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1894.

PARLIAMENT OF TASMANIA.

TASMANIAN GOVERNMENT RAILWAYS:

MR. EDDY'S REPORT, AND APPENDICES; WITH MR. BACK'S REPLY.

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(No. 55.)

REPORT OF THE CHIEF COMMISSIONER OF RAILWAYS, NEW SOUTH WALES, UPON THE TASMANIAN GOVERMENT RAILWAYS, MAY, 1894.

Sydney, 11*th May*, 1894.

To the Honorable Sir EDWARD BRADDON, *K.C.M.G.*,
Prime Minister of Tasmania.

SIR,

I HAVE the honor to report that, in accordance with a request made by your predecessor in office, the Honorable Henry Dobson, to the Honorable Sir George Dibbs, K.C.M.G., Prime Minister of New South Wales, I have inspected the whole of the railway lines owned by the Government of Tasmania, except the Zeehan Line situated on the West Coast, an inspection of which I could not make owing to want of time.

The points upon which I was asked to advise may briefly be summarised as under:—

EXPENDITURE.

(1) Are the working expenses excessive? If so, in what direction should they be reduced?

(2) Special attention is directed to the Engineering Staff, with the view of eliciting whether it is excessive or unreasonably costly; also whether, if the duties of the Engineer-in-Chief of the Colony admitted of his exercising supervision over the railway maintenance, it would be judicious for the responsibility to be divided, or would it be necessary for the Engineer-in-Chief to be controlled by the General Manager of the Railways or the Minister for the time being at the head of the Railway system? Would a dual control and responsibility of this character be practicable, or conducive to the safety and economic working of the Railways?

(3) Is there any unnecessary expenditure in connection with the maintenance of the permanent way or rolling stock?

(4) Are the Railway Workshops advantageously placed and economically worked?

(5) Can any considerable saving be effected in altering the Hobart Railway Station?

(6) Could any better results be obtained by any change in the locomotive, carriage and wagon stock, or the permanent way? If so, what?

(7) Can any improvement be suggested in the present form of management?

(8) Is the clerical staff in the Head Office too great or otherwise?

REVENUE.

(1) Would a reduction or increase in the Goods Tariff or Passenger Rates increase the net revenue? If so, in what direction?

(2) Can the position of the railways be improved by leasing non-paying lines? If such a proposal is recommended, on what terms is it suggested the lines should be leased?

(3) Would the net returns be increased if the lines that do not pay working expenses were closed? What effect would such a step have upon traffic of the remaining lines to which the non-paying lines act as feeders? Would the closing for traffic of these lines diminish the traffic upon the other lines?

(4) In addition to the foregoing, any suggestions that can be made in connection with the railway question of any sort?

The railway problem with which the Colony is faced is rather a difficult one, as will be seen by the following table :—

Cost of Construction and Equipment.	Gross Revenue, Year ending Dec. 1893.	Interest on Capital.	Working Expenses.	Total Working Expenses and Interest.	Loss on the year's transactions.	Total Mileage.
£ 3,709,535	£ 152,083	£ 155,694	£ 136,468	£ 292,162	£ 140,080	miles. 419

Broadly, therefore, the position is this : that £3600 in excess of the gross traffic was required in 1893 to provide interest upon the first cost of construction and equipment of the lines ; therefore it is impossible to bring about any satisfactory financial result. The only question is, Can anything further be done to somewhat reduce the deficit ?

EXPENDITURE.

The expenditure generally cannot be said to be "excessive" when looking at the general methods of railway management in vogue, the unsatisfactory financial result being principally owing to the small volume of the traffic conveyed, many of the lines having been constructed into districts which are unable at present to provide sufficient traffic to meet working expenses and interest upon the capital outlay. The working expenses appear to have been carefully watched and reduced from time to time, as will be seen by the comparative statement of staff employed in April, 1893, January, 1894, and April, 1894, given in the return at the end of this paper.

Owing to the continual shrinkage of traffic, the present appears to be a time when an exceptional review of all expenditure is necessary with the object of conducting the business at the lowest possible cost consistent with the property being kept up to a proper standard ; and it is in this way, in the short time I have had at my disposal, that I have investigated the question and also brought into the consideration several new systems of working recently adopted in New South Wales. The recommendations which I make should not therefore be looked upon as in any way reflecting upon those responsible for the administration of the property, as I am of opinion that the General Manager and his assistants have been very watchful of the interests of the country in this direction.

Engineering Staff.

The supervision of the lines at the present time is by means of the following staff :—

	Salary per annum.
Engineer for Existing Lines	£509
Two Assistant Engineers; (one residing in the South, £361, and the other at Launceston, £361)	722
One Assistant Engineer, in charge of the West Coast (Zeehan) Line	263
Seven Sub-Inspectors; aggregate salary (for 375 miles, Zeehan and Sorell Lines omitted)	1228

(See Diagram page 16.)

The condition of the main line from Hobart to Launceston has been considerably improved since it was taken over from the private company ; and as all the other lines are in fair order, one of the Assistant Engineers and three of the Sub-Inspectors and one clerk can be dispensed with, the Engineer in charge of the whole of the lines to spend the greater part of his time upon the lines. Separate offices are now rented by the Engineering Staff in Hobart ; this expense should be avoided by providing accommodation in a Government building, which I understand can shortly be done. Under this arrangement each Inspector will have a little under 100 miles of line to inspect, and this is a very reasonable length now that they are supplied with tricycles. These changes would effect a total saving of about £1000 per annum.

The Officer in charge of the Zeehan Line does not receive much more than an ordinary Inspector's rate of pay, and, as the line is completely isolated from head-quarters, it is well to have an officer of superior qualifications in charge, so that he may be able to deal with any difficulty which may arise at any moment. The three officers classed in the list of Staff as Resident Engineers as a matter of fact perform duties which are on larger railway systems performed by Inspectors of Permanent Way, Bridges, Buildings, &c., and who receive in the other Colonies nearly as much pay as these gentlemen with their superior engineering knowledge ; and the plan adopted on your lines is, in my opinion, a good one.

I would strongly deprecate any divided responsibility in the management of the lines. The General Manager is held responsible for the safety of the travelling public, and he should therefore be in absolute control of the condition of the permanent way over which all the traffic for which he is responsible has to pass.

In addition to this consideration, there is another in regard to economical working, as on a small property like the Tasmanian Railways, employing so small a staff, the permanent way men are frequently required to perform duties in connection with the Traffic Department for a few hours, which enables the staff of the latter department to be kept at its lowest minimum ; there is also the question of the control of the positions in which the permanent way men shall reside, so that their wives may look after level crossings and platforms.

This is a most important feature in economical working, and I fear any separation of the staff now under the control of the General Manager would ultimately lead to increased cost in the working.

Expenditure in connection with the Maintenance of the Permanent Way and Rolling Stock.

In regard to the permanent way, the expenditure is greater than it would be if a sounder class of timber were used for sleepers. The timber used only averages a life of 8 years, and as the fastenings are liable to become loose, and the rails in many places are of light section, a larger number of sleepers are used than would otherwise be the case. This, with lines having so many severe curves (a large number of 5-chain curves existing), entails a good deal of additional work in exchanging unsound sleepers, as well as leading to much more continuous expenditure in the purchase of new sleepers. The ironbark sleepers of New South Wales have a life of 25 years and more; and as there is so little ironbark available in Tasmania, all I can recommend (unless ironbark sleepers are imported) in regard to this question is that the greatest possible care should be exercised in the purchase of sleepers, so as to ensure the best timber to be obtained in the Colony being used for this purpose.

Every opportunity should also be availed of to place hard rock metal ballast upon the lines, as not only would it make a sounder and more economical road for maintenance, but it would also prevent so much dust being raised by passing trains as is now to be observed upon the lines; thus the comfort of passengers would be increased, and the cost in connection with the maintenance of both the permanent way and rolling stock would be reduced.

On the branch lines care should be taken to keep the speed of trains down so as to minimise the strain upon the permanent way. This question of speed is a most important one when dealing with the strength employed in keeping the road in order, and, as many of the branches are so unprofitable, the proper course would be to provide such a service as is paid for by the public, and run at such a speed as will enable the road to be kept in order by a small staff.

Looking at the great number of 5-chain curves in the main line, I would also recommend that the speed of the Express between Hobart and Launceston should be slightly reduced, as I observe that the train is timed to travel, after allowing for stops, between some of the stations at 29 and 30 miles per hour, and this necessitates a much higher rate of speed in actual working. There is no great urgency for running at an excessive speed, and not only would the permanent way gain by the reduction in speed, but the comfort of the passengers would also be increased. The extra time allowed should be allocated to the parts of the line in which the 5-chain curves predominate.

If better facilities were provided for the permanent way men to get about their lengths, a reduction in the working staff could be effected; and I would recommend that each ganger be provided with a tricycle, and that a light description of trolley be supplied to each length where the sections are long. Much economy has been effected on the New South Wales Railways by introducing this system. The sectional trolley recently adopted in New South Wales is known as the Sheffield No. 1 Standard Section Hand Car, a sketch of which is given at the end of this Report, the cost of the last imported being under £12 for the 4 ft. 8½ in. gauge.

I would recommend that the following reduction in the Permanent Way Staff be made, under these conditions :—

Derwent Valley Line—(24¼ miles in length).

The Permanent Way expenditure for 1893 is shown as having amounted to £2198. This should not exceed £1350, by placing the line in charge of three gangs of three men each, with better facilities for moving about. Some better ballast should also be provided at the Bridgewater end of the line. This sum provides for extra strength which may be necessary at exceptional periods of the year.

Saving on the previous rate of expenditure about £850 per annum.

Apsley Line—(26 miles in length).

The ballasting of this line is very fair, and the maintenance staff should be reduced to nine men instead of 13, viz., three gangs of three men each. The permanent way expenditure should not exceed £1200 per annum instead of £1971—a reduction of about £770 per annum upon the 1893 working.

The line is now being worked by an extension of a main line train, and the locomotive expenses, which in 1893 are shown as amounting to £1531, will consequently show a considerable decrease for the coming year.

Oatlands Line—(4½ miles in length.)

The cost of working this line will be materially reduced in consequence of the permanent way having been made fit for the ordinary locomotives to work over it. The expenditure of the locomotive branch for 1893 is shown as £501; in future, by working the branch by an extension of a main line train, the cost will be merely nominal, and the traffic expenses will also be reduced from about £221 per annum to less than £50 per annum. The cost of the maintenance branch should not exceed about £100 instead of £360 per annum.

Reduced cost now coming into operation, about £800 per annum.

Fingal Line (St. Mary's)—(46¾ miles in length).

This line should be kept in thorough order (additional facilities being provided for the men moving about) by seven gangs of four men each. This would be a reduction of seven men and about £600 per annum in wages.

Chudleigh Line—(12½ miles in length).

As there is so little traffic upon the line (the receipts amounting to £452 and the working expenditure for 1893 amounting to £1556), the permanent-way staff should be reduced to one gang of four men, who, with better facilities for getting about, should have no difficulty in keeping the line in order, and a saving of £170 per annum thus effected.

Although the locomotive expenditure in connection with this line is shown as £491, yet if the line were closed this amount of money would not be saved. The actual out-of-pocket cost of working is only about £200 per annum, the higher figure shown against this department arising from the general cost of working being divided in ratio of the miles run upon the line.

Western Line.

This line, which was constructed to a 5 ft. 3 in. gauge, was originally laid with 72 lbs. to the yard iron rails, and sleepers 9 ft. × 9 in. × 4½ in. Later on, when the extension of the railway system from Deloraine to Devonport was made on the 3 ft. 6in. Government gauge, a third rail was laid down between Launceston and Deloraine for through traffic purposes, a 60 lb. rail being adopted for the third rail. When it was decided to abandon the broad gauge, one of the 72 lb. rails was taken up, leaving a narrow-gauge road with a 72 lb. rail on one side and a 60 lb. rail on the other, with a longer sleeper bearing on one side than on the other, and the rail joints being irregularly broken. This naturally led to increased cost of maintenance, and it would be very desirable to replace as early as possible the 60 lb. rail with the old 72 lb. rail. This could be done by the ordinary gangs gradually, as I understand the 72 lb. rails are still in stock. When this work has been completed, if the men are provided with better facilities for moving about, it should be possible to effect an economy in the maintenance of this section of the line.

Scottsdale Line—(47 miles in length).

Seven gangs of four men each should keep this line in good order, and so effect a saving of seven men, equal to about £600 per annum.

Main Line—Hobart to Launceston.

After the men have been provided with better facilities for getting about, and the speed of the through trains somewhat reduced, I think a reduction in staff could be effected on this line, a length of five miles being adopted as the standard length of section (four men in each gang), exceptionally difficult parts of the line being specially considered. This would bring about a reduction of about ten men and £850 per annum in wages.

Sorell Line (15 miles in length).

The receipts for this line amounted to £1876, and the expenditure to £3083. As the traffic is so small, I think the best course would be to work the line with a long carriage of the American type, with a partition to admit of two classes being carried in one vehicle, instead of the present plan of first and second class carriages and brake-van being provided; or one class of ticket only could be adopted, as the number of first-class passengers upon the line is very small. I append a sketch of a carriage in use on several short unprofitable lines in New South Wales.

A good deal of expenditure appears to be going on at Bellerive in connection with repairing wagons which were taken over from the Main Line Company and sent to this line. This expenditure should be at once stopped, as the total goods traffic for the year only amounted to 1500 tons; therefore only a few wagons are necessary to work the whole business, the general remarks made regarding the repairs of surplus stock applying to this stock.

The locomotive running staff (4) also appears to be capable of reduction, and two of the men should be withdrawn, the light locomotive required being worked by one man. The traffic being so small the line should be worked more like a Tram-line than a Railway ; two short unprofitable lines in New South Wales are worked in this manner. Under this system the total expenses of the locomotive and permanent way departments should not exceed £1300 per annum, instead of £2348 as shown against 1893—saving £1050 per annum.

General Remarks regarding Rolling Stock.

The rolling stock at the present time, in consequence of the shrinkage of business, is in excess of requirements, and a good deal of expenditure has been going on for a long time in getting into good working order the rolling stock that was taken over from the Main Line Company. I would therefore advise the putting on one side for a time of as much of the old class of rolling stock as can be withdrawn from the traffic, and so enable the work in the shops to be reduced until such time as the traffic springs up again and a greater revenue is available for work of this description.

Workshops.

The workshops at Launceston are well supplied with machinery, and are capable of doing efficiently and economically more work than is required on the whole of the lines. They are also directly under the control of the Locomotive Superintendent, and the Foremen are men who work as well as supervise, and I do not think more efficiency can be obtained thereat.

The shops at Hobart are, however, a source of unnecessary expense, and are a weakness in every way. The Locomotive Superintendent has to waste time in leaving the more important centre at Launceston for the purpose of supervising the work going on therein. Stores are also duplicated, and the cost of supervision is absolutely thrown away, as, if the work were performed in the Launceston shops, the Foreman there employed could supervise the whole of the business.

It is much in the interest of the Government that these shops should be closed except for ordinary running repairs, and the building could be used very advantageously as standing room for the locomotives, which now have to remain exposed to the weather owing to the inadequacy of the present running shed. If this alteration is carried out the Officers estimate the saving that would be effected at about £3000 per annum; but I am of the opinion that when the new system is in working order a greater saving than this would be effected.

Altering Hobart Station.

Economy in shunting power would be effected, and facilities to the public afforded, by increasing the siding accommodation, and if authority could be given to close the Macquarie-street level crossing after the Exhibition is over, it would materially assist in making a good scheme. The doing away with the workshops would also assist in this respect.

I do not think it is necessary to have a new passenger station, but at small cost an additional platform could be given at the back of the present station if the workshops proposal is carried out. This would be a great advantage for the excursion business which may be expected for the Exhibition (if low fares are given); and a slight modification of the goods sidings, which could be carried out at a small cost if the level crossing is abolished, is all that I would recommend should be done for some time to come.

Change in Rolling Stock and Permanent Way.

The carriage and wagon stock built by the Government for its own railway systems appears to be of excellent design, and the maximum accommodation appears to have been obtained for stock running upon a 3ft. 6in. gauge. The bogie carriages are exceedingly roomy vehicles, whilst the wagons with a tare of 3 tons 13 cwts. carry 6 tons.

The locomotives of the standard type appear to be excellent machines, but I would recommend that when any new locomotives are required for the goods traffic, they should be of the 8-wheels coupled consolidation type, and so obtain greater hauling power without increasing the weight per axle.

Interchangeability of parts, which is a most important question in the economical maintenance of rolling-stock, appears to have received great attention at the hands of the Locomotive Engineer, and should continue to be kept steadily in view.

With regard to the permanent way, I was glad to see that steel rails 61 lbs. to the yard were being introduced. This is true economy, and should be continued as rapidly as possible on the Main Line, as not only will the extra weight of rail give increased life to the road, out of all proportion to the cost of additional weight, but it will also minimise the disadvantage in connection with the short life of the sleepers, as fewer sleepers will be required for each mile of road as com-

pared with the number used for the present light rail; in fact, instead of using 2420 to the mile, 1936 might be used, being a spacing of 2 ft. 9 in. centre to centre, with 1 ft. 8 in. centres at the joints; sharp curves and soft formation to receive special treatment.

Steel rails of this section can now be purchased f.o.b. London for about £3 17*s.* 6*d.* per ton.

I would advise that in future purchases of rails a rail 30 ft. in length should be adopted instead of 24 ft. as at present. This will give a much better running road by having fewer joints.

There are about six miles of 40 lb. iron rails still in the Main Line; these should be renewed without delay. I understand rails are coming forward for this purpose.

Should it be decided to construct any new lines in future, it would be a wise policy to order 61 lb. steel rails 30 ft. in length, and place them in the Main Line, using the lighter section rails recovered thereby for the branch lines; this would strengthen the Main Line at a minimum of cost, and enable the maintenance to be reduced, and also fit the lines for heavier engines to work over them.

Present form of Management.

Under present conditions I do not think any change in the system of management could be advantageously adopted. I would, however, recommend that the Post and Telegraph Department be considered in conjunction with the Railways, with a view to a still greater extent utilising the railway stations as post and telegraph offices, and effecting an economy in buildings and staff thereby. It is a question also whether the supervision of the whole of the Telegraphs, both general and railway, could not be carried out by the Railway Electrician.

General Manager's Office Staff.

It must be borne in mind that every detail in connection with the working of the lines has to pass through the hands of the General Manager, there being no subordinate Traffic Officers.

The staff consists of three clerks, at an aggregate cost for salaries of £499 per annum, with an office boy at £60 per annum. I do not think this is in excess of what is required to enable the working to be properly supervised.

The General Manager, however, has a personal representative at Launceston, with a messenger. I do not think this expense need be continued. The Stationmaster should be able to deal with all ordinary questions that arise, and any important matter he may require instructions upon could be submitted to Hobart by wire and an answer obtained very promptly.

This will effect a saving of £158 per annum.

Accountants, Auditing, and Stores Staff.

I had not sufficient time to go into the details of the system of accounts in existence, but with so small a property, and everything being self-contained, *i.e.*, no settlements with outside railway companies being necessary, the system of accounts should be of the most simple kind; and I would advise that the whole matter should be investigated by the General Manager and Accountant, with the view of seeing whether any reduction in work and cost could be introduced.

The annual Report submitted to Parliament contains a vast amount of information which is of no practical value, and I would recommend that the returns to be submitted to Parliament, with the General Manager's Report, should be reduced to what is shown on the accompanying sheets—(*see* Appendix, pages 31, 32, 33 and 34), which would enable the whole of the accounts to be thoroughly understood. This should assist the Accountant in reducing his expenses.

A Cashier is employed at Hobart and another at Launceston, the latter at £337 per annum. There is no necessity for keeping an independent officer at Launceston. The small amount of work absolutely necessary to be done there could be performed by the Goods Agent, who is an officer independent of the Stationmaster. This officer could do the absolutely necessary work, and be under the direction of the Hobart Cashier on the subject of cash matters.

Stores Depôts.

There are two stores and storekeepers, one at Hobart and the other at Launceston. It is a great mistake to duplicate store depôts, it only results in building up unnecessary expense and encourages the accumulation of obsolete material. I recommend the abolition of one of the stores and staff, and the distribution of the whole of the general stores for the railways from one store. If the requisitions from each section of the line are made in rotation so as to keep the store going systematically, there should be no difficulty in doing what is required for so small a system with the staff now employed at Hobart.

The Locomotive Engineer could have a "Trust Store" for his own requirements at Launceston, and one of his existing office staff could control the issue in conjunction with the Foremen. This is the system now adopted in New South Wales, where, formerly, several expensive depôts existed outside Sydney.

Aggregate saving, Stores Branch and Cashier, about £650 per annum.

REVENUE.

Reduction or Increase in Goods and Passenger Tariff.

This question is a most difficult one to deal with, and with the limited time at my disposal I should not like to give any definite opinion in regard to specific rates. From all my enquiries, however, it appeared to me that the local circumstances surrounding the question were continually kept in view by the General Manager, and special rates adopted where water and other competition came in, so as to secure to the Railways as much traffic as possible.

With regard to the road competition, it appeared to me almost impossible to stop it, as so many local circumstances, such as good public roads, local influence and comparatively short distances to carry the traffic from door to door, as compared with carting to the Railway and then carting it in from the Railway, had to be considered. Broadly speaking, a small per-centage reduction in rates has no effect whatever in inducing traffic, and unless there are surplus profits to give away, should not be granted.

With regard to increasing rates, this, except under most peculiar circumstances, is a most unwise course to pursue; but great care should be exercised in making reductions, as when once rates are reduced they cannot be put up again without disclocating trade that has begun upon the basis of the lower rates. Whenever, however, a low rate will create a new industry or a new stream of traffic, special endeavour should be made to meet such a state of things.

With regard to passenger fares, a reduction of, say, 5s. in the fare between Hobart and Launceston would, in my opinion, not lead to any material increase in travel, but it would cause a considerable reduction in the revenue, and is a course I would not recommend when the Railways show so heavy a loss. Where a considerable amount of suburban traffic has to be dealt with, if the fares are based upon a high scale, there is no doubt a reduction will induce travel.

I would recommend the adoption, during the summer season, of cheap all-line tickets for periods of a fortnight and one month, to induce visitors to travel over the railways to a greater extent.

Leasing Non-paying Lines.

I would not advise the leasing of any of the lines. No one would be prepared to take the working of the lines over unless they could see a reasonable prospect of making a good profit therefrom; and in my opinion the State should place those responsible for the administration of the railway property in such a position that they can work the lines as advantageously for the State as a private syndicate or company could in the interests of its members; and by this means the people who own the railways should have, either in the shape of extra profits or reduced rates, money that would otherwise go into the pockets of private individuals.

Closing Non-paying Lines.

I think it would be a grave mistake to close any of the lines; it would be a confession to the whole world that money has been unwisely spent. The country must pay the interest upon the outlay under any circumstances, and rather than close any line the expenses of working should be reduced to what the traffic is capable of paying for; the district then obtains a decided benefit from the expenditure, although the country generally may have to provide the interest for the capital outlay. If, however, a line were closed, no advantage whatever would be gained from the construction of the line, interest would still have to be paid, and in addition the withdrawal of the maintenance men would soon lead to the permanent way becoming so much out of repair that when at some future time it was decided to re-open, the cost of putting the permanent way in order would in all probability exceed the amount that had been saved from the closing of the line.

The Return given on page 15 will show the value of the traffic to the main lines in connection with the branches for 1893; and there can be no doubt that the volume of traffic on the trunk lines would be considerably reduced if the branches were not worked, in addition to which the settlement of the country would be seriously affected by the non-working of the extensions.

For all reasons, therefore, I would advise not taking such a course. The changes recommended in the maintenance and the alterations in the working of the train service referred to in the preceding pages should, I think, have the effect of making all the lines pay their working expenses ere long.

GENERAL SUGGESTIONS.

I have been much struck with the comparatively high cost per mile of the lines that have been made in the Colony, seeing that the gauge is a 3′ 6″ one, and in all future extensions I think the roads should be constructed at a less cost. The greatest care should also be exercised in the location of the lines before construction is commenced, with the view of obtaining as easy curves and grades as possible. This latter question is one that has not received that attention in the Colonies that it should have done in the past, a grade of 1 in 40 appearing to have been looked upon in many cases as a satisfactory grade; but when it is considered that the grade will rule the load to be taken by engines practically for all time, the question of whether the ruling grade is 1 in 40 or 1 in 75 is a matter of the most urgent importance, and this will be seen when I mention that an engine capable of taking a load of about 120 tons over a 1 in 40 grade, can haul a load of 210 tons on a 1 in 75 grade.

Generally the station accommodation is of as economical a type as could be devised, but I noticed at some of the terminal points, like Apsley, the accommodation was in excess of requirements, and later on, when an extension takes place, it will become of little value. The accommodation at the end of a line not intended to be the permanent terminal should be of the most meagre description consistent with carrying on the business which must be dealt with.

I would recommend that as early as possible more shed accommodation should be provided for sheltering the passenger carriages. A very large proportion of the carriage stock is so valuable that it should be under cover when not in use. This point is one which is seriously neglected on many railway lines. A private individual takes great care of his buggies and carriages; yet a railway carriage, which costs eight or ten times as much, is allowed to stand exposed to all weathers.

Stores.

The amount of stores consumed in connection with the running of locomotives is in excess of what it should be, and the class of oils used for lubrication, also for burning in the hand and signal lamps, in use upon the lines, is more costly than is necessary. For several years experiments of various kinds have been going on upon the New South Wales Railways with the view of cheapening the cost of oils, &c., and great economy has been effected. I have given to the General Manager particulars of the class of oils used for all purposes, and the prices now paid therefor.

An economy, to the extent of about £850 per annum, can be effected by following the New South Wales' present practice.

Stationery.

The stationery generally, such as invoices, weigh-bills, telegraph forms, &c., and the binding of books, is of the usual extravagant pattern adopted by Government Departments. The General Manager explained to me that the stores were supplied to him from the Government Store, and that he has, practically, little control over it. I would advise that, when the present stock of forms, &c. is exhausted, they should be replaced by forms of the smallest size consistent with the actual requirements, and that the paper should be of a very much cheaper description. [Some specimens forwarded to the General Manager.] A saving of at least £300 per annum should eventually be effected by this means.

I found that money realised by *the sale of old materials*, recovered in consequence of being replaced by new materials, is put into the general revenue, and no credit is given to the Department which has provided the money out of working expenses for the new material. The value of all old stores so replaced out of working expenses should be credited to the branch to assist in paying for the new material, and I would recommend that this course should be followed.

Locomotive coals are debited with railway freight, and this freight is put in as revenue. All work performed for the Department should be without charge and treated as "unprofitable" work; unless this is so the revenue is unduly inflated. I would recommend in future an account only be kept of the work done in this way, and no money transaction be made.

The numbers of drivers and firemen appears to be in excess of requirements, and they have not been reduced to so great an extent as the guards during the past 12 months; the guards have been reduced from 28 to 22, but the sets of locomotive-running men have only been reduced from 34 drivers and 36 firemen to 33 of each class. I find from figures just received that only 37½ per cent. of the drivers' time was occupied in running for the fortnight ending 24th March last, and it is clear that a saving can be effected in this direction. I understand only 18 engines are now in steam daily.

The Locomotive Engineer's office staff consists of two draftsmen, three clerks, and two timekeepers. Either a draftsman or a clerk should be dispensed with by generally utilising the remainder, and thus save about £150 per annum.

Briefly, the recommendations will effect the following savings:—

	£	£
Workshops	3000	
Engineering supervision, &c.	1000	
Permanent way working staff	4323	
Locomotive stores	850	
Locomotive office staff and Sorell line	710	
Head office, general stores concentration, and Cashier's office	808	
Total of economies that may be at once ordered	...	10,691
Oatlands line working, now in operation	...	800

Further steps to be taken regarding locomotive running staff, Accountant's and Auditing staff, stationery supplies.

If traffic continues to decline further retrenchments to be effected.

The whole of the foregoing recommendations have been made on the basis of the present volume of traffic being maintained; should, however, the traffic be still further contracted, the expenses should be still further reduced; this reduction, however, will apply particularly to the locomotive running staff and the workshop expenses; and it is to these two sections of expenditure that I would specially direct attention if the traffic is not maintained at its present level.

Should your Government, or the General Manager of the Lines, require any further advice or assistance in any way in carrying out the retrenchments suggested, it will afford me pleasure to give any assistance in my power in the matter.

Appended hereto are statistics showing the—

1. Cost of construction and equipment, also receipts, expenses, &c. of each line of railway during 1893.
2. Return showing approximately the receipts, working expenses, &c. of each line during 1893.
3. Details of expenditure (all branches) 1893.
4. Return showing approximately the value to the trunk lines of traffic to and from branch lines, 1893.
5. Summary of staff employed (all departments) April 1893, January 1894, April 1894.
6. Engineers' and Inspectors' districts (with diagram).
7. Sketch of vehicle suitable for a line with light traffic.
8. Sketch and particulars of the Sheffield car.

I have the honor to be,

Your obedient Servant,

E. M. G. EDDY, *Ass. Inst. C.E.*,
Chief Commissioner for Railways,
New South Wales.

APPENDIX.

TASMANIAN GOVERNMENT RAILWAYS.

RETURN showing COST OF CONSTRUCTION & EQUIPMENT; also RECEIPTS, EXPENSES &c on each line during 1893.

	COST OF CONSTRUCTION EQUIPMENT &c to 31st Dec. 1893			RECEIPTS 1893			EXPENDITURE 1893. WORKING EXPENSES			INTEREST.			TOTAL.			TOTAL LOSS.			
	£	s	d	£	s	d	£	s	d.	£	s	d.	£	s	d	£	s	d	
MAIN LINE	1,193,781	.	.	64,209	1	6	56,063	8	9	42,893	5	11	98,956	14	8	34,747	13	2	
SORELL	131,287	.	.	1,876	5	10	3,083	11	0	5,256	19	10	8,340	10	10	6,464	5	0	
DERWENT VALLEY	216,243	.	.	4,137	10	2	5,756	6	5	8,447	18	8	14,204	5	1	10,066	14	11	
APSLEY	159,312	.	.	2,255	9	0	4,157	19	10	4,940	0	0	9,097	19	10	6,842	10	10	
PARATTAH & OATLANDS	11,790	.	.	786	16	1	1,148	4	4	463	1	6	1,611	5	10	824	9	9	
FINGAL (St Mary's.)	196,350	.		7,892	8	6	8,647	18	0	7,415	4	8	16,063	2	8	8,170	14	2	
WESTERN	820,137	.	.	39,835	4	5	36,262	8	1	46,889	19	2	83,152	7	3	43,317	2	10	
CHUDLEIGH	68,000	.	.	451	18	0	1,555	10	4	2,828	11	5	4,384	1	9	3,932	3	9	
SCOTTSDALE	397,373	.	.	9,239	15	2	9,177	7	8	15,646	17	3	24,824	4	11	15,584	9	9	
ZEEHAN	224,729	.	.	21,398	7	7	10,615	7	10	7,994	7	7	18,609	15	5	2,788	12	2	PROFIT.
General Railway Purposes	104,137	.	.							4,780	9	1	4,780	9	1	4,780	9	1	
Interest during Construction (Main line.)	A 87,577	.	.							3,653	1	5	3,653	1	5	3,653	1	5	
Deferred Interest (Launceston & Western Ry.)	A 48,000	.	.							2,181	15	0	2,181	15	0	2,181	15	0	
Railway Surveys	X 50,819	.	.							2,303	4	8	2,303	4	8	2,303	4	8	
	3,709,535	.	.	152,082	16	3	136,468	2	3	155,694	16	2	292,162	18	5	140,080	2	2	

TASMANIAN GOVERNMENT RAILWAYS.

RETURN showing approximately the Proportion of RECEIPTS, WORKING EXPENSES &c on each line during the Year 1893.

	MAIN	SORELL	DERWENT VALLEY	APSLEY.	PARATTAH & OATLANDS	FINGAL (ST MARY'S)	WESTERN	CHUDLEIGH	SCOTTSDALE	ZEEHAN	TOTAL.
	£	£	£	£	£	£	£	£	£	£	£
GROSS RECEIPTS.	64,209	1,876	4,138	2,255	787	7,893	39,835	452	9,240	21,398	152,083
GROSS WORKING EXPENSES.	56,063	3,084	5,757	4,158	1,148	8,648	36,262	1,556	9,177	10,615	136,468
Profit on Actual Working, exclusive of Interest.	8,146	. . .	. . .	. . .	. . . .	. . .	3,573	. . .	63	10,783	15,615
Deficiency in connection with actual working expenses of Line.	. . .	1,208	1,619	1,903	361	755	. . .	1,104	. . .	. . .	. . .
Deficiency on Working Expenses & Interest.	35,587	6,676	10,334	7,154	877	8,721	43,481	4,078	16,182	. . .	131,980
Profit after providing for Working expenses & Interest	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	2,110 †	
MILES OPEN. . . . . Miles	122	14·50	24·25	26	4·50	46·75	93·75	12·50	47	28·50	419·75
TRAIN MILES RUN.	338,138	20,062	36,055	24,427	9,188	59,167	224,435	8,118	50,129	30,104	799,823
RECEIPTS.— Per mile of railway worked. £	526·30	129·38	170·59	86·73	174·88	168·81	424·91	36·16	196·59	694·38	355·55
EARNINGS.— Per Train mile. . . . . s/o	3/9·57	1/10·44	2 3·54	1/10·16	1/8·55	2/8·01	3/6·59	1/1·36	3/8·25	14/2·59	3/9·63
COST OF CONSTRUCTION & EQUIPMENT to 31st Dec. 1893	1,237,831	133,890	220,929	162,436	12,936	204,161	849,296	69,042	403,934	228,687	3,523,142 *
Do Per mile open.	10,146	9,234	9,110	6,247	2,874	4,367	9,059	5,523	8,594	8,024	8,393

* *Exclusive of Items marked "A" on Return N° 1.*
† *Includes proportion of Items marked "A" on return N° 1.*

(No. 55.)

TASMANIAN GOVERNMENT RAILWAYS.

DETAILS OF EXPENDITURE.

1893

		Main Line	Sorell	Derwent Valley	Apsley	Parattah & Oatlands	Fingal	Western	Chudleigh	Scottsdale	Zeehan.
Maintenance of Way.	Total. £	18,627	1,184	2,198	1,971	361	4,087	12,882	804	3,968	4,110
	Per mile of line £	152·68	81·58	90·64	75·81	80·45	87·42	137·41	64·32	84·44	114·16
	Per train mile s/o	1/1·22	1/2·16	1/2·63	1/3·37	-/9·44	1/4·58	1/1·78	1/11·76	1/6·99	2/8·76
Locomotive, Car & Wagon.	Total. £	20,074	1,164	2,081	1,531	501	3,043	13,717	491	2,928	3,093
	Per mile of line £	164·54	80·28	85·79	58·88	111·33	65·09	146·31	39·20	62·30	85·92
	Per train mile s/o	1/2·24	1/1·82	1/1·85	1/3·04	1/1·07	1/0·35	1/2·67	1/2·50	1/2·02	2/0·66
Traffic	Total. £	14,830	587	1,210	471	221	1,060	7,494	202	1,903	3,173
	Per mile of line £	121·56	40·48	49·89	18·12	48·88	22·67	79·94	16·16	40·49	88·14
	Per train mile s/o	-/10·53	-/7·03	-/8·05	-/4·63	-/5·77	-/4·29	-/8·01	-/5·97	-/9·11	2/1·30
General.	Total £	2,532	149	268	185	65	458	2,169	59	378	239
	Per mile of line £	20·75	10·27	11·05	7·11	14·44	9·80	23·19	4·80	8·02	6·64
	Per train mile s/o	-/1·80	-/1·71	-/1·78	-/1·81	-/1·71	-/1·85	-/2·32	-/1·76	-/1·83	-/1·91

(No. 55.)

TASMANIAN GOVERNMENT RAILWAYS.

RETURN showing approximately, Value to TRUNK LINES of Traffic TO and FROM BRANCH lines.

	FROM BRANCH			TO BRANCH			TOTAL.		
	£	s	d	£	s	d	£	s	d
FINGAL BRANCH.									
Passengers.	1,242	11	7	837	10	7	2,080	2	2
Parcels, &c.	76	4	5	166	1	11	242	6	4
Goods, Minerals & Live Stock	5,119	18	1	1,187	14	5	6,307	12	6
	6,438	14	1	2,191	6	11	8,630	1	0
DERWENT VALLEY BRANCH.									
Passengers.	1,025	8	1	648	9	2	1,673	17	3
Parcels, &c	57	4	8	88	15	4	146	0	1
Goods, Minerals & Live Stock	477	18	1	521	1	7	998	16	8
	1,560	7	11	1,258	6	1	2,818	14	0
APSLEY BRANCH.									
Passengers.	319	8	5	253	10	1	572	18	6
Parcels, &c.	38	18	4	63	13	6	102	11	10
Goods, Minerals & Live Stock	635	16	3	590	3	9	1,226	0	0
	994	3	0	907	7	4	1,901	10	4
PARATTAH & OATLANDS BRANCH.									
Passengers	350	11	1	144	16	3	495	7	4
Parcels, &c.	52	2	11	65	1	9	117	4	8
Goods, Minerals & Live Stock.	346	17	4	541	9	7	888	6	11
	749	11	4	751	7	7	1,500	18	11
CHUDLEIGH BRANCH.									
Passengers.	262	2	5	192	9	5	454	11	10
Parcels, &c	16	4	4	27	4	2	43	8	6
Goods, Minerals & Live Stock.	920	2	11	192	10	6	1,112	13	5
	1,198	9	8	412	4	1	1,610	13	9
GRAND TOTAL.	10,941	6	0	5,520	12	0	16,461	18	0

TASMANIAN GOVERNMENT RAILWAYS.

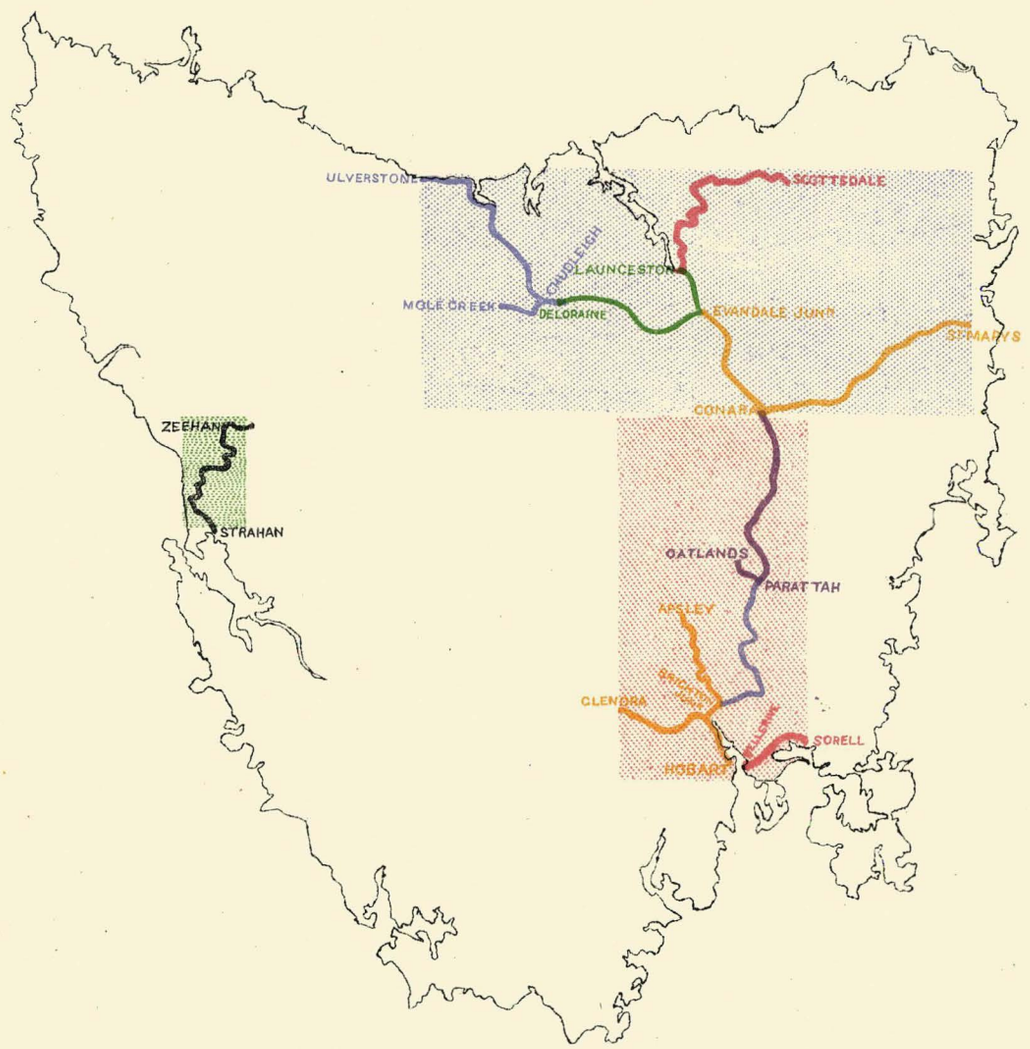
SUMMARY OF STAFF.

Branch	APRIL 1893			JANUARY, 1894			APRIL, 1894.		
	Salaried	Wages.	Total.	Salaried	Wages.	Total.	Salaried	Wages.	Total.
GENERAL MANAGER.	8		8	7	1	8	6	1	7
ACCOUNTANT & TRAFFIC AUDITOR. . . .	17	1	18	16	1	17	16	1	17
STORES.	4	5	9	3	5	8	3	5	8
PERMANENT WAY.	7	424	431	7	421	428	7	378	385
LOCOMOTIVE.	1*	266	267	8	253	261	8	245	253
ELECTRIC TELEGRAPH.	1	16	17	1	5	6	1	5	6
TRAFFIC.	84	223	307	80	204	284	80	212	292
TOTAL.	122	935	1,057	122	890	1,012	121	847	968

* *Draughtsmen, Timekeepers & Clerks on Wages in 1893.*

TASMANIAN GOVERNMENT RAILWAYS.

ENGINEERS & INSPECTORS SECTIONS.



ENGINEERS.	Through mileage	Sidings	Total
	miles chs	miles chs	miles chs
Mr Dowling.	226:20	23:60	250:0
Mr Nairn.	165:64	12:36	178:20
Mr Hules.	35:55	5:61	41:36

INSPECTORS.		Through mileage	Sidings	Total.
		miles chs	miles chs	miles chs
Inspector	Booker.	45:0	10:40	55:40
"	Mead	61:30	6:0	67:30
"	Shepherd	47:1	3:0	50:1
"	Thompson	72:63	4:20	77:3
"	Peail	47:40	1:67	49:27
"	Gates.	33:0	1:21	34:21
"	McCrossen	70:53	8:23	78:76
Sub "	Pearn.	14:52	1:5	15:57

19

1892-3.

LEGISLATIVE ASSEMBLY.

NEW SOUTH WALES.

SALARIES AND WAGES OF EMPLOYEES IN RAILWAY AND TRAMWAY DEPARTMENT.

(RETURN RESPECTING.)

Ordered by the Legislative Assembly to be printed, 2 May, 1893.

RETURN to an *Order* made by the Honorable the Legislative Assembly of New South Wales, dated 8th March, 1893, That there be laid upon the Table of this House,—

"A list of salaries and wages paid to all the employees of the Railway and Tramway Department, not giving any names, but showing the rates of pay and the number and designation at each of such rates."

(Mr. Schey.)

RETURN of Staff in the Service of the Railway Commissioners, New South Wales, in April, 1893.

RAILWAYS.

SECRETARY'S BRANCH.

1	Secretary, £800 per annum.
21	Clerks—1 at £350, 1 at £325, 2 at 320, 1 at £300, 1 at £260, 3 at £250, 1 at £240, 2 at £200, 1 at £180, 2 at £165, 1 at £150, 1 at £140, 1 at £110, 1 at £100, 1 at £90, 1 at £70 per annum.
22	

CHIEF ACCOUNTANT'S BRANCH.

1	Chief Accountant, £1000 per annum.
1	Chief of Expenditure, £600 per annum.
1	Chief Cashier, £500 per annum.
1	Chief Paymaster, £450 per annum.
1	Principal Book-keeper, £450 per annum.
1	Book-keeper, £400 per annum.
1	Examiner of Accounts, £340 per annum.
36	Clerks—1 at £325, 1 at £305, 2 at £285, 1 at £280, 3 at £275, 1 at £265, 2 at £260, 2 at £250, 1 at £240, 5 at £220, 1 at £210, 1 at £200, 1 at £195, 1 at £190, 1 at £180, 1 at £155, 1 at £140, 1 at £135, 2 at £120, 1 at £110, 1 at £105, 1 at £60, 1 at £40, 3 at £30 per annum.
43	

TRAFFIC AUDITOR'S BRANCH.

1	Traffic Auditor, £600 per annum.
1	Chief Inspector, £450 per annum.
6	Inspectors—3 at £305, 3 at £290 per annum.
60	Clerks—1 at £375, 1 at £305, 1 at £275, 1 at £250, 1 at £220, 1 at £215, 1 at £210, 2 at £200, 2 at £185, 1 at £180, 2 at £170, 1 at £165, 3 at £150, 1 at £140, 6 at £135, 1 at £130, 9 at £120, 3 at £110, 2 at £100, 1 at £90, 4 at £70, 2 at £60, 5 at £50, 3 at £40, 5 at £30 per annum.
68	

STORE BRANCH.

(Salaried Staff.)

1	Comptroller of Stores, £800 per annum.*
1	Book-keeper, £300 per annum.
1	Overseer, £300 per annum.
23	Clerks—1 at £300, 2 at £285, 1 at £280, 2 at £215, 1 at £205, 1 at £185, 1 at £160, 1 at £140, 2 at £120, 2 at £70, 3 at £50, 2 at £40, 4 at £30 per annum.
26	

* Allowed £100 per annum as Staff Committeeman.

Wages Staff.

1 Foreman, 10*s.* per diem.
2 Gangers—1 at 9*s.* 1 at 8*s.* per diem.
6 Issuers—1 at 10*s.* 6*d.*, 2 at 9*s.* 6*d.*, 1 at 9*s.*, 2 at 8*s.* per diem.
5 Labourers—4 at 7*s.* 6*d.*, 8 at 7*s.* per diem.
6 Storemen—1 at 9*s.*, 3 at 8*s.*, 2 at 7*s.* 6*d.* per diem.
3 Miscellaneous, Generals—1 at 8*s.* 6*d.*, 2 at 7*s.* 6*d.* per diem.
9 Sheet-dressers—1 at 7*s.* 6*d.*, 8 at 7*s.* per diem.

32

PERMANENT-WAY BRANCH.

(*Salaried Staff.*)

1 Engineer-in-Chief for Existing Lines, £1200 per annum.
9 Engineers—2 at £700, 1 at £600, 1 at £550, 1 at £525, 2 at £500, 1 at £450, 1 at £350 per annum.
17 Draftsmen and Surveyors—1 at £400, 1 at £375, 1 at £350, 1 at £320, 1 at £300, 1 at £275, 1 at £250, 1 at £240, 1 at £225, 1 at £220, 1 at £175, 2 at £150, 1 at £140, 1 at £130, 1 at £125, 1 at £52 per annum.
1 Chief Clerk, £470 per annum.
20 Clerks—2 at £250, 1 at £225, 3 at £220, 2 at £195, 1 at £190, 1 at £185, 1 at £175, 1 at £165, 1 at £160, 1 at £156, 4 at £150, 1 at £140, 1 at £135 per annum.
7 Clerks, Junior—1 at £105, 1 at £100, 3 at £90, 2 at £80.
12 Clerks "Apprentice"—1 at £70, 1 at £60, 7 at £50, 2 at £40, 1 at £30 per annum.
1 Accountant, £400 per annum.
5 Inspectors of Permanent Way—1 at £400, 3 at £300, 1 at £250 per annum.
1 Inspector of Weighing Machines, £250 per annum.
4 Inspectors of Buildings—2 at £310, 1 at £300, 1 at £250 per annum.
27 Sub-Inspectors of Permanent Way—1 at £280, 2 at £260, 2 at £250, 1 at £240, 5 at £230, 1 at £225, 2 at £215, 13 at £200 per annum.
7 Time-keepers—1 at £190, 3 at £150, 1 at £135, 2 at £115 per annum.

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PERMANENT-WAY BRANCH.

(*Wages Staff.*)

1295 Fettlers—33 at 9s., 1 at 8s., 1197 at 7s. 6d., 55 at 7s., 9 at 6s. 6d. per diem.
402 Gangers—3 at 12s. 1 at 11s., 1 at 10s. 6d., 9 at 10s., 3 at 9s. 6d., 332 at 9s., 53 at 8s. 6d. per diem.
502 Labourers—6 at 9s., 6 at 8s. 6d., 4 at 8s., 329 at 7s. 6d., 83 at 7s., 74 at 6s. 6d. per diem.
41 Boys—2 at 5s., 7 at 4s., 3 at 3s. 6d., 10 at 3s., 10 at 2s. 6d., 9 at 2s. per diem.
58 Carpenters—1 at 15s., 1 at 13s., 2 at 12s. 6d., 2 at 12s., 1 at 11s. 3d., 16 at 11s., 3 at 10s. 8d., 5 at 10s. 6d., 2 at 10s. 4d., 9 at 10s., 5 at 9s. 6d., 3 at 9s., 4 at 8s. 6d., 4 at 8s. per diem.
13 Blacksmiths—1 at 14s., 2 at 12s. 8d., 3 at 11s., 3 at 10s. 8., 2 at 10s. 6d., 1 at 9s. 8d., 1 at 9*s.* 6d. per diem.
11 Strikers—10 at 7s. 6d., 1 at 7s. per diem.
7 Fitters—1 at 13s., 1 at 12s. 6d., 1 at 11s. 8d., 2 at 11s., 2 at 10s. per diem.
9 Fencers—1 at 10s., 2 at 9s., 1 at 8s. 6d., 2 at 8s., 3 at 7s. 6d. per diem.
7 Bricklayers—2 at 12s., 1 at 11s. 6d., 1 at 11s., 1 at 10s. 6d., 1 at 9s., 1 at 8s. per diem.
12 Painters—1 at 11s. 6d., 1 at 11s., 1 at 10s. 4d., 2 at 10s., 2 at 9s. 8d., 1 at 9s. 2d., 2 at 9s., 1 at 8s. 8d., 1 at 8s. 6d. per diem.
7 Plumbers—1 at 12s. 6d., 1 at 12s., 1 at 10s. 8d., 1 at 10s., 1 at 9s. 6d., 1 at 7s. 6d., 1 at 6s. per diem.
6 Stationary Engine Drivers—1 at 10s., 1 at 9s., 3 at 8s. 6d., 1 at 8s. per diem.
1 Quarry Foreman, 16s. per diem.
2 Timber Inspectors—1 at 12s., 1 at 11s. per diem.
8 Miscellaneous Trades—1 at 12s., 2 at 9s., 2 at 8s. 6d., 1 at 8s., 1 at 7s., 1 at 5s. per diem.
14 Miscellaneous, General—1 at 9s., 3 at 8s. 6d., 3 at 7s. 6d., 1 at 7s., 2 at 6s. 6d. per diem; 1 at 25s., 2 at 23s., 1 at 10s. per week.

2395

LOCOMOTIVE BRANCH.

(*Salaried Staff.*)

1 Chief Mechanical Engineer, £1200 per annum.
1 Chief Clerk, £500 per annum.
1 Accountant, £500 per annum.
2 Out-door Superintendents, £550 per annum.
2 Works Managers—1 at £550, 1 at £350 per annum.
1 Superintendent of Carriage and Wagon Shops, £400 per annum.
1 Gas Superintendent, £350 per annum.
1 Gas Inspector, £370 per annum.
1 Boiler Inspector, £300 per annum.

1 Water Supply Inspector, £375 per annum.
2 Travelling Engine Inspectors—1 at £300, 1 at £255 per annum.
11 Steam Sheds Foremen—1 at £430, 1 at £350, 2 at £310, 1 at £300, 2 at £290, 1 at £280, 2 at £275, 1 at £250 per annum.
6 Sub Sheds Foremen—1 at £330, 1 at £300, I at £290, 1 at £280, 2 at £250 per annum.
25 General Foreman—1 at £375, 2 at £350, 1 at £325, 1 at £305, 3 at £300, 2 at £290, 3 at £270, 3 at £260, 4 at £255, 2 at £250, 1 at £235, 2 at £225 per annum.
9 Draftsmen—1 at £375, 2 at £325, 1 at £275, 1 at £260, 1 at £235, 1 at £150, 1 at £140, 1 at £110 per annum.
18 Timekeepers—1 at £305, 1 at £265, 2 at £200, 4 at £175, 1 at £180, 2 at £165, 3 at £150, 1 at £140, 1 at £120, 1 at £110, 1 at £80 per annum.
76 Clerks—1 at £330, 1 at £320, 1 at £275, 1 at £265, 3 at £220, 1 at £215, 3 at £200, 1 at £190, 2 at £180, 1 at £175, 2 at £170, 2 at £165, 3 at £160, 10 at £150, 3 at £135, 2 at £140, 3 at £130, 5 at £125, 2 at £120, 1 at £110, 2 at £100, 5 at £70, 1 at £60, 4 at £40, 8 at £50, 6 at £30 per annum; 1 at 6s. a day, 1 at 30s. per week.

159

(Wages Staff.)

384 Drivers (Loco.)—65 at 15s., 255 at 14s., 42 at 13s., 13 at 12s., 9 at 11s. per diem.
446 Firemen—364 at 10s., 81 at 9s., 1 at 8s. per diem.
418 Cleaners—3 at 10s., 2 at 9s., 5 at 8s., 1 at 7s. 6d., 296 at 7s., 48 at 6s., 30 at 5s. 6d., 27 at 5s., 4 at 4s., 2 at 3s. 3d. per diem.
114 Fuelmen—2 at 9s., 4 at 8s. 6d., 21 at 8s., 37 at 7s. 6d., 45 at 7s., 2 at 6s. 6d., 2 at 6s., 1 at 5s. 6d. per diem.
10 Gland Packers—3 at 10s., 7 at 8s. per diem.
57 Pumpers—1 at 10s., 1 at 9s., 34 at 8s. 8d., 5 at 8s. 6d., 1 at 8s. 4d., 1 at 8s. 2d., 11 at 8s., 2 at 7s. 8d., 1 at 6s. 6d. per diem.
3 Fire-lighters—7s. per diem.
10 Chargemen—4 at 15s., 2 at 14s., 1 at 13s., 1 at 12s., 1 at 11s., 1 at 8s. per diem.
232 Fitters—3 at 15s., 2 at 14s., 13 at 13s., 2 at 12s. 8d., 3 at 12s. 4d., 2 at 12s., 10 at 11s. 8d., 2 at 11s. 6d., 2 at 11s. 4d., 1 at 11s. 2d., 13 at 11s., 1 at 10s. 10d., 46 at 10s. 8d., 5 at 10s. 6d., 10 at 10s. 4d., 16 at 10s. 2d., 86 at 10s., 9 at 9s. 4d., 6 at 8s. per diem.
78 Turners—1 at 12s. 8d., 1 at 12s., 8 at 11s. 8d., 5 at 11s. 2d., 16 at 11s., 6 at 10s. 8d., 12 at 10s. 6d., 6 at 10s. 4d., 18 at 10s., 2 at 9s. 4d., 3 at 8s. per diem.
44 Machinists—1 at 12s., 3 at 10s., 3 at 9s. 8d., 3 at 9s. 6d., 1 at 9s. 2d., 13 at 9s., 2 at 8s. 8d., 7 at 8s. 6d., 9 at 8s., 2 at 7s. 6d. per diem.
22 Drillers—2 at 9s. 2d., 1 at 1s. 2d., 8 at 8s., 9 at 7s. 6d., 1 at 7s., 1 at 5s. per diem.
114 Boilermakers—1 at 14s., 1 at 12s. 8d., 3 at 12s. 2d., 1 at 12s., 2 at 11s. 8d., 6 at 11s. 6d., 2 at 11s. 4d., 1 at 11s. 2d., 4 at 11s., 3 at 10s. 8d., 32 at 10s. 6d., 2 at 10s. 4d., 2 at 10s. 2d., 36 at 10s., 16 at 9s. 4d., 1 at 8s., 1 at 7s. 6d. per diem.
79 Boilermakers' Assistants—4 at 8s., 47 at 7s. 6d., 28 at 7s. per diem.
63 Blacksmiths—1 at 16s., 1 at 15s., 1 at 13s., 2 at 12s. 8d., 1 at 12s. 6d., 5 at 12s. 2d., 1 at 12s., 4 at 11s. 8d., 1 at 11s. 4d., 1 at 11s. 2d., 7 at 11s., 20 at 10s. 8d., 2 at 10s. 6d., 3 at 10s. 2d., 11 at 10s., 1 at 9s. 8d., 1 at 8s. 6d. per diem.
13 Springmakers—1 at 14s., 1 at 12s. 8d., 1 at 12s. 2d., 2 at 11s. 2d., 2 at 10s. 8d., 2 at 10s. 2d., 3 at 10s., 1 at 9s. per diem,
104 Strikers—1 at 8s. 2d., 4 at 8s., 56 at 7s. 6d., 43 at 7s. per diem.
40 Moulders—1 at 14s., 5 at 11s. 2d., 5 at 11s., 3 at 10s. 6d., 15 at 10s., 5 at 9s. 4d., 6 at 8s. per diem.
5 Furnace-men—1 at 10s. 8d., 2 at 10s., 1 at 9s. 6d., 1 at 8s. 6d. per diem.
4 Dressers—1 at 9s., 1 at 8s. 6d., 2 at 8s. per diem.
8 Coppersmiths—1 at 12s., 1 at 11s., 1 at 10s. 10d., 3 at 10s., 1 at 9s. 6d., 1 at 9s. per diem.
8 Plumbers—1 at 12s., 2 at 10s. 8d., 1 at 10s. 6d., 1 at 10s., 3 at 9s. per diem.
27 Gasfitters—1 at 12s., 5 at 10s. 8d., 6 at 10s., 2 at 9s. 8d., 2 at 9s. 6d., 1 at 9s. 4d., 5 at 9s., 1 at 8s. 6d., 1 at 8s., 1 at 7s. 6d., 1 at 6s. 6d., 1 at 5s. per diem.
7 Tinsmiths—1 at 11s., 2 at 10s. 8d., 2 at 10s., 2 at 9s. 8d. per diem.
8 Brass-finishers—1 at 11s. 2d., 1 at 10s. 6d., 6 at 10s. per diem.
6 Patternmakers—1 at 15s., 1 at 12s. 2d., 2 at 11s. 2d., 2 at 10s. per diem.
4 Grinders—1 at 11s., 2 at 9s., 1 at 8s. per diem.
185 Builders (Car and Wagons)—1 at 14s., 1 at 12s., 1 at 11s. 4d., 12 at 11s., 2 at 10s. 8d., 31 at 10s. 6d., 1 at 10s. 4d., 124 at 10s., 1 at 9s. 8d., 6 at 9s. 6d., 1 at 9s. 4d., 4 at 8s. per diem.
14 Trimmers—1 at 11s. 2d., 4 at 10s. 8d., 6 at 10s., 1 at 9s. 6d., 1 at 9s. 4d., 1 at 8s. per diem.
72 Painters—2 at 11s., 1 at 10s. 8d., 1 at 10s. 6d., 1 at 10s. 2d., 26 at 10s., 2 at 9s. 8d., 1 at 9s. 4d., 10 at 9s., 2 at 8s. 8d., 3 at 8s. 6d., 23 at 8s. per diem.
41 Painters' Assistants—1 at 8s. 2d., 17 at 7s. 6d., 9 at 7s., 2 at 6s. 6d., 10 at 5s., 2 at 4s. per diem.
34 Lifters—1 at 11s. 4d., 1 at 9s. 8d., 2 at 9s. 4d., 29 at 9s. 2d., 1 at 9s. per diem.
20 Oilers—1 at 10s. 8d., 15 at 8s., 3 at 7s. 6d., 1 at 7s. per diem.
80 Examiners (Car and Wagon)—1 at 13s., 3 at 12s. 8d., 1 at 12s. 2d., 2 at 12s., 3 at 11s. 8d., 1 at 11s. 2d., 5 at 11s., 1 at 10s. 10d., 8 at 10s. 8d., 2 at 10s. 4d., 14 at 10s., 10 at 9s., 1 at 8s. 9d., 4 at 8s. 6d., 1 at 8s. 3d., 19 at 8s., 2 at 7s. 6d., 2 at 7s. per diem.
16 Carpenters—1 at 11s., 1 at 10s. 10d., 2 at 10s. 6d., 6 at 10s., 2 at 9s., 1 at 8s. 8d., 2 at 7s. 6d., 1 at 7s. per diem.
6 Foremen—1 at 16s. 8d., 1 at 15s., 1 at 14s. per diem; 2 at 90s., 1 at 80s. per week.

29 Drivers, "stationary engine and traversers"—1 at 10s. 8d., 3 at 10s., 3 at 8s. 8d., 9 at 8s., 10 at 7s. 6d., 2 at 7s., 1 at 6s. 6d. per diem.
38 Storemen—1 at 10s., 2 at 9s., 1 at 8s. 6d., 16 at 8s., 5 at 7s. 6d., 10 at 7s., 1 at 6s. 6d., 1 at 5s. 6d., 1 at 4s. per diem.
18 Gasmen—20 at 70s. per week, 1 at 11s. 5d., 1 at 10s. 6d., 2 at 10s., 5 at 9s. 6d., 3 at 8s. 6d., 1 at 7s. 6d., 2 at 7s., 1 at 6s. per diem.
5 Cylinder Fillers—3 at 8s. 6d., 1 at 6s. 6d., 1 at 5s. 6d. per diem.
117 Apprentices—3 at 5s., 13 at 3s. 6d., 11 at 3s., 2 at 2s. 6d., 1 at 2s. 3d., 17 at 2s., 1 at 1s. 9d., 18 at 1s. 3d., 19 at 10d. per diem.
57 Boys—11 at 5s., 16 at 4s., 3 at 3s. 6d., 1 at 3s. 3d., 5 at 3s., 9 at 2s. 6d., 6 at 2s. 3d., 5 at 2s., 1 at 1s. 8d. per diem.
337 Labourers—1 at 8s. 8d., 1 at 8s. 6d., 19 at 8s., 154 at 7s. 6d., 145 at 7s., 13 at 6s. 6d., 2 at 5s. 6d., 2 at 5s. per diem.
11 Messengers—4 at 7s. 6d., 2 at 7s., 1 at 5s., 1 at 3s. 6d., 1 at 2s. 6d. per diem, 1 at 10s. per week, 1 at 12s. 6d. per week.
10 Miscellaneous "Trades"—1 at 10s. 6d., 1 at 9s. 8d., 2 at 9s. 6d., 1 at 9s. 2d., 2 at 9s., 3 at 8s. 6d. per diem.
23 Miscellaneous "General"—5 at 10s., 2 at 9s., 1 at 8s. 6d., 3 at 8s., 2 at 7s. 6d., 3 at 7s., 1 at 5s., 1 at 4s. per diem; 1 at 50s., 1 at 30s., 1 at 27s., 1 at 25s., 1 at 7s. 6d. per week.

3421

TRAFFIC BRANCH.

(*Salaried Staff, including Electrical Engineer's Branch.*)

1 Chief Traffic Manager, at £1100 per annum.
1 Chief Clerk, at £450 per annum.
1 Goods Superintendent, all Lines, £700 per annum.
1 District Goods Manager, £600 per annum. *
2 Out-door Superintendents, at £750 per annum. †
1 Traffic Officer, £500 per annum.
6 District Superintendents—1 at £600, 1 at £510, 1 at £500, 2 at £475, 1 at £450 per annum.
15 Traffic Inspectors—2 at £300, 2 at £235, 2 at £230, 5 at £210, 1 at £200, 2 at £170 per annum, 1 at 10s. per diem.
5 Foremen—1 at £350, 1 at £250, 2 at £200, 1 at £180 per annum.
1 Overseer Coal Traffic, £300 per annum.
2 Berthing Masters—1 at £371 10s., 1 at £170 per annum.
1 Special Inquiry Officer, at £300 per annum.
167 Station-masters—2 at 400, 1 at £365, 1 at £350, 4 at £330, 4 at £310, 5 at £300, 3 at £290, 1 at £280, 1 at £275, 6 at £270, 1 at £265, 5 at £255, 7 at £250, 1 at £244, 3 at £240, 1 at £239, 1 at £234, 10 at £225, 1 at £223, 7 at £220, 1 at 219, 1 at £216, 8 at £210, 2 at £206, 2 at £204, 25 at £200, 1 at £196, 1 at £195, 1 at £192, 1 at £191, 3 at £190, 1 at £185, 1 at £181, 29 at £180, 1 at £179, 2 at £175, 1 at £172, 2 at £170, 13 at £165, 3 at £160, 3 at £150 per annum, with free quarters or an allowance for rent.
174 Officers-in-charge—2 at £210, 1 at £201, 1 at £200 4s., 2 at £200, 1 at £196, 1 at £192, 2 at £189, 1 at £182, 2 at £180, 1 at £179, 1 at £178, 1 at £172, 1 at £171, 2 at £170, 1 at £169, 3 at £168, 3 at £165, 1 at £166, 3 at £164, 1 at £163, 1 at £162, 4 at £161, 7 at £160, 2 at £158, 2 at £157, 2 at £156, 2 at £155, 1 at £152, 1 at £151, 45 at £150, 5 at £145, 1 at £142, 2 at £141, 55 at £140, 1 at £136, 12 at £130 per annum, with free quarters or an allowance for rent.
174 Night-Officers-in-charge—2 at £170, 10 at £150, 46 at £140, 96 at £130, 1 at £145, 17 at £120, 1 at £125, 1 at £110 per annum.
2 Porters-in-charge, at £130 per annum.
302 Clerks—1 at £430, 2 at £350, 2 at £300, 2 at £290, 4 at £275, 1 at £270, 1 at £260, 6 at £250, 3 at £240, 1 at £235, 2 at £230, 1 at £225, 3 at £220, 1 at £215, 3 at £210, 19 at £200, 22 at £180, 3 at £175, 2 at £170, 11 at £165, 5 at £160, 1 at £155, 27 at £150, 17 at £140, 1 at £136, 23 at £130, 2 at £125, 27 at £120, 1 at £115, 10 at £110, 12 at £100, 2 at £95, 7 at £90, 9 at £80, 16 at £70, 1 at £65, 4 at £60, 11 at £50, 21 at £40, 15 at £30 per annum.
25 Operators—1 at £125, 3 at £120, 1 at £110, 2 at £100, 1 at £95, 2 at £90, 12 at £80, 2 at £70, 1 at £50 per annum.
6 Miscellaneous, General—1 at £164, 1 at £146, 1 at £150, 1 at £90, 1 at £13, 1 at £5 per annum.

887

* Allowed £100 per annum as Staff Committeman.

† One Out-door Superintendent allowed £100 per annum as Staff Committeeman.

The salaries shown against the Station Officers include the allowances made by the Post Office Department for postal duties in those cases where performed.

ELECTRICAL ENGINEER'S BRANCH.

1 Electrical Engineer, at £800 per annum.
3 Inspectors—1 at £270, 1 at £220, 1 at £200 per annum.
5 Electric Assistants—1 at £185, 2 at £180, 2 at £160 per annum.

51 Operators—1 at £200, 3 at £180, 1 at £165, 2 at £160, 3 at £150, 2 at £140, 1 at £136, 1 at £135, 7 at £130, 5 at £120, 7 at £110, 2 at £100, 1 at £95, 2 at £90, 12 at £80, 1 at £40 per annum.
9 Clerks—1 at £200, 1 at £150, 1 at £130, 1 at £110, 1 at £80, 4 at £30 per annum.
1 Storeman, at £90 per annum.

70

957

TRAFFIC BRANCH.

(Wages Staff, including Electrical Engineer's Branch.)

293 Guards—6 at 12s., 35 at 11s., 97 at 10s. 6d., 81 at 10s., 23 at 9s. 6d., 37 at 9s., 12 at 8s. 6d., 2 at 7s. 6d. per diem.
71 Assistant Guards—70 at 8s. 6d., 1 at 8s. per diem.
682 Porters—7 at 10s., 1 at 9s. 6d., 9 at 9s., 8 at 8s. 6d., 75 at 8s., 113 at 7s. 6d., 438 at 7s., 12 at 6s. 6d., 14 at 6s. per diem; 4 at 45s., 1 at 40s. per week.
342 Junior Porters—150 at 5s., 92 at 4s. 2d., 58 at 3s. 4d., 41 at 2s. 6d., 1 at 1s. 8d. per diem.
192 Signalmen—10 at 11s. 6d., 26 at 11s., 3 at 10s. 6d., 24 at 10s., 12 at 9s. 6d., 1 at 9s. 2d., 3 at 9s., 88 at 8s. 6d., 17 at 8s., 7 at 7s. 6d., 1 at 7s. per diem.
161 Shunters—1 at 10s. 6d., 2 at 10s., 12 at 9s., 16 at 8s. 6d., 13 at 8s., 106 at 7s. 6d., 11 at 7s. per diem.
12 Messengers—1 at 8s., 1 at 7s. 6d. 2 at 7s., 3 at 5s., 2 at 4s. 2d., 3 at 3s. 4d.
19 Telephone Boys—1 at 5s., 1 at 4s. 2d., 4 at 3s. 4d., 7 at 2s. 6d. per diem, and 6 at 10s. per week.
19 Barrack Attendants—2 at 35s., 1 at 34s., 1 at 30s., 4 at 25s., 1 at 22s. 6d., 4 at 20s., 2 at 15s., 1 at 13s., 1 at 12s., 1 at 7s. 6d., 1 at 5s. 7d. per week.
17 Conductors—1 at 8s. 6d., 7 at 7s. 6d., 6 at 7s., 2 at 5s., 1 at 3s. 4d. per diem.
4 Platform Inspectors, at 12s. per diem.
19 Foremen—2 at 12s., 1 at 11s. 6d., 6 at 11s., 4 at 10s. 6d., 2 at 10s., 1 at 9s. 6d., 1 at 8s. 6d., 2 at 8s. per diem.
26 Ticket Collectors—1 at 10s., 1 at 9s., 1 at 8s. 6d., 9 at 8s., 6 at 7s. 6d., 6 at 7s., 1 at 6s. 6d., 1 at 4s. 2d. per diem.
6 Lamp Trimmers—2 at 8s., 2 at 7s. 6d., 2 at 7s. per diem.
5 Attendants, Ladies' Waiting-rooms—3 at 4s. 2d. per diem; 1 at 30s., 1 at 25s. per week.
32 Probationers, at 2s. 6d. per week.
20 Clerks—1 at 8s., 5 at 7s., 3 at 5s., 4 at 4s. 2d., 7 at 2s. 6d. per diem.
42 Miscellaneous—1 at 12s. 4d., 1 at 12s., 1 at 11s., 5 at 10s., 1 at 9s., 1 at 8s., 6 at 7s. 6d., 9 at 7s., 1 at 6s. 6d., 1 at 5s., 1 at 4s. 2d., 2 at 2s. 6d., 1 at 2s., 1 at 1s. 8d., per diem; 3 at 45s., 1 at 30s., 1 at 25s., 2 at 12s. 6d., 1 at 10s., 1 at 50s., 1 at 10s. per week.
442* Gatekeepers—1 at 7s. 6d., 18 at 7s., 3 at 6s., 5 at 2s. 6d. per diem; 1 at 45s., 2 at 42s., 1 at 35s., 31 at 30s., 6 at 25s., 6 at 20s., 1 at 17s., 46 at 15s., 3 at 12s. 6d., 1 at 12s., 56 at 10s., 1 at 9s., 34 at 7s. 6d., 192 at 7s., 26 at 5s., 1 at 3s., 7 at 2s. 6d. per week.

2404

* All gatekeepers paid less than 7s. per week have a cottage provided free of rent.

ELECTRICAL ENGINEER'S BRANCH.

(Wages Staff.)

1 Cleaner at 5s. 6d. per diem.
7 Electric Light Enginemen—2 at 10s., 1 at 9s., 2 at 8s. 8d., 2 at 8s. 6d. per diem.
15 Fitters—2 at 10s., 3 at 9s., 3 at 8s., 1 at 7s. 6d., 4 at 7s., 2 at 6s. per diem.
9 Junior Fitters—1 at 3s. 4d., 4 at 3s., 4 at 2s. 6d. per diem.
5 Messengers—1 at 5s., 1 at 4s. 2d., 1 at 3s. 4d. per diem; 2 at 10s. per week.
1 Operator at 8s. per diem.
14 Probationers at 2s. 6d. per week.
2 Miscellaneous—1 at 12s., 1 at 11s. per diem.

54

2458

INTERLOCKING BRANCH.

(Salaried Staff.)

1 Interlocking Engineer, at £500 per annum.
4 Draftsmen—1 at £300, 1 at £280, 1 at £220, 1 at £130 per annum.
4 Inspectors—1 at £275, 1 at £265, 2 at £230 per annum.
9 Clerks—1 at £165, 1 at £150, 1 at 110, 1 at £100, 1 at £70, 1 at £60, 2 at £50, 1 at £40 per annum.
1 General Foreman at £275 per annum.
1 Timekeeper at £160 per annum.

20

(Wages Staff.)

18 Smiths—1 at 13s. 4d., 1 at 11s. 8d., 1 at 11s. 6d., 3 at 11s. 2d., 3 at 11s., 4 at 10s. 8d., 2 at 10s. 6d., 1 at 10s. 4d., 2 at 10s. per diem.
18 Strikers—17 at 7s. 6d., 1 at 6s. 6d. per diem.
7 Apprentices—1 at 3s., 3 at 2s., 2 at 1s. 3d, 1 at 10d. per diem.
29 Signal-fitters—1 at 13s., 1 at 11s. 8d., 1 at 11s., 4 at 10s. 8d., 6 at 10s., 3 at 9s., 4 at 8s. 6d., 9 at 8s. per diem.
9 Drillers—1 at 8s. 8d., 3 at 8s. 2d., 1 at 8s., 4 at 7s. 6d. per diem.
4 Turners—1 at 11s. 8d., 2 at 10s. 8d., 1 at 10s. per diem.
5 Tinsmiths—1 at 11s. 8d., 1 at 10s. 8d., 2 at 10s., 1 at 9s. 6d. per diem.
4 Improvers—3 at 8s., 1 at 6s. 6d. per diem.
17 Carpenters—1 at 12s., 3 at 11s., 2 at 10s. 6d., 10 at 10s., 1 at 9s. per diem.
18 Miscellaneous trades—1 at 10s. 8d., 1 at 10s. 6d., 4 at 10s., 1 at 9s. 2d., 4 at 9s., 1 at 8s. 8d., 3 at 8s. 6d., 3 at 8s. per diem.
1 Foreman at 13s. per diem.
45 Labourers—1 at 9s., 2 at 8s., 31 at 7s. 6d., 11 at 7s. per diem.
9 Boys—2 at 5s., 1 at 4s., 6 at 2s. 6d. per diem.

184

GENERAL STAFF.

1 * Medical Officer, £900 per annum.
1 Railway Solicitor, £900 per annum.
1 Articled Clerk, £36 per annum.
1 Messenger, 5s. per diem.
1 Estate and Property Agent, £650 per annum.
1 Clerk, £145 per annum.
1 Surveyor, £250 per annum.
1 Apprentice Clerk, £30 per annum.
1 Advertising Clerk, £150 per annum.
1 Secretary to Ambulance Corps, £200 per annum.
1 Ticket-printing Clerk, £185 per annum.

11

* £130 allowed for office accommodation, which ceases on 31st May.
£100 per annum allowed for ambulance duties.

(Wages Staff.)

2 Labourers—1 at 7s., 1 at 6s. per diem.
4 Messengers—2 at 8s., 1 at 6s. per diem; 1 at 48s. per week.
4 Office-cleaners—1 at 27s., 1 at 20s., 1 at 14s. per week; 1 at 3s. per diem, and £25 per annum in lieu of quarters.
1 Attendant at 3s. per diem.

11

TRAMWAYS.

LOCOMOTIVE BRANCH.

(Salaried Staff.)

1 Locomotive Superintendent, £700 per annum.
1 Chief Clerk, £375 per annum.
5 Foremen—2 at £320, 1 at £300, 1 at £270, 1 at £265 per annum.
1 Locomotive Officer-in-charge, £275 per annum.
1 Travelling Inspector, £265 per annum.
4 Timekeepers—1 at £225, 1 at £205, 1 at £165, 1 at £130 per annum.
1 Draftsman, £130 per annum.
4 Clerks—1 at £220, 1 at £190, 1 at £150 per annum;
3 Apprentice Clerks—1 at £50, 2 at £40 per annum.

21

(Wages Staff.)

144 Drivers—14 at 14s., 65 at 13s., 20 at 12s., 45 at 11s. per diem.
5 Drivers (Stationary Engine)—2 at 10s. 6d., 1 at 9s., 1 at 8s., 1 at 7s. 6d. per diem.
140 Firemen—31 at 9s., 74 at 8s., 35 at 7s. 6d. per diem.
79 Cleaners—2 at 11s., 4 at 7s. 6d., 14 at 6s. 6d., 34 at 6s., 22 at 5s. 6d., 3 at 4s. 6d. per diem.
18 Fuelmen—17 at 7s., 1 at 6s. 6d. per diem.
12 Blacksmiths—1 at 12s. 4d., 1 at 12s. 2d., 1 at 12s., 1 at 11s. 6d., 1 at 11s. 4d., 2 at 11s., 2 at 10s. 8d., 1 at 10s. 4d., 2 at 10s. per diem.
14 Strikers—13 at 7s. 6d., 1 at 7s. per diem.
12 Boilermakers—1 at 11s., 1 at 10s. 8d., 2 at 10s. 4d., 7 at 10s., 1 at 9s. 4d. per diem.

52	Fitters—5 at 13s., 1 at 11s. 6d., 1 at 11s. 4d., 1 at 11s., 2 at 10s. 6d., 21 at 10s. 2d., 13 at 10s., 2 at 9s. 4d., 3 at 8s., 1 at 7s. 6d., 2 at 7s. per diem.
14	Machinists—2 at 10s. 2d., 1 at 9s. 8d., 1 at 9s. 4d., 5 at 8s. 8d., 3 at 8s. 6d., 1 at 8s. 4d., 1 at 8s. per diem.
4	Plumbers—1 at 11s. 8d., 1 at 11s. 4d., 1 at 10s. 8d., 1 at 9s. 6d. per diem.
18	Turners—1 at 11s. 8d., 1 at 11s. 2d., 1 at 11s., 1 at 10s. 8d., 2 at 10s. 6d., 1 at 10s. 4d., 5 at 10s. 2d., 6 at 10s. per diem.
4	2 at 10s. 8d., 2 at 10s. per diem.
17	Apprentices—1 at 5s., 1 at 3s., 2 at 2s., 5 at 1s. 3d., 8 at 10d. per diem.
12	Shop Boys—2 at 4s., 2 at 3s., 2 at 2s. 6d., 2 at 2s. 3d., 2 at 2s., 2 at 1s. 9d. per diem.
9	Car Builders—4 at 11s., 3 at 10s. 6d., 2 at 10s. per diem.
8	Carpenters—3 at 10s., 1 at 9s. 8d., 2 at 9s. 4d., 2 at 9s. per diem.
10	Painters—1 at 12s., 4 at 10s., 1 at 2s. 8d., 1 at 9s. 6d., 3 at 8s. per diem.
6	Painters' Assistants—3 at 7s. 6d., 1 at 7s., 2 at 6s. 6d. per diem.
11	Car Lifters—10 at 8s. 6d., 1 at 8s. per diem.
3	Car Fitters—1 at 11s 2d., 1 at 10s. 2d., 1 at 9s. 4d. per diem.
8	Gripmen at 8s. per diem.
4	Oilers—3 at 7s., 1 at 4s. per diem.
7	Lamp Trimmers—6 at 7s., 1 at 4s. per diem.
60	Labourers—2 at 8s., 5 at 7s. 6d., 43 at 7s., 8 at 6s. 6d., 1 at 4s., 1 at 3s. per diem.
10	Miscellaneous trades— 1 at 12s. 6d., 2 at 11s., 2 at 10s., 1 at 9s. 6d., 1 at 9s., 1 at 8s. 6d., 2 at 8s. per diem.
9	Miscellaneous, General—1 at 11s., 1 at 8s. 6d., 3 at 8s., 1 at 7s. 6d., 1 at 7s. per diem, 1 at 15s., 1 at 10s. per week.
690	

TRAFFIC BRANCH.

(Salaried Staff.)

1	Manager at £700 (allowed £52 Sundays, and £100 house rent) per annum.
1	Assistant Manager at £400 (allowed £41 10s. Sundays) per annum.
1	Chief Clerk at £260 per annum.
1	Timekeeper at £220 per annum.
9	Clerks—1 at £220, 1 at £180, 1 at £150, 2 at £140, 1 at £135, 1 at £70 per annum, 1 at 8s., 1 at 7s. 6d. per day.
1	Messenger at £83 per annum.
14	

(Wages Staff.)

185	Conductors—83 at 9s., 8 at 8s. 6d., 35 at 8s., 18 at 7s., 5 at 6s. 6d., 17 at 6s. 6d., 6 at 5s. 6d., 13 at 5s. per diem.
28	Car Cleaners—1 at 9s., 17 at 7s., 8 at 6s. 6d., 2 at 5s. per diem.
1	Clerk at 9s. per diem.
4	Foremen—2 at 12s., 2 at 11s. per diem.
19	Flagmen—1 at 7s. 6d., 18 at 7s. per diem.
7	Inspectors—1 at 91s. per week, 1 at 15s., 1 at 14s., 2 at 12s., 1 at 11s., 1 at 10s. per diem.
3	Point Cleaners—1 at 9s., 1 at 7s., 1 at 5s. per diem.
16	Pointsmen—6 at 8s., 9 at 7s. 6d., 1 at 7s. per diem.
4	Shunters—2 at 10s., 1 at 9s 6d., 1 at 8s. 6d. per diem.
9	Staffmen—At 9s. per diem.
4	Ticket-sellers—1 at 5s., 1 at 3s. 4d., per diem, 2 at 20s. per week.
5	Miscellaneous "General"—1 at 7s. 6d., 2 at 7s. per diem, 1 at 20s., 1 at 19s. per week.
285	

PERMANENT-WAY BRANCH.

(Salaried Staff.)

1	Engineer at £425 per annum.
2	Inspectors, 1 at £250, 1 at £200 per annum.
1	Clerk and Timekeeper at £205 per annum.
1	Draftsman at £150 per annum.
1	Apprentice Clerk at £40 per annum.
6	

(Wages Staff.)

135	Labourers—1 at 8s. 6d., 98 at 7s. 6d., 34 at 7s., 2 at 6s. 6d. per diem.
19	Gangers—1 at 12s., 1 at 10s., 14 at 9s., 3 at 8s. 6d. per diem.
20	Men (horse and dray) at 12s. per diem.
5	Boys—1 at 5s., 2 at 4s., 1 at 3s., 1 at 2s. per diem.
3	Artisans—1 at 11s., 1 at 10s. 8d., 1 at 10s. per diem.
7	Miscellaneous "General"—1 at 9s. 6d., 1 at 8s. 6d., 1 at 7s. 6d., 2 at 6s. 6d., 1 at 3s. 4d. per diem, 1 at 10s. per week.
189	

STORE BRANCH.

(Salaried Staff.)

1 Clerk at £200 per annum.
2 Apprentice Clerks—1 at £40, 1 at £30 per annum.

3

(Wages Staff.)

1 Storeman at 8s. 6d. per diem.

STATEMENT of the number of Persons employed on the Railways in April, 1893.

Branch.	No.
Commissioners and Secretary's Office	22
Chief Accountant's Branch	43
Traffic Auditor's Branch	68
Stores Branch—Salaried Staff	26
Wages Staff	32
Permanent-way Branch—Salaried Staff	112
Wages Staff	2,395
Locomotive Branch—Salaried Staff	159
Wages Staff	3,421
Traffic Branch (including Electrical)—Salaried Staff	957
Wages Staff	2,458
Interlocking Branch—Salaried Staff	20
Wages	184
General—Salaried Staff	11
Wages Staff	11
Total, Salaried Staff	1,418
Total, Wages Staff	8,501
Grand Total	9,919

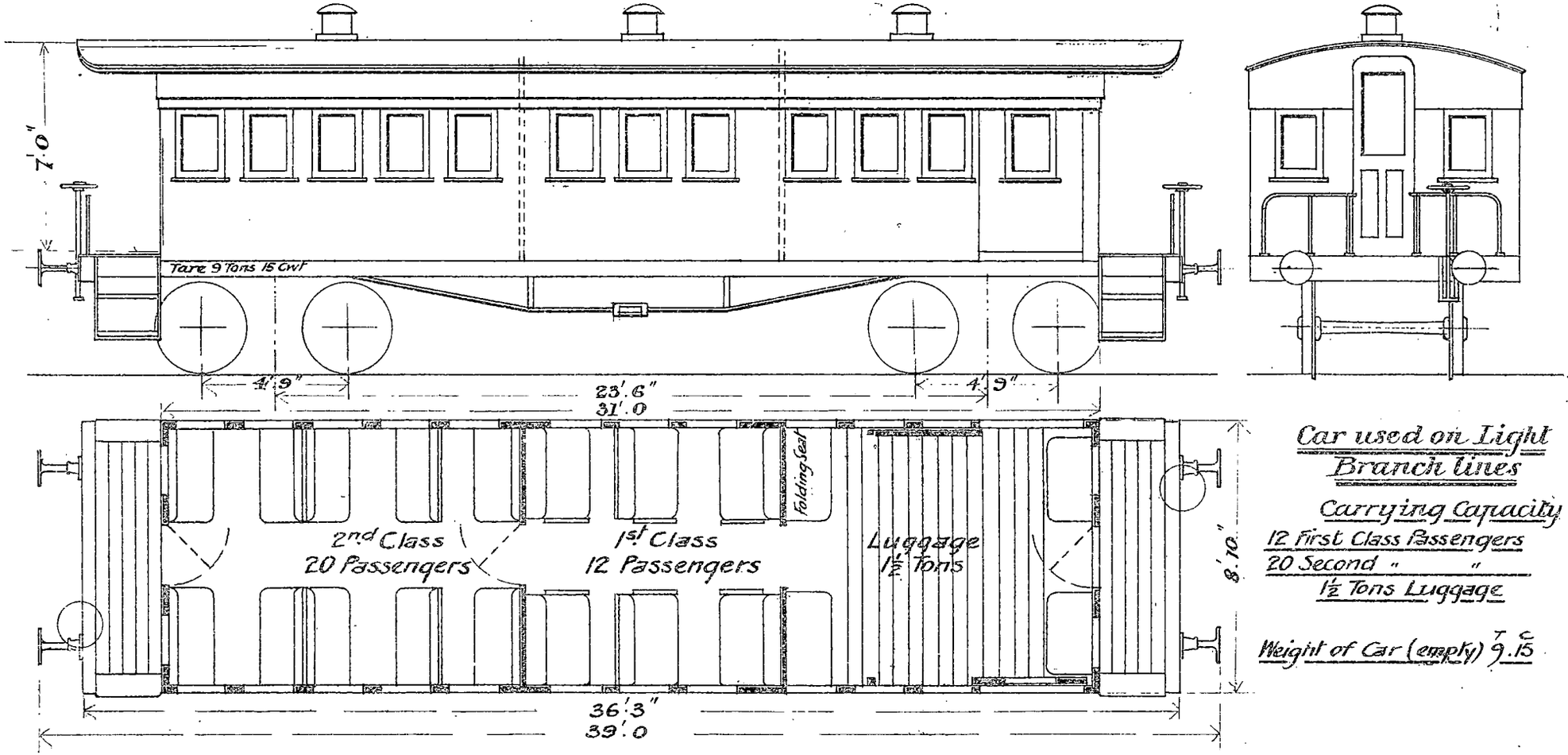
A large number of persons are included in this return as Salaried Officers whose positions were formerly paid through the Wages lists. Grades such as Officers in charge of Stations, Night Officers, Foremen, Sub-Inspectors, &c., being principally affected.

STATEMENT of the number of Persons employed on the Tramways in April, 1893.

Branch.	No.
Locomotive Branch—Salaried Staff	21
Wages Staff	690
Traffic Branch—Salaried Staff	14
Wages Staff	285
Maintenance Branch—Salaried Staff	6
Wages Staff	189
Stores Branch—Salaried Staff	3
Wages Staff	1
Total Salaried Staff	44
Total, Wages Staff	1,165
Grand Total	1,209

SUMMARY.

Railways	9,919
Tramways	1,209
Grand Total.	11,128



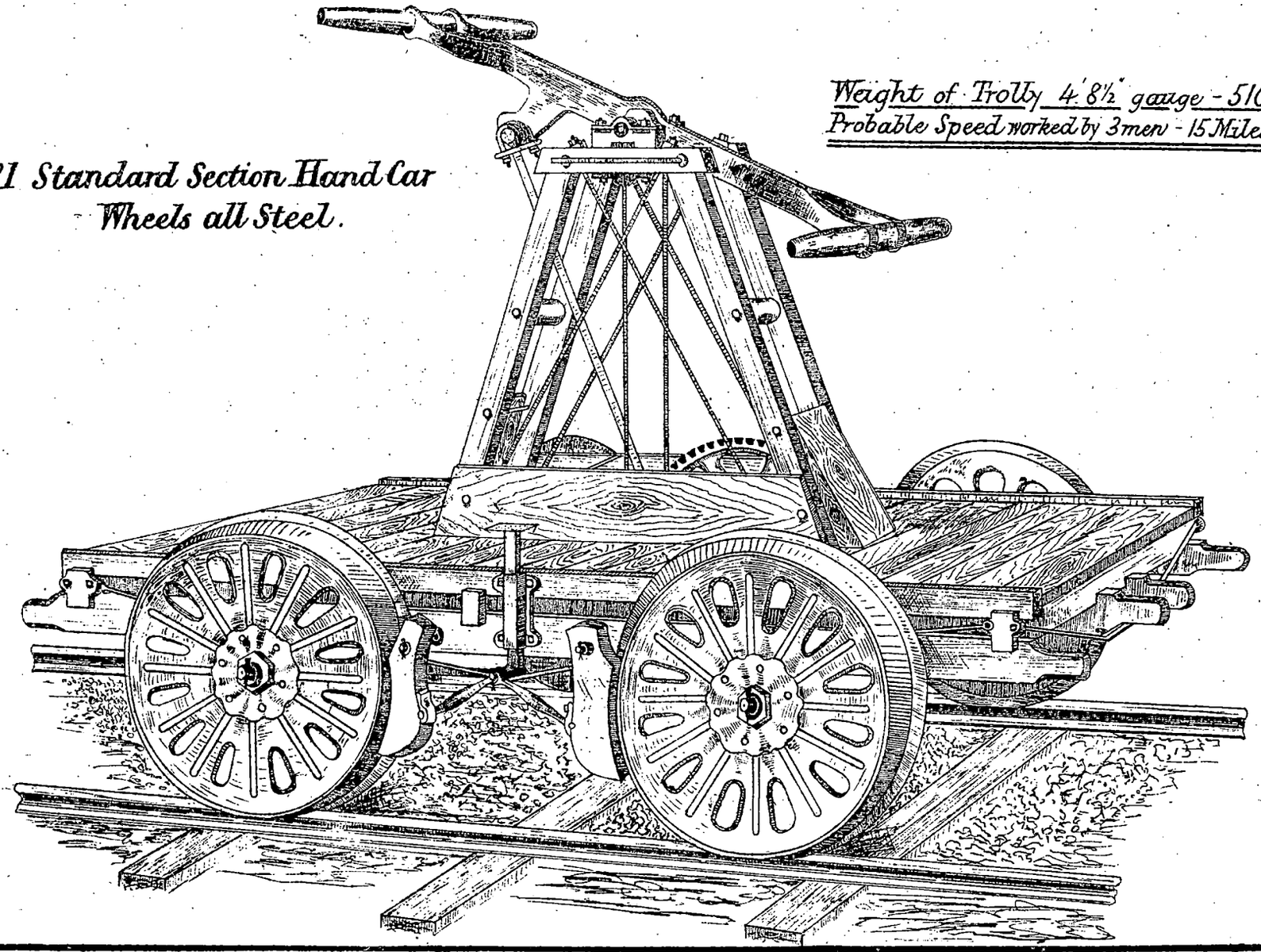
Car used on Light Branch lines

Carrying Capacity
12 First Class Passengers
20 Second " "
1½ Tons Luggage

Weight of Car (empty) T 9.C 15

N°1 Standard Section Hand Car
Wheels all Steel.

Weight of Trolly 4'8½" gauge - 510 Lbs.
Probable Speed worked by 3 men - 15 Miles per hour.



STATEMENT OF ACCOUNT OF THE EXPENDITURE AND REVENUE FOR YEAR 1893, WITH COMPARISONS FOR 1892 AND 1888.

DR. RAILWAYS. CR.

EXPENDITURE.	YEAR ENDING JUNE 30, 1893.	CORRESPONDING PERIOD IN 1892.	CORRESPONDING PERIOD IN 1888.
	£	£	£
To Maintenance of Way, Works, and Stations	474,142	484,233	429,001
Locomotive Power	557,574	643,924	488,452
Carriages and Waggons	129,188	160,816	127,836
Traffic Expenses	503,137	557,396	420,028
Compensation—Passengers	1,701	3,590	21,100
Do Goods	1,889	4,223	4,683
General Expenses	70,885	60,080	61,451
	1,738,516	1,914,252	1,530,551
BALANCE, NET RETURN after paying working expenses £	1,188,540	1,193,044	764,573
GRAND TOTAL £	2,927,056	3,107,296	2,295,124

REVENUE.	Bookings. 1893.	Bookings. 1892.	YEAR ENDING JUNE 30, 1893. £	CORRESPONDING PERIOD IN 1892. £	CORRESPONDING PERIOD IN 1888. £
By Passengers—					
First Class	No. 3,518,937	3,273,923	339,421	391,270	723 646*
Second Class	No. 9,144,443	9,348,022	511,992	534,519	
Season Tickets 1st Class	No. 12,323	12,001	44,120	44,054	69 691*
Season Tickets 2nd Class	No. 231,987	231,795	40,140	38,600	
Horses, Carriages, and Dogs			17,788	20,733	20,186
Parcels and Cloak Room			77,937	77,520	59,312
Mails			57,760	55,836	45 727
Miscellaneous			3,180	7,924	1,512
Total Coaching £			1,092,338	1,170,456	910,083
General Merchandise			986,587	1,057,334	829,747
Wool			336,373	349,675	217,671
Live Stock			299,796	299,252	164,847
Minerals—Coal and Coke			181,026	196,022	145,456
Miscellaneous			7,396	13,902	5,088
Total Goods £			1,811,180	1,916,185	1,362,809
General Miscellaneous £			23,538	20,655	22,232
GRAND TOTAL £			2,927,056	3,107,296	2,295,124

*NOT KEPT SEPARATE IN 1888.

THOMAS HALL,
Chief Accountant.

APPENDIX V.

SCHEDULES under Working Expenses for the Year ending the 30th June, 1893, with comparisons for 1892 and 1888.

RAILWAYS.

BRANCHES.	Year ending June 30, 1893.	Corresponding period in 1892.	Corresponding period in 1888.
A.—Maintenance of Way and Works.	£	£	£
Salaries, offices expenses, and general superintendence	28,374	16,415	19,635
Maintenance and renewals of permanent way, viz.: Wages £314,901	.....	328,847	267,430
Maintenance and renewals of permanent way, viz.: Materials 81,921	396,822	77,550	53,456
Repairs, &c., of bridges, signals, and other works	24,529	27,795	48,187
Repairs, &c., of stations and buildings	17,288	28,421	30,456
Sundries	7,129	5,205	7,837
Lines maintained— Quadruple 1893: 8½ 1892: 8 1888: ...	.....	.....	.....
Lines maintained— Double 1893: 149½ 1892: 143 1888: 72	.....	.....	.....
Lines maintained— Single 1893: 2,193 1892: 2,034 1888: 2,042	.....	.....	.....
1893: 2,351 1892: 2,185 1888: 2,114	474,142	484,233	429,001
B.—Locomotive Power.			
Locomotive Superintendent and clerks	14,749	16,523	21,566
Locomotive foremen	11,065	10,594	6,848
Locomotive drivers and firemen	185,895	223,277	157,808
Locomotive cleaners, coalmen, and labourers	59,384	60,596	52,287
Locomotive sundries	15,790	13,852	24,185
Coal, coke, and wood	75,990	81,088	54,392
Water	23,676	27,548	14,162
Oil, tallow, and waste	15,156	27,312	18,042
Sundry stores for cleaners	4,281	5,859	4,164
Repairs and renewals of engines Wages £119,308	.....	123,502	92,133
Repairs and renewals of engines Materials 32,280	151,588	53,773	20,865
£	557,574	643,924	466,452
C.—Carriages and Waggons.			
Greasing and oiling Wages / Materials } Traffic charges	3,882	3,749	4,093
	6,400	7,744	9,524
Carriage repairs Wages	38,684	38,931	35,285
Carriage repairs Materials	9,445	12,893	10,236
Waggon repairs Wages	48,418	60,069	39,550
Waggon repairs Materials	22,359	37,430	20,148
£	129,188	160,816	127,836

BRANCHES.	Year ending June 30, 1893.	Corresponding period in 1892.	Corresponding period in 1888.
D.—Traffic Expenses.	£	£	£
Traffic Manager's office and staff	5,801	6,816	7,714
District officers and clerks	22,961	23,655	7,179
Station-masters and night officers	86,984	88,649	67,692
Clerks	26,423	25,472	24,134
Pointsmen, signalmen, and gatekeepers	46,195	52,076	32,533
Guards	63,017	71,570	51,416
Porters, labourers, &c.	143,658	160,394	142,649
Stores for stations	39,438	50,243	33,938
Advertising, stationery, printing, &c.	14,816	16,009	52,753
Travelling and Incidental	5,905	6,392	
Sundries	47,938	56,120	
£	503,137	557,396	420,028
E.—Compensation.			
For personal injury—Passengers	1,701	3,580	21,100
For damage to and loss of goods	1,889	4,223	4,683
£	3,590	7,803	25,783
Gratuities to widows and children of employees who have met with accident	2,475	3,210	1,307
F.—General Expenses.			
Commissioners' and Secretary's office	11,700	10,276	7,915*
Accountant's office	9,767	7,757	7,145*
Audit office	10,158	10,092	10,951
Stores branch	6,098	3,700	7,688*
Telegraph branch	19,267	17,443	22,209
Sundries	11,420	7,602	4,236
£	68,410	56,870	60,144
GRAND TOTAL £	1,738,516	1,914,252	1,530,551

* Under the late administration £6,578 of the expenses in connection with the offices of the Commissioner, Secretary, Accounts, and Store Branches was charged to the Construction Capital Account, otherwise the charges against each branch would have been—Commissioner and Secretary, £9,733; Accountant's office, £9,207; and Stores Branch, £10,336. The figures in Compensation and General Charges in 1888 have been adjusted to show the amounts paid to widows and children of employees.

THOMAS HALL,
Chief Accountant.

APPENDIX VI.

COMPARATIVE Analysis of Revenue and Expenditure for the years ending 30 June, 1893, 1892, and 1888.

Particulars.	Year ending 30 June, 1893.				Year ending 30 June, 1892.				Year ending 30 June, 1888.			
	Average miles open for traffic ... Miles. 2,316 Train mileage— Passenger ... ... 3,678,506 Goods ... ... 3,826,804 Total mileage 7,505,310				Average miles open for traffic ... Miles. 2,182 Train mileage— Passenger ... ... 3,683,813 Goods ... ... 4,672,283 Total mileage 8,356,096				Average miles open for traffic ... Miles. 2,044 Train mileage— Passenger ... ... 3,074,678 Goods ... ... 3,614,635 Total mileage 6,689,313			
	Numbers or Tonnage.	Revenue.	Per mile open.	Per train mile.	Numbers or Tonnage.	Revenue.	Per mile open.	Per train mile.	Numbers or Tonnage.	Revenue.	Per mile open.	Per train mile.
REVENUE.												
REVENUE.	Numbers.	£	£	d.	Numbers.	£	£	d.	Numbers.	£	£	d.
Passengers — First and second class.	12,619,945	851,413	367·6		12,663,380	925,789	424·2		9,572,785	723,645	354·0	
Do Season Tickets	243,796	84,260	36·4		244,250	82,654	37·9		169,850	59,691	29·2	
Horses, carriages, and dogs	... .	17,788	7·7		.....	20,733	9·5		.....	20,196	9·9	
Cloak-room and parcels ...	.....	77,937	33·6		.....	77,520	35·5		.....	59,312	29·0	
Mails	.....	57, 60	24·9		.....	55,486	25 6		.....	45,727	22·4	
Miscellaneous	.....	3,180	1·4		.....	7,924	3·6		.....	1,512	0·7	
Total, coaching	.....	1,082,338	471·6	71·27	.....	1,170,456	536·3	76·27	.....	910,083	445 2	71·03
					Tons.				Tons.			
General Merchandise	1,171 815	964,865	416·6		1,239,029	1,010,351	462·9		*1,152,377	829,747	405·8	
Wool	107.491	336,373	145·2		112,609	349.675	160·2		74,148	217,671	106·4	
Live stock	150,115	299,798	129·5		145,230	299,252	137·1		68,101	164,847	80·6	
Minerals—Coal and Coke..	2,228,577	181,026	78·1		2,562,124	196,022	89·8		*2,105,146	145,456	71·1	
Minerals, other than coal†	115,845	21,722	9·4		237,721	46,983	21·5		.....	.....	.....	
Miscellaneous	.....	7.396	3·2		.....	13,902	6·4		.....	5,088	2 8	
Total, goods	3,773,843	1,811,180	782·0	113·59	4,296,713	1,916,185	877·9	98·43	3,399,772	1,362,809	666·7	90·48
Sundries, special and miscellaneous.	.....	23,538	10·2	0·75	.....	20.655	9·5	0·59	.....	22,232	10·9	0·80
Total Revenue	.....	2,927.056	1263·8	93·60	.....	3,107,296	1423·7	89·25	.....	2,295,124	1122·8	82·34
EXPENDITURE.												
WORKING EXPENSES.	Expenditure.	Per mile open.	Per train mile.	Per cent. to Revenue.	Expenditure.	Per mile open.	Per train mile.	Per cent. to Revenue.	Expenditure.	Per mile open.	Per train mile.	Per cent. to Revenue.
	£	£	d.		£	£	d.		£	£	d.	
Maintenance of way, works, and stations	474,142	204·7	15·16	16·20	484,233	221·9	13·91	15·58	429,001	209·9	15·39	18·69
Locomotive power.....	557,574	240·8	17·85	19·05	643,924	295 0	18·49	20·72	466,452	228·2	16·73	20·33
Carriages and waggons.....	129,188	55·8	4·13	4·41	160,816	73·7	4·62	5 18	127,886	62·5	4·59	5·57
Traffic expenses.....	503,137	217·2	16·09	17·19	557,396	255·4	16 01	17·94	420,028	205·5	15·07	18·30
Compensation — Passenger	1,701	·7	·05	·06	3,580	1·7	0·10	0·11	21,000	10·3	0·75	0·91
Do Goods ...	1,889	·8	·06	·06	4,223	1·9	0·12	0·14	4,783	2·3	0·17	0·21
General expenses	70,885	30·6	2·27	2·42	60,080	27·5	1·73	1 93	61,451	30 1	2·21	2 68
Total expenditure	1,738,516	750 6	55·59	59 39	1,914,252	877·1	54·98	61·60	1,530,551	748·8	54·91	66·09
Net profit	1,188,540	513 2	38·01	...	1,193,044	546·6	34·27	...	764,573	374·0	27·43	...
Increase in net profit over year ending 30 June, 1888.	423,967	...	...	....	428,4711	...	...	..	.....	...	...	...
(After paying working expenses.)	EXPENDITURE PERCENTAGE TO GROSS REVENUE, 59·39.				Expenditure percentage to gross revenue, 61·60.				Expenditure percentage to gross revenue, 66·69.			

* The total in 1888 includes the weight of coal and general goods carried for the service, but are not included in 1892 and 1893. † The weight and money of "other minerals" were included in general merchandise in 1888.

Percentage of Expenditure in each Division.

Divisions of Expenditure.	Year ending 30 June, 1893.	Year ending 30 June, 1892.	Year ending 30 June, 1888.
	%	%	%
Maintenance of Way, Works, and Stations	27·27	25·29	28·03
Locomotive Power.....	32·7	33·64	30·48
Carriage and Waggon	7·43	8·40	8·35
Traffic Expenses	28·94	29·12	27·44
Compensation (Passengers)	·10	·019	1·36
Do (Goods)	·11	0·22	0·32
General Expenses	4·08	3·14	4·00
	100·00	100·00	100·00

APPENDIX VII.

RETURN of the Number of Passengers, Tonnage of Goods, Earnings and Working Expenses, Total and per Train Mile, Percentage of Working Expenses to Gross Earnings, Net Earnings, Capital Invested on Lines open, and Interest on Capital each year, from 1855 to 1893, inclusive.

Year.	Length of Line.	Number of Passengers.	Tonnage of Goods.	Train Mileage.	Earnings from Coaching Traffic.	Earnings from Goods Traffic.	Total Earnings	Working Expenses.	Earnings per Train Mile.	Working Expenses per Train Mile.	Percentage of Working expenses to Gross Earnings.	Net Earnings.	Capital expended on Lines open.	Interest on Capital.
	Miles.	No.	Tons.	No.	£	£	£	£	d.	d.	%	£	£	%
1855	14	98,846	140	14,107	9,093	156	9,249	5,959	157·34	101·37	64·43	3,290	515,347	·63
1856	23	350,724	2,469	68,271	29,526	2,757	32,283	21,788	113·32	76·48	67·49	10,495	683,217	1·53
1857	40	329,019	20,847	107,822	34,970	8,417	43,387	31,337	96·58	69·75	72·23	12,050	1,023,838	1·17
1858	55	376,492	33,385	141,495	45,858	16,451	62,309	43,928	105·69	74·51	70·50	18,381	1,231,867	1·49
1859	55	425,877	43,020	147,618	46,502	15,258	61,760	47,598	100·41	77·38	77·07	14,162	1,278,416	1·10
1860	70	551,044	55,394	174,249	45,428	16,841	62,269	50,427	83·37	67·52	80·98	11,842	1,422,672	·83
1861	73	595,591	101,130	214,881	40,637	25,367	75,004	61,187	83·77	68·34	81·58	13,817	1,536,032	·89
1862	97	642,431	205,139	274,565	62,096	41,775	103,871	68,725	90·79	60·07	66·16	35,146	1,907,807	1·84
1863	124	627,164	218,535	315,177	71,297	52,644	123,941	96,867	94·38	73·76	78·16	27,074	2,466,950	1·09
1864	143	693,174	379,661	415,422	81,487	66,167	147,654	103,715	85·30	59·92	70·24	43,939	2,631,790	1·66
1865	143	751,587	416,707	483,446	92,984	73,048	166,032	108,926	82·42	54·07	65·60	57,106	2,746,373	2·07
1866	143	668,330	500,937	490,475	85,636	82,899	168,535	106,230	82·49	51·99	63·04	62,305	2,786,094	2·23
1867	204	616,375	517,022	600,751	87,564	101,508	189,072	117,324	82·02	46·87	62·08	71,748	3,282,320	2·18
1868	247	714,563	596,514	768,529	99,408	124,051	224,359	144,201	70·06	45·03	64·29	80,158	4,060,950	1·97
1869	318	759 635	714,113	893.552	109,427	155,548	264,975	176,362	71·17	47·37	66·57	88,613	4,631,329	1·89
1870	339	776,707	766,523	901,139	117,854	189,288	307,142	206,003	81·81	54·66	67·08	101,139	5,566,092	1·81
1871	358	759,062	741,986	931,333	129,496	225,826	355,322	197,065	91·57	50·79	55·46	158,257	5,887,258	2·68
1872	398	753,910	825,360	1,036,255	164,862	260,127	424,989	207,918	98·43	48·15	48·92	217,071	6,388,727	3·39
1873	403	875,602	923,788	1,109,879	178,216	306,020	484,236	238,035	104·71	51·47	49·16	246,201	6,739,918	3·65
1874	403	1,085,501	1,070,938	1,249,233	188,595	347,980	536,575	257,703	103·09	49·51	48·03	278,872	6,844,546	4·07
1875	473	1,288,225	1,171,354	1,472,204	205,941	408,707	614,648	296,174	100·20	48·28	48·18	318,474	7,245,379	4·39
1876	509	1,727,730	1,244,131	1,688,964	233,870	459,355	693,225	339,406	98·50	48·22	48·96	353,819	7,990,601	4·42
1877	598	2,957,144	1,430,041	2,106,802	271,588	544,332	815,920	418,985	92·95	47·73	51·35	396,935	8,883,177	4·46
1878	688	3,705,733	1,625,886	2,655,176	306,308	596,681	902,989	536,988	81·62	48·54	59·47	366,001	9,784,645	3·74
1879	734	4,317,864	1,720,815	2,932,463	319,950	632,416	952,366	604,721	77·04	49·49	63·49	347,645	10,406,495	3·34
1880	849	5,440,138	1,712,971	3,239,462	390,149	770,868	1,161,017	647,719	86·02	47·99	55·79	513,298	11,778,819	4·35
1881	995	6,907,312	2,033,850	3,923,929	488,675	955,551	1,444,226	738,334	88·33	45·16	51·12	705,892	13,301,597	5·30
1882	1,268	8,984,318	2,619,427	4,851,157	587,823	1,111,038	1,698,863	934,635	84·05	46·24	55·02	764,228	15,843,616	5·13
1883	1,320	10,272,037	2,864,566	5,937,261	661,751	1,269,713	1,931,464	1,177,788	78·07	47·61	60·97	753,676	16,905,014	4·48
1884	1,618	11,253,109	3,124,425	6,403,041	745,665	1,340,572	2,086,237	1,301,259	78·19	48·77	62·37	784,978	20,080,138	4·20
1885	1,732	13,506,346	3,273,004	6,638,399	830,904	1,343,464	2,174,368	1,458,153	78·61	52·72	67·06	716,215	21,831,276	3·37
1886	1,869	14,881,604	3,218,582	6,479,265	849,253	1,310,817	2,160,070	1,492,992	80·01	55·30	69·12	667,078	24,071,454	2·90
1887	2,036	14,451,303	3,339,253	6,472,107	850,499	1,357,796	2,208,295	1,457,760	81·88	54·05	66·01	750,535	26,532,122	2·96
1887-88	2,114	15,174,115	3,399,772	6,689,313	918,975	1,376,149	2,295,124	1,530,551	82·34	54·91	66·69	764,573	27,722,744	2·85
1888-89	2,171	16,086,223	3,485,839	7,641,769	1,025,601	1,512,876	2,538,477	1,634,602	79·72	51·34	64·39	903,875	29,839,167	3·14
1889-90	2,182	17,071,945	3,788,950	8,008,826	1,059,791	1,573,295	2,633,086	1,665,835	78·90	49·91	63·26	967,251	30,555,123	3·17
1890-91	2,182	19,037,760	3,802,849	8,410,421	1,177,037	1,797,384	2,974,421	1,831,371	84·88	52·26	61·57	1,143,050	31,768,617	3·59
1891-92	2,185	19,918,916	4,296,713	8,356,096	1,189,231	1,918,065	3,107,296	1,914,252	89·25	54·98	61·60	1,193,044	33,312,608	3·58
1892-93	2,351	19,932,703	3,773,843	7,505,310	1,115,042	1,812,014	2,927,056	1,738,516	93·60	55·59	59·39	1,188,540	34,657,571	3·48

The accounts were made up to the 31st December in each year up to 1887, since that time up to the 30th June in each year.
Camden and Sans Souci Tramways not included prior to 1888 in this return.

New South Wales.
Chief Secretary's Office, Sydney, 11th May, 1894.

SIR,

REFERRING to my telegram of the 19th February last, granting the services of Mr. E. M. G. Eddy, Chief Commissioner for Railways, to advise your Government upon matters connected with the Railways of your Colony, I have to inform you that Mr. Eddy has completed his Report in connection with the same, which I have the honour to forward to you herewith.

I have the honour to be,
Sir,
Your most obedient Servant,

GEORGE R. DIBBS.

The Honourable the Prime Minister of Tasmania, Hobart.

REPLY OF THE GENERAL MANAGER OF TASMANIAN GOVERNMENT RAILWAYS TO MR. COMMISSIONER EDDY'S REPORT, 26TH MAY, 1894.

Tasmanian Government Railways,
General Manager's Office, Hobart, 26th May, 1894.

The Honourable the Minister for Railways.

SIR,

I HAVE the honor to offer a few remarks upon the Report of Mr. Commissioner Eddy on our working Railways.

I beg to tender the thanks of myself and the officers of the Department to Mr. Eddy for the trouble he has taken to give us his views and suggestions, and regret that time did not permit him to make a more thorough examination.

It is a great pleasure to observe that Mr. Eddy considers our working expenses have been carefully watched; and, whilst I regret that he is unable to offer a single suggestion as to any method of increasing revenue, it is gratifying to find so good an authority is of opinion that your management has done all that appears possible in this direction.

I purpose to touch upon the items in Mr. Eddy's Report in the order they appear, and will commence with

ENGINEERING STAFF.

Mr. Eddy suggests a reduction of one Assistant Engineer and three Sub-Inspectors (the latter we class as Inspectors) giving each Inspector 100 miles to look after.

We have already arranged to reduce one Engineer. I cannot see my way to recommend a reduction of three Inspectors. The Inspectors are superior workmen who inspect their lengths daily, and render such skilled assistance as may be and is required daily on our steep grades, sharp curves, and light rails. An Inspector with 100 miles could not inspect his length thoroughly oftener than once in three or four days, and his expenses for night accommodation would be no inconsiderable item.

We have on the Main Line one Inspector less than Mr. Grant employed, and I consider it would be anything but an economy to make any reduction in the Inspectors, who have from 40 to 70 miles to look after, according to the character of the lines and the weight of traffic. The safety of the public must be considered; with rails at least 30 per cent. too light for our locomotives the strictest and most careful inspection is necessary.

To come to the heading "Expenditure in connection with the Maintenance of the Permanent Way and Rolling-stock," page 5.

Sleepers.—We are getting the best available delivered at one shilling each, less than half the price paid some few years ago, and I do not think it would be desirable to import ironbark from New South Wales for many reasons.

The suggestion that we should use broken metal for ballast is open to argument, and even if deemed desirable we could not afford it in any large quantity.

The proposal to slightly reduce the speed of the express trains between Hobart and Launceston would not effect any economy. These trains do less damage to the road than the heavy goods trains. No saving in wages or material could be made by a reduction in the speed of these trains.

The experiment now being tried of a sectional trolly, as described by Mr. Eddy at page 5 of his Report, should have a trial on these railways; still I do not think it would answer. The trolly weighs a quarter of a ton; add three men and their tools and we have nearly half a ton weight. I am afraid three men would lose much time in pumping this trolly up a long grade of 1 in 40, and would not be fit for work afterwards without a considerable spell.

All these proposals, some of which Mr. Eddy admits are experimental (see page 4), may suit lines where grades are easy, with broken metal ballast, heavy rails, and easy curves, and where sleepers last 25 years; but no one with experience of lines such as ours would take the risk of cutting down either Inspectors or working staff beyond the limits of safety, which we have very nearly reached.

Derwent Valley Line.

Proposal to maintain with nine men divided into three gangs. We have already reduced to 12 men in four gangs, and I do not see my way to make further reductions. This gives 6½ miles lengths, or rather more than two miles to each man. Apart from this, the men's houses could not be apportioned to three gangs' lengths, and time would be lost in walking to and from work.

Apsley Line.

It is impossible to keep this line with nine men in 9-mile lengths. We have at present 12 men, and I cannot see my way to recommend further reductions in repairers on this branch.

Oatlands Line.

Reduced cost by relaying with heavier rail, and working as part of Main Line, say, £800. This is correct, and is the figure I supplied to Mr. Eddy, the reduction having been commenced during his visit.

Fingal Line.

Mr. Eddy proposes to work this line with 7 gangs of 4 men each, with better facilities for the men moving about.

We now have nine gangs, divided into five gangs of four men, and four gangs of three men, according to the circumstances of the line, being a reduction of three men since the 31st December, 1893.

With regard to further reduction on this line, we may be able to reduce next summer to a small extent, but certainly not just at present.

Chudleigh Line.

Proposal to reduce six repairers to four. This has been under consideration for some time, and I hardly see how it can be done.

We have dispensed with the traffic staff, and the wives of the men are station-mistresses; also post and telephone mistresses at Mole Creek, Chudleigh, and Needles. This spreads our men apart, and to work one gang of four instead of two of six would necessitate half a day's loss in walking to and from work, and appointing traffic and postal hands at the places named.

On the whole, a reduction would be a questionable economy, but the matter is receiving earnest consideration.

Western Line.

The proposals of Mr. Eddy are exactly those which Mr. M'Cormick and myself advised Mr. Eddy as being desirable, but for economical reasons are being proceeded with slowly. Further economy in maintenance is in hand.

Scottsdale Line.

Mr. Eddy proposes a reduction of seven men, aggregating £600.

I am afraid in this, as in other cases, Mr. Eddy has overlooked the large amount of timber work in culverts, &c., which our men have to attend to. We have 10 gangs on this line; in all 35 men. I do not see my way to reduce seven men, but a reduction in the speed of trains by an hour each journey would enable one gang of four men to be taken off. By this change the journey would occupy four hours instead of three hours, and, I think, intermediate passengers would drive, thus causing loss of traffic.

Main Line.

This is a saving which we pointed out to Mr. Eddy we had commenced, and have since extended; that is to say, we were relaying on renewals with a heavier rail, and, consequently, could lengthen our gangs as renewals were effected to 5-mile lengths. Four lengths have been relaid and four men reduced. It will take years, however, before we can afford to replace all our light rails with heavier ones; consequently, Mr. Eddy's proposed saving of £850 must be reduced to £344.

Sorell Line.

Proposal to introduce a new type of carriage does not recommend itself. Its weight is given in drawing as 9 tons 15 cwt. The carriages we use are only half this weight, and the van a little over 5 tons. We can use as many of our light small carriages as the traffic may require. They are very easy on the road.

The expenditure Mr. Eddy noticed was on necessary works, which have been completed. They consisted of repairs to trucks and the stripping and examination of a locomotive boiler. The water at Sorell is very hard on boilers, and this work was necessary for safety.

With regard to locomotive running staff, we now have two men (a driver and fireman), who clean their engines themselves. A man is employed as required for pumping and greasing trucks, the balance of his time being engaged in Hobart.

I do not think it desirable to import a tramway motor for this line; it would mean increasing our types, cause an immediate expenditure of, say, £1200 at least, effect no saving in wages, and it would be found that it could not be used, as it would not carry water enough for the trip, there being no water at Bellerive, the engine requiring to run 30 miles on a single feed of water.

One of the two locomotives on this line would be required as a stand-by, and to run with excursions, &c., when the load would be too heavy for the tram motor. Moreover, it is improbable that we could find a purchaser for the other engine. The working account for each type of engine would be as follows:—

Present Engine.	*Tram Motor.*
1 Driver, 11*s.* 2*d.* per day.	1 Driver, 11*s.* 2*d.* per day.
1 Fireman, 7*s.* 3*d.* ditto.	1 Cleaner, 6*s.* ditto.
Or £288 per annum.	Or £268 per annum.

Any saving in coal by using tram motor would be counterbalanced by interest on cost of a new motor.

General Remarks on Rolling-stock.

The storing of stock in sidings in slack seasons is carried out on this as on other lines.

Workshops.

The question of closing the Hobart workshops, or reducing them to a shop for running repairs, has been before the Government for years, and I do not deem it necessary to refer to the matter.

Change on Rolling-stock and Permanent Way.

I am pleased that Mr. Eddy confirms our choice of rail for renewals. The question of 30 ft. rails instead of 24 ft. will have consideration, and if we find they can be economically handled with the reduced gangs of three men, I think the suggestion valuable, and one to be adopted.

The reference to spacing sleepers shows Mr. Eddy's approval of the plan we have adopted.

General Manager's Office Staff.

It is not desirable to dispense with the clerk at Launceston. The public require a great deal of information, and many details have to be dealt with. The Stationmaster has a great deal of work and very long hours; his head porter has been taken away, and he is on duty from early morning till late each evening. I went fully into this matter with the Stationmaster some time ago, and was satisfied that he could not manage without a clerk, and I find it more convenient to have the clerk on my staff. His pay is £116 per annum.

Cashier, Launceston.—This officer handles £140,000 per annum, and pays the Northern section. The Goods Agent could not perform this work without assistance. It could be carried out in my office with the assistance of an officer at less salary than the present cashier. This is a course that could be generally adopted all through the Government service, viz., to dispense with old officers who have worked up to a certain salary and put in their place new men at less salaries, but I do not think that this is the policy of the Government.

The question of transferring the northern Cashier, who is the oldest officer in the railway service, to another department where his experience and integrity may render him suitable, has for some time been before Ministers, and is, I believe, still receiving their consideration.

As to the Messenger, his services could be dispensed with, but he has been in the service since railways were first started in the colony, is a very old man, who has had domestic troubles, and who would have nothing to keep himself and his wife if he were cast adrift. Knowing the troubles he has gone through, I have hesitated to deprive him of his living.

Accountant, Auditing, and Stores Staff.

I divide this into two branches, beginning first with the Accountant and Audit branch.

Mr. Eddy remarks that he had not time to go into the details of our system. This is to be regretted as, had he had time, I could have shown him how much work we carried out by our small staff.

The whole of the Accounting and Audit is carried out by 10 clerks, 5 of whom receive less than £100 per annum.

In this office the accounting for all branches is carried on, besides the audit of Revenue and Expenditure, and the travelling inspection of accounts.

In large systems the work of accounting for the Maintenance and Locomotive branches is in part carried on by those sub-departments.

As an example, I have before me a Return to an order of the Parliament of New South Wales of all staff employed on the railways of that colony in May, 1893,—since, I believe, somewhat retrenched. I find there—Chief Accountant's branch: 2 book-keepers, 1 examiner of accounts, and 36 clerks; Traffic Auditor branch: 1 chief inspector, 6 inspectors, and 60 clerks; in all, with accountants and auditors, a staff of 111. In addition to these, the Permanent Way branch has an accountant and some 32 clerks, and the Locomotive branch an accountant and 76 clerks.

A great deal of the work performed by the Locomotive and Permanent Way accountants and clerks in New South Wales devolves on our 10 clerks in the Accountant and Audit branch.

I cannot see my way to curtail these 10 clerks unless we abolish our daily check on tickets issued. With this and the abolition of some such work as the apportionment of traffic on branch lines we might dispense with two juniors, saving, say, £150 per annum; and as by doing so we should impair the perfect check we now have, under which fraud has been found nearly impossible, I cannot recommend the reduction.

The returns furnished with the yearly Report were ordered by Parliament, and their curtailment would save the cost of printing.

Stores Depôts.

I do not concur in the proposal to abolish the stores at Launceston. Instead of a saving, the proposal would give a loss.

We have one storeman, with the assistance of a labourer, all the clerical work being carried out at Hobart.

To remove the control to the Locomotive Department would still necessitate the employment of these two men. The Locomotive Superintendent informs me that his office staff cannot keep pace with the present work, and it has been reduced even below Mr. Eddy's suggestion.

The storeman gives out oils to each driver in pints, grease, waste, &c. in pounds, on the Locomotive ticket. Someone would be required to do this work if the stores were removed. All the stations and all the maintenance stores would require to be dealt with besides the locomotive stores, and this apparently Mr. Eddy has overlooked. We purchase stores in Launceston to the value of £5000 a year, and we require someone there to attend to these purchases and to the receipt and delivery of stores. What is more important than anything else is that I could not exercise personal supervision on the issue of stores in detail if the bulk were removed to the control of the Locomotive Department. By personal control I have saved many hundreds of pounds per annum, and the proposed change would undoubtedly cause considerable loss.

The Hon. Mr. Grant tried this proposal when he was Manager of the Main Line Company, and he found it so much more expensive than our present system that he soon abolished it.

Revenue (page 9).

Here Mr. Eddy advises that we are doing our best, and does not recommend any change.

I am glad to say that carting and shipping competition have considerably decreased, and I agree with him that for the reasons stated we cannot overcome it entirely.

Leasing non-paying Lines and closing non-paying Lines.

I am thoroughly in accord with the views expressed by Mr. Eddy, which are exactly similar to my advice to Ministers. The return (page 15) which Mr. Eddy furnishes is a copy of one which I have already placed before Ministers. Whilst it is not possible to give an accurate estimate of the loss to trunk lines if the branches named were closed, I think we may assume the average loss as from 60 to 70 per cent. of the traffic.

General Suggestions.

I quite concur in the views expressed by Mr. Eddy on the subject of grades. It is to be regretted that these opinions were not held by those constructing our lines, and we must hope that the time may come when an increase of traffic will enable us to deal with this matter.

Stores.

Locomotive Stores and Oil: Mr. Eddy's proposed saving of £850.—In working this out I find Mr. Eddy has based his views on a consumption of four pints of lubricating oil per 100 miles, and 1½ pints of cylinder oil. This is quite an impossible minimum on our lines. Our standard express engines and others use five pints of lubricating oil and 1½ to two pints of cylinder oil per 100 miles; being one pint more of lubricating oil than Mr. Eddy suggests.

I am informed that express engines in New South Wales use from 10 to 12 pints of lubricating oil. Our engines have the same number of wheels, and the wheels being smaller make more revolutions and require more lubricating. Again, our ballast is exceptionally dusty, covering friction parts of our locomotives with grit. Our Locomotive Superintendent has given every care to this matter, and I feel sure we cannot reduce quantity without depreciating the machinery, and that any curtailment of lubricating would entail pecuniary loss. One hot bearing, which necessitated lifting the engine, would cost the department at least as much as 500 pints of oil.

Like New South Wales, we have been experimenting with a mineral oil much cheaper than castor, and, like New South Wales, we are adopting it, and a marked saving has been effected.

Oils for hand-lamps.—These are supplied with the waste oil from roof lamps, which is filtered and re-issued.

Stationery.

Under this item Mr. Eddy advises that we might save £300 per annum.

I quite concur. In dealing with this item it was not explained to Mr. Eddy that 20 per cent. of the expenditure was for printing posters, time-tables, and tickets. Nevertheless, allowing for this, a large percentage could be saved if we were to import our paper. I have samples which I brought with me from England, and the Government Printer tells me we could save 25 per cent. by its use. None, however, is to be procured in the colony.

At present we are unable to deal with the stationery question, as we are instructed to draw our supplies from the Government Store, where the stock is said to be in excess of present requirements.

Sale of old Materials.

This has been dealt with as directed by the Auditor-General.

Locomotive Coals debited with Freight.

This is simply a cross entry in our books made to show the true earnings of the Fingal Line.

Locomotive Engineer's Staff.

This has already been reduced by more than Mr. Eddy proposes.

Drivers and Firemen.—Mr. Eddy has unfortunately obtained wrong figures here. The drivers and firemen have been reduced to 30 each. Mr. Eddy is also in error as to the number of locomotives daily in steam. There are 22 engines in steam daily, not 18, and the average is greater. On holidays and excursion days this number is considerably exceeded.

In dealing with retrenchment care has been taken to effect economy with the least possible suffering to those who may unfortunately be compelled to leave the service.

We must show some degree of fairness and consideration for our men who have given the best years of their lives to the service.

Many of our line repairers have served the department 20 years and more, and are past the prime of life. These men are not able to do as much work as picked men, but I doubt whether the Government would approve of such heroic measures as to discharge them wholesale.

It must also be borne in mind that the pay of the repairers has been reduced as well as their numerical strength, and it behoves that care and judgment be exercised in making retrenchment to prevent unnecessary hardships and injustice.

Mr. Eddy submits a schedule of reductions which he considers possible, amounting in the aggregate to £10,691. In this is included the sum of £3000, a saving to be effected by closing the Hobart workshops. As this has been before Ministers for years I need not deal with it, and for practical purposes it may be set aside, leaving a sum of £7691 to be considered. Now, this amount is a saving on the expenditure for 1893, and has already been anticipated by actual savings made in 1894 of £4920, which is within £2571 of Mr. Eddy's suggested economies.

The estimates I have furnished the Government for 1895 show a reduction on the estimates for 1894 of £6236; and I am confident that our expenses will be down to that figure before the close of the current year.

The Department has actually made, and is making, reductions in working expenses greater than Mr. Eddy suggests, and in channels which, after long experience and careful thought, the responsible officers of the Department deem most desirable as being the least likely to impair efficiency or reduce safety, and to inflict the least hardship upon the staff.

The Management looks with confidence to the support of the Government in these efforts, and, with every respect for Mr. Eddy's large experience and ability, feels confident that the officers of the Department, who have made these matters a daily study, must of necessity have a more intimate knowledge of dealing with these details than the very short and cursory inspection of Mr. Eddy permitted him to obtain.

I have the honor to be,
Sir,
Your obedient Servant,

FRED. BACK, *General Manager.*

WILLIAM GRAHAME, JUN.,
GOVERNMENT PRINTER, TASMANIA.