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Contributors

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PLAGUE

INSTRUCTIONS ON PROCEDURE IN
OUTBREAKS OF PLAGUE.



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INSTRUCTIONS

IN PARCELS, IN OUTBREAKS OF PLAGUE.

The object of this instruction is to define the duties of the sanitary authorities in relation to the disinfection of parcels in outbreaks of plague. It is intended to be read by the sanitary authorities in the event of an outbreak of plague, and to guide them in the execution of their duties.

1. The sanitary authorities shall be notified of the arrival of a parcel in the event of an outbreak of plague. They shall immediately take steps to ensure that the parcel is not opened, and that it is kept in a secure place until it can be disinfected. They shall also take steps to ensure that the parcel is not handled by any person who is not a member of the sanitary authorities.

2. The sanitary authorities shall be notified of the arrival of a parcel in the event of an outbreak of plague. They shall immediately take steps to ensure that the parcel is not opened, and that it is kept in a secure place until it can be disinfected. They shall also take steps to ensure that the parcel is not handled by any person who is not a member of the sanitary authorities.

3. The sanitary authorities shall be notified of the arrival of a parcel in the event of an outbreak of plague. They shall immediately take steps to ensure that the parcel is not opened, and that it is kept in a secure place until it can be disinfected. They shall also take steps to ensure that the parcel is not handled by any person who is not a member of the sanitary authorities.

4. The sanitary authorities shall be notified of the arrival of a parcel in the event of an outbreak of plague. They shall immediately take steps to ensure that the parcel is not opened, and that it is kept in a secure place until it can be disinfected. They shall also take steps to ensure that the parcel is not handled by any person who is not a member of the sanitary authorities.

BIBLIOTHECA	
MUSEI HISTORICI	
1	1881
2	1882
3	1883
4	1884
5	1885
6	1886
7	1887
8	1888
9	1889
10	1890

INSTRUCTIONS

ON PROCEDURE IN OUTBREAKS OF PLAGUE.

The conduct of outbreaks of plague having now become a routine part of the duties of Medical Officers, it has been thought advisable to issue in a compact form a description of the various methods which have been found to work satisfactorily in practice.

1.—It cannot be too strongly impressed upon Medical Officers that the same care must be exercised in disinfection and the general management of isolated cases as is shown in dealing with outbreaks. It is only by exercising the greatest care in the investigation and disinfection of the earlier cases that a reliable opinion as to the extent of the subsequent necessary disinfection can be formed.

2.—As soon as a case of plague is discovered in a town or village, arrangements must be made to disinfect contacts, clothes, and the premises, and to inspect all deaths which may subsequently occur in the town or village.

A.—IN TOWNS WHERE THERE IS A DISINFECTING STATION.

Procedure on the outbreak of plague.

3.—When a patient is found to be suffering from suspected plague the police should immediately be requisitioned for a guard to see that contacts do not

INSTRUCTIONS

ON PROCEDURE IN OUTBREAKS OF PLAGUE

The control of outbreaks of plague has long been a routine part of the duties of Health Officers. It has been thought advisable to issue a circular form a description of the various methods which have been found to work satisfactorily in practice.

1.—It cannot be too strongly impressed upon Health Officers that the same care must be exercised in disinfection and the general management of infected cases as is shown in dealing with epidemics. It is only by examining the greatest care in the investigation and distribution of the earlier cases that a reliable opinion as to the extent of the subsequent new wave of infection can be formed.

2.—As soon as a case of plague is discovered, all persons who have been in contact with the patient should be notified and arrangements made to isolate them. All articles of clothing and the premises and to inspect all other persons who have been in contact with the patient.

A—In Towns where there is a Quarantine Station.

3.—When a patient is found to be suffering from plague, the police should immediately be notified for a guard to see the patient to the

escape and that nothing is removed from the house, and the disinfector (mubakhar) and sheikh el harah should be ordered to attend.

4.—A list should then be made of all contacts, *viz.*, inhabitants of the house and nearest relatives, with the assistance of the sheikh el harah, who should seal the list after having made sure that it is complete.

5.—The patient should be removed to the hospital for infectious diseases in the ambulance. If there is no special hospital for infectious diseases Medical Officers must arrange for a temporary one (*see* para. 90 *et seq.*).

The ambulance must be disinfected after use.

No patient should be removed to hospital who is in a dying state, or when it is thought that removal will affect the patient injuriously, but all cases treated in their own houses must be properly isolated (*see* paras. 70 and 71) and must be specially reported to the Divisional Inspector.

6.—All contacts must then be examined and disinfected; they must be seen daily for ten days afterwards. A special time and place should be appointed for this daily examination at which the sheikh el harah should be present.

If thought necessary, contacts may be isolated (*see* para. 24).

One or two of the contacts should remain in the house during the disinfection; the others should be

and the disinfectant (antiseptic) and should be removed from the house and the disinfectant should be ordered to attend.

4.—A list should be made of all contacts, viz. inhabitants of the house and nearest relatives with the assistance of the health officer, who should send the list after having made sure that it is complete.

5.—The patient should be removed to the hospital for infectious disease in the neighborhood. If there is no special hospital for infectious disease, Medical Officers must arrange for a temporary one (see para 30 & 31).

The ambulance must be disinfected after use. The patient should be removed to hospital who is in a dying state, or when it is thought that removal will affect the patient injuriously. In all cases treated in their own houses must be properly isolated (see para 50 and 51) and must be specially reported to the District Inspector.

6.—All contacts must then be examined and disinfectants they must be seen daily for ten days after wards. A special time and place should be appointed for this daily examination at which the health officer should be present.

If thought necessary contacts may be isolated (see para 31). One or two of the contacts should remain in the house for the disinfection; the others should be

sent outside as soon as their personal disinfection is finished.

7.—All clothes and soft goods are to be entered on lists by the disinfecter, packed in canvas bags and sent to the disinfecting station (mabkharah), and the whole house and its remaining contents thoroughly cleaned and disinfected (*see* paras. 52 to 57).

In every case, before clothes are packed for removal to the disinfecting station, or disinfected by sublimate on the spot, owners should be asked in the presence of witnesses whether the clothes contain money, valuables, or papers.

If so they should be instructed to remove them.

8.—As soon as possible after the arrival of the patient at the hospital a specimen should be taken of the serum from the bubo, or sputum in the case of suspected pneumonic plague.

In cases of deaths from suspected pneumonic or septicæmic plague two specimens should be taken, one from the heart blood, the other from the apex of the right lung just below the clavicle.

**Method
of taking
specimens.**

9.—The syringe and needle must be boiled for ten minutes, both before and after use. The skin must be thoroughly cleansed and disinfected with sublimate solution (1 : 1,000) and alcohol, and the needle inserted into the substance of the gland, lung, or heart. In some bubonic cases several minutes elapse before a

and outside as soon as their personal distinction is
trivial.

7. All clothes and soft goods are to be sent on
lines by the hospital, packed in canvas bags and
sent to the disinfecting station (mildew), and the
whole house and the remaining contents thoroughly
cleaned and disinfected (see page 55 to 57).

In every case, before clothes are packed for removal
to the disinfecting station or distributed by ambulance
to the spot, owners should be asked in the presence of
witnesses whether the clothes contain money, valu-
ables or papers.

It is they should be instructed to remove them.

8. As soon as possible after the arrival of the
patient at the hospital a specimen should be taken
of the sputum from the larynx or spatula in the case of
suspected pneumonic plague.

In case of deaths from suspected pneumonic
plague two specimens should be taken one
from the throat blood, the other from the sputum of the
right lung, and before the autopsy.

Method of taking specimens
The sputum and throat must
be taken for ten minutes, both
before and after meals. The sputum must
be thoroughly observed and disinfected with carbolic
solution (1:1000) and alcohol, and the throat inserted
into the substance of the gland, tongue or heart. In
some patients there is a certain amount of sputum before a

few drops of serum find their way into the syringe, even though a good vacuum is maintained. When a drop or two of serum appear in the syringe the needle should be withdrawn and the serum ejected on to the surface of the agar slope.

The test tube is then closed with the cotton plug ; the syringe is washed out several times with water to remove albuminous material, taking care to keep the point of the needle below the surface of the water, and is then again boiled.

The form accompanying the specimen must be accurately filled up and the whole carefully packed and sent off without delay by letter post. At the same time a short history of the case should be sent, addressed to Director-General.

This history should give :—

(a) Serial number, date, name, age, sex, village markaz, and mudiria.

(b) Clinical description.

When the specimen has been examined, the details of the bacteriological report will be sent to the Central Administration and the result will be telegraphically communicated to the district concerned by means of five different code words according to the nature of the case. It is important that the exact signification of these words should be understood by all Medical Officers and Inspectors.

I.—*Positive*.—Meaning that the bacteriological examination has shown either positive or very suspicious results and that the case is to be considered and bulletined as plague, and precautions taken accordingly.

few drops of serum from their way into the syringe
even though a good vacuum is maintained. When a
drop or two of serum appear in the syringe the needle
should be withdrawn and the serum allowed to run
surface of the gear slope.

The test tube is then closed with the cotton plug.
The syringe is washed out several times with water to
remove albuminous material, taking care to keep the
point of the needle below the surface of the water, and
is then again boiled.

The form accompanying the specimen must be accu-
rately filled up and the whole carefully packed and sent
off without delay by letter post. At the same time
a short history of the case should be sent, addressed
to Director-General.

This history should give:-

(a) Serial number, date, name, age, sex, village,
marks, and initials.

(A) Clinical description.

When the specimen has been examined, the details
of the bacteriological report will be sent to the Central
Administration and the result will be telegraphically
communicated to the district concerned by means of
the different code words according to the nature of
the case. It is important that the exact signification
of these words should be understood by all Medical
Officers and Inspectors.

1.—Positive.—Meaning that the bacteriological
examination has shown either positive or
very suspicious results and that the case is
to be considered and handled as plague,
and precautions taken accordingly.

II.—*Suspicious*.—Meaning that the bacteriological examination has shown suspicious organisms, and that the same precautions should be taken as if the case were plague, but it is left to the Medical Officer's discretion to bulletin the case or not according to its clinical and epidemiological aspects.

III.—*Indefinite*.—Meaning that the bacteriological examination shows no results at all, and that both the precautions to be taken and the question of bulletining the case are left to the Medical Officer, taking into account the clinical and epidemiological aspects of the case.

IV a.—*Specimen Overgrown*.—Meaning that the culture is overgrown with saprophytic organisms, showing that the Medical Officer has neglected the proper precautions in taking the cultures.

IV b.—*Agar Useless*.—The agar may be dry, in which case the Medical Officer should have taken steps to secure fresh tubes.

SUMMARY.

A.—IN TOWNS WHERE THERE IS A DISINFECTING STATION.

I.—*When patient is alive :*

1. Put a guard on the house.
2. Send for disinfectant and sheikh el harah.
3. Ascertain probable source of infection.
4. Make a list of contacts with the assistance of the sheikh el harah.
5. Remove the patient to hospital.

11. — *Remarks*. — Meaning that the bacteriological examination has shown suspicious organisms and that the same precautions should be taken as if the case were typhus, but it is left to the Medical Officer's discretion to publish the case or not according to its clinical and epidemiological aspects.

111. — *Remarks*. — Meaning that the bacteriological examination shows no results at all, and that both the precautions to be taken and the question of publishing the case are left to the Medical Officer, taking into account the clinical and epidemiological aspects of the case.

112. — *Remarks*. — Meaning that the culture is overgrown with saprophytic organisms, showing that the Medical Officer has neglected the proper precautions in taking the cultures.

113. — *Remarks*. — The agar may be left in which case the Medical Officer would have taken steps to secure fresh tubes.

SUMMARY.

1. — In towns where there is a typhus epidemic.
1. — Visit the house.
2. — Send for doctor and disinfectant.
3. — Ascertain probable source of infection.
4. — Make a list of contacts with the assistance of the health officer.
5. — Remove the patient to hospital.

6. Take specimen for bacteriological examination.
7. Examine and disinfect contacts.
8. Make a list of clothes and soft goods and remove them to the disinfecting station, after ascertaining that they contain no valuables or papers, and that no clothes are concealed or taken away.
9. Disinfect the premises.
10. Disinfect surroundings.

10.—When the patient is discovered after death the same procedure will be followed, except that instead of removing the body to the hospital mortuary the specimen for bacteriological examination will be taken in the place where the body is lying. Should there be opposition to the taking of specimens, the proposal to remove the body to the hospital mortuary will usually overcome the opposition.

11.—A solution of corrosive sublimate (1 : 1,000) must be prepared and given to the corpse-washer (moghassil) for washing the body, and the shroud (kaffan) must be soaked in sublimate solution (1 : 1,000) by the disinfecter and handed to the moghassil.

In cases of pneumonic and septicæmic plague the patient's clothes should be soaked in sublimate solution before they are removed.

The body may then be removed for burial. The bier should be zinc- or tin-lined and must be disinfected after use.

12.—In certain towns, where deaths from plague are taking place without previous notification of illness, it has been found that the removal to the hospital

- 10. Take specimen for bacteriological examination.
- 11. Examine and disinfect contents.
- 12. Make a list of clothes and soft goods and remove them to the disinfecting station after ascertaining that they contain no vermin or pupae and that no clothes are concealed or taken away.
- 13. Disinfect the room.
- 14. Disinfect surroundings.

10.—When the patient is discovered after death the same procedure will be followed, except that instead of removing the body to the hospital mortuary the specimen for bacteriological examination will be taken in the place where the body is lying. Should there be objection to the taking of specimens, the proposal to remove the body to the hospital mortuary will usually overcome the objection.

11.—A solution of corrosive sublimate (1:1,000) must be prepared and given to the corpse-washer (mortuary) for washing the body, and the shroud (kafan) must be soaked in sublimate solution (1:1,000) by the disinfecter and handed to the mortuary. In cases of pneumonia and septicaemia place the patient's clothes should be soaked in sublimate solution before they are removed. The body may then be removed for burial. The dirt should be zinc- or tin-lined and must be disinfected after use.

12.—In certain towns, where deaths from plague are taking place without previous notification of illness, it has been found that the removal to the hospital

mortuary of the bodies of all those who have died without previous notification of their illness, whatever the cause, has had a salutary effect and encouraged notification of the cases during life.

SUMMARY.

A.—IN TOWNS WHERE THERE IS A DISINFECTING STATION.

II.—*When patient is dead:*

1. Put a guard on the house.
2. Send for disinfector, sheikh el harah, and moghassil.
3. Ascertain probable source of infection.
4. Make a list of contacts with assistance of sheikh el harah.
5. Examine and disinfect contacts.
6. Prepare disinfectant for washing body and disinfecting the shroud.
7. Take specimen for bacteriological examination.
8. Make a list of clothes and soft goods and remove them to the disinfecting station, after ascertaining that they contain no valuables or papers and that no clothes are concealed or taken away.
9. Disinfect the premises.
10. Disinfect surroundings.

B.—IN TOWNS WHERE THERE IS NO DISINFECTING STATION AND IN VILLAGES.

13.—When a patient is found alive suffering from suspected plague, a policeman or ghafir should be put on guard at the infected house ; the omda in villages, the sheikh in towns, should be summoned and a list of contacts made out with his assistance.

14.—The contacts should be examined and disinfected with sublimate solution (1 : 1,000), and all, but one attendant for the sick person, sent out of the house. Contacts must be examined daily for ten days (*see* para. 6).

majority of the babies of all those who have died without previous notification of their illness, whatever the cause, has had a salutary effect and encouraged notification of the cases during life.

SUMMARY.

A.—In towns where there is a DISINFECTING STATION.
 1. When patient is dead.

1. Put a yard on the house.
2. Send for disinfectant, chalk, oil, soap, and newspapers.
3. Destroy possible source of infection.
4. Make a list of contacts with assistance of chalk or lamp.
5. Examine and disinfect contacts.
6. Prepare disinfectant for washing beds and disinfecting the street.
7. Take specimen for bacteriological examination.
8. Make a list of clothes and soft goods and remove them to the disinfecting station, after ascertaining that they contain no particles of paper and that no clothes are concealed or taken away.
9. Disinfect the premises.
10. Disinfect surroundings.

B.—In towns where there is no DISINFECTING STATION AND IN VILLAGES.

13.—When a patient is found alive, call away from suspected plague a policeman or ghatsi should be put on guard at the infected house; the order in villages the ghatsi in town should be summoned and a list of contacts made out with his assistance.

14.—The contacts should be examined and disinfectant with sublimate solution (1:1,000), and all but one attendant for the sick person sent out of the house. (Contacts must be examined daily for ten days (see para. 6).)

15.—The house must then be locked up and left in charge of the guard who must be given strict orders that no person be allowed to enter or leave the house and that nothing be removed from it.

16.—Arrangements must at once be made to take the bacteriological specimen and to carry out the necessary disinfection.

The Mamûr must be informed and a telegram sent to the mudiria Public Health Inspector, asking for the exploring syringe and for the services of the disinfector with materials for disinfection.

17.—During the period which elapses before the arrival of the disinfecting equipment, Medical Officers must make arrangements for the proper isolation of the patient and attendant.

In wet and cold weather isolation may be effected either in a tent or, in very exceptional cases, in the patient's own house or by removal to a more suitable one. In all cases when a patient is isolated in a house the conditions laid down in para. 70 must be strictly adhered to.

When the weather permits, tents or huts of mats, reeds, or durra-stalks should be erected outside the village, to the south if possible, and the patient isolated there with an attendant. Arrangements for food supply for the patient and attendant should be made in accordance with para. 99.

When a temporary hospital is erected on private property the rent of the site should be settled and a written contract drawn up.

15--The house must then be locked up and left in charge of the guard who must be given strict orders that no person be allowed to enter or leave the house and that nothing be removed from it.

16--Arrangements must be made for sending to the bacteriological specimen and to carry out the necessary disinfection.

The district must be informed and a telegram sent to the medical Public Health Inspector asking for the exploring string and for the services of the disinfecter with materials for disinfection.

17--During the period which elapses before the arrival of the disinfecting equipment, Medical Officers must make arrangements for the proper isolation of the patient and attendant.

In wet and cold weather isolation may be effected either in a tent or in very exceptional cases in the patient's own house or by removal to a more suitable one. In all cases when a patient is isolated in a house the conditions laid down in para. 10 must be strictly adhered to.

When the weather permits tents or huts of mats, reeds, or gourd-stalks should be erected outside the village to the south if possible, and the patient isolated there with an attendant. Arrangements for food supply for the patient and attendant should be made in accordance with para. 22.

When a temporary hospital is erected on private property the route of the site should be selected and a written contract drawn up.

18.—As soon as the exploring syringe arrives, the specimen for bacteriological examination should be taken and must be forwarded without delay (*see* para. 9).

19.—On the arrival of the disinfecter with the equipment, a small gang of five or six men will be formed and the house and surroundings thoroughly cleaned and disinfected (*see* paras. 52 to 57).

Should the disinfecter not be available the materials will be sent, and the Medical Officer must himself carry out the disinfection of the house and surroundings with such assistance as he can obtain.

SUMMARY.

B.—IN TOWNS WHERE THERE IS NO DISINFECTING STATION AND IN VILLAGES.

I.—*When patient is alive :*

1. Put a guard on the house.
2. Send for the omda or sheikh.
3. Ascertain probable source of infection.
4. Make a list of contacts with the assistance of the omda or sheikh.
5. Examine and disinfect contacts.
6. Telegraph for disinfecter and materials.
7. Isolate the patient.
8. Take the specimen for bacteriological examination.
9. Disinfect premises and contents, including clothes, after ascertaining that none are concealed or taken away.
10. Disinfect surroundings.

NOTE.—It is very seldom necessary to destroy infected clothes, etc.; they should be soaked in sublimate solution (1: 1,000) for twenty minutes and afterwards thoroughly dried in the sunlight.

When, however, for special reasons the burning of infected clothes

18--As soon as the exploring system arrives, the specimen for bacteriological examination should be taken and must be forwarded without delay (see para 9).

19--On the arrival of the disinfectant with the equipment, a small party of five or six men will be formed and the house and surroundings thoroughly cleaned and disinfected (see para 23 to 27). Should the disinfectant not be available, the materials will be sent, and the Medical Officer must himself carry out the disinfection of the house and surroundings with such assistance as he can obtain.

SUMMARY

12--THE HOUSE WHEN THERE IS NO DISINFECTING SYSTEM AND IN VILLAGES

- 1--When patient is well.
1. Put a guard on the house.
2. Food for the week or week.
3. Ascertain probable source of infection.
4. Make a list of contacts with the assistance of the owner or family.
5. Examine and disinfect contacts.
6. Telegraph for disinfectant and containers.
7. Isolate the patient.
8. Take the specimen for bacteriological examination.
9. Isolate patients and contacts, including children, after notifying that cases are regarded as taken away.
10. Isolate surroundings.

NOTE--It is very seldom necessary to destroy the patient's effects, but they should be washed in carbolic solution (1:1000) for twenty minutes and afterwards thoroughly dried in the sunlight. They are never for general use. The laundry is included clean.

or other articles becomes absolutely necessary, Medical Officers must make a list of all clothes, etc., to be destroyed and draw up an agreement as to the amount of compensation to be paid. This agreement must be sealed by the owner. Compensation should be paid on the spot, if possible, by Divisional Inspectors, or in their absence by Medical Officers, and a receipt taken from the owner or his representative in satisfaction of all claims (*see* para. 104).

20.—When the case is discovered after death, similar measures will be taken to those in the preceding instance, but the moghassil will be sent for as well as the omda or sheikh.

21.—As soon as contacts have been disinfected they will be sent out of the house to prepare for the funeral. Contacts must of course be inspected daily for ten days.

Even if it is decided to isolate the contacts, those who appear to be in good health should be allowed to attend the funeral after disinfection. A policeman or ghafir should be ordered to go with them and bring them back to the place of isolation after the funeral.

22.—After the specimen for examination has been taken, disinfectants for washing the body and soaking the shroud must be prepared as in para. 11, and the body may be buried.

23.—The house should then be locked up, the key given to the omda or sheikh, and a guard left on the house until disinfection can be undertaken.

of other articles because absolutely necessary. Medical Officers
must make a list of all objects, etc., to be preserved and then up
an agreement as to the amount of compensation to be paid. This
agreement must be sealed by the owner. Compensation should be
paid as far as possible by Districtal Inspectors or in their
absence by Medical Officers, and a receipt taken from the owner
of the representatives in satisfaction of all claims (see page 101).

20.—When the case is discovered after death
similar measures will be taken to those in the previous
case, but the material will be sent for as well
as the omelette or shikha.

21.—As soon as contacts have been distinguished
they will be sent out of the house to prepare for the
funeral. Contacts must of course be inspected daily
for two days.

Even if it is decided to isolate the contacts, those
who appear to be in good health should be allowed
to attend the funeral after disinfection. A policeman
or khatri should be ordered to go with them and bring
them back to the place of isolation after the funeral.

22.—After the specimen for examination has been
taken, disinfectants for washing the body and articles
the funeral must be prepared as in para. 11, and the
body may be buried.

23.—The house should then be treated as in the
case of the omelette or shikha, and a general call on the
house with disinfection can be made.

SUMMARY.

B.—IN TOWNS WHERE THERE IS NO DISINFECTING STATION AND IN VILLAGES.

II.—*When patient is dead :*

1. Put a guard on the house.
2. Send for omda or sheikh, and moghassil.
3. Ascertain probable source of infection.
4. Make a list of contacts with the assistance of the omda or sheikh.
5. Examine and disinfect contacts.
6. Telegraph for disinfector and materials.
7. Take the specimen for bacteriological examination.
8. Prepare disinfectant for washing body and soaking the shroud.
9. Disinfect premises and contents, including clothes, after ascertaining that none are concealed or taken away.
10. Disinfect surroundings.

Isolation of contacts. 24.—In all cases of pneumonic or primary septicæmic plague contacts should be strictly isolated for ten days.

In bubonic cases it is usually sufficient to keep contacts under observation for ten days, but in certain cases it is advisable to isolate them. For instance:—

- 1.—When the contacts are people of no fixed residence.
- 2.—When there is reason to believe that infected clothes, etc., have been concealed.
- 3.—When missing members of a family or household cannot be discovered.
- 4.—When cases of plague have been wilfully concealed.

Disinfection. 25.—Disinfection may be either special, that is, confined to the house of the infected person and its immediate

SUMMARY

11.—In towns where there is no disinfecting station
and in villages.

11.—When patient is dead:

1. Put a cord on the house.
2. Send for cord or disinfectant and soap.
3. Ascertain probable source of infection.
4. Make a list of contacts with the contents of the order or
check.
5. Examine and disinfect contacts.
6. Photograph for distributor and materials.
7. Take the specimen for bacteriological examination.
8. Prepare disinfectant for washing body and washing the room.
9. Disinfect premises and contents, including clothes, after seeing
that none are concealed or taken away.
10. Disinfect surroundings.

24.—In all cases of pneumonia
or primary septicaemic plague con-
tacts should be strictly isolated for ten days.

In bubonic cases it is usually sufficient to keep
contacts under observation for ten days, but in certain
cases it is advisable to isolate them. For instance—

1.—When the contacts are people of no fixed
residence.

2.—When there is reason to believe that isolated
clothes, etc., have been concealed.

3.—When missing members of a family or house-
hold cannot be discovered.

4.—When cases of plague have been willfully con-
cealed.

25.—Disinfection may be either
epidemic, that is confined to the

house of the infected person and its immediate

surroundings, or general, that is, properly organized disinfection of a whole town or village. When the latter is carried out it is usually determined by the results of the previous special disinfections; for instance, the discovery of numerous dead rats during the special disinfections, or the occurrence of cases in various parts of the town or village, or the extensive concealment of cases and infected clothes. In several instances it has been found sufficient to carry out general disinfection of portions of towns.

It is during this period of special disinfections that the preliminary arrangements for general disinfection should be made.

As in an outbreak the two forms of disinfection go on simultaneously, *viz.*, the special disinfection of the "house of the case" and its surroundings and the general disinfection of whole towns or villages or portions of them, it is convenient to describe the organization required as a whole.

**Duties
of Governor
or Mudir.**

26.—When large towns are infected, the Governor or Mudir should be requested to assemble the sheikhs el harah and order them to make daily inspections in their quarters and report all cases of illness to the Public Health office.

**Duties
of Mamûr
of markaz.**

27. — When small towns or country districts are infected the Mamûr of the markaz should be requested to convene the omdas and warn them

arrangements or general that is properly organized
 distinction of a whole town or village. When
 the latter is carried out it is usually determined
 by the results of the previous special distinctions;
 for instance, the discovery of numerous cases and
 during the special distinctions, or the occurrence of
 cases in various parts of the town or village, or the
 extensive involvement of cases and infected clothes.
 In several instances it has been found sufficient to
 carry out general distinctions of portions of towns.

It is during this period of special distinctions that
 the preliminary arrangements for general distinction
 should be made.

As in an outbreak the two forms of distinction are
 on simultaneously, i.e., the special distinction of the
 "base of the case" and its surroundings, and the
 general distinction of whole towns or villages or
 portions of them, it is convenient to describe the
 organization required as a whole.

26. -- When large towns and in-
 dustrial towns, the Governor or Minister
 should be requested to nominate
 the officials of health and order them to take daily
 inspection in their quarters and report all cases of
 illness to the Public Health office.

27. -- When small towns or
 country districts are infected the
 Minister of the Interior should be
 requested to convene the orders and warn them

that any concealment of plague in their villages will be regarded as a very serious offence.

**Duties
of Omdas.**

28. — Omdas should instruct all sheikhs el balad to make themselves acquainted with cases of sickness occurring in their quarters and to notify them immediately to the Public Health authority. Barbers must be informed that they are not to give death certificates. Free attendance must be given to all those cases, whether plague or not, to which the Medical Officer may be summoned by the omda or sheikhs.

Inspectors of mudirias should explain to omdas that if suspicious cases of illness occur among the inhabitants of their villages, they should at once erect some temporary shelter outside the village, to the south if possible, and remove the sick there. They should not wait for the arrival of the Public Health authorities before taking such measures.

**Concealment of
cases.**

29. — When Medical Officers have reason to believe that concealment of cases is being practised they should at once report to the Divisional Inspector.

**Gratuity
for information.**

30.—The giving of a gratuity (P.T. 20) for each report of a fresh case of plague has a good effect. The gratuity should not be given, however, when the case reported has evidently been ill some considerable time and is in a moribund state, and the report has been made just

that any concealment of plague in their villages will
be regarded as a very serious offence.

28.—Orders should instruct
all shikhs of pabed to make them-

selves acquainted with cases of sickness occurring
in their quarters and to notify them immediately
to the Public Health authorities. Barbers must be
informed that they are not to give death certificates.
Free attendance must be given to all those cases
whether plague or not to which the Medical Officer
may be summoned by the omba or shikhs.

Inspectors of mandirins should explain to ombas
that if suspicious cases of illness occur among the
inhabitants of their villages, they should at once erect
some temporary shelter outside the village, to the
south if possible, and remove the sick there. They
should not wait for the arrival of the Public Health
authorities before taking such measures.

29.—When Medical Officers
have reason to believe that con-
cealment of cases is being practised they should at
once report to the Divisional Inspector.

30.—The giving of a gratuity
for information. (P.T. 30) for each report of a fresh
case of plague has a good effect. The gratuity should
not be given, however, when the case reported has
evidently been ill some considerable time and is in a
moribund state, and the report has been made just

before death ensues with the intention of avoiding isolation.

The announcement of this gratuity should be made to a few persons who are likely to have special information, and payments of the gratuity should be made privately by the Inspector (*see* para. 104).

Duties of Medical Officers. 31.— During outbreaks of plague the duties of the Medical Officers are usually divided as follows :—

In Mudiria Towns.

The mudiria Inspector takes charge of the erection of the plague hospital and the organization of the disinfection service.

The hospital Medical Officer inspects the dead and attends to the plague hospital.

The markaz Medical Officer inspects the dead in the surrounding villages.

Special Medical Officers supervise disinfection and inspect contacts daily.

In smaller Towns and Villages.

The markaz Medical Officer inspects the dead in the markaz town and traces contacts.

Special Medical Officers supervise disinfection, inspect contacts daily, inspect dead in wide areas, and attend to the plague hospital.

The various duties should be specially assigned to the different Medical Officers in order that there may be no confusion. In some towns it is found advisable

before death comes with the intention of avoiding isolation.

The announcement of this mortality should be made to a few persons who are likely to have special influence, and payments of the gratuity should be made privately by the Inspector (see para. 104).

Duties of Medical Officers. 34.—During outbreaks of plague the duties of the Medical Officers are usually divided as follows:—

In Medical Towns.

The medical Inspector takes charge of the erection of the plague hospital and the organization of the disinfection service.

The hospital Medical Officer inspects the dead and attends to the plague hospital.

The medical Medical Officer inspects the dead in the surrounding villages.

Special Medical Officers supervise disinfection and inspect cemeteries daily.

In smaller Towns and Villages.

The medical Medical Officer inspects the dead in the market town and trans-entails.

Special Medical Officers supervise disinfection, inspect cemeteries daily, inspect dead in wide areas, and attend to the plague hospital.

The various duties should be specially assigned to the different Medical Officers in order that there may be no confusion. In some towns it is found advisable

to have a separate Medical Officer for the purpose of inspecting the dead in the market town and trans-entails.

to divide the work of inspection of the dead amongst the various Medical Officers.

When it is necessary to examine all dead bodies in a wide area, *e.g.* within a radius of ten kilometres, a special Medical Officer should be appointed.

His duties should be to examine all dead bodies within his radius of duty before they are buried and to examine free all persons in the villages to whom his attention may be directed by the omda or sheikhs. He should also call on the omda, enquire into the state of health of the village, and examine the registers of deaths. When it is impossible for him to see all deaths, on account of the distance to be covered, he should report the matter to the Inspector in charge.

A donkey or other means of transport must be provided for the examining Medical Officers.

Preliminary Arrangements.

Store. **32.**—A suitable place must be selected for the store (makhzan). In large towns it will be situated generally at the disinfecting station ; in country districts it should be situated as near as possible to the work, easy of access for carts, and in a spot which is not much frequented.

Clerk. **33.**—A clerk must be appointed to keep a register of all receipts and issues of stores, a register of the workmen, and a register of all payments.

to divide the work of inspection of the dead amongst the various Medical Officers.

When it is necessary to examine all dead bodies in a village or within a radius of ten kilometers, a special Medical Officer should be appointed.

The duties should be to examine all dead bodies within his radius of duty before they are buried and to examine the persons in the villages to whom his attention may be directed by the *omda* or *shakha*. He should also call on the *omda* regularly into the state of health of the village and examine the registers of deaths. When it is impossible for him to see all deaths, on account of the distance to be covered, he should report the matter to the Inspector in charge.

A donkey or other means of transport must be provided for the examining Medical Officer.

Psychic and Atmospheric

32.—A suitable place must be selected for the store (*makhana*). In large towns it will be situated generally at the disinfesting station; in country districts it should be situated as near as possible to the work, easy of access for water, and in a spot which is not much frequented.

33.—A clerk must be appointed to keep a register of all receipts and issues of stores, a register of the working, and a register of all payments.

When a large number of gangs are employed a workman may be appointed under the clerk to keep the store clean, the equipment in an orderly manner, and to attend to the burning of rats.

**Register
of articles
on charge.**

The register of articles on charge should be drawn up so as to show receipts of articles from headquarters or elsewhere, local purchases, and destruction of unserviceable articles. This register should be checked by a fortnightly stock-taking.

**Workmen's
register.**

In the workmen's register all the men's names should be entered by gangs if possible, the roll should be called daily before and after work and an entry made of each attendance (*see* para. 49).

Burning-place. 34.—A place should be chosen for the burning of rubbish to the south of the town or village, and a man, or men, must be appointed to attend to the fire only. He must be provided with an iron rod about three metres long (*seekh*) and a rake (*karak*), (*see* para. 69).

Map.

35.—A map of the town or village must be obtained. If no plan exists a sketch-map should be made showing the main streets dividing the town or village into blocks (*mirabba'*), the openings of the blind streets, and the relation of the town or village to the Nile or canal.

Further details can be added later.

When a large number of things are employed a
workman may be appointed under the clerk to keep
the store clean, the equipment in an orderly manner,
and to attend to the burning of waste.

The register of articles on
charge should be drawn up so as
to show receipts of articles from
headquarters or elsewhere, local purchases, and
distribution of miscellaneous articles. This register
should be checked by a fortnightly stock-taking.

In the workman's register all
the men's names should be entered
by gangs if possible, the roll should be called daily
before and after work and an entry made of work
attended (see para. 49).

Burning-place. 34—A place should be chosen
for the burning of rubbish to the
south of the town or village, and a man or woman
be appointed to attend to the fire only. He must be
provided with an iron rod about three metres long
(see para. 49).

Map. 35—A map of the town or
village must be obtained. If no
plan exists a sketch-map should be made showing the
main streets dividing the town or village into blocks
(*mirabak*), the openings of the blind streets, and the
relation of the town or village to the Nile or canal.
Further details can be added later.

Each case of plague should be entered on the plan by number according to the order of its occurrence, corresponding with the number in the case book.

Each evening the amount of the day's disinfection should be indicated on the map by shading.

The "fak el zamam" plan, showing the boundaries of the town or village, can be used as a basis for the sketch-map.

Personnel. **36.**—In order that success may be obtained by general disinfection, constant supervision and experienced disinfectors are absolutely necessary.

A Divisional Inspector should invariably be in control, assisted by one or two special Medical Officers.

Disinfectors. **37.**—A staff of experienced disinfectors will be obtained either from headquarters or locally, and the materials for the requisite number of gangs will be obtained from the local plague store or headquarters. In case of urgency, materials may be obtained from the plague store of another mudiria.

It is advisable to begin with one or two gangs only and increase the number as soon as the men become familiar with the details of the work.

The gang. **38.**—The gang usually consists of a disinfecter and eleven men; two of the latter, *viz.* one of the water-men (*rashasheen*)

Each case of plague should be entered on the plan by number according to the order of its occurrence corresponding with the number in the case book.

Each evening the amount of the day's disinfection should be indicated on the map by shading.

The "lak el xaman" plan, showing the boundaries of the town or village, can be used as a basis for the sketch-map.

Personnel.

36.—In order that success may

be obtained by general disinfection, constant supervision and experienced disinfectors are absolutely necessary.

A Divisional Inspector should invariably be in control, assisted by one or two special Medical Officers.

Disinfectors.

37.—A staff of experienced

disinfectors will be obtained either from headquarters or locally, and the material for the requisite number of gangs will be obtained from the local plague store or headquarters. In case of urgency, material may be obtained from the plague store of another subdivision.

It is advisable to begin with one or two gangs only and increase the number as soon as the force becomes familiar with the details of the work.

The gang.

38.—The gang usually consists

of a disinfector and four men; two of the latter, viz. one of the water-men (mashrafi)

and one of the sweepers (*kanaseen*), should be given the position of headman (*raïs*) with extra pay of P.T. 1 per day, to be raised to P.T. 2 extra pay if thoroughly satisfactory.

The pay of the ordinary workmen varies from P.T. 4 a day in the country to P.T. 6 a day in the towns.

Establishment of gang. **39.**—The establishment of the gang is usually as follows:—

Kanaseen.

- 1 raïs.
- 2 men with sweeping brushes.
- 2 men with baskets.

Rashasheen.

- 1 raïs with watering-pot.
- 1 man with stable-broom.
- 2 men, each with 2 pails.
- 1 barrel-man with :—
 - 3 half-barrels marked at 70 litres,
 - 1 small barrel of sublimate solution with tap,
 - 1 small demi-john of carbolic acid solution,
 - 1 enamelled measuring cup holding 350 c.c. for sublimate,
 - 1 tin measuring cup holding 500 c.c. for carbolic,
 - 4 canvas disinfecting sacks, 1 pail, 3 rubbish sacks,
 - 1 stirrer, 1 fass, 1 rake, 1 paraffin tin for rats, and a supply of quicklime.

and one of the sweepers (Kansan) should be given
the position of headman (rate) with extra pay of P.T. 1
per day, to be added to P.T. 2 extra pay if thoroughly
satisfactory.

The pay of the ordinary workmen varies from
P.T. 4 a day to the couple to P.T. 6 a day in the town.

39.—The establishment of the
of gang.

Animals

- 1 milk
- 2 men with sweeping brushes
- 2 men with baskets

Workshop

- 1 man with watering-pot
- 1 man with stable-broom
- 2 men, each with 2 balls
- 1 barrel-man with —
- 2 half-barrels marked at 50 litres
- 1 small barrel of sulphuric solution with tap
- 1 small demi-john of carbolic acid solution
- 1 ornamental measuring cup holding 350 cc.
- for sulphuric
- 1 tin measuring cup holding 500 cc. for
carbolic
- 4 canvas distilling sacks, 1 half 3 tubs
- sacks
- 1 sieve, 1 case, 1 water 1 paraffin tin for use
- and a supply of quinine.

1 man to fill rat-holes with short iron bar, pail of mortar, basket of broken glass, bottle of carbolic acid solution (1 : 10), trowel and lamp.

The kanaseen are usually distinguished by a yellow band on the arm, and rashasheen by a green band. The raïs wears a red strip over the yellow or green band.

**Wearing
of boots.**

40.—All workmen must wear boots while at work ; the boots should be well greased before being issued and a supply of grease (shahm) should be provided in order that the men may keep their boots soft.

**Police
accompanying
gangs.**

41.—Disinfecting gangs when working should always be accompanied by the sheikh of the quarter and as many police as may be necessary. A requisition for their attendance should be sent to the Police Commandant in towns or to the Mamûr in country districts, and sanction for their payment from the plague credit should be obtained as explained in para. 108.

Sheikhs are usually paid at the rate of from P.T. 50 to P.T. 150 a month while the gangs are working in their quarter ; policemen receive P.T. 2 a day while specially employed on plague duty. These payments are made locally from the plague credit.

Before policemen return to their ordinary duty they should be carefully inspected to see that they are in good health. In order that this may be carried out, the Police Commandant or Mamûr should be requested to give notice when it is intended to change the police employed on plague duty.

I man to fill cut-holes with short iron bar, half of
mortar - basket of broken glass, bottle of
carbolic acid solution (1:10) towed and jump.
The Kammies are usually distinguished by a yellow
band on the arm and redashoon by a green band.
The red dress is red strip over the yellow or green band.

40 - All workmen must wear
boots white at work & the boots
should be well greased before being issued and a
supply of grease (salad) should be provided in order
that the men may keep their boots soft.

Wearing
of boots.

41 - Disturbing gangs when
working should always be secured
by the police of the district
and as many police as may be necessary. A requisition
for their attendance should be sent to the Police Com-
mandant in force or to the District Commandant in
force and sanction for their payment from the Police Com-
mandant should be obtained as explained in para. 108.

Police
accompanying
gangs.

Shells are usually paid at the rate of Rs. 1.50
to Rs. 2.00 a month while the gangs are working in
their quarters; policemen receive Rs. 2 a day while
specially employed on plague duty. These payments
are made locally from the plague credit.
When policemen return to their ordinary duty
they should be carefully inspected to see that they are
in good health. In order that this may be carried
out the Police Commandant or District Commandant should be
requested to give notice when it is intended to change
the police employed on plague duty.

Equipment of gangs.—42.

No. to be sent from Stores for each gang, including reserve.

3	3 half-barrels (bastilla) marked at 70 litres.
6	2 sweeping brushes (maqashah).— <i>Local price</i> about P.T. 3 ½.
6	3 baskets (maqtaf): 2 for rubbish, 1 for broken glass.— <i>Local price</i> about P.T. 2.
4	1 watering-pot (rashashah).
2	1 stable-broom (furshat stable).
10	7 pails (gardal): 4 for rashasheen, 1 for mortar, 1 for milk of lime, 1 for barrel man.— <i>Local price</i> P.T. 5-10.
1	1 small barrel (barmil) for sublimate solution.
1	1 tap (hanafia) for above.
1	1 small demi-john for carbolic acid solution.
2	1 enamelled measuring cup (cûz) for sublimate holding 350 c.c.
2	1 tin measuring cup (cûz) for carbolic holding 500 c.c.
10	7 sacks (kees).
1	1 fass.
1	1 short iron bar (seekh) for stopping rat-runs.
2	2 lamps (fanûs).
1	1 trowel (mahârah).
4	1 whitewash brush (furshat geer).
15	11 pairs of boots (goz gazmah).

Not sent from Stores.

Obtained locally.

- 1 stirrer, a piece of wood about 75 centimetres long for stirring solutions.
- 1 paraffin tin (safihat gaz) for dead rats.— *Local price* P.T. 1.
- 1 bottle (qizaza) for carbolic acid solution 1:10.
- 2 barrels (barmil) for transport of water.— *Local price* about P.T. 30 — or
- 8 paraffin tins (safihat gaz) for transport of water.—*Local price* about P.T. 1.

Equipment for Fire Attendants.

Obtained from Headquarters.

One set only to be sent from Stores to each locality.

1	1 long iron rod (seekh) for stirring the fire.
1	1 strong rake (karak).
1	1 fass.
2	1 pair of boots for each man.

Water-supply. 43.—Water-supply to the gangs.

A. In Towns.—(1) When there is a Town Council, some of the Council water-carts may be used for the transport of water.

The half-barrels may be taken to the place of work by the Council carts used for street-cleaning and should be ready filled before the arrival of the workmen. A great advantage of the use of these water-carts is that their capacity is known, usually about 1 cubic metre, and the amount of sublimate used can be approximately checked.

(2) When these carts are not available, or when they are unable to approach the place of work on account of the narrowness of the streets, small open carts (arabyat karro) should be hired. One will be required for each gang. Two barrels should be secured on the cart and they should be filled from the stand-pipes used by the town watering-carts by arrangement with the Governor or Mudir.

B. In Villages.—(1) Water may be brought by the water-carriers (saqqayeen). In most cases sufficient water-carriers cannot be obtained. In these cases (2) small carts may be used to transport several water-skins each, or boys or girls may be employed to carry water in ballasses or paraffin tins; the latter are preferable. From 4 to 6 boys or girls will be required for each gang according to the distance of the water from the work.

In using paraffin tins it is convenient to have a piece of wood nailed across the opening of the tin; one tin is then attached by a piece of rope to each

A. As Young--(1) When there is a Town Council some of the Council water-carts may be used for the transport of water.

The ball-barrels may be taken to the place of work by the Council carts used for street-cleaning and should be ready filled before the arrival of the workmen. A great advantage of the use of these water-carts is that their capacity is known usually about 1 cubic meter, and the amount of substance used can be approximately checked.

(2) When these carts are not available, or when they are unable to approach the place of work on account of the narrowness of the streets, small open carts (kalyan karto) should be hired. One will be required for each gang. The barrels should be secured on the cart and they should be filled from the stand-pipes used by the town watering-carts by arrangement with the Governor or Muzir.

B. A. Young--(1) Water may be brought by the water-carriers (kalyanvan) in most cases sufficient water-carts cannot be obtained. In these cases (2) small carts may be used to transport several water-skins each, or boys or girls may be employed to carry water in ballases or paraffin tins; the latter are preferable. From 4 to 6 boys or girls will be required for each gang according to the distance of the water from the work.

In using paraffin tins it is convenient to have a piece of wood nailed across the opening of the tin; one tin is then attached by a piece of rope to each

end of a wooden yoke which is carried across the shoulder. It is advisable to have a man stationed at the place for drawing water to fill the vessels and, if necessary, place them on the children's heads. River, canal, or well water should be used for making disinfecting solutions, and the stagnant water of birkas should be avoided.

**Removal
of rubbish.**

44.—Removal of rubbish.

A.—*In towns*, each gang should be provided with a cart (or carts) for the removal of rubbish and transportation of the equipment to and from the work.

1. In some places the two-wheeled carts (arabyat sanduq) used for carrying stone and sand can be obtained. The sides and floors of the carts should be made good with tin when necessary, so as to prevent the escape of dust, etc.; the rubbish from the houses can then be emptied from the sacks or baskets into the cart.

2. In other places small four-wheeled carts (arabyat karro) can be hired. In this case the sacks filled with rubbish should be sent to the burning-place on the carts.

Drivers' wages are usually included in the contract price paid for carts and horses. The usual daily hire of cart, horse, and driver is from P.T. 12 to 20.

B. *In Villages*, where carts cannot usually be obtained, rubbish must be removed in sacks on the backs of donkeys; one donkey will usually be required for each gang.

The usual daily hire for donkey and donkey-boy is P.T. 10.

end of a wooden yoke which is curved across the shoulder. It is advisable to have a man stationed at the place for drawing water to fill the vessels and if necessary, place them on the children's heads. However, or well water should be used for making disinfecting solutions, and the stagnant water of ditches should be avoided.

Removal of rubbish

44--Removal of rubbish
A--As soon as the work should

be proceeded with a cart (or carts) for the removal of rubbish and transportation of the equipment to and from the work.

1. In some places the two-wheeled carts (carriage) used for carrying stone and sand can be obtained. The sides and doors of the carts should be made good with tin when necessary, so as to prevent the escape of dust, etc.; the rubbish from the houses can then be emptied from the sacks or barrels into the cart.

2. In other places small four-wheeled carts (carriage) can be hired. In this case the sacks filled with rubbish should be sent to the burning-places or dumps.

Drivers' wages are usually included in the contract price paid for carts and horses. The usual daily hire of cart, horse, and driver is from P.T. 12 to 20.

B. As Village where carts cannot usually be obtained, rubbish must be removed in sacks on the backs of donkeys. The usual daily hire for each gang

The usual daily hire for donkey and donkey-boy is P.T. 10.

**Supervision
of removal of
rubbish.**

45.—It is advisable to point out to cart-drivers and donkey-boys the exact road which they are to take to the burning-place so that they can be kept under supervision, as they are much inclined to tip rubbish at other places to save themselves trouble.

When the cart or donkey is loaded and ready to start for the burning-place, the disinfector should give the driver a ticket marked with the number of the gang; when rubbish is sent in sacks the number of sacks forwarded should be noted on the ticket. The ticket is handed by the driver to the fire-attendant who retains it; by calling for the tickets on each inspection of the burning-place a check can be kept upon the amount of rubbish burnt.

**Information to
foreign Consuls.**

46.—When plague breaks out in a town the Consuls should be visited and the mode of disinfection explained to them. They should be requested to give a general sanction for the visiting and disinfection of all houses in which persons of their nationality may be residing.

In case of objection to disinfection raised by a foreign subject, special application should be made to the Consul before proceeding.

No foreign patient should be removed to hospital without previous consultation with the Consul, and no closed house belonging to an absent foreigner should be opened without reference by note or otherwise to the Consul whom it may concern.

Supervisor
of removal of
rubbish

45.—It is advisable to post an
a cart-drivers and dung-cart-boys
the exact road which they are to
take to the burning-place so that they can be kept
under supervision, as they are much inclined to tip
rubbish at other places to save themselves trouble.

When the cart or hopper is loaded and ready to
start for the burning-place, the inspector should
give the driver a ticket marked with the number of
the gang; when rubbish is sent in sacks the number of
sacks forwarded should be noted on the ticket. The
ticket is handed by the driver to the fire-attendant
who retains it; by calling for the tickets on each
inspection of the burning-place a check can be kept
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Information to

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They should be requested to give a general sanction
for the visiting and disinfection of all houses in which
persons of their nationality may be residing.

In case of objection to disinfection raised by a
foreign subject, special application should be made to
the Council before proceeding.
No foreign patient should be removed to hospital
without previous consultation with the Council, and no
local house belonging to an absent foreigner should
be opened without reference by note or otherwise to
the Council when it may concern.

Hours of work. 47.—Hours of work are usually the following :—

Summer	... ..	}	6	a.m. to 12 noon.
			2	p.m. to 5 p.m.
Winter	... ..	}	6.30	a.m. to 12 noon.
			1	p.m. to 4 p.m.

The afternoon work is done early during winter in order to give the houses time to dry before night.

Half-holiday. 48.—It is customary to stop working on Fridays at noon, but one gang should remain on duty at the store during the afternoon in case of emergency. A full day's pay is given for Friday.

Disinfection.

Method of work. 49.—The men should be paraded by gangs at the store and the roll called by the clerk, beginning with No. 1 gang ; should any man be missing he should be replaced by one of those who usually wait about hoping for work. When this method is found impossible owing to frequent changes amongst the personnel of the gangs, the disinfectors should be instructed to write in their notebooks each morning the names of the men composing their gangs. These lists will be handed to the clerk at the end of the day's work and from them he will, each evening, make up the wages account to date on the Register No. 64 C.G.

Careful enquiry should always be made into the cause of absence of workmen.

Hours of work. 47.—Hours of work are usually

the following:—

6 a.m. to 12 noon	Summer
7 a.m. to 5 p.m.	
6 a.m. to 12 noon	Winter
7 a.m. to 4 p.m.	

The afternoon work is done only during winter in order to give the horses time to dry before night.

48.—It is customary to stop

working on Fridays at noon, but the gang should remain on duty at the store during the afternoon in case of emergency. A full day's pay is given for Friday.

Distinction.

49.—The men should be paraded

by gangs at the store and the roll called by the clerk, beginning with No. 1 gang; should any man be missing he should be replaced by one of those who usually wait about hoping for work. When this method is found impossible owing to frequent changes amongst the personnel of the gangs, the distillers should be instructed to write in their gate books each morning the names of the men comprising their gangs. These lists will be handed to the clerk at the end of the day's work and from them he will each evening make up the wages amount to date on the ledger No. 64 C.

Careful enquiry should always be made into the cause of absence of workmen.

Moving off to work. **50.**—As each gang is found complete the disinfecter with the raïs of kanaseen, raïs of rashasheen, and barrel-man, should remove the previously checked equipment from the store and provide new men with boots.

In towns the equipment should be packed into the cart; in the country the equipment should be carried by the men, and the gang should move off to work at once.

General plan of action. **51.**—Disinfection should always be done by blocks of buildings (mirabba^c) and not by streets; if each gang pursues its work in a definite direction either to the right or to the left hand, premises cannot be overlooked. The work of the gangs should be concentrated first upon the centre of the greatest infection and its surroundings; from this spot general disinfection should proceed on a definite general plan. Emergencies should be dealt with by a specially efficient gang.

Each evening the work of the next day should be pointed out to disinfectors and the sheikh el hara, who should warn the inhabitants to prepare their houses.

Solution-making. **52.**—On arrival at the place of work, a convenient position, interfering with traffic as little as possible, should be chosen for the barrel-man with his implements and the water-cart.

Two of the half-barrels should be filled with water to the 70-litre mark, 350 c.c. of sublimate solution

50.—As each gang is found
Moving of
to work

complete the detector with the
this of kanasen, rate of rashes, and
should remove the provisionally checked equipment from
the store and provide new men with baskets.

In towns the equipment should be packed into the
cut; in the country the equipment should be carried
by the men, and the gang should move off to work at

51.—Disinfection should always
General plan
of action

be done by blocks of buildings
(temples) and not by streets; if each gang carries
its work in a definite direction either to the right or
to the left hand, premises cannot be overlooked. The
work of the gangs should be concentrated first upon
the centre of the greatest infection and its surround-
ings; from this spot general disinfection should
proceed on a definite general plan. Emergencies
should be dealt with by a specially efficient gang.
Each evening the work of the next day should be
pointed out to disinfectors and the sketch of bars, who
should warn the inhabitants to prepare their houses.

52.—On arrival at the place
Solution
making

of work, a convenient position,
infecting with turbs as little as possible, should be
chosen for the bar-man with his implements and
the water-out.

Two of the half-barrels should be filled with water
to the 70-litre mark, 500 c.c. of sublimate solution

added to each with the enamelled measuring cup, making a solution of 1:1,000, and the whole well stirred.

The third half-barrel is used for making carbolic acid solution; 2,000 c.c. of carbolic acid solution added ~~with~~ the tin measuring cup to 70 litres of water make a solution of 1:35, which is sufficient for the purpose.

No sublimate or carbolic acid must be put into the half-barrel until it has been filled to the 70-litre mark with water, and until the half-barrel has been completely emptied no more water or sublimate should be added to the solution. Each half-barrelful must be separately made.

This must be constantly impressed upon the barrel-man and those who bring the water, as it is of the utmost importance that disinfecting solutions should be of constant strength.

The pails of the rashasheen must be filled by the barrel-man with his own pail; the latter must not be left in the half-barrel or placed on the ground; when not in use it must be placed on a piece of clean sacking or a board.

The workmen must on no account be allowed to dip their pails into the half-barrel.

Work of kanaseen. **53.**—The disinfecter should enter the house and get his men to work, beginning at the top of the house and working downwards. At the commencement, in order to prevent delay, both kanaseen and rashasheen should

added to each with the unmodified measuring cup
making a solution of 1:1,000, and the whole well
stirred.

The third half-barrel is used for making carbolic
acid solution; 2,000 c.c. of carbolic acid solution added
with the measuring cup to 50 liters of water makes
a solution of 1:25, which is sufficient for the purpose.
No sublimate or carbolic acid must be put into the
half-barrel until it has been filled to the 70-liter
mark with water, and until the half-barrel has been
completely emptied no more water or sublimate should
be added to the solution. Each half-barrel must
be separately made.

This must be constantly impressed upon the party-
men and those who bring the water, as it is of the
utmost importance that disinfecting solutions should
be of constant strength.

The balls of the cashboxes must be filled by the
barrel-man with his own ball; the latter must not be
left in the half-barrel or placed on the ground; when
not in use it must be placed on a piece of clean sackcloth
or a board.

The workmen must on no account be allowed to dip
their balls into the half-barrel.

23.—The disinfecter should en-
ter the house and get his men to
work, beginning at the top of the house and working
downwards. At the commencement, in order to
prevent delay, both kansas and cashboxes should

Work of
kansas.

work at cleaning out the house and moving the furniture.

The roof should first be swept clean and all light articles of furniture and bedding from the house spread out on the roof in the sunlight. When sticks and corn-cobs, etc., for fuel, are found on the roof, they should be stacked tidily in the centre so as to expose the corners and sides to the sunlight. Fuel should not be taken away.

All animals should be removed from the house. When rabbits cannot be removed the burrows should be stopped up with bricks.

Heavy articles of furniture must be moved out from the walls and placed near the centre of the room; cupboards containing food should be opened and emptied.

Tibn and grain must be packed into sacks and put into a safe place until the house is dry enough to receive it (*see* para. 65).

Small quantities of grain and tibn can be dealt with by the gang.

The house must then be thoroughly brushed down from top to bottom; all rags and sweepings must be collected in the baskets and put into sacks which, when full, will be put into the rubbish carts or carried away by the donkey to the burning-place.

No rubbish is to be deposited in the street or thrown into the street from the roofs of houses.

When objection is raised to the removal of rags, old sacks, etc., these should be placed in a bucket of sublimate solution to soak for ten minutes and then spread out on the roof to dry.

work at cleaning out the house and moving the furniture.

The roof should first be swept clean and all light articles of furniture and bedding from the house spread out on the roof in the sunlight. Wood sticks and corn-cobs, etc., for fuel, are found on the roof they should be stacked tidily in the centre, so as to expose the corners and sides to the sunlight. Food should not be taken away.

All animals should be removed from the house. When rabbits cannot be removed the burrows should be stopped up with bricks.

Heavy articles of furniture must be moved out from the walls and placed near the centre of the room; cupboards containing food should be opened and emptied.

Tiles and grain must be packed into sacks and put into a safe place until the house is dry enough to receive it (see para. 65).

Small quantities of grain and tiles can be dealt with by the gang.

The house must then be thoroughly brushed down from top to bottom; all rags and sweepings must be collected in the baskets and put into sacks which, when full, will be put into the rubbish carts or carried away by the shokry to the burning-place.

No rubbish is to be deposited in the street or thrown into the street from the roofs of houses.

When objection is raised to the removal of rags, old sacks, etc., these should be placed in a bucket of aromatic solution to soak for ten minutes and then spread out on the roof to dry.

Collections of building stone and bricks should always be removed from the houses, placed in the open air, and soaked with the sublimate solution.

Rotten boards in floors should be taken up and the space under the floor thoroughly cleaned and afterwards disinfected. This is especially important in the case of grocery stores.

Work of rashasheen. **54.**—When a sufficient number of rooms or houses have been cleaned, the kanaseen will continue cleaning other houses and the rashasheen will begin their special work, commencing with the upper floors and working downwards.

Two men will bring the disinfecting solution from the half-barrels in their pails and fill the watering pot; the raïs will then soak the walls to the height of one metre and the floors, and he will be followed by the man with the stable-broom who will rub the solution thoroughly into the floors and corners. Cupboards which have contained food and all recesses must be thoroughly soaked, but pools of solution must not be left lying on the floor. Clean clothes in boxes and cupboards need not be disinfected.

Zereebas used exclusively for animals should be disinfected with carbolic acid solution 1 : 35, including the mangers from which all forage must first be removed. Hen-coops and pigeon-lofts should be cleaned and disinfected; this must be done with discrimination in order to avoid the destruction of eggs.

Open courts (hosh) exposed to the sunlight should

Examination of building stone and bricks should always be removed from the house, placed in the open air and soaked with the sublimate solution. Loose mortar in floors should be taken up and the space under the floor thoroughly cleaned and afterwards disinfected. This is especially important in the case of grocery stores.

Work of
24 - When a sufficient number
of rooms or houses have been cleaned, the kennels will contain cleaning other houses and the rathshohn will begin their special work, commencing with the upper floors and working downwards.

Two men will bring the disinfecting solution from the tall barrels in their tails and fill the watering pot. The task will then soak the walls to the height of one metre and the floors, and be followed by the man with the stable-brush who will rub the solution thoroughly into the floors and corners. Cupboards which have contained food and all recesses must be thoroughly soaked, but pools of solution must not be left lying on the floor. Clean clothes in boxes and cupboards need not be disinfected.

Narcotics used exclusively for animals should be disinfected with carbolic acid solution (1:50) including the syringes from which all foreign matter must be removed. Hen-coops and pigeon-holes should be cleaned and disinfected; this must be done with discrimination in order to avoid the destruction of eggs. Open courts (hoops) exposed to the sunlight should

be thoroughly cleaned, and stones and other articles piled in the centre so as to expose corners and angles to the sunlight; they need not be disinfected with sublimate or carbolic unless a case of plague has occurred in the house.

All food must be removed from the various receptacles of the oven (the balat, the taka, and the qadoos) before disinfection takes place, and no disinfecting fluid is to be left in the receptacles after disinfection is finished.

In the case of dark houses a taka in a furn is frequently overlooked.

Rat-holes. **55.**—When the disinfection of a house is finished all rat-holes must be thoroughly opened up, a small quantity of carbolic solution 1:10 poured into them, some broken glass placed so as to plug the bottom of the rat-run and held in position by mortar, and the hole stopped up flush with the wall with mortar.

A good mortar for this purpose may be made with one part of slaked lime and two parts of homra.

All dead rats and mice which may be discovered by the workmen should be put into the paraffin tin kept for the purpose and covered with carbolic acid solution 1:10.

Limewashing. **56.**—When it is decided to limewash, it will be done at this stage (*see* para. 67).

be thoroughly cleaned and stones and other articles
placed in the center so as to expose corners and angles
to the sunlight; they need not be disinfected with
sublimated carbolic unless a case of plague has oc-
curred in the house.

All food must be removed from the various recep-
tacles of the organ (the pot, the tank, and the pahn)
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In the case of dark houses a tank in a turn is fre-
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Rat-holes. 55.—When the disinfection of

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must be thoroughly opened up, a small quantity of
carbolic solution 1:10 poured into them, some broken
glass placed so as to plug the bottom of the rat-run and
held in position by mortar, and the hole stopped up
flush with the wall with mortar.

A good mortar for this purpose may be made with
one part of slaked lime and two parts of sand.

All dead rats and mice which may be discovered by
the workmen should be put into the paraffin tin kept
for the purpose and covered with carbolic acid solu-
tion 1:10.

Lime-washing. 56.—When it is decided to

lime-wash, it will be done at this
stage (see para. 67).

Disinfection of the "house of the case." 57.—In the disinfection of the "house of the case" the process is

even more thorough; all clothes and soft goods must be disinfected, either by passing through the disinfecting machine in towns where these exist, or in other places by soaking in sublimate solution (1:1,000) followed by thorough drying in the sunlight; ceilings, walls, and furniture must be well sprayed with sublimate solution by means of the Vermorel pump, and the whole of the walls in the house limewashed.

Every room in the "house of the case" must be thoroughly cleaned and disinfected. It is to be distinctly understood that the instructions contained in paras. 1 to 24 apply to each fresh case of plague which occurs, whether isolated or in an outbreak.

Exceptional houses and rooms.

58.—In better class houses, where no case of plague has occurred, thoroughly clean rooms are occasionally found; if they are on upper stories and no signs of rats are found, Medical Officers may order these rooms to be left untouched. Rooms which have not been disinfected must be specially reported to the Inspector in charge of disinfection.

The kitchens, food cupboards, and latrines of these houses should be done, as well as any other rooms that are dark or damp or not thoroughly clean.

In fairly clean houses with good wooden floors, in which no case of plague has occurred, after thorough cleansing the sublimate solution should be applied to

27. In the disinfection of the house of the case, the process is even more thorough; all clothes and soft goods must be disinfected, either by passing through the disinfecting machine in towns where these exist or in other places by soaking in sublimate solution (1:1000) followed by thorough drying in the sunlight; ceilings, walls and furniture must be well sprayed with sublimate solution by means of the Veronal pump, and the whole of the walls in the house disinfected.

Every room in the "house of the case" must be thoroughly cleaned and disinfected. It is to be distinctly understood that the instructions contained in parts I to III apply to each fresh case of plague which occurs, whether isolated or in an outbreak.

28. In better class houses where no case of plague has occurred, thoroughly clean rooms are occasionally found; if they are an upper stories and no signs of rats are found, Medical Officers may order these rooms to be left untouched. Rooms which have not been disinfected must be specially reported to the Inspector in charge of disinfection.

The kitchen, food cupboards, and latrine of these houses should be done, as well as any other rooms that are dirty or damp or not thoroughly clean.

In fairly clean houses with good wooden floors, in which no case of plague has occurred, after thorough cleaning the sublimate solution should be applied to

Exceptional
houses
and rooms.

the house, cut off from the main block by a door which can be locked.

(b) In a small house.—All the rest of the inhabitants, except the attendant, must leave the house.

(c) In both cases (*a* and *b*).—A Police agent or ghafir must be stationed at the door at the expense of the owner or tenant of the house, but under the control of the Public Health authorities, the sanitary arrangements must be carried out to the satisfaction of the Public Health authorities. All cases treated in their own houses must be specially reported to the Divisional Inspector.

The patient may be attended by a private doctor if desired, but the isolation and sanitary arrangements must be carried out to the satisfaction of the Public Health authorities.

It is advisable to inform sheikhs and notables of these conditions at the beginning of an outbreak.

Precautions to be taken by attendants. **71.**—1. There must be, in the sick room :—

(a) A large tub containing a solution of corrosive sublimate (1 : 2,000) or carbolic acid solution (5%) and a basin full of corrosive sublimate solution for the hands.

(b) Efficient means for boiling water.

(c) Two vessels to receive the dejections.

2. The patient's room should contain as little furniture as possible.

3. All linen or clothing removed from the patient or the bed must be placed immediately in the barrel of

the house, cut off from the main block by a door which can be locked.

(b) In a small house.—All the rest of the inhabitants, except the attendant, must leave the house.

(c) In both cases (a and b).—A Police agent or ghadar must be stationed at the door at the expense of the owner or tenant of the house, but under the control of the Public Health authorities, the sanitary arrangements must be carried out to the satisfaction of the Public Health authorities. All cases treated in their own houses must be specially reported to the Divisional Inspector.

The patient may be attended by a private doctor if desired, but the isolation and sanitary arrangements must be carried out to the satisfaction of the Public Health authorities.

It is advisable to inform sheriks and notables of these conditions at the beginning of an outbreak.

Precautions to be taken by sick room attendants.

(a) A large tin containing a solution of corrosive sublimate (1 : 2000) or carbolic acid solution (5%) and a basin full of corrosive sublimate solution for the hands.

(b) Efficient means for boiling water.

(c) Two vessels to receive the dejections.

2. The patient's room should contain as little furniture as possible.

3. All furniture or clothing removed from the patient or the bed must be placed immediately in the parcel of

disinfecting solution and allowed to remain there for four hours before being removed.

Linen or clothing which has become soiled through discharges should be changed at once and disinfected as above.

4. Spoons and other metal table utensils should be plunged into boiling water immediately after being used by the patient.

The table utensils, water vessels, and toilet articles must be kept in the sick room and must not be used by any one but the patient.

5. The stools, urine, and sputum of the patient should be received into a vessel containing a small quantity of carbolic acid solution (5%). The amount of disinfectant must subsequently be made at least equal in volume to the amount of material to be disinfected; the vessel must then be covered and allowed to stand for half an hour before the contents are emptied into the closet.

6. While in the patient's room a large overall (gallabia) should be worn which should completely cover the clothes; on leaving the room the overall must be taken off.

7. The hands must always be disinfected with sublimate solution after touching the patient and great care must be taken never to use table utensils (spoons, cups, gullas, etc.), which have been used by the patient.

8. The floor of the patient's room must be disinfected regularly twice a day with sublimate solution, and

disinfecting solution and allowed to remain there for
four hours before being removed.

Laundry or clothing which has become soiled through
discharges should be changed at once and disinfectant
as above.

4. Spoons and other metal table utensils should be
plunged into boiling water immediately after being
used by the patient.

The table utensils, water vessels and toilet articles
must be kept in the sick room and must not be used
by any one but the patient.

5. The stools, urine and sputum of the patient should
be received into a vessel containing a small quantity
of carbolic acid solution (5%). The amount of disin-
fectant must subsequently be made at least equal in
volume to the amount of material to be disinfected;
the vessel must then be covered and allowed to stand
for half an hour before the contents are emptied into
the closet.

6. While in the patient's room a large overall
(galabias) should be worn which should completely
cover the clothes; on leaving the room the overall
must be taken off.

7. The beds must always be disinfected with
sublimated solution after touching the patient and
great care must be taken never to use table utensils
(spoons, cups, knives, etc.) which have been used by
the patient.

8. The floor of the patient's room must be disinfected
regularly twice a day with sublimated solution and

also whenever it is soiled by the dejections or sputum of the patient.

9. No person must be allowed to enter the patient's room without a written order from the doctor in charge.

10. If the patient dies, the clothing should be damped with sublimate solution before it is removed, and pledgets of absorbent cotton steeped in sublimate solution should be inserted into the nostrils and mouth to prevent the escape of fluids. If for religious reasons ceremonial washing of the body is necessary, it will be done by the moghassil or moghassilah in accordance with para. 11.

Special Precautions in Outbreaks of Pneumonic Plague.

72.—The special precautions to prevent the spread of pneumonic plague may be grouped under the following headings :—

- I. Isolation of all possible contacts.
- II. The management of the isolation camp (cordon).
- III. The amount of disinfection required.

I.—ISOLATION OF ALL POSSIBLE CONTACTS.

Isolation of all possible contacts. **73.**—The intense personal infectivity of pneumonic plague renders it imperative that all persons who have been in contact with a case of pneumonic plague must be isolated in an isolation camp for a period of ten days from the date of the last exposure to infection.

When whenever it is noted by the physician or patient
of the patient.

No person must be allowed to enter the patient's
room without a written order from the doctor in
charge.

If the patient dies, the clothing should be
disinfect with sublimate solution before it is removed,
and articles of clothing not to be removed to sublimate
solution should be inserted into the nostrils and mouth
to prevent the escape of fluids. If for religious reasons
occasional washing of the body is necessary, it will
be done by the method of water poured in accordance
with part II.

Special Precautions in Outbreaks of Pneumonic Plague

72. The special precautions to prevent the spread
of pneumonic plague may be grouped under the
following headings:

- I. Isolation of all possible contacts.
- II. The management of the isolation camp (see part II).
- III. The amount of disinfection required.

I. ISOLATION OF ALL POSSIBLE CONTACTS

73. The person concerned in
activity of pneumonic plague
renders it imperative that all
persons who have been in contact with a case of
pneumonic plague must be isolated in an isolation
camp for a period of ten days from the date of the
last exposure to infection.

In practice the ten days' isolation is calculated from the date of isolation or death of the patient.

**Method of
drawing up
contact lists.**

74.—A contact list must be made out for each patient by the Medical Officer himself by questioning intelligent members of the family concerned; the omda and sheikh should always be present during its compilation and should verify and seal the list as complete.

In order that names may not be omitted the lists must be made in the following order :—

1. Name of the case; husband, wife or wives, children and their families if any.

2. Brothers and sisters of the case; their wives or husbands and children; the wives or husbands and children of the latter if any.

3. Father of the case :—

(a) His brothers and sisters; their wives and husbands and children; families of the latter if any.

(b) His father and mother (*i.e.*, grandfather and grandmother of the case).

(c) His uncles and aunts and their families.

4. Mother of the case :—

(a) Her brothers and sisters; their wives and husbands and children; families of the latter if any.

(b) Her father and mother (*i.e.*, grandfather and grandmother of the case).

(c) Her uncles and aunts and their families.

In practice the two days' isolation is calculated from the date of isolation or death of the patient.

Method of drawing up contact lists. A contact list must be made out for each patient by the Medical Officer himself by questioning intelligent members of the family concerned; the cards and sheets should always be present during its compilation and should verify and seal the list as complete.

In order that nurses may not be omitted the lists must be made in the following order:—

1. Names of the case; husband, wife or wives, children and their families if any.

2. Brothers and sisters of the case; their wives or husbands and children; the wives or husbands and children of the latter if any.

3. Father of the case:—

(a) His brothers and sisters; their wives and husbands and children; families of the latter if any.

(b) His father and mother (i.e., grandfather and grandmother of the case).

(c) His uncle and aunts and their families.

4. Mother of the case:—

(a) Her brothers and sisters; their wives and husbands and children; families of the latter if any.

(b) Her father and mother (i.e., grandfather and grandmother of the case).

(c) Her uncle and aunts and their families.

5. Special contacts: Persons, not relatives, who have been known to have been in contact with the patient, such as near neighbours, employees, etc.

The general contact list having been completed, each living person whose name appears in it is to be given a serial number.

These names are afterwards entered in the contact book kept at the isolation camp by the Medical Officer (*see* para. 84).

**Special points
in making
contact lists.**

75.—The following special points must be noted in making out contact lists:—

1. When the patient or deceased is married, the relatives of both husband and wife must be entered in the manner described in para. 74.

2. The contact list must include the names of all members of the family whether alive or dead. In the case of those members of the family who are dead it must be remembered:—

(a) To record in the list the names of the husbands or wives and families of the deceased persons.

(b) To find out when and where these persons died. “Mat min zaman” often means that the person died a few days previously of pneumonic plague and was secretly buried.

3. In the case of every marriageable male or female in the list the following enquiries should be made, otherwise important contacts may be omitted:—

(a) Whether they are married.

(b) How many times they have been married.

Special points: Persons not relatives who have been known to have been in contact with the patient such as near neighbors, employers, etc.

The general contact list having been completed, the living person whose name appears in it is to be given a serial number.

These names are afterwards entered in the contact list kept at the isolation camp by the Medical Officer in charge.

Special points in making contact lists: 75.—The following special points must be noted in making out contact lists:—

1. When the patient or deceased is married, the relatives of both husband and wife must be entered in the manner described in para. 74.

2. The contact list must include the names of all members of the family whether alive or dead. In the case of those members of the family who are dead it must be remembered:—

- (a) To record in the list the names of the husbands or wives and families of the deceased persons.
- (b) To find out when and where these persons died. "Mat sein vaman" often means that the person died a few days previously of pneumonia, typhus and was recently buried.

3. In the case of every marriageable male or female in the list the following enquiries should be made, otherwise important contacts may be omitted:—

- (a) Whether they are married.
- (b) How many times they have been married.

(c) Whether they have been divorced (*mutallaq*).

Divorced persons should be entered in the same way as though the marital relation still existed.

4. In the case of persons, absent from their villages, whose names are recorded in the contact lists, the following information must be obtained :—

(a) The date of leaving their village.

(b) The name of the place to which they have gone.

If they have recently left the village they must be put under observation either in the isolation camp of their own village or in a camp near the village to which they have fled.

Every effort must be made to find these “runaway contacts”; if the search is unsuccessful the markaz should be informed as well as the adjoining marakiz. Should the search by the omda and Police be unsuccessful, a reward, not exceeding 20 piastres, varying in accordance with the importance of the contact, should be offered for his or her discovery. All such cases must be reported to the Mudiria and Divisional Inspectors.

Cases previous to discovery of outbreak. 76.—It frequently happens that the “*first suspected case*” is not the “*first actual case*” in the outbreak.

The Medical Officer should therefore endeavour to discover whether secret burials have taken place recently by inspection of the cemetery and questioning the barber, turaby, and hanuty.

If such is the case, such persons’ relatives are to be

(c) Whether they have been divorced (matrimonial).
Divorced persons should be entered in the same
way as though the marital relation still existed.
In the case of persons absent from their
villages whose names are recorded in the contact
list the following information must be obtained:—
(a) The date of leaving their village.

(b) The name of the place to which they have gone.
If they have recently left the village they must be
put under observation either in the isolation camp or
their own village or in a camp near the village to
which they have fled.

Every effort must be made to find these "runaway
contacts"; if the search is unsuccessful the names
should be obtained as well as the adjoining markets.
Should the search by the Gonds and Police be un-
successful, a reward not exceeding 20 piastres, varying
in accordance with the importance of the contact,
should be offered for his or her discovery. All such
cases must be reported to the Medical and Divisional
Inspectors.

Cases previous to discovery of outbreak.
78.—It frequently happens that
the "first reported case" is not
the "first actual case" in the

outbreak.
The Medical Officer should therefore endeavour to
discover whether other great fairs have taken place
recently by inspection of the country and question-
ing the barbers, turaks, and handys.
If such is the case such persons' relatives are to be

treated as contacts and full lists must be made of them as in para. 74.

The death register must be inspected and special enquiries made as to the relationship and proximity of residence of the persons whose names are entered therein. Suspicion as to the cause of their deaths would be aroused by their family relationship or close personal contact with the "first suspected case," or by the history of a short illness.

The Medical Officer should not readily believe histories of prolonged illness but should carefully investigate such statements.

Collection of contacts. 77.—Arrangements must be made at once for the collection of the most important contacts, *i.e.* those persons living in the patient's house and the nearer relatives.

Their names must be written out, numbered with their serial numbers, and handed to the omda or Police.

The remaining contacts will be brought in as time allows and when arrangements have been made to receive them.

The bringing in of large numbers of contacts can only be done efficiently by the Police ; as soon, therefore, as the Medical Officer decides that a considerable number of contacts are to be isolated, he should communicate with the Police and request their assistance.

Search for further cases. 78.—When the principal contacts are found the omda and sheikhs should search the village systematically for

74. as in para. 74. The death register must be inspected and special enquiries made as to the relationship and proximity of residence of the persons whose names are entered therein. Enquiries as to the cause of their death would be arranged by their family relationship or close personal contact with the "first suspected case," or by the history of a short illness.

The Medical Officer should not readily believe histories of prolonged illness, but should carefully investigate such statements.

77. Arrangements must be made at once for the collection of contacts.

The most important contacts, i.e. those persons living in the patient's home and the nearest relatives, their names must be written out numbered with their serial numbers, and handed to the officer. The remaining contacts will be brought in as time allows and when arrangements have been made to examine them.

The tracing of large numbers of contacts can only be done efficiently by the Police; as soon therefore as the Medical Officer decides that a considerable number of contacts are to be isolated, he should communicate with the Police and request their assistance.

78. Search for further cases. — When the principal contacts are found the search should be systematic for

other sick persons ; all suspicious cases must be isolated.

**Selection
of site for
isolation camp.**

79.—During this time the Medical Officer will select the site for the Isolation Camp and Hospital (cordon) ; it must be to the south of the village, not less than fifty metres from dwelling houses, and capable of allowing considerable expansion of the camp.

Temporary shelters should be erected immediately for the patients and the most important contacts.

Bûs huts are best ; tents should only be used to tide over a pressing emergency until huts can be built.

**Demand for
equipment.**

80.—The Medical Officer will next calculate the amount of equipment required for building and equipping the Isolation Camp and Hospital (*see* paras. 90 and 91) and will then mark out the position of the various huts in both sections.

SUMMARY.

SPECIAL PRECAUTIONS IN PNEUMONIC PLAGUE.

1. Request assistance of Police.
2. Make "general" contact list.
3. Give "special" contact list to omda or Police for collection of most important contacts.
4. Select site for Isolation Camp.
5. Make temporary accommodation for sick and most important contacts.

other risk persons; all suspicious cases must be isolated.

79.—During the time the Medical Officer will select the site for the Isolation Camp and Hospital (village); it must be to the south of the village, not less than fifty meters from dwelling houses and capable of allowing considerable expansion of the camp. Temporary shelters should be erected immediately for the patients and the most important contacts. Bats are not pests; they should only be used to take over a pressing emergency with bats can be built.

80.—The Medical Officer will calculate the amount of equipment required for building and equipping the Isolation Camp and Hospital (see pages 30 and 31) and will then work out the position of the various bats in both sections.

SUMMARY

GENERAL PRECAUTIONS IN TROPICAL COUNTRIES

1. Request assistance of Police
2. Make "general" contact list
3. Make "special" contact list to watch for collection of most important contacts
4. Select site for Isolation Camp
5. Make temporary accommodation for risk and most important contacts

the floor and walls with the Vermorel pump, or the floor and walls may be washed with sublimate solution by means of a clean piece of sacking (khaisha).

In some cases a bucketful of sublimate solution and a clean piece of sacking may be given to a servant of the house who will wash down the floors and walls under the supervision of the disinfecter.

No rooms on the ground-floor should be left without disinfection, except those containing quicklime.

Mosques should not be disinfected by the gangs; sublimate or carbolic solution should be offered to the manager (imam) of the mosque so that the mosque-servants may carry out disinfection should the manager desire to do so. Mats should be removed and the whole building thoroughly swept before the solution is applied, and the result should be inspected by the Medical Officer in charge. Other places of worship should be treated in an exactly similar manner.

Closed houses and rooms. 59.—When houses or rooms are found closed and the occupier absent, enquiry must be made as to the nationality of the occupier.

In the case of a local subject a note should be sent to the Police authorities in the towns, or to the omda in the villages, who will cause the house or room to be opened and close it after the disinfection is finished.

A procès-verbal of the circumstances should be drawn up and filed in the markaz for future reference.

In the case of a foreigner, in the towns, the Consul concerned should be requested to send a kawass to

The floor and walls with the Vermorel pump or the floor and walls may be washed with sublimate solution by means of a clean piece of sucking (Khatsh).

In some cases a bucketful of sublimate solution and a clean piece of sucking may be given to a servant of the house who will wash down the doors and walls under the supervision of the doctor.

No rooms on the ground-floor should be left without disinfection except those containing quinine.

Mosques should not be disinfected by the manager or parabolic solution should be offered to the manager (Imam) of the mosque so that the manager may carry out disinfection should the manager desire to do so. Mats should be removed and the whole building thoroughly swept before the solution is applied and the result should be inspected by the Medical Officer in charge. Other places of worship should be treated in an exactly similar manner.

59.—Closed houses and rooms.—When houses or rooms are found closed and the occupier absent enquiry must be made as to the nationality of the occupier.

In the case of a local subject a note should be sent to the Police authorities in the town, or to the ombudsman in the village, who will cause the house or room to be opened and close it after the disinfection is finished.

A process-verbal of the circumstances should be drawn up and filed in the register for future reference. In the case of a foreigner, or the town, the Council concerned should be requested to send a letter to

open the house. In the villages, when the authority for opening the house of a foreigner has arrived from the consulate, the Mamûr should be requested to send a Police officer to open the house, remain during the disinfection, and close the house when the disinfection is finished. The Police officer is responsible for the contents of the house during the disinfection. In each case a procès-verbal should be drawn up and filed in the markaz.

**Clothes
and bedding.**

60.—At the commencement of a general disinfection of a village, the omda should be requested to instruct the sheikhs el balad to order all the inhabitants to place their mats (haseerah), bedding, and spare clothing on the roof in the sunlight for five successive days. A daily inspection should be made to see that this order is obeyed. This very important proceeding should be carried out whenever possible.

**Special work
of permanent
disinfector.**

61.—In small outbreaks the permanent disinfector, when present, should undertake the disinfection of the “house of the case,” its contents and surroundings. To cope with this work he must be given charge of an ordinary gang.

Should considerable numbers of fresh cases occur, the services of the permanent disinfector should be employed in the disinfection of infected clothing and soft goods ; the “house of the case” and surroundings should be disinfected by one of the other gangs.

open the house. In the village when the authority for opening the house of a farmer has arrived from the constable, the Manor should be requested to send a Police officer to open the house, remain during the disinfection, and close the house when the disinfection is finished. The Police officer is responsible for the contents of the house during the disinfection. In each case a process-verbal should be drawn up and filed in the mark.

Clothes and bedding. 80.—At the commencement of a general disinfection of a village, the order should be requested to instruct the aldermen to order all the inhabitants to place their mats (basen), bedding, and spare clothing on the roof in the sunlight for five successive days. A daily inspection should be made to see that this order is obeyed. This very important proceeding should be carried out whenever possible.

Special work of permanent disinfectant. 81.—In small outbreaks the permanent disinfectant, when present, should undertake the disinfection of the "house of the case," its contents and surroundings. To cope with this work he must be given charge of an ordinary gang. Should considerable numbers of fresh cases occur the services of the permanent disinfectant should be employed in the disinfection of infected clothing and soil goods; the "house of the case," and surroundings should be disinfected by one of the other gangs.

**Disinfection
of shops and
large stores.**

62.—The disinfection of shops and large stores containing articles liable to be damaged by moving or deteriorated by exposure to damp, must be done with great care in order to avoid claims for damages.

When valuable goods have to be moved from one store to another, merchants should be requested to remove the goods by means of their own porters, who understand the work. A certain sum for the removal of each package should be agreed upon, usually 1 to 4 milliemes, according to the distance. When carts have to be used to carry the goods 4 milliemes a package is the usual charge.

When very large stores have to be cleared it may be found more economical to pay the porters (shayaleen) by the day. The usual wage of a porter is P.T. 10 a day. When the store consists of several rooms which communicate, one or more rooms should be cleared at a time, disinfected, allowed to dry, the goods replaced, and another portion of the store cleared. The work of moving heavy goods is much facilitated by the employment of one or two hand-barrows, such as are used in mills for moving sacks of flour.

Breakages.

63.—When clearing stores containing breakable articles such as glass and china, an Inspector or Medical Officer should always be present. Articles broken by the workmen should be entered in a list and put in a special place apart; the price of each article can be found in the merchants' file of invoices. Care must be taken that

**Distinction
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large stores.**

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the usual charge.

When very large stores have to be cleared it may be
found more economical to pay the porters (shyals) by
the day. The usual wage of a porter is 1.10 a
day. When the store consists of several rooms which
communicate one or more rooms should be cleared at
a time, disallowed, allowed to dry, the goods replaced,
and another portion of the store cleared. The work
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arrangement is useful for moving sacks of flour.

Breakages.

63.—When clearing stores con-

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should be entered in a list and put in a special place
apart; the price of each article can be found in the
merchandise list of invoices. Care must be taken that

the broken article corresponds with the description in the invoice, and that articles broken previously are not entered in the list.

Bills for breakages must be sent in directly after the disinfection of a store is finished.

Inspectors should pay for small breakages in houses at once from their own pockets after proper enquiry and take a receipt from owners; the compensation can subsequently be recovered on production of the receipt (*see* para. 104).

Valuation of broken articles. 64.—In the ports, in case of a difference of opinion as to the value of an article which has been broken, the article should be removed to the custom-house and the Director of Customs requested to obtain the decision of the official valuer.

Special grain and tibn gang. 65.—After harvest large stores of grain and tibn are frequently found in the villages, and it is impossible for the ordinary gangs of disinfectors to deal with them without disorganizing the work.

In these circumstances one or more special gangs, composed of 1 raïs and 4 boys, or young men, should be formed; each gang should be provided with a large number of sacks, say 40, and the raïs must be provided with a note-book. The duties of these gangs consist in conveying the sacks to the houses, assisting the inhabitants to fill them, and recovering the sacks when the need for them is passed.

the broken article corresponds with the description in the invoice and that article broken previously are not entered in the list.

Bills for packages must be sent in directly after the destination of a store is finished.

Passengers should pay for small packages in houses at once from their own pockets after proper enquiry and take a receipt from owners; the compensation can subsequently be recovered on production of the receipt (see para 191).

64.—Valuation of broken articles.—In the ports, in case of a difference of opinion as to the value of an article which has been broken, the article should be removed to the custom-house and the Director of Customs requested to obtain the decision of the official valuer.

65.—Special grain and tin gangs.—After harvest tax-gangs are formed in the villages and it is impossible for the ordinary gangs of disinfectors to deal with them without deranging the work.

In these circumstances one or more special gangs composed of 1 man and 4 boys or young men, should be formed; each gang should be provided with a large number of sacks say 40 and the rate must be provided with a non-book. The duties of these gangs consist in conveying the sacks to the houses, assisting the inhabitants to fill them, and returning the sacks when the need for them is passed.

The method of procedure is as follows: At the beginning of the day's work the Medical Officer in charge, accompanied by the raïs of the tibn gang, enters all the houses which will probably be disinfected during the day, and points out all the grain and tibn which must be removed. The raïs makes a note in his note-book of each case and allows such a number of sacks for each case as he thinks necessary. The sacks are then brought to the houses by the boys of the gang who assist the inhabitants to fill them, and the raïs notes the number of sacks left in each house against the name of the proprietor.

When the disinfecting gang arrives at the house the sacks of grain or tibn are removed and put into a safe place; when the disinfection is finished and the floors are dry, the grain is returned to the house and the sacks are recovered by the raïs of the tibn gang who then obliterates the entry in that particular case.

The raïs must account daily to the clerk for all the sacks issued to him.

End of the day's work. **66.**—When the day's work is finished all the gangs should return with their equipment to the Store where the roll will be called and the equipment checked. All dead rats will be handed over to the person charged with the duty of burning them.

The equipment and boots of each gang should be laid down separately in the Store so as to prevent confusion and save time in the morning.

When the water supply to the gangs is done by

The method of procedure is as follows: At the beginning of the day's work the Medical Officer in charge accompanied by the rest of the team enters all the houses which will probably be visited during the day, and points out all the grain and oil which must be removed. The rate makes a note in his note-book of each case and allows such a number of sacks for each case as he thinks necessary. The sacks are then brought to the houses by the boys of the gang who assist the inhabitants to fill them, and the rate notes the number of sacks left in each house against the name of the proprietor.

When the distaffing gang arrives at the house the sacks of grain or oil are removed and put into a safe place, when the distaffing is finished and the flour and oil, the grain is returned to the house and the sacks are covered by the rate of the team gang who then delivers the entry in that particular case.

The rate must account daily to the clerk for all the sacks issued to him.

End of the day's work 88.---When the day's work is finished all the gangs should return

with their equipment to the store where the roll will be called and the equipment checked. All dead rats will be handed over to the person charged with the duty of burning them.

The equipment and books of each gang should be laid down separately in the store so as to prevent confusion and save time in the morning. When the water supply to the gangs is done by

means of small carts transporting barrels, the barrels should be filled at the end of the day's work.

Limewashing. 67.—When it is decided to limewash as part of the routine of general disinfection, special whitewashers (mobayadeen) provided with lime brushes and pails of milk of lime should be attached to each gang. As a rule about four limewashers are required for each gang, but in places where little limewashing is required they may be reduced in number.

Well-lighted, airy rooms as a rule do not require limewashing, which should be confined to dark or damp rooms with no windows, latrines, kitchens, cellars, food-stores, and dark corners under stairs, etc. The walls of these places should be limewashed to the height of one metre from the ground ; special care must be taken that the milk of lime penetrates thoroughly into the angle between the wall and the floor, and a strip (shireet) of the floor itself about 8 inches broad should be limewashed.

Grocers' store-rooms should always be done, and hen-coops and pigeon-cots when possible.

It is to be clearly understood that in the "house of the case" all the walls should be limewashed.

Rat-poisoning. 68.—When considerable numbers of dead rats are found during the course of disinfection the question of rat-poisoning has to be considered. The decision will depend upon the discovery or otherwise of rat-infection.

means of small carts transporting barrels, the barrels should be filled at the end of the day's work.

Limewashing. 87.—When it is decided to lime-wash as part of the routine of general disinfection, special whitewashers (motsu-ken) provided with lime brushes and pails of milk lime should be attached to each gang. As a rule about four whitewashers are required for each gang, but in places where little limewashing is required they may be reduced in number.

Well-lighted, airy rooms as a rule do not require limewashing, which should be confined to dark or damp rooms with no windows, latrines, kitchens, cellars, food-stores, and dark corners under stairs, etc. The walls of these places should be limewashed to the height of one metre from the ground; special care must be taken that the milk of lime penetrates thoroughly into the angle between the wall and the floor, and a strip (about 8 inches broad) of the floor itself about 8 inches broad should be limewashed.

Grocers' storerooms should always be done, and latrines and pigeon-holes when possible. It is to be clearly understood that in the "house of the case" all the walls should be limewashed.

Rat poisoning. 88.—When considerable numbers of dead rats are found during the course of disinfection the question of rat-poisoning has to be considered. The decision will depend upon the discovery or otherwise of rat-infection.

When undertaken, rat-poisoning should be carried out in a methodical manner. The most satisfactory poison (simm) is phosphorus paste, which can be obtained from headquarters. A supply of tomatoes should be obtained; the tomatoes are cut across and the pulp between the trabeculæ extracted; each half is then cut into four pieces and the hollows between the trabeculæ filled with the phosphorus paste.

The bait thus made should be carried to its destination in tin boxes provided with handles and covers.

The rat-poisoner must be provided with a glove, a sleeve fastened at the wrist and elbow by a piece of tape in order to protect his arm, and a lamp. He must work systematically, preceding the general disinfection by two or three days, and placing pieces of the bait well down into all rat-holes, in spaces under wooden floors, and in corners of locked-up stores. He must be careful to leave no bait about in places where children or domestic animals can get at it. He should proceed block by block, noting in his note-book each house as he finishes it. A reward for each dead rat brought to the store may be offered; the reward may at first be small, say 3 milliemes for rats and 2 milliemes for mice, to be increased if necessary.

In all cases of rat-infection particular attention should be paid to the state of health of the cats. Those found diseased should be carefully examined for buboes, and if necessary destroyed.

Site for the burning-place. 69.—The site for burning rubbish (mehall el hareeq) should be carefully chosen so as to avoid nuisance to the

When undertaken, the poisoning should be carried out in a methodical manner. The most satisfactory poison (arsenic) is phosphorus paste, which can be obtained from manufacturers. A supply of tin snips should be obtained; the tin snips are cut across and the pulp between the trapezoid extracted; each ball is then cut into four pieces and the hollow between the trapezoid filled with the phosphorus paste.

The bait thus made should be carried to its destination in tin boxes provided with handles and covers.

The rat-proofer must be provided with a glove, a piece of cloth at the wrist and elbow by a piece of tape in order to protect his arm and a lamp. He must work systematically, covering the general distribution of two or three days and placing pieces of the bait well down into all rat-holes, in spaces under wooden floors, and in corners of locked-up stores. He must be careful to leave no bait about in places where children or domestic animals can get at it. He should proceed slowly by block, noting in his notebook each house he has visited. A reward for each dead rat brought to the store may be offered; the reward may be first 10 cents, say 2 milligrams for rats and 2 milligrams for mice, to be increased if necessary.

In all cases of rat-infestation particular attention should be paid to the state of health of the rats. Those found diseased should be carefully examined for tubercles, and if necessary destroyed.

Site for the
burning place. (This method is best) should be
carefully chosen so as to avoid nuisance to the

inhabitants from the smoke ; it will therefore be at some distance from habitations. In towns it is important that a good road for carts should lead to it, but when donkey-transport is used, this is not of so much importance. It must also be so situated that there is no danger to houses or crops from fire, and no place should be selected in which children are in the habit of playing, as it will be found difficult to keep them away.

Rubbish should be tipped from the carts or sacks close to the fire, the inflammable articles separated from the dust by means of the rake and placed on the fire ; finally, the dust itself should be levelled and the fire built upon it. A good deal of supervision is necessary to make sure that all rubbish is really burnt and not carried back into the houses.

It is sometimes necessary to change the position of the burning-place when the work is being carried on at too great a distance from the site originally chosen.

The man in charge of the burning-place should keep a tally of the number of sacks or cart-loads of rubbish dealt with during each day (*see* para. 45).

Isolation of the Sick.

Isolation in private houses. 70. — No patient should be treated in his own house, except cases discovered in a dying condition, unless isolation can be really efficiently enforced.

The following conditions must be fulfilled:—

(a) In a large house.—The patient must be placed with his attendant in an entirely separate portion of

inhabitants from the smoke; it will therefore be at some distance from habitations. In towns it is important that a good road for carts should lead to it, but when donkey-transport is used, this is not of so much importance. It must also be so situated that there is no danger to houses or crops from fire, and no place should be selected in which children are in the habit of playing, as it will be found difficult to keep them away.

Rubbish should be tipped from the carts or sacks close to the fire, the inflammable articles separated from the dust by means of the rake and placed on the fire; finally, the dust itself should be fowled and the fire built upon it. A good deal of supervision is necessary to make sure that all rubbish is really burnt and not carried back into the houses.

It is sometimes necessary to change the position of the burning-place when the work is being carried on at too great a distance from the site originally chosen. The man in charge of the burning-places should keep a tally of the number of sacks or cart-loads of rubbish burnt with during each day. (see para. 45.)

Isolation of the Sick.

70. — No patient should be treated in his own house, except in a dying condition, unless isolation can be really efficiently enforced.

The following conditions must be fulfilled:—

(a) In a large house.—The patient must be placed with his attendant in an entirely separate portion of

6. Calculate amount of equipment and order by telephone from mudiria store.
7. Remove sick to Hospital and most important contacts to contact section.
8. Disinfect house of the case.
9. Measure out positions of huts in hospital and contact sections.
10. As soon as equipment arrives erect huts in both Hospital and contact sections on the marked sites.
11. Request Police to collect more distant contacts.

II.—THE MANAGEMENT OF THE ISOLATION CAMP (CORDON).

Management of contact section. 81.—As the contacts are brought in they are examined by the Medical Officer ; their names are marked off on the general contact list and all sick are at once isolated ; the others are taken to the bath.

Bathing. 82.—A tamurgia must be in charge of the women's bath and a tamurgi in charge of the men's bath, and they must be actually present at the bathing.

Two half-barrels must be provided in each bath hut, the one containing a solution of 1:5,000 corrosive sublimate, the other containing a solution of 1:1,000 corrosive sublimate.

The contacts enter the bath hut and strip, placing their clothing in the 1:1,000 solution and bathing their bodies in the 1:5,000 solution.

They are then given clean clothing and are drafted into the huts in the contact section ; a list of the

10. As soon as equipment arrives, erect huts in both Hospital and contact sections on the marked sites.
11. Hospital huts to take a more direct contact.
12. Situate out positions of huts in hospital and contact sections.
13. Isolated huts of the case.
14. Contact section.
15. Remove risk to Hospital and most important contacts to main store.
16. Isolate contact of equipment and order by telephone from main store.

II—THE MANAGEMENT OF THE ISOLATION CAMP (GARDEN)

Management of 81.—As the contacts are brought contact section, in they are examined by the Medical Officer; their names are marked off on the general contact list and all sick are at once isolated; the others are taken to the bath.

Bathing. 82.—A tamangia must be in charge of the women's bath and a tamangia in charge of the men's bath, and they must be actually present at the bathing. Two half-baths must be provided in each bath, but the one containing a solution of 1:5,000 corrosive sublimate, the other containing a solution of 1:1,000 corrosive sublimate.

The contacts enter the bath hut and strip, placing their clothing in the 1:1,000 solution and bathing their bodies in the 1:5,000 solution. They are then given clean clothing and are drafted into the huts in the contact section; a list of the

occupants of each hut is written, nailed to a bed board and hung on the door of the hut. Thus:—

Hut contact lists.—83.	<i>Contacts of case</i> _____
	Entered cordon on _____ (date)
Names.	Ages.
1. _____	_____
2. _____	_____
3. _____	_____
etc.	etc.

Those persons who have been living in the patient's house or who are known to have been in close contact with the case must be placed in separate huts from the more remote contacts.

Cordon contact book. 84.—Each hut is then given a number and the names of the contacts are entered hut by hut in the Cordon Contact Book, which should be drawn out in the form shown on the pp. 52-53.

Disinfection of clothing. 85.—The clothes of the contacts must remain in the disinfecting solution for half an hour; they are then removed, dried, and handed back to the contacts to wear, the clean hospital clothing which was given to them being disinfected, dried, and returned into Store.

Release of certain contacts. 86.—When all the contacts of a case have been brought into the Isolation Camp, two males and one

occupants of each hut is written, nailed to a board and hung on the door of the hut. Thus—

Case	Number of contacts	Name	Age
83	1		
	2		
	3		
	etc.		

Those persons who have been living in the patient's house or who are known to have been in close contact with the case must be placed in separate huts from the more remote contacts.

84—Each hut is then given a number and the names of the contacts are entered but not in the Contact Book, which should be drawn out in the form shown on the pp. 52-53.

85—The clothes of the contacts must remain in the disinfecting solution for half an hour; they are then removed, dried, and packed back to the contacts in way, the clean hospital clothing which was given to them being disinfected, dried, and returned into store.

86—When all the contacts of a case have been brought into the Isolation Camp, the males and one

female from the more remote contacts may be allowed out to look after the affairs of the family.

They must come to the Isolation Camp twice a day for examination, and delay in presenting themselves, or non-attendance, should be met by returning them into isolation.

This privilege is *not* to be given :—

1. If there is much infection in the family.
2. If any of the contacts remain outside undiscovered.
3. If the case is one of death outside the hospital or secret burial after the discovery of the outbreak.

The fact that these persons are not in isolation must be noted in the general contact list and their names must be brought specially to the notice of the senior Inspector in charge.

**Inspection
of contacts in
camp.**

87.—The contacts must be inspected individually in their huts at least three times a day. This is the most important measure in the prevention of the spread of infection inside the Isolation Camp, and nothing must be allowed to interfere with this examination. Any contact suspected of being ill must be isolated at once in a separate hut in the Hospital section; the remainder of the people in the hut, leaving in their hut all blankets, haseeras, etc., are taken to the bath and the disinfection process is repeated as on admission.

A note is made on the hut contact list of the name of the person transferred to the Hospital section with the date and hour of the transfer.

DECEMBER.

REMARKS.

9	10	11	12	13	14	15	16	17	18
x	x	x	x	x	x	Discharged.			
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				
x	x	x	x	x	x				

Fatma Zein Id Deen
isolated No. 395 4th Decem-
ber. Died 5th December.
The family moved to Hut
No. 15.

CORDON CONTACT BOOK

Hut No. 6.

Contents of this Cordons Log is given

Admitted into Cordons 1st December

No.	Name	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	...															
2	...															
3	...															
4	...															
5	...															
6	...															
7	...															
8	...															
9	...															
10	...															

The family moved to the
 hut No. 6
 on 1st December
 and the family moved to the
 hut No. 6 on 1st December

On the completion of the disinfection the contacts are placed in another hut, their hut contact list going with them ; they then enter upon a new period of ten days observation and the fact is noted in the Cordon Contact Book (*see* para. 84).

The blankets, haseeras, cups, etc., in the old hut, are then thoroughly disinfected and dried ; gullas are broken, and the matting of the evacuated hut is removed and burnt. The poles of the hut, which are left *in situ*, and the ground, are disinfected, and the site should not be used for a new hut for 48 hours.

The recurring necessity of changing the huts of the contacts is one of the reasons why it is so necessary to have ready for occupation a number of empty huts.

Every endeavour must be made to prevent the occupants of one hut from mingling with those of another ; the contacts must be warned against this and habitual offenders should be confined alone in separate huts.

Promiscuous defæcation in the camp must be stopped, and when a large number of people are isolated a special man should be employed to keep the surface of the section clean and to see that the latrines are used.

Discharge of contacts. **88.**—All contacts, except as mentioned in para. 86, must be isolated for ten days.

On discharge, the process of personal and clothing disinfection is to be repeated as on admission.

(a) the completion of the disinfection the contacts are placed in another but their first contact list going with them; they then enter upon a new period of ten days observation and the fact is noted in the Contact Book (see para. 84).

The blankets, harness caps etc., in the old hut are then thoroughly disinfected and dried; galls are broken and the mulling of the evacuated hut is removed and burnt. The poles of the hut, which are left in situ, and the ground, are disinfected, and the site should not be used for a new hut for 48 hours.

The recurring necessity of changing the bats of the contacts is one of the reasons why it is so necessary to have ready for occupation a number of empty huts.

Every precaution must be made to prevent the occurrence of one bat from mingling with those of another; the contacts must be warned against this and habitual offenders should be confined alone in separate huts.

Continuous delimitation in the camp must be stopped, and when a large number of people are isolated a special man should be employed to keep the surface of the section clean and to see that the latrines are used.

Discharge of contacts 88.—All contacts, except as mentioned in para. 88, must be isolated for ten days. On discharge, the process of personal and clothing disinfection is to be repeated as on admission.

III.—THE AMOUNT OF DISINFECTION REQUIRED.

Disinfection in pneumonic plague.

89.—When cases of pneumonic plague have arisen in the course of bubonic or septicæmic outbreaks, the indications governing the amount of disinfection required are those laid down in para. 25.

When there are, or have been, no cases of bubonic or septicæmic plague, and there is no evidence of rat-infection, the disease is probably imported and disinfection should be confined to the houses of the actual cases. Every endeavour must be made to discover the identity of the first case and to trace the movements of that case for fourteen days before discovery or death.

Should the patient have arrived in the locality recently, enquiry must be made in the place or places from which the infected person has come in order to determine whether or not plague infection exists in those localities.

Plague Hospitals.

Plague hospitals.

90.—At the beginning of an outbreak, hospital equipment and tents for the number of beds required should be obtained from the mudiria or headquarters.

In towns where no special hospital for infectious diseases exists, an isolated building should be hired and converted into a hospital.

When a suitable building cannot be obtained a piece of waste ground must be chosen and a tent or mat

III.—The Amount of Disinfection Required

88.—When cases of pneumonic plague have arisen in the course of bubonic or septicaemic outbreaks, the indications governing the amount of disinfection required are those laid down in para. 85.

When there are or have been, no cases of bubonic or septicaemic plague, and there is no evidence of rat-infestation, the disease is probably imported and disinfection should be confined to the houses of the actual cases. Every opportunity must be made to discover the identity of the first case and to trace the movements of that case for fourteen days before discovery or death. Should the patient have arrived in the locality recently, enquiry must be made in the place or places from which the infected person has come in order to determine whether or not plague infection exists in those localities.

Plague Hospitals

89.—At the beginning of an outbreak, hospital equipment and tents for the number of beds required should be obtained from the military or headquarters. In towns where no special hospital for infectious diseases exists, an isolated building should be hired and converted into a hospital. When a suitable building cannot be obtained a piece of waste ground must be chosen and a tent or mat

hospital erected. Floors should be levelled, well stamped down, and covered with a layer of six inches of sand.

In wet weather tents or huts should be covered with tarpaulins, and, if necessary, the floors may be boarded. Tarpaulins may be obtained from headquarters.

In small towns and villages, when the weather permits, temporary huts constructed of durra-stalks, mats, or other convenient material, should be erected.

In choosing the site for a temporary Plague Hospital it must be remembered that room for extension may be required.

Sections. **91.**—Plague Hospitals should be divided, whenever possible, into two sections, *viz.* :—

First section for plague cases.....	} divided into wards for males and females.
Second section for doubtful cases.	

No doubtful case should be put into the plague section.

Accommodation for contacts. A third section should be built to the north of the Hospital compound for the isolation of contacts. Separate shelters must be provided for male and female contacts and special latrines provided for their use.

Accommodation for guard. A hut for the guard should be erected close to the isolation huts for contacts and a special latrine must be provided for the guard.

hospital erected. Floors should be levelled, well
ramped down, and covered with a layer of six inches
of sand.

In wet weather tents or huts should be covered with
carpauline, and, if necessary, the floors may be boarded.
Carpauline may be obtained from headquarters.

In small towns and villages, when the weather per-
mits, temporary huts constructed of burnt-stalks,
straw, or other convenient material, should be erected.

In choosing the site for a temporary Plague Hospital
it must be remembered that room for extension may
be required.

Sections. 91.—Plague Hospitals should be divided, whenever possible,

into two sections, viz.—
First section for plague cases... }
Second section for doubtful cases. }
wards for males }
divided into }
wards for females }
and females. }
No doubtful case should be put into the plague
section.

Accommodation. A third section should be built to
be used for contacts. The north of the hospital compound
or the isolation of contacts. Separate shelters must
be provided for male and female contacts and special
arrangements provided for their use.

Accommodation. A hut for the yard should be
erected close to the isolation huts
for contacts and a special latrine must be provided
for the guard.

Mortuary. A special hut should be built at the south-east of the Hospital compound for use as a mortuary.

Patients' latrines. The site of the patients' latrines should be also to the south-east of the Hospital. All vomited matters, sputa, urine, and fæces, must be deposited in the latrine and covered with a layer of quick-lime.

In large camps the latrines for both contacts and patients may be placed to the east or west of the camp, at least ten metres from the nearest hut.

Kitchen. The kitchen should be situated to the south-west of the Hospital, and the water-supply arrangements should be in proximity to it.

Attendants. 92.—Medical Officers in charge of Plague Hospitals will engage attendants and make such arrangements for food supply as may be necessary (*see* para. 99).

Provision must be made for the separate treatment of males and females; and female attendants (*tamurgia*) must be engaged to look after the latter. Midwives (*dayas*) must on no account be employed as *tamurgia*.

It is often advisable to allow a female friend to remain in Hospital as attendant on a female patient or child, in order that the relatives may have more confidence that proper care is taken of the patients.

In the country, attendants are usually best obtained through the *omda*.

Mortuary. A special hut should be built at the south-west of the Hospital compound for use as a mortuary.

Latrines. The site of the patients' latrines should be also to the south-east of the Hospital. All voided matters, spits, urine and faeces must be deposited in the latrine and covered with a layer of quick-lime. In large camps the latrines for both contacts and patients may be placed to the east or west of the camp at least ten metres from the nearest hut.

Kitchen. The kitchen should be situated to the south-west of the Hospital, and the water-supply arrangements should be in proximity to it.

Attendants. 22.—Medical Officers in charge of Plague Hospitals will engage attendants and make such arrangements for food supply as may be necessary (see para. 23).

Provision must be made for the separate treatment of males and females; and female attendants (nurses) must be engaged to look after the latter. Midwives (dayas) must on no account be employed as attendants. It is often advisable to allow a female friend to remain in Hospital as attendant on a female patient or child, in order that the relatives may have more confidence that proper care is taken of the patients. In the country, attendants are usually best obtained through the order.

Disinfection. **93.**—Tubs or half-barrels containing disinfectant solution will be placed in convenient positions and all used articles of clothing or equipment will be placed in them to soak for twelve hours before being again used.

A basin (magûr) containing sublimate solution for the disinfection of the hands of the attendants, should be placed outside each section.

When hospital clothing is provided, all patients' clothing should be disinfected on arrival at the Hospital.

When hospital clothing is not available, all patients' clothing must be thoroughly disinfected before the patient is discharged or before the clothing is handed over to the relatives.

Floors of wards and other Hospital buildings should be disinfected at least once a week with sublimate solution or quick-lime. The latter process is carried out as follows: Sufficient quick-lime to cover the floor is placed in a heap in the middle of the room to be disinfected, a small quantity of water is poured on the lime and the whole covered with a sack; in a few minutes the lime is converted into a powder which is spread evenly over the earth floor and watered with a watering can.

All soiled dressings and poultices must be burnt.

Precautions to be taken by Police and attendants. **94.**—When Police are detailed as Hospital guards they should not wear their uniforms on duty in the Hospital, but should be dressed in their cotton clothes. On returning to their ordinary

Distinction 93.—Tide or half-tide con-
taining disinfected solution will
be placed in convenient positions and all need articles
of clothing or equipment will be placed in them to
soak for twelve hours before being again used.
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minutes the lime is converted into a powder which is
spread evenly over the earth floor and watered with a
watering can.

All soiled dressings and poultices must be burnt.

Precautions 94.—When Police are detailed
to be taken by Hospital guards they should not
wear their uniforms on duty in the
Hospital, but should be dressed in
their civilian clothes. On returning to their ordinary

duty great care must be taken that both they and the clothes which they have worn are thoroughly disinfected. They must also be carefully inspected to see that they are in good health.

95.—Police and attendants must be strictly forbidden to walk about within the camp with bare feet, or to use the latrines provided for the patients.

Dieting attendants. **96.**—Attendants must be made to understand that they are on no account to leave the camp; arrangements must be made to have their food brought to them by their friends when they cannot be provided for in the camp; when possible they should be dieted as contacts (*see* para. 99).

Visits to patients. **97.**—Arrangements should be made with omdas to prevent people from collecting in the neighbourhood of hospitals, but near relatives of patients may be allowed to come close to the huts to talk to their sick with the permission of the Medical Officer and only during his evening visit.

When patients are dying the relatives should be informed, and two near relatives may be allowed to enter the Hospital and remain with the patient until death ensues. The relatives should be warned of the danger of infection, and before leaving the Hospital they must be thoroughly disinfected. They must subsequently be kept under observation for ten days.

...great care must be taken that both they and the clothes which they have worn are thoroughly disinfected. They must also be carefully inspected to see that they are in good health.

95.—Visitors and attendants must be strictly forbidden to walk about within the ward with bare feet, or to use the latrines provided for the patients.

96.—Attendants must be made to understand that they are to be allowed to leave the ward; arrangements must be made to have their food brought to them by their friends when they cannot be provided for in the ward; when possible they should be distal as contents of the ward.

97.—Arrangements should be made with a view to prevent people from collecting in the neighborhood of hospitals, and near relatives of patients may be allowed to come close to the beds to talk to their sick with the permission of the Medical Officer and only during his evening visit.

When patients are dying the relatives should be informed and two near relatives may be allowed to enter the hospital and remain with the patient until death occurs. The relatives should be warned of the danger of infection and before leaving the hospital they must be thoroughly disinfected. They must subsequently be kept under observation for ten days.

In cases of pneumonic plague, attendants and relatives must be instructed to keep away from in front of the patient, especially when he is coughing, and relatives must be advised to sit at the door of the hut, not close to the patient; a special hut should be made for such attendant relatives beside the patient's hut. A mask should be worn by those in close attendance or in making examinations. It is made as follows: Take a piece of gauze 80 centimetres long and 30 centimetres broad, place in its centre a piece of absorbent cotton 15 centimetres square and $2\frac{1}{2}$ centimetres thick, fold the edges of the gauze over the cotton as in making a poultice. Place the pad over the mouth and nostrils and tie the ends of the gauze behind the head. The small space left by the sides of the nostrils should be packed with cotton.

Case book. 98.—In each Hospital a case-book must be kept and all cases entered under the following headings:—

No.—Name—Age—Address—Date of admission—
Type of Disease—Site of Bubo—Result—Date of
Discharge or Death.

The record of cases coming from each town or village should be kept on a separate page, and the number of the case should correspond with the number on the map of the town or village.

In cases of pneumonic plague, attendants and relatives must be instructed to keep away from the front of the patient, especially when he is coughing and sputtering. He should be advised to sit at the head of the bed, not close to the patient; a special hut should be made for such attendants relative to the patient's hut. A mask should be worn by those in close attendance or in making examinations. It is made as follows: Take a piece of gauze 50 centimetres long and 30 centimetres broad, place in its centre a piece of absorbent cotton 15 centimetres square and 2 1/2 centimetres thick, fold the edges of the gauze over the cotton as in making a pocket. Place the pad over the mouth and nostrils, and tie the ends of the gauze behind the head. The small space left by the sides of the nostrils should be packed with cotton.

Case book. 88--In each Hospital a case book must be kept and all cases entered under the following headings:--

Name--Age--Address--Date of admission--Type of Disease--Site of Bubot--Health--Date of Discharge or Death.

The record of cases coming from each town or village should be kept on a separate page, and the number of the case should correspond with the number on the map of the town or village.

Diet. **99.**—The following diets are given as a guide :—

I.—Diet for sick persons.

Milk 1 rotl.

Soup 1 rotl= $\frac{1}{4}$ rotl of meat.

Bread 1 loaf* (ragheef).

Eggs 3

II.—Diet for convalescents and contacts.

Bread 3 loaves. (*)

Meat $\frac{1}{3}$ rotl.

Rice $\frac{1}{6}$ rotl.

Vegetables $\frac{1}{6}$ rotl.

In the country, arrangements for the supply of food should be made through the omda or one of the sheikhs; the price of each article should be separately agreed upon: so much per rotl of milk, so much per loaf of bread, etc.

In ordering food for the Hospital the Medical Officer in charge will each day ascertain, during the afternoon, the number of diets for sick persons and the number of diets for convalescents and contacts required for the following day; he will then calculate the amount of food required by the above table and give a written requisition for the supplies to the person who is supplying the food.

(*) The loaf refers to the round loaf of native bread as used in the Government Hospitals. Allowance must be made for local peculiarities.

16.—Diet for convalescents and contacts.

- 1.—Diet for sick persons.
- Milk 4 roll.
- Soup 1 roll = 1/4 roll of meat.
- Bread 1 loaf* (sugar).
- Butter 3
- 17.—Diet for convalescents and contacts.
- Bread 3 loaves.*
- Meat 1/2 roll.
- Rice 1/2 roll.
- Vegetables 1/2 roll.

In the country arrangements for the supply of food should be made through the agents or one of the agents; the price of each article should be separately agreed upon; so much per roll of milk, so much per part of bread, etc.

In ordering food for the Hospital the Medical Officer in charge will each day ascertain during the afternoon, the number of diets for sick persons and the number of diets for convalescents and contacts required for the following day; he will then calculate the amount of food required by the above table and give a written requisition for the supplies to the person who is supplying the food.

(*) The loaf refers to the round loaf of white bread as used in the Government Hospitals. Allowance must be made for loaf deterioration.

Food requisition. The requisition should take the following form, *e.g.*, food is required for 4 patients and 3 contacts :—

Date _____		Required for Plague Hospital at _____		
		4 sick.	3 contacts.	Total.
Milk	... ..	4 rotls.	—	4 rotls.
Meat	... ..	1 rotl.	1 rotl.	2 rotls.
Bread	... ..	4 loaves.	9 loaves.	13 loaves.
Eggs	... ..	12	—	12
Rice	... ..	—	1/2 rotl.	1/2 rotl.
Vegetables	...	—	1/2 rotl.	1/2 rotl.

Food should arrive at the Hospital not later than 7 a.m., accompanied by the requisition ; the latter should be filed in the office when the quantities have been found to be accurate.

Contacts admitted for isolation should bring sufficient food with them for the first day.

In towns where there is a Hospital, arrangements should be made with the Hospital contractor to supply the Plague Hospital with food at contract prices, and the usual Hospital diets should be ordered.

It is frequently found more convenient to give a food allowance to each contact instead of supplying them with the food itself.

This allowance should not exceed P.T. 2 per day for adults (over 12) and P.T. 1 for children under 12.

No allowance is given for babies in arms.

Hospital huts. 100.—The most convenient forms of huts for rapid building are those shown in the diagrams.

Hospital diets 100.—The most convenient forms of diets for rapid building are those shown in the diagram.

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should be made with the Hospital contractor to supply the Town where there is a Hospital arrangements should be made with the Hospital contractor to supply food with them for the first day. Contacts admitted for isolation should bring sufficient food with them for the first day.

Food should arrive at the Hospital not later than 7 a.m., accompanied by the requisition; the latter should be filed in the office when the quantities have been found to be accurate.

Food requisition	4 sick	3 contacts	Total
Milk	4 rolls	—	4 rolls
Meat	1 roll	1 roll	2 rolls
Bread	3 loaves	3 loaves	13 loaves
Eggs	12	—	12
Wine	—	1/2 roll	1/2 roll
Vegetables ...	—	1/2 roll	1/2 roll

4 patients and 3 contacts:—
The requisition should take the following form, viz. food is required

The 2 × 2-metre hut (Fig. 1) is used for the isolation of cases of plague, each case separately. It is also used for baths.

The 2 × 2 metre hut.

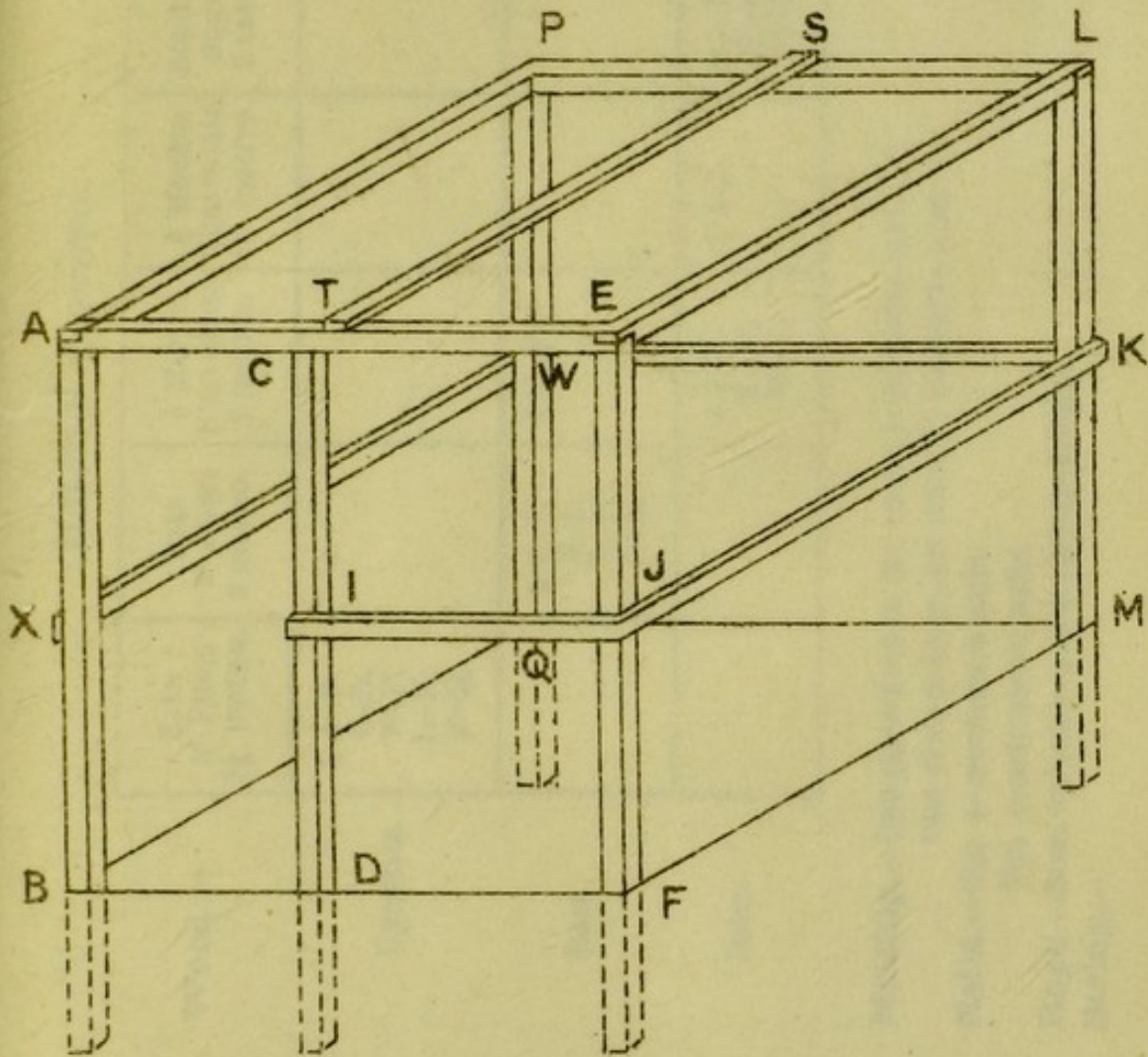
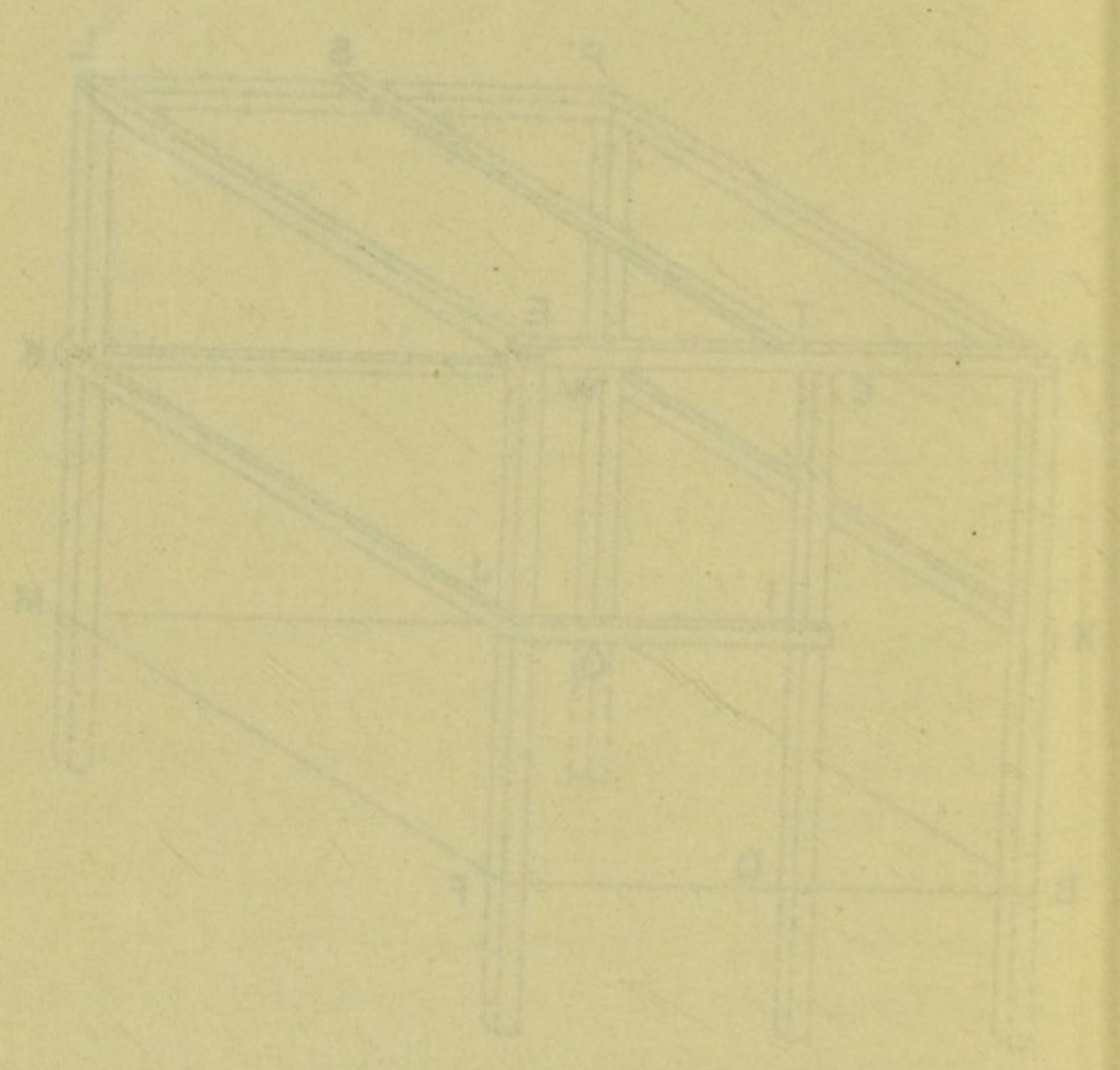


Fig. 1.

The 2 x 2 member (Fig. 1) is used for the insulation
of cases of pipes, each case separately. It is also
used for ducts.

The 2 x 2 member (Fig. 1)



THE 2 × 2-METRE HUT.

Material required.

Wood:—	Erks 3" Filler 2½ metres.	Erks 3" Filler 2 metres.	¼ Morina Busa talata 2 metres.	¼ Morina Busa talata 1¼ metres.	Bogdadly migwiz 2 metres.	Bogdadly migwiz 1¼ metres.
Uprights.	5 A-B. O-D. E-F. L-M. P-Q.					
Roof		4 A-E. E-L. L-P. P-A.	1 S-T.			
Sides.					3 J-K. K-W. W-X.	1 I-J.

Matting.—One piece 2 × 2 m. for roof = 2 Damietta mats.

One piece 2 × 8 m. for sides = 7 Damietta mats.

Nails.—Ten 6-centimetre nails.

Ten 4-centimetre nails.

Rope.—Busa waheda = 1 inch circumference.

String.—

1898

1899

1900

1901

1902

1903

1898	1899	1900	1901	1902	1903
1-0 1-1 1-2 0-0 1-1 1-2	1-0 1-1 1-1 1-1	1-0 1-1 1-1 1-1	1-0 1-1 1-1 1-1	1-0 1-1 1-1 1-1	1-0 1-1 1-1 1-1

University of Chicago

The 4 × 2-metre hut (Fig. 2) is used for stores and for contacts ; for the latter purpose it will hold 5 adults and 5 children.

The 4 × 2 metre hut

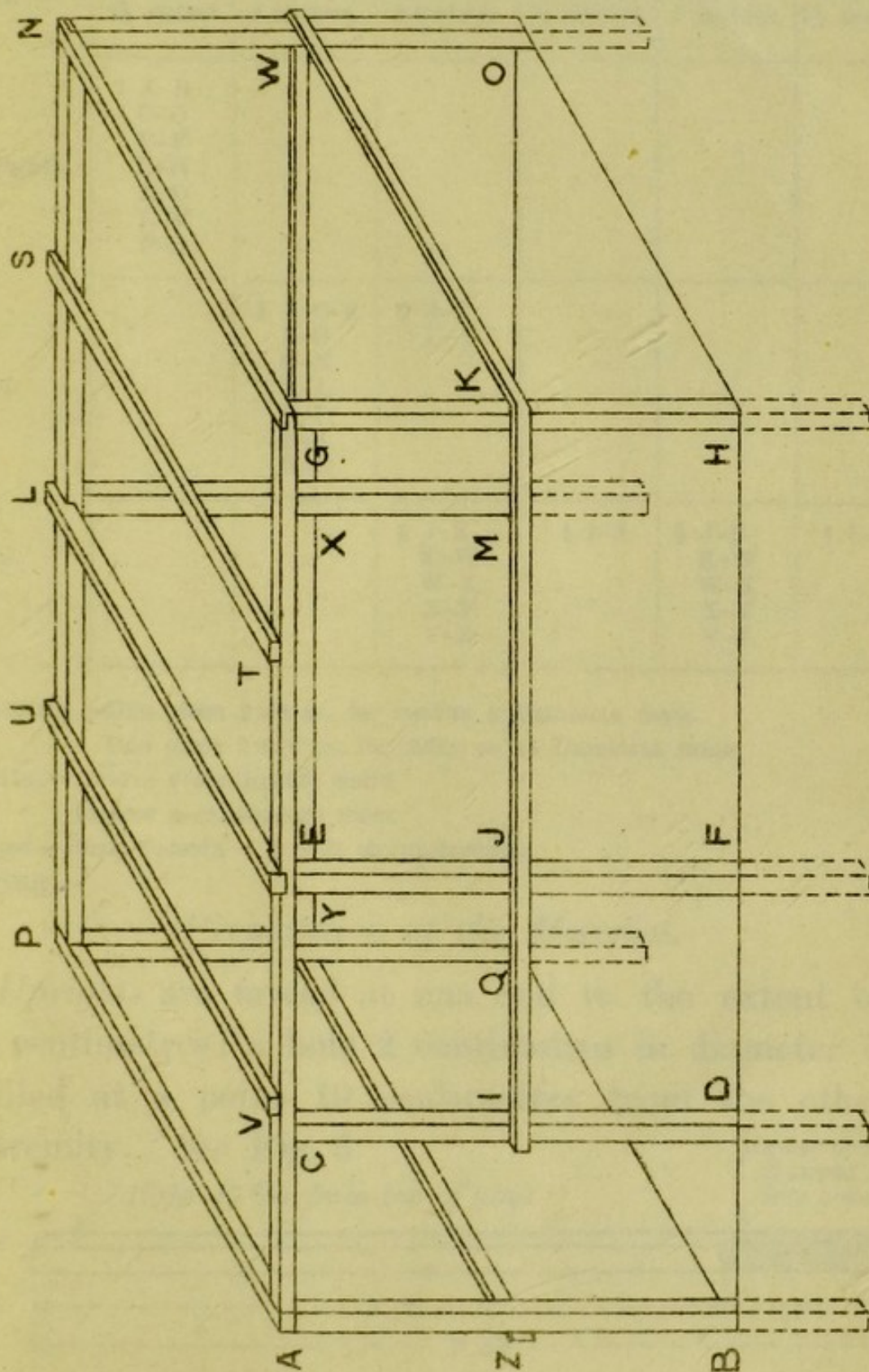


Fig. 2.

The 4x8 meter but (Fig. 2) is used for rooms and
for controls for the latter purpose it will hold 2
adults and 3 children.

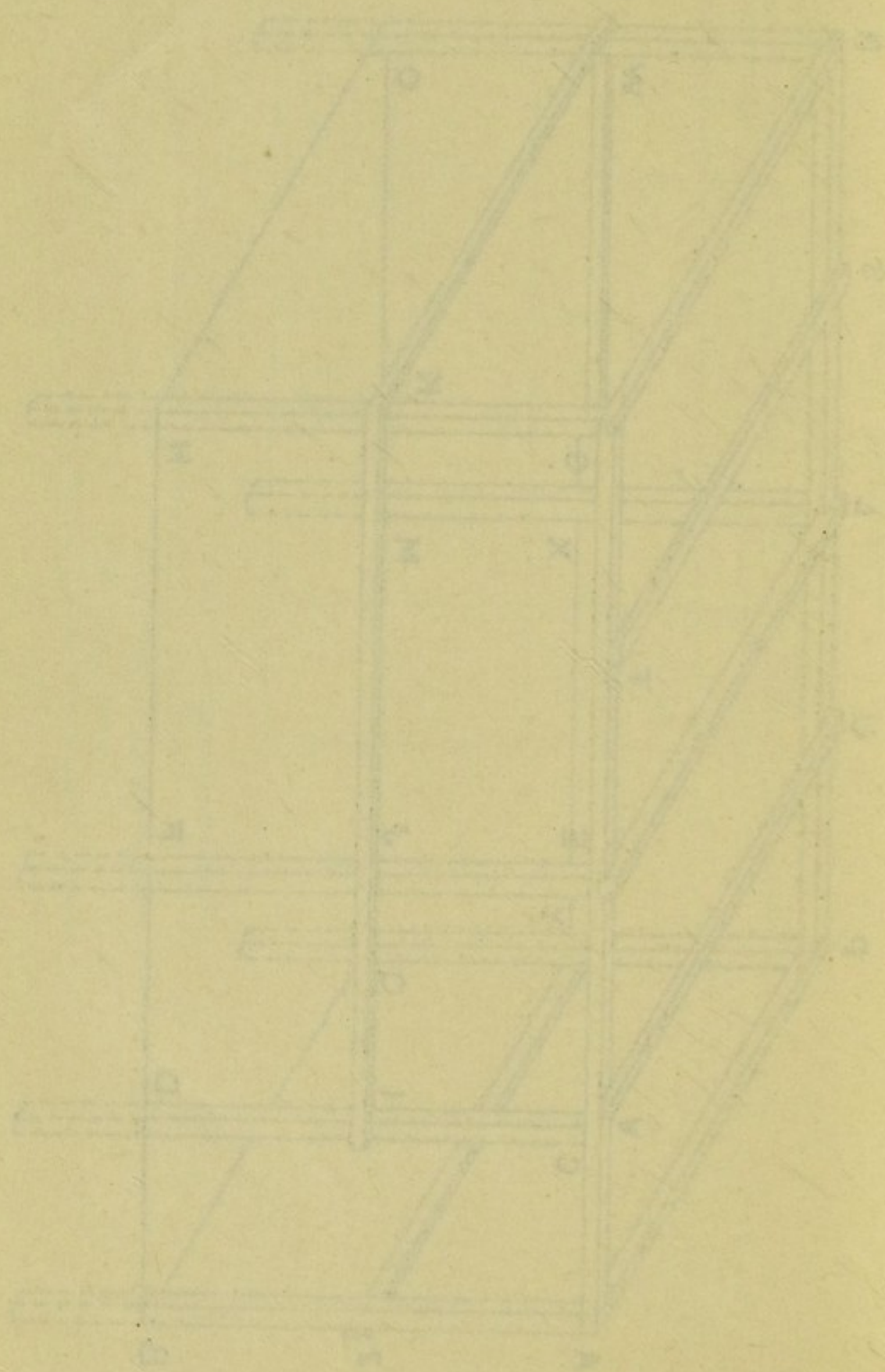


FIG. 2

THE 4 × 2-METRE HUT.

Material required.

Wood:—	Erks 3" Fileri 2½ metres.	Erks 3" Fileri 2 metres.	½ Morina Busa talata 2 metres.	½ Morina Busatalata 1¼ metres.	Bogdadly migwiz 2 metres.	Bogdadly migwiz 1¼ metres.
Uprights.	7 A-B C-D E-F G-H N-O L-M P-Q					
Roof.		7 A-C-E E-G G-N N-L L-P P-A E-L	2 S-T U-V			
Sides.			5 J-K K-W W-X X-Y Y-Z	1 I-J	5 J-K K-W W-X X-Y Y-Z	1 I-J

Matting.—One piece 2 × 4 m. for roof = 4 Damietta mats.

One piece 2 × 16 m. for sides = 14 Damietta mats.

Nails.—Twelve 6-centimetre nails.

Twelve 4-centimetre nails.

Rope.—Busa waheda = 1 inch circumference.

String.—

Preparation of the Material.

Uprights are tarred at one end to the extent of 50 centimetres; a hole 2 centimetres in diameter is drilled at a point 10 centimetres from the other extremity. See Fig. 3.

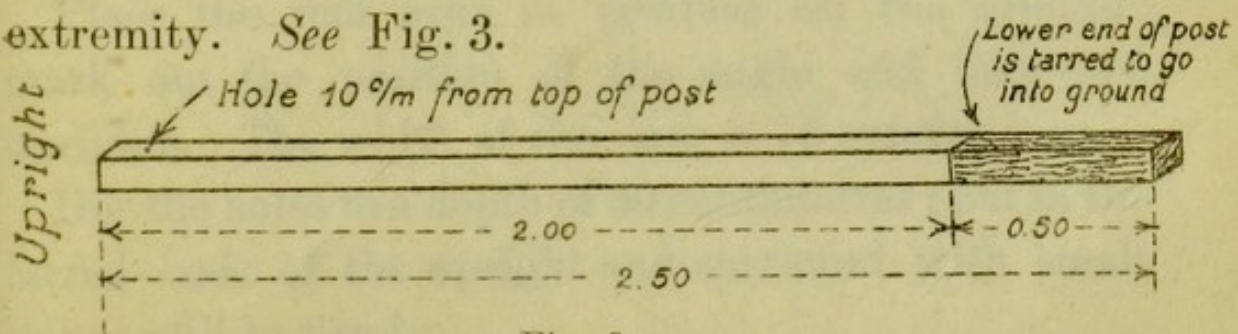


Fig. 3.

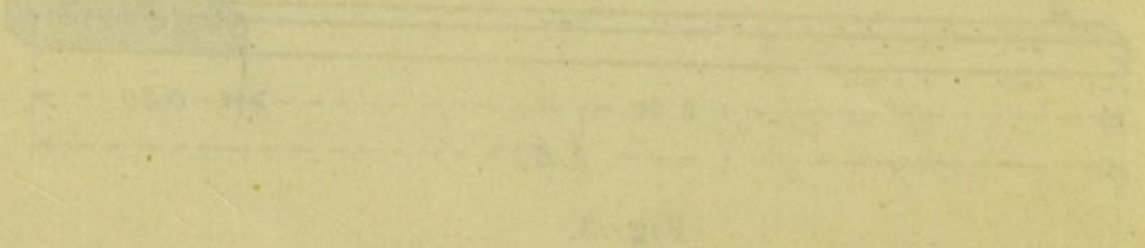
Material required.

1. Material	2. Quantity	3. Remarks	4. Material	5. Quantity	6. Remarks
Plank	1000		Plank	1000	
Timber	1000		Timber	1000	
...
...
...

Notes—The above quantities are for the 4 x 3 meter hut.
 The quantities for the 4 x 3 meter hut are 1000 units.
 The quantities for the 4 x 3 meter hut are 1000 units.
 The quantities for the 4 x 3 meter hut are 1000 units.

Expenditure of the Material.

The expenditure of the material is as follows: The quantities are listed at one end to the extent of 1000 units; a hole 1 centimeter in diameter is drilled at a point 10 centimeters from the other extremity. See Fig. A.



Roof pieces.—A square piece half the thickness of the wood is removed from each end of the erk roof pieces in order to allow the corners to fit into each other, and a hole 2 centimetres in diameter is drilled at a point 12 centimetres from each extremity. See Fig. 4.

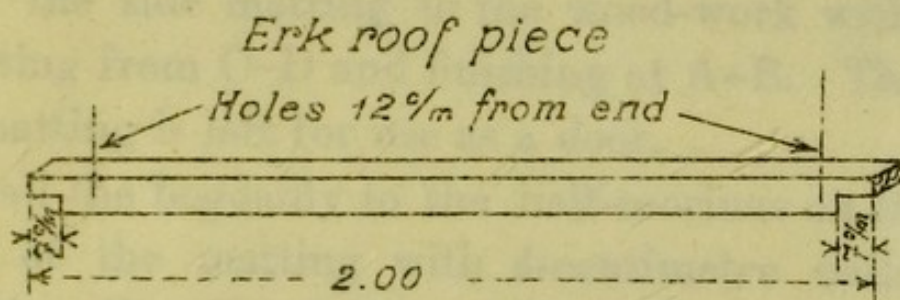


Fig. 4.

The half-morina roof pieces require no special preparation ; they are kept in position by lashing to the roof erks and by the roof matting.

The matting should be made ready in two pieces by joining the mats by string, side to side, to the required length. The average size of the Damietta mats is 2 metres by 1.20 metres.

Method of erecting the Huts.

Place the roof erks in position on the ground ; mark out the position of the angle and door-post uprights. The width of the door is 75 centimetres.

Dig the holes to a depth of 50 centimetres ; put in the tarred ends of the upright and surround with small stones ; fill in firmly.

Two pieces - A square piece half the thickness of the wood is removed from each end of the risk roof pieces in order to allow the corners to fit into each other, and a hole 2 centimetres in diameter is drilled at a point 12 centimetres from each extremity.

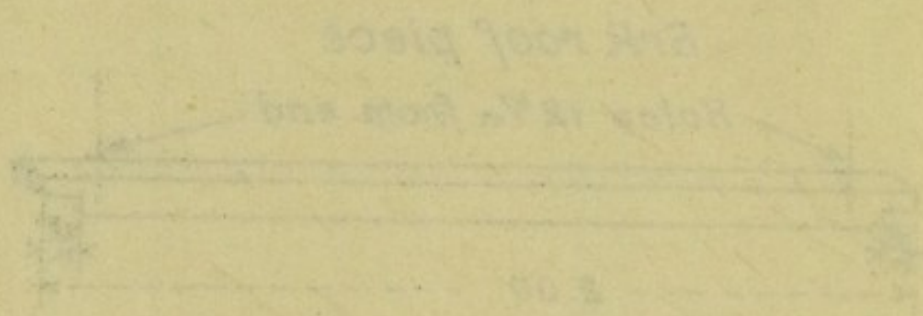


Fig. 1

The half-moon roof pieces require no special preparation; they are kept in position by lashing to the roof ribs and to the roof rafting.

The rafting should be made ready in two pieces by joining the ribs by string, side to side in the required length. The average size of the finished raft is 2 metres by 1.30 metres.

Method of erecting the ribs

Place the roof ribs in position on the ground; mark out the position of the angle and door-post uprights. The width of the bay is 75 centimetres. Dig the holes to a depth of 50 centimetres; put in the tapered ends of the upright and surround with small stones till in ready.

Place the roof erks in position and lash them to the uprights with rope. *See Fig. 5.*

Place the central roof pieces in position and lash on. Nail the half-morina side pieces with 6-centimetre nails to the outer sides of the uprights at a height of 1 metre from the ground.

Fix the roof matting to the wood-work with string. Fix the side matting to the wood-work with string, starting from C-D and finishing at A-B. The excess of matting is left for use as a door.

Nail the bogdady to the half-morinas on the outer side of the matting with 4-centimetre nails. The matting thus lies between the half-morina and the bogdady.

Nails should not be driven quite home so that they can be easily drawn in striking the hut without splitting the side pieces.

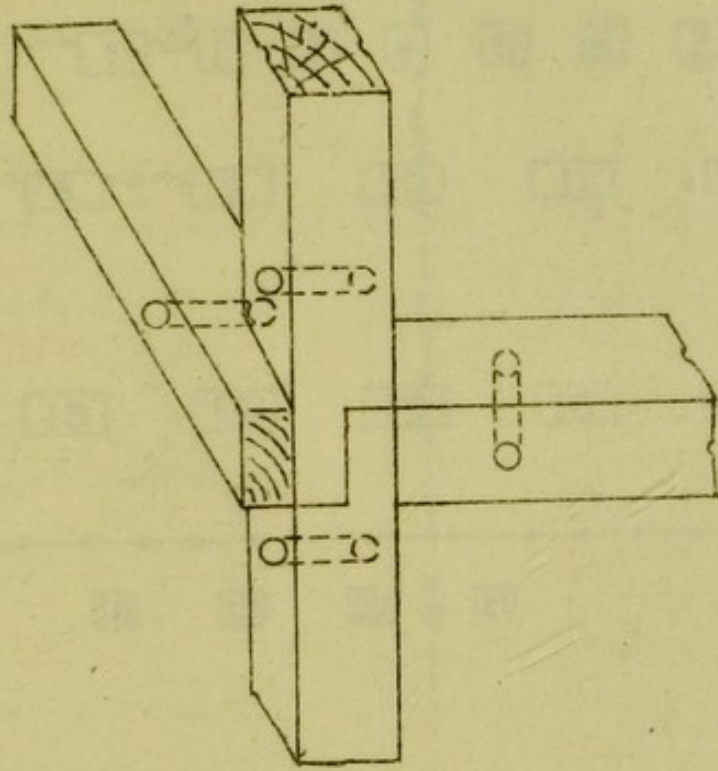
Place the roof ecks in position and lash them to the uprights with rope. See Fig. 5.

Place the central roof pieces in position and lash on. Nail the half-mooring side pieces with 6-centimetre nails to the outer sides of the uprights at a height of 1 metre from the ground.

Fix the roof matting to the wood-work with string. Fix the side matting to the wood-work with string, starting from C-D and finishing at A-B. The excess of matting is left for use as a door.

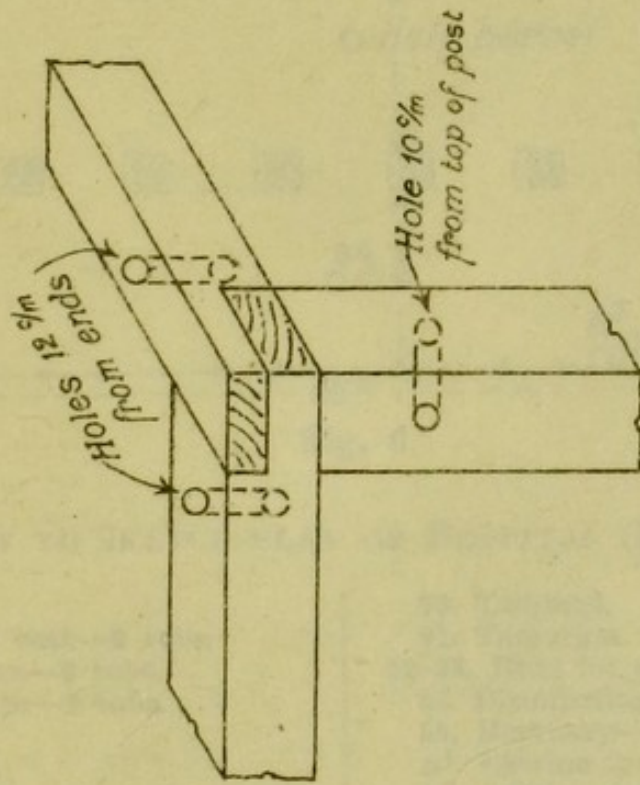
Nail the boardings to the half-mooring on the outer side of the matting with 4-centimetre nails. The matting thus lies between the half-mooring and the boardings.

Nails should not be driven quite home so that they can be easily drawn in striking the hut without splitting the side pieces.



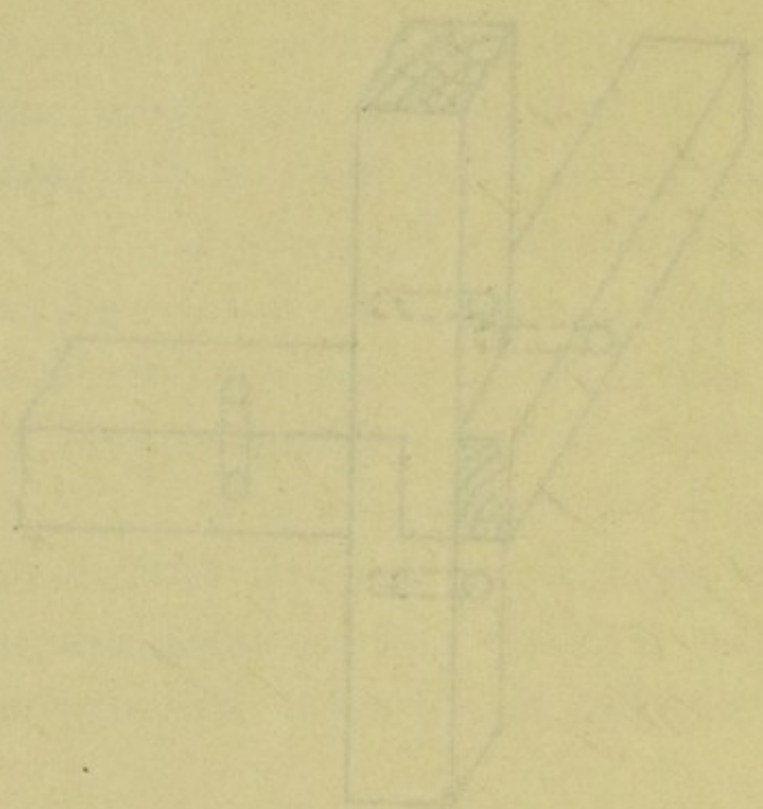
*Joint of post and plates
at centre of side of double hut*

Fig. 5.

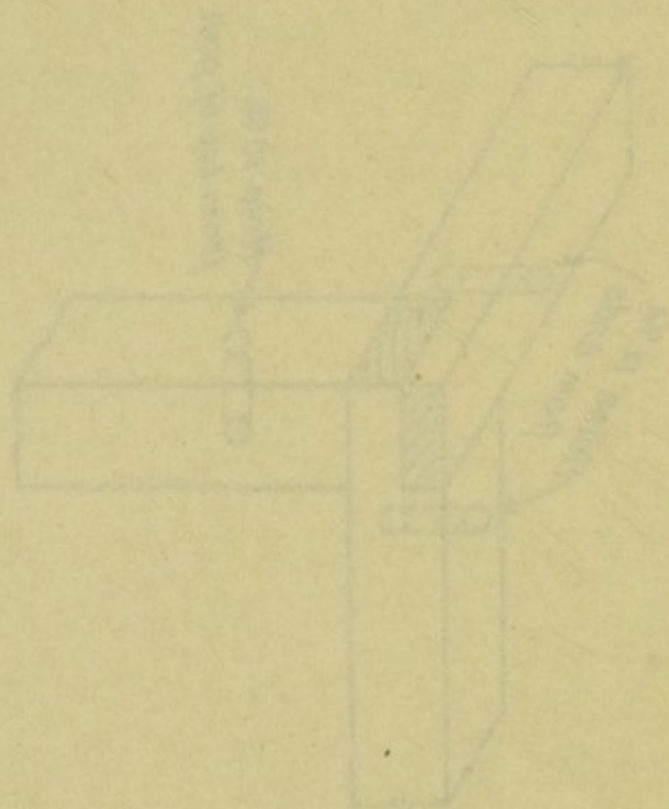


*Joint of post and plates
at top corner of hut*

at bottom of side opening
 and side of base to support
 weight of base to support



at top corner of unit
 and to support the
 weight of base to support



SKETCH PLAN OF HOSPITAL

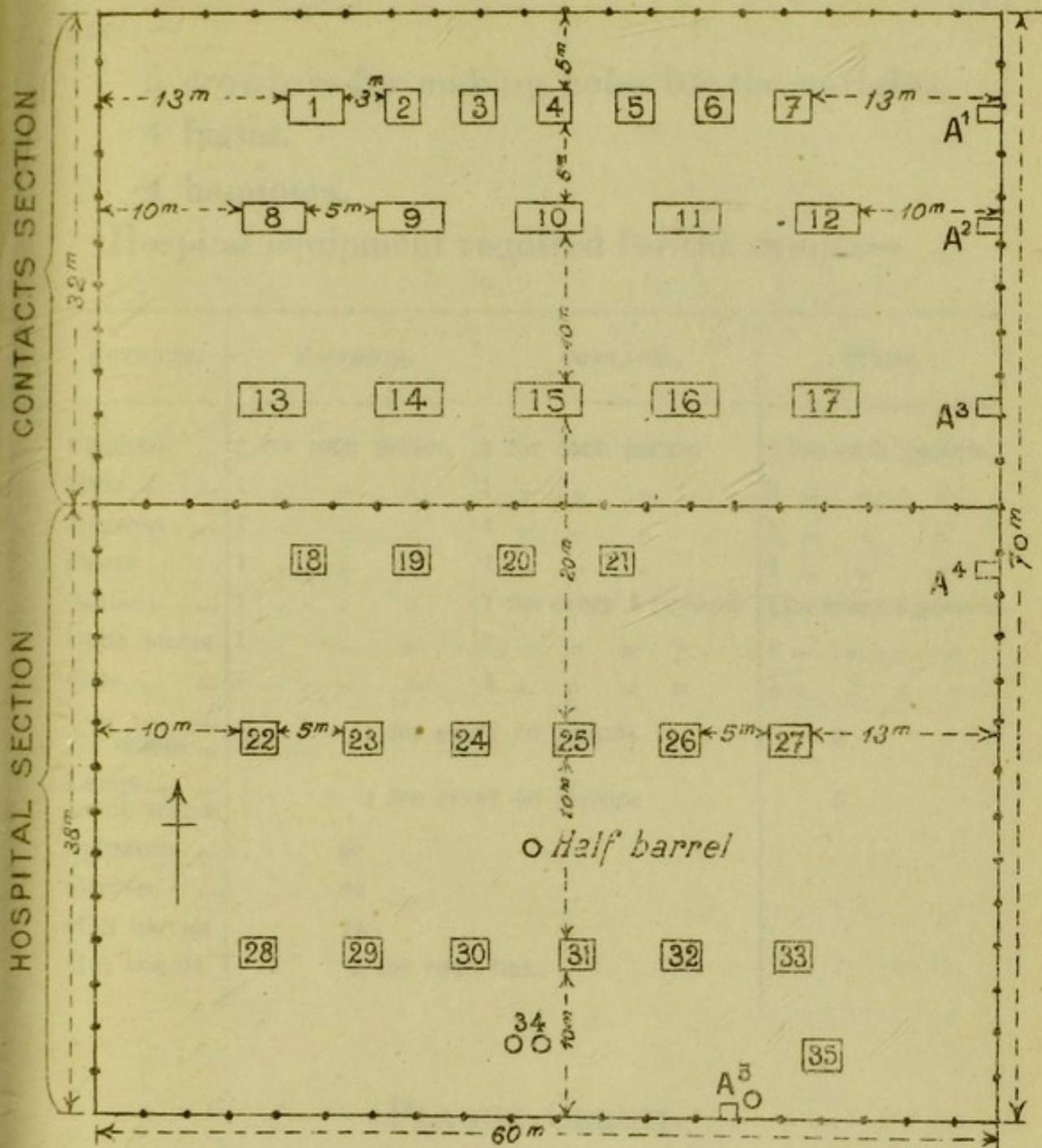


Fig. 6.

KEY TO SKETCH-PLAN OF HOSPITAL (FIG. 6).

- | | |
|--|--|
| <ul style="list-style-type: none"> 1. Store. 2. Womens' bath—2 tubs. 3. Mabkharra—2 tubs. 4. Men's bath—2 tubs. 5. Police. 6. Tamurgi. 7. Tamurgia. 8-17. Huts for contacts. 18. Store. 19. Bath—2 tubs. | <ul style="list-style-type: none"> 20. Tamurgi. 21. Tamurgia. 22-33. Huts for patients. 34. Disinfecting station—2 barrels. 35. Mortuary—2 tubs. A¹. Latrine for staff. A². Latrine for contacts. A³. Latrine for contacts. A⁴. Latrine for staff. A⁵. Latrine—1 tub. |
|--|--|

SKETCH PLAN OF HOSPITAL

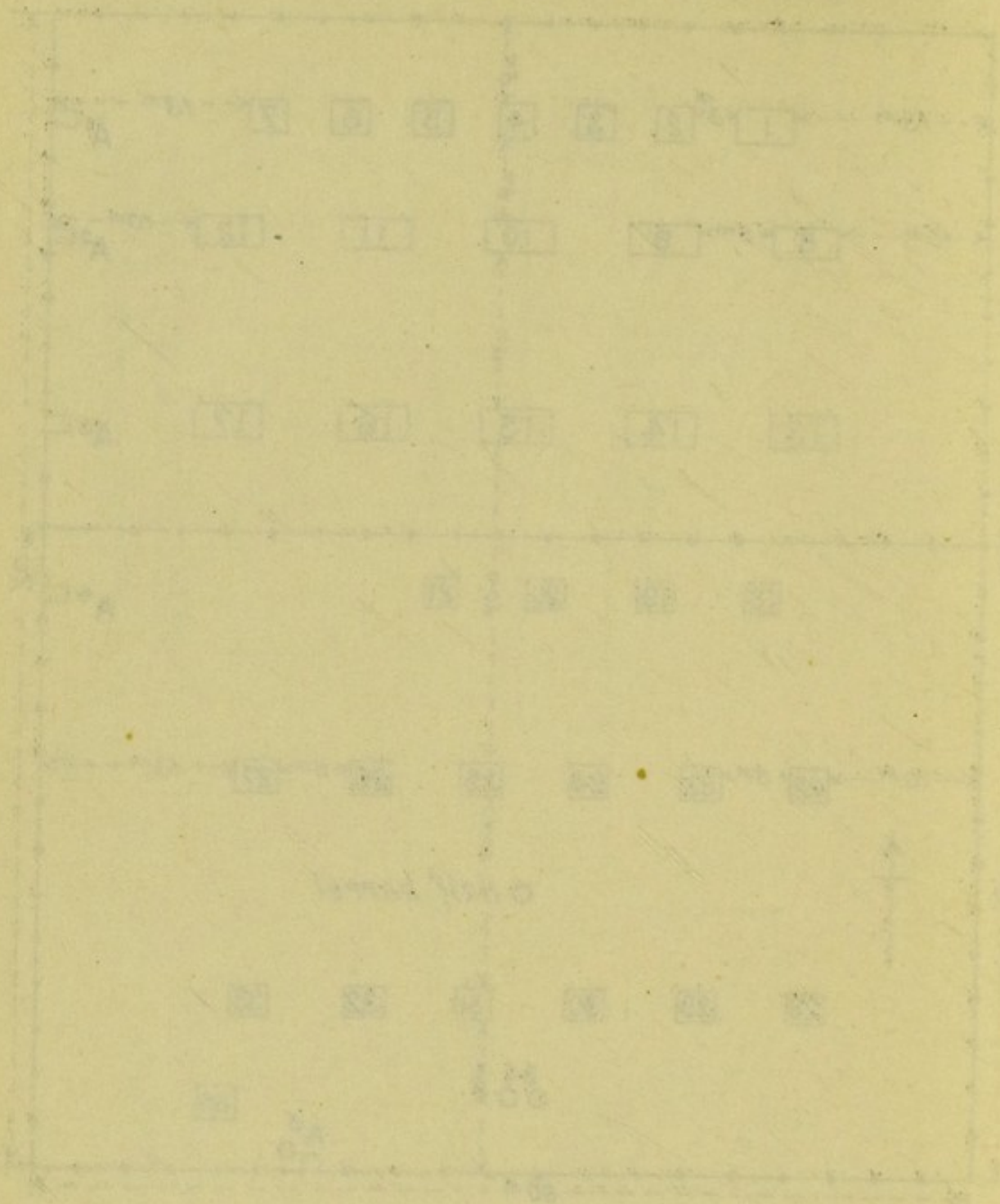


Fig. 6

KEY TO SKETCH PLAN OF HOSPITAL (FIG. 6)

- | | |
|--------------------------|-------------------------------------|
| 1. Room | 20. Tunnel |
| 2. Women's bath - 2 beds | 21. Tunnel |
| 3. Men's bath - 2 beds | 22-23. Halls for patients |
| 4. Men's bath - 2 beds | 24. Laboratory station - 2 patients |
| 5. Toilet | 25. Laundry - 2 beds |
| 6. Tunnel | 26. Lathes for steel |
| 7. Tunnel | 27. Lathes for contact |
| 8. Hall for contact | 28. Lathes for contact |
| 9. Room | 29. Lathes for steel |
| 10. Bath - 2 beds | 30. Lathes for steel |

The instruments required for building the camp are :—

6 crowbars for making holes for the uprights.

4 fasses.

4 hammers.

Hospital equipment required for the camp :—

ARTICLES.	PATIENTS.	CONTACTS.	STAFF.
Blankets ...	2 for each person	2 for each person	2 for each person.
Mats	1 " " "	1 " " "	1 " " "
Drawers ...	1 " " "	1 " " "	1 " " "
Shirts ...	1 " " "	1 " " "	1 " " "
Gullas... ..	1 " " "	1 for every 5 persons	1 for every 5 persons
Gulla plates	1 " " "	1 " " " "	1 " " " "
Cups	1 " " "	1 " " " "	1 " " " "
Zirs	} 1 for every 50 persons		2
Zir stands ...			
Lamps... ..	} 1 for every 50 persons		3
Lamp stands			
Splittoons ...	20		
Slippers ...	20		
Half barrels	14		
Hut boards	1 for each hut.		

PLAGUE CREDIT.

Plague credit. 101.—On the application of a Divisional Inspector credit for a specified sum will be opened at the nearest mudiria or markaz ; payments from this credit will be made on the signature of the Divisional Inspector. When it is necessary to delegate the power of drawing upon the plague credit to the mudiria Inspector or markaz

101.—On the application of a Divisional Inspector credit for a specified sum will be opened at the named number or numbers; payment from this credit will be made on the signature of the Divisional Inspector. When it is necessary to delegate the power of drawing upon the plague credit to the number Inspector or numbers

Plague Credit.

ITEMS	QUANTITY	REMARKS
1	1	for each person
2	1	for each person
3	1	for each person
4	1	for each person
5	1	for each person
6	1	for each person
7	1	for each person
8	1	for each person
9	1	for each person
10	1	for each person
11	1	for each person
12	1	for each person
13	1	for each person
14	1	for each person
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38	1	for each person
39	1	for each person
40	1	for each person
41	1	for each person
42	1	for each person
43	1	for each person
44	1	for each person
45	1	for each person
46	1	for each person
47	1	for each person
48	1	for each person
49	1	for each person
50	1	for each person

Hospital equipment required for the camp:—
 4 bandages
 4 lances
 6 crowbars for making holes for the spears.
 The instruments required for building the camp.

Medical Officer, information of the fact will invariably be sent to the Mudir or Mamûr by the Divisional Inspector in writing.

Whenever such a credit is opened a copy of the register for plague expenses will be supplied.

Sarrafa. **102.**—Arrangements should be made with the Mudir for the services of a sarraf, who will be required to pay all small accounts daily at such regular time as may be convenient, and to attend at the store each Friday, at such time after midday as may be arranged, to pay all wages and other weekly or fortnightly accounts. On the recommendation of the Inspector the sarraf may make application to the Mudir for authorization to receive payment for his services.

Payments. **103.**—All payments must be made through the mudiria or markaz, except in cases of compensation for small breakages, destruction of bedding, etc., or rewards for information.

All istimaras, before being sent to the mudiria or markaz for verification and payment, must be numbered, signed, and the total entered in the register.

Cash advance to Inspectors. **104.**—In order to make petty and urgent payments of the nature mentioned in para. 103, the mudiria or markaz is authorized to advance any sum not exceeding L.E. 10 in cash to the Inspector. This

Medical Officer, information of the fact will immediately be sent to the Minder or Minder by the Divisional Inspector in writing.

Whenever such a credit is opened a copy of the register for plague expenses will be supplied.

102.—Arrangements should be made with the Minder for the services of a cart, who will be required to pay all small accounts daily at such regular time as may be convenient, and to attend at the store each Friday at such time after midday as may be arranged, to pay all wages and other weekly or fortnightly accounts. To the recommendation of the Inspector the Minder may make application to the Minder for authorization to receive payment for his services.

103.—All payments must be made through the Minder or Minder, except in cases of compensation for small damages, destruction of bedding, etc., or rewards for information. All estimates, before being sent to the Minder or Minder for verification and payment, must be countersigned, signed, and the total entered in the register.

104.—In order to make petty cash advances, and urgent payments of the nature mentioned in para. 103, the Minder or Minder is authorized to advance any sum not exceeding Rs. 10, or such to the Inspector. This

amount or any portion of it is renewable on production of receipts vouching for the expenditure incurred.

In the case of rewards for information no receipt is required, but a voucher should be made out for the amount, headed "Rewards for notification," and signed by the Inspector.

Inspectors are reminded that all cash advances are debited to them personally in the mudiria books and that they will be required to make good any sum not properly vouched for.

Wages account. 105.—Every Thursday, or alternate Thursday afternoon, the clerk will make up the wages account for the week or fortnight on Form No. 64 C.G., showing the names of the workmen, by gangs if possible, the number of days each man has worked, rate per day, deductions, and total.

This will be checked by the Inspector, numbered, signed, and the total entered in the Register for plague expenses under the heading "Pay of disinfecting gangs" or "Pay of other agents." The account will then be passed to the mudiria or markaz for verification of the figures, and payment will be made by the sarraf at the Store next day.

It is advisable to pay the wages every week. In exceptional cases the wages of workmen may, on the presentation of wages sheets approved by the Inspector concerned, be checked at the mudiria or governorate and paid out at once, either to the person delegated by the Inspector or to a cashier from the mudiria or

amount or any portion of it is renewable on production of receipts vouching for the expenditures incurred.

In the case of rewards for information no receipt is required, but a voucher should be made out for the amount awarded "Rewards for information," and signed by the Inspector.

Inspectors are reminded that all cash advances are debited to them personally in the monthly books and that they will be required to make good any sum not properly vouched for.

Wages account. 105.—Every Thursday, or other

date Thursday afternoon, the clerk will make up the wages account for the week or fortnight on Form No. 41 (G), showing the names of the workmen, by gangs if possible, the number of days each man has worked, rate per day, deductions

This will be checked by the Inspector, numbered, and the total entered in the Register for wages expenses under the heading "Pay of disinterested gangs" or "Pay of other gangs." The account will then be passed to the auditor or auditor for verification of the figures, and payment will be made by the bank at the close of next day.

It is desirable to pay the wages every week. In exceptional cases the wages of workmen may, on the presentation of wages sheets approved by the Inspector, be checked at the auditor or government and paid out at once, either to the person delegated by the Inspector or to a cashier from the ranks of

governorate, who will distribute the wages among the workmen and return the sheets signed by them to the mudiria or governorate concerned with the least possible delay.

Food account. **106.**—The food account for the week or fortnight will also be made up on Thursday afternoon from the requisitions filed in the office. It will be checked by the Inspector, numbered, signed, the total entered in the register of plague expenses under the heading “Food,” passed to the mudiria or markaz for verification, and payment will be made by the sarraf at the Store next day.

It is advisable to pay this account weekly.

Other accounts. **107.**—All other accounts should be presented at the office on the day on which the debts are contracted. They should be checked on the same evening by the Inspector, numbered, signed, and the totals entered in the register of plague expenses under their proper headings. They should then be passed to the mudiria or markaz for verification of the figures and payment next day at the Store.

Method of entering in register. **108.**—It will be seen that each account passed for payment will bear a serial number.

Entries in the register will be made under the following headings:—

Pay of disinfecting gangs.

Pay of other agents.

Government who will distribute the ways among the
workmen and return the sheets signed by them to the
auditor or Government concerned with the least
possible delay.

Food account. 106.—The food account for the
week or fortnight will also be made
up on Thursday afternoon from the requisitions filed
in the office. It will be checked by the Inspector,
numbered, signed, the total entered in the register of
expenses under the heading "Food," passed to
the auditor or marks for verification, and payment
will be made by the start of the store next day.
It is advisable to pay this account weekly.

Other accounts. 107.—All other accounts should
be presented at the office on the
day on which the bills are contracted. They should
be checked on the same evening by the Inspector,
numbered, signed, and the totals entered in the register
of expenses under their proper headings. They
should then be passed to the auditor or marks for
verification of the figures and payment next day at the
store.

Method of entering in register. 108.—It will be seen that each
account passed for payment will
bear a serial number.
Entries in the register will be
made under the following headings—
Exp of discharging gangs
Exp of other agents

Transport and riding allowances.
 Materials.
 Rewards for notification.
 Indemnity for objects destroyed.
 Food.
 Rent.
 Sundries.

The expenditure account will thus take the following form :—

Date of Approval.	NATURE OF EXPENDITURE.	No. of Receipt.	Amount.		REMARKS.
			L.E.	Mill.	
1906					
June 1	Wages of disinfecting gangs	No. 9	15	150	
„ 1	Wages of other agents ...	„ 10	3	280	
„ 1	Food	„ 11	2	120	
„ 2	Materials	„ 12	—	500	
„ 3	Materials	„ 13	—	250	
„ 5	Reward for notification ...	„ 14	—	200	Paid personally.
	June 6. Expenditure to date.		21	500	
	<i>Signed.</i>				
	٦ يونيو المنصرف لغاية تاريخه (الامضاء)		٢١	٥٠٠	
	مشال مهمات	١٥ غمرة	٠٠	٣٥٠	

Should it be necessary to transfer the account to an Inspector who desires to keep the register in Arabic, the account should be closed as above, the amount of

Transport and riding allowances.
 Materials.
 Allowances for non-attendance.
 Indemnity for objects destroyed.
 Food.
 Rent.
 Sundries.

The expenditure account will thus take the following

Particulars	Amount		Particulars	Amount	
	Rs.	P.		Rs.	P.
Salaries & allowances	100	00	Salaries & allowances	100	00
Transport & riding	10	00	Transport & riding	10	00
Materials	5	00	Materials	5	00
Non-attendance	2	00	Non-attendance	2	00
Indemnity	1	00	Indemnity	1	00
Food	1	00	Food	1	00
Rent	1	00	Rent	1	00
Sundries	1	00	Sundries	1	00
Total	121	00	Total	121	00

It should be necessary to transfer the amount to the account who desires to keep the register in Arabic. The account should be placed as above, the amount of

expenditure to date entered in the figures of both languages, and the register should be signed by both parties to the transfer.

At the end of an epidemic in a locality the register will be returned to headquarters.

No special plague allowances may be granted to officials of this or any other Department without previous approval from headquarters. The following plague allowances are given as a guide:—

Sheikh of the quarter, when actually employed on plague duty, from P.T. 50 to 150 a month, according to the importance of the work.

Police Officers or Moawinin Idara, when specially detailed, from P.T. 11 to 20 a day.

Sarrafs, P.T. 5 a day.

Barbers, when specially employed, not exceeding P.T. 5 a day. This payment must not be made to barbers already receiving monthly pay for prophylactic measures.

Policemen acting as guards in camps or on disinfection duty, P.T. 2 a day.

The Police Officer concerned will submit a list of policemen employed on such duty to the Divisional or Mudiria Public Health Inspector in charge, who, after verifying the list to see that the police have been actually employed on plague work, will approve the list and pass for payment to the Mudiria.

An istimara will be made out monthly for the above allowances and forwarded to headquarters; the payment, when approved, will be made from the local plague credit.

condition to date entered in the figures of both
figures, and the register should be signed by both
parties to the transfer.

At the end of an epidemic in a locality the register
shall be returned to headquarters.

No special hygiene allowances may be granted to
the staff of this or any other Department without
previous approval from headquarters. The following
hygiene allowances are given as a guide:—

Staff of the quarter who are regularly employed on
duty from P.M. 5 to 10 a month, according
to the importance of the work.

Police Officers or Moslem men when specially
employed from P.M. 11 to 20 a day.

8 weeks P.M. 5 a day.

Staff when specially employed, not exceeding
P.M. 5 a day. This payment must not be made to
those already receiving monthly pay for prophylactic
work.

Police men acting as guards in camps or on disin-
fection duty P.M. 2 a day.

The Police Officer concerned will submit a list of
persons employed on such duty to the Divisional
Medical Officer Public Health Inspector in charge, who
on verifying the list to see that the police have
not actually employed on hygiene work, will approve
the list and pass for payment to the Medical Officer.

A list of names will be made out monthly for the above
allowances and forwarded to headquarters; the
amount when approved will be made from the local
fund.

Temporary disinfectors or raïses appointed locally or sent from the Central Administration are considered to be on daily wages. Their names should be entered in the Workmen's Register and their wages should be paid out of the local plague credit at the end of each week or fortnight.

This does not apply to disinfectors, raïses, or men permanently attached to the mudiria disinfection stations who will be paid in the ordinary way. No advances of pay will be allowed for any reason.

Unserviceable articles. **109.**—During the course of disinfection articles which become temporarily unserviceable, such as watering-pots, should be repaired locally. Worn out articles, such as watering-pots, pails, mats, etc., which cannot be repaired, should be broken up, burnt if possible, and struck off charge in the Ledger of Receipts and Issues.

Equipment statement. **110.**—At the end of a general disinfection an equipment statement should be prepared under the following heads :—

Article—No. received from headquarters.—No. purchased locally—Total—Destroyed as unserviceable—Remaining.—This equipment statement should be forwarded to the Central Administration.

All baskets used during disinfection and mats used in hospitals should be burnt.

Temporary disintegrators or raiser appointed locally
to sent from the Central Administration are con-
sidered to be on daily wages. Their names should be
entered in the Workmen's Register and their wages
should be paid out of the local plant credit at the
end of each week or fortnight.

This does not apply to disintegrators, raiser, or mill
generally attached to the rubber disintegration
stations who will be paid in the ordinary way. No
advances of pay will be allowed for any reason.

Unserviceable articles
109.—During the course of
disintegration articles which become
temporarily unserviceable, such as
watering-pots should be repaired locally. Worn out
articles, such as watering-pots, pails, mats, etc., which
cannot be repaired should be broken up, burnt if
possible, and stock off charge in the ledger of
Receipts and Issues.

Equipment
110.—At the end of a general
statement, disintegration an equipment state-
ment should be prepared under

the following heads:—
Articles—No. received from Headquarters—No.
purchased locally—Total—Destroyed as unserviceable
—Remaining.—This equipment statement should be
forwarded to the Central Administration.
All baskets used during disintegration and mats used
in hospitals should be burnt.

**Dismantling
temporary
hospitals.**

111.—Temporary Hospitals built of mats, reeds, or durra - stalks (bûs) should be taken down, the wooden supports thoroughly disinfected with sublimate solution, and the mats, reeds, or durra-stalks burnt on the site of the hut so as to disinfect the floor. It is advisable to rake up the floor to the depth of three inches before making the fire.

After the wooden supports have been properly disinfected and dried they should be tied together hut by hut and returned to the Mudiria Store.

All mats which have been used in Plague Hospitals should be burnt.

Tents used as Plague Hospitals should be disinfected with sublimate solution and laid inside outwards in the sunlight for three days.

All articles must be thoroughly disinfected before being returned to the Mudiria or Central Stores, and no articles should be returned which are not in a serviceable condition.

Cleaning
Temporary
Hospitals.

111. Temporary Hospitals built
of mats, reeds or durt-stalks
(b) should be taken down, the
wooden supports thoroughly disinfected with sublimate
solution, and the mats, reeds or durt-stalks burnt
in the sun or the put so as to disinfect the floor. It
is advisable to rake up the floor to the depth of
three inches before making the fire.

After the wooden supports have been properly
disinfected washed they should be tied together and
by put and returned to the Medical Store.
All mats which have been used in Tents Hospitals
should be burnt.

Tents used as Tents Hospitals should be disinfected
with sublimate solution and laid inside outwards in
the sunlight for three days.

All articles must be thoroughly disinfected before
being returned to the Medical or General Stores, and
no articles should be returned which are not in a ser-
viceable condition.

Decree of 27th May 1899.

ARTICLE 1.

When a town or village or part of a town is declared by the Public Health Department infected with plague or cholera, the Public Health authorities have the right to make an inspection in every house or apartment to see if any cases of the said maladies are hidden there. The persons who are in the house or apartment are obliged to facilitate this inspection.

When it is necessary to enter the house of a foreigner or to carry out therein any of the measures prescribed by the articles which follow, the Public Health authority shall give previous information of the hour of the visit to the Consulate concerned in order that a representative may be present if thought necessary.

If no representative of the consular authority exists in the town or village in which the case occurs, and if there is danger in delay, the visit may be made as a special case, but the consular authority must be immediately advised of it.

ART. 2.

Any person suffering from one of the said infectious maladies in conditions not permitting of proper isolation, will be transported to the Hospital erected for the treatment of infectious diseases, unless the Public Health Inspector is of opinion that the transport will do him harm.

Article 1.

When a town or village or part of a town is declared by the Public Health Department infected with plague or cholera, the Public Health authorities have the right to make an inspection in every house or apartment to see if any cases of the said maladies are hidden there. The persons who are in the house or apartment are obliged to facilitate this inspection.

When it is necessary to enter the house of a foreigner or to carry out therein any of the measures prescribed by the articles which follow, the Public Health authority shall give previous intimation of the hour of the visit to the Consulate concerned in order that a representative may be present if thought necessary.

If no representative of the consular authority exists in the town or village in which the case occurs, and if there is danger in delay, the visit may be made as a special case, but the consular authority must be immediately advised of it.

Art. 2.

Any person suffering from one of the said infections contained in conditions not permitting of proper isolation will be transported to the Hospital erected for the treatment of infectious diseases, unless the Public Health Inspector is of opinion that the transport will do him harm.

ART. 3.

If the patient is attended at home the Public Health authority will take the necessary steps to isolate him and his attendants from the other inhabitants of the house and will exercise to this end a strict superintendence.

ART. 4.

If the Public Health authorities think it of use to isolate for a certain time under tents or shelters, away from the houses, the family or relatives of a person suffering from one of the said infectious diseases, these persons must submit to this measure without any opposition.

ART. 5.

It is absolutely forbidden to take away a person suffering from one of the said infectious diseases from one village to another, or from one house to another, or to assist directly or indirectly in such removal.

ART. 6.

The inhabitants of a house in which a case of one of the said infectious diseases shall have occurred are required to cause to be disinfected all rooms, places, bedding, clothing, linen, which in the opinion of the Public Health authorities ought to be disinfected.

The disinfection will be done under the superintendence of the agents of the Public Health authority, which, in case of delay or negligence on the part of

Art. 3.

If the patient is attended at home the Public Health authority will take the necessary steps to isolate him and his attendants from the other inhabitants of the house and will exercise to this end a strict supervision.

Art. 4.

If the Public Health authorities think it of use to isolate for a certain time under tents or shelters away from the houses, the family or relatives of a person suffering from one of the said infectious diseases, these persons must submit to this measure without any opposition.

Art. 5.

It is absolutely forbidden to take away a person suffering from one of the said infectious diseases from one village to another or from one house to another or to assist directly or indirectly in such removal.

Art. 6.

The inhabitants of a house in which a case of one of the said infectious diseases shall have occurred are required to cause to be disinfected all rooms, passages, bedding, clothing, linen, which in the opinion of the Public Health authorities ought to be disinfected. The disinfection will be done under the supervision of the agents of the Public Health authority, which in case of delay or negligence on the part of

those whose duty it is, can proceed with the disinfection itself on their account and at their expense.

Disinfection is done gratuitously for the poor by the Public Health authority.

(Note.—All disinfection is now performed gratis.)

ART. 7.

In case of a death from one of the said infectious diseases occurring in a house, all the precautions for disinfection of the body ordered by the Public Health authorities will be immediately taken under the superintendence of the agents of the Public Health authority, which in case of delay or negligence may itself proceed with the disinfection on the account and at the expense of the members of the family on whom the obligation rests.

ART. 8.

The inhabitants of a house in which a case of the said infectious diseases occurs, the neighbours and those who come to know about it are obliged to report it without delay to the nearest Public Health authority.

ART. 9.

The Police will take care that no assembly of the family, friends, or acquaintances be held in the interior of infected houses and they can interfere to break up such assembly.

ART. 10.

Penalty : Imprisonment, 24 hours to 1 week.
Fine, 5 to 100 P.T. or both.

those whose duty it is, and proceed with the disinfection
 itself on their account and at their expense.
 Disinfection is done gratuitously for the poor by
 the Public Health authority.
 (Note—All disinfection is now performed gratis.)

Art. 7.

In case of a death from one of the said infectious
 diseases occurring in a house, all the precautions for
 disinfection of the body ordered by the Public Health
 authorities will be immediately taken under the super-
 intendance of the agents of the Public Health authority,
 which in case of delay or negligence may itself proceed
 with the disinfection on the account and at the expense
 of the members of the family on whom the obligation
 rests.

Art. 8.

The inhabitants of a house in which a case of the said
 infectious disease occurs, the neighbours and those
 who come to know about it are obliged to report it
 without delay to the nearest Public Health authority.

Art. 9.

The Police will take care that no assembly of the
 family, friends or acquaintances be held in the interior
 of infected houses and that an attempt be made to break up
 such assembly.

Art. 10.

Penalty: Imprisonment 24 hours to 3 months.
 £100 to 1000 T. or less.

ART. 11.

Previous Decrees remain in force in so far as they are not contrary to the present.

Law No. 3 of 1911.

ARTICLE 1.

Is added, to the Decree of 27th May 1899, after Art. 9, the following :—

ART. 9 *bis*.—The Administration of Public Health may, in the interest of the public health, cause administrative closure of market places, cattle markets, and other public markets held periodically which serve towns or villages where a case of true or suspected plague or cholera has been reported.

ART. 11.

Previous Decrees remain in force in so far as they are not contrary to the present.

Law No. 3 of 1911.

ARTICLE I.

Is added to the Decree of 27th May 1898, after

Article, the following:—

ART. 11a.—The Administration of Public Health
has, in the interest of the public health, cause
administrative closure of market places, cattle markets,
and other public markets held periodically which
serve towns or villages where a case of time or sus-
pected typhus or cholera has been reported.

**Arrêté of the Minister of Interior
of 26th June 1901.**

ARTICLE 1.

The Inspectors of the Public Health Department are authorized to cause to be disinfected by their agents all the houses or apartments which they consider necessary in the interest of the public health in towns or villages where cases of plague may have been reported by the Public Health Department.

ART. 2.

In case of refusal or of resistance on the part of persons residing in the house or apartment, the agent charged with the disinfection shall bring the fact to the knowledge of the doctor of the locality who shall proceed to the place and in his presence and under his uninterrupted superintendence shall cause the door or doors to be opened, by force if necessary, and the operations of disinfection to be proceeded with, making a procès-verbal of all the circumstances.

ART. 3.

In case of absence of the persons residing in the house or apartment, opening shall not be proceeded with until after the Police office has been advised of the matter.

Article of the Minister of Interior
of 26th June 1901.

Article 1.

The Inspectors of the Public Health Department are authorized to cause to be disinfectated by their agents all the houses or apartments which they consider necessary in the interest of the public health in towns or villages where cases of plague may have been reported to the Public Health Department.

ART. 2.

In case of refusal or of resistance on the part of persons residing in the house or apartment, the agent charged with the disinfection shall bring the fact to the knowledge of the doctor of the locality who shall proceed to the place and in his presence and under his interrupted superintendance shall cause the doors or doors to be opened, by force if necessary, and the operations of disinfection to be proceeded with, making a procès-verbal of all the circumstances.

ART. 3.

In case of absence of the persons residing in the house or apartment, opening shall not be proceeded with until after the Police office has been advised of the matter.

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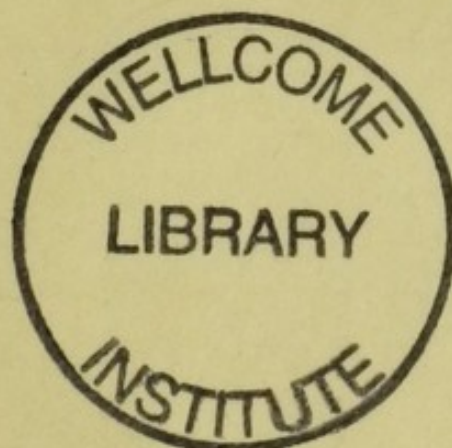
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