M.R.O. 1—77,006—3-6-37.

(1) Number of pages. 1+25

(2) Date of repai

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 266 Press ~~Mis.~~

531-32

Dated 30 1 1871.

Not to be folded or roughly handled

No. 531. Read the following Endorsement of the Acting Consulting Engineer for Railways, dated Madras, 21st December 1870, No. 497 :—

From the Agent and Manager of the Madras Railway Company, to the Acting Consulting Engineer for Railways, dated Madras, 20th December 1870, No. 736.

I HAVE the honour to forward herewith a copy of the Acting Consulting Physician's Report* of his last half-yearly inspection of all the stations on the lines of this Railway. The delay which has occurred in the transmission of this report to you has been occasioned by the inquiries which I have been making of the heads of departments in reference to the several points noticed by Dr. Urquhart.

* No. 174, 22nd September 1870.

2. In reference to your letter, No. 421, of the 2nd August last, I have also the honour to enclose you copy of a communication† from Dr. Urquhart, which I received in reply to my inquiry as to the extent to which the recommendations made by him in previous reports had been carried out.

Paragraph 1.

† No. 186, 29th September 1870.

3. The suggested improvements at Bangalore, mentioned in this letter, have since been made.

From the Acting Consulting Physician, Madras Railway Company, to the Agent and Manager, Madras Railway Company, dated Royapooram, 22nd September 1870, No. 174.

DURING July and August last, I made the usual half-yearly inspection of all the stations on the lines of the Madras Railway.

2. The condition of the smaller stations has been made the subject of a report to the Traffic Manager, and need not therefore in this place be noticed in detail. I had reason to be satisfied with the conservancy of the stations generally.

3. NORTH-WEST LINE.—*Arconum.*—Here, as on former occasions, the station premises were found clean, and the waiting rooms and platform in good order.

The Native and European urinaries and latrines on both sides were quite clean, although the native latrines on the north side (which are very much and constantly frequented) were not quite free from smell.

The native lines were clean and have been much improved by the drains introduced.

The latrines attached to these lines were perfectly clean and sweet; but the asphalte required renewal in some places, and the pits behind though free from smell and not contaminated with urine were half full of spring water, which requires constant removal by hand. The private privies were clean and free from smell, and the floors were asphalted. There were no tubes or buckets behind however.

There are defects in the construction of the private privies here as well as at some other stations on the line, which are perhaps not of much importance at present, but which must tend to render conservancy more difficult as time advances. These places are used as urinaries by many of the servants and others who will not use a commode, and should be so constructed as to cause all flow to be towards one point. The floor of each privy should slope downwards towards the seat underneath, which should be a channel terminating in a tube, having one of its open mouths over a bucket placed in a simple excavation behind each privy.

The chuttrum outside the compound was in good order; but the latrine attached is not asphalted, and was dirty and offensive when I visited it.

Triputty.—This station has no Resident Inspector, and might be considered one of the smallest stations. It is noticed here chiefly on account of the public chuttrum near the line. This

chuttrum was clean when visited, and the drain running through the centre court yard was not offensive, but the compound was found surrounded by stagnant water, as mentioned in my last report, and the drainage seemed to have no outlet but into this ditch. The general waiting room of Triputty Station was wet, and seemed to have been washed out as the train was coming in, the surplus water not having been removed. The commode in the bath room was untidy. The European urinary was clean though smelling slightly, and the native latrines were clean and free from smell; but the lids of the cisterns behind were broken, and the tubes in the cisterns leaky. A [illegible] now used by guards has no privy attached to it, and this is no doubt a source of inconvenience.

Cuddapah.—At this station the waiting rooms and public urinaries and latrines were in a satisfactory state. The private privies on the north, as well as on the south side, were all perfectly clean, properly asphalted, and well provided with buckets; but the Station Master's privy floor is sloped towards the door. The privies were all perfectly sweet, with the exception of the one furthest west, which, though quite clean, had a very slightly urinous smell. These privies require a coat of tar three feet up the walls, as they are used as urinaries.

The Guards' quarters are too small for the number of men and families occupying them, there being but four rooms and two bath rooms for six men including families.

On the west side of the compound outside there is a waste piece of broken ground which appeared to be used as a latrine.

Ghooty.—The platform and waiting rooms of this station were clean; but the ladies' room looked uncomfortable with flags instead of a mat.

The European urinary was quite clean, but not quite free from smell. It is dark, not sufficiently ventilated, and requires a door with a lock to prevent drivers, guards, etc., frequenting it.

The private privies are well constructed except that the slope of the floor is in most cases towards the door. They were quite clean at the time of inspection.

As the station was unfinished I cannot say what buildings are yet to be erected, but at the time of my visit the accommodation for the guards was insufficient.

The compound requires levelling and has several old buildings in it which should be removed. The present accommodation for traffic clerks, etc., is not satisfactory, Mr. Barnett's old buildings being used as quarters for them. There are no latrines for native workmen about the station, and hence the trench outside the hedge on the west by the river side is used by them as well as other natives for necessary purposes.

As the employés here are liable to fever, flannel clothing and waist-belts are much required by porters and others exposed to the weather.

4. Bangalore Branch.—*Bangalore*.—Had the station premises and waiting rooms clean. The utensils in the gentlemen's room were old and cracked, and the chunam floor was broken in some places. The public urinaries and latrines were in a satisfactory state. The private privies have been improved by having their floors asphalted, but they still require in several instances the removal of the chunam blocks for standing on, and the substitution of seats with buckets underneath, and pits and buckets behind or under the outlet tube as recommended for Arconum. Tar is required three feet up the walls, as the privies are used as urinaries, and in some cases were not free from smell when inspected, owing to the contact of urine with the chunam attached to some of the privies, and between them and the cook-rooms there is a wall forming a partition which should be removed, as it tends to create a nuisance. The cess-pools in the compound should be filled up, asphalted, and converted into latrines for servants, or removed altogether.

The porters' lines have now the privies attached to them asphalted, but at the time of my visit the brick and chunam blocks remained, and there were no proper tubes at the outlets into the cisterns.

Jollarapett.—This station was, on the whole, in a very satisfactory state. The waiting rooms, platforms, European urinaries, and native latrines were in good order. There was a very slight smell at certain times of the day in the public native latrines, but this was no more than was to be expected, seeing how many persons (including all the native staff on duty) made use of them.

The locomotive latrines and the whole of the privies attached to the houses of the employés were quite clean and free from smell. The asphalte in some of these private privies was found in need of repair, and the slope of the floor in many being partly towards the door, gave a wet and unsightly appearance to the ground about the entrance after washing. There were no pits for buckets behind the private privies, but open drains convey the fluid excreta, etc., in more than one instance into the soil near the outlets. The privies noted in last report as being dirty were quite clean on the present occasion.

The locomotive parcherry was clean, as was also the adjoining ditch outside the compound. The Reddy's house near this parcherry so long in ruins and a perfect nuisance was being proceeded with.

The traffic lines were in good order, but the drainage from them appeared defective. The latrines attached to these lines were in a very satisfactory state as to cleanliness; but the asphalte near the doors which was in a broken state had a downward slope towards the soil at the entrances. The lids of the pits were slightly broken. The ground behind Inspector Bance's fence and outside the compound, which has apparently been for some time used as a latrine, should have access to it stopped by removing the wicket and fencing the gap thus left.

5. South-West Line.—*Vellore*.—The station premises here were clean, and the waiting-rooms and public urinaries and latrines in good order.

The private privies which appeared to be resorted to as urinaries to a considerable extent had no tar on the lower part of the walls, and had in some instances the asphalte broken and the slope of the floor towards the door. No pits or proper outlets have yet been made to these private privies, and they have not been supplied with buckets to catch the fluid excreta. All had more or less an offensive smell, and some were dirty at the time of my visit. I have fined the Inspector and warned him that he will be removed if there is no change for the better in future.

Salem.—The condition of this station was satisfactory and calls for but few remarks. The public urinaries, latrines, etc., were in excellent order, and the new public latrines formerly recommended were in use and very clean.

The Telegraph Inspector's bungalow has still no privy, however, and there are no pits or buckets behind any of the privies attached to the private houses of the employés.

Erode.—The conservancy here was very good, the rooms and public and private urinaries and latrines being clean and free from offensive smell. There were, however, no pits, buckets, or proper outlets, provided for the private privies.

The chuttrum and its latrines outside the station compound were evidently well attended to.

Coimbatore.—Had the ladies' waiting room very wet when seen early in the morning, the water after washing having been left to dry by evaporation. In other respects, the station premises, including the gentlemen's rooms and public urinaries and latrines, were in good order.

The locomotive lines were clean outside, but there was not sufficiently free exit by proper drains for the water used in cooking, washing etc. The latrines of these lines were in very good order. The public latrine in the compound near the gate leading to Coimbatore was in good order also.

The private privies were all sweet and clean, but one or two had no asphalte, several had no seats, and all were without pits and buckets behind and without proper outlets. The chuttrum outside had the latrines attached to it not quite clean when I visited them. The ground outside the compound on the road leading to Coimbatore was soiled with excrement in some places. Buildings have been lately erected close up to the compound gate, and now there is a regular stud of a village very near the station.

Palghaut.—The compound of this station is very large, and that part of it lying between the station premises and the houses of the employés is irregular and full of holes. It was very marshy when I saw it.

The station premises, including waiting rooms, public urinaries, and latrines were in very good order.

The private privies, three of which had been built since last report, had no pits, buckets, or seats, and with one exception were not asphalted. They were clean and apparently not much used.

...eypore.—Had the waiting rooms and public European urinary and latrine in good order. The is no latrine for the use of the native public at this station, and this is sometimes attended with inconvenience, as the natives during wet weather use the floor of the European urinary. The workmen's privy, as well as the private privies, were all clean, and with the exception of the one attached to the Station Master's bungalow, in which there was a slight smell quite free from offensive odour; the asphalte was found broken in some instances, however, the slope was in ... cases towards the doors, and none had pits or buckets behind.

... concluding this report I beg to suggest:—

(1.) ... additional pot to each of the common country filters now in use, with clean sand in the *second*; small well-packed pieces of charcoal from light-wood in the *third*; sponge in an aperture at the bottom of *each* of the *three upper* pots; and a tap in the *fourth* or lowest pot.

(2.) Tanks on trucks to convey water from stations where there is a supply of good water to others in the neighbourhood where fever prevails, and where the water is found to be unwholesome.

(3.) Flannel clothing and waist-belts for the employés at feverish stations on the South-West Line, and at all important stations on the North-West Line.

(4.) Asphalte for the floor of every private privy *sloping towards the seat*; an opening under the seat leading to a channel which ends in a receiving pipe, so placed as to discharge its contents into a bucket lying in a simple excavation outside and behind the privy; tar *three* feet up the walls of each private privy; and no brick and chunam without a coating of asphalte or tar in any situation where contact with fluid excrement is likely to take place.

(5.) A parapet or ridge (asphalted) three or four inches high at the entrance of all urinaries where there is no door-sill to retain water.

From the Acting Consulting Physician, Madras Railway Company, to the Agent and Manager, Madras Railway Company, dated Royapooram, 29th September 1870, No. 186.

With refer... to your letter, No. 3,578, dated September 23rd, 1870, I beg to say that the recommend...ons made by me in former reports have been carried out to a considerable extent.

The cess-pools at Bangalore have not yet been filled up or converted into latrines, pits for buckets and proper outlets have not been made behind the private privies at some stations, the privy floors have not in all cases been asphalted, and the telegraph bungalow privy at Salem has not been built.

From the progress which has taken place since January last, I have no doubt these matters will be attended to as soon as possible.

Submitted for the information of Government.

(Signed) H. L. PRENDERGAST, Captain, R.E.,
Acting Consulting Engineer for Railways.

No. 532. Order thereon, 30th January 1871, No. 266.

RAILWAY, No. 67.

Ordered to be recorded.

2. Captain Prendergast will draw the attention of the Agent and Manager to the suggestions of the Consulting Physician contained in the concluding portion of his report.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Acting Consulting Engineer for Railways.
Exd. E. C. Shunker.

No. 736

No Enclosure

MADRAS RAILWAY.

AGENT AND MANAGER'S OFFICE.

Madras, 20th December 1870.

From R. B. Elwin Esqre.
Agent and Manager, of the M. Ry. Co.

To Captain H. L. Prendergast R. E.
Acting Consulting Engineer for Railways.

Sir,

I have the honor to forward herewith a copy of the Acting Consulting Physician's Report of his last Half Yearly inspection of all the Stations on the lines of this Railway. The delay which has occurred in the transmission of this Report to you has been occasioned by the inquiries which I have been making of the Heads of Departments in reference to the several points noticed by Dr. Urquhart.

x No. 174 22nd Sept. 1870.

Para. 1

2. In reference to your letter No. 421 of the 2nd August last I have also the honor to enclose you copy of a Communication from Dr. Urquhart which I received in reply to my inquiry as to the extent to which the recommendations made by him in previous Reports had been carried out.

x No. 186 29th Sept. 1870.

3. The suggested improvements at Bangalore

mentioned in this letter have since been made.

I have the honor to be
Sir
Your most obedient servant.
J. W. Ellis
for the Agent and Manager.

MADRAS RAILWAY.

From

The Agent and Manager.

To

The Consulting Engineer

for Railways.

P.W. No. 5709/70

Dated 20th December 1870.

Recd. 21st " "

No. 736.

Enclosing a Copy of the
reg Coms Physicians'
Report of his last half
yearly inspection of
all the stations on
the lines of the Madras
Railway -

There are defects in the construction of the private privies here as well as at some other stations on the lines which are perhaps not of much importance at present but which must tend to render conservancy more difficult as time advances. These places are used as urinaries by many of the servants and others who will not use a commode; and should be so constructed as to cause all flow to the nearest point. The floor of each privy should slope downwards towards the seat under which should be a channel terminating in a tube having one of its open mouths over a bucket placed in a simple excavation behind each privy.

The Chuttram outside the compound was in good order but the latrine attached is not as it should be; and was dirty and offensive when I visited it.

b. Tripatty. This station has no resident Inspector and might be considered one of the smaller stations. It is noticed here chiefly on account of the public Chuttrum near the line. This Chuttrum was clean when visited; and the drain running through the centre Court yard was not offensive, but the Compound was found surrounded by stagnant water as mentioned in my last report, and the drainage seemed to have no outlet but into the ditch.

The general waiting room of Tripatty station was wet and seemed to have been washed out as the train was coming in, the surplus water not having been removed. The commode in the bath room was untidy. The European Nursery was clean though smelling slightly; and the native latrines were clean and free from smell, but the lids of the cisterns behind were broken, and the tubes in the cisterns leaky. A Bungalow now used by friends has no privy attached to it; and this is no doubt a source of inconvenience.

c. Cuddapah. At this station the waiting rooms and public urinaries and latrines were in a satisfactory state. The private privies on the south as well as on the north side were all perfectly clean, properly asphalted, and well provided with buckets; and the station master's privy floor is sloped towards the door. The privies were all perfectly sweet with the exception of the one furthest west which though quite clean had a very slightly ammoniacal smell. These privies require a cant of ten three feet up the walls as they are used as urinaries.

The friends' quarters are too small for the number of men (and families) occupying them, there being but four rooms and two bath-rooms for six men including families.

On the west side of the compound outside there is a waste piece of broken ground which appeared to be used as a latrine.

d. Cooty. The platforms and waiting rooms of this station were clean but the ladies' room looked uncomfortable with flags instead of a mat.

The European Nursery was quite clean but not quite free from smell. It is dark, not sufficiently ventilated, and requires a door with a lock to prevent Drivers, &c. frequenting it.

The private privies are well constructed except

that the slope of the floor is in most cases towards the door. They were quite clean at the time of inspection.

At the station was unfinished. I cannot say what buildings are yet to be erected, but at the time of my visit the accommodation for the present was insufficient.

The Compound requires levelling and there are several old buildings which should be removed. The present accommodation for Traffic Clerks is not satisfactory.

Mr Barnett's old buildings being used as quarters for them. There are no latrines for native workmen about the station, and hence the trench outside the hedge on the west by the river side is used by them as well as other natives for necessary purposes.

As the employés here are liable to fever; flannel belts are much required.

Clothing and waist belts are much required by porters and others exposed to the weather.

4. Bangalore Branch.

Bangalore. Had the station premises and waiting rooms clean. The utensils in the gentlemen's rooms were old and cracked and the chunam floor was broken in some places.

The public urinaries and latrines were in a satisfactory state. The private privies have been improved by having their floors asphalted but they still require in several instances the removal of the chunam blocks for standing cans and the substitution of seats with buckets underneath, and pots and buckets behind or under the outlet tube as recommended for circulation. Lime is required three feet up the walls, as the privies are used as urinaries; and in some cases were not free from smell when inspected owing to the contact of urine with the chunam attached to some of the privies and between them and the cook rooms there is a wall forming a partition which should be removed as it tends to create a nuisance. The cess pools in the compound should be filled up, asphalted and converted into latrines for servants, or removed altogether.

The Porters latrines have now the privies attached to them asphalted but at the time of my visit the brick and chunam blocks remained and there were no properitubes at the outlets into the cisterns.

Jalarpett. This station was on the whole in a very satisfactory state. The waiting rooms, platforms, European latrines and latrines were in good order. There was a very slight smell at certain times of the day in the public latrines but this was no more than was to be expected seeing how many persons (including all the native staff on duty) made use of them.

The Locomotive latrines and the whole of the privies attached to the houses of the Employés were quite clean and free from smell. The asphalte mixture of these private privies was found in need of repair and the slope of the floor in many being partly towards the door-jamb and not towards the drain, urine appeared to the ground about the entrance after washing. There were no pots or buckets behind the private privies but open drains conveyed the fluid excreta &c in more than one instance into the soak near the outlets. The privies noted in last report as being dirty were quite clean at the present occasion.

The Locomotive parchery was clean as was also the adjoining ditch outside the compound. The Redelys house near this parchery is long in ruins, and no perfect nuisance, was being proceeded with.

The Traffic lines were in good order, but the drainage from them appeared defective. The latrines attached to these lines were in a very satisfactory state as to cleanliness; but the asphalte near the door which was in a broken state, had a downward slope towards the soil & the entrances. The lids of the pits were slightly broken. The ground behind Inspector Bance's fence and outside the compound, which has apparently been for some time used as a latrine, should have access to be stopped by removing the wicket and fencing the gap that left.

5. South West Line.

a. Cullore. The station premises here were clean and the waiting rooms and public urinaries and latrines in good order.

The private premises which appeared to be resorted to as urinaries to a considerable extent, had no ties on the lower part of the walls, and had in some instances the asphalte broken and the slope of the floor towards the door, no pits or proper outlets have yet been made to these private premises, and they have not been supplied with buckets to catch the fluid excreta. All had more or less an offensive smell and some were dirty at the time of my visit. I have fined the Inspector and warned him that he will be removed if there is no change for the better in future.

b. Salem. The conditions of this station was satisfactory and calls for but few remarks. The public urinaries latrines &c were in excellent order and the new public latrines formerly recommended were in use and very clean. The Telegraph Inspectors bungalow has still no privy however, and there are no pits or buckets behind any of the privies attached to the private houses of the Employés.

c. Erode. The Conservancy here was very good, the rooms and public and private urinaries and latrines being clean and free from offensive smell. There were however no pits, buckets or proper outlets provided for the private privies.

The Chattrum and its latrines outside the station Compound were evidently well attended to.

d. Coimbatore. And the Ladies waiting room very wet when seen early in the morning. the water after washing having been left to dry by evaporation. In other respects the station premises including the Gentlemen's rooms and public urinaries and latrines were in good order.

The Loco-lines were clean outside but there was not sufficiently free exit by proper drains for the water used in Cooking, washing, &c. The latrines of these lines were in very good order. The public latrine in the compound near the gate leading to Coimbatore was in good order also.

The private premises were all sweet and clean but one or two had no asphalte, several had no seats and all were without pits and buckets behind and without proper outlets. The Chattrum outside, had the latrines attached to it properly

clean; when I visited them. The ground outside the compound on the road leading to the combatant was soaked with excrement in some places. Buildings have been lately erected close up to the Compound gate, and now there is a regular street of a village very near the station.

b. Paulghat. The Compound of this station is very large, and that part of it lying between the station premises and the houses of the employés is irregular and full of holes. It was very marshy when I visited.

The station premises excluding waiting rooms, public urinaries and latrines were in very good order.

The private privies three of which had been built since last report had no pits, buckets, or seats, and with one exception were not asphalted. They were clean and apparently not much used.

The waiting rooms and public European urinary and latrine in good order. There is no latrine for the use of the native public at this station and this is sometimes attended with inconvenience as the natives during wet weather use the floor of the European urinary.

The workmen's privy as well as the private privies were all clean, and with the exception of the one attached to the station master's bungalow in which there was a slight smell, quite free from offensive odour; the asphalte was found broken in some instances however, the slope was in reduced cases towards the door,

and none had pits or buckets behind.

6. In concluding this report I beg to suggest

(1) An additional pot to each of the common Coimbatore filters now in use; with clean sand in the second, small well packed pieces of charcoal from light wood in the third, sponge in an aperture at the bottom of each of the three upper pots, and a tap in the fourth or lowest pot.

(2) Tanks on trucks to convey water from stations where there is a supply of good water to others in the neighbourhood where fever prevails and where the water is found to be unwholesome.

(3.) Flannel clothing and waistbelts for the employés at fever-ish stations on the South West Line, and at all important stations on the North West Line.

(4) Asphalte for the floor of every private privy sloping towards the seat; an opening under the seat leading to a channel which ends in a receiving pipe, so placed as to discharge its contents into a bucket lying in a simple excavation outside and behind the privy; taken three feet up the walls of each private privy; and no brick and chunam without a coating of asphalte or tar in any situation where contact with fluid excrement is likely to take place.

(5.) A parapet or ridge (asphalted) three or four inches high at the entrance of all urinaries where there is no door still to

retain

return mail.

Yours faithfully
Jos J. Urquhart, M. D.
Ag. Consulting Physician.
Ch. P. Co.

/True Copy/

J. H. Mellis.
Asst. Agent & Manager.

Confidential

Rec'd 30th/70

No 186.

Madras Railway Company
Consulting Physician's office
Royapooram, 29th Sept'r 1870

The Agent and Manager.
Madras Railway Company.

Dear Sir,

With reference to your letter, No 3578, dated 28th September 28th. 1870, I beg to say that the recommendations made by me in former reports have been carried out to a considerable extent.

The Cesspools at Bangalore have not yet been filled up or converted into Latrines: pits for buckets and proper outlets have not been made behind the private Privies at some stations; the privy floors have not in all cases been asphalted; and the Telegraph bungalow privy at Salem has not been built.

From the progress which has taken place since January last, I have no doubt these matters will be attended to as soon as possible.

Yours faithfully
(Sd) J Urquhart Abd.
Ag Consulting Physician
Madras Railway Co

(True Copy)
J. W. Mellis.
for the Agent & Managers.

(31)

RAILWAY DEPARTMENT.

P. W. Dept. 1870. 4 Sheet Summary.
Proc. Govt. No. 5209

From

The Consulting Engineer
for Railways,

To

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

Dated 21st December 1870.

Received 22nd

No. 497.

Ex. No. 266 - 30th Decr 71.

Submitting for the information of Govt a copy of the Cons: Physicians Report of his last half-yearly Inspection of stations on the Madras Railway.

No. 531

6 Jany 71 Regd

Public Works Department

No. 266

25

Proceedings of the Madras Government

Under date the 30th Jany 71

Read the following

From The Consulting Engineer for Railways, } No. E. No. 497 dated 21st Decr 70

Ordered to be recorded

Capt. Prendergast will draw the attention of the Agent and Manager to the suggestions of the Consulting Physician contained in the concluding portion of his Report.

To

The Right Hon'ble
Railways

Dated 31/1/71

No-5209.

Govt of [1871] Madras.

PUBLIC WORKS.

To

The Acting Consulting
Engr. for Railways

Dated

Read. Rd.

G.O. 8th Jany 1871. No. 266.

Nos. 531-532

Statistics. Endorsement to the Consr. for Railways submitting for information a Report by the Govt Physician on the Madras Railway on the Statistics of the Madras Railway recorded.

L: Land/71 R. 95