REPORT ON THE INSPECTION OF THE MADRAS RAILWAY

FOR THE

HALF-YEAR ENDING THE 30TH JUNE 1890.

THE inspection of the South-West line and branches was made between the 28th of July and the 3rd August, and of the North-West line between 11th and 14th of August.

2. **Earthwork.**—The banks and cuttings were in good order throughout and had been well maintained.

3. **Bridges.**—A large number of bridges were inspected and found to be in good order.

4. *Tootha Bridge.*—The speed across this bridge is limited to 10 miles per hour owing to the weakness of the girders which were erected when lighter engines were in use on the railway. It is proposed to renew these girders at once with others of a heavier section and the opportunity should be taken to raise the bridge 3 feet as the flood of 1882 rose about 6 inches upon the girders.

5. *Bridge at mile* 395.—The speed over this bridge is also limited to 10 miles per hour; it consists of 3 spans of 74 feet, resting upon screw pile piers, and was built some years ago across an opening where a smaller bridge was scoured out. The structure was only erected as a makeshift till a permanent bridge could be built, and it would appear desirable to take the work in hand next official year if funds can be granted for the purpose.

6. *Nine-feet culvert, mile* 408-22.—The foundation had settled and it was hardly safe. The water which originally passed through this culvert had been diverted to another further on, and the opening should now be carefully closed.

7. *Bridge, mile* 258, *near Gooty.*—All the wells in this bridge, except two at the end of one of the wing walls, had been concreted and masonry was in progress. There will be no difficulty in completing this bridge before the diversion is washed away by a flood.

8. *Pennér, Chitrávati and Cheyár Bridges.*—The girders require to be carefully scraped and either painted or tarred. A hut at each end of these bridges is required for watchmen to prevent villagers from using the bridges as foot-ways.

9. *Tungabhadra Bridge.*—The new roadway for the bridge is about half finished. The work has been caried out in a very satisfactory manner without any interruption to the traffic.

10. *Pápaghni Bridge.*—A considerable quantity of material had been collected for the reconstruction of this bridge after the ensuing rains. No work had been actually commenced, except a little earthwork, owing to the well curbs not having yet arrived from England.

11. The road-ways of nearly all the large girder bridges on the Madras Railway consist of longitudinal rail bearers resting upon cross girders placed about 6 feet apart. If a single wagon left the rails on any of these bridges, or just before entering upon them, the whole train would be wrecked. It is desirable that guard rails should be laid upon them throughout, and that ramps for rerailing wagons that have left the rails should be fixed at both ends of all these large bridges. The cost of the work need not be great, as there are plenty of old rails in stock.

12. **Fencing.**—The fencing has been carefully maintained throughout.

13. **Ballast.**—The ballast has been maintained to full section everywhere. It consists of rather fine gravel and sand, and in dry weather the interior of the carriages is covered with dust raised by the passing train. It would be a great boon to travellers if the portion of the line between the rails could be covered with broken stone or coarse gravel. If the work were gradually done the cost need not be very great.

14. **Permanent-way.**—The permanent-way is maintained up to an unusually high standard, and taking into consideration the age of the rails the running was excellent throughout.

15. The table below shows the nature of rails in the line at present, and the renewals for the past four half-years.

Length of divisions.				Balance length of iron rails in main line of each sort by weight of rails.		Renewals including rails from sidings for 4 half-years.				Length laid with steel rails.	
						Rails renewed.					
Divisions.	Main line.	Sidings.	Total.	65 lb.	75 lb.	84 lb.	June 1888.	December 1888.	June 1889.	December 1889.	Steel rails, 75 lb.	Flat-bottom rails.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.					Miles.	Miles.
1st Division, South-West line ..	175·77	29·60	205·37	37·53	5·25	43·95	1,761	1,752	2,086	2,065	88·58	·46
2nd do. ..	136·114	18·3351	154·4491	35·8716	68·0748	..	1,294	1,555	939	1,279	32·1676	..
3rd do. ..	121·37	9·71	131·08	52·24	38·11	·52	1,470	1,208	1,430	1,891	30·18	·32
4th do. ..	139·585	18·001	157·586	86·771	26·680	..	727	1,220	908	1,031	25·636	·498
1st Division, North-West line ..	119·866	16·906	136·772	..	75·902	1·023	1,203	1,189	1,585	1,072	42·072	·869
2nd do. ..	95·7627	9·0853	104·8480	..	91·2427	..	143	282	189	236	3·5900	·93
3rd do. ..	93·2365	12·5770	105·8135	·004	80·5292	..	6	51	91	99	12·4533	·25
Total ..	881·7042	114·2144	995·9186	212·4166	385·7887	45·493	6,604	7,257	7,228	7,673	234·6789	3·327

16. The 84-lb. rails were laid in 1856 and have consequently been 34 years in the line, and some of the lighter sections of iron rails on the South-West line have not been far short of this time. The various sections of the North-West line were opened between 1860 and 1870, so that the iron rails in that portion of the Madras Railway vary from 30 to 20 years in line according to their distance from Arkónam. Judging by the age of the rails and the number of new rails laid in the line it would appear that the renewals have not been excessive in the past and that very heavy renewals must be expected within the next few years. An actual examination of the iron rails now in the line confirmed this. Between Arkónam and Jalárpet the rails were found to be very much worn and it appeared doubtful if some of the rails which were found in the line would not have been better out of it. Between Jalárpet and Salem the rails were in fair condition, but on the Bangalore branch and from Erode to near Calicut they again showed clear signs of deterioration. On the North-West line between Raichúr and Cuddapah the iron rails were in fair condition, but the same cannot be said of them between Cuddapah and Arkónam.

17. The return shows that there are still about 644 miles of iron rails in the line, nearly all of which will have to be renewed in the next 8 or 10 years, or at the average rate of about 75 miles per annum. The renewals last year were 14,901 rails 20 feet long or about 28 miles, and it is therefore clear that much heavier renewals must be expected within the next few years. It appears doubtful if the renewals kept pace with the deterioration of the rails in the last two half-years.

18. The renewals have been effected with 75-lb. steel rails 20 feet long, and the old fish plates with four fish bolts have been used. The new steel rails were obtained 20 feet long to fit into the place of the old iron rails which were of that length ; but as the steel rails are laid in lengths of one or two miles at a time, and the renewals are then effected with such of the old iron rails taken out as are fit for use, it appears a pity that 30-feet steel rails were not obtained so as to lessen the number of joints. A stronger section of fish plate with six holes would also appear desirable to use with the new steel rails. It has been noted at almost every inspection that the rail joints were low, and the hammer of the vehicles running over them was most marked. This hammering action must be destructive to both rails and rolling stock and it is quite worthwhile to go to considerable expense in reducing it as much as is possible.

19. **Stations.**—The station premises were everywhere found neat and clean, and sanitation had been carefully attended to. The pits from which the earth is dug to make up the platforms, &c., are too close to the station premises, due to too little land having been left in the hands of the Company in the neighbourhood of stations.

20. The usual extensions of existing accommodation to meet increasing traffic were in progress and do not call for any special remarks.

21. The traffic for the Kolar Gold Mines now averages about 100 wagons per day and a further increase to the accommodation at Kolar road and Kamasamudram stations will soon be required. The demand for fuel for the mines is now so great that it is carried in from stations on the Madras Railway 70 miles off, and if the present consumption goes on the wood fuel must soon be exhausted and coal must be obtained to supply its place.

22. The revision of the station arrangements at Bangalore city where there is a large junction with the Southern Maharatta Railway is under consideration between the Agents of the two lines. When this revision is carried out the opportunity should be taken to remove the 3 reverse curves of 955 feet radious in the approaches to the station. These curves are dangerous, unnecessary, and apparently could be removed at no great cost.

23. At Calicut no extension of the existing goods or passengers stations should be required for many years, but a carriage shed is much required owing to the dampness of the climate.

24. At Ferok an extension of the river wharf with a line of rails along it is much required. The traffic at this station will probably develop largely because boats of considerable tonnage can come up the river at all times and lie along the wharf, from which goods could be loaded direct into the wagons as soon as the siding is laid in. The position of Ferok station appears much better suited for trade than that at

Calicut, where goods must be carted to the beach and then loaded in boats in an open roadstead unprotected in any way from the monsoons.

25. At Pálghat station the buildings are temporary; the goods-shed in which from Rs. 10,000 to Rs. 15,000 worth of goods are frequently stored, like the passenger station, consists of old rails, bamboos and thatch, under which the engine passes daily. If a spark from the engine lodged in the thatch, it would probably set fire to it and all the temporary buildings and goods would be burnt to the value of about Rs. 20,000. It is most desirable that the gauge of the proposed railway from Pálghat to Dindigul should be settled, and the buildings at the former place be made permanent.

26. **Points and Crossings.**—The levers which move the points are all of an old pattern, and it is difficult to hold over the points with them when a shunting engine is passing over, especially as in one position the pointsman's head is only a foot or two from the moving train. The derailments which are of rather frequent occurrence on the Madras Railway appear to be largely due to these levers, which the Chief Engineer proposes gradually to replace with those of a better pattern.

27. The Stoney's patent rocking bars have generally worked satisfactory. If the flanges of the wheels all projected the standard distance of $1\frac{3}{8}$" below the tyre, the rocking bars would work perfectly, but unfortunately this is far from being the case. In one case the rocking bars had jammed in under the rail so that it became difficult or impossible to open the points owing to a wheel with a much greater projection than $1\frac{3}{8}$" riding upon it, and in some cases the rocking bar had become so worn from a similar cause that it became possible to open the points sufficiently to allow a flange to enter when wagons with flanges with standard projections were passing over.

28. A very ingenious pneumatic arrangement for working all the points in a station from a central box was at work at Ráyapuram station. The only objection to it appeared to be its cost, the danger of its getting out of order and the time 4 to 6 seconds taken to open the points. It is possible that in time such an arrangement will be required for working the points at stations on the Madras Railway, but that time hardly appears to have arrived yet. What is required is a simple arrangement by which the lever handles of 4 or 5 sets of points can be brought together and worked by one pointsman instead of 4 or 5 as at present. Only points which can be readily and easily worked from a Central station should be grouped, and the grouping should not cost more than Rs. 25 per point.

29. *Length of Sidings.*—The extension of the platforms and sidings sanctioned in Madras G.O., No. 639 R., dated 5th June 1889, is making steady progress. The length sanctioned for the platforms and sidings appear suitable but are not in accordance with the minimum dimensions ordered by the Government of India.

30. **Signals.**—Distant signals have only been provided at the more important stations on the single line and have not been erected at the following stations on the double line Mussur, Munnur, Tiruvalúr and Konnur. Distant signals are essential to safe running at all stations on the double line when trains are in the habit of stopping, as absolute block is not in force on this section of the Madras Railway. Distant signals are possibly not essential to safe running on the single line where absolute block is in force, but they appear very desirable, as curves are very numerous and the gradients are very heavy.

31. **Water.**—The supply of water for locomotive purposes is insufficient at Bangalore and Salem. At the former place the Chief Engineer proposes to sink additional wells, and at the latter place to bring in the water from a distance of about three miles from a swamp at the side of the line, where there is said to have been a sufficient supply in the driest season known.

32. **Fuel for Engines.**—Suitable wood for locomotive fuel becomes scarcer and dearer yearly on the North-West line, in the neighbourhood of Madras, and especially on the Bangalore branch where the prices given by the Gold Mining Companies at Kolar are in excess of what the Railway Company can afford. Coals from various sources have been tried, and those now most in favor with the Locomotive Department appears to be —

	Rs.	A.	P.	
1. Patent fuel, costing	23	12	0	per ton.
2 Barakur coal „	17	13	0	„
3. Japanese „ „	17	12	0	„

The last named is now under trial, and the second is said to be in reality about the same price as the first because 1 ton of patent fuel is about equal to 1·14 tons of Barakur coal. About two years ago 500 tons of Singareni coal costing Rs. 23-13-0 per ton delivered in Madras by rail were tried, but the result was not satisfactory, 1 ton of patent fuel being equivalent to 1·66 tons of Singareni coal. The coal then tried does not appear to have been a fair sample of what could now be got from the Singareni mines, and the cost should not exceed Rs. 14 per ton delivered in Madras as follows:—

	Rs.	A.	P.
At pits mouth	6	8	0
Carriage to Bezváda	3	0	0
Carriage from Bezváda to Madras by Buckingham canal	4	0	0
Handling, &c.	0	8	0
Total ...	14	0	0

"Nuts" coal for station engines could be obtained for Rs. 3-8-0 per ton less. If Singareni coal can be obtained for these prices a very considerable saving from its use should follow, and at all events a further trial is desirable.

33. **Traffic.**—The traffic in both passengers and goods is increasing in a most satisfactory manner, due apparently to the endeavour of the Traffic Manager to meet the wishes of his constituents.

34. The Great Indian Peninsula Railway quote lower mileage rates for certain articles from Hudgi junction to Bombay in through booking with the Southern Maharatta Railway than they are prepared to quote for similar articles from Raichur to Bombay in through booking with the Madras Railway. This appears to be an undue preference to the Southern Maharatta Railway over the Madras Railway in terms of chapter V, section 42 (2) of the Indian Railway Act of 1890.

(Signed) T. GRACEY, Lieut.-Colonel, R.E.,
Offg. Consulting Engineer for Railways.

4th September 1890.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From the Consulting Engineer for Railways, dated Madras, 13th September 1890, No. 611.

Report on the inspection of the Madras Railway for the half-year ended the 30th June 1890.

———

Submitted to Government.

Order—dated 20th September 1890, No. 1421 R., Public Works.

The Agent's attention will be drawn to paras. 4, 5, 6, 7, 8, 11, 13, 16, 17, 18, 22, 23, 28, 30, 31 and 32.

2. The question of preferential rates brought to notice in para. 34 of the inspection note will be referred to the Government of Bombay for favor of consideration.

(True Extract.)

(Signed) T. GRACEY, Lieut.-Col., R.E.,
Offg. Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.
„ Secretary to the Government of Bombay,
Public Works Department.

Exd. J. Moses.
Spare Copies

RAILWAY.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated September, 20th.

Recd. *Encl.*

G.O., 20th Sept. 1890, No. 1421 R.

SEPTEMBER.

Madras Railway

Orders on report on the inspection of the — for the half-year ended the 30th June 1890.

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SEPTEMBER

Madras Railway

Orders on report on the inspection of the — for the half-year ended the 30th June 1890.

REPORT ON INSPECTION OF THE SOUTH INDIAN RAILWAY INCLUDING THE NELLORE BRANCH

FOR THE

HALF-YEAR ENDED 30TH JUNE 1890.

THE inspection was made between the 15th and 26th August in company with the Agent, Chief Engineer, Locomotive Superintendent, and the Resident Engineers of the several divisions.

2. **Earthwork.**—The banks and cuttings were in good order and appear to have been well maintained. Earth appears to be slowly accumulating on either side of the line at the Ponniár causeway; if this continues to any extent it should be levelled off in order that the flood waters may not be banked up. The banks in the Gúdúr valley on the Nellore branch were reported to be giving trouble through uneven settlement.

3. **Bridges.**—The bridges throughout the line are in good running order, but on the Nellore branch the gauge in some cases requires readjusting, and, on the Erode and Negapatam branches, where the old 68lb. rails are in use, the joints on many of the bridges require opening out; on some of them a slight creep was noticed. On the Southern extension it has been found that on many of the bridges the timber sleepers require renewing and it has been thought advisable to relay the ~~bridges~~ with the new 50lb. permanent-way.

4. It was decided that the 12-feet drain recently sanctioned to carry off the surface water at the Fort station, Madras, should be altered to four open drains of 4 one-foot openings at intervals, which would serve the purpose better.

5. 42/7—*One* 10-*feet bridge.*—The cracked north abutment has been securely strutted with rails.

6. 84/5—*Thondayar bridge*, ~~4~~ Four 100-*feet spans.*—The bank of earth in front of the third span from the north should be opened out in order to pass abnormal flood waters through the opening.

7. 85/13—*Gingee bridge*, ~~22~~ Twenty two 30-*feet spans.*—A bund is required on the south side of this bridge to the west of the line and at right angles to it to prevent water from spilling down alongside the line to the small bridges. A scheme for this should be got out at once.

8. 124/0—*Gadilam bridge*, ~~15~~ Fifteen 100-*feet spans.*—Cuts should be made in the bank opposite the new spans. Five diagonal tension ~~circles~~ in the new spans have been cut and rivetted with plates, as they were too long by about $\frac{1}{8}$ inch. One stirrup carrying a cross girder is slightly cracked and should be strapped at once. These straps to which the cross girders are attached should be scraped and examined periodically as they are a very vital part of the bridge. It would be better if they were painted instead tarred.

9. 146/7—*One* 100-*feet span.*—A tension bar, which has a slight crack, should have plates rivetted to it.

10. 151/6—*One* 70-*feet girder completed.*—The slopes of the banks require pitching.

11. 176/4.—A small bridge is asked for across an irrigation channel, but this appears to be outside the Company's property.

12. 323/3—*One* 15-*feet girder bridge.*—It is proposed to build a small dam across this channel in order to divert a portion of the water through a double 20-feet bridge just below, which does not now take its share of the water.

13. 327/13.—A three 25-feet girder bridge is to be constructed here in connection with the Periyár Project. The diversion is nearly ready, but it was settled not to open it until after the north-east monsoon, when the bridge will be at once taken in hand.

14. 361/9—*Two* 15-*feet girder bridge*.—The south abutment is cracked; the bridge will be floored.

15. 387/8—*Five* 50-*feet girder bridge*.—Several spikes were found to be loose and some nuts off the horizontal bolts. Clip bolts should be inserted, say 3 or 4 to each rail, as the spikes spring and often split the longitudinals.

16. *Arkónam Branch*—57/10-A.—At this mileage a two 20-feet bridge in lieu of one 15-feet opening, as the waterway was considered to be insufficient, was reported to be complete at the date of this inspection. It consists of girders of the ordinary plate type in use on the line with cross girders carrying longitudinal beams on which the rails are laid in chairs. The pier and abutments are of brick pointed with cement. The ballast walls consist of double rails with the space filled in with cement, and are a very neat type. The bridge is floored with boulders in set chunam round the piers, the remainder being dry and has drop walls 5 feet deep with aprons on the up and down stream sides. Height of rail level above floor is 18′ 4″. The brickwork appears to be excellent, the gauge is correct, and the approaches, excepting one gap to pass the water through temporarily and which has to be filled in, are consolidated. The slopes of the banks are pitched for a distance of 25 feet from the abutments. On testing with an engine the deflections varied from $\frac{3}{16}$ to $\frac{1}{8}$ inch; a running test could not be made on account of the gap. I am of opinion that the bridge may be opened for passenger-traffic without danger to the public using it. Sanction to open the bridge was given by the Consulting Engineer on 18th August 1890.

17. 63/10—*Four* 10-*feet bridge*.—The north abutment which has shifted forward has been strutted and the weight taken off. On rebuilding the abutment the question of whether a larger opening, say 15 feet, is advisable should be considered.

18. *Erode Branch*—267/9 E—*Wyacondin channel, five* 30-*feet girders*.—The rail joints want re-arranging and the gauge is rather tight.

19. *Tinnevelly Branch*—433/7 T—*Ten* 70-*feet girder bridge*.—The longitudinals on one side are being renewed, as it was found that the rail was too close to the edge of the longitudinals.

20. *Nellore Branch*—13/6 N.—The Irrigation Departments ask for a 3-feet culvert to be converted into a 20-feet bridge, as the drainage of a tank, which has been repaired, will pass through it. This seems to be necessary.

21. 14/7 N—*One* 40-*feet span*.—The groyne on the east side requires to be repaired and extended; extra flooring is also necessary.

22. 15/6 N—*Two* 10-*feet arches and six* 40-*feet girders*.—The arch at north end is badly cracked, the weight has been taken off by baulks. The arch at the south end is also slightly cracked. The piers should be re-pointed on the top as water lies there.

23. 72/8 N—*Ralayarroo bridge, seven* 100-*feet girders*.—The gauge is $\frac{1}{8}$″ tight. It was reported that there appeared to be more oscillation in the two northern girders than in the others; it was arranged to have these spans tested again and compared with the originals.

24. The refuges on many of the bridges are in very bad order and should be repaired.

25. All the bridges in the Gúdúr and Ramdass valleys appeared to be in good order, but some are tight as to gauge; any scour holes requiring to be filled in or pitching found to be necessary has been done.

26. **Permanent-way.**—The permanent way has been well maintained throughout the line and is as a rule in good running order. Up to 30th June 1890, 275 miles of the new 50 lb. road had been laid, including ~~17½~~ 18 miles on the Arkónam branch, 10 miles on the Negapatam, and one over and on the approaches to the Gingee bridge on the Pondicherry branch.

27. The portion of the old 40 lb. road in the vicinity of Kumbakónam is wearing out fast, due mainly to the decay of the sleepers; the old 68 lb. road on the Negapatam branch is also deteriorating rapidly, the rails in many places showing signs of spreading. On this branch the old timber sleepers are being renewed with cast-iron

Anandarajan, J.

pots taken out from the Negapatam end, which has been relaid for 10 miles with the 50 lb. road. The new 50 lb. road between Tanjore and Trichinopoly is in very good running order.

28. At 115/1-2 and 116/8 there are sharp curves in the line; ~~when~~ the trains jar badly, these might be eased.

29. A siding to form a run round should be put in at the end of the Cuddalore wharf siding so that the engine can always be in front of the train, as with a long train the driver cannot see what is going on at the other end, though precautions are taken in restricting speed to 4 miles an hour and ringing a bell. A man was recently knocked down by the brake-van and killed when crossing this siding, which is unfenced.

30. The gauge of the Nellore branch is in places from $\frac{1}{8}$ to $\frac{1}{4}$ inch tight, and the Denham Olphert sleepers continue to give trouble on account of the large breakages of the jaws.

31. **Ballasting and Fencing.**—The line is fully ballasted, but in many places the ballast is inferior in quality, and contains a good deal of earth.

32. The aloe fencing grows well as a rule, but in some places notably between the 51st and 53rd mile on the Arkónam branch it is poor and wants looking after.

33. Wire fencing is necessary at the level crossing gates near Nellore and also at the west end of Rénigunta station between the cemetery and the gate lodge.

34. On some portions of the line large trees overhang in a way which would be very dangerous in the event of their being blown down; the most noticeable were at mileages 370 and 371 on the Main line 63 and 68 to 70 on the Arkónam branch, and in the 255th, 264th and 283rd miles on the Erode branch.

35. *Stations.*—The buildings, platforms and yards were as usual well looked after and were neat and clean. Sanitation has everywhere been well attended to.

36. At Madras the question of a new station for the Beach terminus, which now only boasts of a ticket ~~branch~~, was discussed and it was decided that plans should be got out at once and that the Harbour Trust Board and Municipality should be consulted as to the site. At Egmore the new carriage repairing shed was completed. The Locomotive Superintendent wants the smiths fires removed from their present position to a lean-to against the boundary wall to give more light and get rid of the smoke in the engine shed.

37. The new dock siding at Chingleput which has been a long-felt want has been commenced. This will allow of three trains being at the platform at the same time.

38. At Villupuram the junction arrangements are progressing slowly owing to the difficulty in getting labor, and it is estimated that it will take two-and-a-half months more to complete the work.

39. At Vikravandi, Venkatagiri and Kálahasti small goods sheds are necessary, and at Kuttalam a lean-to against the present goods shed was asked for, as in rushes of traffic the goods are exposed to the weather. At Pallur more goods accommodation is required, a house should be built there for the station-master, who now lives in the station and his room could then be converted into a goods godown. At Trichinopoly Fort the goods shed, salt godown and old engine shed were all full of goods; if traffic increases it will be necessary to enlarge the yard and provide extra goods accommodation. The transhipping of goods at Erode having largely increased, the transhipping platform and cover will have to be extended. At Panruti Messrs. Parry and Co. ask for a siding into their works, and at Nellikuppam they also ask that the goods shed may be removed to the north side of their sidings in order to improve their shunting arrangements; this will also be more convenient for the public.

40. At Nídamangalam, Elamanur and Venkatachellam the station buildings require to be re-floored and the floor of the goods shed at Tuticorin requires re-pointing.

41. It was noticed that the pale fencing on the platforms of most of the stations on the Nellore branch was in bad repair and appeared to be deteriorating fast.

42. At Tanjore and Koilpati steam pumps are required, as a great deal of water is used at these stations, and at the former station the tank requires to be enlarged. At Tirupati and Nellore a roof is required over the pumps.

43. At Vaithisvarankoil the station building is badly cracked and also three of the staff quarters at Nellore; these are being strongly tied with old rails and will be carefully watched.

44. At Tanjore it was decided to pull down an old disused third-class waiting shed as it is getting in a dangerous condition. This station is one of the oldest on the line and is very unfitted for present requirements; it should, in my opinion, be entirely remodelled.

45. At Vendod and Yellacur the latrines which are portable ones, should be removed to the other end of the platforms as they are in the vicinity of the wells.

46. The Cuddalore Old Town station has been much improved of late, a great deal of the low swampy ground has been filled in and locomotive sidings laid down. The station sidings are also being lengthened and a new siding is to be put in.

47. Villiambakam, which is only a temporary station, in a very dilapidated condition, shows a fair amount of traffic and is, I think, worthy of a permanent structure. At Negapatam the Locomotive Superintendent asks for a weigh bridge and loading gauge in the works.

48. At Pasur there is no latrine, and Yellacur is the only station in the Nellore branch which has not got a feeder road; ~~which~~ should be provided.

49. Many of the smaller stations have no raised platforms. I am of opinion that at ~~each station~~ the platforms should be at least one foot above rail level. Several of the platforms and through sidings are also too short. A certain number might with advantage be lengthened every year so that they may all be gradually brought up to ~~stand and~~ dimensions. A return has been submitted giving their present lengths.

50. *Station machinery.*—The points and crossings inspected were in good order. Ground disc signals have been fixed to the important ones at the larger stations, but at present there seems to be a difficulty in keeping them exactly square with the line.

51. The signals were as a rule in good working order, the only one noticed which did not work satisfactorily was the south distant signal at Unjalur. The north distant signal at this station should be moved to the other side of the line. At Kuttalam, the south distant signal is in a bad position as it cannot be seen from a distance. Both distant signals at Villenur, the north one at Narasingampet, and the west one at Negapatam, require stops to prevent the arm going below 45°.

52. The distant signals at nearly all the stations are too close to the facing points. The Agent has been requested to send in a return showing their exact positions with regard to the stations; a certain number of signals every year might then be removed to the necessary distances from the outermost points. All the minor stations on the South Indian Railway have distant signals only and no home signals.

53. *Watering arrangements.*—Water was reported to be short at Tindivanam, Vikravandi, Panruti, Manaparai, Vaiyampati and Erode. The Chief Engineer will take steps to increase the supply at these stations. At 286/2 an auxiliary watering place has been made. There is an old well here near the line, and an iron tank on a sleeper staging has been put up. An estimate has been sanctioned for laying pipes temporarily from an old well about half-a-mile off to the Kadambur station; if this is successful permanent arrangements will be made, which it is hoped will do away to a large extent with the water trucks which are now hauled between Koilpati and Tuticorin.

54. *Rolling stock.*—All carriage stock, except that running on the mail trains, requires to be varnished, and there have been several complaints of the leaky state of the first-class carriages. The engines and wagon stock of the Villupuram-Guntakal State Railway are being erected by the South Indian Railway, most of the former are completed and the latter are being turned out at the rate of one a day. Some of these engines and stock have been taken into use as a temporary measure by the South Indian Railway. Jones' patent Couplings have been fitted to one mail Train, and are favourably reported on, as they diminish considerably the jar at starting, and improve the steadiness of the train while running. The remainder of the stock is being fitted as opportunity offers.

55. *Traffic.*—The receipts for the half-year amounted to nearly 30 lakhs of rupees, the highest sum yet recorded; about one-third of the increase is due to additional 3rd-class passenger traffic and the remainder to merchandise, mainly ~~due to~~ the carriage of grain owing to scanty crops and high prices in the Southern districts. It is probable that the result of the half-year's working will show that the line has earned the amount of interests paid by the State.

~~56.~~ The working of this department has been considerably handicapped by the death of two Traffic officers, but the Agent reports that the subordinates, who have been temporarily promoted, have been doing very good work.

~~57.~~ The distance between Búdalúr and Tiruverumbúr—14 miles—is too great. If traffic continues to increase, an extra station between these two, as a crossing place, will be necessary.

MADRAS,
11th September 1890.

(Signed) SIDNEY SMITH, Major, R.E.,
Deputy Consulting Engineer for Railways.

SOUTH INDIAN RAILWAY.

STATEMENT showing the Coaching and Goods stock received for renewals and repairs and turned out for the quarter ending 31st March 1890.

Particulars.	Passengers' vehicles.	Covered goods wagons.	High-sided wagons.	Other vehicles.	Total.	Remarks.
Total stock on hand on 1st January 1890.	44	32	32	12	120	
Total received from 1st January 1890 to 31st March 1890.	62	42	44	58	206	
	106	74	76	70	326	
Deduct— Stock turned out from 1st January 1890 to 31st March 1890.	61	46	49	50	206	
Total, stock on hand ..	45	28	27	20	120	{ Undergoing repairs .. 113 { Awaiting repairs .. 7

TRICHINOPOLY,
15th April 1890.

(Signed) W. F. HOOPER,
for Agent.

SOUTH INDIAN RAILWAY.

LOCOMOTIVE DEPARTMENT.

STATEMENT showing the Coaching and Goods stock received for renewals and repairs and turned out for the quarter ending 30th June 1890.

Particulars.	Passengers' vehicles.	Covered goods wagons.	High-sided wagons.	Other vehicles.	Total.	Remarks.
Total stock on hand on 1st April 1890 ..	45	28	27	20	120	
" received from 1st April 1890 to 30th June 1890.	31	31	76	10	148	
	76	59	103	30	268	
Deduct— Stock turned out from 1st April 1890 to 30th June 1890.	44	38	62	25	169	
Total, stock on hand ..	32	21	41	5	99	{ Undergoing repairs .. 83 { Awaiting repairs .. 16

NEGAPATAM,
10th July 1890.

(Signed) W. S. BETTS,
Agent.

(Signed) C. E. CRIGHTON,
Locomotive and Carriage Superintendent.

SOUTH INDIAN RAILWAY.

Engineer Department.

Statement showing the renewals of rails for the half-year ending 30th June 1890.

—	Rails Displaced.																			
	Iron.								Steel.											
	68 lb.				40·3 lb.				50 lb.				41 lb.				56 lb.			
	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut left feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Main Line.																				
January 1890	..	30	..	..	47	24	3	38	..	..	..	..	..	..	..	..	..	..	..	..
February ,, ...	..	1,594	64	296	144	83	13	261	1	..	..	..	139	192	4	422	..	..	..	..
March ,, ...	..	3,087	93	285	56	30	7	..	1	..	..	..	1	..	..	..	..	..	..	..
April ,, ...	..	978	4	..	89	32	5	..	..	..	..	..	..	..	..	..	..	..	..	..
May ,, ...	..	505	8	19	80	79	1	..	..	..	..	..	..	65	..	..	..	..	..	..
June ,, ...	..	6	..	..	189	141	4	219	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	6,200	169	600	605	389	33	518	2	..	..	..	140	257	4	422	..	..	..	..
Sidings.																				
January 1890	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
February ,, ...	..	..	..	..	25	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..
March ,, ...	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April ,, ...	..	..	..	..	3	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..
May ,, ...	..	..	..	..	13	15	..	16	..	..	..	..	..	..	..	..	..	..	..	..
June ,, ...	..	..	..	..	6	..	4	182	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	48	33	7	198	..	..	..	..	..	..	..	..	..	..	..	..
Grand Total ..	..	6,200	169	600	653	422	40	716	2	..	..	..	140	257	4	422	..	..	..	..

Statement showing the renewals of rails for the half-year ending 30th June 1890—*cont.*

	Rails Replaced.																			
	Iron.								Steel.											
	68 lb.				40·3 lb.				50 lb.				41 lb.				56 lb.			
	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.	24 feet.	21 feet.	18 feet.	Cut left feet.	24 feet.	21 feet.	18 feet.	Cut L. feet.
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Main Line.																				
January 1890	..	30	..	..	47	24	3	38	..	..	..	..	..	8	..	..	..	..	..	..
February ,, ...	..	4	..	..	59	42	5	22	1,910	8	..	..	..	..	..	..	..	..	..	..
March ,, ...	..	61	..	..	50	17	7	..	2,725	2	2	53	7	13	..	..	..	..	..	..
April ,, ...	..	40	4	..	85	25	3	..	820	..	..	..	4	7	2	..	..	..	..	..
May ,, ...	413	39	2	32	68	60	1	..	..	..	..	..	12	19	..	..	..	..	..	..
June ,, ...	..	6	..	..	177	65	4	..	113	12	..	..	7	16	..	..	..	..	..	..
Total ..	413	180	6	32	486	233	23	60	5,568	22	2	53	38	55	2	..	..	..	..	..
Sidings.																				
January 1390	..	..	..	..	1	1	1	..	..	..	..	..	..	2	8	..	..	..	..	..
February ,, ...	..	..	..	..	23	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..
March ,, ...	..	..	..	..	..	1	..	..	..	..	..	..	..	1	5	1	..	..	..	..
April ,, ...	..	..	..	..	2	1	..	..	..	..	..	..	..	2	8	..	..	..	..	..
May ,, ...	..	..	..	..	11	7	..	16	..	..	..	..	..	..	..	1	..	..	..	..
June ,, ...	..	..	..	..	6	..	3	182	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	43	12	5	198	..	..	..	..	5	21	2	..	..	..	..	..
Grand Total ..	413	180	6	32	529	245	28	258	5,568	22	2	53	43	76	4	..	..	..	..	..

TRICHINOPOLY,
15th August 1890.

(Signed) W. F. HOOPER,
for Agent.

(Signed) F. F. SMITH,
for Chief Engineer.

Rozario & Ruthnasamy

SOUTH INDIAN RAILWAY.

ENGINEER DEPARTMENT.

STATEMENT showing the renewals of sleepers for the half-year ending 30th June 1890.

——	Sleepers Displaced. Creo. 6 feet.	Creo. 9 feet.	Pingadu.	Teak of sizes.	Pot 68 lb.	Pot 50 lb.	Pot 40 lb.	Transverse steel sleeper.	Sleepers Replaced. Creo. 6 feet.	Creo. 9 feet.	Pingadu.	Teak of sizes.	Pot 68 lb.	Pot 50 lb.	Pot 40 lb.	Transverse steel sleeper.
Main Line.																
January 1890	2,339	..	30	..	70	77	35	..	2,273	..	8	..	158	77	35	..
February ,, ...	2,425	..	93	95	5,550	1½	5	2,241	2,130	..	93	9	254	8,426½	5	..
March ,, ...	3,235	..	154	8	10,516	½	3	..	2,742	..	129	8	496	12,194½	3	..
April ,, ...	2,672	..	3	10	2,178½	..	3½	..	2,539	..	142	4	1½	3,523	3½	..
May ,, ...	908	..	3	..	1,552	1½	3	..	790	..	46	..	78	1,745½	3	..
June ,, ...	2,614	..	365	342	1	2	..	..	1,815	..	50	64	712½	479	134	..
Total ..	14,193	..	648	455	19,867½	82½	49½	2,241	12,289	..	468	85	1,700	26,445½	183½	..
Sidings.																
January 1890	65	..	..	..	..	..	..	..	64	..	1	..	..	..	..	..
February ,, ...	116	..	..	..	..	..	..	..	116	..	..	..	..	..	..	..
March ,, ...	347	..	27	..	..	..	..	..	347	..	27	..	..	..	..	..
April ,, ...	301	..	..	2	..	..	..	..	301	..	2	..	..	..	..	..
May ,, ...	219	..	8	..	..	..	..	..	219	..	8	..	..	..	..	..
June ,, ...	316	..	1	..	..	..	..	..	316	..	1	..	..	..	..	..
Total ..	1,364	..	36	2	..	..	..	..	1,363	..	39	..	..	..	..	..
Grand Total ..	15,557	..	684	457	19,867½	82½	49½	2,241	13,652	..	507	85	1,700	26,445½	183½	..

TRICHINOPOLY,
15th August 1890.

(Signed) W. F. HOOPER,
for Agent.

(Signed) F. F. SMITH,
for Chief Engineer.

Ruthnasamy & Rajasir

Form No. 2.

PUBLIC WORKS DEPARTMENT.

OFFICE OF CONSULTING ENGINEER FOR RAILWAYS,

Madras, 13th September 1890.

Report on the inspection of the Madras Railway for the half-year ended the 30th June 1890.

No. 611

SUBMITTED ——— to ——— Government.

Sidney Smith
Major R.E.
for Cons. Engr. for Railways

Form No. 3.

From

THE CONSULTING ENGINEER
FOR RAILWAYS,
MADRAS.

No. 611.

Dated 13th } September 1890.
Received 22nd }

No. of Enclosures. 1

Subject.

Submitting Report on the Inspection of the Madras Railway for the half year ended the 30th June 1890.

A
No. 1421 R dy 20th Sept/90.

A No. 1421 R dy 20th Sept/90.

The Agent's attention will be drawn to paras 4, 5, 6, 7, 8, 11, 13, 16, 17, 18, 22, 23, 28, 30, 31, and 32.-

2. The question of preferential rates brought to notice in para 34 of the Inspection Note will be referred to the Govt. of Bombay for favor of consideration.--

To The Consulting Engr for Rys
Secy: to the Govt. of Bombay P.W.D.

895.

Govt. of 18 Madras.

PUBLIC WORKS.

211

Dated

Read. Encl.

G.O., 20 Sept 90, No 1421 R.

Madras Railway.

Orders on report on the inspection of the — for the half year ended the 30th June 1890.

1 0
1 3

Rec 22/9 22/9

19TH SEPTEMBER 1890, No. 1409 R., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From the Consulting Engineer for Railways, dated Madras, 4th September 1890, No. 593.

From the Agent, South Indian Railway, to the Consulting Engineer for Railways, dated Trichinopoly, 4th August 1890, No. 1083.

Your No. 370 of the 31st March last. The Government of India when considering certain proposals for the changing of South Indian rolling-stock transferred to the Villupuram-Guntakal State Railway observed "that as these two lines will probably be amalgamated soon it will practically make no difference which of the two proposals is acted on. The Government of India therefore will be glad if the Government of Madras will settle the transaction in whatever manner it considers the most convenient."

2. Thereupon the Government of Madras sanctioned the proposal submitted with my letter No. 1087 of 24th August last.

3. This arrangement has not been carried out, and as circumstances have somewhat changed since my proposal was made, I have to solicit of Government a reconsideration of the question.

4. As the time is now so near at hand for the State to assume the ownership of the South Indian Railway, I wish to submit that it is undesirable in this case, as in the case of the State Railway stock working on the Nellore Branch (see my letter No. 890 of the 23rd June 1890), to make any transfer of its value. Further as rolling-stock for the Villupuram-Guntakal State Railway has arrived in this country, has been erected, and a portion of it used by the South Indian Railway Company, I propose for adoption a rate of hire which shall apply to *both* stocks.

5. I attach a statement which shows at what rate per diem each description of stock works out, taking a sum representing 5 per cent. upon its cost *plus* an annual amount to represent its assumed life.

6. The Chief Engineer and the Locomotive Superintendent have considered these figures and they recommend, for simplification of account, the allowance rates given below for each class of stock :—

For engines Rs. 8½ per engine,
For coaching stock Rs. 1½ per vehicle,
For goods stock annas 14 do.
} per 24 hours.

7. I therefore propose that the above charges be paid by the Villupuram-Guntakal State Railway for all South Indian Railway stock which has been and is being used in the State Railway, and that the South Indian Railway Company pay the same charges for all Villupuram-Guntakal stock which has been or is used on the South Indian Railway. This does not apply to Villupuram-Guntakal stock worked on the Villupuram-Guntakal Railway and Nellore Branch.

Enclosure.

SOUTH INDIAN RAILWAY.

Locomotive Department.

Proposed Scale of Charges for hire of South Indian Railway Engines and Stock lent to the Villupuram-Guntakal State Railway.

Description.	Value.	Interest at 5 per cent.	Depreciation.	Total.	Rate per day.	Remarks.
Engines.	Rs.	Rs.	Rs.	Rs.	Rs.	
Tank engines		For 10 years.				
Passengers' engines with tenders	18,619	931	1,861	2,792	7·65	Say Rs. 8-0-0 per day.
Goods engines with tenders	20,943	1,047	2,094	3,141	8·60	Say ,, 9-0-0 ,,
Coaching Stock.						
Governor's saloon carriage						
Inspection carriage						
First-class saloon carriages, Cleminson's		Depreciation for 6 years.				
Do. do. ordinary						
English first-class composites	4,792	239	799	1,038	2·84	Say Rs. 2-14-0 per day.
Composite carriages	4,689	235	781	1,016	2·78	Say ,, 2-12-0 ,,
Second-class carriages with retiring accommodation	3,155	158	525	683	1·87	Say ,, 1-14-0 ,,
Intermediate class carriages	..	..	..	..	..	
Third-class carriages, ordinary	2,519	129	419	544	1·49	Say ,, 1- 8-0 ,,
Do. do. Cleminson's	4,500	225	750	975	2·67	Say ,, 2-10-0 ,,
Post-office vans (¼ luggage and ¾ guard's brake-van)	3,079	154	513	667	1·83	Say ,, 1-14-0 ,,
Railway Mail Service vans	3,340	167	556	723	1·98	Say ,, 2- 0-0 ,,
Passenger's brake-vans	3,079	154	513	667	1·83	Say ,, 1-14-0 ,,
Horse-boxes	2,464	123	410	533	1·46	Say ,, 1- 8-0 ,,
Carriage trucks	1,260	63	210	273	·74	Say ,, 1- 0-0 ,,
Goods Stock.						
Goods brake-vans	2,081	104	347	451	1·23	Say Rs. 1- 4-0 per day.
Covered goods wagons	1,342	67	223	290	·79	Say ,, 1- 0-0 ,,
Do. do. iron body	1,207	60	200	260	·71	Say ,, 1- 0-0 ,,
Cotton trucks, ordinary	1,811	90	301	391	1·07	Say ,, 1- 2-0 ,,
Do. do. Cleminson's	2,255	112	376	488	1·34	Say ,, 1- 6-0 ,,
High-sided trucks	1,090	54	181	235	·64	Say ,, 1- 0-0 ,,
Do. iron	926	46	154	200	·54	Say ,, 1- 0-0 ,,
Ballast wagons	1,076	54	179	233	·64	Say ,, 1- 0-0 ,,
Do. do. iron	660	33	110	143	·39	Say ,, 1- 0-0 ,,
Two timber trucks on 1 Bogie timber truck	1,924	96	320	416	1·14	Say ,, 1- 2-0 ,,
Timber trucks on cotton truck frames	1,135	57	189	246	·68	Say ,, 1- 0-0 ,,
Gun-powder vans	2,509	125	418	543	1·48	Say ,, 1- 8-0 ,,
Cattle wagons	1,570	78	261	339	·92	Say ,, 1- 0-0 ,,
Ten-ton boiler truck	1,603	80	267	347	·95	Say ,, 1- 0-0 ,,
Five-ton travelling crane	8,018	400	1,336	1,736	4·75	Say ,, 4-12-0 ,,

Example of calculation.

	Rs.
Value of engine	18,619
Interest 5 per cent. on value	931
+ Depreciation 10 years do.	1,861
	2,792
÷ 365 days = 7·65 per day.	

Negap atam,
21st July 1890.

(Signed) C. E. CRIGHTON,
Locomotive and Carriage Superintendent.

(Signed) W. S. BETTS,
Agent.

Submitted for the sanction of Government.

2. In supersession of the proposals previously submitted and embodied in G.O., No. 376 R., dated 17th March, and No. 1167 R., dated 11th August 1890, the Agent, South Indian Railway, now submits revised proposals for charges on account of the hire of locomotive and rolling-stock for the South Indian and the Villupuram-Guntakal State Railway.

3. The Agent, South Indian Railway, states that a portion of the rolling-stock erected for the Villupuram-Guntakal State Railway has been used by the South Indian Railway Company and submits for adoption a rate of hire which shall apply both to the Villupuram-Guntakal and South Indian Railways.

4. This proposal will apply to all South Indian Railway stock used on the Villupuram-Guntakal State Railway and *vice versâ*, and will not affect the Villupuram-Guntakal stock worked on its own line and the Nellore Branch.

5. The Chief Engineer and the Locomotive Superintendent are in favor of the present proposal and consider that its adoption will simplify accounts.

6. This question was discussed at the last official meeting, when the Agent's proposal was sanctioned subject to the approval of Government.

Order—dated 19th September 1890, No. 1409 R., Public Works.

The Agent's proposal is sanctioned on condition that the Villupuram-Guntakal Railway is never to be charged for South Indian Railway stock, whilst the former has similar stock of its own standing idle, not in use by the latter.

(True Extract.)

Major, R.E.,
Under-Secy. to Govt., P.W.D.,
Railway Branch.

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

Exd. J. Moses.
Spare Copies

RAILWAY.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated September, 19th.

Recd. *Encl.*

G.O., 19th Sept. 1890, No. 1409 R.

SEPTEMBER.

Locomotive and Rolling-stock

The proposals of the Agent, South Indian Railway, for charges on account of the hire of — for the South Indian and Villupuram-Guntakal State Railways, sanctioned on certain conditions.

Referred to C.E.R. in No. 1634
Letter to A. No. 828 of 8.8.90. 26.8.90

No 1087

South Indian Railway,
AGENT'S OFFICE,
TRICHINOPOLY, 4th August 1890.

From
The AGENT,
SOUTH INDIAN RAILWAY,

To
The CONSULTING ENGINEER FOR RAILWAYS,
MADRAS.

Sir,

Your No. 370 of the 31st March last. The Government of India when considering certain proposals for the changing of South Indian rolling Stock transferred to the Villupuram Guntakal State Railway observed "that as these two lines will probably be amalgamated soon it will practically "make no difference which of the two proposals is "acted on. The Government of India therefore will "be glad if the Government of Madras will settle "the transaction in whatever manner it considers "the most convenient."

Thereupon the Government of Madras sanctioned the proposal submitted with my letter No. 1087 of 24th August last.

This arrangement has not been carried out and as circumstances have somewhat changed since my proposal was made, I have to solicit of Government a reconsideration of the question.

As the time is now so near at hand for the State to assume the ownership of the South Indian Railway I wish to submit that it is

undesirable

undesirable in this case, as in the case of the State Railway Stock working on the Nellore Branch (See my letter No. 890 of the 23rd June 1890) to make any transfer of its value. Further as rolling Stock for the Villupuram Cuntakal State Railway has arrived in this country, has been erected, and a portion of it used by the South Indian Railway Company, I propose for adoption a rate of hire which shall apply to both Stocks.

I attach a statement which shows at what rate per diem each description of Stock works out, taking a sum representing five per cent upon its cost plus an annual amount to represent its assumed life.

The Chief Engr and the Locomotive Superintendent have considered these figures and they recommend, for simplification of account, the allowance rates given below for each class of stock.

For engines Rs. 0 1/2 per engine
" Coaching stock Rs. 1 1/2 per vehicle } per 24 hours.
" goods stock annas 14 — " —

I therefore propose that the above charges be paid by the Villupuram Cuntakal State Railway for all South Indian Railway Stock which has and is being used in the State Railway and that the South Indian Railway Company pay the same charges for all V.G. Stock which has been or is used on the South Indian Railway. This does not apply to V.G. Stock worked on the V.G. Railway and Nellore Branch.

Sam. Liv
Your most obedient Servant
William C Bell
Agent.

(1 Encl.)

From
THE AGENT,
South Indian Railway,
Trichinopoly.

To
THE CONSULTING ENGINEER FOR
RAILWAYS,
Madras.

Dated 4th August 1890
Received 5th
No. 1083
ENCLOSURE. 1

Resolution be sanctioned with the proviso that the V.G. Railway is never to be charged for stock &

Passengers Brake Vans						
Horse Boxes	2464	123	410	533	1·46	" 1/8 do
Carriage Trucks	1260	63	210	273	·74	" 1/- do
GOODS STOCK.						
Goods Brake Vans	2081	104	347	451	1·23	Say Rs 1 1/4 per day
Covered Goods Waggons	1342	67	223	290	·79	" 1/- do
Do. Do. Iron body	1207	60	200	260	·71	" 1/- do
Cotton Trucks Ordinary	1811	90	301	391	1·07	" 1/2 do
Do. Do. Cleminsons	2255	112	376	488	1·34	" 1/8 do
High sided Trucks	1090	54	181	235	·64	" 1/- do
Do. Do. Iron...	926	46	154	200	·54	" 1/- do
Ballast Waggons	1076	54	179	233	·64	" 1/- do
Do. Do. Iron...	660	33	110	143	·39	" 1/- do
2 Timber Trucks of 1 Bogie Timber Truck	1924	96	320	416	1·14	" 1/2 do
Timber trucks on Cotton truck frames	1135	57	189	246	·68	" 1/- do
Gun Powder Vans	2509	125	418	543	1·48	" 1/8 do
Cattle Waggons	1570	78	261	339	·92	" 1/- do
10 Ton Boiler truck	1603	80	267	347	·95	" 1/- do
5 Ton travelling Crane	8018	400	1336	1736	4·75	" 4/12 do

Example of Calculation

Value of Engine ——— Rs 1861

Interest 5% on Value — Rs 931.

+ Depreciation 10 years - do — " 1861

2792

÷ 365 days ——— = 7·65 per day

Loco. and Carriage Supdt's Office,
Negapatam 21st July 1890

William Betts.
Agent

C. Crichton.
Loco. and Carr. Supdt.

South Indian Railway

Locomotive Department

Proposed scale of charges for hire of South Indian Railway Engines and Stock lent to the Villupuram-Gumtakal State Railway

Description	Value	Interest @ 5%	Depreciation	Total	Rate per day	
ENGINES.	Rs	Rs	Rs	Rs	Rs	
			For 10 years.			
Tank Engines						
Passengers Engines with Tenders	18619	931	1861	2792	7·65	Say Rs 8- per day
Goods Engines with Tenders	26943	1347	2694	5141	8·00	" 8- "
COACHING STOCK.						
Governor's Saloon carriage						
Inspection carriage						
First Class Saloon Carriages Cleminsons						
Do. Do. Ordinary						
English First Class Composites	4792	239	799	1038	2·84	Say Rs 2 3/4 per day.
Composite Carriages	4689	235	781	1016	2·78	" 2 1/2 do
2nd Class Carriages with retiring accommodation	3155	158	525	683	1·87	" 1 1/4 do
Intermediate Class Carriages...			419	544	1·4	
3rd Class Carriages Ordinary						

Public Works Department,
Railway Branch.

PUBLIC WORKS DEPARTMENT,

RAILWAY BRANCH.

READ the following:—

Endorsement No 593 d/4th Sept. 1890 from the Consulting Engineer -

1489R

FOR ORDERS.

I can't find the G.O. quoted in the file.

G.O. 376. R. d/17/3/90 ?
G.O. 1167 R. d/11/8/90 ?

I quoted a wrong number

The Agent S.I.R. asks for a reconsideration of the orders passed in G.O. No ~~35~~ 376 R d/ 17th ~~August~~ March 1889 and the Consulting Engineer in forwarding the letter states that the Agent's new proposals have been sanctioned subject to the approval of Government.

The new proposal is that the V. G. Railway and South Indian Ry should each charge the other the following rates for stock lent -

Engines Rs 8/8/- per day
Carriages " ~~1/4~~ 1/8/- per day
Wagons " -/12/- per day

The proposal is in my opinion reasonable and the accounts will be much more easily kept than under the ~~original~~ original proposal - The whole Ry will be amalgamated in 4 months and I recommend that the Agent's proposals be sanctioned with the proviso that the V. G. Railway ~~not~~ never be charged for stock of

ailway,
Trichinopoly.
ER FOR
RAILWAYS,
Madras.
18 90

very [illegible] lent by the S. I. Ry. ~~[illegible]~~ whilst the former has similar stock of its own standing idle not in use by the latter.

Ve
8/9/90

They have any of the V. G. Rly stock available.

[illegible]

Very [illegible]

J H G

17/9

Ve

17/9

FOR ORDERS.

This seems rather a complicated arrangement. I understand it to mean that the S. I. Ry. is not to charge for the loan of its own wagons &c to the V. G. Ry. if it have any of the V. G. Ry rolling stock in its own possession & not being used. But if (as is proposed) each Ry pays ~~at the~~ same rates for all the rolling stock of the other line which it is using what more is wanted? The arrangement now proposed seems unnecessary.

J H G

12/9/90

The rates proposed may be sanctioned otherwise

J H G

12/9

The proviso is meant to prevent the S. I. Railway ~~Company~~ charging for stock to the V. G. line ~~whilst the latter has stock of its own available.~~

The S. I. Railway Engines & wagons are old and it is desirable to use them on construction work where stock gets a good deal knocked about and to save the new V. G. Engines & wagons for open line work. The new V. G. ~~stock~~ will therefore be principally ~~[illegible]~~ used on the S. I. Ry and will be replaced by old S. I. Ry stock.

Ve

12/9

Form No. 1.

PUBLIC WORKS DEPARTMENT.

OFFICE OF CONSULTING ENGINEER FOR RAILWAYS,

Madras. 4th September 1890.

Letter from the Agent, South Indian Railway No. 1083 dated 4th August 1890 with an enclosure.

3 P

No. 593

SUBMITTED for the Sanction of Government.

Subject.—

2. In supersession of the proposals previously submitted and embodied in G. O. No. 376 R dated 17th March and No. 1167 R dated 11th August 1890 the Agent, South Indian Railway, now submits revised proposals for charges on account of the hire of Loco=motive and rolling stock for the South Indian and the Villupuram Guntakal State Railway.

3. The Agent, South Indian Railway, states that a portion of the rolling stock erected for the Villupuram Guntakal State Railway has been used by the South Indian Railway Company and submits for

for adoption a rate of hire which shall apply both to the Villupuram Guntakal and South Indian Railways.

4. This proposal will apply to all South Indian Railway stock used on the Villupuram Guntakal State Railway and Vice Versâ, and will not affect the Villupuram Guntakal stock worked on its own line and the Bellary Branch.

5. The Chief Engineer and the Locomotive Superintendent are in favour of the present proposal and consider that its adoption will simplify accounts.

6. This question was discussed at the last official meeting, when the Agent's proposal was sanctioned subject to the approval of Government.

Sidney Smith
Major R.E.
for offg: Coug: Engr: for Railways.

PWC No. 840/7

Form No. 3.

Ks

Re: Aces 376 R of 17-3-90
" " " 1167 R of 11-8-91

A No. 1409 R of 19 Septr/90.

The Agent's proposal is sanctioned on condition that the Villupuram Guntakal Railway is never to be charged for ~~stock~~ ~~[illegible]~~ South Indian Railway stock whilst the former has similar stock of its own standing idle, not in use by the latter. –

Ms
W.G.R

1

To

The Cons. Engr. for Rys. ✓ D 2/9
– " – Exr. Gr. Ry. Accts: ✓ D

D 20/9

0
5/9

A... 8/9 – R 12/9
again 13/9 R 17/9

From

The CONSULTING ENGINEER
FOR RAILWAYS,
Madras,

No. 593

Dated 4th } Septr. 1890
Received 5

No. of Enclosures. 3

Subject.

Submitting for the Sanction of Government letter from the Agent S. I. Ry: forwarding revised proposals for charges on account of the hire of Locomotive and rolling stock for the S. I. Ry and the V. G. S. Ry.

A

No. 1409 R of 19 Septr/90.

8407.

Govt. of 18 Madras.

PUBLIC WORKS.

Dated 22/5

Read. Encl.

G.O., 19th Sept. 1890, No. 1409R.

Locomotive Rolling Stock.

The proposals of the Agent S.I. Ry for changes on account of the hire of — for the S.I. and S. Ry. State Railway sanctioned on certain conditions.

40 2

12/9/1