accidents and Injuries to Life and Limb, from the Opening of the Lines for Traffic to 31st December 1878.

Year.	Passengers Killed or Injured.				Servants of the Department or of Contractors Killed or Injured.				Persons Killed or Injured whilst crossing at Crossings.		Trespassers.		Miscellaneous.		Total.	
	From causes beyond their own control.		From their own misconduct or want of caution.		From causes beyond their own control.		From their own misconduct or want of caution.		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.								
1859	1	...	2	...	...	...	3	...	...	...	6	...
1860	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	2
1861	3	2	...	...	...	...	...	...	3	2
1862	...	19	...	...	...	1	4	8	1	1	1	1	...	1	6	31
1863	...	2	...	1	1	...	5	5	...	...	3	2	...	...	9	10
1864	1	7	...	...	...	1	...	1	1	9
1865	1	18	...	...	4	1	...	...	5	19
1866	1	1	2	...	...	...	1	1	...	...	4	2
1867	3	1	5	...	...	...	1	...	...	1	9
1868	2	...	...	...	2	...
1869	2	...	...	...	1	...	1	...	4	...
1870	4	1	...	...	...	1	...	...	...	2	4
1871	2	1	...	...	2	1	2	1	6	3
1872	...	28	...	2	...	1	...	1	...	...	3	...	...	...	3	32
1873	1	...	...	...	...	...	...	...	1
1874	4	...	...	1	1	...	4	...	1	...	10	1
1875	6	6	1	...	...	4	1	1	...	11	8
1876	...	1	...	1	3	4	10	15	2	...	6	5	2	1	23	27
1877	...	36	1	...	3	3	10	5	...	1	8	2	...	2	22	49
1878	...	22	...	3	...	6	7	5	2	...	6	1	1	3	16	40
Total	109	1	8	13	29	57	75	6	2	49	17	8	9	134	249

Railway Department, Accountant's Office,
20th March 1879.

P. P. LABERTOUCHE, Secretary,
GEO. T. A. LAVATER, Accountant.

*Revenue, Expenditure & Net Earnings upon each system
FOR THE YEAR ENDING 31ST DECEMBER, 1878*



AVERAGE MILES OPEN FOR THE YEAR

295 $\frac{3}{4}$	347 $\frac{3}{4}$	210	113
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295 $\frac{3}{4}$	347 $\frac{3}{4}$	210	113
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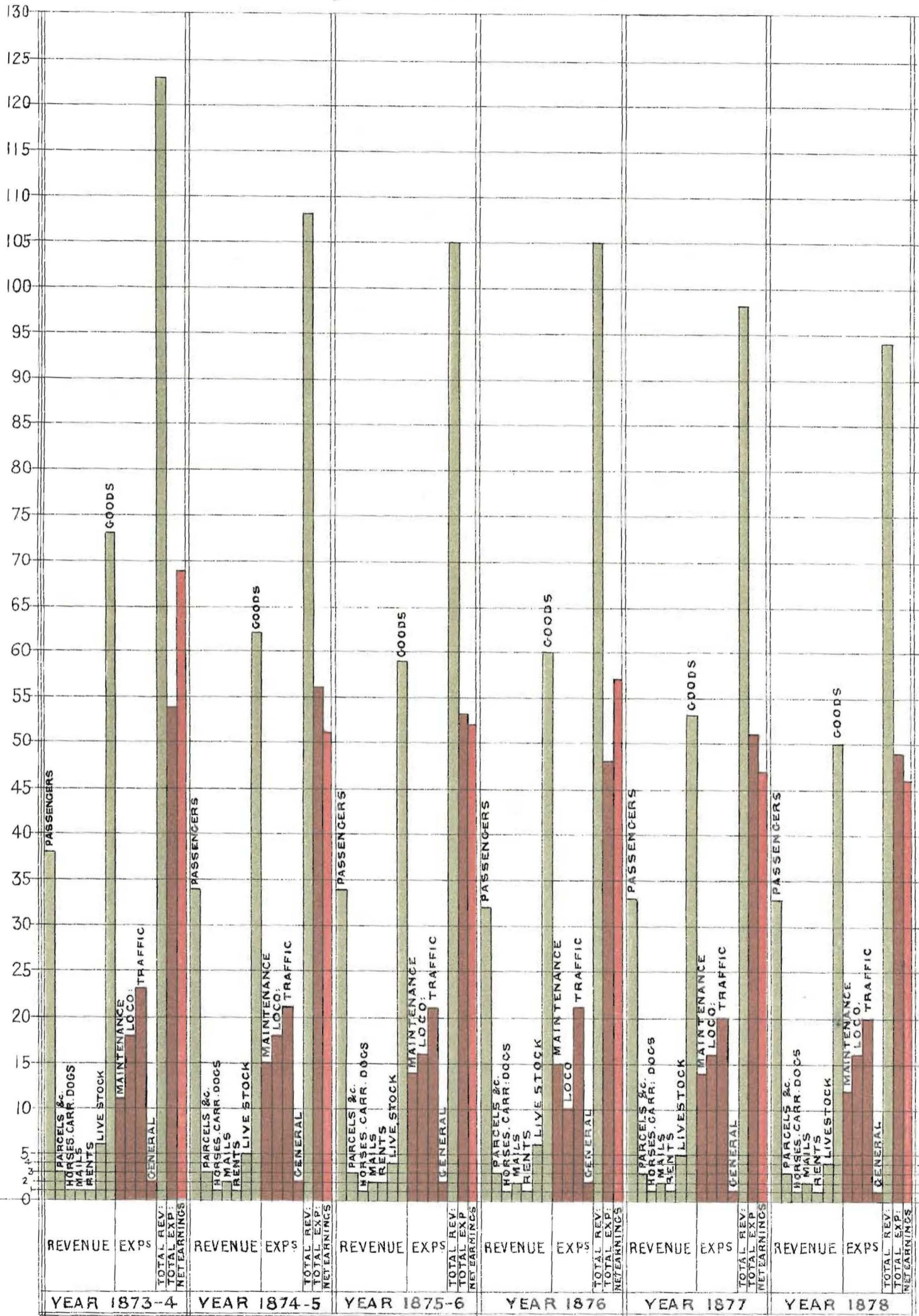
295 $\frac{3}{4}$	347 $\frac{3}{4}$	210	113
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TOTAL AVERAGE MILES 966 $\frac{1}{2}$

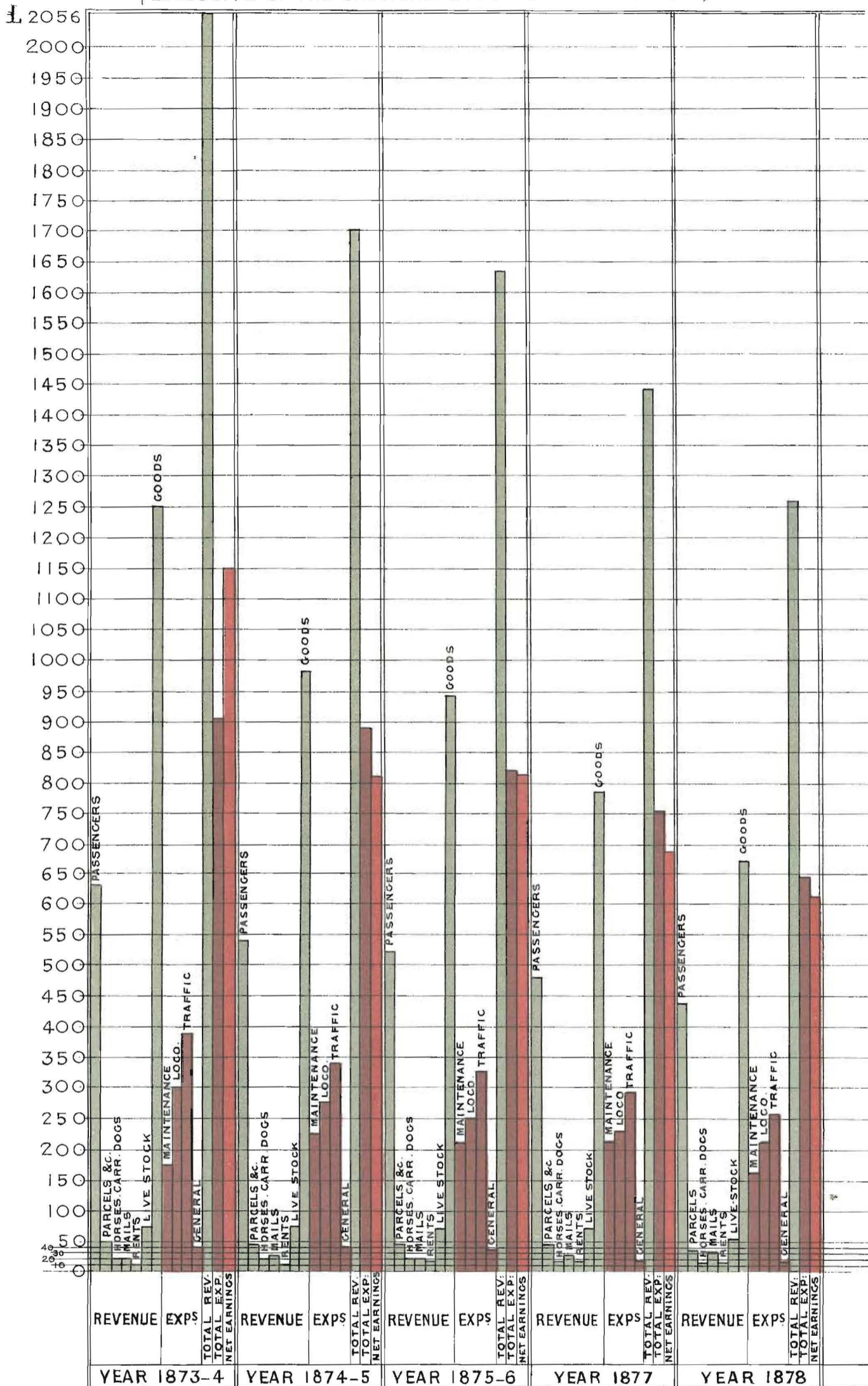
Revenue, Expenditure & Net Earnings
PER TRAIN MILE

For all Systems for five and a half years ending
31ST DECEMBER 1878

Pence



Revenue, Expenditure & Net Earnings per average mile open
FOR ALL SYSTEMS FOR FIVE YEARS ENDING 31ST DEC. 1878
 (EXCLUSIVE OF THE SIX MONTHS ENDING 31ST DEC. 1876)



THE FOUR RAILWAY SYSTEMS AT 31ST DECEMBER 1878

