

Public Works (1893) Department.

RAILWAY BRANCH.

G.O., No. 380. R

DATED 20th February

[Despatch Abstract.]

Stock list of Engineering stores.— Requesting
that the Agent & Manager Madras Railway
be asked to enquire into and report
on the several points raised by the
Examiner of Guaranteed Railway Accounts
in his report on the — prepared by the
Madras Railway on 31st December 1891

BACK PAPERS.

[illegible]

FURTHER PAPERS.

[illegible]

20TH FEBRUARY 1893, No. 380 R., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From the Examiner, Railway Accounts, to the Consulting Engineer for Railways,
dated Madras, 18th January 1893, No. 29.

In continuation of my report on the suspense balances of the Madras Railway Company, forwarded with my No. 429 G., dated 2nd September 1892, I have the honour to state that I have tested the stock lists of the engineering stores prepared by the Madras Railway on 31st December 1891 and I further have the honour to report thereon as follows.

2. Before making the inspection I was informed that the system in force on the Madras Railway was for departments to keep numerical ledgers only and to periodically extract the numerical balances from these ledgers into stock lists, which lists were thereafter priced at current rates and the sum of the results compared with the aggregate balances on the Audit office ledgers.

3. Upon investigation, however, I discovered that the Engineering Department does not conform to this system, but keeps priced accounts.

It would appear most advisable that the store system in all departments should be uniform.

4. As a preliminary step to the test to be applied I asked the Auditor to furnish me with detailed lists of the stores said to be in stock and was accordingly shown the list annexed as appendix A, amounting to Rs. 9,00,059.

5. Upon examination of this list I discovered—

(a) that numerical details had been furnished only for items amounting to Rs. 7,14,863 (*vide* appendix B);

(b) that certain adjusting items, amounting to Rs. 10,696, had been added to the stock in hand (*vide* appendix C), also that the value of stores in hand had been unduly reduced by certain credit adjustments amounting to Rs. 20,467 (*vide* appendix C) and that the net result of these adjusting entries was an undue reduction of the value of the stock in hand by Rs. 9,771 ;

(c) that a large number of items of stock appeared in the lists without value;

(d) that unadjusted credit balances, amounting to Rs. 4,373, had been allowed to unduly reduce the value of the stock in hand at the Terminal Workshops;

(e) that the so-called stock lists were incomplete to the extent of Rs. 1,94,966, inasmuch as no numerical details had been furnished for certain items making up that amount and included in schedule D hereto appended.

6. After considerable trouble and delay I ultimately obtained details of all the items included in schedule D excepting an amount of Rs. 1,227, being the balance on the Watch Department account current; although small, this account should, like all other manufacture accounts, have been supported by numerical details of stock and lists of unfinished jobs.

7. Having thus obtained details I proceeded to test their accuracy and the following paragraphs will be found to deal with the various items of stock in their serial order of entry in schedules B and D.

8. *Stores at the Terminal Workshops valued at Rs. 89,853.*—(a) The Terminal Workshop stock contains the following important articles, the remaining items, although numerous, being small in value:—

Portland cement	...	...	...	...	...	...	Rs.
Swedish iron	...	...	...	...	...	...	7,989
Round iron	...	...	...	...	...	...	2,939
T iron	...	...	...	...	...	...	1,812
Teak timber	...	...	...	...	...	...	4,018
„ scantlings	...	...	...	...	...	...	40,159
Machinery	...	...	...	...	...	...	9,985
							7,102
							74,004
Overcharges Cr.							4,373
							69,631

(b) A large number of items appears in the lists without value owing to overcharges, adjustments, omissions, and pendencies, viz.:—

Acid, hydrochloric	...	...	...	...	...	lb.	2
Base plates	...	...	...	...	...	No.	9
Bottom castings, C.I.	...	...	...	...	...	...	16
Brackets for lamp posts	...	...	...	...	...	...	27
Brass, old	...	...	...	...	...	lb.	14
Chairs, C.I.	...	...	...	...	...	No.	850
Clips, C.I., for pot sleepers	...	...	...	...	...	...	2,669
Coal	...	...	...	...	...	lb.	6,612
Chloride of copper	...	...	...	...	...	...	2
Handles, brass	...	...	...	...	...	No.	1
Iron, flat	...	...	...	...	...	lb.	6,892
„ round	...	...	...	...	...	...	2,680
Nitrate of copper	...	...	...	...	...	...	2
Pipes, C.I.	...	...	...	...	...	No.	80
Pulleys for distant signals	...	...	...	...	...	...	209
Plates for screw apparatus	...	...	...	...	...	...	23
Rivets, iron	...	...	...	...	...	lb.	69,057
Shoes, C.I.	...	...	...	...	...	No.	11
Screws, W.I., for distant signals	...	...	...	...	...	...	110
Washers, galvanized	...	...	...	...	...	...	452
Wheels, angle	...	...	...	...	...	...	28

(c) Several errors were found to have been made in extracting balances from the ledger into stock lists.

(d) The teak timber account showed the following startling results as regards prices:—

Stock at commencement of December half-year 1891	...	...	...	Per cubic foot.
Total receipts of half-year including stock in hand	...	...	...	Rs. A. P.
Issues of period	...	...	...	1 14 3
Balance in hand at close of period	...	...	...	1 11 4
	...	...	...	2 5 0
	...	...	...	1 6 4

From the above it will appear that the issue rate of the period has been much too high and that the stock in hand is some Rs. 7,000 to Rs. 8,000 understated owing to overcharges on issues.

(e) The teak scantling account valued at Rs. 9,985 was represented by a quantity of 4,503 cubic feet of scrap at an average price of Rs. 2-3-6 per cubic foot, which is higher than the value set upon good timber.

i. This account in January 1891 started with a balance of 10,347 cubic feet valued at Rs. 18,320.

ii. Without any special authority, however, Rs. 8,730 were written off to Revenue expenditure in June half-year 1891 and the value of the stock was thereby reduced to As. 13-9 per cubic foot.

iii. 6,600 cubic feet were thereafter sold by auction at As. 4-2 per cubic foot in July, but no adjustment was made of the difference in value between As. 4-2 and As. 13-9. The balance on the account therefore remained at the excessive rate of Rs. 2-3-6 per foot on 31st December 1891.

iv. Of the stock of 4,500 feet in hand on 31st December 1891, 4,100 cubic feet were sold by auction in January 1892, realizing Rs. 1,175, or As. 4-7 per cubic foot, and the value of scantling would therefore appear to be overstated by more than Rs. 8,000, unless, as is very probable, the actual quantity in hand is far in excess of the book balances owing to the faulty system adopted in the sawing accounts.

(f) Timber is accounted for under the following system:—

i. Certain logs are allocated to particular works and cut up.
ii. The actual measured outturn is then increased by 50 per cent. and charged to the several works. This addition of 50 per cent. to the quantity of the cut timber is based on an assumed wastage of 33 per cent. on the original capacity.

iii. A summary is made of the quantity charged to all works during the month and the difference between this total and the measured capacity of the logs consumed is debited to an account called “Duggies and Scantlings,” thus:—

				FT. IN. PARTS.
Log No. 69/1918 contents	...	...	...	36 1 6
				FT. IN. PARTS.
Cut up beam, order No. 929	...	...	...	23 5 6
Add 50 per cent.	...	...	...	11 8 9
				35 2 3
Charge to duggie and scantling	...	...	...	0 11 3
				36 1 6

iv. This system of dealing with scantling or (as it would be more accurately described) “scrap” is manifestly incorrect as the quantities brought to account never agree with the actual results of sawing.

v. In some cases, the actual outturn plus 50 per cent. exceeds the capacity of the log cut up, and, in such cases, no scrap timber is taken to account although there must necessarily be some.

vi. The following summary of a month's transactions will show to what extent the system is erroneous:—

				C. FT.
30 logs containing	...	...	...	1,715
When cut up yielded	...	...	...	1,050
				665
And the scrap and saw dust originally measured	...	...	...	665

or 38 per cent. of original quantity.

Of this 665 feet, 50 per cent. of 1,050 or 525 cubic feet were added to the outturn and the scantling account was debited with 140 feet only; 525 cubic feet of scrap have therefore been omitted from the accounts.

vii. As a proof of the error in system, it would appear from the accounts that during a period of 9 months between January and October 1891 there was no debit to the scrap account although the sawing operations were considerable.

viii. The proper course to adopt would be to periodically measure and value the scrap after fixed sets of sawing operations and to charge works with the value of the original logs less the estimated value of scrap recovered and taken into stock.

(g) Included in the item of machinery as stock in hand is a vertical boiler valued at Rs. 2,485, which is old and in use in the workshop. It is irregular to treat articles in use as in stock and ostensibly available for issue and sanction should apparently be obtained to charge this engine off to works.

(i) Under these circumstances, neither the balances on the Audit Office's hand, nor the balances in stock without value, owing to overcharges and errors in pricing, there are also considerable accumulations of stock in hand, which have never been priced at all owing to a want of system in dealing with returned stores.

(k) With a General Store adjacent to the Terminal Workshop at Ráyapuram, it would further appear inadvisable to keep a separate engineering stock of many of the items of a general nature now borne on the lists of the Engineering Department.

(l) It would also seem inadvisable with the large timber stock amounting to a value of Rs. 2,70,000 maintaining up such a large further separate stock.

(m) Certain items of stock are not required for the maintenance of the

In some cases, these pendencies were three and four months in arrear and in the case of one article it was noticed that the transactions of December had been priced, while those of the preceding months of October and November were still left pending. Some arrangement would appear to be necessary to improve the system of pendencies.

9. *Permanent-way materials* (P. 50,000).—This item is also a subject of complaint, and with the

(c) These rates have then been compared with the market values current at the time for similar articles and with the rates at which the articles were being issued with the following results:—

...	0 3 0	0 1 7	0 8 4
	0 0 6	0 0 6	0 2 0
			0 0 6

(d) With the exception of fish plates and fish bolts, which require revision, the rates seem to be as nearly correct as is possible on a system of averages.

(e) The stock of teak keys seems large, it being sufficient for 100 miles of track at the rate of 4,000 per mile; but I am informed it is only sufficient for one year's requirements.

(g) The quantities of each class of sleeper or other article of store should have been detailed in the stock list and worked out at its own rate and the sum of the whole compared with the aggregate ledger value. This should be noted in preparing future lists.

					RS.	RS.
Permanent-way, schedule B	...	...	...	...	61,597	
" D	...	...	...	...	22,909	
						84,506
Bridges, schedule D	...	...	...	...	...	16,909
						1,01,415

11. *Twelve 35-foot W.I. girders (Rs. 4,865-10-0).*—These are said to be an emergency stock and are at present located in the following divisions, although they are not borne on their stock lists:—

12. One 24-foot W.I. girder (Rs. 200) has been in Arkónam depôt since December 1888.

13. One 14 feet 6 inches W.I. girder (Rs. 91-9-1).—This is a part of the emergency stock and is lying on 4th division, South-West line.

14. *Seventy-two cast-iron girders at Perambūr (Rs. 3,445).*—These have been in stock since 1885 having been ordered for roofing the carriage shops. Their value has been reduced by about 40 per cent. of the cost price.

15. *Two sets of 14 flat 6 inches girders (Rs. 470).*—These are lying on 1st division, South-West line and are priced at half value, being returned stores.

16. *Four sets of W.I. girders, 139 feet 10 inches (Rs. 8,930) and charges thereon (Rs. 2,606-7-1).*—These have been returned from works and strengthened for use on other bridges.

17. *Two engine turn-tables (Rs. 1,500).*—These have been in stock since 1887; their original cost was Rs. 8,769 and they are of 50 feet and 40 feet diameter, respectively.

18. *Three wagon turn-tables (Rs. 1,560).*—These were received from England in 1888; a fourth turn-table is borne on the books without value.

19. *Six water columns* (Rs. 320).—The divisional stock lists show four only, two having been issued and not charged off till next half-year.

20. *One engine turn-table at Podanúr (Rs. 1,500).*—This is not in the stock lists of the division, it having been condemned and taken to pieces and the component parts made available for renewals. It is stated the item will be cleared off the stock in June 1892.

21. *One air pump (Rs. 630) and two hand pumps (Rs. 1,024).*—These items call for no special remark.

22. *Surveying instruments* (Rs. 540).—The details furnished in support of this item are shown in schedule E.

Considering that the list contains 25 theodolites, 35 levels and 12 boxes of mathematical instruments, their value seems ridiculously small. It would appear necessary to set apart the instruments forming the working plant of the several offices and to revalue the remainder and treat them as surplus stores.

23. *Surveying instruments, new* (Rs. 203).—These are not in the engineering books and are in custody of the General Storekeeper, although the storekeeper does not include them in his list of articles warehoused for Engineering Department (*vide* appendix H).

A system of retaining the value of an article in the list of one department and the quantity in that of another may lead to the inclusion of the articles in the stock lists of both departments.

In my opinion all stock which is not likely to be required for any considerable period should be borne on the books of the General Storekeeper and indented for by departments when required only.

24. *Telegraph stores* (Rs. 20,509), *watch materials* (Rs. 1,227).—(a) These stocks should, in my opinion, be kept separate from engineering store and accounted for direct to audit, as they appear to receive very little scrutiny from the Engineering Department; it is further doubtful whether separate store accounts are necessary to so large an extent as now maintained.

(b) The stock list of the Telegraph Department consists of some 200 to 300 items, many of which might possibly be obtained from General Store as required.

(c) As a proof that the present system is unsatisfactory, it may be stated that two of the items included in the list of stores in hand on 31st December 1891 were the following, viz. :—

Proportion of general superintendence	...	...	...	...	Rs.
" of home payments	...	...	...	...	684
					237
Total ...					921

These are not represented by anything of tangible value, being debits which should have been added from time to time to the cost price of stores.

This sub-division having been neglected, the debits have been accumulating since 1889 and treated as stock in hand.

(d) The absence of details regarding watch materials has been referred to in paragraph 6.

25. *Stores in hand on account of station machinery* (Rs. 13,425) and *points and crossings* (Rs. 2,353).—These represent certain stocks held by Inspectors and contain many items which might be obtained and charged off as required.

They further do not include the whole of the stock of the classes they nominally represent, as the bulk of the stock is included under the head "Permanent-way."

26. *Brick-making stock* (Rs. 2,090).—This stock is duly supported by divisional balance sheets. In the case, however, of stock in the Terminal Workshops, the balance brought forward is valued at Rs. 12 per 1,000, the issues therefrom have been made at Rs. 15 per 1,000 and the stock in hand reduced to a value of Rs. 7 per 1,000 in consequence of the apparent overcharges.

27. *Unfinished works on the Terminal Workshops* (Rs. 474).—These are supported by detailed lists extracted from the works ledgers; on comparing these lists with the books several petty inaccuracies were discovered, while the writing up of the books was considered to be capable of much improvement.

28. *Permanent-way materials taken out between Beypore and Kadaloondi* (Rupees 1,233).—(a) On completion of the Calicut extension certain old material was credited to the work at half price amounting to Rs. 23,818.

(b) Instead of bringing the articles on to the ordinary stock accounts according to nomenclature, they were kept on a separate account and as issued or sold the value realized was credited in reduction of the Rs. 23,818.

(c) The credits so made have reduced the account to Rs. 1,283 as shown in the stock lists.

(d) Upon applying for details of the items comprised in the balance of Rupees 1,283, I was furnished with the list hereto annexed as appendix F, which, if priced, will make up a value far exceeding the Rs. 1,283, at which they are borne on the books.

(e) The items included in this list should be valued and transferred to their proper heads in the ordinary returns.

(f) The system of keeping separate accounts for material obtained from particular districts or works is complicated and unnecessary.

29. *Surplus stores remaining at Terminal Workshops* (Rs. 954).—This question has already been touched upon in paragraph 8(i) and (j). A list of the items comprised in the item of Rs. 954 is annexed as appendix G and a further list of unvalued articles belonging to the Engineering Department and warehoused in the General Stores Department without value on 31st December 1891 is annexed as appendix H.

It is impossible to state which of the particular articles comprised in these lists make up the assumed value of Rs. 954, but there is little doubt that they would realize five or six times that amount.

30. *Screw-piles* (Rs. 4,390).—Six hundred and ninety-three screw piles recovered from bridges were in June half-year 1891 returned into store at a rate of Rs. 10 per 35 lineal feet, 35 lineal feet being a ton or thereabouts. The ordinary sale rate for iron scrap is about Rs. 20 per ton and these screw piles are therefore considerably undervalued.

31. *Old rails* (Rs. 1,07,694).—(a) This amount is made up as follows :—

	65 lb.		75 lb.		84 lb.		Total.		Amount.
	20'	17'	20'	17'	20'	17'	20'	17'	
Stock at the Terminal Workshops	9,733	88	4,649	65	1,614	14	15,996	167	Rs. 55,041
Stock on divisions as per accounts current.	2,510	79	3,486	206	446	37	6,442	322	4,177
Stock at Ferök	476	71	219	14	4	13	699	98	43,942
Total ..	12,719	238	8,354	285	2,064	64	* 23,137	* 587	4,234
									1,07,694

* Equal to 4,727 tons at 5 rails a ton at Rs. 23 per ton.

(b) Upon investigation, it however transpired that this did not represent the entire stock of old rails belonging to the Company.

(c) Under G.O., No. 1779 R. of 13th November 1890, some 7,000 tons of old rails were ordered to be brought on the books, but, instead of doing this at once and in one item in the divisional returns, the rails in question were roughly dealt with in the returns of the head office with the result that the stock on the line is worth about Rs. 71,000 more than shown in the Company's stock lists as may be seen from the following table made up by pricing the actual stock included in the unpriced returns of the several divisions.

84 lb. rails, 51,673 feet, at Rs. 7 per 20 feet	...	...	...	Rs. 18,088
75 lb. " 206,600 " at " 6 per 20 "	...	...	...	61,980
65 lb. " 394,784 " at " 5 per 20 "	...	...	...	98,695
Total ...				1,78,763

(d) The entries made in the head office returns from time to time were arbitrary estimates unsupported by any detail quantities as may be seen from the following:—

October 1890	Rs.
December " "	54,000
June 1891	70,000
	10,000

(e) No ledgers of quantities were maintained in the head office in respect of old rails, and, although quarterly unpriced lists have been prepared and submitted by district officers, no attempt seems to have been made to make these agree with the head office returns or with the stock lists.

(f) In my opinion the whole of the rails in the custody of district engineers should be at once brought on the priced divisional returns as the present system is most irregular.

(g) I further discovered with regard to the stock borne on divisional priced returns and said to be worth Rs. 43,942 that at the rates in force for return of old permanent-way material [*vide* paragraph (l)] the quantities entered on the lists only work out to Rs. 38,237.

(h) The difference of Rs. 5,705 is due to the fact that the stock at the commencement of the year was valued as follows, viz.:—

65 lb.	Rs.
75 " "	8
84 " "	9
	10

(i) Under authority of minute No. 7 of 1891, however, the future issue rates were reduced to Rs. 5, 6 and 7, respectively, resulting in a reduction of about Rs. 16,046 in the value of stock; but no adjustment of this item was made in the books.

(j) This deficiency has been almost adjusted by means of the augmented prices obtained from public sales (*vide* paragraph l) and will by this means ultimately be wiped off.

(k) Such adjustments should, however, in my opinion, be made by debit to Revenue as soon as sanctioned and not allowed to remain in arrear until adjusted by the transactions of subsequent periods.

(l) The following table will show the value allowed for returned 20-foot rails as compared with cost price:—

Rails.	Rate at which brought on to stock.	Cost of new material on basis that a 75 lb. rail of 20 ft. costs Rs. 15, other sizes being proportionately increased or reduced.	Rate at which sold to public.
	RS. A. P.	RS. A. P.	RS. A. P.
65 lb.	5 0 0	13 0 0	8 12 0
75 " "	6 0 0	15 0 0	10 0 0
84 " "	7 0 0	16 12 10	11 4 0

(m) The rates allowed for returned rails do not average half value, and, as some rails, when recovered, must be fit for use in the main line, it would appear advisable to sub-divide returned rails into serviceable and unserviceable and quote a separate rate for each instead of adopting, as at present, an unserviceable rate for the whole. It should further be remembered that the rate quoted for new material is calculated at 1s. 10d. to the rupee and that for sale purposes this rate would require to be increased by about 50 per cent. to provide for the current rate of exchange. The rate realized by sales of old material is about 4/9 of this augmented price of new material and would therefore appear to be a very good one.

32. *Comparison with audit ledger.*—(a) The stock in hand as per lists originally submitted by the Chief Engineer amounted to Rs. 9,00,059 compared with Rs. 8,78,923 standing on the Audit office ledger resulting in an excess of Rs. 21,136 over the Company's books.

(b) This excess in the course of investigation has been augmented to the following extent, viz.:—

Original excess	Rs. 21,136
Add—	
Adjustments [<i>vide</i> para. 5 (b)]	9,771
Credit balances [<i>vide</i> para. 5 (d)]	4,373
Permanent-way [<i>vide</i> para. 31 (c)]	71,069
Teak timber [<i>vide</i> para. 8 (d)]	8,000
	1,14,349
Less—	
Scantling [8 (e) iv]	8,000
Permanent-way [31 (g)]	5,705
	13,705
Net apparent excess of stock over Audit office balances	1,00,644

(c) The above excess would be still further augmented if the whole of the unpriced stock were brought to account and certain articles now standing at very low rates revalued.

(d) Again the Engineering Head office ledgers had not at the time of my inspection been posted for the June half-year 1892 and the books were, therefore, practically useless as stock records.

33. *Conclusion.*—The foregoing remarks lead me to express the opinion that the state of the engineer store accounts is far from satisfactory, especially as regards returned stores, and further that the existing system does not provide for a sufficient control by the Auditor of the Company.

34. In my note No. 429 G., dated 2nd September 1892, an extract from which is given in appendix I, I called attention to certain apparent defects in the general system of stores on the Madras Railway, and I would now further suggest that all stores of an important nature should be borne on priced ledgers kept in the Audit office and that the numerical system should only be allowed to apply to articles which are small in value, although numerous in quantity; also

(a) That the Engineering and other departments retain charge only of special stores peculiar to their own requirements and that stores of a general nature be obtained from General Stores by indent as required;

(b) That one timber stock be maintained for the entire railway instead of separate stocks in each department or that the balance in each department be considerably reduced;

(c) That all surplus and unserviceable stores be borne on the books of the General Store although the department concerned or a committee of experts would naturally fix the prices of such articles and be consulted before they were disposed of by sale;

(d) That sub-divisional workshops, such as the Terminal and Telegraph and District Engineers, be in direct communication with the Audit office on all matters regarding store accounts;

(e) That the Auditor, who is in the same building as the Chief Engineer, should supply the latter officer with all details he may from time to time require regarding stocks in hand, issues, &c., and that the existing Engineering Store Accounts office at Rayapuram be closed;

(f) That divisional accounts be simplified by the abolition of ledgers as far as possible, the whole of the store details being incorporated into monthly returns to the Audit office similar to those now in use for rails;

(g) That supplies of petty stores be arranged for by fixed imprests instead of by maintenance of detailed divisional ledger accounts;

(h) That all material now in hand without value be appraised and brought on the books and that a uniform system be adopted in future of bringing stores on to the books as returned at a fair market value in conformity with the orders contained in Government of India Resolution No. 213-218 A.G.R., dated 11th April 1874, and Government of India Circular No. IX (Railway), dated 1st May 1883;

That the only exception made to this rule shall be in the case of petty articles set aside for early auction;

(i) That whatever system be adopted for the railway generally, whether of priced or unpriced accounts, it be applied to the Engineering as well as to the other Departments;

(j) That occasion be taken when valuing and bringing surplus material of the Engineering Department in the books to re-value, and, if necessary, reduce the prices of articles which have been for years in stock or have from any other cause depreciated in value;

(k) That it be made clear that no important adjustment of store balances consequent on depreciation or alteration in value of stock or owing to excesses or deficiencies on stock or other causes shall be made without the previous approval of the Government Consulting Engineer, that stores shall not be made use of while standing on the store books and that actuals shall be given in stock lists of all articles of varying prices—*vide* paras. 8 (g) and 9 (f and g.)

(Signed) J. LIGHTFOOT,
Examiner, Railway Accounts, Madras.

ENCLOSURES.

A.

CHIEF ENGINEER'S STORE AND WORKSHOP ACCOUNT.

BALANCE ON 31ST DECEMBER 1891.

(As originally furnished by the Company.)

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
Surveying instruments ...	540	0	0			
" new ...	203	2	6			
Telegraph stores ...	20,509	12	11			
Stores at the Terminal Workshops ...	85,479	9	8			
Permanent-way materials ...	5,40,696	7	3			
New " ...	84,506	9	9			
				7,31,935	10	1
Watch materials stock with Telegraph Department ...	1,227	6	2			
Stores in hand on account of station machinery ...	13,425	6	9			
Stores in hand on account of points and crossings ...	2,353	3	11			
Station machinery expenditure for December 1891 charged divisions in January 1892 ...	761	2	4			
Points and crossings expenditure for December 1891 charged divisions in January 1892 ...	305	0	11			
Brick-making stock account ...	2,090	9	3			
Telegraph Department private bills up to December 1891 to be recovered ...	530	6	9			
Telegraph Department bills against divisions and departments charged in the next half-year ...	31	3	6			
Telegraph Department watch repairing bills against Engineering Department for December 1891 charged divisions in January 1892 ...	51	8	3			
Terminal Workshops' private bills up to December 1891 to be recovered ...	1,202	11	5			
Unfinished works in the Terminal Workshops for General Stores and Traffic Departments subsequently charged ...	474	6	2			

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
12 35-feet W.I. girders stock at Depot ...	4,865	10	0			
2 engine turn-tables " ...	1,500	0	0			
3 wagon " " ...	1,500	0	0			
6 water columns " " ...	320	0	0			
1 24-feet W.I. girders " " ...	200	0	0			
1 14-feet " " " ...	91	9	1			
72 C.I. girders stock at Perambur ...	3,445	3	0			
1 engine turn-table at Pódanur ...	1,500	0	0			
One set of iron sleeper purchased from East Indian Railway ...	6	8	0			
Price list against Traffic, Locomotive and General Stores Departments for December 1891 brought to account in January, February and March 1892 ...	3,848	14	5			
Permanent-way materials taken out between Beypore and Kadaloondi stock at 4th division, South-West line ...	1,283	11	2			
2 sets of 14 feet 6 inches girders in stock on 1st division South-West Line ...	470	0	0			
4 sets of W.I. girders 139 feet 10 inches removed from Chitravati and Pennér now in stock at depot, Rs. 8,930 charges incurred for strengthening girders, Rs. 2,606-7-1 ...	11,536	7	1			
1 air pump received from general stores warehoused ...	630	10	2			
Surplus stores remaining in the Terminal Workshops ...	954	9	6			
Screw piles received into stock at depot ...	4,390	0	0			
Value of stores transferred to General Stores from Telegraph Department to be adjusted ...	100	2	7			
Iron received from General Stores for Terminal Workshops to be adjusted ...	530	1	3			
Old rails sold and credited to divisions up to December 1891 subsequently recovered ...	1,297	6	8			
Value of old rails removed from the line and credited to divisions now in stock ...	1,07,694	12	3			
2 hand-pumps received from General Stores and in charge of Locomotive Department ...	1,024	11	9			
Value of iron works, &c., received from England for strengthening bridges in July 1891 stock at depot ...	16,909	13	0			
1st division, South-West line, charges in November 1891 for starting rail signal between Madras and Arkónam to be adjusted ...	129	11	7			
1st division, North-West line, charges for one C.I. tank made in the Terminal Workshops for Cheyár to be charged in the next half-year ...	404	11	7			
Value of sheet iron received from General Store in December 1891 charged 1st division, South-West line, in January 1892 ...	35	2	5			
1st division, South-West line, pay sheet for watchmen employed at Kátpádi, South Indian Railway, for November and December to be recovered ...	18	10	0			
Value of bands or belting leather over-charged by General Store in December 1891 and credited in January 1892 ...	1,449	15	9			
				1,88,591	6	8

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
<i>Credits.</i>						
Terminal Workshops' labour for December 1891 charged departments and subsequently brought to accounts	251	0	1			
Value of old rails charged to estimated works to be adjusted in subsequent half-year	1,161	0	0			
Old metal issued and charged to Locomotive Department to be credited in the following half-year	4,593	9	2			
Five ton crane charged to 4th division, South-West line, to be credited in the following half-year	2,399	9	6			
Amount recovered by sale of unserviceable stores in the Terminal Workshops to be credited in the following half-year	7,822	8	2			
Amount recovered by sale of old stores and tools to be credited to divisions	848	10	9			
Work done by Telegraph Department for private works and departments to be credited to Telegraph Revenue	364	0	11			
Old iron rails used for estimated works in the Terminal Workshops to be credited in the following half-year	3,027	7	0	20,467	13	7
Balance on 31st December 1891				9,00,059	3	2

B.

CHIEF ENGINEER'S STORE AND WORKSHOP ACCOUNT,
31st DECEMBER 1891.

(As reclassified by Examiner of Railway Accounts.)

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
<i>Lists of stock supported by numerical details.</i>						
Stores at the Terminal Workshops	89,852	7	5			
1 set of iron sleeper purchased from the East Indian Railway	6	8	0			
Permanent-way materials	5,40,696	7	3			
New	61,596	12	7			
12-35 ft. W.I. girders stock at depôt	4,865	10	0			
1-24 ft. " " "	200	0	0			
1-14 ft. 6 in. " " "	91	5	1			
72 C.I. girders stock at Perambûr	3,445	3	0			
2 sets of 14 ft. 6 in. girders in stock on 1st division, South-West line	470	0	0			
4 sets of W.I. girders, 139 ft. 10 in., received from Chitravati and Pennér now in stock at depôt	8,930	0	0			
Charges incurred for strengthening girders	2,606	7	1			
2 engine turn-tables at depôt	1,500	0	0			
3 wagon " " "	1,500	0	0			
6 water columns " " "	320	0	0			
1 engine turn-table at Pôdanûr	1,500	0	0			
1 air-pump received from General Stores warehoused	630	10	2			
2 hand-pumps received from General Stores and in charge of Locomotive Department	1,024	11	9			
Total	7,19,236	6	4			
Less "overcharges" credited in the list of stores at the Terminal Workshops	4,372	13	9			
Net total	7,14,863	8	7			

C.

CHIEF ENGINEER'S STORES AND WORKSHOP ACCOUNT,
31st DECEMBER 1891.

(As reclassified by Examiner of Railway Accounts.)

*Dr. Adjustments.**Work Bills.*

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
Station machinery expenditure for December 1891 charged divisions in January 1892	761	2	4			
Points and crossings expenditure for December 1891 charged divisions in January 1892	305	0	11			
Telegraph Department private bills up to December 1891 to be recovered	530	6	9			
Telegraph Department bills against divisions and departments charged in the next half-year	31	3	6			
Telegraph Department watch repairing bills against Engineering Department for December 1891 charged divisions in January 1892	51	8	3			
Terminal Workshop private bills up to December 1891 to be recovered	1,202	11	5			
1st division, South-West line, charges in November 1891 for starting rail signal between Madras and Arkonam to be adjusted	129	11	7			
1st division, North-West line, charges for one C.I. tank made in the Terminal Workshops for Cheyâr to be charged in the next half-year	404	11	7			
1st division, North-West line, pay sheet for watchmen employed at Kâtpâdi South Indian Railway for November and December 1891 to be recovered	18	10	0	3,435	2	4

Stores and issues.

Value of stores transferred to General Stores from Telegraph Department to be adjusted	100	2	7			
Iron received from the General Stores for Terminal Workshops to be adjusted.	530	1	3			
Price lists against Traffic, Locomotive and General Stores Departments for December 1891 brought to account in January, February and March 1892	3,848	14	5			
Old rails sold and credited to divisions up to December 1891 subsequently recovered	1,297	6	8			
Value of sheet iron received from the General Stores in December 1891 charged 1st division, South-West line, in January 1892	35	2	5			
Value of bands or belting leather overcharged by the General Stores in December 1891 and credited in January 1892	1,449	15	9	7,261	11	1
Total debit				10,696	13	5

*Cr. Adjustments.**Work Bills.*

Terminal Workshops' labour for December 1891 charged departments and subsequently brought to account	251	0	1			
Work done by Telegraph Department for private works and departments to be credited to Telegraph Revenue	364	0	11	615	1	0

Sales and issues.

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
Value of old rails charged to estimated works to be adjusted in subsequent half-year	1,161	0	0			
Old metal issued and charged to Locomotive Department to be credited in the following half-year	4,593	9	2			
Five-ton crane charged to 4th division, South-West line, to be credited in the following half-year	2,399	9	6			
Amount recovered by sale of unserviceable stores in the Terminal Workshops to be credited in the following half-year	7,822	8	2			
Amount recovered by sale of old stores and tools to be credited to divisions	848	10	9			
Old iron rails used for estimated works in the Terminal Workshops to be credited in the following half-year	3,027	7	0	19,852	12	7
Total credit				20,467	13	7
Net credit				9,771	0	2

D.

CHIEF ENGINEER'S STORES AND WORKSHOP ACCOUNT,
31st DECEMBER 1891.

(As reclassified by Examiner of Railway Accounts.)

Particulars.	Amount.			Total.		
	RS.	A.	P.	RS.	A.	P.
<i>Lists of stock not supported by numerical details.</i>						
Surveying instruments	540	0	0			
" " new	203	2	6			
Telegraph stores	20,509	12	11			
New permanent-way, sundry materials	22,909	13	2			
Watch materials, stock with Telegraph Department	1,227	6	2			
Stores in hand on account of station machinery	13,425	6	9			
Stores in hand on account of points and crossings	2,353	3	11			
Brick-making stock account	2,090	9	3			
Unfinished works in the Terminal Workshops for General Stores and Traffic Departments subsequently charged, 474-6-2, permanent-way materials taken out between Beypore and Kadaloondi stock at 4th division, South-West line	1,283	11	2			
Surplus stores remaining in the Terminal Workshops	954	9	6			
Screw piles received into stock at depôt	4,390	0	0			
Value of old rails removed from the line and credited to divisions now in stock	1,07,694	12	3			
Value of iron works, &c., received from England for strengthening bridges in July 1891, stock at depôt	16,909	13	0			
Total				1,94,966	10	9

E.

ENGINEERING DEPARTMENT.

Lists of surveying instruments in hand on the 31st December 1891.

Names.	First division, South-West line.	Second division, South-West line.	Third division, South-West line.	Fourth division, South-West line.	First division, North-West line.	Second division, North-West line.	* Pápaghni bridge.	Perambur.	Chief Engineer's office.	Terminal works.	Telegraph engineer.	Total.
<i>Surveying instruments.</i>												
Arrows	61	30	14	36	19	43						203
Barometers in case				1								1
Boxes, colour	1		2	2	1	2						8
Brushes, sable	10	17	12				4					43
Compasses, prismatic, in case	1	1										1
Curves, radii	1	1	1	2	1	2				1		9
Chains measuring 100 feet		1		1		1						3
" 66 "	6	3	2	7	2	3	2	1				26
" of sizes for cylinders										1		1
Cases, tin, for maps	2	2					1					4
Edges, straight steel			1	1	1	2	2					7
Instruments, mathematical, in case	1	1	1	1	1	2	1			1		9
" " in fish skin case, incomplete			1			2						3
Levels, dumpy, with stand No. 25.	1	1	1	3	2	2	4		9		12	35
Protractors, circular				1	1	2						5
Pins, drawing, brass		20					12					32
Poles, surveying			6									6
Plumb bobs, brass		1	1			3						5
Plates, colour slabs sets	4	1					6					11
Rulers, parallel, wooden and steel	1			2	1	1	16			1		22
" brass		1	1	1		3	1					8
Rods, ranging	3	8		9			11					31
Rod, 30 feet								1				1
Staves, levelling	1	4	2	4	2	3	2					18
Squares						9						9
" vulcanized		4	2		1							7
Squares, T. ebony		1	2	3	3	1						13
Sextants, pocket, in case						1						1
Scales, assorted, boxwood and ivory	11		5	12	4	7	7			3		49
Scales, boxwood and offsets in case		1				12	7					20
Theodolites with stand	1	1	1	2	1	2	3		11		3	25
Telescopes, portable							1					1
Thermometers							2					2
Tapes, measuring, of sizes steel—50 feet, 100 feet.	20	14	15	15	21	14	7	1		4		111
" " "		1				1	2	1		3		8

* The stock shown against the Pápaghni bridge is that which stood on the 30th April 1892.

F.

FOURTH DIVISION, SOUTH-WEST LINE.

List of permanent-way materials with half value taken out from the line between Beypore and Kadaloondi in hand on 31st December 1891.

Description.	Stock remaining on hand on 30th September 1891.	Manufactured in the divisional stores.	Expended.	Transferred.	Balance in hand on 31st December 1891.	Remarks.
Chairs, C. iron, second hand	279		65		214	
Fish bolts for 75' lb. rails, second hand.	251		192		59	
Fish plates for 75' lb. rails, second hand.	38	41		79		
Fish plates for 65 lb. rails, second hand.	261	41			220	Converted into 75 lb.
Sleepers, teak, 10'-0 + 12" x 6".	146		13		133	
" " 10'-0 + 10" x 6".	5		3		2	
Pot sleepers	798		1		797	

FOURTH DIVISION, SOUTH-WEST LINE—*cont.*

List of permanent-way materials with half value taken out from the line between Beypore and Kadaloondi in hand on 31st December 1891—*cont.*

Description.	Stock remaining on hand on 30th September 1891.	Manufactured in the divisional stores.	Expended.	Transferred.	Balance in hand on 31st December 1891.	Remarks.
Tie bars	977	..	242	..	735	
Cotters	428	..	20	..	408	
Gibs	792	..	..	..	792	
Teak keys	880	..	..	..	880	
Trenails, iron	18,946	..	530	..	18,416	
Rails, iron 75 lb., 20 feet	56	..	3	..	53	
" " 65 " 17 "	681	..	228	..	453	
" " steel 75 " 20 "	43	..	..	..	43	
" " " 75 " 20 "	82	..	10	..	72	
Rails, stock	22	..	..	..	22	
" tongue	22	..	..	..	22	
" crossing, V. portion	9	..	..	..	9	
" check	26	..	..	..	26	
" wing	18	..	..	..	18	
Chairs, A	6	..	..	..	6	
" B	5	..	..	..	5	
" C	6	..	..	..	6	
" D	6	..	..	..	6	
" E	44	..	..	..	44	
" F	18	..	..	..	18	
" sliding	99	..	6	..	93	
" single block	22	..	..	..	22	
" double	20	..	1	..	19	
Rods, connecting	8	..	..	..	8	
" cross	20	..	..	..	20	
Switch boxes with weights	11	..	1	..	10	
Bolts, oblong	91	..	..	..	91	
" stud-headed	4	..	..	..	4	

G.

Terminal Workshops.

Stock of surplus stores without value on 31st December 1891.

Description.	Quantity.	Description.	Quantity.
Axles, light trolley	No. 5	Divers' boots	Pair 1
Arms, semaphore	5	Dolly, iron	1
Beaters	6	Doors of sizes	Pairs 6
Bolts of sizes	48	Excavators	No. 10
Blocks, iron, for chain	2	Frames, spectacle	12
" snatch	3	Funnels, large	2
Bars, crow, large	29	Gyne's centrifugal pump	1
" small	16	Gate, wooden	Pairs 2½
Bars, pinch	2	Girder, 41' 9"	No. 2
Bottom for crane jib	3	" 18'	2
" framing for boiler	2	Glasses, bull's eye	17
Bracket, semaphore	3	Hooks for crane chain	6
Bunk, wooden	1	" for sling	3
Bell, brass, station	1	" for couplings	3
Chain, measuring	Bundles 24	" for block chain	2
Couplings, screw	No. 52	Leggings for divers	5
Caps for pile	23	Lever with weights for distant	2
Cotters for trusses	19	signal	10
Column, C.I., of sizes	20	Light, sky, wooden	1
Cramp joiners	1	Lampstand	22
Crossings, solid	19	Mamooties	4
Couplings for pile	19	Monkey iron for pile driving	129
Crab, winch	2	Mangowood pieces	

Stock of surplus stores without value on 31st December 1891—*cont.*

Description.	Quantity.	Description.	Quantity.
Pickaxes	No. 125	Plate, iron	No. 1
Piles of sizes	23	" "	4
Pulleys for chain	3	" bed iron	4
" vertical for distant	1	" iron, of sizes	84
signal	5	" bridge	21
Posts, crane	lb. 115	Rope, Manilla	Coil ½
Powder, sulphur	No. 1	Rollers, C.I.	No. 48
Pipe, angle, flange, 3-4 × 3	2	Rods, lengthening	2
" bend 6-4 × 9	1	Racks for hanging couplings	1
" branch 4 × 6	14	Ratchets for screw jacks	3
" 3-6 × 6	2	Rods, measuring	8
" 3-6 × 4	3	Rollers, C.I., with pedestals	19
" flange 8 × 6	6	" crushing machine	19
" 6 × 6	3	Rail, gauge	4
" 4 × 9	1	" check	6
" 3-4 × 2½	1	" flat bottom	17
" 3 × 2½	3	" V portion	8
" 3-9 × 2½	1	" tongue	36
" 2½ × 2½	1	" wing	10
" Do. for water column	5	" pieces of sizes	98
10-11 × 8	1	Spanners of sizes	7
Pipe, flange, for water column	1	" Do. box	2
6 × 6	1	Scale, counter with 8 weights	1
Pipe, flange, for water column	1	Soles iron, for divers' boots	1
" bend, 5-5 × 9	2	Stair case	2
" 4-9 × 6	7	Stand, commode	2
" 4-7 × 7	5	Standards for drawing table	7
" bend, 3" diameter	19	" for theodolite	4
" socket, 4-6 × 3	3	Staves, levelling	12
" hose, Indian rubber	13	Swords without scabbards	2
" rain, 4-7 × 3	7	Steel crossing	8
" 4-2 × 3½	23	Taps and dies, incomplete	Set 3
" 3-8 × 3	5	Top for crane jib	No. 3
" 1½ × 3	2	Pipe, T. flange	1
" socket, bend, 2½ × 8	1	Tripod, iron	5
" 2-2 × 4	6	Weights, lever	22
" straight, one end, ...	1	" 56 lb.	5
9-1 × 12	1	" 28 "	6
Pipe, socket, straight, one end	1	" 7 "	7
8-5 × 10	3	" 14 "	3
Pipe, socket, straight, one end, ...	3	" 4 "	2
3 × 6	3	" 2 "	4
Pipe, socket, T. 4 × 4	4	Wheels, trolley	2
" T. 3½ × 6	5	" fly, large	2
" T. 3½ × 4	6	" small	6
" T. 3 × 7	17	" pinion	4
" T. 1-10 × 4-6	2	" truck	1
" T. 2-6 × 4-6	3	Window, glass	No. 1
Plane, bead, with iron	23	" Gothic	1
Plate, bed iron	7	" panel	5
" "	12	" venetian	2
" iron	6	Wells, lamp	1
		Well, fire	1

5th November 1892.

(Signed) J. B. DUNCAN,
Engineer in charge, Terminal Works.

H.

List of articles warehoused by the General Storekeeper for the Engineering Department, Madras Railway, at 31st December 1891.

Description.	Quantity.	Description.	Quantity.
Pocket sextant ... No.	1	Mamooties ... No.	228
Telescope ... "	1	Caps, wooden, for tents ... "	6
T. iron, 4" x 3" x 1/2" ... Bars	12-1,847	Bars, malleable, for fencing ... "	3
" " 5" x 3" x 1/2" ... "	14-4,362	Zinc-pieces ... Case.	1
Lamp, carriage, side, without burner ... No.	1	Bolts, with nuts, 4 1/2" x 7/8" ... "	20
" tail, red, with burner. ... "	1	Stand, wash hand, double ... "	1
" green, without burner ... "	1	" " single ... "	1
" old muster with burner and reflector ... "	1	" coat ... "	2
Lamps, English, wall, platform, with burner, chimney and two reflectors ... "	1	Basins, crockery, white ... "	1
Lamp post, danger, with burner ... "	2	Scale, counter ... "	1
Lantern, hand, country ... "	1	Pulley, block, with chain ... "	1
Semaphore tin case with burner oval ... "	2	Commodore, iron ... "	1
Lamp, street, small ... "	5	Blocks of sizes ... "	17
Gauges, iron, for rails ... "	23	Nails, iron, spike 6" for roofing ... "	3,991
		Rivets, iron, of sizes ... lb.	848
		Flannel, inside ... Pairs.	12
		Watches, guards ... No.	10
		Pump, air, diving ... "	1
		Levels, spirit ... "	4
		C.I. spectacle frame ... "	2

I.

Extract from the report by the Examiner of Railway Accounts on the suspense balances of the Madras Railway Company on 31st March 1892.

I. Stores.—(a) The store balances have increased during the financial year by Rs. 1,13,484. The increase arises chiefly in material for renewal of rails and bridges and on fuel.

(b) On 31st December 1891, the main ledger—

Balances amounted to ...	Rs.
and priced store lists to ...	29,86,175
resulting in an excess of ...	31,34,568
	1,48,393

on depôt balances over main ledger.

(c) Of this excess, Rs. 38,227 is attributable to purchases and sales not entered in the main ledgers and Rs. 1,10,166 to an excess of the stock lists over the balance shown on the main ledgers.

(d) The detailed stock lists include several large adjusting entries and it would appear advisable to introduce a more efficient system of agreement between the debits to the main and store ledgers by means of purchase and sale accounts and priced receipts and issue books and further to reduce the value of pendencies to a minimum and ensure each half-year being charged with the actual issues of the period.

No. 85.

Endorsement by the Consulting Engineer for Railways, dated Madras, 15th Feb. 1893.

Submitted to Government for transmission to the Director-General of Railways in continuation of this office endorsement No. 662, dated 3rd September 1892, embodied in Proceedings of Government, No. 2203 R., dated 13th September 1892.

ORDER—dated 20th February 1893, No. 380 R., Public Works.

The Government directs that before further action be taken on the report now submitted by the Examiner of Guaranteed Railway Accounts, Madras, the Agent and Manager, Madras Railway, be asked to inquire into the several points raised therein and furnish Government with an expression of his views regarding them.

(True Extract.)

(Signed) W. V. CONSTABLE, Major, R.E.,
Offg. Under-Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.
„ Examiner, Guaranteed Railway Accounts.

Exd. C. A. Manisawmy.
Spare Copies

RAILWAY.

Govt. of {1893} Madras.
PUBLIC WORKS.

Dated February, 20th.

Recd.

Encl.

G.O., 20th Feb. 1893, No. 380 R.

FEBRUARY.

Stock Lists of Engineering
Stores

Requesting that the Agent and Manager, Madras Railway, be asked to inquire into and report on the several points raised by the Examiner of Guaranteed Railway Accounts in his report on the — prepared by the Madras Railway on 31st December 1891.

sent to Secy 21.1.93
G.O.P.
received from Secy 9.2.93
G.O.P.

No 29

Office of En. Ry. Secy -
Madras. 18. Jan 93

To

The Consulting Engineer
for Railways, Madras.

Sir,

20-1

In continuation of my report on the Suspense Balances of the Madras Railway Company forwarded with my No 299 dated 2nd September 1892, I have the honor to state that I have tested the Stock Lists of the Engineering Stores prepared by the Madras Railway on 31st December 1891 and I further have the honor to report thereon as follows—

Submitted to the Secy for Engrg. Stores
G.O.P. 21.1.93
received from Secy 9.2.93
G.O.P.

1. As this letter is addressed to E.R. & not to R. please say whether E.R. cannot take the action with R. which he suggests to take in the above circumstances. He should be asked to take the proof has been connected.

Submitted to R. & Secy for Engrg. Stores
as above - the balance be
affirmed by the signature
of R. 13/1

2. Before making the inspection, I was informed that the system in force on the Madras Railway was; for Departments to keep numerical ledgers only, and to periodically extract the numerical

numerical balances from these ledgers into Stock lists; which lists were thereafter priced at current rates and the sum of the results compared with the aggregate balances on the Audit Office Ledgers.

3. Upon investigation, however, I discovered that the Engineering Department does not conform to this system, but keeps priced accounts.

It would appear most advisable that the Store System in all Departments should be uniform.

4. As a preliminary step to the test to be applied, I asked the Auditor to furnish me with detailed lists of the Stores said to be in Stock, and was accordingly shown the list annexed as Appendix A amounting

3. ^{for}
amounting to Rs 9,00,059.

5. Upon examination of this list, I discovered

(a). that numerical details had been furnished only for items amounting to Rs 7,14,863. Vide-Appendix B.

(b). that certain adjusting items amounting to Rs 10,696 had been added to the Stock in hand. Vide Appendix C; also that the value of stores in hand had been unduly reduced by certain credit adjustments amounting to Rs 20,116. Vide Appendix C; and that the net result of these adjusting entries was an undue reduction of the value of the Stock in hand by Rs 9,771.

(c). that a large number of items of Stock appeared in the

4 P4
the lists without value.

(d). That unadjusted credit balances amounting to Rs 4,373 had been allowed to unduly reduce the value of the stock in hand at the Terminal Workshops.

(e). That the so-called Stock lists were incomplete to the extent of Rs 1,94,966, inasmuch as no numerical details had been furnished for certain items making up that amount and included in Schedule D hereto appended.

b. After considerable trouble and delay, I ultimately obtained details of all the items included in Schedule D excepting an amount of Rs 1,227, being the balance in the Watch Department Account Current; although small, this amount should, little

like all other manufacturing Accounts, have been supported by numerical details of Stock and lists of unfinished jobs.

7 Having thus obtained details I proceeded to test their accuracy and the following paragraphs will be found to deal with the various items of Stock in their serial order of entry in Schedules B & D.

8. Stores at the Terminal Workshops valued at Rs 89,853.

(a). The Terminal Workshop Stock contains the following important articles, the remaining items, although numerous, being small in value.

Portland Cement	Rs 7,989.
Swedish Iron	" 2,939.
Round Iron	" 1,812

Carried over Rs 12,740

Born; at forward No 12740

T Iron	4018
Teak Timber	40159
" Teaklings	9985
Blackmery	7102
	<u>71104</u>
Overcharges Co:	4373
	<u>69631</u>

(6). A large number of items appears in the list without value owing to overcharges, adjustments, omissions, and pendencies, viz:-

- Acid Hydrochloric lbs 2.
- Base Plates - - - N° 9.
- Bottom Castings C.I. " 16.
- Brackets for lamp Posts " 37
- Brass old - - - lbs 1 1/2
- Chains C.I. - - - N° 850.
- Clips C.I. for Pot. Stoppers " 2669.
- Coal - - - lbs 6612
- Chloride of Copper - - - 2
- Candles Brass - - - N° 1.
- Iron Flat - - - lbs 6892.
- - - Round - - - 2680.
- Nitrate of Copper - - - 2.
- Pipes C.I. - - - N° 80.
- Pulleys for distant Signals. 209.
- Plates for Suction Apparatus. 23.
- Rivets Iron - - - lbs 69057.
- Shoes C.I. - - - N° 11.

Screws

Screws W. I. for distant

Spirals... N 110.

Washers galvanized 452.

Wheels Angle 28.

(c). Several errors were found to have been made in extracting balances from the Ledger into Stock lists.

(d). The health timber account showed the following startling results as regards prices.

	Per cubic foot
Stock at commencement of	1891-3
December Half year 1891-	1-14-3
Total receipts of Half year	
including Stock in hand	1-11-14
Issues of period	2-5-0
Balance in hand at close	
of period	1-6-14

From the above, it will appear that the issue price of the period has been much too high and that the Stock in hand is some Rs 7,000 to Rs 8,000 understated owing to overcharges on issues.

(c) The leak scavenging account valued at Rs 9,985 was represented by a quantity of ^{of scrap} 4,503 cubic feet at an average price of Rs 2-3-6 per cubic foot, which is higher than the value set upon good timber.

i. This account in January 1891 started with a balance of 10,347 cubic feet valued at Rs 18,320.

ii. Without any special authority, however, Rs 8,730 were written off to Revenue Expenditure in June half year 1891 and the value of the stock was thereby reduced to annas 13 pias 9 per cubic foot.

iii. 6,600 cubic feet were there - after sold by auction at annas 4 pias 2 per cubic foot in July but no adjustment was made of the difference in value between annas 4 pias 2 and annas

13 p. 9. The balance on the account therefore remained at the excessive rate of Rs 2-3-6. per foot on 31st December 1891.

iv. of the Stock of 4500 feet in hand on 31st December 1891, 4,100 cubic feet were sold by auction in January 1892 realizing Rs 1,175 or Rs 0-4-7 per cubic foot and the value of Scantling would therefore appear to be overstated by more than Rs 8,000 unless, as is very probable, the actual quantity in hand is far in excess of the book balance owing to the faulty system ^{adopted} in the Sawing accounts.

(f). Timber is accounted for under the following system

i. Certain logs are allocated to particular mills and cut up.

ii The actual measured

output

outturn is then increased by 50 per cent and charged to the several works. This addition of 50^{percent} to the quantity of the cut timber is based on an assumed wastage of 33 per cent on the original capacity.

iii. A summary is made of the quantity charged to all works during the month and the difference between this total and the measured capacity of the logs consumed is debited to an account called "Duffies and Scantlings" thus:—

Log No 69 contents 36-1-6
1918

Cut-up beam-ords

No 929... ft 23-5-6.

Add 50 percent = 11-8-9.
35-2-3.

Charge to
Duffie and } -0-11-3.
Scantling. } 36-1-6.

iv. This system of dealing with

with Scantling or Cas it would
be more accurately described,
"Scrap" is manifestly in-
correct as the quantities brought
to account never agree with
the actual results of Sawing.

v. In some cases, the actual
outturn plus 50 per cent ex-
ceeds the capacity of the log
cut up, and, in such cases,
no Scrap timber is taken
to account although there
must necessarily be some.

vi. The following summary
of a month's transactions
will show to what extent the
System is erroneous.

30 logs containing cft 1,415
when cut up yielded 1,050
and the Scrap and
Sawdust originally
measured - - - 665.

or 38 per cent of original
quantity.

Of this 665 ft. 50 per cent
of 1,050 or 525 cft. were added

to the outturn and the least

P-12 ✓ -ling account was debited with 140 ft. only; 525 cubic feet of scrap have therefore been omitted from the accounts.

VII. As a proof of the error in system, it would appear from the accounts that, during a period of 9 months between January and October 1891, there was no debit to the scrap account although the sawing operations were considerable.

VIII. The proper course to adopt would be to periodically measure and value the scrap after fixed sets of sawing operations and to charge works with the value of the original logs less the estimated value of scrap recovered and taken into

13.

stock.

(g). Included in the item of Machinery as stock in hand is a vertical boiler valued at Rs 2,485, which is old and in use in the workshop. It is irregular to treat articles in use as in stock and ostensibly available for issue and sanction should apparently be obtained to charge this Engine off to works.

(h). The overcharges of Rs 4,373 have already been alluded to in paragraph 5(d) and paragraph (b) of this section; they are mainly due to errors in pricing and have affected the Stock lists in double directions, inasmuch as no value has been given to the numerical quantity on hand, while a reduction of totals has resulted from entering the credit balances.

(i).

p. 14

(i). In addition to the items referred to in paragraph 6 of this section as stores in stock without value, owing to overcharges and errors in pricing, there are also considerable accumulations of stock in hand, which have never been priced at all, owing to a want of system in dealing with returned stores.

(j). Under these circumstances, neither the priced stock lists submitted, nor the balances on the Audit Office ledgers accurately represent the amount of capital locked up in stores, while the possibility of speculation is much enhanced by the absence of priced records. It would appear advisable to bring all material belonging to the Company upon its books at a fair value, based, at the very least, upon the price it might reasonably be expected to fetch at auction.

P. 15

(k). With a General Store adjacent to the Terminal Workshop at Royapuram, it would further appear inadvisable to keep a separate Engineering Stock of many of the items of a general nature now borne on the lists of the Engineering Department.

(l). It would also seem inadvisable with the large timber stocks (which roundly amount to a value of Rs 2,70,000) - maintained in the Locomotive Department to keep up such a large further separate Engineering Stock of Rs 50,000.

(m). Certain items appear in the receipts and issues without price and are called pendencies. These, it is said, are owing to the prices of the Supplying Department not having been received.

In some cases, these pendencies were 3 and 4 months in arrears and in the case of one article

16.
article it was noticed that the transactions of December had been priced, while those of the preceding months of October and November were still left pending.

Some arrangement would appear to be necessary to improve the system of pendencies.

9. Permanent Way Materials-
Rs 540,696.

(a). The quantities and amounts in this list have been compared with ledgers maintained in the Chief Engineer's office and with the Divisional returns and found correct, except as regards the item of Fish Plates, which are 528 short stated.

(b). The quantities in the stock list have, in the case of important articles, been divided into their value for the purpose of ascertaining the rate per unit of stock in hand.

P-17

17.
(c). These rates have then been compared with the market values current at the time for similar articles and with the rates, at which the articles were being issued with the following results.

	Stock value.			Issue rate.			Market price.		
	Rs	a	p	Rs	a	p	Rs	a	p
Rails Steel 20 feet.	15	0	5	14	11	3	14	12	7
" " 17 "	11	14	4	11	14	0	11	13	10
Pot Sleepers	2	3	4	2	2	4	2	3	7
Tie Bars	1	1	5	1	1	4	1	1	10
Fish Plates	0	5	6	0	7	11	0	8	4
" - Bolts	0	3	0	0	1	7	0	2	0
Teak Keys	0	0	6	0	0	6	0	0	6

(d). With the exception of Fish Plates and Fish Bolts, which require revision, the rates seem to be as nearly correct as is possible on a system of averages.

(e). The stock of Teak Keys seems large, it being sufficient for 100 miles of track at the rate of 4,000 per mile, but I am informed it is only sufficient for one year's requirements.

(f). Certain of the items in the lists, such as, Wooden Sleepers, Switches, &c., are not capable

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of check in consequence of one general entry having been made for material of greatly varying prices. For instance, sleepers are issued at rates of Rs 28/-, Rs 21/-, Rs 15/- and Rs 12/- respectively according to size, whereas they are shown in the Stock list in one item which works out to an average rate of Rs 15-13-1 per sleeper.

(g). The quantities of each class of sleeper or other article of Store should have been detailed in the Stock list and worked out at its own rate and the sum of the whole compared with the aggregate ledger value. This should be noted in preparing future lists.

10. New Permanent Way Material and Iron Work for strengthening Bridges viz:-

Permanent Way, Schedule B	Rs 6,597	Rs
" " " " "	D 22,909-84	Rs
Bridges	D 16,909	Rs
	Rs 101,415	
	Thrs	

P. 19

19.

These items represent special ~~special~~ English Ivoories for rails and cross beams obtained for strengthening Bridges and are correct in the aggregate, although some of the detailed entries in the Ledger and lists are inaccurate.

11. Twelve 35 feet W. I. Girders.

Rs 4865-10-0.

These are said to be an Emergency Stock and are at present located in the following Divisions, although they are not borne on their Stock lists.

S. W. Line 2nd Division - 4

N. W. Line 1st Division - 4

N. W. Line 2nd Division - 4

12.

12. One 24 feet W. I. Girder.

Rs 200, has been in Tottenham Depot since December 1888.

13. One 14 feet 6 inches W. I. Girder.

Rs 91-9-1. This is a part of the Emergency Stock and is lying

on

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20.
on 4 $\frac{1}{2}$ Division S.W. Line.
14. 72. Cast Iron Girders at Perambur, Rs 3,445. These have been in stock since 1885 having been ordered for roofing the carriage shops. Their value has been reduced by about 40 per cent of the cost price.
15. Two sets of 14 feet 6 inches Girders, Rs 470. These are lying on 1 $\frac{1}{2}$ Division S.W. Line and are priced at half value being returned stores.
16. 4. Sets of W. I. Girders 139 feet 10 inches, Rs 8,930, and charges thereon, Rs 2,606-7-1. These have been returned from works and strengthened for use on other bridges.
17. 2. Engine Iron Tables, Rs 1,500. These have been in stock since 1887; their original cost was Rs 8,769 and they are of 50 feet and 40 feet diameter, respectively.

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18. 3. Wagon Turn Tables, Rs 1,500.

These were received from England in 1888; a fourth turntable is borne on the books without value.

19. 6. Water Columns, Rs 320. The

Divisional Stock lists show four only, two having been issued and not charged off till next half year.

20. 1. Engine Turn Table at Lodhiana, Rs 1,500. This is not in the

stock lists of the Division it having been condemned and taken to pieces and the component parts made available for renewals. It is stated the item will be cleared off the stock in June 1892.

21. One Air Pump, Rs 630 and two hand pumps, Rs 1,024. These items call for no special remark.

22. Surveying Instruments, Rs 540.

The details furnished in Support of

22.
of this item are ^{shown} ~~presented~~ in
Schedule E.

O. 22

Considering that the list contains 25 theodolites, 35 levels, and 12 boxes of ellathematic instruments, their value seems ridiculously small. It would appear necessary to set apart the instruments forming the working plant of the several offices and to revalue the remainder and treat them as Surplus Stores.

23. Surveying Instruments, New,
Rs 203. These are not in the Engineering books and are in custody of the General Storekeeper, although the Storekeeper does not include them in his list of articles warehoused for Engineering Department - Vide Appendix H.

A system of retaining the value of an article in the list of one Department and the quantity in that of another may

P. 23

23.

may lead to the inclusion of the articles in the stock list of both Departments.

In my opinion all stock which is not likely to be required for any considerable period should be borne on the books of the General Storekeeper and indexed for by Departments when required only.

24. Telegraph Stores, Rs 20,509.
Watch Materials, Rs 1227.

(a). These stocks should, in my opinion, be kept separate from Engineering Store and accounted for direct to audit, as they appear to receive very little scrutiny from the Engineering Department; it is further doubtful whether separate store accounts are necessary to so large an extent as now maintained.

(b). The stock list of the Telegraph Department consists of some 200 to 300 items, many of which might

P-24

might possibly be obtained from General Store as required.

(c). As a proof that the present system is unsatisfactory, it may be stated that two of the items included in the list of Stores in hand on 31st December 1891 were the following, viz:-

Proportion of General Superintendence	Rs 684
— " — House Payments —	237
Total	921

These are not represented by anything of tangible value being debits which should have been added from time to time to the cost price of Stores.

This subdivision having been neglected, the debits have been accumulating since 1889 and treated as stock in hand.

(d). The absence of details regarding Watch Materials has been referred to in paragraph 6.

25. Stores in hand on account of Station Machinery, Rs 13,425 and Points and Crossings Rs 2,353.

These

8 25

These represent certain stocks held by Inspectors and contain many items which might be obtained and charged off as required.

They further do not include the whole of the stock of the classes they nominally represent as the bulk of the stock is included under the head "Permanent Way".

26. Brickmaking Stock, Rs 2,090.

This stock is duly supported by Divisional balance sheets. In the case, however, of Stock in the Terminal Workshops, the balance brought forward is valued at Rs 12/- per 1,000, the issues therefrom have been made at Rs 15/- per 1,000 and the stock in hand reduced to a value of Rs 7/- per 1,000, in consequence of the apparent overcharges.

27. Unfinished Works on the Terminal Workshops, Rs 474.

These are supported by detailed lists extracted from the Works ledgers.

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(d). Upon applying for details of the items comprised in the balance of Rs 1283, I was furnished with the list hereto annexed as Appendix F, which, if priced, will make up a value far exceeding the Rs 1283, at which they are borne on the books.

(e). The items included in this list should be valued and transferred to their proper heads in the ordinary returns.

(f). The system of keeping separate accounts for material obtained from particular Districts or works is complicated and unnecessary.

29. Surplus Stores remaining at Terminal Workshop, Rs 954. This question has already been touched upon in paragraph 8(i) & (j). A list of the items comprised in the item of Rs 954 is annexed as Appendix G and

and a further list of undervalued articles belonging to the Engineering Department and warehoused in the General Stores Department without value on 31st December 1891 is annexed as appendix H.

It is impossible to state which of the particular articles comprised in these lists make up the assumed value of Rs 954, but there is little doubt that they would realize 5 or 6 times that amount.

30. Screw Piles, Rs 4,390- 693

Screw Piles recovered from Bridges were in June Halfpenny 1891 returned into Store at a rate of Rs 10 per 35 lineal feet, 35 lineal feet being a ton or thereabouts. The ordinary sale rate for Iron Scrap is about Rs 20 per ton and these screw piles are therefore considerably undervalued.

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29.

31. Old Rails Rs 107,694. ^(a) This amount is made up as follows.

	65 lbs		75 lbs		84 lbs		Total		Amount	Rs
	20'	17'	20'	17'	20'	17'	20'	17'		
Stock at the Terminal Workshops. —	9,733	88	4,649	65	1,614	14	15,996	167	57,044	St. Rapa Bureau
Stock on Divisions as per Accounts Current	2,570	79	3,486	206	1,416	37	6,442	322	43,942	
Stock at Ferrol	4	3	2	2	1	1	5	3	5	Distrib- uted on the Several Divisions
	476	71	219	14	4	13	699	98	4,234	at Ferrol station
Total	12,719	238	8,354	285	2,064	64	23,137	587	107,694	

* Equal to Tons 4,727 at 5 Rails a ton at Rs 23/- per ton.

(b). Upon investigation it, however, transpired that this did not represent the entire stock of old rails belonging to the Company.

(c). Under Government Order No. 779K of 13th November 1890, some 7,000 tons of old rails were ordered to be brought on the boats but instead of doing this at once and in one item in the Divisional Returns, the rails in question were roughly dealt with in the returns of the Head Office

office with the result that the stock on the line is worth about Rs 71,000 more than shown in the Company's stock lists as may be seen from the following table.

Pr 20
made up by pricing the actual stock included in the unpriced returns of the several divisions

8 1/4 lbs rails 57,673 feet at Rs 7	Rs 18,088.
per 20 feet	
7 1/2 lbs rails 206,600 feet at Rs 6	
per 20 feet	61,980.
6 1/2 lbs rails 374,784 feet at Rs 5	
per 20 feet	98,695.
<u>Total 1,78,763.</u>	

(d). The entries made in the Head office returns from line to line were arbitrary Estimates unsupported by any detail quantities as may be seen from the following:-

	Rs
October 1890	54,000
December "	70,000
June 1891	10,000

(e). No ledgers of quantities were maintained in the Head office in respect of old Rails and although quarterly unpriced lists have been prepared and

P 31

31.
and submitted by District officers no attempt seems to have been made to ^{make them} agree these with the Head office returns or with the Stock lists.

(f). In my opinion the whole of the rails in the custody of District Engineers should be at once brought on the ^{priced} Divisional returns as the present system is most irregular.

(g). I further discovered with regard to the stock borne on Divisional ^{priced} Returns and said to be worth Rs 43,942 that at the rates in force for return of Old Permanent Way material vide paragraph (c) the quantities entered on the lists only work out to Rs 38,237.

(h). The difference of Rs 5,705 is due to the fact that the stock at the commencement of the year was valued as follows:- viz:-

65 tns - Rs 8.
75 " - " 9
84 " - " 10.

D.C.2

(i). Under authority of Minute No 7 of 1891, however, the future issue rates were reduced to Rs 5/6 & 7/4, respectively, resulting in a reduction of about Rs 16,046 in the value of stock. But no adjustment of this item was made in the books.

(j). This deficiency has been almost adjusted by means of the augmented prices obtained from public sales (vide paragraph l) and will, by this means, ultimately be wiped off.

(k). Such adjustments should, however, in my opinion, be made by debit to Revenue as soon as sanctioned and not allowed to remain in areas until adjusted by the transactions of subsequent periods.

(l). The following table will show the value allowed for returned 20 feet rails as compared with

with cost price.

Rails	Rate at which brought on to stock.		Cost of new material on basis that 75th rail of 20 feet costs Rs 15/- other sizes being proportionately increased (or reduced).				Rate at which sold to public.	
			Rs	a	p	Rs	a	p
65 lbs.	5	"	13	"	"	8	12	"
75 lbs	6	"	15	"	"	10	"	"
84 lbs	7	"	16	12	10	11	4	"

(m). The rates allowed for Returned Rails do not average half value and as some rails, when recovered must be fit for use in the main line, it would appear advisable to subdivide Returned Rails into serviceable and unserviceable and quote a separate rate for each, instead of adopting, as at present, an unserviceable rate for the whole. It should further be remembered that the rate quoted for new material is calculated at 18s 10d to the Rupee and that for sale purposes this rate would require to be increased by about 50 per cent to provide for the current rate of exchange.

the

P. 34

The rate realized by sales of old material is about $\frac{4}{9}$ of this augmented price of new material and would therefore appear to be a very good one.

32. Comparison with Audit Ledger.

(a). The stock in hand as per lists originally submitted by the Chief Engineer amounted to Rs 9,00,059 compared with Rs 8,78,923 standing on the Audit office Ledger resulting in an excess of Rs 2,136 over the Company's books.

(b) This excess in the course of investigation has been augmented to the following extent viz.

Original excess	Rs 2,136
add. Adjustments vide para 5(b)	9,771
Credit balances para 5(d)	4,373
Permanent way para 31(c)	7,069
Leak Linters para 8 (d)	8,000
	<u>1,14,349</u>
Less. Scantling 8.2 (iv)	8,000
Permanent way 31 (g)	5,705
	<u>13,705</u>

Net apparent excess of stock over audit office balances - - - - - 1,00,644

(c). The above excess would be still further augmented if the whole of the unpriced stock were brought to account and certain articles now standing at very low rates revalued.

(d). Again the Engineering Head office Ledgers had not at the time of my inspection been posted for the June Half-year 1892 and the books were therefore practically useless as Stock records.

Conclusion.

33. The foregoing remarks lead me to express the opinion that the state of the Engineer's Store Accounts is far from satisfactory, especially as regards Returned Stores, and further that the existing system does not provide for a sufficient control by the Auditor of the Company.

Dr

Pr 736

34 In my note N° 429 G. dated 2nd September 1892, an extract from which is given in Appendix I I called attention to certain apparent defects in the General System of stores on the Madras Railway, and I would now further suggest that all stores of an important nature should be borne on priced ledgers kept in the Audit office and that the numerical system should only be allowed to apply to articles which are small in value, although numerous in quantity; also

(a) That the Engineering and other Departments retain charge only of special stores peculiar to their own requirements and that stores of a general nature be obtained from General stores by indent as required.

(b). That one Timber Stock be maintained

P-37

37.
maintained for the entire
Railway instead of separate
stocks in each Department
or that the balance in each
Department be considerably
reduced.

(c). That all surplus and
useless stores be borne
on the books of the General
Store although the Depart-
ment concerned or a committee
of Experts would naturally fix
the prices of such articles and be
consulted before they were dis-
posed of by sale.

(d). That sub-divisional work-
shops such as the Terminal and
Telegraph and District Engineers,
be in direct communication
with the Audit office on all
matters regarding store ac-
counts ~~and that the Loco-~~
~~motive Accountant as in~~
~~the case of State Railways~~
~~and Divisional offices be~~
~~responsible to the Auditor~~
regarding

P-26

regarding all detail matters of account although working directly under the Locomotive Superintendent.

(e). That the Auditor who is in the same building as the Chief Engineer should supply the latter officer with all details he may, from time to time, require regarding stocks in hand, Issues, &c & that the existing Engineering Store Accounts office at Royapuram be closed.

(f). That Divisional Accounts be simplified by the abolition of Ledgers as far as possible, the whole of the store details being incorporated into monthly returns to the Audit office similar to those now in use for rails.

(g). That supplies of petty stores be arranged for by fixed imprests, instead of by maintenance of

P-39

39.
of detailed Divisional Ledger
Accounts.

(k) That all material now in
hand without value be ap-
praised and brought on the
books, and that a uniform
system be adopted in future
of bringing stores on to the
books as returned at a fair
market value, in conformity
with the orders contained in
Government of India Resolution
F 213-218 A.G.R. dated 11th April
1874 and Government of India
Circular No IX Ry. dated 1st
May 1883.

That the only exception
made to this rule shall be in
the case of petty articles set
aside for early auction.

(i). That whatever system be
adopted for the Railways
generally, whether of priced or
of unpriced accounts, it be
applied to the Engineering as
well as to the other Departments.

(j)

P-40

(j). That occasion be taken when valuing and bringing surplus material of the Engineering Department in the books to revalue, and, if necessary, reduce the prices of articles which have been for years in stock or have from any other cause depreciated in value.

(K). That it be made clear that no important adjustment of store balances consequent on depreciation or alteration in value of stock or owing to excesses or deficiencies on stock or other causes, shall be made without the previous approval of the Government Consulting Engineer.

Stores ~~shall~~ not be made use of while standing on the store books and details shall be given in stock list of all articles of varying prices. vide paras 5(7) + 9(f+g) I have the honor to be,

Sis,

Your most obedient servant,
 J. K. G. M. for

Examiner, Railway Accounts

Madras.

Madras. —
 18th January 1893.

REGISTERED
91A

Chief Engineer's Store and Workshop Account Envelope to N^o 29
Balance on 31st December 1891. 41 A
(as originally furnished by the Company.)

Particulars	Amount		Total.	
	Rs	A. P.	Rs	A. P.
Surveying Instruments	540	" "		
do New	203	2 6		
Telegraph Stores	20609	12 11		
Stores at the Terminal Workshops	85479	9 8		
Permanent Way Materials	540696	7 3		
New do	84506	9 9	731935	10 1
Watch Materials stock with Tele Dept	1227	6 2		
Stores in hand on account of Station Machinery	13425	6 9		
do Points & Crossings	2353	3 11		
Station Machinery expenditure for December 91 charged Divisions in Janu- -ary 1892	761	2 4		
Points & Crossings expenditure for December 1891 charged Divisions in January 1892	305	0 11		
Brick making Stock Account	2090	9 3		
Telegraph Department private bills up to December 1891 to be recovered	530	6 9		
Telegraph Department bills against Divisions and Departments charged in the next half year	31	3 6		
Telegraph Department Watch repairing Bills against Engineering Depart- ment for December 1891 charged Di- visions in January 1892	51	8 3		
Terminal Workshops private bills up to December 1891 to be recovered	1202	11 5		
Unfinished works in the Terminal Workshops for General Stores and Traffic Departments subsequently charged	474	6 2		
Carried over	22453	1 5	731935	10 1

Particulars	Amount		Total	
	Rs	A P	Rs	A P
Brought forward	22,453	1 5	7,319	35 10 1
12- 35 ft. W. J. Girders Stock at Depot	4865	10 0		
2- Engine Turn Tables	1500	0 0		
3- Wagon	1500	0 0		
6- Water-columns	320	0 0		
1- 24 ft. W. J. Girders	200	0 0		
1- 14 ft.	91	9 1		
72- C. J. Girders Stock at Brambar	3445	3 0		
1- Engine Turn Table at Podanur	1500	0 0		
one set of Iron sleeper purchased from East Indian Railway	68	0		
Price list against Traffic, Locomotive and General Stores Departments for December 1891 brought to account in January, February, and March 1892	3848	14 5		
Permanent Way Materials taken out between Beypore and Kadaloondi stock at 4 th Division, S. W. Line	1283	11 2		
2- sets of 14 ft. 6 in. girders in Stock on 1 st Division, S. W. Line	470	0 0		
4- Sets of W. J. Girders 139 ft. 10 in. removed from Chitravati and Tenner now in stock at Depot Rs 8930-0-0				
Charges incurred for strengthening girders } Rs 2606-7-1	11536	7 1		
1. Air pump received from General Stores, warehoused	630	10 2		
Surplus Stores remaining in 1 st Division Terminal Workshops	954	9 6		
Screw piles received into Stock at Depot	4390	0 0		
Value of Stores transferred to General Stores from Telegraph Department to be adjusted	100	2 7		
Carried over	59096	6 5	731935	10 1

Particulars	Amount		Total	
	Rs	A P	Rs	A P
Brought forward	59096	6 5	731935	10 1
T. Iron received from General Stores for Terminal Workshops to be adjusted.	530	1 3		
Old rails sold and credited to Divisions up to December 1891 subsequently recovered	1297	6 8		
Value of old rails removed from the line and credited to Divisions now in Stock	107694	12 3		
2- Hand pumps received from General Stores and in charge of Locomotive Department	1024	11 9		
Value of Iron works etc received from England for strengthening Bridges in July 1891 stock at Depot	16909	13 0		
1 st Division, S. W. Line charges in November 1891 for starting rail signal between Madras and Arkonam to be adjusted	129	11 7		
1 st Division S. W. Line charges for one C. J. Tank made in the Terminal Workshops for Chayan to be charged in the next Half year	404	11 7		
Value of sheet iron received from General Store in December 1891 charged 1 st Division, S. W. Line in January 1892	35	2 5		
1 st Division S. W. Line Pay sheet for Watchmen employed at Halpradi S. J. Ry. for November and December to be recovered	18	10 0		
Value of bands or belting leather overcharged by General Store in December 1891 and credited in January 1892	1449	15 9	188591	6 8
Carried over			920527	0 9

Madras Railway.

43B

Chief Engineer's Store and Workshop Account, 31st December 1891.
(as reclassified by Examiner of Railway Accounts)

Particulars	Amount			Total		
	Rs	A	P	Rs	A	P
<u>Credits.</u>						
Brought Forward				920527	0	9
Terminal Workshops Labor for December 1891 charged (Departments and subsequently brought to accounts—	251	0	1			
Value of old rails charged to estimated works to be adjusted in subsequent half year—	1161	0	0			
Old metal issued and charged to Locomotive Department to be credited in the following half year—	4593	9	2			
Fire Ton Crane charged to L. & P. Div. S. W. line to be credited in the following half year—	2399	9	6			
Amount recovered by sale of unserviceable stores in the Terminal Workshops to be credited in the following half year—	7822	8	2			
Amount recovered by sale of old stores and Tools to be credited to Divisions	848	10	9			
Work done by Telegraph Department for private works and Departments to be credited to Telegraph Revenue	364	0	11			
Old iron rails used for estimated works in the Terminal Workshops to be credited in the following half year—	3027	7	0	20467	13	7
Balance on 31 st December 1891				900059	3	2

Amount		Total	
Rs	P	Rs	P
<u>Lists of Stock supported by</u> <u>numerical details</u>			
Stores at the Terminal Workshops—	89	52	7 5
1 set of Iron sleeper purchased from the East Indian Railway—		6	8 0
Permanent Way Materials—	540	696	7 3
New— do —	61	596	12 7
12-35 ft W. I. Girders Stock at Depot—	43	65	10 0
1-24 " " do — do —	200	0	0 0
1-14 " 6 in do — do —	91	9	1
72 C. I. Girders stock at Tarambur—	34	45	3 0
2 sets of 14 ft. 6 in. Girders in stock on 1 st Division S. W. Line—	470	0	0 0
4 sets of W. I. Girders 139 ft. 10 in received from Chitnavati and Permer now in stock at Depot—	89	30	0 0
Charges incurred for strengthening Girders	2	606	7 1
2 Engine Turn Tables at Depot—	1500	0	0 0
3. Wagon— do — do —	1500	0	0 0
6. Water-columns — do —	320	0	0 0
1. Engine Turn Table at Podanur—	1500	0	0 0
1. Air pump received from General Stores warehoused—	630	10	2
2. Hand pumps received from General Stores and in charge of Locomotive Department—	1024	11	9
Total—	719	236	6 4
Less ~~Item of~~ "Overcharges" ~~not supported~~ ~~credited~~ ~~ed by details~~ in the list of stores at the Terminal Workshops—	43	72	13 9
Net Total	714	863	8 7

Madras Railway. 44 C.

Chief Engineer's Store and Workshop Account, 31st December 1891.
(as reclassified by Examiner of Railway Accounts)

	Amount		Total	
	Rs	A.P.	Rs	A.P.
<u>D^r Adjustments</u>				
<u>Work Bills.</u>				
Station Machinery expenditure for December 1891 charged Divisions in January 1892. —————	761	2 4		
Points and Crossings expenditure for December 1891 charged Divisions in January 1892. —————	305	0 11		
Telegraph Department private bills up to December 1891 to be recovered —	530	6 9		
Telegraph Department bills against Divisions and Departments charged in the next half year —————	31	3 6		
Telegraph Department watch repair- ing bills against Engineering De- partment for December 1891 charged Divisions in January 1892. —————	51	8 3		
Terminal Workshop private bills up to December 1891 to be recovered —	1202	11 5		
1 st Division S. W. line charges in November 1891 for starting rail signal between Madras and Arkonam to be ad- justed —————	129	11 7		
1 st Division N. W. line charges for one C.I. Tank made in the Terminal Workshop for Cheyav to be charged in the next H.Y.	404	11 7		
1 st Division N. W. line Paysheet for Watchmen employed at Kattadi, S. I. Ry. for November and December 1891 to be recovered —————	18	10 0		
Carried over			3435	2 4

	Amount		Total	
	Rs	A P	Rs	A P
Brought Forward			3435	24
<u>Stores and Issues.</u>				
Value of stores transferred to General Stores from Telegraph Department to be adjusted	100	27		
T. Iron received from the General Stores for Terminal Workshops to be adjusted Price lists against Traffic, Locomotive and General Stores Departments for December 1891 brought to account in January, February and March 1892.	530	13		
Old rails sold and credited to Divisions up to December 1891 subsequently recovered	3848	145		
Value of sheet iron received from the General Stores in December 1891 charged 1 st Division S. W. line in January 1892	1297	68		
Value of Bands or belting leather overcharged by the General Stores in December 1891 and credited in January 1892	35	25		
	1449	159	7261	111
Total Debit			10696	135

Cr: Adjustments.

Work Bills

Terminal Workshops labor for December 1891 charged Departments and subsequently brought to account.	251	01		
Work done by Telegraph Department for private works and Departments to be credited to Telegraph Revenue	3614	011	615	10
Carried over			10081	125
			615	10

	Amount		Total	
	Rs	A P	Rs	A P
Cr: Adjustments (Contd.)			615	10
Brought forward			10081	125
<u>Sales and Issues</u>				
Value of old rails charged to estimated works to be adjusted in subsequent Half year	1161	00		
Old metal issued and charged to Locomotive Department to be credited in the following half year	4593	92		
Five Ton Crane charged to 4 th Division S. W. line to be credited in the following half year	2399	96		
Amount recovered by sale of un-serviceable stores in the Terminal Workshops to be credited in the following half year	7822	82		
Amount recovered by sale of old stores and tools to be credited to Divisions	848	109		
Old Iron rails used for estimated works in the Terminal Workshops to be credited in the following half year	3027	70	19852	127
Total Credit			20467	137
Net Credit			9771	02

Debited in the Account Current for April 1892

Will be adjusted in June 1892.

—do—

—do—

—do—

—do—

46 D.

Madras Railway.
Chief Engineer's Store and Workshop Account, 31st December 1891.
 (as reclassified by Examiner of Railway Accounts)

	Amount		Total	
	Rs	P	Rs	P
<u>Lists of Stock not supported by numerical details.</u>				
Surveying Instruments	540	0 0		
do New	203	2 6		
Telegraph Stores	20,509	12 11		
New Permanent Way, Lundry materials	22,909	13 2		
Watch materials, Stock with Telegraph Department	1227	6 2		
Stores in hand on account of Station Machinery	13,425	6 9		
Stores in hand on account of Joints and Crossings	2353	3 11		
Brick making Stock Account	2090	9 3		
Unfinished works in the Terminal Work-shops for General Stores and Traffic Departments subsequently charged	474	6 2		
Permanent Way Materials taken out between Beypore and Kadalundi stock at 4 th Division S. W. Line	1283	11 2		
Surplus stores remaining in the Terminal Workshops	954	9 6		
Screw piles received into Stock at Depot	4390	0 0		
Value of old rails removed from the line and credited to Divisions now in stock	107,694	12 3		
Value of Iron works, &c, received from England for strengthening Bridges in July 1891, Stock at Depot	16,909	13 0		
Total			1,94,966	10 9

Engineering Department.

Surveying Instruments
List of stocks in hand on the 31st December 1891.

Names	1 st Division S. W. Line.	2 nd Division S. W. Line.	3 rd Division S. W. Line.	4 th Division S. W. Line.	5 th Division S. W. Line.	6 th Division S. W. Line.	7 th Division S. W. Line.	8 th Division S. W. Line.	9 th Division S. W. Line.	10 th Division S. W. Line.	11 th Division S. W. Line.	12 th Division S. W. Line.	13 th Division S. W. Line.	14 th Division S. W. Line.	15 th Division S. W. Line.	16 th Division S. W. Line.	17 th Division S. W. Line.	18 th Division S. W. Line.	19 th Division S. W. Line.	20 th Division S. W. Line.	21 st Division S. W. Line.	22 nd Division S. W. Line.	23 rd Division S. W. Line.	24 th Division S. W. Line.	25 th Division S. W. Line.	26 th Division S. W. Line.	27 th Division S. W. Line.	28 th Division S. W. Line.	29 th Division S. W. Line.	30 th Division S. W. Line.	Total	
<u>Surveying Instruments</u>																																
Arrows	61	30	14	36	19	43																									203	
Barometers in case				1																												1
Boxes, Color	1		2	2	1	2																										8
Brushes sable	10	17	12						4																							43
Compasses, Prismatic, in case		1																														1
Curves, Radii	boxes	1	1	1	2	1	2																									9
Chains, measuring 100 ft.		1		1		1																										3
do do 66		6	3	2	7	2	3	2	1																							26
do of sizes																																1
do for cylinders																																1
Cases, Tin, for maps	2	2																														4
Edges, Straight steel			1	1	1	2	2																									7
Instruments, Mathematical, in case	1	1	1	1	1	2	1																									9
do do in Fish skin case, Incomplete			1			2																										3
Levels, Curvay, with stand N° 25	1	1	1	3	2	2	4		9																							35
Protractors, Circular		1		1	1	2																										5
Pins drawing brass		20							12																							32
Poles, Surveying			6																													6
Plumb Bobs, Brass		1	1			3																										5
Plates, color	4	1							6																							11
Rulers, Parallel, Wooden, steel	1			2	1	1	16																									22
do Brass		1	1	1		3	1																									8
Rods, Ranging	3	8		9			11																									31
Rod, 30 feet									1																							1
Staves, Levelling	1	4	2	4	2	3	2																									18
Squares						9																										9
do Vulcanized		4	2		1																											7

The stock shown against the Papagni Bridge is that which stood on the 30th April 1892.

Names.	1 st Division. S. W. Lane.	2 nd Division. S. W. Lane.	3 rd Division. S. W. Lane.	4 th Division. S. W. Lane.	1 st Division. S. W. Lane.	2 nd Division. S. W. Lane.	Refugee Bridge.	Swander	Chief Engine Office	General Works	Telegraph Engineer	Total
Squares & Ebony		1	2	3	3	3	1					13
Leah's, Pocket, in case						1						1
Leads, Assorted, Boxwood and Ivory	11		5	12	4	7	7			3		49
—so— Boxwood and offsets in case		1				12	7					20
Theodolites with stand	1	1	1	2	1	2	3		11		3	25
Telescopes, Portable							1					1
Thermometers							2					2
Tapes, Measuring, of Sizes	20	14	15	15	21	14	7	11		4		111
—so— steel = 50 feet, 100-ft		1				1	2	1		3		8

Madras Railway. 48 F.
4th Division, South West Line.

List of Permanent Way Materials with half value taken out
from the line between Bexford & Kadaloondi in London 31st December 1891.

Description	Stock remaining on hand on 30 th September 1891	Manufactured in the Division Small Boats	Expended	Transferred	Balance in hand on 31 st December 1891	Remarks
Chairs C Iron 2 nd hand	279	.	65	.	214	
Fish Bolts for 75 th Rails - do	251	"	192	.	59	
Plates for " " " "	38	41	"	79	.	
" " " 65	261	41 ^x	"	"	220	*Converted into 75 th
Sleepers Teak 10'-0" x 12" x 6"	146	"	13	"	133	
" " " 10'-0" x 10" x 5"	5	"	3	"	2	
Pot. Sleepers	798	"	1	"	797	
Tie Bars	977	"	242	"	735	
Cotters	428	"	20	"	408	
Gibs	792	"	"	"	792	
Teak keys	880	"	"	"	880	
Treenails Iron	18946	"	530	"	18416	
Rails Iron 75 th 20 ft	56	"	3	"	53	
" " " 65	681	"	228	"	453	
" " " 17	43	"	"	"	43	
" " " Steel 75 " 20 "	82	"	10	"	72	
Rails stock	22	"	"	"	22	
" " " Tongue	22	"	"	"	22	
" " " Crossing V. Portion	9	"	"	"	9	
" " " Check	26	"	"	"	26	
" " " wing	18	"	"	"	18	
Chairs A	6	"	"	"	6	
" " B	5	"	"	"	5	
" " C	6	"	"	"	6	
" " D	6	"	"	"	6	
" " E	44	"	"	"	44	
" " F	18	"	"	"	18	
" " Sliding	99	"	6	"	93	
" " Single block	22	"	"	"	22	

Description.	Stock remaining on hand on 30 th September 1891.	Manufactured in the Divisional Stores	Expended	Transferred	Balance on hand on 31 st December 1891.	Remarks
Chairs Double	20	"	1	"	19	
Rods connecting	8	"	"	"	8	
— Cross —	20	"	"	"	20	
Switch Boxes with weights	11	"	1	"	10	
Bolts oblong	91	"	"	"	91	
— Nut headed —	4	"	"	"	4	

Description	Quantity	Remarks
Wheels light trolley	N 5	
Arms Semaphore	" 5	
Beaters	" 6	
Bolts of Sizes	" 48	
Blocks Iron for chain	" 2	
" Snatch	" 3	
Bars Iron large	" 29	
" " Small	" 16	
" Pinch	" 2	
Bottoms for Crane jib	" 3	
" Framing for Boiler	" 2	
Brackets Semaphore	" 3	
Bench wooden	" 1	
Bell Brass Station	" 1	
Chain Measuring	Bundles 24	
Couplings Screw	N 52	
Caps for pile	" 23	
Cotters for Trusses	" 19	
Column C. I. of Sizes	" 20	
Cramp Joiners	" 1	
Crossing Solid	" 19	
Couplings for pile	" 19	
Crab winch	" 2	
Divers Boots	Pair 1	
Dolly Iron	" 1	
Doors of Sizes	" 6	
Excavators	N 10	
Frames Spectacle	" 12	
Funnel Large	" 2	
Gyres Centre-fugal pump	" 1	
Gate Wooden	Pairs 2 1/2	
Girders 41'-9"	N 2	
	342 3	

Description	Quantity	Remarks
Girders 18'	N ^o 2	
Glasses Bulls' eye	" 17	
Hooks for crane chain	" 6	
" " sling	" 3	
" couplings	" 3	
" Block chain	" 2	
Leggings for Divers	" 5	
Lever with weights for Distant Signal	" 2	
Light sky wooden	" 10	
Lamp stand	" 1	
" Hammocks	" 22	
Monkey Iron for Pile driving	" 4	
Mangowood Pieces	" 129	
Pickaxes	" 125	
Piles of sizes	" 23	
Pulleys for chain	" 3	
" vertical for Distant Signal	" 1	
Hooks Crane	" 5	
Powder Sulphur	lbs 115	
Pipe Angle Flange 3-4x3	N ^o 1	
Pipe Bend " 6-4x9	" 2	
" Branch 4x6	" 1	
" " 3-6x6	" 14	
" " 3-6x4	" 2	
" Flange 8x6	" 3	
" " 6x6	" 6	
" " 4x9	" 3	
" " 3-4x2 1/2	" 1	
" " 3x2 1/2	" 1	
" " 3-9x2 1/2	" 3	
" " 2 1/2x2 1/2	" 1	
" for water column 10-11x8	" 5	
" " " 6x6	" 1	
" " " "	" 1	

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Description	Quantity	Remarks
Pipe Flange Bend 5-5x9	N ^o 2	
" " 4-9x6	" 7	
" " 4-7x7	" 5	
" " Bend 3" Diameter	" 19	
" " Socket 4-6x3	" 3	
" Hose Indian Rubber	" 13	
" Rain 4-7x3	" 7	
" " 4-2x3 1/2	" 23	
" " 3-8x3	" 5	
" " 1 1/2x3	" 2	
" Socket Bend 2 1/2x8	" 1	
" " " 2-2x4	" 6	
" " Straight one end 9-1x12	" 1	
" " " 8-5x10	" 1	
" " " 3x6	" 3	
" " T 4x4	" 3	
" " T 3 1/2x6	" 4	
" " T 3 1/2x4	" 5	
" " T 3x7	" 6	
" " T 1-10x4-6	" 17	
" T 2-6x4-6	" 2	
Plane Bead with Iron	" 3	
Plate Bed Iron	" 23	
" " " "	" 7	
" " " "	" 12	
" Iron	" 6	
" " " "	" 1	

Description	Quantity	Remarks
Plate Iron	N ^o 4	
" Bed Iron	" 4	
" Iron of sizes	" 84	
" Bridge	" 21	
Rope Manila	Coil 1/2	
Rollers C. I.	N ^o 48	
Rods Lengthening	" 2	
Racks for hanging Couplings	" 1	
Ratchets for screw jacks	" 3	
Rods Measuring	" 8	
Rollers C. I. with Pedestals	" 19	
" Crushing machine	" 19	
Rail Gauge	" 4	
Check	" 6	
" Flat Bottom	" 17	
" v Portion	" 8	
" Tongue	" 36	
" Wing	" 10	
" Pieces of sizes	" 98	
Spanners of sizes	" 7	
" Box	" 2	
Scale counter with 8 weights	" 1	
Soles Iron for Divers Boots	" 8	
Shaw Case	" 1	
Hand Commode	" 2	
Standards for drawing table	" 2	
" for Theodolite	" 7	
Staves Levelling	" 4	
Swords without Scabbards	" 2	
Steel Crossing	" 2	
Taps and dies incomplete	Set 8	
Loft for Crane Jib	N ^o 3	
Life I Flange	" 3	

Description	Quantity	Remarks
Tripod Iron	N ^o 1	
Weights Lever	" 5	
" 56 lbs	" 22	
" 28 "	" 5	
" 7 "	" 6	
" 14 "	" 7	
" 4 "	" 6	
" 2 "	" 2	
Wheels Trolley	" 4	
" Fly Large	" 2	
" Small	" 2	
" Pinion	" 6	
" Truck	" 4	
Window Glass	Pairs 1	
" Gothic	N ^o 1	
" Panel	" 1	
" venetian	" 5	
Wells Lamp	" 2	
Bell Fire	" 1	
12		
5-11-92.		
(Sd:) John B. American,		
Engineer in charge,		
Terminal Works.		
13	243	3

57 H

List of articles warehoused by the General Storekeeper for the Engineering Department, Madras Railway at 31st December 1891.

Description	Quantity	Remarks
Locket Sextant	No 1	
Telescope		
T Iron 4" x 3" x 1/2"	Pairs 12-1847	
T Iron 5" x 3" x 1/2"	Pairs 14-4362	
Lamp Carriage side without Burner	No 1	
" Tail Red with Burner	" 1	
" " Green without "	" 1	
" " old mirror with do and Reflector	" 1	
Lamps English Wall Platforms with Burner, Chimney and 2 Reflectors	2	
Lamp Post (Danger with Burner	No 2	
Lantern Hand Country	" 1	
Semaphore Tin Case with Burner Oval	" 2	
Lamp Street Small	" 5	
Gauges Iron for Rails	" 23	
Mammoties	" 228	
Caps Wooden for Tents	" 6	
Bars malleable for fencing	No 3	
Line Pieces	Case 1	
Bolts with nuts 1 1/2" x 7/8"	No 20	
Hand Washhand double	No 1	
" " Single	" 1	
" " Coat	" 2	
Basins Crockery white	" 1	
Scale Counter	" 1	
Pulley Block with chain	" 1	
Commodore Iron	" 1	
Blocks of size	" 17	
Nails Iron spike 6" for roofing	3991	
Rivets Iron of size	lbs 848	
Flannel Inside	Pairs 12	
Watchers Guards	No 10	
Pump Air (Diving)	" 1	

Description	Quantity	Remarks
Levels spirit	10	4
C. I. Spectacle Frame.	2.	

I.

Extract from the Report by the Examiner of
Railway Accounts on the Suspense Balances of the
Madras Railway Company on 31st March 1892.

I. Stores. - (a) The store balances have increased during the financial year by Rs 1,13,484. The increase arises chiefly in material for renewal of rails and bridges and on fuel.

(b). On 31st December 1891, the main ledgers balances amounted to ----- Rs 29,86,175 and priced store lists to ----- " 31,74,568 resulting in an excess of ----- 1,48,393 on deposit balances over main ledgers.

(c) Of this excess, Rs 38,227 is attributable to purchases and sales not entered in the main ledgers and Rs 1,10,166 to an excess of the stock lists over the balance shown on the main ledgers.

(d). The detailed stock lists include several large adjusting entries and it would appear advisable to introduce a more efficient system of agreement between the debits to the main and store ledgers by means of purchase

purchase and sale accounts and priced receipts and issue books and further to reduce the value of pendencies to a minimum and insure each half-year being charged with the actual issues of the period.

Form No. 1.

PUBLIC WORKS DEPARTMENT.

OFFICE OF CONSULTING ENGINEER FOR RAILWAYS,

Madras, 15th February 1893.

Letter from the Exam^r, Guaranteed
Railway Accounts, Madras, N^o 29, dated
18th January 1893, with enclosures.

19

No. 85

Endorsement by the Govt. for the Railway Accounts, 1893.

SUBMITTED. _____ to Government. for
transmission to the Director
General of Railways in
continuation of this office
endorsement N^o 662, dated
3rd September 1892, embodied
in Proceedings of Government
N^o 2203 R, dated 13th September
1892.

Subject.

M. M. M. M.
Major R. E.
for the Sup^r of Railways
Madras

OW 8.1/1893
1476/53

P. W. CURRENT No. 1476

FORM No. 3.

From

THE CONSULTING ENGINEER

FOR RAILWAYS,

Madras,

No. 2203 R d/13-9-72 ✓

No. 85

Dated 15th } February 1893
Received 16th }

No. of ENCLOSURES. / 1

Subject.

Submitting, for transmission
to the Director-General of Rail-
ways, the Report by the Exa-
miner of Ry. Accounts, Madras,
on the Stock lists of the engi-
neering stores prepared by the
M. Ry. on 31st December 1891.

51

FOR
CR.

No. 380 R d/ 20th Feb/93.

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Endorsement by the } No. 85 dated 15th Feb/1893.
Eng: for Railway Madras

21 P

The Government direct
that before further action
be taken on the report now
submitted by the Examiner
of Guaranteed Ry. Accounts,
Madras, the Agent and
Manager, Madras Railway,
may be asked to inquire into
the several points raised
therein, & furnish Government
with an expression of his
views regarding them.

for
72th) M¹⁵
2

M¹⁵
2
OR.

nent.

A
No 380 R 820 7

addressed
100 of
Locomotive
from
the
the 13th of
Madras

J.C. 20/2
Hem. 16/2. R 18/2