

Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 204 R

DATED 13th May

[Despatch Abstract.]

Passenger fares.— Letter from the Govt of India sanctioning certain alterations in the — on the Kolar Gold Fields State Railway, communicated to the officers concerned.

8. In directing the attention of the District Sanitary officer, Vizagapatam (Surgeon-Lieutenant-Colonel Leapingwell), to the fact that certain pilgrims from an infected festival were about to pass into his district and advising observation, he suggested to me that a system of "passes" might be arranged for in communication with Railway and District authorities, and that the return of pilgrims by rail to their destination could always be notified to the District Sanitary officer. By using a code, it could be arranged cheaply to keep all authorities informed of the number of pilgrims and special localities to which they were returning.

ENCLOSURE.

EXTRACTS from reports showing spread of cholera by rail.

NELLORE DISTRICT.

By District Medical officer, Nellore.

Potlapudi Village.—"It appears that from Potlapudi, a village with a population of 871, situate about 12 miles south-east of Nellore, about 30 people went to the festival held at Tiruvannámalai. On arrival there they learned by tom-tom that cholera was present; they, however, did not leave till two days afterwards, and on the return journey in the train on the morning of the 14th December 1894, the first case occurred in a woman who died next morning, about one hour before the train arrived at Nellore, where her body was buried. Next morning, as they were travelling to Potlapudi, a boy was attacked (since recovered), and same day a woman living in the same house as the boy was seized and died that night. The disease at first appeared only in the houses of those who had gone to the festival, but afterwards spread to the houses of other residents in the village. When it was found that cholera was present in their midst, many of the villagers went to their fields and stayed there till it had died out. He (hospital assistant) experienced great difficulty in dealing with the sick, as the relatives in most instances would not allow disinfection of stools, or their instant removal to a distance and buried as he advised, but threw them on the manure heap in the backyard usually, and only in some instances covered them with earth. The dead were buried within 12 hours, and only in their clothes; but the clothes of others were removed by relatives and given to the dhobies to be washed; the relatives as well as the dhobies refused to use disinfectants in the water for washing them as recommended by the hospital assistant. They also refused to have their houses limewashed.

"It seems to me to be of little use sending a hospital assistant to an affected village, unless he or some revenue official there be given some powers to enforce simple sanitary precautions against the spread of the disease, such as disinfection and burial of stools without delay, and early disinfection of clothing and houses of those attacked."

NORTH ARCOT DISTRICT.

By District Medical officer, North Arcot.

Vellore.—"Cholera was imported into the town by pilgrims on their way from the Tiruvannámalai festival, which took place about the 10th December. A number of people were seized with the illness on the journey and were sent on to Vellore in the train or from Kátpádi in juktas by the railway apothecary or other railway official. The first case was that of a resident of Madras aged 20 years. He was brought in a cart from the South Indian Railway station to the hospital, on the 12th December, and died next day. The next case, also a resident of Madras, was attacked with the disease in the train and was taken into hospital on the 13th, and died the same evening. In like manner seven other cases were brought by train to the hospital, of whom six died in all.

"A hospital assistant was deputed to visit all infected houses, and to see that thorough cleaning and disinfection were carried out under his own supervision, with directions to pay particular attention to infected clothing and to the discharges."

SOUTH ARCOT DISTRICT.

By the Civil Apothecary, Chidambaram Municipality.

Chidambaram.—"The first case of cholera was that of a pilgrim, a Malayalee, who with his relatives alighted in a house in the eastern part of the town on the 14th instant, coming directly from Tiruvannámalai, whither he had been for the festival; he is reported to have taken bad the same night and died by the morning of the 15th. . . . The other patient was found on the Railway Company's premises suffering from cholera, and he was sent on to the hospital on the forenoon of the 15th instant, where he died a few hours afterwards in spite of treatment. As he was in a greatly exhausted condition, a detailed account of his attack could not be obtained, but it is ascertained that he was also a pilgrim coming directly from Tiruvannámalai and was a native of Salem."

By the First-Class Hospital Assistant, Porto Novo.

"The man had been to Shiyali, where he was attacked at 6 p.m. on the 13th instant and brought down by his relatives to Porto Novo, his native place, on the same night by the mail train.

"I hear that cholera is prevailing at Shiyali, being imported by the pilgrims, who had been to Tiruvannámalai for Karthigai festival."

By the Hospital Assistant, Vanur.

"In forwarding the enclosed cholera report, I beg to report that the first case occurred in one named Papooraya Mudali, who had been for the Karthigai festival at Tiruvannámalai where cholera prevailed."

By First-Class Hospital Assistant, Cuddalore Old Town.

"I beg to report that three pilgrims, natives of Tinnevely district (one female and two males), on their return from Tiruvannámalai festival last midnight were attacked with cholera, of whom the female died this morning in a choultry near the railway station."

By Second-Class Hospital Assistant, Panruti.

"I beg to bring to your kind notice that cholera of virulent type was imported from Tiruvannámalai by the pilgrims who had been there for the late Karthigai festival; none of them were the residents of this place, but belonging to different parts of this district excepting one who was a native of Tanjore district. All of them that were attacked were Hindu males who actually brought cholera with them. Amongst the three who were attacked, two of them had been suffering from the complaint on their way home by the rail; since they were objected to proceed further to their destination, they alighted at the station, and halted at their friend's place and fell victims to the dire disease."

CHINGLEPUT DISTRICT.

By the Civil Apothecary, Conjeeveram Municipality.

Conjeeveram.—"On the 13th current, a Hindu male, weaver by profession, a resident of Conjeeveram, by name Kundasawmi Mudali, returned to his permanent residence at Pillapaliam (Conjeeveram) from Tiruvannámalai by train. He went to attend the Karthigai festival that took place on the 10th idem. He stopped at Tiruvannámalai from Monday morning to Wednesday morning. He left the place as he was warned to leave it at once, as cholera was reported to have broken out in Mattupatty (cattle-market) . . . About 7 miles from

Conjeeveram when coming by the South Indian train on the 13th instant, he vomited. On arrival at Conjeeveram station he walked into the latrine on the platform, vomited and purged once therein, and then went on walking homewards. On the way, he entered Kamatchiamman temple, washed his hands and feet and rinsed his mouth in the tank of the temple and then walked away; approaching another temple Kachapeswaraswami's, he had another motion; still further on at the bend of Kachapeswaran Mada street he had one more motion. There was a fourth motion at the bend of Akkapparantan street. After this he appears to have been much exhausted, and fell down unable to walk near the Manjaneer channel."

TANJORE DISTRICT.

By District Medical officer, Tanjore.

Shiyali.—“I have the honour to inform you that the Civil Apothecary at Shiyali reports that, on the morning of 12th December 1894, on arrival of the 9 A.M. train at the Shiyali station from Villapuram, a person named Kuppusawmy Iyer was found to be suffering from cholera.

“2. It appears that, on his way from Tiruvannamalai Karthigai festival, he took the train at Villapuram at 3-40 A.M., and shortly afterwards was attacked with cholera; he passed several motions in the carriage and vomited several times. According to the account furnished to me by the apothecary, he was allowed to proceed from several stations before Shiyali, although he was seen to be vomiting by some of the railway officials.”

“P.S.—Since writing the above I have received a report from the Medical officer at Shiyali that three more cases of cholera were discovered in the train, all patients were returning from the Tiruvannamalai Karthigai festival. I intend proceeding to Shiyali myself at once.”

By the Assistant Surgeon, Tanjore.

“... The patient had been to the infected place (Tiruvannamalai). On the 14th December 1894 at 5 P.M., while she was travelling in the train from Chidambaram to Tanjore, the attack commenced with vomiting and purging. The stools and vomited matters were voided in rags and thrown out of the carriage.”

By the Chairman, Municipal Council, Mayavaram.

“... The deceased had been to Tiruvannamalai (the attacked locality) and was in contact with an affected person. ... The deceased had the attack while in attendance on another person. But considering as ordinary diarrhoea left the place Shiyali (where the other person was dropped from the train as cholera-stricken) and was on his way to his native place Alangudy. The date and time of attack said to be early morning of 13th December 1894. The deceased had purging and vomiting.

“The stools while at Shiyali were voided in a tope, in his clothes while in train. How disposed of with the stools, &c., during transmission not known. He was picked up in the railway station, and sent to the hospital where he was attended to.”

No. 781, Local and Municipal.

Transferred to the Public Works (Railway) Department.

FORT ST. GEORGE,
5th June 1895.(Signed) C. G. TODHUNTER,
Ag. Assistant Secretary.

From the Officiating Agent and Manager, Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 11th July 1895, No. 628.

I have the honour to acknowledge the receipt of your letter No. 1945, dated 20th June, enclosing copy of a letter from the Acting Sanitary Commissioner for Madras reporting on the inadequacy of arrangements made to meet the sanitary requirements of the pilgrims attending the recent festival at Tiruvannamalai on the South Indian Railway.

2. In reply I desire to explain that the general aspects of this subject were fully considered at the last railway conference, and I enclose you a copy of a letter in which the expression of my views was submitted in compliance with the request from that body that the opinions of the managers of the several railways might be obtained.

3. I have also the pleasure to forward a copy of a letter from the Company's Medical Officer, whose opinion was invited on the several points raised by the acting Sanitary Commissioner.

ENCLOSURES.

From the Medical officer, Madras Railway, to the Officiating Agent and Manager, dated Rayapuram, 6th July 1895, No. 927.

Acting Sanitary Commissioner's report.

[Your No. 8620/5915 of 21st ultimo.]

I duly received your above quoted letter forwarding your office docket No. 8620 containing the Sanitary Commissioner's report on circumstances which came under his notice while inspecting the festival at Tiruvannamalai, with his suggestions for preventing cholera poison being carried into various districts by pilgrims returning from such gatherings. As you have invited my opinion on the Sanitary Commissioner's suggestions, I have carefully examined the latter and beg to submit a few comments thereon. If it is intended to make reflections on the South Indian Railway Company for overcrowding their pilgrim trains, I don't think it is reasonable. The natives resort to such feasts as the one under reference in large numbers and the resources of the companies are taxed to the very utmost, and so some overcrowding is quite inevitable.

2. I am not quite in agreement with paragraph 2 of the Sanitary Commissioner's letter. A person may be suffering from cholera with painless symptoms and not attract the notice of fellow passengers, and even if they did, the person's fellow passengers would most probably be friends or relations and would very likely keep silent about the circumstances in case the railway officials would remove the individual from the train and place him down at some station very far from his home. The pilgrims know that it is the practice of the railway officials to be especially active on the occasion of a feast in looking out for travellers with symptoms of illness and in removing them from the train.

The railway apothecaries at such times move freely about among the pilgrims, while the latter are waiting at stations and the ticket collectors and porters are always instructed to scan the faces of the pilgrims well in order that cases of sickness may be detected and sent to hospital. The pilgrims therefore combine to conceal cases and the difficulties of the railway officials in detecting them are far greater I fear than the Sanitary Commissioner thinks. The report by the District Medical Officer, Nellore, shows how little assistance the authorities may expect from natives in detecting cases of cholera and stamping out the disease.

When the South Indian Railway authorities detected a case of cholera among the pilgrims returning from Tiruvannamalai, they appear to have acted with promptitude as you will observe from the report made by the 2nd-class hospital assistant, Panruti, on page 7 of the extract of reports accompanying the Sanitary Commissioner's letter to Government. The railway officials refused to allow the cholera-stricken people to remain in the train after the disease had declared itself, and set them down where medical relief was available.

3. I don't see any evidence in the extract of reports that the railway authorities dropped pilgrims suffering from cholera at unsuitable places, as suggested in paragraph 3 of the Sanitary Commissioner's letter. Wherever the pilgrims were dropped, medical attendance appears to have always been available. I am in entire agreement with the Sanitary Commissioner that some understanding should exist between the authorities of districts and the Railway Companies as to the stations at which cholera cases should be removed from the train. The district authorities should erect cholera sheds near some of the larger stations along the line where medical subordinates are stationed. There are such sheds on this railway and when a case is removed from a train, the railway apothecary renders first aid, places the patient in the shed, sends an intimation to the Government medical subordinate and hands over the case to him when he arrives. These sheds need not be expensive structures, and although that is so, it is very difficult to get district authorities to put them up. This department has been trying for a long time without success to induce the district authorities at Jalarpet to erect a cholera shed near that station to replace one that was demolished several months ago.

4. The suggestion in paragraph 4 that a latrine carriage should be attached to pilgrim trains is not one that I would like to support. The habits of natives are such that it would be difficult to induce the healthy pilgrims to enter such carriages and the latter would certainly prove to be serious nuisances. The latrine accommodation on platforms should suit healthy pilgrims quite well, and if the latrines are cleaned out and thoroughly disinfected immediately after the departure of the pilgrim train, any danger that might follow the use of the platform latrines by the pilgrims would be removed.

5 and 6. An ambulance carriage attached to trains carrying over a certain number of pilgrims would be useful. In my No. 449 of 27th March last to your address, I offered some remarks on the desirableness of having such carriages attached to pilgrim trains. I adhere to what is stated in that letter in this connection, and would only like to add that the patients' stools should be thoroughly disinfected and removed at some station, and buried deeply in the ground at some distance from houses and wells. Perhaps I should also say that instead of a railway apothecary accompanying the train over his own length only, it might be better if a Government medical subordinate travelled in the ambulance carriage the whole journey, and so the

continuity of the patient's treatment would not be interrupted. There might not be time during a short stoppage for an apothecary to acquaint his successor with all the particulars of cases then under treatment, and I think it would be better if a Government medical subordinate treated the cases throughout.

I would only seek to add that I am sure railway companies do their best to prevent the spread of cholera and other infectious diseases through any agency of theirs. When it is considered that the incubative stage of cholera may be five or ten days or even twenty days and that persons who attend one of these feasts and never take ill themselves may bring the disease to their homes, it would be very unreasonable to blame railway companies for helping to carry the poison to these villages. Again persons may have cholera on them, and yet not be apparently ill, or only slightly ill, and in that way the task of railway officials in selecting dangerous cases is very difficult. I think a great deal could be done by district authorities at these feasts to prevent cholera breaking out. The pilgrims reach the feast after a fatiguing journey in many cases, and this predisposes them to cholera. It is therefore important that the pilgrims should have opportunities of buying good wholesome meals at these fairs, that good well water should be available for their use; and that no vendors of decayed fruit should be allowed to ply their calling among the pilgrims.

I beg to return herewith your office docket above referred to.

From the Officiating Agent and Manager, Madras Railway Company, to the Secretary, Railway Conference, Simla, dated Madras, 13th May 1895, No. 8537/4656.

I have the honour to acknowledge the receipt of your letter No. 024 of 8th February 1895, forwarding copy of letter No. 713 R.T. of 13th December 1894, from the Government of India with enclosures regarding the stoppage of trains at short intervals to enable passengers to obey the calls of nature.

2. In dealing with this subject attention is invited to the very different conditions under which pilgrim traffic is conducted on the Madras Railway, compared with those which exist on the Oudh and Rohilkund and other railways in Northern India. On the Madras Railway pilgrims reach their destination in 3 or 4 hours, and the existing latrine accommodation provided at stations is found to suffice; most of the trains conveying passengers halt at the principal intermediate stations for 15 minutes or more and mail trains stop at all large stations both in the morning and evening for about half an hour; drinking water is distributed on the platforms of nearly every station; and the present arrangements for coping with pilgrim traffic appear to afford satisfaction.

3. On the general question raised, and in regard to the difficulties encountered on other lines when the journey by train extends to over 24 hours, the Heads of Departments, to whom the subject was referred, concur with me that any system for utilizing the carriages for latrines does not commend itself. It does not suit the habits, customs and convenience of the bulk of native passengers, as they are, as a rule, ignorant of the proper method of using the type of latrine usually provided in carriages, and the difficulty in preserving cleanliness in the carriages is an insuperable objection. The pollution, moreover, of the road both within station limits and way gangs to undertake the duties of scavengers, are adduced as further reasons for condemning carriages in ordinary trains for the use of females and children recently adopted.

4. In the opinion of this office, the other alternative appears to be preferable in many ways, although it entails detention to the trains. I would therefore advocate that all trains conveying pilgrims should stop for at least 45 minutes at sunrise, and again at sunset, at specially selected temporary stations, to permit pilgrim passengers to perform their necessary ablutions and make use of the ordinary conveniences which should be provided. With this object the selected stations should be far from large towns and fixed at sites where open plains would afford space for the erection of the requisite sheds and latrines (for both sexes) which should be of a temporary character. The sites chosen should also contain an ample supply of good water, and a special temporary staff of scavengers should be retained for keeping the premises scrupulously clean and is annually dealt with, it will doubtless be practicable to time all trains carrying pilgrims so that they will arrive at these temporary halting stations at sunrise or sunset. The outlay and upkeep derived. The outbreak of an epidemic would be fully repaid by the resulting benefits to be risk of its importations into large towns would be restricted to the temporary halting stations; the stations would be scoured; and the comfort and convenience to passengers would be fully appreciated.

5. In regard to sickness during the journey the company's medical officer suggests that in cases where pilgrims are attacked by cholera they should be removed to a hospital van (to be attached to the train) in which separate latrine accommodation for both sexes should be provided. The apothecary of the section could travel in the van, taking with him his medical chest, and would commit the charge of the patients to the apothecary of the next section, and the repetition of this procedure would secure for all who required it, the benefit of medical aid throughout the journey. I consider this proposal worthy of consideration.

6. With reference to the utilization of covered goods wagons to meet the requirements of abnormal traffic, there appears to be no reason why these should not be converted into temporary 3rd class carriages by the introduction of suitable ventilation, both at the ends and on the roof of these vehicles.

From the Acting Agent, South Indian Railway, to the Consulting Engineer for Railways, Madras, dated Trichinopoly, 30th August 1895, No. 797.

Referring to your endorsement No. 1946 of 20th June 1895, forwarding copy of the Acting Sanitary Commissioner's letter (Local and Municipal Department, No. 890, dated 3rd May 1895), to the Chief Secretary to Government of Madras, I have the honour to collate the following extracts from reports by the Superintending Physician and the Acting Traffic Manager of this Railway, on the subjects referred to in the Acting Sanitary Commissioner's letter.

The Superintending Physician writes the arrangements made by his department during the Tiruvannāmalai festival of 1894 were as follows:—

"The apothecary of the section (located at Villupuram) visited Tiruvannāmalai daily and stayed several hours, and inspected the station grounds, latrines, &c. Disinfectants were freely used about the grounds, and especially on spots where pilgrims sat about or washed, &c. All rubbish was swept twice daily and burnt in the incinerator. The waterman was stationed at the well to serve out water and prevent its pollution. Disinfectants were served out to the station staff for use when required and a supply of cholera medicines was left with the stationmaster. The apothecary during the festival month made special inspection of stations on his section and was absent from head-quarters for twenty-one days on this account. It is the general practice during festivals for the apothecary of the section, in whose length of line a festival occurs, to act as above specified. This is done at Kumbakonam, Tirupati, Chidambaram, &c."

"The transport of large numbers of semi-civilised and unruly pilgrims with horrid and insanitary ways is a difficult traffic question and so much of it as is related to medical management is certainly not, in my opinion, happily solved by the Acting Sanitary Commissioner in his letter to the Chief Secretary to Government, copy of which you send me with your above-quoted letter. The special latrine carriage proposed by the Acting Sanitary Commissioner has yet to be invented, and when used by large numbers of pilgrims is more likely to be a nuisance on wheels than a measure appertaining to sanitation, and to prevent *bona fide* pilgrims from using the station latrines would mean the stationing of two ticket examiners at the double latrines at stations (some of our stations have more than two latrines) to scrutinise the tickets of passengers, essaying towards the calls of nature. This would mean further a prohibitive waste of time at stations."

"The Acting Sanitary Commissioner appears to be under the impression that cholera-stricken passengers are allowed to travel together. This is a great mistake. No sooner does a passenger show any symptom of the disease than every other passenger in the carriage is removed to other parts of the train and the cholera-stricken passenger alone carried in the polluted carriage. The patient is *not* dropped by the railway authorities where they choose, but put down at the nearest large station where there is a hospital. The polluted carriage is then subjected to a process of disinfection. I pointed out a few years ago that no process of disinfection practicable for a carriage would satisfy theoretical requirements, still the carriage is well scrubbed and washed with an antiseptic fluid, and then fumigated (closed) with sulphur."

"It is my belief that in 99 per cent. of cases of cholera showing itself in passengers, the disease manifests itself only *after* the journey has commenced, the patient being free from the disease at the time of purchasing his ticket. For a person with the actual disease dominant on him to pass the ticket collector's gate, and walk or be carried up the platform of the station and put into a carriage, without being detected by the railway servants, or being objected to by other passengers, is well nigh an impossibility."

"I may here say, with reference to the Acting Sanitary Commissioner's proposal to have a reserved ambulance carriage, that the present practice obtaining on this railway of removing healthy passengers from a carriage contaminated by a cholera patient and allowing the patient to travel in it alone is preferable."

"But medical necessities may be carried by the chief guard in his van at festival times."