

Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 122-23R

DATED 4th March.

[Despatch Abstract.]

Madras Railway. — Orders on the Inspection report
of the — for the half-year ending 31-12-74.

Forwarding copy of Prov on the Inspection report
of the — for the half-year ending 31-12-74.

[illegible]

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

10. **Ballast.**—Some ballast is required on the Gold Fields Branch; elsewhere the line is fully ballasted.

11. *Stone Covering*.—The effect of the covering of stone over the sand ballast to allay the inconvenience caused to passengers by dust was most marked throughout the inspection. The programme is to first complete the portion between Madras and Mettupalaiyam. The present state of the work is as follows:—

Madras-Mettupalaiyam.—Thirty-four miles out of the 328 remain to be covered.

Podanur-Calicut (112 miles).—Nothing done, but the 25 miles between Tirur and Calicut is ballasted with laterite and does not require any covering.

Bangalore Branch and North-west Line.—Nothing done except trial sections for estimate purposes.

12. *Stations*.—The station buildings, platforms, yards and compounds are kept in excellent order. Particular attention has been devoted towards supplying the wants of native passengers by the erection of refreshment stalls at the principal stations for the sale of fruits, sweetmeats, &c.

13. *North-west Line—Nandalur*.—The loop siding extension has been completed. The other work for converting this into a locomotive changing station has not yet been commenced.

14. *Raichur*.—Some open top bridges were observed in the station yard which require to be planked over.

15. The staircase leading to the over-bridge from the main platform is to be shifted so as to be in continuation of the line of the bridge; it at present obstructs the view of the signals at the G.I.P. end of the yard.

16. *Gold Field Branch—Urigam*.—The take off for a new private siding between the north distant signal and the loop points was approved.

The siding accommodation is stated to be insufficient.

17. *Bangalore Branch—Bowringpet Junction*.—The new gridiron sidings for facilitating the marshalling of the Gold Fields Branch trains are about half completed.

18. *Bangalore City*.—The new Madras Railway platform and alteration of sidings are completed. The new station buildings are about up to roof level.

19. *South-west Line*.—A site was selected and approved for a new trial station at mile 68/10 on a gradient of 1 in 336.

20. *Katpadi*.—The platform at the lay-bye buffer-stop should be finished off by a ramp and fence which latter may be allowed to infringe the six-feet-from-edge-of-platform standard dimension.

21. *Kallari station*—is on a gradient of 1 in 120. I think a safety siding should be provided.

22. *Mile 186½*.—A crossing station is proposed here. Being situated at the top of the Salem ghât, a saving of assisting engine mileage will be made as engines will be able to return to Salem from here instead of running on to Mullapuram. This site is supposed not to be feverish. Kudiampatti, the next station in the direction of Salem, is very feverish and is not a crossing station.

23. *Olavakode*.—A portion of land to the north for stacking fuel on is asked for.

24. *Palghat*.—The existing temporary station house is thatched. This is not only dangerous, but requires constant repairs. It should, I think, be tiled.

25. The only piece of land suitable for building staff quarters on, lying between the present stationmaster's house and the public road, should be reserved for the Company's use, squatting thereon by unauthorized persons should at least be prevented.

26. *Kallai*.—A portion of land is required for goods shed extension.

27. *Mangalam*.—Extension of goods shed necessary. A zinc shed now at Bowringpet will be transferred here.

28. *Periyanaikanpalaiyam*.—It would be a convenience to the railway officials if the name of this station could be reduced.

29. *Staff quarters*.—The management give great attention to the comfortable housing of the staff. Institutes have been erected, or are in course of erection, at the important centres.

30. *Cuddapah*.—Two bungalows have been pulled down for re-erection at Nandalur in anticipation of the scheme for the transfer of this locomotive changing station to Nandalur.

31. *Gooty*.—The school room accommodation seems deficient.

32. *Jalarpet*.—Same remark as for Gooty.

33. *Points and Crossings*.—The points at many stations were carefully examined and all were found to be in good order. The movement in those fitted with Stoney's and Winter's Patent Locking bar was practically nil. Lay-bye facing points are usually fitted with an adaptation of Annett's lock which gives entire satisfaction.

34. *Tadpatri*.—The grouped points whereby one man does the work of four have been in use here for seven years, no derailment having occurred during that time.

35. *Raichur*.—The safety switch controlling the road leading from the G.I.P. locomotive yard is, in its present condition, useless. The points are so designed that they can be pinned over against the weight, and the disc signal working in connection was out of order.

36. *Lisanatham*.—The switches are of bad design and were ordered by the Chief Engineer to be removed.

37. *Palghat*.—A point indicator is wanted at the outermost points.

38. A lock for points without any loose parts except the key and a new type of point handle in which the handle works in a slotted drum were exhibited by Mr. Stoney; both worked well and appear to be a great improvement on existing devices.

39. *Safety Sidings—Bangalore City—Southern Mahratta Railway yard*.—The weighted points should be interlocked with a proper signal. As the siding stands, an outgoing train, if inadvertently turned into it would probably be precipitated down the high bank at the end of the siding. I consider it unsafe. It should either be laid to a steep rising gradient or a weighted detector bolt worked by the stationmaster from the platform fitted to the point rod in connection with the signal.

40. I think the Madras safety sidings (which are all on the rising gradient principle) should be provided with treadle bars or detector bolts.

41. *Balaghat and Champion Reef*.—The safety sidings at these stations are now satisfactory, but the points require to be weighted and interlocked with signals.

42. *Urigam*.—Position of new slip siding was selected and approved. As, however, this position is unavoidably some distance from the station, I think the north home signal should be erected at these points.

43. *Mullapuram*.—Safety siding points should be weighted.

44. *Signals*—were all in good working order.

45. *Interlocking of Points and Signals—Tiruttani*.—This station has been fitted with interlocked points and crossings by Saxby and Farmer and constructed in conformity with the Board of Trade rules. Clause 2 (b) of the enclosure to Government of India Circular No. IX, Railway, dated 18th August 1893, reads as follows:—

"Facing points, if worked at a distance from the lever, to be fitted with point locks and locking (treadle bar), and means to be provided for detecting any failure of connections."

If this rule be strictly interpreted, Saxby and Farmer's system fails to comply with the conditions, for, were the point rod, the point locking bolt and the signal wire point detector slide or their connections to fail simultaneously, the home signal could be pulled off. The signal wire point detector slide is 1½ inches diameter solid bar and has hardly any strain on it; the point lock and rodding is amply strong. I consider it practically impossible for such connections to fail simultaneously.

The interlocking is complete and satisfactory, the workmanship excellent and the levers were pulled with ease.

46. Being on the English principle, it is so arranged that the distant signal cannot be pulled off until the starter or electric section signal is lowered. Hence for trains which have to pass other trains at this station the distant will be on and the home off. Under existing rules the driver of a train on finding the distant signal against him has to stop dead and then draw his train inside it.

It is urged that drivers, seeing the home off while the distant is against them, will habitually break the rule about stopping outside. With this I agree and suggest that at all stations where the home signals are at the points, the distant signal, as in the English system, is not to be considered a stop signal, but merely a warning signal and that no shunting is to be allowed outside the home signal after line clear has been given to the next station in the same direction.

47. I recommend that trains be allowed to run through the facing points at this station up to a maximum speed of 40 miles an hour provided they run through on the main line.

48. *Pudi*.—The interlocked points and signals at this station were originally inspected and passed, subject to certain alteration being carried out, last June. The alterations have been satisfactorily completed and the system has been in daily use since July. The points were carefully examined and found to be in perfect working order.

The system (which is an adaptation of Anderson's) as regards the failure of connections is similar to Tiruttuni. The rodding working the points and the signal wire point detector slide must both fail before a conflicting signal could be given, which I consider practically impossible.

I recommend that trains be allowed to run through this station on the main line at a maximum speed of 25 miles an hour.

49. *Mamandur*.—This station has been interlocked on Mr. E. W. Stoney's system, the principal feature in which is that one line of rodding locks and detects all points and also lowers either home signal, the points being worked as heretofore by pointsmen at the points. In this system were any one failure to take place in the signal rod point detector slide, either signal could be pulled off; but I assume, as the points are not worked at a distance, rule 2 (b) above referred to does not apply.

The interlocking is complete and satisfactory, but the levers could only be pulled with great difficulty owing to the travel on the support pulleys being too small. There was also too much play between the point rod pins and the slots they work in and also between the slotted plate and its casing.

The detector rod between the lay-by points and the signal rodding has too much spring in it. These points should remain padlocked as at present.

There is no locking bar fitted to the lay-by points, but, as before remarked, these points being worked by a pointsman in the usual manner, rule 2 (b) of Circular No. IX above referred to does not apply.

I recommend the opening of this system, but on the understanding that, until the next half-yearly inspection, the limit of speed remains as at present ten miles an hour.

50. I think the stationmaster and the permanent way sub-inspector of the section should together examine each interlocked system daily.

51. *Fencing*.—The aloe fencing, in spite of the trouble and expense bestowed on it, has several gaps, particularly near mile 58 and north of Cuddapah in the black cotton soil. It is generally temporarily wired at the worst places.

52. *Rolling-stock*.—is in its usual excellent condition. The oil lighting for carriages is very poor, but I understand the plant for Pintches oil gas installation is now on its way out.

53. *Workshops*.—It is contemplated to remove the heavier plant from Podanur to Perambur.

54. A new well is asked for at Arkonam to supply the Company's sodawater manufactory with pure water as its present supply is liable to contamination.

55. More land is required for the Engineering department workshops recently transferred to this station from Rayapuram, consequent on the original site being abandoned owing to the impossibility of carrying it out for the estimate.

56. *General*.—It would be a great convenience to third-class passengers if arrangement could be made with the G.I.P. to run through trains between Madras and Bombay. At present not only the third-class passengers but on occasions hundreds of parcels have to be transhipped from one company's carriages to those of the other, necessitating great delays.

57. A new block instrument, the invention of Mr. G. K. Winter, the Company's Telegraph Engineer, is working at Arkonam station. By means of this instrument, which somewhat resembles the electric tablet system in principle, the line clear ticket is automatically issued by the combined action of the stationmasters at each end of the section and that only after the last train for which line clear was given has cleared the section. This instrument, the price of which is comparatively small, I think supplies a long-felt want for single line working.

58. More attention might be paid by guards and stationmasters towards helping native passengers to find seats in crowded trains. At present this duty is usually left to the porters who have not the necessary status or perseverance when obstructive passengers wish to keep compartments more or less empty for themselves.

MADRAS,
26th February 1895.

(Signed) C. T. R. SCOVELL,
Government Inspector of Railways.

Note by the Senior Government Inspector.

The report is satisfactory.

The attention of the Engineering Department is drawn to paragraph 8.

The safety sidings at Raichur and Bangalore City stations mentioned in paragraphs 35 and 39 should be at once put in order. Safety siding points should be weighted to stand always open for the siding and interlocked with a disc signal.

Paragraphs 47 and 48.—Until a decision is come to as to the conflicting signals, I cannot support the recommendation to open these stations for fast through running.

I consider the signals should conform to the general rule that obliges drivers to stop dead at a distant signal against them. It should be remembered that the trial of the different systems was only intended to be provisional.

MADRAS,
26th February 1895.

(Signed) F. R. UPCOTT,
Senior Government Inspector.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper:—

Report of inspection of the Madras Railway for the half-year ending 31st December 1894.

ORDER—dated 4th March 1895, No. 122 R., Public Works.

Communicated to the Agent and Manager, Madras Railway, for information and necessary action.

2. A copy of these Proceedings will be forwarded for the information of the Government of India.

[Here enter No. 123 R., dated 4th March 1895.]

(True Extract.)

(Signed) F. R. UPCOTT,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Agent and Manager, Madras Railway.

- " Revenue Department.
- " Resident in Mysore, through the Political Department.
- " Government of Bombay, Public Works Department.

ENDORSEMENT—dated 4th March 1895, No. 123 R., Public Works.

Forwarded.

(By Order.)

Joint Secy. to Govt., P.W.D.,
Railway Branch.

RAILWAY.
Govt. of (1895) Madras.
PUBLIC WORKS.

Dated March, 4th.

Recd.

Encl.

G.O., 4th March 1895, Nos. 122,
123 R.

MARCH.

Madras Railway

Forwarding copy of Proceedings on the
inspection report of the — for the half-
year ending 31st December 1894.

MADRAS RAILWAY.

STANDARD GAUGE 5' 6".

Total mileage including Gold Fields Branch, 850.

INSPECTION Report by the Government Inspector of Railways for the half-year ending
31st December 1894.

The inspection was made on the 4th to 7th, 12th to 19th and 26th February
in company with the Agent, heads of departments and district officers over their
respective divisions.

2. Banks and Cuttings—are maintained to full section and are in good order.
The side cut and raising of the bank at the site of the Karamadai accident have been
completed.

3. Bridges and Culverts.—All the bridges and culverts inspected, with the
exception noted below, were in good order. Two girder bridges only remain to be
strengthened to bring all up to the Board of Trade standard. The longitudinal timbers
do not give entire satisfaction owing to their liability to split under the edge of the
rail flange.

4. Six feet open top—mile 347/17—North-west Line.—The abutments are badly
bulged and the bridge must be either rebuilt or closed. It is at present strongly
strutted. I concur with the Chief Engineer that, having regard to the configura-
tion of the surrounding country and to the fact that the line is practically on the
watershed, that the opening can be closed, but recommend that the closing be con-
sidered temporary only until its effect has been ascertained by the action of the next
monsoon.

5. Three feet drain—mile 180/14—Bangalore branch.—Although the waterway has
proved sufficient since the opening of the railway, a wash-away occurred here last
August. The waterway being theoretically too little, it was decided to substitute a
12-feet arch.

6. Permanent Way.—The road is generally in first-class order, the running
over the new steel rails being particularly smooth; that over the iron rails being
characterised by jarring, due to the indentations caused by the chair before they were
turned. Every endeavour is made, by inverting and turning them end for end, to
obtain the longest possible life out of the old iron rails some of which have been in
the road for nearly forty years.

The whole of the road throughout the railway is opened out for examination
every six months.

7. Miles 319 to 321—South-west Line.—The 65 lb. iron rails are bulged and gone
at the joints and are to be immediately renewed with 75 lb. steel bull-headed rails.

8. Mile 94, North-west Line.—The rails here are nearly worn out and are being
carefully watched. Of the 43 miles of double line between Arkonam and Madras, 33
miles of the up and 15 of the down line have been relaid with steel rails.

9. I think it would facilitate trolly inspection if a more modern type of light
trolly were used. The present type is not much lighter than some material trollies
and progress is very slow. A large number of men, drawn from the permanent way
gangs, are required to shove and protect them.

10. Ballast.—Some ballast is required on the Gold Fields Branch; elsewhere the
line is fully ballasted.

11. *Stone Covering*.—The effect of the covering of stone over the sand ballast to allay the inconvenience caused to passengers by dust was most marked throughout the inspection. The programme is to first complete the portion between Madras and Méttupálaiyam. The present state of the work is as follows:—

Madras-Méttupálaiyam.—Thirty-four miles out of the 328 remain to be covered.

Podanur-Calicut (112 miles).—Nothing done, but the 25 miles between Tirur and Calicut is ballasted with laterite and does not require any covering.

Bangalore Branch, North-west Line.—Nothing done except trial sections for estimate purposes.

12. *Stations*.—The station buildings, platforms, yards and compounds are kept in excellent order. Particular attention has been devoted towards supplying the wants of native passengers by the erection of refreshment stalls at the principal stations for the sale of fruits, sweetmeats, &c.

13. *North-west Line—Nandalur*.—The loop siding extension has been completed. The other work for converting this into a locomotive changing station has not yet been commenced.

14. *Raichur*.—Some open top bridges were observed in the station yard which require to be planked over.

15. The staircase leading to the over-bridge from the main platform is to be shifted so as to be in continuation of the line of the bridge; it at present obstructs the view of the signals at the G.I.P. end of the yard.

16. *Gold Field Branch—Urigam*.—The take off for a new private siding between the north distant signal and the loop points was approved.

The siding accommodation is stated to be insufficient.

17. *Bangalore Branch—Bowringpet Junction*.—The new gridiron sidings for facilitating the marshalling of the Gold Fields Branch trains are about half completed.

18. *Bangalore City*.—The new Madras Railway platform and alteration of sidings are completed. The new station buildings are about up to roof level.

19. *South-west Line*.—A site was selected and approved for a new trial station at mile 68/10 on a gradient of 1 in 336.

20. *Kātpāli*.—The platform at the lay-bye buffer-stop should be finished off by a ramp and fence which latter may be allowed to infringe the six-feet-from-edge-of-platform standard dimension.

21. *Kallari station*.—is on a gradient of 1 in 120. I think a safety siding should be provided.

22. *Mile 186½*.—A crossing station is proposed here. Being situated at the top of the Salem ghāt, a saving of assisting engine mileage will be made as engines will be able to return to Salem from here instead of running on to Mallapuram. This site is supposed not to be feverish. Kādpāli, the next station in the direction of Salem, is very feverish and is not a crossing station.

23. *Olarakole*.—A portion of land to the north for stacking fuel on is asked for.

24. *Palyhat*.—The existing temporary station house is thatched. This is not only dangerous, but requires constant repairs. It should, I think, be tiled.

25. The only piece of land suitable for building staff quarters on, lying between the present stationmaster's house and the public road, should be reserved for the Company's use, squatting thereon by unauthorized persons should at least be prevented.

26. *Kallai*.—A portion of land is required for goods shed extension.

27. *Mangalam*.—Extension of goods shed necessary. A zino shed now at Bowringpet will be transferred here.

28. *Periyanaikanpalaiyam*.—It would be a convenience to the railway officials if the name of this station could be reduced.

29. *Staff quarters*.—The management give great attention to the comfortable housing of the staff. Institutes have been erected, or are in course of erection, at the important centres.

30. *Cuddapah*.—Two bungalows have been pulled down for re-erection at Nandalur in anticipation of the scheme for the transfer of this locomotive changing station to Nandalur.

31. *Gooty*.—The school room accommodation seems deficient.

32. *Jalarpet*.—Same remark as for Gooty.

33. *Points and Crossings*.—The points at many stations were carefully examined and all were found to be in good order. The movement in those fitted with Stoney's and Winter's Patent Locking bar was practically nil. Lay-bye facing points are usually fitted with an adaptation of Annett's lock which gives entire satisfaction.

34. *Tadpatri*.—The grouped points whereby one man does the work of four have been in use here for seven years, no derailment having occurred during that time.

35. *Raichur*.—The safety switch controlling the road leading from the G.I.P. locomotive yard is, in its present condition, useless. The points are so designed that they can be pinned over against the weight, and the disc signal working in connection was out of order.

36. *Bisanatham*.—The switches are of bad design and were ordered by the Chief Engineer to be removed.

37. *Palghat*.—A point indicator is wanted at the outermost points.

38. A lock for points without any loose parts except the key and a new type of point handle in which the handle works in a slotted drum were exhibited by Mr. Stoney; both worked well and appear to be a great improvement on existing devices.

39. *Safety Sidings—Bangalore City—Southern Mahratta Railway yard*.—The weighted points should be interlocked with a proper signal. As the siding stands, an outgoing train, if inadvertently turned into it would probably be precipitated down the high bank at the end of the siding. I consider it unsafe. It should either be laid to a steep rising gradient or a weighted detector bolt worked by the stationmaster from the platform fitted to the point rod in connection with the signal.

40. I think the Madras safety sidings (which are all on the rising gradient principle) should be provided with treadle bars or detector bolts.

41. *Balaghat and Champion Reef*.—The safety sidings at these stations are now satisfactory, but the points require to be weighted and interlocked with signals.

42. *Urigam*.—Position of new slip siding was selected and approved. As, however, this position is unavoidably some distance from the station, I think the north home signal should be erected at these points.

43. *Mallapuram*.—Safety siding points should be weighted.

44. *Signals*.—were all in good working order.

45. *Interlocking of Points and Signals—Tiruttani*.—This station has been fitted with interlocked points and crossings by Saxby and Farmer and constructed in conformity with the Board of Trade rules. Clause 2 (b) of the enclosure to Government of India Circular No. IX, Railway, dated 18th August 1893, reads as follows:—

"Facing points, if worked at a distance from the lever, to be fitted with point locks and locking (treadle bar), and means to be provided for detecting any failure of connections."

If this rule be strictly interpreted, Saxby and Farmer's system fails to comply with the conditions, for, were the point rod, the point locking bolt and the signal wire point detector slide or their connections to fail simultaneously, the home signal could be pulled off. The signal wire point detector slide is 1½ inches diameter solid bar and has hardly any strain on it; the point lock and rodding is amply strong. I consider it practically impossible for such connections to fail simultaneously.

The interlocking is complete and satisfactory, the workmanship excellent and the levers were pulled with ease.

46. Being on the English principle, it is so arranged that the distant signal cannot be pulled off until the starter or electric section signal is lowered. Hence for trains which have to pass other trains at this station the distant will be on and the home off. Under existing rules the driver of a train on finding the distant signal against him has to stop dead and then draw his train inside it.

It is urged that drivers, seeing the home off while the distant is against them, will habitually break the rule about stopping outside. With this I agree and suggest that at all stations where the home signals are at the points, the distant signal, as in the English system, is not to be considered a stop signal, but merely a warning signal and that no shunting is to be allowed outside the home signal after line clear has been given to the next station in the same direction.

47. I recommend that trains be allowed to run through the facing points at this station up to a maximum speed of 40 miles an hour provided they run through on the main line.

48. *Pudi*.—The interlocked points and signals at this station were originally inspected and passed, subject to certain alteration being carried out, last June. The alterations have been satisfactorily completed and the system has been in daily use since July. The points were carefully examined and found to be in perfect working order.

The system (which is an adaptation of Anderson's) as regards the failure of connections is similar to Tiruttani. The rodding working the points and the signal wire point detector slide must both fail before a conflicting signal could be given, which I consider practically impossible.

I recommend that trains be allowed to run through this station on the main line at a maximum speed of 25 miles an hour.

49. *Namandur*.—This station has been interlocked on Mr. E. W. Stoney's system, the principal feature in which is that one line of rodding locks and detects all points and also lowers either home signal, the points being worked as heretofore by pointsmen at the points. In this system were any one failure to take place in the signal rod point detector slide, either signal could be pulled off; but I assume, as the points are not worked at a distance, rule 2 (b) above referred to does not apply.

The interlocking is complete and satisfactory, but the levers could only be pulled with great difficulty owing to the travel on the support pulleys being too small. There was also too much play between the point rod pins and the slots they work in and also between the slotted plate and its casing.

The detector rod between the lay-by points and the signal rodding has too much spring in it. These points should remain padlocked as at present.

There is no locking bar fitted to the lay-by points, but, as before remarked, these points being worked by a pointsman in the usual manner, rule 2 (b) of Circular No. IX above referred to does not apply.

I recommend the opening of this system, but on the understanding that, until the next half-yearly inspection, the limit of speed remains as at present ten miles an hour.

50. I think the stationmaster and the permanent way sub-inspector of the section should together examine each interlocked system daily.

51. *Fencing*.—The aloe fencing, in spite of the trouble and expense bestowed on it, has several gaps, particularly near mile 53 and north of Cuddapah in the black cotton soil. It is generally temporarily wired at the worst places.

52. *Rolling-stock*—is in its usual excellent condition. The oil lighting for carriages is very poor, but I understand the plant for Pintches oil gas installation is now on its way out.

53. *Workshops*.—It is contemplated to remove the heavier plant from Podanur to Perambur.

54. A new well is asked for at Arkonam to supply the Company's sodawater manufactory with pure water as its present supply is liable to contamination.

55. More land is required for the Engineering department workshops recently transferred to this station from Rayapuram, consequent on the original site being abandoned owing to the impossibility of carrying it out for the estimate.

56. *General*.—It would be a great convenience to third-class passengers if arrangement could be made with the G.I.P. to run through trains between Madras and Bombay. At present not only the third-class passengers but on occasions hundreds of parcels have to be transhipped from one company's carriages to those of the other, necessitating great delays.

57. A new block instrument, the invention of Mr. G. K. Winter, the Company's Telegraph Engineer, is working at Arkonam station. By means of this instrument, which somewhat resembles the electric tablet system in principle, the line clear ticket is automatically issued by the combined action of the stationmasters at each end of the section and that only after the last train for which line clear was given has cleared the section. This instrument, the price of which is comparatively small, I think supplies a long-felt want for single line working.

58. More attention might be paid by guards and stationmasters towards helping native passengers to find seats in crowded trains. At present this duty is usually left to the porters who have not the necessary status or perseverance when obstructive passengers wish to keep compartments more or less empty for themselves.

(Signed) C. T. R. SCOVELL,
Government Inspector of Railways.

MADRAS,
26th February 1895.

Noted by the Senior Government Inspector.

The report is satisfactory.

The attention of the Engineering Department is drawn to paragraph 8. The safety sidings at Raichur and Bangalore City stations mentioned in paragraphs 35 and 39 should be at once put in order. Safety siding points should be weighted to stand always open for the siding and interlocked with a disc signal.

Paragraphs 47 and 48.—Until a decision is come to as to the conflicting signals, I cannot support the recommendation to open these stations for fast through running. I consider the signals should conform to the general rule that obliges drivers to stop dead at a distant signal against them. It should be remembered that the trial of the different systems was only intended to be provisional.

(Signed) F. R. UPCOTT,
Senior Government Inspector.

MADRAS,
26th February 1895.

Dr

Please see draught
on your inspection = THE MADRAS GOVERNMENT.
Report with communi-
cations at foot.

Read the following

all right I think $\frac{all}{4/3}$
all $\frac{4}{3}$

in the Madras Railway
in and 31 5 1895

Communicated
to the Agent in Charge
Madras Railway for
information necessary
action.

2. A copy of these dis-
-cussions will be forwarded
for the information of the
Government of India.

DESPATCHED
8-MAR-95

To

The Agent in Charge, R. & C. 2. 123. R. 4th March 95
" Revenue Department - Forwarded
" Resident in my care
This is the full report
- Out of Bombay 2nd

DESPATCHED
8-MAR-95

DESPATCHED
8-MAR-95

DESPATCHED
8-MAR-95

No 122 R. dated 4.3.95
123

No. of C. O.	For what purpose.	When taken.	Name of the party by whom taken.
	1875		
	Adm.		

R. originals for April 1895

P. W. D.

No.

MEMORANDUM of Papers removed from
the Records of the Madras Government for
reference.

*April
to
June*

~~nos 222 - 311~~

nos 223 - 433

AK

INDEX

TO THE

TABLE OF CONTENTS AND TABULAR STATEMENT OF MISCELLANEOUS PROCEEDINGS AND MATTERS OF ROUTINE,

RAILWAY,

FOR THE MONTH OF APRIL 1895.

	—	Page.
A		
<i>Arakere-Mangalore Railway Survey.</i> —Revised and budget estimates of the —	Regular.	3
B		
<i>Bezwada Extension Railway.</i> —Capital and Revenue Accounts of the —	Regular.	1
<i>Bezwada-Madras Railway Survey.</i> —Revised and budget estimates of the —	Regular.	2
<i>Bezwada Extension Railway.</i> —Revenue revised estimate of the — ...	Regular.	2
<i>Bezwada Extension Railway.</i> —Capital revised estimate of the — ...	Regular.	2
<i>Bezwada-Madras Railway.</i> —Station sites in respect to the —	Routine.	1
<i>Budget estimates, 1895-96, of the Guaranteed and Nilgiri Railways, Madras</i>	Routine.	1
<i>Bezwada Extension Railway.</i> —Financial statistics of the —	Routine.	2
<i>Bangalore City station.</i> —Approaches to —	Routine.	3
<i>Bangalore City station.</i> —Office for tranship clerks at —	Routine.	5
C		
<i>Continuous automatic brakes.</i> —Working of —	Routine.	2
<i>Compensation cases in respect of lands acquired for the Madras-Ennur Railway</i>	Routine.	2
<i>Continuous automatic brakes.</i> —Working of —	Routine.	2
D		

	—	Page.
E		
Erratum in G.O., No. 254 R., dated 13th April 1895	Routine.	4
F		
Fowler, Mr. F. D., Executive Engineer	Routine.	1
G		
Guaranteed Railways.—Revised and budget estimates of — (Land and Supervision)	Regular.	4
Grant, Mr. A., Examiner of Railway Accounts	Routine.	2
H		
Half-yearly Capital and Revenue Accounts of the Madras and South Indian Railways.—Dates of submission of —	Routine.	3
I		
Indian Guaranteed Railway Companies.—Capital Accounts of the — ...	Routine.	5
J		
K		
L		
Land.—Temporary acquisition of — for the East Coast Railway ...	Routine.	1
Land.—Acquisition of — for the Virudjatti station	Routine.	1
Land.—Withdrawing from acquisition of certain — in Dibbalapalem.	Routine.	2
Land.—Acquisition of — for the Cocanada Town Railway station ...	Routine.	4
Land.—Acquisition of — for the railway godowns near the Cocanada Port	Routine.	4
Land.—Acquisition of — for the East Coast Railway	Routine.	4
Land.—Acquisition of — for the East Coast Railway	Routine.	4
Land.—Acquisition of — for the South Indian Railway in Saidapet taluk	Routine.	4
Lightfoot, Mr. J., Examiner, Guaranteed Railway Accounts	Routine.	5
M		
Madura-Pámban Railway Survey.—Revised and budget estimates of the —	Regular.	2
Máyavaram-Muttupet Railway.—Revenue revised and budget estimates of the —	Regular.	3

	—	Page.
Máyavaram-Muttupet Railway.—Capital revised and budget estimates of the —		
	Regular.	3
Madras Railway.—Open Capital sanctions of the departments of the —		
	Regular.	3
Madras Railway.—Capital and revenue revised and budget estimates, —, for 1894-95 and 1895-96		
	Regular.	3
Madras-Ennur Section.—Budget estimate for the —		
	Routine.	2
Madras-Ennur Section.—Half-yearly narrative progress report of — ...		
	Routine.	3
Madras Railway.—Reports by heads of departments of the — ...		
	Routine.	3
N		
Nilgiri Railway.—Revised and budget estimates of the —		
	Regular.	2
Nanjangod-Gudalur Railway Survey.—Revised and budget estimates of the —		
	Regular.	2
Nilgiri Railway.—Revised and budget estimates of the — (Land and Interest)		
	Regular.	2
Narrative Progress Reports of certain railway surveys		
	Routine.	3
O		
Official Meeting and Stores Committee, Madras Railway.—Minutes of — ...		
	Routine.	2
Office Establishment of the Special Deputy Collector, Madras-Ennur Railway		
	Routine.	3
Office of the Consulting Engineer for Railways		
	Routine.	5
P		
Ponnai Road station.—Code initials of —, Madras Railway		
	Routine.	2
Public Works Department Code and Book of Forms		
	Routine.	3
Pinto, Dewan Bahadur A.		
	Routine.	4
Presidency allowance.—Grant of — to Mr F. D. Fowler		
	Routine.	5
Q		
R		
Revenue statistics of the South Indian and Máyavaram-Muttupet Railways		
	Routine.	4

	—	Page.
S		
<i>South Indian Railway.</i> —Capital and Revenue accounts of the — ...	Regular.	1
<i>South Indian Railway.</i> —Analysis of working of the — ...	Regular.	1
<i>South Indian Railway.</i> —Train service in — ...	Regular.	1
<i>South Indian Railway.</i> —Capital revised and budget estimates of the — ...	Regular.	3
<i>South Indian Railway.</i> —Revenue revised and budget estimates of the — ...	Regular.	3
<i>South Indian Railway.</i> —Open capital sanctions, — ...	Regular.	3
<i>Shoranore-Cochin and Calicut-Cannanore Railway Surveys.</i> —Revised and budget estimates, — ...	Regular.	4
<i>South Indian Railway.</i> —Establishment Rolls and working estimates of — ...	Regular.	4
<i>South Indian and Mayavaram-Muttupet Railways.</i> —Budget estimates of the — ...	Routine.	1
<i>South Indian Railway Board's letters</i> ...	Routine.	1
<i>Shelley, Captain A. D. G., R.E.</i> ...	Routine.	1
<i>Surveys under the Government of Madras and the Madras-Ennur Section</i> ...	Routine.	2
<i>South Indian Railway Board's letters</i> ...	Routine.	4
<i>Stores.</i> —Issues and receipts, &c., of — on the South Indian Railway.	Routine.	4
<i>Shelley, Captain, A. D. G., R.E.</i> ...	Routine.	5
T		
<i>Tramway from Vizianagram to Bimlipatam.</i> —Extension of the — ...	Routine.	3
<i>Tinnevely-Quilon Railway Survey.</i> —No budget estimate for — necessary ...	Routine.	3
U		
V		
W		
X		
Y		
<i>Young, Mr. H. D., Temporary Assistant Engineer, Ennur Branch</i> ...	Routine.	3
Z		

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

TABLE OF CONTENTS,
RAILWAY,

FOR THE MONTH OF APRIL 1895.

1 Subjects.	2 Numbers and Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
<i>South Indian Railway.</i> —Note by the Chief Auditor on the Capital and Revenue accounts of the — for the half-year ended the 31st December 1894, ordered to be forwarded to the Government of India and to the Secretary of State.	1895. 1st April, No. 223 R.	...	.....
Forwarded to the Government of India ...	1st April, No. 224 R.	...	.....
Despatch to the Secretary of State forwarding the above.	1st April, No. 10 R. 223	...	.....
<i>South Indian Railway (including Mayavaram-Muttupet and Pondicherry Railways).</i> —The analysis of working of the — for the half-year ended 31st December 1894, ordered to be forwarded to the Director-General of Railways and to the Secretary of State.	1st April, No. 225 R.	...	.....
Forwarded to the Director-General of Railways.	1st April, No. 226 R.	...	.....
Despatch to the Secretary of State forwarding the above.	1st April, No. 11 R. 223	...	.....
<i>South Indian Railway.</i> —The proposed alteration in the timing of the train service on the Tanjore-Negapatam section, —, approved.	2nd April, No. 230 R.	...	7th June 1894, No. 341 R.
<i>Devarda Extension Railway.</i> —Note by the Chief Accountant and Auditor of His Highness the Nizam's Guaranteed State Railway Company (Limited) on the Capital and Revenue accounts of the — for the half-year ended the 31st December 1894, ordered to be forwarded to the Government of India and to the Secretary of State.	4th April, No. 238 R.	...	.....
Forwarded to the Government of India ...	4th April, No. 239 R.	...	.....

1 Subjects.	2 Numbers and Dates of Proceedings.	3 Date of Report to Secretary of State for India.	4 Numbers and Dates of previous Proceedings.
<i>Guaranteed Railways.</i> —Ordered that the final issue of the revised and budget estimates, — (Land and Supervision), for 1894-95 and 1895-96 be forwarded to the Government of India.	1895. 24th April, No. 304 R.	...	.....
Forwarded	24th April, No. 305 R.	...	.....
<i>Shoranur-Cochin and Calicut-Cannanore Railway Surveys.</i> —Ordered that the final issue of the revised and budget estimates — for 1894-95 and 1895-96 be forwarded to the Government of India.	25th April, No. 306 R.	...	.....
Forwarded	25th April, No. 307 R.	...	.....
<i>South Indian Railway.</i> —The establishment rolls and working estimates of the — for 1895-96, approved, and copies ordered to be forwarded to the Government of India.	25th April, No. 310 R.	...	.....
Forwarded	25th April, No. 311 R.	...	.....

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

TABULAR STATEMENT OF MISCELLANEOUS PROCEEDINGS
AND MATTERS OF ROUTINE,

RAILWAY,

FOR THE MONTH OF APRIL 1895.

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
<i>Desunda-Madras Railway.</i> —Letter to the Government of India stating that the final location of station sites in respect to the villages and towns served by the — should not be settled without first consulting the Madras Government.	2nd April 1895, No. 227 R.	.....
<i>Land.</i> —Notification for the temporary acquisition of — required by the East Coast Railway in Govindanagaram, ordered to be published in the <i>Fort St. George Gazette</i> .	2nd do. do. No. 228 R.	.....
<i>Land.</i> —Notification for the acquisition of — required by the South Indian Railway at Virudupatti station, ordered to be published in the <i>Fort St. George Gazette</i> .	2nd do. do. No. 229 R.	.....
<i>South Indian and Mayavaram-Muttupet Railways.</i> —Resolution of the Government of India embodying the figures accepted by that Government in the revised estimates for 1894-95 and budget estimates, 1895-96, of the —, communicated to the Agent, South Indian Railway.	3rd do. do. No. 231 R.	.....
<i>Budget Estimates, 1895-96.</i> —Resolution of the Government of India embodying the figures accepted by that Government in the revised estimates, 1894-95, and —, of the Guaranteed and Nilgiri Railways, Madras, communicated to the Examiners of Public Works and Railway Accounts.	3rd do. do. No. 252 R.	.....
<i>South Indian Railway Board's Letters.</i> —Forwarding to the Government of India copies of certain —.	3rd do. do. No. 233 R.	.....
<i>Captain A. D. G. Shelley, R.E.</i> —Letter to the Government of India forwarding this Government notification granting — furlough for 18 months.	3rd do. do. No. 234 R.	17th Feb. 1895, No. 75 R.
<i>Mr. F. D. Fowler, Resident Engineer.</i> —Letter to the Government of India reporting that — joined the office of the Consulting Engineer for Railways, Madras, on the forenoon of 3rd April 1895.	3rd do. do. No. 235 R.	.....

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
<i>Continuous automatic brakes.</i> —Letter to the Government of India forwarding revised tables showing the working of — on the Madras and South Indian Railways for the 2nd half of 1894.	3rd April 1895, No. 236 R.	.....
<i>Land.</i> —Notification withdrawing from acquisition of certain — in Dibbalapalem, Vizagapatam district, originally acquired but now no longer required for the East Coast Railway, ordered to be published in the <i>Fort St. George Gazette</i> .	4th do. do. No. 237 R.	.....
<i>Ponnai Road Station.</i> —Submitting to the Government of India the name and code initials of — between Arcot and Tiruvaram stations on the Madras Railway where the opening of a testing station has been sanctioned.	6th do. do. No. 240 R.	.....
<i>Compensation cases.</i> —Notification to enable Mr. Chester, Deputy Collector, Madras, to deal with — referred to Court in respect of the lands acquired for the Madras-Ennore Railway within the City of Madras, ordered to be published in the <i>Fort St. George Gazette</i> .	6th do. do. No. 241 R.	.....
<i>Continuous automatic brakes.</i> —Government of India order forwarding results of the working of — in use on railways in India during the six months ended the 30th June 1894, communicated to the Agents of Madras, South Indian and His Highness the Nizam's Railways and to the Engineer-in-Chief, Nilgiri Railway.	6th do. do. No. 242 R.	.....
<i>Official Meeting and Stores Committee, Madras Railway.</i> —The minutes of the — (No. 2 of 1895) held on the 27th February 1895, approved and copies ordered to be forwarded to the Government of India.	6th do. do. No. 243 R.	.....
Forwarded	6th do. do. No. 244 R.	.....
<i>Bezwada Extension Railway.</i> —Letter to the Government of India forwarding the statement of financial statistics of the — for the year 1894.	6th do. do. No. 245 R.	.....
<i>Mr. A. Grant, Examiner of Railway Accounts.</i> —Letter to the Government of India forwarding for favourable consideration an application for privilege leave from —.	8th do. do. No. 246 R.	.....
<i>Surveys under the Government of Madras and the Madras-Ennore Section.</i> —Resolution of the Government of India accepting the budget estimates of — at certain figures, communicated to the officers concerned with remark.	9th do. do. No. 247 R.	.....
<i>Madras-Ennore Section.</i> —Resolution of the Government of India accepting the budget estimate for the — of the Bezwada-Madras Railway for 1895-96 at Rs. 3,00,000, and directing the section being temporarily worked by the Madras Railway Company, communicated to the Agent and Manager, Madras Railway.	9th do. do. No. 248 R.	.....

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
<i>Approaches to the Bangalore City Station.</i> —Ordered that the Resident in Mysore be addressed with reference to proposals in connection with the —.	10th April 1895, No. 249 R.	.....
<i>Tramway from Vizianagram to Dimlipatam.</i> —Letter to the Government of India forwarding a representation from Messrs. Stuart, Hall and Company protesting against the extension of the proposed —.	10th do. do. No. 250 R.	.....
<i>Office Establishment.</i> —The Examiner, Railway Accounts, ordered to finally accept the charges claimed by the Special Deputy Collector, Madras-Ennore Railway, on account of salary for his — from 1st to 8th April.	10th do. do. No. 251 R.	.....
<i>Madras-Ennore Section.</i> —Letter to the Government of India forwarding the half-yearly narrative progress report accompanied by the quarterly progress table for the — of the Bezwada-Madras Railway for the period ending 31st March 1895.	11th do. do. No. 252 R.	.....
<i>Madras Railway.</i> —Reports by heads of departments of the — for the half-year ending 31st December 1894, ordered to be forwarded to the Government of India.	13th do. do. No. 254 R.	.....
Forwarded	13th do. do. No. 255 R.	.....
<i>Mr. H. B. Young, Temporary Assistant Engineer, Ennore Branch.</i> —Letter to the Government of India explaining how the appointment of — was sanctioned against the provision for an Executive Engineer in the original project estimate for the branch in anticipation of the formal sanction of that Government and requesting sanction to the appointment accordingly.	13th do. do. No. 256 R.	.....
<i>Public Works Department Code and Book of Forms.</i> —Letter to the Government of India forwarding a statement showing the number of copies required of each volume of the —.	13th do. do. No. 257 R.	.....
<i>Half-yearly Capital and Revenue Accounts.</i> —Letter from the Government of India stating that it will be sufficient if printed copies of the — of the Madras and South Indian Railways are submitted by the 15th March and 18th September as proposed, communicated to the Agents, Madras, South Indian and Nizam's Railways.	13th do. do. No. 258 R.	27th Feb. 1895, No. 113 R.
<i>Tinnevely-Quilon Railway Survey.</i> —Telegram from Government of India stating that no budget estimate for the — is necessary as the cost of the survey is being met from amount deposited by the Travancore Durbar, communicated to the Engineer-in-Chief and the Examiner.	16th do. do. No. 261 R.	.....
<i>Narrative Progress Reports.</i> —Letter to the Government of India forwarding the — of certain railway surveys for March 1895.	18th do. do. No. 270 R.	.....

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
<i>Revenue Statistics.</i> —Ordered that copies of the — (out-wards and in-wards traffic at stations) of the South Indian and Mayavaram-Muttupet Railways for the half-year ended 31st December 1894 be forwarded to the Government of India.	19th April 1895, No. 273 R.	....
Forwarded	19th do. do. No. 274 R.	.....
<i>South Indian Railway Board's Letters.</i> —Letter to the Government of India forwarding copies of certain —.	19th do. do. No. 275 R.	.....
<i>Land.</i> —Notification for the acquisition of — required for the extension of the Cocanada Town Railway Station, ordered to be published in the <i>Fort St. George Gazette</i> .	19th do. do. No. 276 R.	.....
<i>Land.</i> —Notification for the acquisition of — required for the extension of railway godowns near the Cocanada Port, ordered to be published in the <i>Fort St. George Gazette</i> .	19th do. do. No. 277 R.	.....
<i>Land.</i> —Notification for the acquisition of — required for the East Coast Railway in the G6-l4-vari district, ordered to be published in the <i>Fort St. George Gazette</i> .	19th do. do. No. 278 R.	.....
<i>Land.</i> —Notification for the acquisition of — required for digging a channel to restore the supply of water to a private tank cut off by the East Coast Railway line in the Vizagapatam district, ordered to be published in <i>Fort St. George Gazette</i> .	19th do. do. No. 279 R.	.....
<i>Stores.</i> —Letter to the Government of India forwarding a statement showing the receipts, issues and balances of — on the South Indian and Mayavaram-Muttupet Railways for the half-year ended 31st December 1894.	20th do. do. No. 284 R.	.....
<i>Erratum.</i> —In line 2, paragraph 10 of the report of the Commandant, Madras Railway Volunteers, embodied in the reports by heads of departments for the half-year ending 31st December 1894.	20th do. do. No. 285 R.	13th April 1895, No. 254 R.
The above forwarded to the Government of India.	20th do. do. No. 286 R.	.....
<i>Dewan Bahadur A. Pinto, Deputy Collector on special duty.</i> —Letter from Government of India sanctioning the grant of a deputation allowance of one-fifth of salary to — from the date he took up the duties in connection with acquisition of land for the Madras-Ennore Section, forwarded to the Revenue Department.	22nd do. do. No. 293 R.	.....
<i>Land.</i> —Notification for the acquisition of — in Shrotriam Eranavur village, Saidapet taluk, Chingleput district required for a ballast pit at the Railway Station therein ordered to be published in the <i>Fort St. George Gazette</i> .	22nd do. do. No. 296 R.	.....

Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
<i>Office of the Consulting Engineer for Railways.</i> —Sanction accorded to the inclusion, in the monthly salary bills during the whole or portion of the current official year, of the charges incurred on the temporary establishment of the —.	22nd April 1895, No. 297 R.	.....
<i>Mr. J. Lightfoot, Examiner, Guaranteed Railway Accounts.</i> —Letter to Government of India forwarding application for a year's leave on medical certificate from — duly certified by the Examiner, Public Works Accounts.	25th do. do. No. 308 R.	11th April 1895, No. 1648 C. $\frac{1}{4}$
<i>Presidency allowance.</i> —Sanction accorded to the grant of — of Rs. 100 per mensem to Mr. F. D. Fowler, Deputy Consulting Engineer for Railways.	25th do. do. No. 309 R.	.....
<i>Indian Guaranteed Railway Companies.</i> —Statement from the Accountant-General, India Office, on the Capital Accounts of the — on the 31st March 1895, communicated to the Examiner, Guaranteed Railway Accounts, Madras.	29th do. do. No. 312 R.	.....
<i>Captain A. D. G. Shelky, R.E., Under Secretary to Government, Public Works Department, Railway Branch.</i> —Stating that — was recalled to duty on public grounds from the privilege leave granted to him, and that he rejoined his appointment on the 12th January 1895.	29th do. do. No. 315 R.	.....
<i>Bangalore City Station.</i> —Letter to the Bombay Government forwarding letter from Agent and Manager, Madras Railway, as to the position of the office for tranship clerks at — and the insufficient lighting of the platform.	30th do. do. No. 316 R.	.....