Government (1897) of Madras,

Local & Munl. (189) Department.

PRINTED

G.O., No. 974 M

DATED 26-4-97

DESPATCHED

[Despatch Abstract.]

Bubonic Plague

Communicating to the Collectors of Districts concerned the Sanitary Commissioners inspection notes of the plague stations at Podanur Arkonam and Guntakal.

BACK PAPERS.

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

FURTHER PAPERS.

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

Government {1897} of Madras,

LOCAL AND MUNICIPAL.

Recd.	1897.	*Enclosures*
Regd.		*Spare copies*

G.O., No. 974 M., 26th April 1897.

APRIL.

Bubonic Plague.

Communicating with remarks to the Collectors of Districts concerned, the Sanitary Commissioner's Inspection notes of the plague stations at Podanur, Arkonam and Guntakal.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following paper:—

From Surgeon-Lieutenant-Colonel W. G. King, M.B., C.M., D.P.H., Sanitary Commissioner for Madras, to the Secretary to Government, Local and Municipal Department, dated Fort Saint George, 16th April 1897, No. 883-S.

I have the honour to forward herewith my inspection notes showing the condition of the plague observation stations at Arkonam, Podanur and Guntakal.

Enclosure.

Podanur.

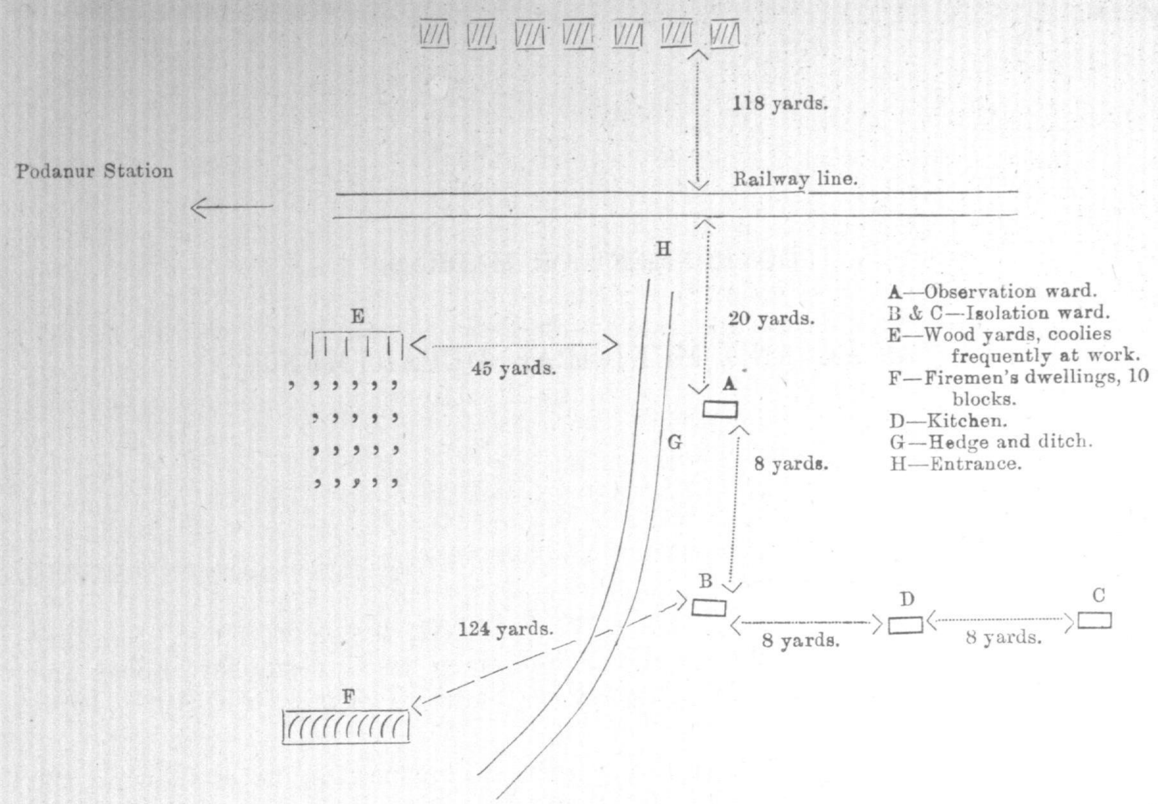
Inspected 9th April 1897.

Inspection of trains.—This is conducted by the Civil Apothecary. His method of examination was complete, and was fulfilled in a systematic and orderly manner. Suspicious cases were examined in a room set apart by the Railway authorities for this purpose.

In the case of a party of Bombay people who declared they had been resident some time in the Presidency, it was thought necessary to examine carefully a woman who looked as if she had recovered from a recent illness. There being no female medical attendant or nurse present—none having yet been appointed—it was not possible to conduct the examination with the completeness desirable.

2. *Observation and isolation arrangements.*—Two "pucca" wards and a kitchen were completed on the 1st April, but up to date (9th April) have not been delivered to the charge of the Civil Apothecary. It was therefore not possible for me to gain entrance to these buildings. Allowing, however, for thickness of the walls, the cubic space per head would seem to be about 1500 cubic feet. One ward is meant for females, the other for males. A single open space latrine is provided. For observation, an existing cholera ward having divisions for males and females is relied upon. The site on which these buildings stand is close to the Railway line, if not actually within the Railway premises. The diagram given below will afford an idea of the relative position of these buildings:—

No. 1.



Irrespective of the proximity to the Firemen's dwellings and to the wood yard where coolies are always working, the proximity of the "observation" to the "isolation" ward renders the position undesirable. Separate latrines and a cook house have not been provided for the observation ward.

3. *Furniture.*—Nothing beyond two cots formerly used for cholera patients is available for either the "observation" or the "isolation" sheds. The cumblies used for cholera patients are also available, but beyond this nothing is ready in the way of clothing.

4. *Attendants.*—There is only a single attendant provided. There is not a single chatty in the place for conveyance of water or for cooking purposes. The medicines at disposal are those suitable for treatment of cholera.

The Civil Apothecary explains that staff and other requirements have been asked for, but that he has been informed that these things will be provided when occasion arises; that is, when either a case requiring observation or treatment is admitted.

5. *Recommendations.*—The use of the present buildings should be confined to purposes of observation. Their proximity to dwellings and to the observation sheds precludes the use of the isolation ward with safety, having regard to *possible* ærial conveyance of infection, and especially to the impossibility of keeping completely apart attendants upon observation and plague cases. Hence, I would advise whilst retaining these for observation that fresh buildings be made for isolation purposes. These preferably should take the form of well built huts. The inspecting staff should be strengthened without delay by the addition of either a lady apothecary or, at the least, by an experienced European or Eurasian nurse.

13.4.97

Temporary Dhoolis Should

Temporary dhoolies should be provided for transport of patients. The Hospital staff, furniture and equipments should be such as at least to provide without a moment's delay for the treatment and comfort of at least one patient actually affected with plague and one under observation. It certainly should not be necessary to run hither and thither for staff, or to rely upon borrowing from the Railway Apothecary and the like, as I understand is intended should a patient be admitted.

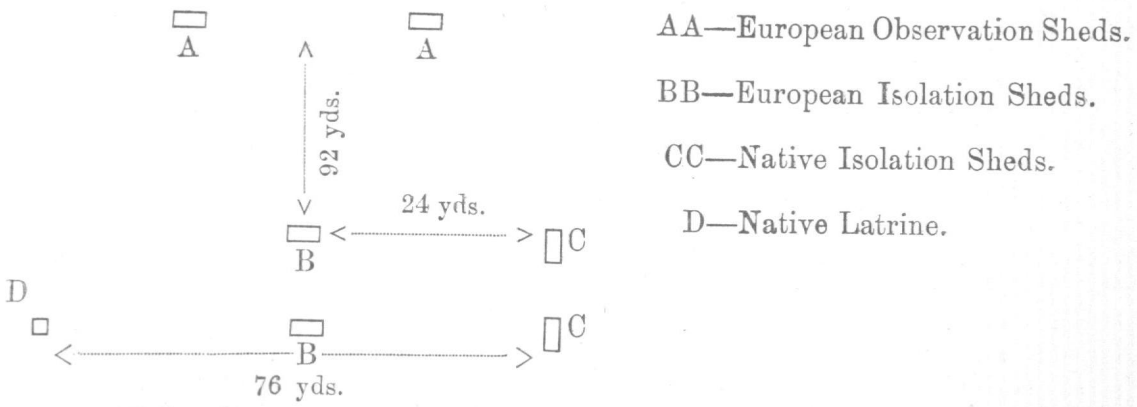
Arkonam.

Inspected 10th April 1897.

Train Inspection.—The system pursued hitherto has been to examine all tickets and to judge of the necessity for an examination, according as to whether these showed that the bearer had come from an infected locality or not. Taking into account the fact that owing to various devices by persons aware of inspection, it is possible to arrange that tickets may not show the original place of departure, and in view of the fact that a whole night after departure from Guntakal may well suffice for incubation, I have advised the Medical officer to make all passengers alight and be correctly examined. Discretion is allowed as to ladies arriving first class—the time being such as probably not to permit of their being conveniently clothed for appearance in public; but, gentlemen having a history of having been in affected parts within ten days will be required to alight for examination in all cases. Ropes or bamboos with hooks should be provided for affixing on the carriages, between which the patients should stand when examined. The police should be more active in requiring persons to alight in time to prevent it being necessary for the Medical officer to trouble himself on this point and thus consume time unnecessarily. The water supply is from a well. This should be covered, and a pump should be provided.

2. *Observation and isolation wards.*—The site chosen for these is excellent, but it is undesirably close to the quarters of Europeans—namely 215 yards from the nearest plague isolation shed. As to the distance to which ærial infection may operate in plague we know nothing for certain, and it may well be that even a shorter distance *might* suffice to prevent infection; but the fact to be remembered in the case of plague camps is that, above all things, the object aimed at is isolation. It does not seem to me that isolation will be complete when it is possible for the menial staff to mingle, say, with servants inhabiting European quarters in the neighbourhood. It may be deemed that discipline would be so perfect as to get over the difficulty; but even if so the camp is so built that the isolation and observation sheds are far too near each other. The diagram No. 2 shows the relative position.

No. 2.


A
A
92 yds.
24 yds.
B
C
D
B
C
76 yds.
AA—European Observation Sheds.
BB—European Isolation Sheds.
CC—Native Isolation Sheds.
D—Native Latrine.

3 Whilst the arrangements here would suffice for an observation camp, I consider for *isolation* purposes a position further removed from ordinary dwellings desirable and *from observation sheds necessary,* and would consequently recommend

---

9

[G. / 24.]
800—20-1-97.

DEPARTMENT.

Papers to be read in proceedings :—

Again G.O., dated 189 , No.
Again G.O., dated 189 , No.
Wh Current No. 1-[illegible] of 1897, dated 16th Apl, from the Sani. Comr.
" " " 189 , " , "
" " " 189 , " , "

Prey

ORDER. No. 974 M. d/. 26.4.97

The Sanitary Commissioner's inspection notes of the plague stations at Podanur, Arkonam and Guntakal will be ~~recorded~~ communicated to the Collrs. of the districts concerned with the [illegible]ing remarks:—

& for ~~attention~~ information

[illegible] Podanur — The ~~S~~ Collr will arrange for ~~Commissioner's remarks about~~ the construction of isolation sheds at a greater distance from the observation sheds than they are at present ~~are constructed in~~. ~~In~~ A ~~experienced~~ trained European or Eurasian midwife or ~~nurse~~ should be deputed for duty at the station, if the Surgeon General has not already done so as required by G.O. no 898 M. d 13.4.97. A couple of temporary dhoolis should

x midwife was ordered in G.O. 898 M / 13-4-97

supply of suitable medicines should be

also be fitted up & ~~kept ready~~; and there should be at once provided the medical equipment ~~&~~ necessaries and attendants required for the immediate reception & treatment of at least one affected patient and one person under observation as ~~suggested~~ recommended by the S.C. The Surgeon General ~~the Surgeon General~~ should see that these ~~things~~ matters are ~~carefully and~~ promptly ~~carried out~~ attended to.

(2) Arkonam. The recommendations of the Sanitary Commissioner as to the train inspection of railway passengers are approved. As to the distance of the ~~Sh~~ isolation from the observation sheds ~~of the plague camp, the Government is of opinion that the S. Commr. is unnecessarily anxious, if the experience of Surg. Lieut. Col. Wates of Bombay, as reported in the Pioneer× of 14th April last is to be trusted.~~ the Government notes that their distance apart ~~observation sheds at the station are already at a distance of~~ is 100 yds. ~~The Sch~~ ~~the isolation sheds and~~ The Sanitary Commr. will be requested to report ~~if~~ whether, with reference to the more recent experience in Bombay, he sees any reason to alter his present opinion as to the ~~[illegible]~~ necessity of these being separated by a greater distance ~~with reference to Dr. Wates's observations adverted to above~~. Meanwhile the Collr. of N. Arcot will report whether any suitable site for isolation sheds is available at a convenient distance from the railway station.

× This extract from Pioneer must be printed.

Office note that a copy of this G.O. goes to Collr. N. Arcot with these orders.

This G.O. is in the linked file

The attention of the Collector ~~of North Arcot~~ will be drawn to the Sanitary Commissioner's remarks regarding latrines and kitchens and also to his remarks in para 5 ~~thereof~~ regarding equipment, instructions as to ~~regarding~~ which have however been already ~~been~~ issued ~~to the Collector~~ in G.O. No. 832 M dated 8th April 1897. With reference to the observations in report ~~Sanitary Commissioner's remarks as~~ of the insufficient protection afforded by the sheds ~~of walls &c~~ the attention of the Collector, who is responsible, will be given ~~drawn~~ the matter. A copy of ~~to~~ G.O. No. 933 A M dated 21st April 1897 regarding the Guntakal camp ~~Sheds~~ will be communicated to him. ~~and he will be informed that he will be held responsible for seeing that the sheds are properly watched.~~

(3) Guntakal. The Sanitary Commissioner's remarks in paras 2 & 3 of the notes upon ~~about~~ this station will be

supply of suitable medicines should be

receive
~~communicated to~~ the
~~Collector~~ of careful ~~Anantapur~~ for
~~information and~~ attention.

of the Collr of Anantapur

S.B.
25/4/97

(True Extract
~~[illegible]~~
Secy)

Issue at once in type to the three Collrs concerned & here – & the San. Comr.
S.B.

(4) General remarks

The Sanitary Commissioner's remarks under this head are concurred in. Orders have already been issued for the appointment of midwives^x in default of female apothecaries at inspection Stations and for the entertainment of two clerks^x at Guntakal to note down the names and addresses of passengers from Raichur and Stations beyond. The Government does not consider that the entertainment of a similar staff of clerks will be necessary in the case of all inspection Stations, but the Sanitary Commissioner may report any special circumstances existing in the case of other Stations which will render such a course necessary.

(True orders)

x Midwives G.O. 898 M

Sent for communication on Saturday last.

To
The Surg. Genl.+
.. San. Commr.
.. Collector of Anantapur
.. .. .. Coimbatore
.. .. .. N. Arcot
.. Prest. Dt. Bd. Anantapur+
.. .. Coimbatore+
.. .. N. Arcot+
.. Chairman of Muni. Comns. in these 3 districts
.. P.W.D. (Rail. Br.)
.. ~~Jud. Dep~~ Jud Dept.
& I.G. Police

Despd. [illegible]

✓All other Collrs
+ [illegible] dated 15/5/97
[illegible] 31/5/97

D.O.

MADRAS

OOTACA

25. 4.

Dear King,

With reference to your remarks in your letter $\frac{883}{S}$ dt 16th April on the inspection of Arkonam plague Camp and the desirability of separating the isolation and observation sheds – now 100 yds. apart – by a greater distance please see G.O. thereon under issue. The Collector has been asked

Easily procurable & opened & proper supply of suitable medicine should be communicated to the

[illegible] of Anantapur

if a suitable site is
ble at a convenient ~~site~~ distance
m the Railway station for the
olation sheds. But I am to
nquire whether with reference
Surgeon. Col. Water's experience
s reported in the Pioneer of the
4th (extract enclosed to be returned)
this point is so very essential

Yours sincerely
(Signed) G. S. Forbes.

LOCAL AND MUNICIPAL DEPARTMENT.

Again G.O., dated 189 , No.
Current No. 1/Ooty of 189 , dated from the San. Commr.
Current No. of 189 , dated from the

FOR ORDERS.

H.M.

The San. Commr. forwards inspection notes of the plague stations at Podanur, Arkonam & Guntakal.

Podanur. He recommends the construction of ~~an~~ isolation sheds at a greater distance from the observation sheds. A distance of 8 yards as at present is certainly too small.

Yes – It should be at a greater distance – The Chr. [illegible] on 6th.
HS

A nurse will be deputed at once if the S. Gen. has not already done so.

A couple of temporary dhoolies shd be kept ready.

HS

And there shd be as the S.C. advises equipment & necessaries for the immediate reception & treatment of atleast one.

I don't remember exactly what orders have been issued as to these matters, but surely the S.G. should see to them. Commodities & native charpoys are easily procurable & ofcourse a proper supply of suitable medicines should be affected patient & one person under observation.

Arconam.

The recommendations as to train inspection may be approved.

As to the distance of the site of the plague camp from European quarters which is 215 yards the San. Comsr. seems to be unnecessarily anxious, if the experience of Surgn. Col. Waters of Bombay as reported in the Pioneer of 14th April last (see extract placed below) is to be trusted. Dr. Waters is a well known authority.

I believe there is no other site conveniently placed.

The Observation sheds are 100 yards from the isolation sheds.

The Collector can however be asked if another site for the isolation sheds can be found. The removal will however be expensive. Or we may ask the San. Comr. if he sees any reason to alter his opinion with reference to Dr. Waters's observations.

As to the insufficiency of the walls &c the P.W.D. may be referred to the G.O. recently issued regarding the Guntakal sheds.

The Collector's attention ~~[illegible]~~ will be drawn to para. 4 of the S.C's remarks regarding latrines & kitchens: also to para. 5 regarding equipment but instructions have already issued to the P.W.D. on a reference from the Surgn.-Genl. whom the P.W.D. thought was the authority to provide these.

Guntakal. The inspection of passengers is now being done

on the spot — Some attendants shd. also be engaged & ready. But what is the S.G. about that he does not see to these things?

I don't remember the G.O. — But of course the Colr. must be held responsible pressing that the sheds are properly thatched very thoroughly. Col. Percy who recently passed through told me the inspection at Guntakal was more careful & rigorous than at any of the Bombay stations ..

As to the S.C's general remarks—

(1) the sufficiency of sheds has been already noticed

(2) Proximity of isolation & observation sheds — the point has been noted on above

(3) Nurses are being appointed in default of female apothecaries

(4) Equipment & necessaries for immediate treatment sh'd be ready

(5) As to names & addresses of passengers arrangements have been made, & a request for 2 clerks at Guntakal is with the H.C.

S.K. 22/4/97

HA

I have sanctioned it
HA
23/4/97

Urgent 8

Local & Munl. (189) Department.

CURRENT No. 1/ooty

SECRETARY TO GOVERNMENT LOCAL & MUNICIPAL DEPARTMENT
21 APR 1897

From The Sanitary Commissioner

Order

No. 883/S.

Dated 16th April 1897.
Received
Registered
Enclosures
Spare copies.

SUBJECT.

Forwards Inspection report on the Plague Observation stations of Podanur, Arconum and Guntakal.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

2

No. 883/5

URGENT.

date

Read the following paper.

Office of Sanitary Commissioner,
Fort St. George, 16th April 1897.

From

Surgeon Lieut.-Col. W. G. KING, M.B., C.M., D.P.H.,
Sanitary Commissioner for Madras,

To

The Secretary to Government
Local and Municipal Dept.

Enclosure. One

Sir,

I have the honour to forward herewith my inspection notes showing the condition of the plague observation stations at Arconum, Podanur and Guntakul.

I have the honour to be
Sir,
your most obedient servant
W G King
Surgeon Lt Col
Sanitary Commissioner for Madras.

Enclosure

Podanur.

Inspected 9th April 1897.

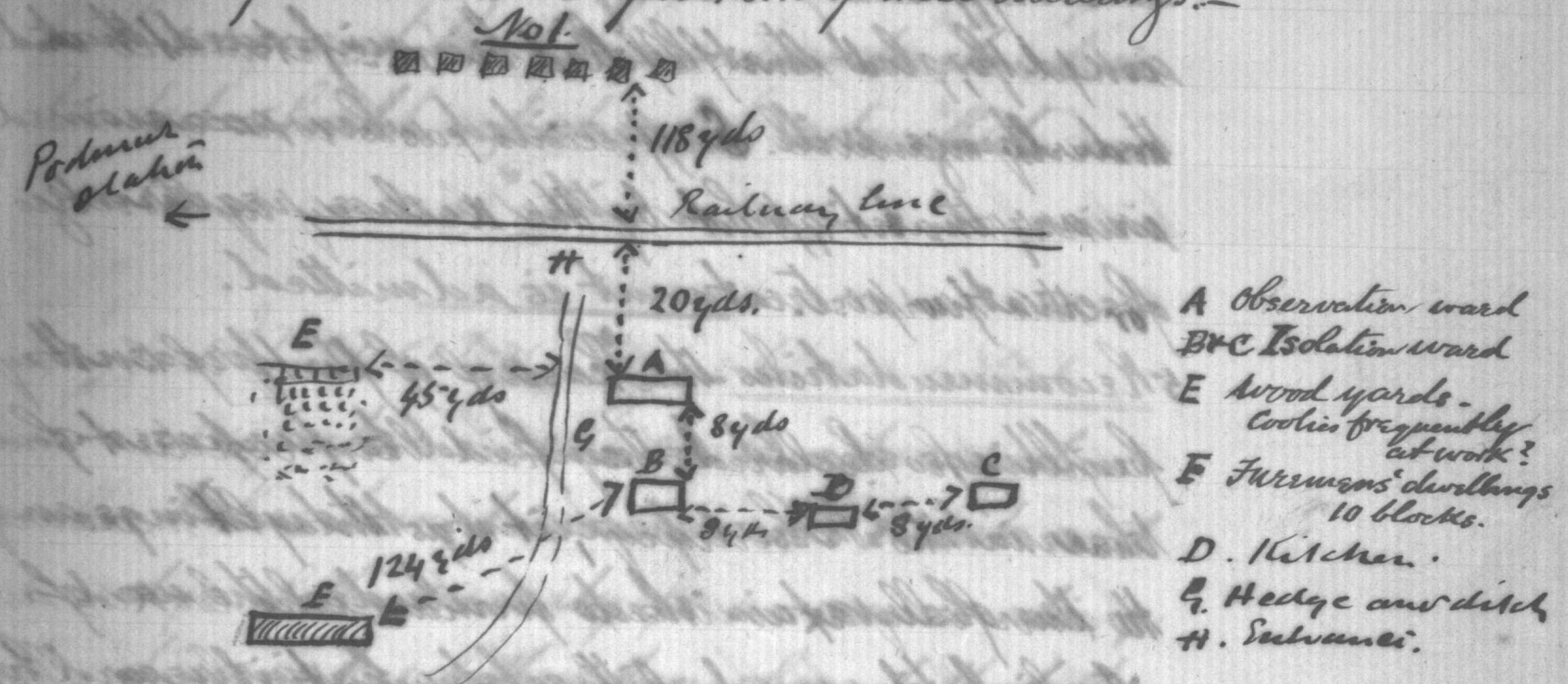
Inspection of trains – This is conducted by the Civil Apothecary. His method of examination was complete, and was fulfilled in a systematic and orderly manner. Suspicious cases were examined in a room set apart by the Railway authorities for this purpose.

In the case of a party of Bombay people who declared they had been resident some time in the Presidency, it was thought necessary to carefully examine a woman who looked as if she had recovered from a recent illness. There being no female medical attendant or nurse present – none having yet been appointed – it was not possible to conduct the examination with the completeness desirable.

2. Observation and isolation arrangements – Two "pucca" wards and a kitchen were completed on the 1st April, but up to date (9th April) have not been delivered to the charge of the Civil Apothecary. It was therefore not possible for me to gain entrance to these buildings. Allowing, however, for thickness of the walls, the cubic space per head would seem to be about 1500 cubic feet. One ward is meant for females, the other for males. A single open space latrine is provided. For observation an existing cholera ward having divisions for

Males

males and females is relied upon. The site on which these buildings stand is close to the Railway line, if not actually within the Railway premises. The diagram given below will afford an idea of the relative position of these buildings:—



Irrespective of the proximity to the Firemens dwellings and to the wood yard where coolies are always working, the proximity of the "observation" to the "isolation" ward renders the position undesirable. Separate latrines and a cook house have not been provided for the observation ward.

3 Furniture. Nothing beyond two cots formerly used for cholera patients is available for either the "observation" or the "isolation" sheds. The Cumblies used for Cholera patients are also available, but beyond this nothing is ready in the way of clothing.

4. Attendants. There is only a single attendant provided. There is not a single chatty

in

in the place for conveyance of water or for cooking purposes. The medicines at disposal are those suitable for treatment of cholera.

The Civil apothecary explains that staff and other requirements have been asked for, but that he has been informed that these things will be provided when occasion arises; that is, when either a case requiring observation or treatment is admitted.

5. Recommendations. The use of the present buildings should be confined to purposes of observation. Their proximity to dwellings and to the observation sheds precludes the use of the isolation ward with safety, having regard to possible aerial conveyance of infection, and especially to the impossibility of keeping completely apart attendants upon observation and plague cases. Hence, I would advise whilst retaining these for observation that fresh buildings be made for isolation purposes. These preferably should take the form of well built huts. The inspecting staff should be strengthened without delay by the addition of either a lady Apothecary or, at the least, by an experienced European or Eurasian nurse.

Temporary dhoolies should be provided for transport of patients. The Hospital staff, furniture and equipments should be such as at least to provide without a moments

delay

delay for the treatment and comfort of at least one patient actually affected with plague and one under observation. It certainly should not be necessary to run hither and thither for staff, or to rely upon borrowing from the Railway Apothecary and the like, as I understand is intended - should a patient be admitted.

Arconum.

Inspected 10th April 1897

Train inspection - The system pursued hitherto has been to examine all tickets and to judge of the necessity for an examination, according as to whether these showed that the bearer had come from an infected locality or not. Taking into account the fact that owing to various devises by persons aware of inspection, it is possible to arrange that tickets may not show the original place of departure, and in view of the fact that a whole night after departure from Guntakal may well suffice for incubation, I have advised the Medical officer to make all passengers alight and be correctly examined. Discretion is allowed as to ladies arriving first class - the time being such as probably not to permit of their being conveniently clothed for appearance in public; but, gentlemen having a history of having been in affected parts within ten -

days

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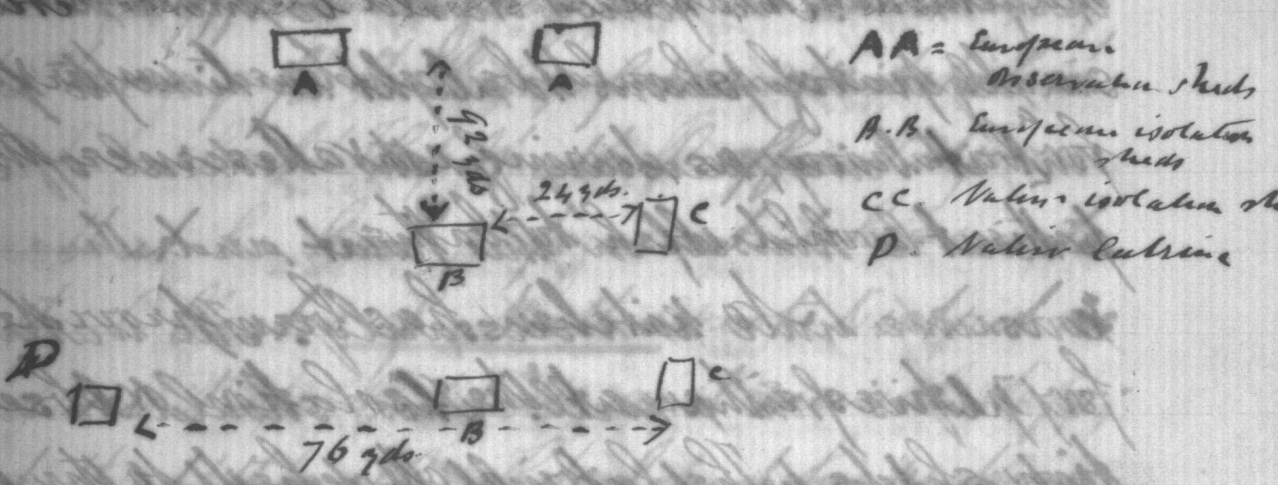
days will be required to alight for examination in all cases. Ropes or bamboos with hooks should be provided for affixing on the carriages, between which the patients should stand when examined. The police should be more active in requiring persons to alight in time to prevent it being necessary for the Medical officer to trouble himself on this point and thus consume time unnecessarily. The water supply is from a well. This should be covered, and a pump should be provided.

2. Observation and isolation wards - The site chosen for these is excellent but it is undesirably close to the quarters of Europeans - namely 215 yards from the nearest plague isolation shed. As to the distance to which aërial infection may operate in plague we know nothing for certain, and it may well be that even a shorter distance might suffice to prevent infection; but the fact to be remembered in the case of plague camps is that, above all things, the object aimed at is isolation. It does not seem to me that isolation will be complete when it is possible for the menial staff to mingle, say, with servants inhabiting European quarters in the neighbourhood. It may be deemed that discipline would be so perfect as to get over the difficulty, but even if so the

camps

camp is so built that the isolation and observation sheds are far too near each other. The diagram No 2 shows the relative position.

No 2.


A
A
B
C
D
C
B
92 yds
24 yds.
76 yds
AA = European observation sheds
A.B. European isolation sheds
CC. Native isolation sheds.
D. Native latrine

3. Whilst the arrangements here would suffice for an observation camp, I consider for isolation purposes a position further removed from ordinary dwellings desirable and from observation sheds necessary, and would consequently recommend the removal of the isolation wards elsewhere. The wards for Europeans require much more care in building with reference to admission of sun. In their present state, it would be impossible to treat Europeans in them with safety*. The sides require a thick protection of either cadjan leaves or bamboo mats. The windows might with advantage be increased to double the size. The flooring is of rammed earth. If economy must be so much —

studied

* If as required in G.O. No 319. dated 27.2.97 & the sheds for natives are intended to accommodate four each they are unreasonably small. W.G.K.

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studied as to demand this description of flooring (which is highly favorable for retention of infective matter) in a ward where Europeans may be confined for six weeks on end, it should at least be arranged that a small patch should be rendered impervious for a bath room, as during convalescence the patient would wish to bathe.

4. No kitchen has been provided for natives either at the isolation or observation sheds. The latrine attached to the isolation shed for natives is far too distant from the sheds namely 227 paces — which implies a greater exertion than can be expected of a person in a weakly state. To get at the latrine, it is necessary to pass the sheds of the Europeans which are distant from those for natives only about 87 to a little over 100 ft. Cooking for Europeans under observation, as well as for those in the isolation sheds, and for the hospital staff, must be conducted under present arrangements in the one pucca kitchen available. This is very undesirable.

5. There is available a single Moore's medicine chest — a very good chest for non-professional persons. There is not a cot or atom of furniture in the place. There is no means of transport. There are no nursing

or

or cooking attendants. If a patient were to be received under existing conditions, he would have to be placed on the bare floor, and wait for food and comforts till the Medical officer bargained with the Railway Apothecary for a loan of various articles.

5. The Medical officer informs me that he had represented his wants to the Collector of North Arcot District as to furniture, bedding and menial staff; but that this officer declared his responsibility ended with making of sheds.

G.O. Same issued — 8.4.

Guntakal

Inspected 27th March

The plague inspection station at Guntakal was inspected on the 27th March. At that time the Medical officer had erected tents, but he still awaited the arrival of cots. No cooking utensils were available, but the Medical officer considered he could shift with procuring article from the native refreshment room.

2 No flooring of even gravel had been provided for the sheds, but the Tahsildar had applied to the Collector for permission to make this addition. The only observation shed available was a single unfit structure of 10' by 25'. The sheds meant for Europeans

Europeans are unsuitable, on account of the thinness of the walls affording too slight pr tection against the sun. No provision had been made or was contemplated for retaining a different menial staff for observat and isolation.

3 Water supply – I advise that this be obtained from the rest camp well by use o a pump, as the behaviour of the plague bacillus in water is unknown.

4 Train inspection – This was conducted more hurriedly than I would wish; but on this and certain other minor details, I conferred with the Medical officer, and trus that matters are now correctly conducted.

~~W.K.~~

General Remarks.

(1) It is I think essential that it be recognized that sheds employed shall give full protection from the sun.

(2) Arrangements as to buildings and staff should be such as to render it impossible that a person under observation shall be subjected to the risk of contracting infection

infection by reason of propinquity to isolation wards, or mingling of staffs belonging to isolation sheds and observation sheds.

(3) The provision of ~~lady~~ a female medical practitioner or a qualified european, or Eurasian nurse at each station for conduct of examinations is essential.

(4) There should be no waiting till a case is admitted before sufficient staff, equipment, or comforts are provided. All arrangements should be such as to permit that on admission of a case (1) for observation or (2) isolation or (3) a case of both on the same day, everything should be at hand for the comfort and treatment of the persons concerned, and that no labour that is avoidable should in the event be required of the medical officer that would distract his attention from his professional medical and sanitary duties.

(5) At all observation stations the staff should be sufficiently strong to enable the names and addresses of all passengers arriving from infected localities being written down and transmitted to the local authorities of their destinations.

W G King
Surgeon Lieut Col
Sanitary Commr for Madras

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copy sent to Press.

eturned for signature.

espatched in print. 5-5-97
15-5-97
31-5-97

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Order of Government.

Letter of Government.

Statement with ditto.

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Q = Print heading only.