M.R.O. 1—77,006—8-6-37.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 2693 Press / Mis.
256-257

Dated 15-11- 1872.

Not to be folded or roughly handled

No. 256. Read the following letter from the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 3rd October 1872, No. 529 :—

UPON my return to Madras on the 24th ultimo, I found two further letters* awaiting me from the Agent of the Madras Railway upon the subject of the Bangalore Branch, and the Deputy Consulting Engineer's reports. Before submitting them to Government, I was obliged to refer them to Captain Thompson, who was then on a tour of inspection, for any observations he might wish to make upon them in connection with his reports ; and I have now the honour to request that you will be so good as to lay them before Government, with Captain Thompson's letter of the 30th ultimo. Previous correspondence on the subject is recorded in the following orders of Government :—

* No. 676, dated 17th September 1872.
,, 684, ,, 18th ,, ,,

No. 1,804, dated 30th July 1872.
,, 2,003, ,, 22nd Aug. ,,
,, 2,257, ,, 23rd Sept. ,,

2. It will be seen that there is an almost irreconcilable difference between the testimony borne by the Railway Engineers and that borne by the Deputy Consulting Engineer, as to the condition of certain portions of the Bangalore Branch in June last. Some of the extraordinary difference between these statements may perhaps be accounted for as suggested by Captain Thompson ; but however that may be, I am bound to state my belief that that Officer was not mistaken in his description of the condition of the road on the occasion of his first inspection. It seems impossible to believe that any one could be mistaken when stating that he saw certain sleepers and tie-bars exposed ; but Captain Thompson's statement is incidentally supported by other evidence. Captain Smith, three months* before, had found a considerable deficiency of ballast on the same part of the line ; and when inspecting the branch on the 7th September, Captain Thompson drew my special attention to the points at which he had noticed the deficiency of ballast in his first report, and it was evident at each place that repairs had lately been made. At one or two of the places parties were actually at work on the day of our inspection.

* See report printed with G. O., 25th March 1872, No. 835.

3. I need scarcely say that my one wish in the matter has been to insure the Bangalore Branch being put into a satisfactory condition, and this I am happy to say is now the case. The certificates which accompany the half-yearly Revenue Accounts, and which I am called on to countersign, are as follow :—

I hereby certify that the whole of the Company's permanent-way, stations, buildings, telegraph, fencing, etc., have during the past half- year been maintained in good working condition and repair.

(Signed) A. B.
Chief Engineer.

I hereby certify that the whole of the Company's plant, engines, tenders, carriages, wagons, machinery, and tools have during the past half-year been maintained in good working order and repair.

(Signed) C. D.
Locomotive Superintendent.

I hereby certify that the certificates given above by the Railway officials are correct.

(Signed) E. F.
Consulting Engineer.

With Captain Smith's report for March, and Captain Thompson's for June, before me I knew that I should have a misgiving in countersigning these certificates for the first half of 1872; and, under the circumstances, I thought it right to let the Railway Authorities know that, unless there were a decided improvement, I might find myself unable to countersign the certificates for the second half of 1872.

From the Officiating Deputy Consulting Engineer for Railways, to the Consulting Engineer for Railways, dated Bangalore, 30th September 1872, No. 3-R.I.

I HAVE the honour to acknowledge the receipt of your memorandum No. 818 of the 25th instant, forwarding letters Nos. 676 and 684 of the 17th and 18th instant, respectively, to your address from the Agent of the Madras Railway Company, for such remarks as I may wish to make upon them and their enclosures in connection with my reports dated 28th June 1872 and the 10th September 1872.

2. I have carefully perused the Agent's letters and enclosures above referred to; but as his statements and those of the Chief Engineer, Madras Railway Company, and the Engineer in charge of the Bangalore Branch are so diametrically opposed to statements which I have made in my reports of the 28th June and 10th September 1872—statements made most deliberately from actual observation with my own eyes, I can only come to the conclusion that there must be *not a mistake but a misunderstanding* somewhere.

3. I have endeavoured to discover where such a misunderstanding could arise, and I believe that I have been in some degree successful.

4. It appears to me that the Madras Railway officials above referred to and I differ in opinion, first, as to what constitutes an urgent want of ballast at any point in an iron permanant way; second, as to what constitutes ballasting or re-ballasting a portion of line.

5. With regard to the first question, my opinion is that at any point where the tie-bars and about one-third of the surfaces of the pot-sleepers are exposed, the line at such point should be re-ballasted as soon as possible; that it is in fact *urgently in want of ballast*, although not absolutely in a *dangerous* condition.

6. From what I can gather from the letters of the Chief Engineer and the Engineer in charge of the Bangalore Branch, they do not consider a portion of the line to be in urgent need of ballast until it has become absolutely dangerous from want of it.

7. With regard to the second question, namely, as to what constitutes ballasting or re-ballasting, I consider that when on a portion of line the ballast has

been carried down on the side walks or slopes by weather or vibration, and the ballast so carried down has been re-collected and replaced on the line, such process is to all intents and purposes ballasting or re-ballasting that portion of line.

8. The Chief Engineer and the Engineer in charge of the Bangalore Branch, however, do not appear to consider that such a process as I have just described comes within the meaning of the words ballasting or re-ballasting; but that to ballast or re-ballast a portion of line, the material required must be brought to the spot by ballast train and there deposited.

9. If these differences of opinion are held in view, our very opposite statements about the same portions of line may to a great extent be reconciled.

10. In support of my assumption as to the meaning the Chief Engineer and Engineer in charge of the Bangalore Branch attach to the words "urgent need of ballast," I beg to refer you to letters Nos. 216 and 233 and dated respectively 31st August 1872 and 15th September 1872, from the Engineer in charge of the Bangalore Branch to the Chief Engineer of the Madras Railway. I have underlined in red ink the portions of the letters I wish you to refer to.*

* The portions referred to are printed in italics.

11. My assumption as to the meaning these gentlemen attach to the words "ballasting or re-ballasting," you will, I think, fully find justified by a reference to the ballast statements forwarded to the Chief Engineer, Madras Railway, by the Engineer in charge of the Bangalore Branch, with his letter No. 233 of the 15th September 1872, in which mention is invariably made of "*deposited train ballast*" and "*dates extracted from Ballast Guards' and Permanent-way Inspectors' reports.*"

12. Holding the opinions which I did, and still do, regarding the meaning to be attached to "an urgent want of ballast" on an iron permanent-way, and "ballasting or re-ballasting," I beg most emphatically to reiterate what I stated in paragraph 11 of my report dated 28th June 1872, regarding the points at which ballast was "urgently required." I also beg most emphatically to reiterate what I have stated in my subsequent report dated 10th September 1872, namely, that during the interval which elapsed between the dates of these two inspections, the portions of line referred to in paragraph 11 of my report dated 28th June 1872, had been "attended to and are now as well ballasted as could be desired."

13. In paragraph 8 of his letter No. 676 of 17th September 1872, the Agent of the Madras Railway Company writes "what is meant by the words attended to" which occur in "paragraph 3 of the Officiating Deputy Consulting Engineer's report of the 10th instant, I must leave to that Officer to explain."

14. By "attended to," I mean that the attention of the executive had been given to the portions of line referred to, and that either by collecting and replacing the ballast which had been carried away by weather and vibration, or by putting on material brought to the localities either by ballast train or otherwise, the tie-bars and pot-sleepers which were before greatly exposed had been recovered and the roadway brought up to equally good condition with the rest of the line.

15. I must beg to remind you that on the occasion of my last inspecting the Bangalore Branch, namely, on the 10th instant, I pointed out to you each of the places referred to in paragraph 11 of my report of 28th June 1872 as being "urgently" in need of ballast, and that at each one of these points work had either

very lately been carried out as evinced by the freshness of the soil and absence of all signs of having withstood much weather, or working parties were at that moment engaged in repairing them.

16. That the condition of the portions of the line referred to in paragraph 11 of my report of 28th June was the same when last as when [illegible] on by me, I absolutely and emphatically deny. When first inspected by me they were in what I considered and consider an unsatisfactory state, tie-bars and pot-sleepers being exposed. They were on my second inspection in what I considered and consider a perfectly satisfactory condition as regards ballasting, tie-bars and pot-sleepers being all covered.

17. As I have already said in the last paragraph of my report dated 10th September 1872, "since my last inspection a great deal has been done throughout the whole length of the line in improving the roadway and replacing the ballast, which from weather and vibration had been carried down the side slopes of the roadway in embankments and into the side channels in cuttings."

From the Agent and Manager of the Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 17th September 1872, No. 676.

I HAVE the honour to acknowledge the receipt, on the 12th instant, of your letter No. 740, dated the 11th idem, with which you forwarded to me a report made by the Officiating Deputy Consulting Engineer as to the condition on the 7th instant of the permanent-way on the Bangalore Branch of this Railway.

2. In that report Captain R. Thompson alludes to those portions of the line which in paragraph 11 of his report of the 28th June last he described as being "urgently in need of ballast."

3. He states that those portions of the line have since been "attended to," and that with the exception of the line at the 153rd mile, the whole branch was on the 7th instant in excellent order throughout.

4. I will not allude to the condition of the 153rd mile further than to state that some days before the receipt of your letter under acknowledgment the Engineer in charge of the Bangalore Branch had reported* that the line at that point would require renewal, and at the time the branch was being inspected by yourself and Captain Thompson the road was being "lifted" and the necessary repairs executed. I beg, however, that it may be particularly pointed out to the Government that the 153rd mile is not one of the points described in the Officiating Deputy Consulting Engineer's report of the 28th of June as being "urgently" in need of ballast, or even as requiring ballast at all.

* *Vide* Mr. Wilkinson's letter No. 225 of 9th September 1872. Copy sent to Consulting Engineer with letter No. 665 of 13th Sept.

5. With reference to the points mentioned in paragraph 11 of that report as "urgently" in need of ballast, I have already informed* you that, up to the 31st ultimo, no ballast had been placed upon the Bangalore Branch at the points in question since Captain Thompson's inspection in June. Upon receipt of your letter No. 740, I requested the Chief

* *Vide* my letter No. 630 of 31st August 1872, paragraph 1.

Engineer to let me know whether any repairs had been executed to those particular points of the line since, and I learn* that after personal inquiry and reference to the returns of ballasting, Mr. Wilkinson reports that all the places mentioned in paragraph 11 of the Officiating Deputy Consulting Engineer's report of June last, except one (the repairs at 185-14 and 185-15 having been commenced on the 8th of September, the day after your inspection,) were on the 7th instant in the same condition as regards ballast as they were on the 28th of June last, with the exception of the wear and tear they had undergone in the meantime. That is to say that during the interval no ballast (except at the 169-18th mile) had been placed upon the points of line in question. That ballast was not required at those points as has been throughout maintained by the Chief Engineer, will, I presume, looking at the opinion expressed in your letter under reply, now be admitted.

* Mr. Anderson's report, etc., etc., will follow.

6. Thus on the 5th of July you called upon me to report, for the information of Government, that certain repairs to the line had been executed which your department considered necessary. In reply you were furnished with the written opinion of the Chief Engineer that the repairs in question were not necessary, and that the line was in excellent order throughout. Being in possession of that opinion you again on the 29th of August inquired whether the repairs had been carried out, adding that, "in the event of the repairs in question not being executed before the close of the year, I may be unable to countersign the certificate respecting the permanent-way, etc., which is attached to the half-yearly Revenue Accounts."

7. On the 7th instant, under the circumstances explained above, you inspected the Bangalore Branch yourself in company with Captain Thompson, and in your letter No. 740 of the 11th instant, you informed me that you had much pleasure in endorsing Captain Thompson's remarks as to the generally good condition of the line.

8. What is meant by the words "attended to" which occur in paragraph 3 of the Officiating Deputy Consulting Engineer's report of the 10th instant, I must leave to that Officer to explain; but as you mention that a copy of that report has been forwarded to the Government, I request that you will be so good as to forward to Government a copy of this letter also, so that the facts of the case may be known when the subject is under the consideration of His Excellency the Governor in Council.

9. Adverting to paragraph 4 of your letter under reply, I beg to enclose, for the information of Government, copy of a Circular issued by the Consulting Physician which will, I trust, prevent the practice of which you complain.

Circular memorandum from the Consulting Physician of the Madras Railway Company, to the Conservancy Inspectors, Madras Railway Company, dated 14th September 1872, No. 242.

THE Consulting Physician has come to know that the privies at stations are used by Station Masters and other servants of the Company. When used by such servants *travelling*, no objection can be raised; but the proceeding is highly irregular and objectionable when a Station Master uses the station bath-rooms at his own station, or the Firemen and Drivers of any particular station resort to those rooms, instead of the latrines of their own dwellings. You are, therefore, requested to report every instance in which the irregularity occurs to the Consulting Physician.

From the Agent and Manager of the Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 18th September 1872, No. 684.

In continuation of my letter of the 17th instant, No. 676, I have now the honour to enclose, for submission to His Excellency the Governor in Council, a copy of the Chief Engineer's letter of the 16th instant, No. 434, giving cover to two letters and two statements from Mr. Wilkinson, having reference to the alleged want of ballast on the Bangalore Branch, as represented in Captain R. Thompson's report of the 28th of June last.

2. Mr. Anderson's letter is so complete in itself, and the statements prepared by Mr. Wilkinson regarding ballast are so conclusive, that I do not consider it necessary to make any comment upon these documents.

From B. ANDERSON, Esq., Chief Engineer, to the Agent and Manager of the Madras Railway Company, dated Madras, 16th September 1872, No. 434.

Consulting Engineer's letter No. 740 of 11th instant, forwarding copy of a report dated 10th idem, from the Officiating Deputy Consulting Engineer.

1. In the 2nd paragraph of his letter Colonel Shaw-Stewart draws attention to a certain portion of the 153rd mile where "for some eight or ten chains the pot-sleepers and tie-bars were completely uncovered, and for that distance the road was in a condition far from satisfactory."

2. It should be unnecessary to point out that the permanent-way of a line of Railway is kept in perfect condition only by constant care and watchfulness. No amount of attention however can keep the line from settling down in certain places, especially after three months of such severe rain as the Bangalore Branch is exposed to, and has just undergone, during the south-west monsoon.

3. The part of the 153rd mile referred to had just been what is called "lifted" before the Consulting Engineer's inspection. The operation is a very simple one, but in order to be effectually performed it is necessary that the ballast should be removed from the pot-sleepers to admit of the packing required underneath the sleepers to bring the road to its proper level.

4. No careful Engineer would think of removing the old ballast, and "lifting" the road unless he had a stock of new ballast ready to restore the road to its proper condition. The Consulting Engineer states that a working party was engaged in putting on additional ballast when he passed, so that the necessity for any remarks upon the condition of the road is not apparent.

5. The necessary orders have been issued with reference to the Coracapillay fence between Madras and Arconum noticed in the 3rd paragraph of Colonel Shaw-Stewart's letter.

6. I have now to deal with the 2nd, 3rd, and 4th paragraphs of the Officiating Deputy Consulting Engineer's report.

7. In the 11th paragraph of his report dated 28th June, Captain R. Thompson indicates no less than thirty-five places on the Bangalore Branch as "requiring ballast," and twenty-three as "urgently requiring ballast." Such a statement, if correct, would reflect much discredit upon the Engineer in charge of the branch, and upon myself as head of the Engineering Staff; I therefore refrained from communicating the Officiating Deputy Consulting Engineer's remarks to Mr. Wilkinson until I had an opportunity of satisfying myself as to their accuracy.

8. In my letter No. 349 of 22nd July, I was able to give you my assurance that not a yard of the Bangalore Branch was urgently in want of ballast, and that assurance is now most fully confirmed by Captain R. Thompson, who states that those portions of the line to which he referred "are now as well ballasted as could be desired," and by the Consulting Engineer who has "great pleasure in endorsing Captain Thompson's remarks as to the generally good condition of the line."

9. The Government having read Captain R. Thompson's report of 28th June, and the very extraordinary and wholly uncalled for threat contained in the 2nd paragraph of Colonel Shaw-Stewart's letter No. 692 of 29th ultimo, will no doubt now be greatly astonished to learn that, of the fifty-eight places indicated as "requiring" and "urgently requiring ballast," but three have had ballast put upon them since the 28th June.

10. When it is remembered that in the meantime the line has been exposed to the very worst and most trying months in the year, it will be perfectly plain how entirely mistaken the Government Officers have been throughout, and how fully justified I was in resisting the Consulting Engineer's misjudged attempts to force me to remedy "defects and omissions" that are now shown never to have existed.

11. I forward two letters received from Mr. Wilkinson, one No. 216, dated 31st August, which will satisfy the Government of the anxious care Mr. Wilkinson bestows upon the line under his charge, and the other No. 233 of 15th September, which encloses two statements showing when ballast was last deposited in the places referred to by the Officiating Deputy Consulting Engineer.

From A. T. WILKINSON, Esq., to B. ANDERSON, Esq., dated Bangalore, 31st August 1872, No. 216.

In reply to your telegram asking when I ballasted the Bangalore Branch, I beg to enclose two returns showing the miles and dates on which ballast has been deposited since 1st January by train and by basket. As mentioned in my rough note from Jollarpett this morning after receipt of the telegram, I never heard of Captain Thompson's report until 13th July when you read out certain miles and telegraph posts as we approached them between Colar Road and Bangalore stations at which ballast was said to be "urgently required." By this expression I understand the Inspecting Officer to mean that, in his opinion, there was pressing necessity for an immediate supply of ballast at the places indicated. You did not leave me a copy of the report, and I do not now remember the places mentioned in it, neither do I know the date of the report; you, however, will see by the returns when and where ballast was deposited, but this I will vouch for that on no occasion, or in any place, has ballast been in any degree "urgently required" since the division has been in my charge.

2. The merely partial exposure of the upper surface of pots and of the tie-bars consequent upon the lifting necessary for maintenance of road level and the opening out for periodical examination of pots, tie-bars, and their fastenings *has no element of danger in it*, and I should feel it unbecoming to express this truism to you were it not that an extract from one of Captain Smith's reports was sent to me sometime since in which the remark "pots and tie-bars exposed" occurs. No suggestion as to the manner in which platelayers' work should be executed to avoid this partial exposure accompanied the extract, and it was therefore simply filed.

3. I have vouched for the sufficiency of ballast *to ensure the safety of the road*, and will now show you from my diary that frequent personal inspection has enabled me to do so. Going no further back than the 2nd of May, the cyclone day, I most anxiously inspected the Bangalore Branch from engines, and reported to you in my No. 101 of 3rd May, that all was safe. On 4th May I inspected the whole division from engines with more than ordinary care; in consequence of the storm re-examined it on my return to Jollarpett as long as daylight lasted, and on Sunday, 5th May, closely watched the Bangalore Branch from engine, and in my No. 103 of 6th May, reported the whole division firm and safe, with the exception of a very slight displacement of ballast by wash which had been repaired before I reached the spot, which was at the 181st mile, Bangalore Branch.

13th, 14th, 15th May.—Inspected the whole division from engines.
22nd and 23rd May.—Inspected as far as Sumulputty by engine and trolly.
28th May.—To Mullapooram by night.
29th and 30th May.—Inspected the whole division from trolly and engine.
4th June.—To Mullapooram.
5th ,, —From Mullapooram inspected road and bridges, 14 miles by train to Jollarpett.
6th ,, —Inspected by engine Jollarpett to Morapore, 34 miles, and by trolly back to Sumulputty, 14¾ miles; returned to Jollarpett.

7th June.—Inspected road by engine to Sumulputty, 20 miles, and again by trolly back to Jollarpett and to Bangalore.

10th June.—Inspected by trolly Bangalore to Malloor, 24 miles; returned to Bangalore.

14th ,, —To Malloor by night.

15th ,, —Inspected from Malloor to Colar Road by trolly, 16¾ miles; back to Bangalore by train.

16th ,, —(Sunday) by 8-30 P. M. to Colar Road; ready on

17th ,, —To inspect by trolly to Coopum, 21¾ miles.

18th ,, —Inspected by trolly to Jollarpett, 22¼ miles.

19th ,, —To Bangalore by night.

20th ,, —By 9 A. M. to Coopum, thence inspected by engine and trolly to Jollarpett, 22¼ miles.

21st ,, —Inspected 40 miles of main line by trolly and returned to Bangalore.

28th and 29th June.—To Mullapooram.

1st July.—Returned to Jollarpett, carriage. Inspected Bangalore Branch by engine. From 3rd to 13th July, on which latter date I went to meet you at Colar Road, a severe cold prevented my travelling.

4. I submit these full details of two months' travel at the risk of fatiguing you, for the purpose of asking whether you can conceive it *possible*, after such repeated journies by engine over the whole division taken for the sole object of inspection, one complete trolly inspection of road and bridges besides extra trolly work for special observation (as on 20th and 21st June) that any "urgent" defect or need *could* escape notice.

5. Nor has there been any reason for starving the road as you have never stinted me in ballast, and I can only say now of the places you read out from the list, what I remarked to you at the time, that had there been any *more* ballast on these than there was I should have censured the Inspectors for wastefulness.

From A. T. WILKINSON, Esq., to B. ANDERSON, Esq., dated Bangalore, 15th September 1872, No. 233.

YOUR No. 877 of 12th current, and in continuation of my No. 231 of 13th in reply, I now enclose two statements, one of section I and the other of section 2, *showing when ballast was* LAST *deposited* and where, on the miles quoted in a letter from the Officiating Deputy Consulting Engineer dated 28th June 1872. I trollied yesterday over this distance (43 miles) returning at mid-day to-day, and very carefully examined all the places enumerated. I regret that, in consequence of the shortness of time to enable me to get this return to you by tomorrow morning, it is not so well tabulated as I should desire; but I have just and only time to remark the singularity of the fact that out of fifty-eight places mentioned as requiring ballast, twenty-three of these "urgently," only three have had ballast placed on them since 28th June, one in August and the others on the 8th of this month, and I can very confidently state *that, so for as the* SAFETY *of the road* was concerned, both of these places might have gone a very much longer period untouched.

THE DATES GIVEN ARE THE LATEST ON WHICH BALLASTING HAS BEEN DONE.

Extract from a letter from the Officiating Deputy Consulting Engineer for Railways, dated 28th June 1872.

Ballast required.	1st Section, 2nd Division, South-West Line.	Remarks.
196 10	Deposited train ballast, 196-8 to 13.	19th March. *None since.* Well ballasted now.
195 13	No ballast deposited this year.	All covered; lowest place 5″ below rail level.
195 12	Do. do.	
194 14	Deposited train ballast 194, 1 to 14.	On 21st to 26th March; ballast nearly level with rail. *None since.*
194 13	Lowest ballast 4½″ below rail level.	Well ballasted.

Extract from a letter from the Officiating Deputy Consulting Engineer, etc.—(Concluded.)

Ballast required.	1st Section, 2nd Division, South-West Line.	Remarks.
194 10	.....	Ballasted well up.
194 2	.....	Do.
194 3	.....	Do.
193 9 193 4	Deposited train ballast 193, 569 and 14 to 16.	On 26th March. Well ballasted. *None since.*

Dates extracted from Ballast Guards' and Permanent-way Inspectors' reports, and the road personally examined by me on 14th September 1872 by trolly.

(Signed) A. T. WILKINSON.

THE DATES GIVEN ARE THE LATEST ON WHICH BALLASTING HAS BEEN DONE.

Extract from a letter from the Officiating Deputy Consulting Engineer for Railways, dated 28th June 1872.

Ballast required.	2nd Section, 2nd Division, South-West Line.	Ballast urgently required.	Remarks.
191 12	Train ballasted 191, 1 to 2, on 15th March (latest date). Well ballasted now.	191 6	See this mile opposite page. Well ballasted now.
191 6		190 7	Train ballasted 190, 14 to 16 on 14th March (latest date). Well ballasted.
189 13	Train ballasted 189, 9 to 11, on 15th March. Well ballasted now.	189 13	See this mile opposite page. Well ballasted now.
189 7		189 7	Do. do.
188 8	Train ballasted 188, 8 to 12, on 16th March. Well ballasted now.	187 14	Train ballasted 187, 1 to 3, on 12th March. Well ballasted now.
182 18	Train ballasted 182, 1 to 6, on 8th March. *Fully* ballasted now.	187 6	Do. do. do.
182 17		185 15 185 14	Train ballasted 185, 6 to 8 and 15, 17, on 13th March. Basket work commenced at these two telegraph posts on 8th September at this date (14th Sept.) 140 lineal feet remain untouched and the road is solid and safe, the old ballast being half way up the keys; ballast is now merely spread for the *width*.
178 16	Train ballasted 178, 1 to 3, on 5th March. Well ballasted now.		
177 20	Train ballasted 177, 11 to 14, on 5th March. Well ballasted now.	184 9	Trains ballasted 184, 1 and 2 and 12 to 16, 14th March. *Fully* ballasted now.
177 19		183 19	(No. 19th post, the last is 18th.) Not ballasted this year. Well ballasted now.
174 8	Train ballasted 174, 2 to 3 and 12 to 14, on 28th February. Well ballasted now.	178 13	Train ballasted 178, 1 to 3, on 5th March. Well ballasted now.
174 7		177 14	Train ballasted 177, 11 to 14, on 5th March. Well ballasted now.
174 6		175 14	Train ballasted 175, 7 to 10, on 5th March and telegraph post 19, 9th March. Basket ballasted 175, 14, in August when tie-bars between rails were visible only.
165 12	Not ballasted this year. Well ballasted now.	169 18	(No. 18th post, the last is 17.) Basket ballasted in August after ordinary lifting; no urgency whatever. Well ballasted now.

Proceedings of the Madras Government, Public Works Department, 15th November 1872.

Extract from a letter from the Officiating Deputy Consulting Engineer, etc.—(Concluded.)

Ballast required.	2nd Section, 2nd Division, South-West Line.	Ballast urgently required.	Remarks.
163 11 163 10	Train ballasted 163, 13 to 18 and 1 to 3, up to 15th May. Well ballasted now.	164 16	Basket ballasted in March. Well ballasted now.
160 5 160 4	Train ballasted 160, 9 to 12, on 15th May. Well ballasted now.	163 6 163 5 163 4	Train ballasted 163, 1 to 3 and 13 to 18, up to 15th May. Basket ballasted in February, and yet the ballast is so high *now* that it has to be opened out for examination of keys
158 17 158 16 158 4	Train ballasted 158, 3 to 8, and 13 to 14, on 1st March. So well ballasted that ballast must be opened to examine keys.	162 2 162 1	Train ballasted 162, 18 on 15th May. Well ballasted.
157 1	See this mile on opposite page. Well ballasted now.	157 17 157 13	Train ballasted 157, 4 to 16, up to 17th May. Well ballasted; there are 4 joint of wooden sleepers on rock well ballasted outside, but only partially showing their upper surfaces between rails.
156 18	Train ballasted 156, 4 to 16, up to 14th May. *Fully* ballasted now.	155 11	Train ballasted 155, 11 to 15, up to 14th May. Fully ballasted, and it had to be opened this week to allow examination of keys.
155 155 18	Basket work in May (No. 19, last is 18, train ballasted 155 11 to 15 up to 14th May.	Fully ballasted; had to be opened for the examination of keys this week.	

Dates extracted from Ballast Guards' and Permanent-way Inspectors' reports, and the road personally examined by me on trolly on 14th September 1872.

(Signed) A. T. WILKINSON.

No. 257. ORDER THEREON, 15th November 1872, No. 2,693.

RAILWAY, No. 48.

ORDERED to be recorded, with the expression of the satisfaction felt by His Excellency the Governor in Council on ascertaining that the Consulting Engineer was eventually enabled to certify that the Bangalore Branch of the Madras Railway had been maintained in good working order throughout the half-year ending 30th June 1872.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Exd. E. C Shunker.

Govt. of {1872} Madras.

PUBLIC WORKS.

To

THE CONSULTING ENGINEER

FOR RAILWA

Dated November 15*th*.

Recd.

Encl.

G. O., 15*th* November 1872 *No.* 2,693.

NOVEMBER.

Nos. 256 257

Bangalore Branch, Madras Railway.—Letter from the Consulting Engineer submitting correspondence regarding his Deputy's report on the Bangalore Branch.

P 131

RAILWAY DEPARTMENT. CONSULTING ENGINEER'S OFFICE.

No. 529.

From

Lieutt Colonel J. H. M. Shaw Stewart R.E.
Consulting Engineer for Railways,

To

Colonel G. W. Walker R.E.
Secretary to Government,
Public Works Department,
Fort Saint George.

SIR,

Upon my return to Madras on the 24th ultimo I found two further letters awaiting me from the Agent of the Madras Railway upon the subject of the Bangalore branch, and the Deputy Consulting Engineer's reports. Before submitting them to Government, I was obliged to refer them to Captain Thompson, who was then on a tour of inspection, for any observations he might wish to

* 10676 dated 17th Septr 1872.
10684 dated 18th Septr 1872.

to make upon them in connection with his reports: and I have now the honour to request that you will be so good as to lay them before Government, with Captain Thompson's letter of the 30th ultimo. Previous correspondence on the subject is recorded in the following orders of Government:—

No 1804 30th July 1872

" 2003 – 22nd August 1872

" 2257 – 23rd September 1872.

2. It will be seen that there is an almost irreconcilable difference between the testimony borne by the Railway Engineers, and that borne by the Deputy Consulting Engineer, as to the condition of certain portions

portions of the Bangalore branch in June last. Some of the extra-ordinary differences between these statements may perhaps be accounted for as suggested by Captain Thompson; but, however that may be, I am bound to state my belief that that Officer was not mistaken in his description of the condition of the road on the occasion of his first inspection. It seems impossible to believe that any one could be mistaken when stating that he saw certain sleepers and timbers exposed: but Captain Thompson's statement is incidentally supported by other evidence. Captain Smith, three months before,

had

* See report printed with G.O. 25th March 1872. No 835.

had found a considerable deficiency of ballast on the same part of the line; and when inspecting the branch on the 7th September, Captain Thompson drew my special attention to the points at which he had noticed the deficiency of ballast in his first report, and it was evident at each place that repairs had lately been made. At one or two of the places parties were actually at work on the day of our inspection.

3. I need scarcely say that my one wish in the matter has been to insure the Bangalore branch being put into a satisfactory condition, and this I am happy to say

is now the case. The certificates which accompany the half-yearly Revenue Accounts, and which I am called on to countersign, are as follows:—

I hereby certify that the whole of the Company's Permanent Way, Stations, buildings, Telegraph, Fencing, &c. have during the past half-year been maintained in good working condition and repair.

(Signed) A.B.
Chief Engineer.

I hereby certify that the whole of the Company's Plant, Engines, Tenders, Carriages, Wagons, Machinery, and Tools have during the past half-year been

been maintained in good working order and repair.

(Signed) C. D.
Locomotive Superintendent

I hereby certify that the Certificates given above by the Railway Officials are correct.

(Signed) E. F.
Consulting Engineer

With Captain Smith's report for March, and Captain Thompson's for June, before me, I knew that I should have a misgiving in countersigning these certificates for the first half of 1872; and under the circumstances I thought it right to let the Railway Authorities know that, unless there were a decided improvement, I might find myself unable to countersign the certificates for the second half of 1872.

I have the honour to be,
Sir,
Your most obedient Servant
V. Thompson Lieutt Coll R.E
Cons: Engineer for Railways

Madras
3d October
1872

Rw RT / 3

Bangalore
September 30th 1872.

From Captain Ross Thompson R.E.
M & S Dep'y Consulting Engineer
for Railways

To

Lieut Col. J. H. St. Maur Stewart
R.E.
Consg. Engineer for Railways.

Sir, I have the honour to acknowledge
(1.) the receipt of your memo No. 818 S. dated
the 25th inst, forwarding letters
Nos 576 & 684 of the 17th & 18th inst
respectively to your address from
the Agent of the Madras Railway Co,
for such remarks as January work
to make upon them. & then re-
-commission connection with my
reports dated 28th June 1872
& the 10th September 1872.

(2.) I have carefully perused the
Agents letters, & enclosures above
agents to, but as his statements
appear to, but as his statements
& those of the Chief Engineer
& Railway Co & the Engineer

P. W. 1872 Depart.
Proc. of Govt for Nov.
No. 4830.

RAILWAY DEPARTMENT.

1872.

From

The Consulting Engineer
for Railways,

To

The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 5th Oct
Recd. 4 } October 1872.

Rec: 9th

No. 529.

Submitting two
letters received from the
Agent & Manager of the
M. Ry, upon the subject
of the Bangalore branch
& the Dy Con. Engr's reports
No. 2693-15 Nov/72

Rw 25th Branch Pte Pp 564-565
" 30th July " 260-261
" 22nd Aug " 342-343
" 25th Sept " 326-331

No 256
Copied in Rly Letter Book 1872

in charge of the Bangalore branch are so diametrically opposed to statements which I have made in my reports of the 28th June & 10th September 1872. Statements made most deliberately from actual observation with my own eyes, I can only come to the conclusion that there must be, not a mistake, but a misunderstanding somewhere.

(3.) I have endeavoured to discover where such a misunderstanding could arise, & I believe that I have been in some degree successful.

(4.) It appears to me that the Madras Railway officials above referred to, & I, differ in opinion
1st as to what constitutes an urgent want of ballast at any point in an iron permanent way
2nd as to what constitutes ballasting or reballasting a portion of line

(5.) With regard to the first question, my opinion is that at any point where the ties & about one third of the surfaces of the foot sleepers are exposed, the line at such point should be reballasted as soon as possible, that it is in fact urgently in want of ballast, although not absolutely in a dangerous condition

(6.) From what I can gather from the letters of the Chief Engineer & the Engineer in charge of the Bangalore Branch, they do not consider a portion of the line to be in urgent need of ballast until it has become absolutely dangerous from want of it.

(7.) With regard to the second question, viz as to what constitutes ballasting or reballasting. I consider that when on a portion of line the ballast has been carried down on the side walks or slopes, by weather or whatever

& the ballast so carried down has been recollected & replaced on the line, such process is to all intents & purposes ballasting or reballasting that portion of line

The Chief Engineer & the Engineer in Charge of the Bangalore Branch however do not appear to consider that such a process as I have just described comes within the meaning of the words ballasting or reballasting, but that to ballast or reballast a portion of line, the material required must be brought to the spot by ballast train & there deposited. (8.)

If these differences of opinion are held in view, owing to opposite statements about the same portions of line may to a great extent be reconciled (9.)

In support of my assumption as to the meaning the Chief Engineer & Engineer in Charge of (10.)

the Bangalore Branch attach to the words "urgent need of ballast" I beg to refer you to letters Nos 216 & 233 & dated respectively 31st August 1872 & 15th September 1872, from the Engineer in charge of the Bangalore Branch to the Chief Engineer of the Madras Railway. I have underlined in red ink the portions of the letters I wish you to refer to. (11.)

My assumption as to the meaning these gentlemen attach to the words "ballasting or reballasting" you will I think fully find justified by a reference to the Ballast statements forwarded to the Chief Engr. Madras Railway by the Engr. in charge of the Bangalore Branch, with his letter No. 233, of the 15th Sept 1872. in which mention is invariably made of "Deposited Train Ballast" & "Dates extracted from Ballast Guards

"& Permanent way Inspectors"
"reports".

Holding the opinions which I did & still do regarding the meaning to be attached to "an urgent want of ballast" on an iron Permanent way, & "Ballasting & reballasting" — I beg most emphatically to reiterate what I stated in para 11. of my report Dated 28th June 1872, regarding the points at which ballast was "urgently required". I also beg most emphatically to reiterate what I have stated in my subsequent report dated 10th September 1872. viz:- That during the interval which elapsed between the dates of these two inspections, the portions of line referred to in para 11. of my report dated 28th June 1872 had been "attended "to & are now as well ballasted "as could be desired"

In para 8 of his letter No 676 (13.)
of 14th September 1872. the Agent

(12.)

of the Madras railway Co writes
"What is meant by the words"
"attended to" which occur in
"paragraph 3 of the Offg Dy Cons
"Engrs report of the 10th inst.
"I must leave that Officer to
"explain".

(14.) By "attended to" I mean that the attention of the executive had been given to the portions of line referred to & that either by collecting & replacing the ballast which had been carried away by weather & vibration or by putting on material brought to the localities either by ballast train or otherwise, the the bars & joint sleepers which were before greatly exposed had been recovered & the roadway brought up to equally good condition with the rest of the line.

(15.) I must beg to remind you that on the occasion of my last inspecting the Bangalore Branch by me on the 10th inst. I pointed

Agent & Manager.

11
Party
Office
1872

Co.

&c

ledge
ther
ow

ch

ss
of the
ur
being

ous
to"
e
ras
ough-

out to you each of the places referred to in para 11 of my report of 28th June 1872 as being "urgently" in need of ballast & that at each one of these points work had either very lately been carried out as evinced by the freshness of the soil & absence of all signs of having withstood much weather, & working parties were at that moment engaged in repairing them. That the condition of the portions (16.) of the line referred to in para 11. of my report of 28th June was the same when last as when first reported on by me, I absolutely & emphatically deny. When first inspected by me they were in what I considered & consider an unsatisfactory state, the bars & pot sleepers being exposed. They were on my second inspection in what I considered & consider a perfectly satisfactory condition as regards ballasting. the bars & pot sleepers being all covered.

(17.) As I have already said in the last para of my report dated 10th September 1872. "Since my last inspection a great deal has "been done throughout the whole "length of the line in improving "the roadway & replacing the "ballast, which from weather "& vibration had been carried "down the side slopes of the "roadway in embankments & "into the side channels in "cuttings".

I have the honour to be
Sir,
Your most obdt servant
Robt Thompson
Capt R.E.
Dy Deputy Consty Insp
In Railways.

D 31/11

Madras Railway Company
Agent & Manager's Office
Madras 17th September 1872.

No. 676.

From

R. B. Elwin Esqre
Agent & Manager, M. R. Co.

To

Lt Col. J. Hall. R. Shaw Stewart, R.E
Govt. Engineer for Railways

Sir,

I have the honour to acknowledge the receipt, on the 12th instant, of your letter No 740 dated the 11th idem with which you forwarded to me a Report made by the Officiating Deputy Consulting Engineer as to the condition on the 7th instant of the Permanent Way on the Bangalore Branch of this Railway.

2. In that Report Captain Rose Thompson alludes to those portions of the line which in paragraph 11 of his report of the 28th June last he described as being "frequently in need of ballast".

3. He states that those portions of the line have since been "attended to" and that with the exception of the line at the 105th mile the whole branch was on the 7th instant in excellent order throughout.

Govt. Engineer

4. I will not allude to the condition of the 155th mile further than to state that some days before the receipt of your letter under acknowledgement the Engineer in Charge of the Bangalore Branch had reported that the line at that point would require renewal and at the time the Branch was being inspected by yourself and Captain Thompson the road was being "lifted" and the necessary repairs executed - I beg however that it may be particularly pointed out to the Government that the 155th mile is not one of the points described in the Officiating Deputy Consulting Engineer's report of the 28th of June as being "urgently" in need of ballast, or even as requiring ballast at all.

* Vide Mr Wilkinson's letter No 220- 9th Septr 72 Copy sent to Govt Engr with letter No 665- 13th Septr -

5. With reference to the points mentioned in paragraph 11 of that Report as "urgently" in need of ballast, I have already informed you that up to the 31st ultimo no ballast had been placed upon the Bangalore Branch at the points in question since Captain Thompson's inspection in June. Upon receipt of your letter No 740 I requested the Chief Engineer to let me know whether any repairs had been executed to those particular points of the line since, and I learn that after personal enquiry and reference to the returns of ballasting Mr Wilkinson reports that all the

* Vide my Letter No 630- 31st Augt 1872 Para. 1.

* Mr Anderson's Report & Papers will follow.

Chetty Chandra

places mentioned in paragraph 11 of the Officiating Deputy Consulting Engineer's report of June last except one (the repairs at 185.14 and 185.15 having been commenced on the 8th of September the day after your inspection) were on the 7th instant in the same condition as regards ballast, as they were on the 28th of June last, with the exception of the wear and tear they had undergone in the meantime. That is to say that during the interval no ballast (except at the 169.18 mile) had been placed upon the points of line in question. That ballast was not required at those points - as has been throughout maintained by the Chief Engineer - will I presume, looking at the opinion expressed in your letter under reply, now be admitted.

6. Thus, on the 5th of July you called upon me to report for the information of Government that certain repairs to the line had been executed which your Department considered necessary. In reply you were furnished with the written opinion of the Chief Engineer that the repairs in question were not necessary, and that the line was in excellent order throughout. Being in possession of that opinion, you again on the 29th of August enquired whether the repairs had been carried out

exactly as

adding that "in the event of the repairs
"in question not being executed before
"the close of the year I may be unable
"to countersign the certificate respecting
"the Permanent way, &c., which is
"attached to the Half-yearly Revenue
"Accounts."

7. On the 7th instant under the circumstances explained above, you inspected the Rangalene Branch yourself in company with Captain Thompson and in your letter No. 740 of the 11th instant you informed me that you had much pleasure in endorsing Captain Thompson's remarks as to the generally good condition of the line.

8. What is meant by the words "attended to" which occur in paragraph 3 of the Officiating Deputy Consulting Engineer's report of the 10th instant I must leave to that Officer to explain, but as you mention that a copy of that Report has been forwarded to the Government I request that you will be so good as to forward to Government a copy of this letter also so that the facts of the case may be known when the subject is under the consideration of His Excellency the Governor in Council.

9. Adverting to paragraph 4 of your letter under reply, I beg to enclose for the information of Government copy of a Circular issued by the Consulting Physician which will I trust prevent the practice of which you complain.

I have the honour to be
Sir
Your most Obedient Servt

Agent & Manager

Agent & Manager

P.W. 4830/72.

No 242.

14th September 1872

Circular Memorandum.

To.

The Conservancy Inspectors
Madras Railway Company.

The Consulting Physician has come to know that the privies at stations are used by station Masters and other servants of the Company. When used by such servants ~~strangers~~, no objection can be raised but the proceeding is highly irregular and objectionable. When a station Master uses the station bath-rooms at his own station, or the Firemen and Drivers of any particular station resort to those rooms, instead of the latrines of their own dwellings. You are therefore requested to report every instance in which the irregularity occurs, to the Consulting Physician.

(Sd) W. J. Van Someren M.D
Consulting Physician
Madras Railway Company.

(True Copy)

Agent & Manager.

No. 684

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE.

Madras, 18th September 1872

From

R. D. Clarke Esqre
Agent and Manager. of the Mds. R. Co.

To

Lt Col. J. Hobbs Shaw Stewart, R.E.
Consulting Engineer for Railways.

SIR,

In continuation of my letter of the 17th instant No. 676, I have now the honour to enclose for submission to His Excellency the Governor in Council a copy of the Chief Engineer's letter of the 16th instant No. 434 giving Coventon two letters and two statements from Mr Wilkinson having reference to the alleged want of ballast on the Bangalore Branch, as represented in Captain Rose Thompson's report of the 28th of June last.

2. Mr Anderson's letter is so complete in itself, and the statements prepared by Mr Wilkinson regarding ballast are so conclusive that I do not consider it necessary to make any comment upon these documents.

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

R. D. Clarke
Agent & Manager.

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer

for Railways.

Dated 18th Sept 1872

Recd. 19th

No. 1824 C&W

Forwarding for Calculation & K.B. the Govt in Council Copy of a letter from the Ch: Engineer & of the Accountant Genl having reference to the alleged want of Ballast on the Bangalore Road.

P. W. 4830/72.

removed from the foot sleepers to admit of the packing required underneath the sleepers to bring the road to its proper level.

4. No careful Engineer would think of removing the old ballast, and lifting the road unless he had a stock of new ballast ready to restore the road to its proper condition. The Consulting Engineer states that a working party was engaged in putting on additional ballast when he passed, so that the necessity for any remarks upon the condition of the road is not apparent.

5. The necessary orders have been issued with reference to the Karakapilla fence between Madras and Arcanum noticed in the 3rd para of Colonel Shaw Stewart's letter.

6. I have now to deal with the 2nd, 3rd and 4th paras of the Officiating Deputy Consulting Engineer's report.

7. In the 4th para of his report dated 28th June Captain Ross Thompson indicates no less than 35 places on the Bangalore Branch as "requiring ballast" and 23 as "urgently requiring ballast". Such a statement, if correct, would reflect much discredit upon the Engineer in charge of the Branch, and upon myself as head of the Engineering Staff, & therefore refrained from communicating the Officiating Deputy Consulting Engineer's

an opportunity of satisfying myself as to their accuracy.

8. In my letter No 349 of 22nd July I was able to give you my assurance that not a yard of the Bangalore Branch was in want of ballast, and that urgently in want of ballast, and that assurance is now most fully confirmed by Captain Ross Thompson, who states that those portions of the line to which he referred "are now as well ballasted as could be desired", and by the Consulting Engineer, who has great pleasure in endorsing Captain Thompson's remarks as to the generally good condition of the line".

9. The Government, having read Captain Ross Thompson's report of 28th June, and the very extraordinary and wholly uncalled for threat contained in the second para of Colonel Shaw Stewart's letter No 692 of 29th ultimo, will no doubt now be greatly astonished to learn that, of the fifty-eight places indicated as "requiring" and "urgently requiring ballast" but three have had ballast put upon them since the 28th June.

10. When it is remembered that in the meantime the line has been exposed to the very worst and most trying months in the year it will be perfectly plain how entirely mistaken the Government officers have been throughout, and how fully justified I was in resisting the

Consulting Engineer's misjudged attempts to force me to remedy "defects and omissions" that did not now & never to have existed.

11. I forward two letters received from Mr Wilkinson - one No 216 dated 31st August to which will satisfy the Government of the anxious care Mr. Wilkinson bestows upon the line under his charge, and the other No 233 of 15th September which encloses two statements showing when ballast was last deposited in the places referred to by the Officiating Deputy Consulting Engineer.

Yours faithfully
for Beresford Anderson
Chief Engineer.

True Copy
Asst Engr Bellary

Dft. 40 of 1872.

No 216.

Madras Railway Company
Resident Engineer's Office
Bangalore, 31st August 1872

Beresford Anderson Esquire

My dear Sir

In reply to your Telegram asking when I last sent the Bangalore Basket I beg to enclose two returns shewing the weeks and dates on which ballast has been deposited since 1st January by Train and by Basket. As mentioned in my rough note from Jollarpett this morning after receipt of the Telegram I never heard of Captain Thompson's report until 13 July when you read out certain miles and Telegraph Posts as we approached them between Bolar Road and Bangalore stations at which ballast was said to be "urgently required." By this expression I understand the Inspecting Officer to mean that in his opinion there was pressing necessity for an immediate supply of ballast at the places indicated. You did not leave me a copy of the report and I do not now remember the places mentioned in it, neither do I know the date of the report. You however will see by the returns when and where ballast was deposited but this I will vouch for, that on no occasion or in any place, has ballast been in any degree "urgently required" since the Division has been in my charge.

The merely partial exposure of the upper surface of pots and of the tie bars consequent upon the lifting necessary for maintenance of road level and the opening out for periodical examination of pots, tie bars and their fastenings has no element of danger in it: and I should feel it unbecoming to express this opinion to you were it not that an extract from one of Captain Smith's reports was sent to me sometime since in which the remark "Pots and tie bars exposed" occurs. No suggestion as to the manner in which Platelayers work should be executed, to avoid this partial exposure accompanied the extract and it was therefore simply filed.

I have vouched for the sufficiency of ballast to insure the safety of the road and will now show you from my Diary that frequent personal inspection has enabled me to do so. Going no further back than the 2nd of May the Cyclone day I most anxiously inspected the Baingalore Branch from Engines and reported to you on my No 101 of 3rd May that all was safe. On 4 May Inspected the whole Division from Engines with more than ordinary care in consequence of the Storm we encountered on my return to Jolarpett as long as daylight lasted and on Sunday 5 May closely watched the Baingalore Branch from Engine and in my No 103 of 6 May reported the whole Division firm and safe, with the exception of a very slight displacement of ballast by wash which had been repaired before I reached the spot, which was at the 181st mile B.B.

13th 14th 15th May Inspected the whole Division from Engines

22nd and 23rd May " as far as Samulputty by Engine and Trolly

28th May — To Mulapooram by night 29 & 30th May — Inspected the whole Division from Trolly and Engine

4th June To Mulapooram

5th " From Mulapooram inspected Road and Bridges 44 miles by Train to Jolarpett

6th June Inspected by Engine Jolarpett to Moorapoor 34 miles and by trolly back to Samulputty 44 3/4 miles returned to Jolarpett

7th " Inspected road by Engine to Samulputty 20 miles and again by trolly back to Jolarpett and to Baingalore

10th " Inspected by Trolly Baingalore to Malloor 24 miles returned to Baingalore.

14th " To Malloor by night

15th " Inspected from Malloor to Colar road by trolly 16 3/4 miles back to Baingalore by Train

16th " (Sunday) left 8.30 A.M. to Colar road ready to ~~read on~~ to inspect by trolly to Corpum 21 3/4 miles

17th " Inspected by trolly to Jolarpett 22 1/4 miles

18th " to Baingalore by night

19th " By 9 A.M. to Corpum thence inspected by Engine & Trolly to Jolarpett 22 1/4 miles

20th " by Engine & Trolly Inspected 40 miles of main line by

21st " to Baingalore returned

28th & 29th June. To Millapporaim.
1st July. Returned to Jollarpett Carriage
Inspected Bangalore Branch by
Engine

From 3rd to 13th July on which latter date I went to meet you at Odar road, a severe cold pre=
=vented my travelling

I submit these drill details of two months travel at the risk of fatiguing you for the purpose of asking whether you can conceive it possible, after such repeated journies by Engine over the whole Division taken for the sole object of inspection: viz complete trolly inspection of road and bridges besides extra trolly work for special observations (as on 20th and 21st June) that any "urgent" defect or need could escape notice Nor has there been any reason for staving the road as you have never stinted me in ballast and I can only say now of the places you read not from the list, what I remarked to you at the time, that had there been any more ballast on these than there was I should have censured the Inspectors for waste of funds.

Yours very truly
(Signed) A. T. Wilkinson
(True Copy)
(Signed) Beresford Anderson
Chief Engineer
(True Copy)
W. F. Curtis
Agent and Manager

P.W. 4805/72.

Madras Railway Company
Resident Engineer's Office
No. 233. Bangalore 15th September 1872
7-30 P.M.

Beresford Anderson Esqre.

My dear Sir,

Your No. 877 of 12th current and in continuation of my No. 231 of 13th in reply. I now enclose two statements, one of section 1 and the other of section 2 shewing when ballast was last deposited and where, on the miles quoted in a letter from the officiating Deputy Consulting Engineer dated 28th June 1872. I travelled yesterday over this distance (43 miles) returning at midday today and very carefully examined all the places enumerated. I regret that in consequence of the shortness of time to enable me to get this return into you by tomorrow morning it is not so well tabulated as I should desire but I have just, and only time to remark the singularity of the fact that out of fifty eight places mentioned as requiring ballast, twenty three of these "urgently", only three have had ballast placed on them since 28th June. one in August and the others on the 8th of this month and I can very confidently state that so far as the safety of the road was concerned both of these places might have gone a very much longer period untouched.

unbroached.

Yours very truly
Sgd. A. T. Wilkinson

/True Copy/
Sgd Beresford Anderson
Chief Engineer

/True Copy/

Sgd. A. T. Wilkinson
Agent & Manager

P. W. 4830/72.

The Dates given are the latest on which Ballasting was done

Extract from a letter from the Officiating Deputy Consulting Engineer for Railways dated 28 June 1872.

Ballast Required	Remarks First Section. Second Division S. W. Line
196. 10	Deposited Spain Ballast 196. 8 to 13. to 19th March None since. Well ballasted now.
195. 13	No ballast deposited this year. } All covered. Lowest place 5" below rail level.
195. 12	ditto ditto }
194. 14	Deposited Spain ballast 194. 5. to 14. on 25th to 26th March. ballast nearly level with rail. None since.
194. 13	Lowest ballast 4½ below rail level. Well ballasted.
194. 10	Ballasted well up
194. 2	ditto
194. 3.	ditto
193. 9	Deposited Spain Ballast 193. 5 to 9 & 14 to 16. on 26th March. Well ballasted. None since
193. 4	

Dates Extracted from Ballast Guards and Permanent Way Inspectors Reports and the Road personally Examined by me 11th September 1872 by trolley.

/Sgd/ A. T. Wilkinson

Agent and Manager

/True Copy/
Beresford Anderson
Chief Engr.

P. W. 4830/72.

The Dates given are the Latest on which ballasting has been done

8 25

Extract from a letter from the Officiating Deputy Consulting Engineer for Railways dated 28th June 1872

Ballast Required	Remarks Second Section: Second Division S.W. Line	Ballast Urgently Required	Remarks
191. 12	Train ballasted 191. 16 2 on 15th March (Latest date)	191. 6	See this mile opposite page - Well ballasted now
191. 6	Well ballasted now — Ditto — Ditto	190. 7	Train ballasted 190-14 & 16 on 14th March (Latest date) Well ballasted
189. 13	Train ballasted 189. 9 & 11 on 15th March - Well ballasted now	189. 13	See this mile opposite page - Well ballasted now
189. 7	— Ditto — Ditto — do —	189. 7	— Ditto — Ditto
188. 8	Train ballasted 188. 8 & 12 on 15th March - Well ballasted now	187. 14	Train ballasted 187. 16 3 on 12th March - Well ballasted now
182. 18	Train ballasted 182. 1. 6. on 8th March - Fully ballasted now	187. 6	— Ditto — Ditto
182. 17		185. 15.	Train ballasted 185-6 & 8 & 15. 17 on 13th March. Basket work
178. 16	Train ballasted 178. 16 3 on 5th March - Well ballasted now	185. 14	Commenced at these two T. Posts on 8th left at this date (14 Sept.) 14 lineal feet remains untouched and the road is solid and by the Ballast being half way up the Keys: ballast is now merely spread for the width.
177. 20	Train ballasted 177. 11 & 14 on 5th March - Well ballasted now	184. 9	Train ballasted 184. 1 2 2-12 & 16-14th March. Fully ballasted now
177. 19		183. 19	(No 19th Post the last is 18th) Not ballasted this year - Well ballasted now
174. 8		178. 13	Train ballasted 178. 1 & 3 on 5th March - Well ballasted now
174. 7	Train ballasted 174-2 & 3 & 12 & 14. on 28th Feby - Well ballasted now	177. 14	Train ballasted 177. 11 & 14 on 5th March. Well ballasted now
174. 6		175. 14	Train ballasted 175. 7 & 10 on 5th March & T.P. 19 - 9th March. Basket ballasted 175. 14. in August when the bars between rails were visible ag
165. 12	Not ballasted this year. Well ballasted now	169. 18	(No 18th Post the last is 17) Basket ballasted in August after ordinary lifting: no urgency whatever: Well ballasted now
163. 11	Train ballasted 163. 13 & 18 & 1 & 3 up & 15th May. Well ballasted now	164. 16	Basket ballasted in March - Well ballasted now
163. 10		163. 6	Train ballasted 163. 1 & 3 & 13 & 18 up & 15 May: basket ballasted in M and yet the ballast is so high now, that it has to be opened out fo Examination of Keys.
160. 5	Train ballasted 160. 9 & 12 on 15th May - Well ballasted now	163. 5	
160. 4		163. 4	
158. 17	Train ballasted 158. 3 & 8 and 13 & 14 on 1st March. So well	162. 2	Train ballasted 162. 18 on 15th May - Well ballasted
158. 16	ballasted, that ballast must be opened to Examine Keys	162. 1	
158. 4		157. 17	Train ballasted 157. 4 & 16 up & 17th May - Well ballasted that are 4 joint
157. 1	See this mile on opposite page - Well ballasted now	157. 13.	of Wooden Sleepers on rock well ballasted outside, but only partially showing their upper surfaces between rails
156. 18	Train ballasted 156. 4 & 16 up & 14th May. Fully ballasted now	155. 11	Train ballasted 155. 11 & 15 up & 14th May. Fully ballasted, and it to be opened this week to allow Examination of Keys
155-	Basket work in May (No Nos 19- back 18) Fully ballasted. had to be opened for the Examination of Keys this week		
155. 18	Train ballasted 155. 11 & 15 up & 14th May		

Dates Extracted from Ballast Guards and Permanent Way Inspectors Reports and the Road personally Examined by me on trolly 11th September 1872

(Sgd) A. J. Wilkinson

(Sgd) W. J. Laws

Agent and Manager

True Copy

Alfred Andrews

Chief Engr

G.H.O. Dispatch 20

Proceedings of the Madras Government
Under date the October 1872
Read the following

From the Cons.& Engr.
for Railways (Horcester No 5290/3. Octr. 1872)

Ordered to be recorded,
with the expression of the
satisfaction felt by His Ex.
-cellency the Governor in
Council on ascertaining
that the Consulting Engi-
-gineer was eventually
enabled to certify that
the Bangalore branch
of the Madras Railway had been
maintained in good
working order throughout
the half year ending 30th
June 1872. G.H.O.

35

To The Cons. Engineer
for Railways S-V
Dated 16/11/72.

Sp 1873

Govt. of 1872. Madras.

PUBLIC WORKS.

To The Consulting Engrs. for Railways

Dated

Recd. Encl. 9

G. O. 15 June 1872, No. 2693.

Nos. 256 & 257

Kurnoolee Branch, Cudda Railway. Letter from the Engrs. transmitting Correspondence regarding the Deputy's Report on the Kurnoolee Branch.