

Public Works (1897) Department.

G.O., No. 552

DATED 14 June 1897

[Despatch Abstract.]

South India Railway: Pros: of Govt in the
Railway Branch on the Govt Inspector's
Report of inspection of the — for the half year
ending 31st December 1896 Comd to the S.E.
Vand VI Cables for early report on certain
Lands affecting the railway.

CHIEF ENGINEER
FOR THE GATION
1st 1897

RAILWAY.

PUBLIC WORKS.

Spare copies

MAY.

Communicated to the Sec
V & V I Circles for early
report-

$$\begin{array}{r} 81 \\ 3 \overline{) 243} \\ \underline{24} \\ 3 \\ 3 \\ \underline{3} \\ 0 \end{array}$$

W.H.

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4697

Departments concerned or necessary
forwarded to the Government of India.

No. 333 R., 11th May 1897.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper:—

Report on the Inspection of the South Indian Railway for the half-year ending 31st Dec. 1896.

ORDER—No. 333 R., dated 11th May 1897.

Communicated to the Agent, South Indian Railway, and the departments concerned for information and necessary action, in accordance with the remarks of the Senior Government Inspector of Railways, dated 13th April 1897.

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

[Here enter No. 334 R., dated 11th May 1897.]

(True Extract.)

For Agent *Ar. V. N. App.*
Under Secretary to Government,
Railway Branch.

To the Agent, South Indian Railway.
" Chief Engineer for Irrigation.
" Inspector-General of Police.
" Local and Municipal Department.

Exd. T. K. Narayana Aiyangar.

SOUTH INDIAN RAILWAY.

Report on the Inspection for the half-year ending 31st
December 1896.

Metre Gauge, 1,104 miles.

The inspection was made between the 1st and 20th March 1897. The Agent and heads of departments were present throughout the inspection. The district officers accompanied the train over their respective divisions.

2. **General.**—The line is well maintained. The road was generally in very good running order. The stations are neat and tidy.3. **Tanks affecting the Railway.**—A tank commanding the line at mile 104, Pondicherry Branch, though recently repaired, requires attention, as the new earth-work is guttering badly.4. **Mile 350—Main line.**—An old tank has recently been repaired and is reported to be threatening the safety of the line. Further report with levels should be submitted.5. **Mile 441—Tinnevely Branch.**—A complaint has been received from the Tahsildar of want of waterway at this mileage. In his letter the Tahsildar remarks that the tank above the line "is not a very safe tank"—an admission which should receive attention in the proper quarter.6. **Formation.**—The earthwork is short at mile 298/13, Dharmavaram Branch. Formation is low in many places along the Mayavaram-Mutpet Railway. If filled in, there should be a considerable saving in the amount of ballast still required.8. **Bridges and Culverts.**—The Adyar Bridge (6 × 65'), mile 6, will, in consequence of the probable early doubling of the line in the Madras suburban district, require to be doubled. It is worth considering whether, in view of the overstrained condition of the girders, this work should not be put in hand before the doubling is actually decided on.

9. The cracked abutments of the 30 feet girder bridge at mile 50, Arkonam bridge, which have been strutted were inspected and showed no signs of movement.

10. The fitting of overhead bracing to all bridges which require it, has been completed.

11. The substitution of cross for longitudinal timbers has been vigorously pushed on with during the last half year; and the following bridges in addition to those enumerated in Appendix F. of the last report, are now complete. A very good job has been made of the work:—

Mile 155/7	...	...	...	...	...	...	...	14 × 150'
" 356/16	...	...	...	...	...	...	...	7 × 30'
" 361/14	...	...	...	...	...	...	...	6 × 30'
" 365/7	...	...	...	...	...	...	...	2 × 30'
" 383/6	...	...	...	...	...	...	...	7 × 70'
" 387/7	...	...	...	...	...	...	...	5 × 50'
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12. **Mile 156/14.**—The reconstruction of a 30 in place of the 10 feet girder bridge, which was washed away in July last, was in hand. The diversion was in good order.13. **Mile 164/4.**—The new culvert was nearly finished. Diversion in good order.14. **Mile 214/10.**—It was decided to rebuild the masonry of this 30 feet girder bridge which is badly cracked.

15. **Girder strengthening.**—Owing to shorthandedness in the Engineering Department the revised calculations of girder stresses are not yet complete. Practically the only strengthening operations in hand are the cross sleepers of bridges of which the old cross girders were weak.
16. **Level Crossings.**—The suggestions contained in paragraphs 19 and 20 of the last report have not as yet been acted on, although additional safety appliances still appear to be required in the neighbourhood of Madras and Trichinopoly.
17. **Fencing.**—The aloe fencing is, as previously remarked upon, full of gaps, more especially on the Pondicherry branch and in the Tinnevely district.
18. The Kiloray thorn fence referred to in paragraph 23 of the last report has been tried on the Erode branch with excellent results. It is intended to extend the use of this type of fence.
19. The wire fencing round many station yards requires to be refixed and restrained notably at Tiruválúr-Negapatam branch.
20. **Ballast.**—Deficient in places on the Májavaram-Mutupet Railway (*vide* para. 7).
21. **Permanent-way.**—Steel sleepers on the Villupuram-Guntakal section have given no further trouble. The renewals have been very light. Rails are much worn on the Májavaram-Mutupet Railway. Renewals are heavy. This is the result of laying the line originally with second-hand rails.
22. The road was rough between Virudupati and Sáttúr. The curve at mile 383 $\frac{3}{4}$ requires sweetening.
23. The new 50 lb. road renewals have progressed comparatively slowly. 5.95 miles have been laid between the 30th June last and the date of the inspection, leaving 8.08 mile of the main line still to be relaid.
24. **Station Buildings.**—A standard ticket window and barrier has now been adopted and the old inconvenient ones are gradually being altered.
25. The refuse of engine ashes might be more advantageously made use of in filling up old borrow pits and generally levelling up the station compounds. I understand that the contract with those who undertake the removal of ashes will require amending to permit of this.
26. The Madras Tramway terminates just outside the gates of Egmore station; at train time some inconvenience is experienced by the tram cars stopping exactly opposite the gateway. The police should have powers to prevent this obstruction.
27. A scheme was discussed for acquiring the land and buildings of the abandoned Hospital for women and children, which adjoins Egmore station, for locomotive and traffic purposes. I do not think the extension is wanted.
28. Proposals for trial stations at Noyel (mile 310/4, Erode branch). Thirunellikaval (mile 206, Májavaram-Mutupet Railway) Murungapet (257, Erode branch), Aduturai (mile 186/14) were discussed. It is understood that these four new stations will be brought forward for sanction shortly.
29. **Villupuram.**—The engine-shed extension is finished, an alteration to the locomotive sidings is proposed and approved.
30. A goods tranship line is required.
31. The waiting shed accommodation for local passengers, about the insufficiency of which complaints have recently been made in the native press, is ample and no extension is necessary. I understand that the average bookings per day are 350 and the maximum by any one train 200.
32. **Cuddalore New Town.**—The proposal to extend the lay-bye to take two extra trucks is approved.
33. **Tanjore.**—Two designs have been drawn up for improving this station, one of which, I think, must be rejected on account of the expense, over four lakhs. The other, which was carefully considered on the inspection, will not cost more than 2½ lakhs, and will afford ample accommodation for the present and will not interfere with future extensions.

34. **Májavaram.**—A toll bar has been erected just outside the goods shed gate. On the day of the inspection, the bar was closed across the road. No one was in charge nor was any toll notice displayed. The Traffic Department complained that carts proceeding to and from their goods shed were blackmailed.
35. **Adiyakkamangalam.**—A permanent station building is required. A loop is not necessary, but an Annett's lock should be fitted to the lay-bye points and the home signal moved to the points. Distant signals are not required.
36. **Májavaram and Tiruvallur.**—Telegraph offices are required on the Island platform at each of these stations. This will leave only 13' 6" on either side, an infringement of standard dimensions which will be recommended for sanction.
- Mile 285/12—Ballast Depot.**—There is no objection to a siding being put in. The points should face north. A weighted derailing switch is necessary to protect the main line from vehicles running out of the siding accidentally. A block hut, a home signal and two distant signals will be required.
37. **Ammayanayakanúr.**—A very insanitary bullock bandy village has sprung up close to the station, and should be acquired.
38. **Kóilpatti.**—Extension of goods shed required.
39. **Tinnevely.**—A wagon turn table has been inserted on a siding in such a position that when a wagon is being turned on it, the main line is fouled. I see no objection to this, provided a lock and key and a scotch block be fixed so as to ensure that wagons cannot be run on to the table and turned at train time.
40. **Karúr.**—A parcels office is required. The gentlemen's waiting-room can be converted into a parcels office and the ladies' waiting-room into a general waiting-room.
41. **Tirukóilúr—First and second class waiting-room asked for.**—Considering that the number of out-ward 1st and 2nd class passengers average to only one per day, I do not think the accommodation should be sanctioned.
42. **Kátpádi.**—The platform at the east lay-bye buffer stop should be ramped.
43. **Nellore.**—The passengers' platform will have to be temporarily abandoned by the South Indian Railway, as the Bezwada-Madras Railway have to raise the formation level by 2 to 3 feet.
44. **Kálahasti.**—Extension of platform asked for and approved. The extension should be towards the west. No necessity to alter position of ashpit and water column. Goods shed also requires extension.
45. **Signals and station yards—Beach station.**—Owing to the improved train service running between Pallavaram and Beach, I consider that a home signal should be erected at this station.
46. **Tindivanam.**—At this and numerous other stations some of which are on curves, the platform signal is hidden by trees. No time should be lost in erecting proper home signals at the points, when the obsolete platform signals can be removed.
47. **Villupuram.**—The indicator lights showing south should be blocked out. The south side of the indicator arms should be painted white and the lights facing north, towards the station, should show red and green.
48. **Cuddalore Old Town.**—Locomotive disc signal should show red and green towards Beach line only. The disc should be painted red and white. The cross over between the main line and the locomotive lines should be rodded and worked by the man in charge of the main line distant signal, who will also now work the branch and disc signals.
49. **Tirupati.**—The alteration to sidings advocated on paragraph 16 of the last report has been carried out. In order to facilitate shunting, a cross over can be put in between the goods shed and main line facing Rénigunta.
50. **Madura.**—A very simple and efficient point lock by Saxby and Farmer is under trial.
51. **Tuticorin.**—The objection taken in previous reports to the disc signal lights will be rectified by the abolition of the three throw points.

52. A weighted derailing switch should be provided at points No. 25, locomotive yard. A detected dwarf signal worked from No. 12 points will control engines going to the traffic lines.

53. A "stop" notice board will, I think, be sufficient to protect the locomotive yard from trains coming from the Salt Branch. This should be erected on the branch clear of the locomotive yard whence salt trains can be hand-signalled on.

54. A new standard type of home signal was inspected at Trichinopoly and, with the exception that the vertical distance between the two arms should be increased from 2' 6" to 3' 6", approved. The arms of all home signals have now been counter-weighted.

55. *Paragraph 59 of last report.*—Proper stops have now been fixed to the home signals.

56. *Refreshment rooms.*—It has now been arranged that a well-known European Firm of Madras will undertake the refreshments on the whole line from the 1st July.

57. *Koilpati*—possesses a very temporary tea-shed, dirty table linen, etc. At this and other "chota hazri" stations, tea kiosks surrounded by a small garden with a shady tree or two would be doubtless much appreciated.

58. *Tinnevely and Tuticorin.*—Refreshment rooms should, I think, be opened at these two stations.

59. *Native refreshments.*—A native refreshment-room and a native women's waiting-room are in course of construction as an experiment at Villupuram.

60. *Workshops, Negapatam.*—These works seem to have quite recovered from the effects of the strike. One thousand eight hundred and thirty men were at work on the day of the inspection. This is 350 short of the usual complement, but I understand quite sufficient for all requirements.

61. *Trichinopoly.*—A few machines might advantageously be procured for the Engineering Workshops at this station.

62. *Rolling-stock.*—A loading gauge at a roadside station brought to notice that the roof lamps of certain types of coaching stock infringe standard dimensions. Application for sanction to the infringement should be submitted.

63. I recommend that a certain number of four-wheel coupled passenger engines and coaching vehicles be fitted annually with the vacuum brake. The Madras local trains are at present absurdly slow for want of the brake.

64. *Watering Arrangements.*—The Locomotive Department complain of the irregular water-supply received from the municipal water works; they are obliged to supplement the supply by using the old railway pumping engine.

65. *Traffic.*—It is proposed to revise the timing of trains between Chingleput and Madras. The office trains should be quickened up a bit between Chetput and Beach.

66. Great delay takes place in sending up the line clear ticket to the drivers of long mixed trains. I see no objection to the stationmaster handing the ticket to the drivers of all trains, as the engine passes the station building provided, of course, that the line is clear. When trains run through a station without stopping, the guard has no opportunity of examining the message books and satisfying himself as to the genuineness of the line clear ticket, and therefore there is no reason why he should do so when the train stops at the station. Besides the saving of delay, my proposal leaves the guard and stationmaster free to attend to passengers during the halt at the station.

67. The shunting engine at Chingleput does not seem to be necessary and should be removed.

68. *Winter's Block Instruments*—have been provided at all stations between Trichinopoly and Mayavaram and have given entire satisfaction. During the recent festival at Kumbakonam, as many as 57 trains were worked over this section in one day without the slightest hitch, whereas with a much less number of trains, great delays and confusion occurred north of Mayavaram, where the ordinary system is in force.

69. With reference to paragraph 52 of the last report, the Traffic Manager states that at stations provided with catch sidings it is practically impossible to avoid cutting off vehicles from passenger trains standing on the main line. A modified prohibition

against such shunting might, however, be issued to the effect that at such stations goods trains must always, and passenger and mixed trains must when possible, shunt only when standing on one of the trapped lines.

70. As a convenience to the third-class passengers I would recommend that through carriages be more extensively provided. For instance through third-class carriages might be run on all trains between Negapatam and Madras, Negapatam and Madura. Certain trains also might run through to Trichinopoly Fort instead of stopping at Trichinopoly junction and *vice versa*.

71. Scotch blocks on through sidings are, I think, a source of danger. It is always possible that a stationmaster, especially at stations which are not usually crossing stations, may, at night, forget that they are locked across the rails and so cause a train to be derailed.

72. The traffic on the Dharmavaram branch is so light that I think there would be no objection to reducing the number of passenger trains now run.

73. There is no necessity for trailing points to be held by pointsmen.

74. The proposal to alter the locomotive running lengths has been carefully considered, and a report drawn up by a committee appointed to investigate the question has gone home to the Board to Directors. The success of the scheme rests on the number of locomotives which can be saved. The Acting Locomotive Superintendent, in the absence of the Locomotive Superintendent who was on leave, estimated that, approximately, 20 engines could be put out of running. The Locomotive Superintendent who has since returned states that he will be unable to save one engine. Before the scheme is sanctioned, some sort of guarantee will have to be given as to the number of engines which under normal conditions will be laid up.

75. *Accident Trains.*—The absence of properly-equipped accident trains has previously been commented upon.

At Nellore, the locomotive accident van was inspected and found to be *minus* jacks which were being used in the engine shed.

At Pakala the apothecary was not able to produce his travelling accident case.

76. *Tuticorin-Colombo Route.*—A site for an emigrant cooly shed was approved. Suitable waiting and refreshment accommodation is badly needed; a small platform and shed should be provided on the Beach. It would be a great convenience to passengers if the Customs department could combine and build the customs shed in conjunction with the railway shed.

The Port authorities should also be induced to allow of the pier dues being included in the price of through tickets.

77. *Train Communication.*—The mail trains are being fitted with Winter's electric communication.

MADRAS,
6th April 1897.

C. T. R. SCOVELL,
Government Inspector.

Remarks by Senior Government Inspector.

The contents of paragraphs 3, 4 and 5 should be communicated to the Irrigation Department, paragraph 26 to the Police Department, and paragraphs 34 and 64 to the Local and Municipal Department, for the issue of such orders as may appear necessary. The report should be sent to the Agent, South Indian Railway, for attention to the points brought to notice by the Inspecting officer. I agree with Mr. Scovell's remarks in paragraph 63 that more steady progress should be made with the fitting of rolling stock with the vacuum brake. The gradual extension of the use of Winter block-system over selected busy sections of the line is very desirable. It is now in use over a busy section of twelve or thirteen stations between Trichinopoly and Mayavaram. The Agent should report soon what steps he proposes to take to remedy the defects brought to notice.

13th April 1897.

F. J. E. SPRING,
Senior Govt. Inspector of Railways, Madras.

APPENDIX.

STATEMENT showing renewals of permanent-way (excluding the extraordinary renewals referred to in paragraph 23) for the half-year ended 31st December 1896.

South Indian Railway and Villupuram-Dharmavaram Main Line and Branches excluding sidings.

624	Rails, iron, 68 lb.,	replaced by	624	Rails, iron, 68 lb.
726	" " 41 lb.,	" by {	141	" " 41 lb.
17	" steel, 50 lb.,	" by {	585	" steel, 41 lb.
2	" " 41 lb.,	" by {	17	" " 50 lb.
1,594	Sleepers, pine,	" by {	2	" " 41 lb.
1,056	" pingadu,	" by {	2,642	sleepers, pingadu.
320	" C.I. pots,	" by {	336	" C.I. pots.
31	" transverse steel,	" by {	31	" transverse steel.
95	" Denham and Oppert's	" by {	95	" Denham and Oppert's.

Máyavaram-Mutupet Railway.

361	Rails, iron, 41 lb.,	replaced by	361	Rails, iron, 41 lb.
9	Sleepers, pingadu,	" by	9	Sleepers, pingadu.

Pondicherry Branch.

20	Rails, iron, 41 lb.,	replaced by	20	Rails, iron, 41 lb.
200	Sleepers, pingadu,	" by	200	Sleepers, pingadu.

RAILWAY.

Government {1897} of Madras.
PUBLIC WORKS.

Recd.

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Enclosures

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No 552 J 2 11. 697
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40. **Karúr.**—A parcels office is required. The gentlemen's waiting-room can be converted into a parcels office and the ladies' waiting-room into a general waiting-room.

41. **Tirukóilúr.**—First and second class waiting-room asked for.—Considering that the number of out-ward 1st and 2nd class passengers average to only one per day, I do not think the accommodation should be sanctioned.

42. **Kátpádi.**—The platform at the east lay-bye buffer stop should be ramped.

43. **Nellore.**—The passengers' platform will have to be temporarily abandoned by the South Indian Railway, as the Bezwada-Madras Railway have to raise the formation level by 2 to 3 feet.

44. **Kálahasti.**—Extension of platform asked for and approved. The extension should be towards the west. No necessity to alter position of ashpit and water column. Goods shed also requires extension.

45. **Signals and station yards—Beach station.**—Owing to the improved train service running between Pallavaram and Beach, I consider that a home signal should be erected at this station.

46. **Tindivanam.**—At this and numerous other stations some of which are on curves, the platform signal is hidden by trees. No time should be lost in erecting proper home signals at the points, when the obsolete platform signals can be removed.

47. **Villupuram.**—The indicator lights showing south should be blocked out. The south side of the indicator arms should be painted white and the lights facing north, towards the station, should show red and green.

48. **Cuddalore Old Town.**—Locomotive disc signal should show red and green towards Beach line only. The disc should be painted red and white. The cross over between the main line and the locomotive lines should be rodded and worked by the man in charge of the main line distant signal, who will also now work the branch and disc signals.

49. **Tirupati.**—The alteration to sidings advocated on paragraph 16 of the last report has been carried out. In order to facilitate shunting, a cross over can be put in between the goods shed and main line facing Rénigunta.

50. **Madura.**—A very simple and efficient point lock by Saxby and Farmer is under trial.

51. **Tulicorin.**—The objection taken in previous reports to the disc signal lights will be rectified by the abolition of the three throw points.

52. A weighted derailing switch should be provided at points No. 25, locomotive yard. A detected dwarf signal worked from No. 12 points will control engines going to the traffic lines.

53. A "stop" notice board will, I think, be sufficient to protect the locomotive yard from trains coming from the Salt Branch. This should be erected on the branch clear of the locomotive yard whence salt trains can be hand-signalled on.

54. A new standard type of home signal was inspected at Trichinopoly and, with the exception that the vertical distance between the two arms should be increased from 2' 6" to 3' 6", approved. The arms of all home signals have now been counter-weighted.

55. *Paragraph 59 of last report.*—Proper stops have now been fixed to the home signals.

56. *Refreshment rooms.*—It has now been arranged that a well-known European Firm of Madras will undertake the refreshments on the whole line from the 1st July.

57. *Kóilpati*—possesses a very temporary tea-shed, dirty table linen, etc. At this and other "chota hazri" stations, tea kiosks surrounded by a small garden with a shady tree or two would be doubtless much appreciated.

58. *Tinnevely and Tuticorin.*—Refreshment rooms should, I think, be opened at these two stations.

59. *Native refreshments.*—A native refreshment-room and a native women's waiting-room are in course of construction as an experiment at Villupuram.

60. *Workshops, Negapatam.*—These works seem to have quite recovered from the effects of the strike. One thousand eight hundred and thirty men were at work on the day of the inspection. This is 350 short of the usual complement, but I understand quite sufficient for all requirements.

61. *Trichinopoly.*—A few machines might advantageously be procured for the Engineering Workshops at this station.

62. *Rolling-stock.*—A loading gauge at a roadside station brought to notice that the roof lamps of certain types of coaching stock infringe standard dimensions. Application for sanction to the infringement should be submitted.

63. I recommend that a certain number of four-wheel coupled passenger engines and coaching vehicles be fitted annually with the vacuum brake. The Madras local trains are at present absurdly slow for want of the brake.

64. *Watering Arrangements.*—The Locomotive Department complain of the irregular water-supply received from the municipal water works; they are obliged to supplement the supply by using the old railway pumping engine.

65. *Traffic.*—It is proposed to revise the timing of trains between Chingleput and Madras. The office trains should be quickened up a bit between Chetput and Beach.

66. Great delay takes place in sending up the line clear ticket to the drivers of long mixed trains. I see no objection to the stationmaster handing the ticket to the drivers of all trains, as the engine passes the station building provided, of course, that the line is clear. When trains run through a station without stopping, the guard has no opportunity of examining the message books and satisfying himself as to the genuineness of the line clear ticket, and therefore there is no reason why he should do so when the train stops at the station. Besides the saving of delay, my proposal leaves the guard and stationmaster free to attend to passengers during the halt at the station.

67. The shunting engine at Chingleput does not seem to be necessary and should be removed.

68. *Winter's Block Instruments*—have been provided at all stations between Trichinopoly and Májavaram and have given entire satisfaction. During the recent festival at Kumbakónam, as many as 57 trains were worked over this section in one day without the slightest hitch, whereas with a much less number of trains, great delays and confusion occurred north of Májavaram, where the ordinary system is in force.

69. With reference to paragraph 52 of the last report, the Traffic Manager states that at stations provided with catch sidings it is practically impossible to avoid cutting off vehicles from passenger trains standing on the main line. A modified prohibition

against such shunting might, however, be issued to the effect that at such stations goods trains must always, and passenger and mixed trains must when possible, shunt only when standing on one of the trapped lines.

70. As a convenience to the third-class passengers I would recommend that through carriages be more extensively provided. For instance through third-class carriages might be run on all trains between Negapatam and Madras, Negapatam and Madura. Certain trains also might run through to Trichinopoly Fort instead of stopping at Trichinopoly junction and *vice versa*.

71. Scotch blocks on through sidings are, I think, a source of danger. It is always possible that a stationmaster, especially at stations which are not usually crossing stations, may, at night, forget that they are locked across the rails and so cause a train to be derailed.

72. The traffic on the Dharmavaram branch is so light that I think there would be no objection to reducing the number of passenger trains now run.

73. There is no necessity for trailing points to be held by pointsmen.

74. The proposal to alter the **locomotive running lengths** has been carefully considered, and a report drawn up by a committee appointed to investigate the question has gone home to the Board to Directors. The success of the scheme rests on the number of locomotives which can be saved. The Acting Locomotive Superintendent, in the absence of the Locomotive Superintendent who was on leave, estimated that, approximately, 20 engines could be put out of running. The Locomotive Superintendent who has since returned states that he will be unable to save one engine. Before the scheme is sanctioned, some sort of guarantee will have to be given as to the number of engines which under normal conditions will be laid up.

75. **Accident Trains.**—The absence of properly-equipped accident trains has previously been commented upon.

At Nellore, the locomotive accident van was inspected and found to be *minus* jacks which were being used in the engine shed.

At Pácala the apothecary was not able to produce his travelling accident case.

76. **Tuticorin-Colombo Route.**—A site for an emigrant cooly shed was approved. Suitable waiting and refreshment accommodation is badly needed; a small platform and shed should be provided on the Beach. It would be a great convenience to passengers if the Customs department could combine and build the customs shed in conjunction with the railway shed.

The Port authorities should also be induced to allow of the pier dues being included in the price of through tickets.

77. **Train Communication.**—The mail trains are being fitted with Winter's electric communication.

MADRAS,
6th April 1897.

C. T. R. SCOVELL,
Government Inspector.

Remarks by Senior Government Inspector.

The contents of paragraphs 3, 4 and 5 should be communicated to the Irrigation Department, paragraph 26 to the Police Department, and paragraphs 34 and 64 to the Local and Municipal Department, for the issue of such orders as may appear necessary. The report should be sent to the Agent, South Indian Railway, for attention to the points brought to notice by the Inspecting officer. I agree with Mr. Scovell's remarks in paragraph 63 that more steady progress should be made with the fitting of rolling stock with the vacuum brake. The gradual extension of the use of Winter block-system over selected busy sections of the line is very desirable. It is now in use over a busy section of twelve or thirteen stations between Trichinopoly and Májavaram. The Agent should report soon what steps he proposes to take to remedy the defects brought to notice.

13th April 1897.

F. J. E. SPRING,
Senior Govt. Inspector of Railways, Madras.

APPENDIX.

STATEMENT showing renewals of permanent-way (excluding the extraordinary renewals referred to in paragraph 23) for the half-year ended 31st December 1896.

South Indian Railway and Villupuram-Dharmavaram Main Line and Branches excluding sidings.

624	Rails, iron, 68 lb.,	replaced by	624	Rails, iron, 68 lb.
726	" " 41 lb.,	" by {	141	" " 41 lb.
17	" steel, 50 lb.,	" by	585	" steel, 41 lb.
2	" " 41 lb.,	" by	17	" " 50 lb.
1,594	Sleepers, pine,	" by {	2	" " 41 lb.
1,056	" pingadu,	" by	2,642	sleepers, pingadu.
320	" C.I. pots,	" by	336	" C.I. pots.
31	" transverse steel,	" by	31	" transverse steel.
95	" Denham and Oppert's	" by	95	" Denham and Oppert's.

Máyavaram-Mutupet Railway.

361	Rails, iron, 41 lb.,	replaced by	361	Rails, iron, 41 lb.
9	Sleepers, pingadu,	" by	9	Sleepers, pingadu.

Pondicherry Branch.

20	Rails, iron, 41 lb.,	replaced by	20	Rails, iron, 41 lb.
200	Sleepers, pingadu,	" by	200	Sleepers, pingadu.