

Local & Munl. (189) Department.

MISCELLANEOUS.

G.O., No. 963 P

DATED 30-8-98.

[Despatch Abstract.]

Disinfecting apparatus at Kupel.

Requesting the Collo of Bellary to ascertain
and report whether the Dy. Authorities will
accept a contract payment of Rs. 140 a
month for working the 2.

BACK PAPERS.

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

FURTHER PAPERS.

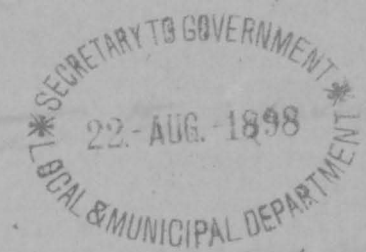
G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
enc 2040 P.	(24/5/98 para 1)						

Local & Munl. (1898) Department.

CURRENT No. 1354P

To P.W. Dept (By Branch)
for form of C.

Counter indicate and I think necessary. We do not
before the S.M.B. in any way. 7/11/98 J.S. 1898



From The Collector of Bellary.

Order No. 963 P. mis. of 30-8-98

An extract of para 5(5) of the Madras Sanitary Commis report printed in G.O. No 767 P. of 8-8-98 will be forwarded to the Agent, S. Bellary, with the request that an open mesh wire platform may be substituted as soon as possible for the present wooden platform of the disinfecting apparatus.

D. Dis. No. 202-P.

Dated 18-8-98
Received 22-8-1898
Registered 22-8-1898
Enclosures 2.
Spare copies

SUBJECT.

Submitting a report showing the result of checking the estimate of the cost of working the apparatus at Hospit by the Executive Engineer. To the Agent, S. Bellary (para 1 only with extract) 140. Page 4 mli. 26/8/98

2. As regards the monthly cost of working the apparatus, the C.M.S. of Bellary is requested to ascertain and report whether the Ry authorities accept a contract payment of Rs 140 a month.

25/11/98

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Copy of letter No. 55-86 from the Executive Engineer, Bellary, to the Collector of Bellary.

With reference to your Ref. on C. No. 678-P, I have the honour to report 18-7-98 that I consider that the charge for labour for working the disinfectant at Hospet may be accepted. I think the charge for stores is unduly high.

I consider that $\frac{1}{4}$ ton firewood per diem should be ample for working the boiler. I do not know the cost of firewood at Hospet but assuming it to be Rs 6 per ton we have a monthly charge of $6 \times \frac{1}{4} \times 30 = \text{Rs } 45$. To this may be added Rs 15 for oil and waste and a certain percentage of profit. I consider that Rs 60 per mensem would be a reasonable charge for stores.

(True Copy)

Signature

RB 18.8.98

Acting collector

List showing the expenses actually incurred for fuel
 & for the disinfecting apparatus.

No.	Items of expenses.	Consumption for a day.	Consumption for a month.	For only	Monthly expenditure.
				Cost	
1	Fuel	lbs 82	2542	9 . - 10 8 ..	
2	Coal	lbs 164	5084	30 . - 35 . -	
	Crank case oil 1 gallon			1 9 10	
	Red lead powder 5 lbs			. 10 . -	
	White lead paint 5 lbs			. 12 6	
	Black lead powder 1 lb			. 2 5	
	Sheet emery cloth No. 2			. 1 . - 2 6 9	
	Brick No. 1			. 1 11	
	24% on the above			. 18 2	
	Cooly hire			. 4 6	
	Tallow, waste cotton &c			2 12 11	
	Cocoon oil bottles 2			.. 10 10 ..	
	Kerosine oil " 2			.. 4 4 ..	
	Other contingencies.			 2 ..	
				Total	50 12 9

(Signed) H. M. Haskin
 Medical Officer in
 charge of Imugabhadra
 inspection station.

(True copy)

Acting Collector

R.B.
 18.8.98

- (3) Should a case be suspected, it is sent to the Plague Observation Shed near the Municipal Hospital. This shed is well designed for the detention of observation cases, but another shed with necessary out-buildings at some distance should be erected for the treatment of actual plague cases, to accommodate two females and four males, which could be added to if required. This is advisable because of the existence of plague at Hubli.

3. *Hospet Railway Station and Plague Camp.*—In company with the Acting Collector, Mr. Elwin, I reached Hospet at 11-15 p.m. The following preventive measures are in force at Hospet on arrival of train:—

- (1) All passengers are counted in the carriages before being permitted to alight.
- (2) Those alighting are made to pass out by one gate, are examined and again counted.
- (3) Those remaining in the carriages are examined and again counted. In this way the number is checked.
- (4) Those passengers going from Hospet are allowed admission to the platform by the entrance gate. They are examined as they pass on to the platform.

The train from Hubli to Hospet is due at 1-38 a.m. but is, as a rule, one hour late. On the day of my arrival here (22nd), I inspected the train from Hubli along with Surgeon-Captain Pereira.

Inspection Staff on the platform—

- 1 Commissioned Medical Officer.
- 1 Nurse.
- 2 Hospital Assistants.

Inspection of train occupied 1½ hours. 16 passengers were detained on account of want of passes and unsatisfactory destination and one woman suffering from fever. They were sent to the observation camp under police escort. Their clothes and persons were disinfected at 8 a.m., and they were given passports and allowed to proceed by the next train. The examination was made as thorough as possible, but hindered on account of the darkness. The inspection would be much quicker and more thorough, were it performed in daylight. The inspection is made on the railway platform in the open. There is no shelter nor provision for privacy and, should it be necessary, it is not possible to examine any person thoroughly unless done in the open. The station building is not suitable for use as an examination room. One examination shed or enclosure should be erected on the platform for the use of the Medical Officer and Medical Subordinates during the inspection of passengers to ensure expedition, privacy and thorough examination.

I.—DISINFECTION CAMP.

The disinfection camp at Hospet consists of 4 round rooms (2 waiting and 2 bath rooms), 2 for males and 2 for females. Two latrines are also attached to these.

II.—SUSPECT CAMPS.

- (a) *European Suspect Camp*—Consists of 2 sheds, the bigger of the two for 4 European males and the smaller for one European lady. There are 2 servants' rooms, 2 latrines, 1 kitchen, for both, attached to these. The bath rooms are attached to the main sheds.

- (b) *Native Suspect Camp.*—A single shed containing 5 compartments on each side for males and females to admit 5 persons in each compartment is built next to European Suspect Camp. There are 2 police guard rooms, 2 bath rooms (one for males and one for females) and 2 kitchens. There are two latrines one for males and one for females.
- (c) *Hospital Assistants' Quarters.*—A single building with partition in the middle for 2 Hospital Assistants under construction.
- (d) *Nurse's Quarters.*—A single building just as above.
- (e) *Well.*—A single well for the whole camp; eight feet water, not protected at present but will be shortly so; and provided with a pump.

III.—PLAGUE HOSPITALS.

- (a) *Hospital Assistants' Quarters.*—A single shed with partition in the middle for 2 Hospital Assistants.
- (b) *Nurse's Quarters.*—Just as above.
- (c) *Assistant Surgeon's Quarters.*—A single shed.
No latrines for the above three quarters. One required for Hospital Assistants and one for nurses and commode for Assistant Surgeon's bath room.
- (d) *Police guard rooms.*—Two in number.
- (e) *Native Hospitals.*—Two in number, one for males and one for females. Each Hospital contains 5 compartments to accommodate 5 patients in each room.
- (f) *Relatives' rooms.*—Two in number for the use of the relatives of the patients.
- (g) *Store room.*—One single room for storing provisions, &c.
- (h) *Dispensary.*—One single room for dispensing medicines, &c.
- (i) *Duty room.*—One single room with partition in the middle for duty subordinates.
- (j) *European Hospitals.*—Two in number, one for males and the other for females. The floor cemented.
- (k) *Servants' room.*—Two in number.
- (l) *Well.*—A single deep well for the whole camp under construction, will be fitted with a pump and covered in.
The kitchens are attached to the above hospitals.

4. *Disinfection and observation.*—The passengers detained for observation are taken to the suspect camp under police escort and wait there until the next morning. All their clothes are taken from them, they previously being given Government clothes to wear. These clothes are then tied in loose bundles and are put in the disinfecting chamber and steamed till lb. 30 of pressure is obtained in the chamber, which is retained for *15 minutes. The clothes are then taken out from the chamber and are given to the passengers who have been previously bathed with hot water and disinfected. They are then allowed to go to the observation camp and are kept there till the arrival of the next train (24 hours after arrival) and then discharged. Those persons suffering from any illness or who are in any way suspicious are kept in the observation camp for a more or less prolonged period. The passengers so detained are provided with a disinfection pass in proof of their being detained and disinfected. The clothes given to the passengers for temporary use while they are being disinfected are afterwards thoroughly washed in carbolic lotion, dried and kept for use for the next day.

* Too little : would advise 30 minutes.

Requirements.

5. (1) Latrines in Plague camp for the use of medical subordinates and nurses.
- (2) Bedding and furniture should be provided for the camp. There are no cots nor blankets.
- (3) A dhooly, a night-soil cart, six washing tubs, six wooden buckets for cleaning soiled clothes and disinfecting with HgCl_2 in the camp enclosure instead of as at present in the irrigation channel.
- (4) Two dhobies and one clerk.
- (5) The disinfection chamber should have an open mesh wire platform instead of the present wooden platform which causes wetting of the articles introduced for disinfection.
- (6) The articles to be disinfected should be kept in the chamber 30 minutes instead of as at present 15 minutes to ensure thorough disinfection.
- (7) Phenyle or Lysol should be used for disinfection of persons instead of crude carbolic acid as it will not mix with water.
- (8) Perchloride of mercury 1 to 1,000 to be used for disinfection of articles which cannot be placed in the disinfection chamber and for soiled articles before their being handed to the dhobie for the purpose of washing.
6. *Frontier precautions taken against the entrance of plague cases across the frontier into Bellary.*—The frontier of Bellary, formed by the river Tungabhadra is about 200 miles in extent. It is divided into 32 inspection circles arranged in a double row—19 circles in front and 13 behind. Each circle is 10 miles square and the two rows are supposed to protect a depth of 20 miles of country.
7. *Staff of the frontier Circles.*—One Supervisor over four Circle Inspectors, one Circle Inspector for each circle. In the 32 circles are 14 Unions, for each Union one Assistant Plague Inspector is appointed, who as far as possible works under the orders of the Union Chairman.
8. (1) *Duties.*—The District Medical and Sanitary Officer, Bellary, is given the Assistance of a Special Plague Medical Officer to allow of his being absent from Head Quarters for prolonged periods on plague supervision work. He is expected to visit and attend to the working of the various circles.
- (2) The Supervisor itinerates the 4 circles. He sends weekly diaries to the District Medical and Sanitary Officer who enters any remarks he has to make and forwards them to the Collector. The Collector makes any remarks he has to make and returns the diary through the District Medical and Sanitary Officer to the Supervisor. Any part of the diary that calls for early action is extracted and attended to at once.
- (3) Circle Inspectors itinerate their circle, observe all cases entering the circle without passport and produce them before a plague authority. With passports they see that they are observed for a period of 10 days, find and report cases of fever. They send their reports to the Supervisor. At the frequented ferries on the Tungabhadra, stations for inspection have been erected. There are 10 inspection stations.
- (4) *Establishment.*
- | | | |
|---------------------|-----|--|
| Hospital Assistant | ... | } Dispensary Quarters
and
Medicines. |
| Clerk | ... | |
| Conservancy Maistry | ... | |
| 2 Peons | ... | |
| 1 Constable | ... | |
| 1 Toty | ... | |
- Hospital with 3 wards 12 x 12 raised rammed floor.

Observation sheds—male and female.

Latrines—male and female.

Kitchen for observation shed.

Kitchen for Hospital shed.

The observation shed is well separated from the infected sheds. All the stations are supplied with articles as per Government list.

9. The Tungabhadra river being in flood and likely to continue at a high level until November will with the frontier stations guard the frontier most effectually, the only likely means of entrance being by rail.

10. I left Hospet on the night of the 23rd July and reached Hubli at 6 A.M. 24th July, where I was met by Surgeon-Captain Lenmann, I.M.S., Bombay, in charge of plague operations at Hubli. The plague precautions at Hubli are as follows:—

(1) Booking in any direction from railway stations near to Hubli is forbidden except under pass from Resident Plague Authority at Hubli or Patel of village outside Hubli.

(2) Booking from Hubli is prohibited except in the case of persons holding passes from Resident Plague Authority to travel by rail or certificate of having been twice inoculated by a Government Medical Officer or a special pass exempting from disinfection and detention.

(3) Passengers by all trains arriving and departing are inspected and unless holding passes, &c., are detained and disinfected.

(4) Camps—

1. Observation and segregation and Plague Hospital.

2. Health Camp.

3. Railway observation Camp.

These camps are capable of accommodating 250, 250 and 150 each.

11. The Municipality, population is about 60,000, is divided into divisions and wards for the detection of plague cases. On a case occurring, the infected and neighbouring houses are evacuated, the people being taken to the plague camp. The area in which the house is situated is evacuated and all the people disinfected and placed in the Health Camp. The houses are all disinfected and after 15 to 20 days the people are allowed to return to their houses.

12. The Railway employes live quite apart from the Municipality and have an observation camp and doctor of their own. They were the means of introducing plague into Hubli.

13. I was informed that plague in Hubli would have been stamped out or controlled, had sufficient police or military guard and disinfection staff been supplied but that the force of 36 policemen and a disinfection staff of 167 coolies was quite inadequate to segregate and keep the people under strict supervision together with thorough disinfection of evacuated houses. In consequence the epidemic spread and is now on the increase. To counteract the evil of insufficient staff the Medical Officer in charge is doing his utmost to inoculate the whole population and is, as far as I could judge, in a fair way to succeed.

14. Inoculation was commenced on the 10th May in Hubli. Up to the 19th July 11,500 persons had been inoculated twice and 5,500 persons once. On the day of my visiting Hubli, I was present and assisted at the inoculation of 583

cases. There were four inoculation centres and the following is the work done on the 24th July:—

583

330

250

500

1663

The people seem to have confidence in inoculation and a wish to be inoculated. The Medical Officer in charge, Surgeon-Captain Lenmann, has had considerable experience having been in charge of the Sholapur Plague Camp and his opinion is that the doses of serum prescribed by Professor Haffkine are much too small and accordingly he increases the dose by about 50 per cent.; also that the first inoculation only gives immunity for about 3 weeks. He accordingly re-inoculates all his cases, which re-inoculation confers protection for from 5 to 6 months.

15. The paucity of police guards allows of the departure from Hubli of numbers of people. However I was informed that a weekly census of the Municipality was regularly taken and that the census showed that very few people were leaving the station, the census taken the week previous to my visit being 53,000. Between Hubli and Gadag on the line to Hospet there are four railway stations. At these stations no tickets are allowed to be issued unless in accordance with the Regulations in force. I was informed that on the line from Hubli to Guntakul and Hubli to Bangalore, not more than 10—15 altogether were issued in one day since this order came into force 10th July 1898.

16. Gadag, a railway station about 30 miles from Hubli is made up of two villages Bitgiri and Gadag. There are two health camps and one observation camp and a plague Hospital situated about 600 yards from the station.

17. A Special Plague Medical Officer has charge with the Civil Hospital Assistant and a private medical man paid by the Municipality for plague duty and the Civil Hospital Compounder.

Under the orders of Mr. Vincent,
Assistant Police Superintendent.

18. The trains arriving from Hubli and Hotgi are inspected—the one by the compounder, the other by the private medical practitioner. Departing trains are not inspected. People arriving by road are not checked nor inspected. Plague has not broken out in Gadag, but 14 days ago a plague case from Hubli died there. There have been no more cases. It is quite easy for any person from Hubli to travel by road to Gadag or any station between that and Hospet and there to book by rail into the Madras Presidency. The Tungabhadra river being in flood and the frontier Inspection stations being on the alert, I would recommend that all persons arriving by train from the Hubli side be detained and thoroughly disinfected whether they have a pass or not. I would also request the serious consideration of Government to detain at Hospet for 10 days all persons travelling from or near Hubli, as I find that persons although giving their name and address will proceed next day and book to some other place, their whereabouts not being known and no trace of them to be found.

19. Hubli is only about 6 hours' run from Hospet and the incubation period is noted as 10 days. It is therefore the most likely thing for a person affected with plague to pass under your inspection undetected and there is no doubt but that the numbers of ticket-holders from stations on the Hospet side of Gadag are greatly increased which suggests that people from the Hubli district travel to Gadag, &c., and "book" thence to the Madras Presidency.

20. Surgeon-Major Bannerman was lent to the Bengal Presidency about 3 months ago, and there seems little likelihood for some time yet of his return. As he is the only Medical Officer belonging to this Presidency who

has received a special training in plague work, I would advise Government to depute a Medical Officer for plague instruction to Bombay. This measure I consider necessary on account of the increasing hold plague has acquired on Hubli. Its situation and nearness to the lines of communication with this Presidency lays us open to infection at any moment notwithstanding the most careful preventive measures that can be adopted. It is therefore advisable that Surgeon-Major Bannerman be recalled or a medical officer be at once put in training to take his place during his absence.

ORDER—No. 767 P., dated 8th August 1898.

Para. 2 of the report.—The Government agrees with the Sanitary Commissioner that the special Hospital Assistant posted on the Bellary railway platform to inspect all arrivals by trains should not be withdrawn. The Municipal Council should be required to erect another shed with out-buildings for the treatment of plague cases, as recommended by the Sanitary Commissioner.

2. *Para. 3 of the report.*—Separate orders have been issued directing the Southern Mahratta Railway Company to construct an inspection shed at Hospet.

3. *Para. 5 of the report.*—The suggestions made in this paragraph should be carried out. The Government has already sanctioned in G.O., No. 717 P., dated 26th July 1898, the Collector's application for one clerk and one dhoby, as well as his indent for hospital furniture and equipment. For disinfection of persons permanganate of potash, chloride of lime or phenyle may be used in preference to lysol, which is costly. The use of carbolic acid should be discontinued, as it has been found to be a very weak germicide.

4. *Para. 8 of the report.*—The Collectors of Bellary and Kurnool are requested to satisfy themselves and report whether the several officers of the Observation Staff actually do the duties assigned them. It is only by constant personal inspection that their work can be properly checked, and the Government will, if possible, post a special gazetted officer to each district to help the Collector in the work of supervision. The Divisional Officers should also move about along the frontier as much as they can without neglecting other work.

5. *Paras. 18 and 19 of the report.*—In the opinion of the Government, the recommendations of the Sanitary Commissioner go too far and cannot be sanctioned. Detention of all railway passengers for ten days is a measure of quarantine, which is against the Venice Sanitary Convention and the orders of the Government of India, and its practical effect would be to drive people to roads and bye-paths, and thus spread plague in directions where the Government control is less strict. Nor is universal disinfection desirable.

6. *Para. 20 of the report.*—Surgeon-Major Bannerman has been lent to the Government of Bengal on the condition that he must return when plague actually breaks out in this Presidency, and he cannot therefore be recalled at present. The Sanitary Commissioner's suggestion to depute a Medical officer to Bombay for plague instruction will be disposed of separately.

7. The plan is returned to the Sanitary Commissioner as requested. A copy should be forwarded for record in the Government office.

(True Extract.)

H. TREMENHEERE,

Secretary to Government.

To

The Collector of Bellary. (A. B. C. F. G. H. J. K.)

„ „ Kurnool. (A. F. G. K.)

„ Sanitary Commissioner.

„ Surgeon-General.

Copy to all other Collectors. (A. F. G. H. K.)

Government {1898} of Madras.

LOCAL AND MUNICIPAL.

Recd.

Regd.

1898.

Enclosures

Spare copies

G.O., No. 767 P., 8th August 1898.

AUGUST.

Plague Preventive Measures.

Passing orders on the Sanitary Commissioner's report on—at Hospet and between Hubli and Hospet.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper:—

From Surgeon-Major H. THOMSON, M.B., D.P.H., Acting Sanitary Commissioner for Madras, to the Secretary to Government, Local and Municipal Department, dated Fort St. George, 30th July 1898, No. 1692/S.

I have the honour to forward you herewith the Report on Hospet Plague preventive measures and of the precautions taken at Hubli and the line between Hubli and Hospet.

2. A plan of the disinfection, observation and Hospital Plague Camps at Hospet is also forwarded for information and favour of return.

REPORT.

With reference to your telegram of the 19th instant received here on the following morning, I have the honour to state that I started for Hospet by the mail train leaving Madras on the 21st July 1898.

2. I arrived at Bellary on 22nd July at 9 A.M. As I could not proceed further until evening 8 o'clock, I, in company with the District Medical and Sanitary Officer, inspected the Municipal arrangements for the detection of plague in the station. The following are the arrangements:—

- (1) One Hospital Assistant is posted on the railway platform to inspect all arrivals by trains—

Hospet to Bellary	...	...4-30 A.M. arrival.
Guntakul to Bellary	...	...9-0 A.M. "
" "	...	...8-0 P.M. "

The Municipality wish to remove this subordinate and to distribute his duties among the Medical Subordinates attached to the Municipal Hospital (2) and Branch dispensaries (2) or to discontinue medical inspection of arrivals by rail. I do not approve of the withdrawal of the Hospital Assistant detailed for special inspection duty.

- (2) The Municipal Plague Staff—

Two Divisional Inspectors (Cantonment and Municipality).
Eight Circle Inspectors.
Ten Peons.
Eight Totties.

The Divisional Inspectors issue passports, attend the railway station on the arrival of trains and make a list of arrivals from infected areas. This list is checked with that received from the inspection station, Hospet. The list is divided among the various Circle Inspectors who see that the arrivals attend for observation daily. There are three observing stations, viz., the Municipal Hospital, Cowl Bazaar Dispensary and Brucepet Dispensary. Inspection is here made by a Medical Subordinate; at the end of ten days' observation the passport is taken from the person and filed.

No.

FROM

E. A. Edwin Esquire,

Ag COLLECTOR OF
BELLARY.

To

THE

Secretary to Government,
Local and Municipal Department.

SIR,

Costacamand.

In reply to Government Order
581-P this I have the honour to submit
16-6-98
copy of the Executive Engineers letter 5586
25-7-98
criticizing the Southern Mahratta Railway
Company's estimate of the cost of working
the disinfecting apparatus at Hospet. It
will be observed that the Executive En-
gineer accepts the estimate of Rs 80 a month
for labours but considers that the esti-
mate of Rs 100 a month for stores is
excessive and should be reduced to
Rs 60. I may mention that the agent

of the Southern Mahratta Railway - company admits that the estimate for stores was framed on the assumption that the apparatus would work for 12 hours a day, whereas as a matter of fact the fire is not ordinarily kept up for longer than 3 or 4 hours a day.

2. The actual charges incurred on the disinfecting apparatus at Tungabhadra are according to the medical officer in charge of the station

Labour — Rs 78-0-0.

Stores — Rs 50-12-9.

A statement showing how the amount under stores is arrived at is enclosed. As at Hospet, disinfection at Tungabhadra is carried out but once a day.

3. The delay in replying to the Government Order is due to the fact that the required information from Tungabhadra reached me only 2 days ago.

4. In conclusion, I beg to suggest that while settling with the Southern Mahratta Railway Company what is to be paid for working the apparatus at Hospet Government should ask the Company to replace the present wooden platform in the disinfecting chamber by an open mesh-wire platform, as recommended by the Sanitary Commissioner in para 5(5) of his report embodied in Government Order $\frac{767-P}{8-8-98}$.

I have the honour to lie.

Sir,

Your most-obt servant

R. B. 1889

Acting Collector

R. B.
18-8-98

189

, DATED

REF TO C. No.

GOVERNMENT

GOVERNMENT.

WITH DITTO

COILED UP, BEING MEANT FOR DESPATCH
ORIGINAL.

- = Copy in full.
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