

Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 643-4 R

DATED 7th October

[Despatch Abstract.]

East Coast Railway. — The Government Inspector's
inspection report of the — for the half-year ending 30th
June 1895, communicated to the Manager for necessary
action, and a copy of the proceedings ordered to be
forwarded to the Govt of India.

Forwarding Pros: on the Govt Inspector's
inspection report of the — for the half-year
ending 30th June 1895.

[illegible]

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

„ „ 330.

4. Bridges and Culverts.—Cracks have appeared in a large number of bridges, due in most cases to settlement of foundations which are in black cotton soil, and in others to the bridges having been raised without a corresponding increase of width. Measures have been taken by adding curtain walls, flooring and pitching, to prevent the cracks extending; in other respects the bridges are in very good order. The ends of sleepers should be bolted or strapped to prevent splitting. The 6' and 12' girders should be fastened to bed-plates with dog spikes; bearing plates should be double-spiked on the outside.

Kistna bridge.—The lower booms are now properly drained.

Bridge at mile 126/1 of 2-12' + 4-20' and at 127/12 of 4-20'.—The abutments were washed away during last rains; they have been rebuilt during the half-year and the waterway of the latter increased from 1-12' to 4-20'. The bridges are completed and tarring.

Mile 246/7, 6 spans of 100'.—The ends of lower boom over saddles should be filled up with concrete.

Nellimerla bridge, mile 260/10, 4 spans of 100'.—One of the diagonals of the right hand main girder is badly bent; it should be cut and straightened and made up to original section with cover plates. The ends of lower girder over saddles should be filled up with concrete. The same remark applies to bridge of 7 spans of 150' over the Langulia river.

Damasadhara bridge, mile 300, 19 spans of 70'.—Bearing plates for half the span not yet provided. The longitudinal sleepers should be provided with transoms and iron ties.

Mile 415/1, 6' girder.—Wants painting and sleepers tarring; some of the small girder bridges have common sleepers, generally unevenly spaced: proper bridge sleepers should be provided.

5. Ballast.—There is a full section of ballast up to mile 300, with the exception of portions of miles 136/7 and mile 141/2. The 78 miles of sand ballast on the Bezvada-Gódvári section should be covered with broken stone. From mile 300 to the depôts, but labour is hard to get at this season and it is difficult to get it into the road. Every effort should be made to get this section fully ballasted before the north-east monsoon begins. The worst miles are the following:—

300 to 302; 321 to 322: Kotah Bommali to Naupada; and mile 259. Moorum ballast should not be used where the steel sleepers are laid.

6. Rails and fastenings and sleepers.—Renovals up to date have been nil with exception of six fish plates broken through centre bolt hole. The road is laid partly with wood and partly with steel sleepers. The latter sleepers are of the continuously curved type without a raised rib. Judging from experience of these sleepers on other lines, I think it would be economical to remove them from cuttings and station yards, which on this line are very difficult to keep dry, and replace with wooden sleepers before corrosion begins, which in such situations it very soon will. It would be better, I think, to leave them uncovered at the top; they dry quicker and it is easier to detect cracks, broken lugs and missing keys, and the loss of weight to the road is inconsiderable.

7. Fencing.—The line is unfenced except through Ellore town and from Waltair to Vizagapatam, and at stations. Barbed wire-fencing has been used which was prohibited on railways under Director-General of Railways' Circular No. V of 20th December 1892 and Madras G.O. No. 1762 W. of July 1894. Boundary pillars have been erected except on the recently opened section. The level crossing south of Waltair should be fenced; trespassers make use of the line as a highway.

8. Level Crossings.—Gateman's huts have been built at the principal road crossings, but the gates have not yet been fitted; they are ordered. Many of the minor road crossings require metalling. The level crossing south of Waltair should have a proper gateman's lodge.

9. Stations, platforms, &c.—Permanent station buildings have been built at nearly all stations; many of them are still unprovided with palisading or fencing round the platforms; barbed wire has, in some instances, been used for this purpose—see remarks on Fencing above. Latrines have still to be provided with few exceptions for stations north of the Gódvári; the floors of latrines should have a layer of cement over the concrete floors, sides and seats should be tarred, some provision for lighting at night should also be made and distinguishing marks for men and women should be painted. Latrines badly wanted at Gódvári, South. The goods platform are coped with 6" stones projecting 3 inches; these will soon get broken; new goods platform walls should have the coping flush with wall. Clearance sleepers for shunting have been put in at some stations; it would be well to use them throughout the line. At some stations the name-boards are placed at the ends at right angles to the line and are not easily visible from the train; they should be placed in the usual position. The weighing-machines were in many cases out of order owing to the bearings being clogged with oil. The line clear books were well kept. Refreshment rooms well kept and no complaints in books during the half-year.

Sitanagram.—A new station has been opened here. Sidings for the locomotive shops and coal siding take off at it.

Mustabad.—New station house built during half-year and stationmaster's quarters in progress.

Kalparu flag station.—The site has been shifted a mile to the north; the new station is nearly complete.

Nidavol.—New station building finished and new goods-shed and siding.

Gódvári, North.—A new siding has been put in, making an island platform so as to accommodate two passenger trains. A new goods-shed has been built.

Cocanada Town.—has been opened during the half-year and the old flag station abolished. The goods-shed has been partly walled in and much extended. It is very important that the railway should be allowed to acquire the land alongside the channel up to high water mark in order that goods may be rapidly transferred from the railway to the boats. At present it is only leased to the railway and they are unable to build permanent structures until they have a proper title to the land of the Harbour Board. This land is vested in the Conservancy Board who are unwilling to surrender control over it apparently from a misapprehension that the railway would be beyond their control in the matter of building jetties, interfering with the waterway, &c. It is essential that facilities for shipping rail-borne goods should be provided, and I understand the financial position of the Board prevents their doing this at present. The difficulty might be got over by the Board agreeing to surrender the land with the option of taking it back with the buildings on it at a fair value should the Board be converted into a Port Trust at some future time.

Pithapuram.—A new station building has been built.

Sallapole, a new flag station; name-boards wanted.

Duraguda flag station.—A quarry siding takes off about 600 feet from the station; it is protected by a signal, but there should be a pointsman's hut at the points; the catch siding-points should be weighted so as to be always open to the slip and not locked.

Anakpalle.—The site of the present station is unsuitable and is far away from the business centre of the town and in the wrong direction to the flow of the traffic. The railway line $2\frac{1}{4}$ miles further on passes about a furlong away from the centre of the village, which is a very large producing and gathering centre, and the station is being moved to that spot where a siding has been already opened temporarily for the accommodation of the traffic in the busy season.

Simhachallem junction.—An estimate has been sanctioned for providing a proper system of signals interlocked with the points.

Waltair.—Name-boards wanted over different rooms; Eaves-boards want painting. Windows are wanted in bath rooms and bolts are on wrong side of doors.

Vizagapatam.—It has now been decided to retain this station, as no more central place for a terminus could be obtained except at a large outlay. More land is to be taken up behind the station, the collection of huts removed, a good approach road made, and the open drains covered in. A good shed and siding for local goods will also be provided.

Vizagapatam goods terminus.—Reclamation works are in progress along the foreshore of the creek in order that all goods arriving for shipment may be delivered at the wharf in close proximity to the boats. The approach to the wharf is liable to interruption from slips in the deep Ross Hill cutting and has the further disadvantage of involving a back shunt. The alternative swamp line is not used owing to the timber bridge of 4 spans of 24 feet at the eastern end being considered unsafe. Fears have been expressed that if this opening were closed the régime of the creek would be altered owing to the upper opening of 3 spans of 40 feet, not allowing a sufficient quantity of water to be impounded. There seems to me to be little fear of this happening and the closing of the eastern bridge would, I think, improve matters by giving the scour a more direct line. The best course would seem to be to fill in the timber bridge and watch results; if a tendency to silt was observed the remedy would be found in increasing the waterway of the 3/40 feet bridge.

Alamandu.—Palisading wanted in third-class waiting room; eaves-boards want painting.

Vizianagram.—Goods-shed being erected; goods platform is very muddy and approach road worse still: proper metalling should be put down.

Garividi.—A new station to accommodate the Manganese mines has been put in.

Sigaduru.—A new station-house has been built and platform is in progress.

Punduru flag station.—A new station-house has been erected, and siding is being laid in.

Dusi.—A stone platform wall has been put in and the split points are to be altered.

Tilari.—A Scotch block wanted in dead end.

Pundi.—Platform should be metalled; a through siding has been laid in; stationmaster's quarters in progress.

Berhampur.—No name-boards over rooms. Goods-shed in progress.

10. Signals.—From Bezwada to Waltair the signals worked easily with the exception of Rajahmundry distant signal which was stiff. From Waltair to Berhampur the condition of the signals leaves a good deal to be desired. At Berhampur and Vizagapatam the distant signals could not be pulled off: at Dhupalli and Dusi and some others the arms want re-painting, and at other stations the signal arm falls flush with the post. The system adopted of carrying the wires on pulleys attached to the rail seems a doubtful improvement; it works well on some lines, but here the pulleys are, I think, too small and the connection with rail too flimsy and the bearings are not properly oiled.

11. Station yards.—Many of the station yards are very wet; the ground is level and the water level high. Deep drains should be cut on the side opposite to platform with cross drains sloping up to the platform wall and deep enough to drain the ballast properly.

12. Ferries.—The ferry at the Gôdâvari is a transshipment ferry; bulk is broken at both banks and all goods transhipped into country boats and towed across by the steamers *Dorothy* and *Helen* of 150 and 50 horse-power, respectively. The trip takes one hour against stream and half an hour with it with 3 to 4 loaded boats in tow; in the dry season, the trip takes an hour either way. There are slips of a primitive character at either bank for transshipping wagons; but these are only used for loaded wagons of railway materials and heavy machinery, the process being very slow. During the busy season the contents of 2,760 wagons were transhipped in a month, the greatest number in a day being ninety. I am informed by the manager that complaints against transshipment are few and decreasing, but it would seem advisable to

establish a proper system such as that in use at Digba ghât, Gara ghât and other places, as the construction of the bridge, even when sanctioned, will occupy some years and the plant will be required at the Mahanuddee and Roopnarain later on. I understand that the matter is under consideration of the Government of India. It would be an improvement if a staff of Company's porters were kept up to transfer passengers' baggage, an addition to the fare could be made if necessary to pay for them; at present the passenger has to pay coolies to transfer his baggage.

13. Workshops and store buildings.—New locomotive shops and sidings have been opened during the half-year at Sitanagram. A new shed for locomotive stores at Waltair is nearly finished. The machinery at Waltair locomotive shops appears to be insufficient to deal with the numerous alterations which are necessary to the compound engines.

14. Rolling stock.—The compound engines have given a great deal of trouble here as on other lines, but are working better than they did. The regulator valves have to be remodelled, also the brasses of the big ends and new plates have had to be added to the springs of the trailing wheels. Two engines have been completely overhauled and the remainder are being dealt with; but with the inadequate machinery at command the alterations are necessarily slow. The goods and passengers' vehicles are in good order.

(Signed) F. D. FOWLER,
Government Inspector of Railways.

MADRAS,
21st September 1895.

Note by Senior Government Inspector.

The report is satisfactory. Since it was written, disastrous floods have wrecked the line between Bezwada and Ellore; and as the staff will be engaged in repairing and rebuilding this portion, many improvements noticed, as desirable, will have of necessity to be deferred till the line is again opened for through running.

With reference to paragraph 2, I shall await Manager's application for a revised train service between Chicacole and Berhampur.

Paragraph 9—Cocanada town.—The matter of land is being dealt with.

Vizagapatam goods terminus.—The closing of the creek timber bridge has been sanctioned.

Paragraph 12.—When the earth groins at the proposed site of the Gôdâvari bridge are put in, the ferry working will be much simplified.

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

OOTACAMUND,
2nd October 1895.

ORDER—No. 643 R., dated 7th October 1895.

Communicated to the Manager, East Coast 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. 644 R., dated 7th October 1895.]

(True Extract.)

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

To the Manager, East Coast Railway.
" Director-General of Railways.

Ed. T. K. Narayana Aiyangar.
Spare Copies

RAILWAY.

Govt. of {1895} Madras.

PUBLIC WORKS.

Dated October, 7th.

Recd.

Encl.

G.O. No. 643 R., 7th Oct. 1895.

OCTOBER.

East Coast Railway

The Government Inspector's inspection report of the — for the half-year ending 30th June 1895, communicated to the Manager for necessary action, and a copy of the Proceedings ordered to be forwarded to the Government of India.

No. 613 R., 7th OCTOBER 1895.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following papers:—

EAST COAST RAILWAY.

STANDARD GAUGE 5' 6".

Inspection report for the half-year ending 30th June 1895.

Length open for traffic, 399 miles.

The inspection was made between the 10th and 15th August. The Manager, Traffic and Locomotive Superintendents and District officers were present during the inspection.

2. General.—With the exception of the newly opened length from Chicacole road to Berhampur the line is in excellent running order. Great progress has been made in the general upkeep of the line since last inspection. The temporary sheds, which did duty for station buildings, have nearly all disappeared and have been replaced by permanent structures, with sufficient goods-shed accommodation for the traffic offering. At many of the stations gardens are springing up and the compounds are being got into shape. A very fair traffic—both passenger and goods—has been dealt with, but the latter has only been secured between Bezwada and Cocanada by carrying all classes at the lowest rate which scarcely pays more than working expenses. This is due to the canal competition, and it has been proposed to levy a toll of Rs. 1 a ton at the Ellore and Dowlaishweram locks. This would secure to the railway the through traffic from Bezwada to which, being rail-borne, it has a fair claim, while leaving to the boats the carriage of the local traffic. The revenues of the railway would be largely increased, and if the receipts of the canal from navigation showed a falling off, the toll could be reduced, but the experiment seems worth making. The matter is still under consideration. The length from Chicacole road to Berhampur, which was opened in the last half-year, is not in such good order as the rest of the section; more ballast is required in many places. The roughest sections were between Telari and Naupada and between Baruva and Kanchili. The Manager has asked that the restriction on night running between Chicacole road and Berhampur be now removed. The banks are now pretty well consolidated and the section is properly provided with signals, &c. I consider that night running will not now endanger the safety of the public and recommend that the restriction be removed.

3. Banks and Cuttings.—The banks are well maintained and up to full width at formation level, except between Kotah Bommali and Naupada where a long bank was observed to be a good deal eroded and short of width. The cuttings want more attention to drainage, particularly where steel sleepers are used; the side drains are often too small and want clearing out; the slopes of some of them are being turfed, with satisfactory results; where turfing is not possible, ballast walls might be tried instead of the side drains. The following were noticed as being not well drained:—

Cutting north of Rajahmundry station, sides slip a good deal.

„ between Somachalum and Alamanda.

„ mile 261/14.

„ „ 330.

4. Bridges and Culverts.—Cracks have appeared in a large number of bridges, due in most cases to settlement of foundations which are in black cotton soil, and in others to the bridges having been raised without a corresponding increase of width. Measures have been taken by adding curtain walls, flooring and pitching, to prevent the cracks extending; in other respects the bridges are in very good order. The ends of sleepers should be bolted or strapped to prevent splitting. The 6' and 12' girders should be fastened to bed-plates with dog spikes; bearing plates should be double-spiked on the outside.

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Bridge at mile 126/1 of 2-12' + 4-20' and at 127/12 of 4-20'.—The abutments were washed away during last rains; they have been rebuilt during the half-year and the waterway of the latter increased from 1-12' to 4-20'. The bridges are completed and the work has been well carried out 3-60' at 148/10. Sleepers want squaring and tarring.

Mile 246/7, 6 spans of 100'.—The ends of lower boom over saddles should be filled up with concrete.

Nellimerla bridge, mile 260/10, 4 spans of 100'.—One of the diagonals of the right hand main girder is badly bent; it should be cut and straightened and made up to original section with cover plates. The ends of lower girder over saddles should be filled up with concrete. The same remark applies to bridge of 7 spans of 150' over the Langulia river.

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5. Ballast.—There is a full section of ballast up to mile 300, with the exception of portions of miles 136/7 and mile 141/2. The 76 miles of sand ballast on the Bezvada-Gódvári section should be covered with broken stone. From mile 300 to Berhampur a great deal of ballast is required; there is said to be a good supply in the depôts, but labour is hard to get at this season and it is difficult to get it into the road. Every effort should be made to get this section fully ballasted before the north-east monsoon begins. The worst miles are the following:—

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8. Level Crossings.—Gateman's huts have been built at the principal road crossings, but the gates have not yet been fitted; they are ordered. Many of the minor road crossings require metalling. The level crossing south of Waltair should have a proper gateman's lodge.

9. Stations, platforms, &c.—Permanent station buildings have been built at nearly all stations; many of them are still unprovided with palisading or fencing round the platforms; barbed wire has, in some instances, been used for this purpose—see remarks on Fencing above. Latrines have still to be provided with few exceptions for stations north of the Gódvári; the floors of latrines should have a layer of cement over the concrete floors, sides and seats should be tarred, some provision for lighting at night should also be made and distinguishing marks for men and women should be painted. Latrines badly wanted at Gódvári, South. The goods platform are coped with 6" stones projecting 3 inches; these will soon get broken; new goods platform walls should have the coping flush with wall. Clearance sleepers for shunting have been put in at some stations; it would be well to use them throughout the line. At some stations the name-boards are placed at the ends at right angles to the line and are not easily visible from the train; they should be placed in the usual position. The weighing-machines were in many cases out of order owing to the bearings being clogged with oil. The line clear books were well kept. Refreshment rooms well kept and no complaints in books during the half-year.

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Kalparu flag station.—The site has been shifted a mile to the north; the new station is nearly complete.

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Berhampur.—No name-boards over rooms. Goods-shed in progress.

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

To the Manager, East Coast Railway.
" Director-General of Railways.

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Forwarded.

(By order.)

Joint Secy. to Govt., P.W.D.,
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To the Secretary to the Government of India,
Public Works Department.

Encl. T. K. Narayana Aiyangar.
Spare Copies

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Govt. of {1895} Madras.

PUBLIC WORKS.

Dated October, 7th.

Recd.

Encl.

G.O. Nos. 643, 644 R., 7th Oct.
1895.

OCTOBER.

East Coast Railway

Forwarding Proceedings on the Govern-
ment Inspector's inspection report of the —
for the half-year ending 30th June 1895.

I don't see any reason why the numerous letters upon themselves to send to the following East Coast Railway Standard Gauge 5' 6".
The papers submitted be presented as per originals.
Clear send another proof after checking the heading for corrections. Should be printed as in the original.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following papers :—

Report of Inspection of the East Coast Railway (Standard Gauge 5' 6") for the half-year ending 30th June 1895.

[Length open for traffic, 399 miles.]

The inspection was made between the 10th and 15th August. The Manager, Traffic and Locomotive Superintendents and District officers were present during the inspection.

2. General.—With the exception of the newly opened length from Chicacole road to Berhampur the line is in excellent running order. Great progress has been made in the general upkeep of the line since last inspection. The temporary sheds, which did duty for station buildings, have nearly all disappeared and have been replaced by permanent structures, with sufficient goods-shed accommodation for the traffic offering. At many of the stations gardens are springing up and the compounds are being got into shape. A very fair traffic—both passenger and goods—has been dealt with, but the latter has only been secured between Bezvada and Cocanada by carrying all classes at the lowest rate which scarcely pays more than working expenses. This is due to the canal competition, and it has been proposed to levy a toll of Rs. 1 a ton at the Elfore and Dowlaishweram locks. This would secure to the railway the through traffic from Bezvada to which, being rail-borne, it has a fair claim, while leaving to the boats the carriage of the local traffic. The revenues of the railway would be largely increased, and if the receipts of the canal from navigation showed a falling off, the toll could be reduced, but the experiment seems worth making. The matter is still under consideration. The length from Chicacole road to Berhampur, which was opened in the last half-year, is not in such good order as the rest of the section; more ballast is required in many places. The roughest sections were between Telari and Naupada and between Baruva and Kanchili. The Manager has asked that the restriction on night running between Chicacole road and Berhampur be now removed. The banks are now pretty well consolidated and the section is properly provided with signals, &c. I consider that night running will not now endanger the safety of the public and recommend that the restriction be removed.

3. Banks and Cuttings.—The banks are well maintained and up to full width at formation level, except between Kotah Bommali and Naupada where a long bank was observed to be a good deal eroded and short of width. The cuttings want more attention to drainage, particularly where steel sleepers are used; the side drains are often too small and want clearing out; the slopes of some of them are being turfed, with satisfactory results; where turfing is not possible, ballast walls might be tried instead of the side drains. The following were noticed as being not well drained :—

Cutting north of Rajahmundry station, sides slip a good deal.
" between Somachalum and Alamanda.
" mile 261/14.
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4. **Bridges and Culverts.**—Cracks have appeared in a large number of bridges, due in most cases to settlement of foundations which are in black cotton soil, and in others to the bridges having been raised without a corresponding increase of width. Measures have been taken by adding curtain walls, flooring and pitching, to prevent the cracks extending; in other respects the bridges are in very good order. The ends of sleepers should be bolted or strapped to prevent splitting. The 6' and 12' girders should be fastened to bed-plates with dog spikes; bearing plates should be double-spiked on the outside.

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300 to 302; 321 to 322: Kotah Bommali to Naupada; and mile 259. Moorum ballast should not be used where the steel sleepers are laid.

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9. **Stations, platforms, &c.**—Permanent station buildings have been built at nearly all stations; many of them are still unprovided with palisading or fencing round the platforms; barbed wire has, in some instances, been used for this purpose—see remarks on Fencing above. Latrines have still to be provided with few exceptions for stations north of the Gódavari; the floors of latrines should have a layer of cement over the concrete floors, sides and seats should be tarred, some provision for lighting at night should also be made and distinguishing marks for men and women should be painted. Latrines badly wanted at Gódavari, South. The goods platform are coped with 6" stones projecting 3 inches; these will soon get broken; new goods platform walls should have the coping flush with wall. Clearance sleepers for shunting have been put in at some stations; it would be well to use them throughout the line. At some stations the name-boards are placed at the ends at right angles to the line and are not easily visible from the train; they should be placed in the usual position. The weighing-machines were in many cases out of order owing to the bearings being clogged with oil. The line clear books were well kept. Refreshment rooms well kept and no complaints in books during the half-year.

Sitanagram.—A new station has been opened here. Sidings for the locomotive shops and coal siding take off at it.

Muntabad.—New station house built during half-year and stationmaster's quarters in progress.

Kalparu flag station.—The site has been shifted a mile to the north; the new station is nearly complete.

Nidavol.—New station building finished and new goods-shed and siding.

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Anakapalle.—The site of the present station is unsuitable and is far away from the business centre of the town and in the wrong direction to the flow of the traffic. The railway line $2\frac{1}{2}$ miles further on passes about a furlong away from the centre of the village, which is a very large producing and gathering centre, and the station is being moved to that spot where a siding has been already opened temporarily for the accommodation of the traffic in the busy season.

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Waltair.—Name-boards wanted over different rooms; Eaves-boards want painting. Windows are wanted in bath rooms and bolts are on wrong side of doors.

Vizagapatam.—It has now been decided to retain this station, as no more central place for a *terminus* could be obtained except at a large outlay. More land is to be taken up behind the station, the collection of huts removed, a good approach road made, and the open drains covered in. A good-shed and siding for local goods will also be provided.

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Tilari.—A Scotch block wanted in dead end.

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Berhampur.—No name-boards over rooms. Goods-shed in progress.

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12. Ferries.—The ferry at the Gôdâvari is a transshipment ferry; bulk is broken at both banks and all goods transhipped into country boats and towed across by the steamers *Dorothy* and *Helen* of 150 and 50 horse-power, respectively. The trip takes one hour against stream and half an hour with it with 3 to 4 loaded boats in tow; in the dry season, the trip takes an hour either way. There are slips of a primitive character at either bank for transshipping wagons; but these are only used for loaded wagons of railway materials and heavy machinery, the process being very slow. During the busy season the contents of 2,760 wagons were transhipped in a month, the greatest number in a day being ninety. I am informed by the manager that complaints against transshipment are few and decreasing, but it would seem advisable to

establish a proper system such as that in use at Digha ghât, Gara ghât and other places, as the construction of the bridge, even when sanctioned, will occupy some years and the plant will be required at the Mahanuddee and Roopnairin later on. I understand that the matter is under consideration of the Government of India. It would be an improvement if a staff of Company's porters were kept up to transfer passengers' baggage, an addition to the fare could be made if necessary to pay for them; at present the passenger has to pay coolies to transfer his baggage.

13. Workshops and store buildings.—New locomotive shops and sidings have been opened during the half-year at Titnagram. A new shed for locomotive stores at Waltair is nearly finished. The machinery at Waltair locomotive shops appears to be insufficient to deal with the numerous alterations which are necessary to the compound engines.

14. Rolling stock.—The compound engines have given a great deal of trouble here as on other lines, but are working better than they did. The regulator valves have to be remodelled, also the brasses of the big ends and new plates have had to be added to the springs of the trailing wheels. Two engines have been completely overhauled and the remainder are being dealt with; but with the inadequate machinery at command the alterations are necessarily slow. The goods and passengers' vehicles are in good order.

(Signed) F. D. FOWLER,
Government Inspector of Railways.
MADRAS,
21st September 1895.

Note by Senior Government Inspector.

The report is satisfactory. Since it was written, disastrous floods have wrecked the line between Bezvada and Ellore; and as the staff will be engaged in repairing and rebuilding this portion, many improvements noticed, as desirable, will have of necessity to be deferred till the line is again opened for through running.

With reference to paragraph 2, I shall await Manager's application for a revised train service between Chicacole and Berhampur.

Paragraph 9—Cocanada town.—The matter of land is being dealt with.

Vizagapatam goods terminus.—The closing of the creek timber bridge has been sanctioned.

Paragraph 12.—When the earth groins at the proposed site of the Gôdâvari bridge are put in, the ferry working will be much simplified.

(Signed) F. R. UPCOTT,
Senior Government Inspector.
OOTACAMUND,
2nd October 1895.

ORDER—No. 643 R., dated 7th October 1895.

Communicated to the Manager, East Coast 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. 644 R., dated 7th October 1895.]

(True Extract.)

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

To the Manager, East Coast Railway.
" Director-General of Railways.

Ed. T. K. Narayana Aiyangar.
Spare Copies

RAILWAY.

Gobt. of {1895} Madras.

PUBLIC WORKS.

Dated October, 7th.

Recd.

Encl.

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Recd 23 11

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STANDARD GAUGE 5' 6".

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11. *Station yards.*—Many of the station yards are very wet; the ground is level and the water level high. Deep drains should be cut on the side opposite to platform with cross drains sloping up to the platform wall and deep enough to drain the ballast properly.

12. *Ferries.*—The ferry at the Gôdâvari is a transshipment ferry; bulk is broken at both banks and all goods transhipped into country boats and towed across by the steamers *Dorothy* and *Helen* of 150 and 50 horse-power, respectively. The trip takes one hour against stream and half an hour with it with 3 to 4 loaded boats in tow; in the dry season, the trip takes an hour either way. There are slips of a primitive character at either bank for transshipping wagons; but these are only used for loaded wagons of railway materials and heavy machinery, the process being very slow. During the busy season the contents of 2,760 wagons were transhipped in a month, the greatest number in a day being ninety. I am informed by the manager that complaints against transshipment are few and decreasing, but it would seem advisable to establish a proper system such as that in use at Digha ghât, Gara ghât and other places, as the construction of the bridge, even when sanctioned, will occupy some years and the plant will be required at the Mubarruddoo and Reeperarain later on. I understand that the matter is under consideration of the Government of India. It would be an improvement if a staff of Company's porters were kept up to transfer passengers' baggage, an addition to the fare could be made if necessary to pay for them; at present the passenger has to pay coolies to transfer his baggage.

13. *Workshops and store buildings.*—New locomotive shops and sidings have been opened during the half-year at Ditanagram. A new shed for locomotive stores at Waltair is nearly finished. The machinery at Waltair locomotive shops appears to be insufficient to deal with the numerous alterations which are necessary to the compound engines.

14. *Rolling stock.*—The compound engines have given a great deal of trouble heretofore on other lines, but are working better than they did. The regulator valves have to be remodelled, also the brasses of the big ends and new plates have had to be added to the springs of the trailing wheels. Two engines have been completely overhauled and the remainder are being dealt with; but with the inadequate machinery at command the alterations are necessarily slow. The goods and passengers' vehicles are in good order.

(Signed) F. D. FOWLER,
Government Inspector of Railways.

MADRAS,
21st September 1895.

Note by Senior Government Inspector.

The report is satisfactory - since it was written, discussions goods have worked the line between Bezwada & Ellore and as the staff will be employed in repairing & rebuilding two portions - many improvements noticed as desirable will have to be deferred till the line is again opened for running - red line is again opened for running -

With reference to para 2. I shall await Managers application for a revised train service between the coast & Berhampur Para 9. Co's. work. Town - The matter of land is being dealt with - The closing of Vizagapatam goods terminal, the closing of the creek timber bridge has been sanctioned Para 12. When the proposed earth bridge is the proposed site of the junction bridge will be put in, the ferry working will be much simplified. F. D. Fowler

Senior Government Inspector

Obtained

2 October 1895

M. Hanussee
Roperarain

Inspection report
of the Lach Coast
Railway, for the half-
year ending 30th June
1895

W
26 Oct

Forwarded to His
Excellency the Governor
in Council for informa-
tion.

HO
24/10/95

JS
25/10/95

J. Rupcott
Joint Secretary to Govt
P.W.D. Ry. Branch

Circulate in money. 21st
to such Hon. members as
are in London Nov. 18th 95

Ans 18/10
ES/10

- (3) J. E. L. Government
(1) J. E. L. Government
(2) J. E. L. Government

A No 643 R 27-10-95

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Present

Read the following

Report of inspection of the East Coast
Railway for the half year ending 30 June 1995.

Inspection report of the
E. C. Ry for the half-year
ended 30.6.95

Communicated
to the Manager East
Coast Ry for information
and necessary action.
2. A copy of these
proceedings will be for-
warded for the information
of the Govt of India.
H. C. N. 644 R 27-10-95.

Forwarded

44/ 7/10
12

The Manager E. C. Ry
Director General Ry.

RECEIVED
1. OCT. 95

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1. OCT. 95

circ 22/10. R 27/10

9/10/1975

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No 643-4 Kd/7-10-75