[L. & M.
300—16-5-99.]

Local & Munl. (1899) Department.

Plague.

PRINTED.

G.O., No. 852

DATED 3-6-99.
Dpd. 10. 8. 99

Pres.
Please show proof
8/6

[Despatch Abstract.]

Disinfection with perchloride of mercury

Communicating to all Collectors Sanitary Commissioner's letter ~~regarding~~ recommending certain methods of applying the perchloride solution to the walls of infected houses.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
P.C	308	d/1-2-99					
"	570	d/1-3-99					

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
C.Mo	1600	P [illegible]					

Government (1899) of Madras.

LOCAL AND MUNICIPAL.

Recd. } 1899. *Enclosures*
Regd. *Spare copies*

G.O., No. 852 P., 3rd June 1899.

JUNE.

Disinfection with Perchloride of Mercury.

Communicating to all Collectors Sanitary Commissioner's letter recommending certain methods of applying the perchloride solution to the walls of infected houses.

No. 852 P., 3rd June 1899.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

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Adverting to the correspondence ending with your No. 927/S., dated 18th March 1899, I have the honour to request you to be so good as to suggest some practicable method of applying perchloride to the walls of houses.

2. In the case of large towns within easy communication by rail and in which much disinfection work has to be done, I am of opinion that the machine designed by you and recently on trial at Vellore, will, with a few minor improvements suggested by experience, work most easily and effectually.

3. But such a machine cannot be provided for use in the remoter villages or for scattered imported cases in towns, in which plague has not become indigenous. In such cases the disinfectant may be applied—

(*a*) by spraying with a Chinese pump ;
(*b*) by throwing from an earthenware lotah ;
(*c*) by watering with cans.

You object to the latter method on account of the action of the metal on the disinfectant and also because you fear that the workmen may dash the water on, not using the "rose," but holding the cans by the spout. The latter objection applies also to (*b*). Chinese pumps are theoretically perfect, but in practice they have been found defective. They have been constantly condemned by Collectors as useless, because the workmen cannot or will not learn how to use them, and they soon get out of order. You yourself have admitted in paragraph 5 of your No. 250/S., dated 23rd January 1899, some of the difficulties in working them, but the greatest objection is that even under careful supervision they so soon get out of order. Then the workmen take to dashing the perchloride on with lotahs. I have always found that the workmen readily use the watering cans in the way they should be used. I admit they do not apply the solution with the force the new pump does, but they do not get out of order in the same way, and are consequently of the greatest practical use as a means of application. But at the same time the cans used of course are liable to affect the disinfectant if it is allowed to stand in them for any time. Could not the cans be treated in some way to avoid this, or made of some material which will not act upon the perchloride? I believe earthenware cans with "roses" are made in Ganjám and will ask the Collector if he can send a few samples.

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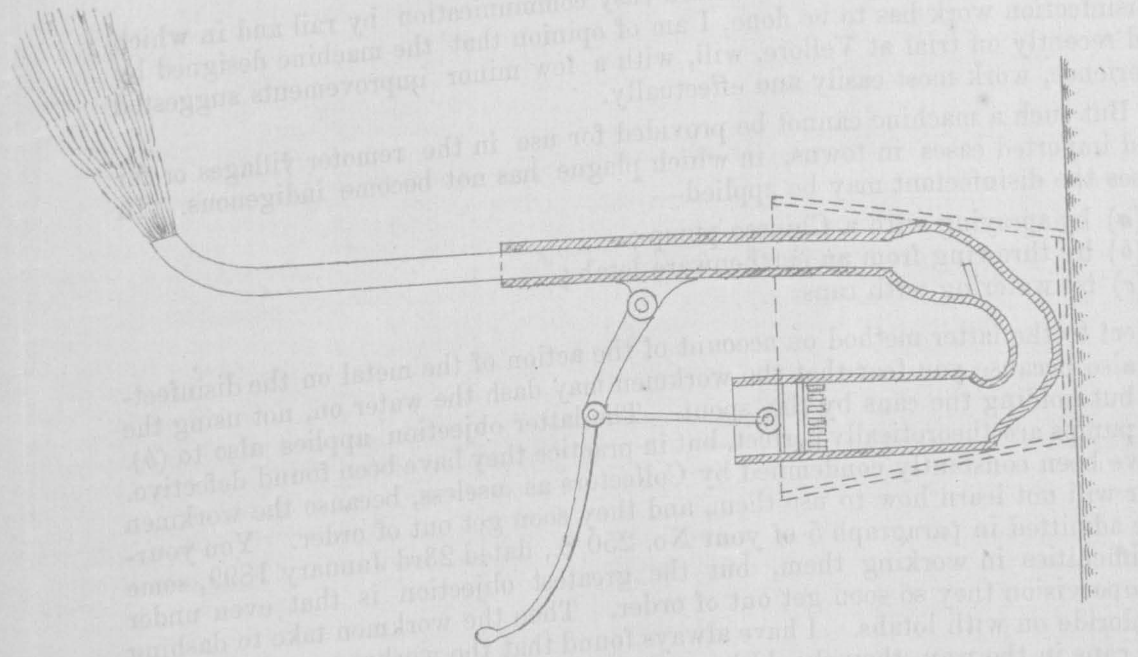

Litho., Survey Office, Madras
1899.

Reg: No. 5052
Copies 305

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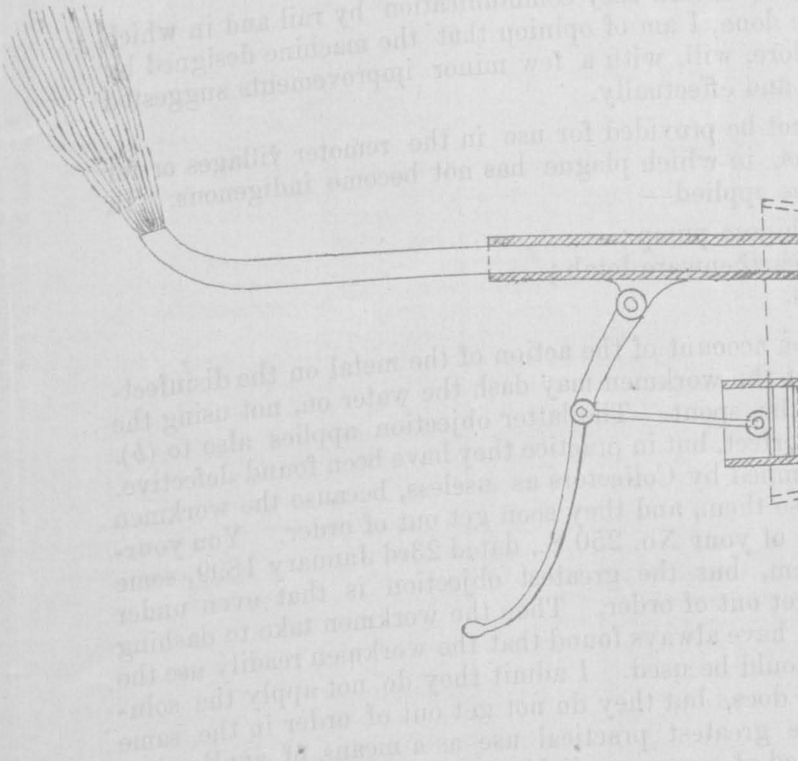
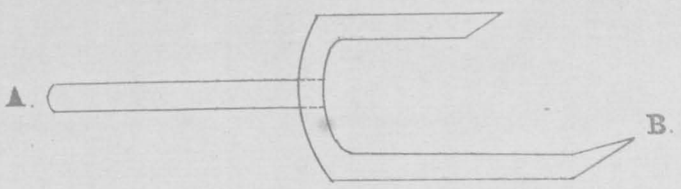


Litho., Survey Office, Madras
1899.

Reg: No. 5052
Copies 305

the workmen readil



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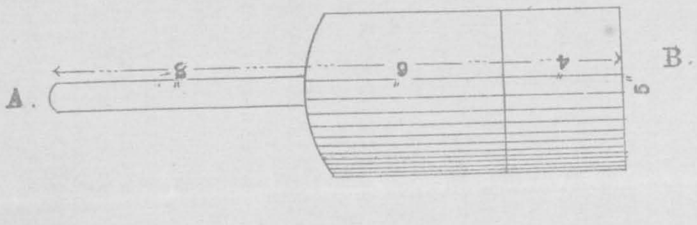
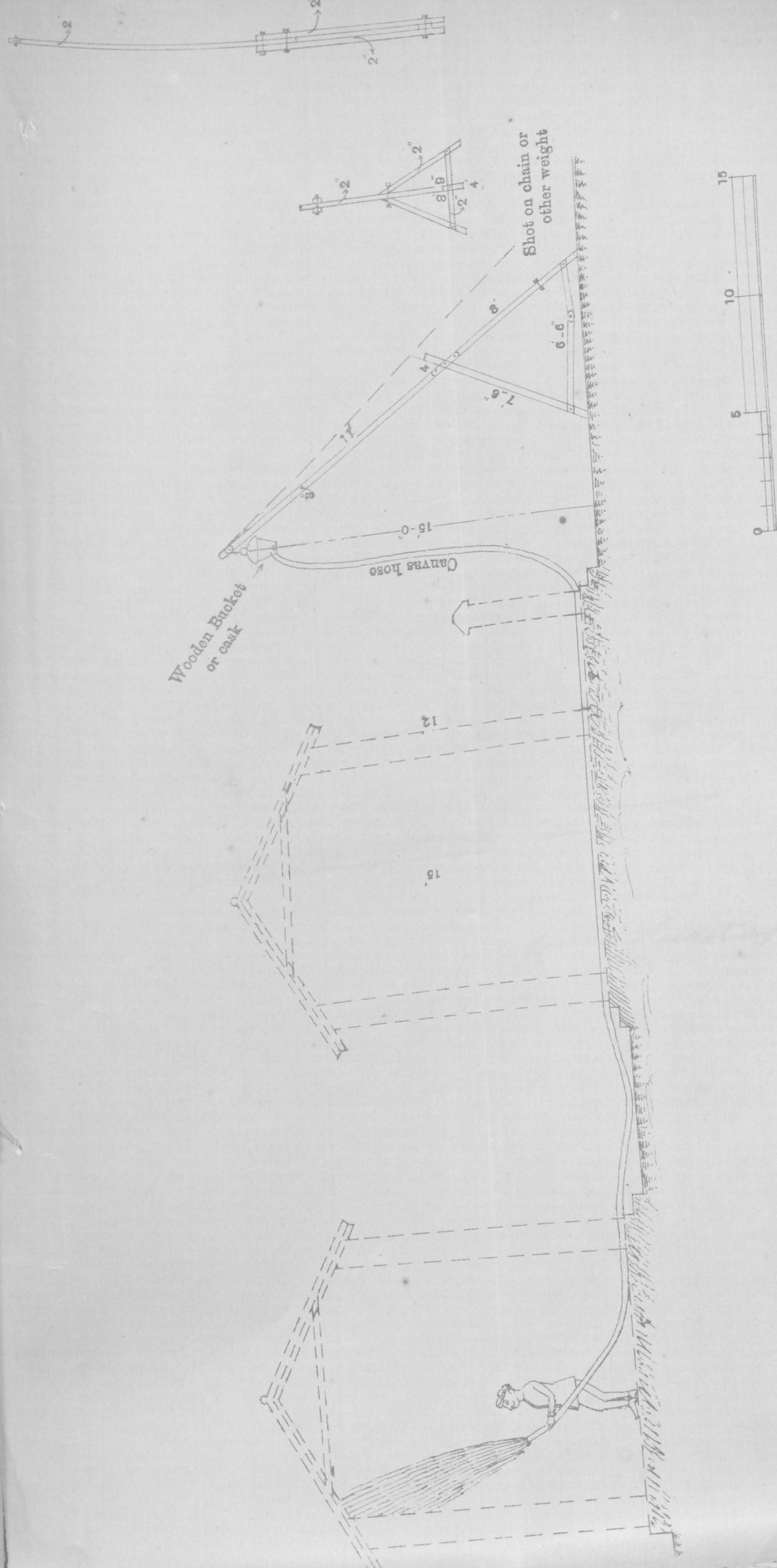


The disinfection scoop

Reg: No. 5053
Copies_305

Litho., Survey Office, Madras
. 1899.

Reg: No. 5051
Copies 305



Litho., Survey Office, Madras
1899.

Reg: No. 5051
Copies 305

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Order—No. 852 P., dated 3rd June 1899.

Colonel King's letter will be communicated to all Collectors for information. The recommendations of the Sanitary Commissioner should be adopted as far as circumstances permit.

(True Extract.)

~~M. HAMMICK,~~
~~Ag. Secretary to Government.~~

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To all Collectors (A, B, F, G, H).
" the Sanitary Commissioner.
" the Surgeon-General.
" the President, Municipal Commission, Madras.

Exd. A. F. Eccleston.

BACK PAPERS.

SANITARY COMMISSIONER WITH THE GOVERNMENT OF MADRAS
Register No. 2690-S
8 - JUN 99

480—21-4-99.

No................ Office of Sanitary Commissioner,
Madras, 15. 7. 1899

Sir,

I forward herewith proof of diagrams of disinfecting apparatus which I had printed at the Revenue Survey office. I request you will kindly inform him of the number of copies you may require of them so that he may cause them to be struck off and sent to you direct.

P. C.
15 JUL 1899

Yours truly,

W. Balasundaram
Manager and Assistant,
Office of Sanitary Commissioner.

To

The Plague Assistant,
with G.O. NO.852 P dated 3rd June 1899
and connected papers.

---

of Madras.

UNICIPAL.

~~Please send proof to Survey~~

Forwarded to the Sanitary Comr for favour of getting the diagrams printed & checked.
7/6/99

ures

copies

3rd June 1899.

JUNE.

Please send clean proof with diagrams, proof copies of which are enclosed
15/7/99

Disinfection with Perchloride of Mercury.

Communicating to all Collectors, Sanitary Commissioner's letter recommending certain methods of applying the perchloride solution to the walls of infected houses.

BACK PAPERS

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Register 2690-S
8 - JUN. 99

Government (1899) of Madras.

LOCAL AND MUNICIPAL.

~~Please send proof to [illegible]~~

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M. S. Mascarenhas
7/6/99

Recd. Regd.	1899.	Enclosures Spare copies

G.O., No. 852 P., 3rd June 1899.

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Register No. 269a-5
8-JUN. 99
WITH THE GOVERNMENT OF M

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~~Please send proof to Sanitary~~

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*from the "Engineer" Oct 28th 1898

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,, the President, Municipal Commission, Madras. ✓

Dpd H.S. 10.8.99

Exd. A. F. Eccleston.

Proof 6/6

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Exd. A. F. Eccleston.

Code Class 10

INDIAN TELEGRAPHS. Monthly Number.

To (Office) Telephonic		From (Office) Message		
Words	Day. 1	Hour. 13	Minute. 60	Official Instructions.

To (Person) Plague Asst. Govt. Office

From (Person) Manager S. C's Office

The Proof of 852 P is with the S.C who is now at Rajahmundry - I already reminded him of this - I shall also write to day

Submitted for orders. It is 12th July i.e. more than one month and yet no thing is heard about the proof

E 12/7/99

LN.	Sent to	LN.	
Mts. by	At Hrs. Mts. by		Telegraph Master.

–8 12 97–2000000

F. C 2.

, the Surg
, the President, Munic

Exd. A. F. Eccleston.

1,000—7-2-99.

NOTE FOR THE

from
The Special Plague
Assistant
Govt office

To The Manager,
Sanitary Commr Office

Will you please reply to my messages of 21st & 26th June regarding proof of G. O. No 852 P.

N. S. Mascarenhas
1/7/99

(To be returned after despatch)

13.34
1-7-99.

despatch

TELEGRAPHS. Monthly Number.

From (Office) Message

Official Instructions

From (Person) Manager S. C. Office

Message Tomorrow

, L & M Dept
Comr.

n the proof of
dated 3rd June 99
on the 7th June 99
regarding diagrams.

N. S. Mascarenhas
13/7/99
For Secretary to Govt

returned)

LN.

by

Telegraph Master.

F. C 2.

,, the
,, the President, Munic

Exd. A. F. Eccleston.

1,000—29-3-99.

NOTE FOR THE P.A.

The G.O. is not yet received back nor the manager replied to the two messages as to what has been done

G
1/7/88.

taken on G.O 862 P sent to the Sanitary Commissioner on the 7th insts for getting the diagrams printed and when it may be expected back for issue

N S Makarenhas
26/6/88
Special Plague Asstt

G
26/6/88.

D/
14-4
26.6.99.

(To be returned after despatch)

TELEGRAPHS. Monthly Number.

From (Office) Message

Official Instructions.

From (Person) Manager S. C. Office

Madras Tomorrow

h, L & M Dept
y Comsr.

n the proof of
dated 3rd June 99
on the 7th June 99
y regarding diagrams.

N S Makarenhas
13/7/88
For Secretary to Govt

returned)

I.N.

Rts. by

Telegraph Master.

F C 2.

1,000—28-5-00.

NOTE FOR THE

„ the Surg
„ the President, Munic

Exd. A. F. Eccleston.

Code Class.

INDIAN TELEGRAPHS.

Monthly Number.

To (Office) Telephone			From (Office) Message	
Words	Day 12	Hour 1½	Minute 18	Official Instructions
To (Person) Spl. Plague Asst.			From (Person) Manager S. C. Office	

He will be in Madras Tomorrow

From Secy to Govt, L & M Dept

To Sanitary Comr.

Kindly return the proof of
G.O. No 852 P dated 3rd June 99
Sent to you on the 7th June 99
with a query regarding diagrams.

F.
14-7
13-7-98

N. S. Natesa
13/7/98
For Secretary to Govt

(To be returned)

64 Word Form.

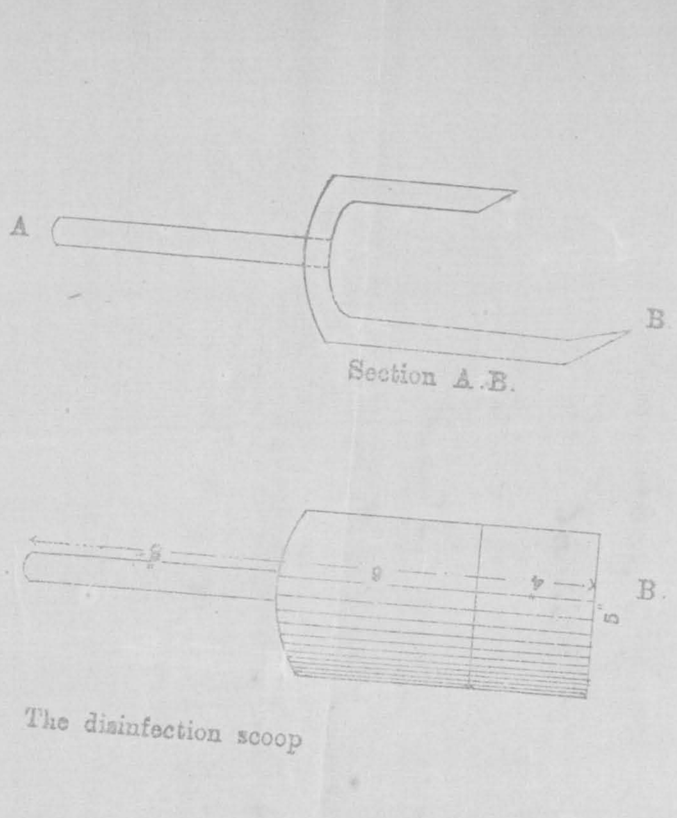
F. C. 2.

om | I.N. | Sent to | I.N.

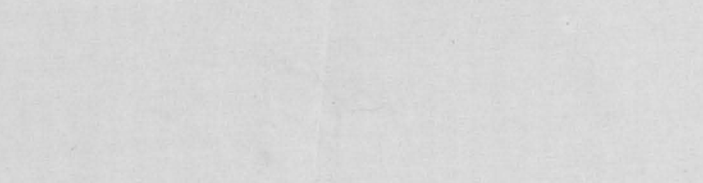
Hrs. Mts. by | At Hrs. Mts. by | Telegraph Master.

No. 258 T—31 8 98—1000,000.

2



Section A.B.

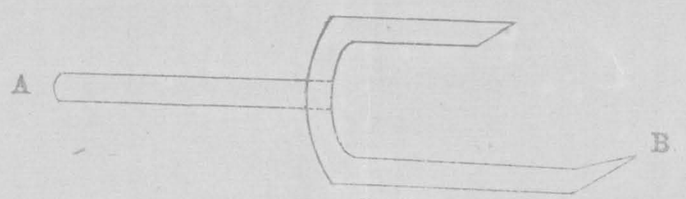


The disinfection scoop

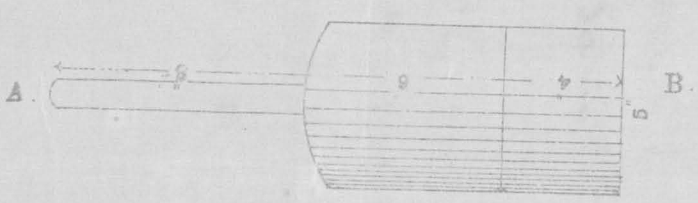
Reg : No. 5053
Copies_305

Litho., Survey Office, Madras
1899.

2



Section A.B.

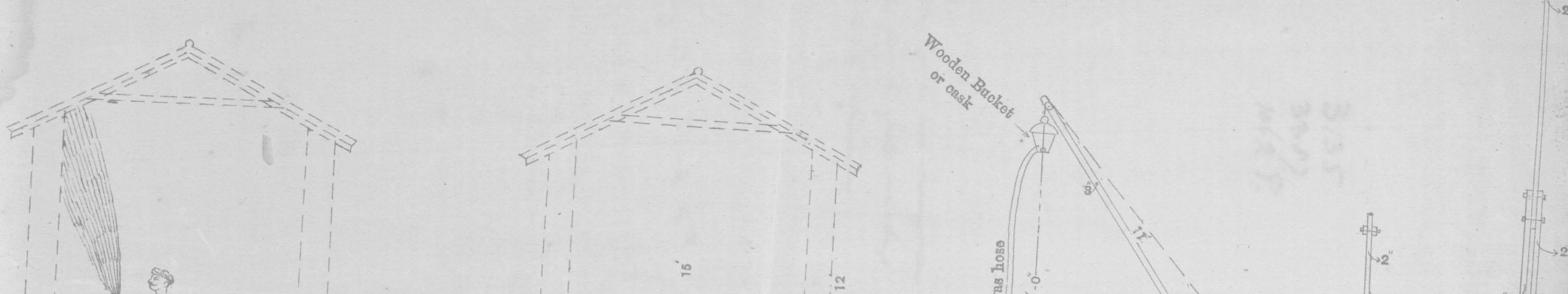


The disinfection scoop

Reg: No. 5053
Copies_305

Litho., Survey Office, Madras
1899.

3



Reg: No. 5051
Copies 305

Litho., Survey Office, Madras
1899.

LOCAL AND MUNICIPAL DEPARTMENT.

Again G.O., No. , dated 189 .

Current No. 3135 of 189 , dated from the

Current No. 3387 of 189 , dated from the
1062 P.

SUBJECT.

Disinfection with perchloride of mercury

FOR ORDERS.

In a letter disposed of ⊗ in P. Cir Procs No 653 d/ 6th March 1899, the Coll. of Bellary authorised the use of the ordinary watering cans in lieu of Chinese pumps when disinfecting houses with perchloride of mercury. The S.C. objected to this on the ground that the perchloride gets reduced & loses its efficacy when used in metallic vessels. The S.C. thereupon asked him to suggest the best mode of ~~using~~ using the perchloride compatible of infection h

10.62 P. illed

Submit

Lufff 3/13 155 M

⊗ not available now, having been put up for the file relating to Observation schemes.

Best way is to print the Correspondence & Communicate to all Colrs. – Mr. Buckley's letter dt. 24th April & Col King's reply

S P.

Its ~~1~~ i. vi 99.

Order No 852 Revenue 83 – 6 – 98 Jornd 6/6

Col King's letter will be Communicated to all Colrs. for information – His recommendations of the San. Commr. sh. be as far as circumstances

All Collrs. (A.B. 7.9 H) ~~31~~ 1. vi 99.

1.14/ 4c Madras

Plague Commissioner's Office

~~Local & Munl.~~ (1899) ~~Department.~~

CURRENT No. 3135

From The Sanitary Commissioner for Madras

~~Prys~~
~~**Order**~~

~~Communicated to the Collr of Bellary~~

No. 841/S

Dated 13-3-99

Received

Registered 14-3-99

P. C. 14 MAR 1899

Enclosures

Spare copies.

Rep on C No 3135 of 99.

Ref made 3135/99
16-3-99

Sir,

1. With refce to your letter No 3057 of 13-3-99 I have the honour to state that as perchloride of mercury acts so quickly on metal as to make the use of metal vessels impossible, I understand that if the perchloride is allowed to stand in metal vessels, the latter will become spoiled, but great care is at present taken to see that cans are not [illegible] required for immediate use.

SUBJECT.

Stating that the use of metallic vessels with perchloride of mercury solution is incompatible

1/3 14/3

~~[illegible]~~ 2o Sanitary Commr

Despd 16/3/99 155

Plague Commissioner's Office

~~Local & Munl~~. (1899) ~~Department~~.

CURRENT No. 3135

From The Sanitary Commissioner for Madras

~~Reys~~
~~**Order**~~

~~Communicated to the Collr of Bellary~~

No. 841/S

Dated 13-3-99

Received

Registered 14-3-99

P.C. 14 MAR 1899

Enclosures

Spare copies.

Ref on C No 3135 of 99.

Ref mclld 3135/99 16-3-99

Sir,

I .. refer to your letter No 5 of 11-3-99 I.. to ask if perchloride of mercury acts so quickly on metal as to make the use of metal vessels impossible.) I understand that if the perchloride is allowed to stand in metal vessels, the [illegible] will become spoiled but great care is at present taken to see that Com are not placed [illegible] required for immediate use.

1. 14/3

2o ~~[illegible]~~ Sanitary Commr

Despd 16/3

SUBJECT.

Stating that the use of metallic vessels with perchl[illegible] of merc[illegible] solution [illegible]

[illegible] Madras

BACK PAPERS.

G.O.	No.	Department.	Date.
Procgs	653	Rē	6-3-99

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Plague

~~2,250—1-4-97.~~

No. 841/S

C No 3185

OFFICE OF SANITARY COMMISSIONER,
Madras ~~Fort St. George~~, 13th March 1899.

From

~~SURGEON~~-LIEUT.-COL. W. G. KING, M.B., C.M., D.P.H.,
SANITARY COMMISSIONER FOR MADRAS,

1P

To

THE Plague Commissioner
Madras

Enclosure.

Hay L

SIR,

With reference to para 7 of the Collector of Bellary's letter Ref: on C No 570 P. dated 26 February 1899 communicated with your Proceedings No 653 dated 6 March 1899, I have the honor to observe that the use of metallic vessels with perchloride of mercury solution is incompatible. Further, I do not believe that with a washing can the walls of a house can be treated efficiently.

I have the honor to be
Sir
Your most obedt Servant
W G King
Lieut Col: IMS
Sanitary Commissioner
for Madra

1,000—7-2-99. C No 3387 of 1899

NOTE ~~FOR THE~~ …ner's Office.

Progs No $\frac{308}{1-2-99}$ which contains the Sany Commr's letter in which he speaks of the possession of a good conscience plus much perseverance & physical strength as being essential to work a chinese pump, is put up.

2. The Sany Commr does not seem to have made any remarks on the "practice of throwing the perchloride of mercury on the walls". His a[illegible] notes [illegible] various places are put up. In one also of them (Flag E) he condemns the practice of distributing perchloride of mercury from "lotahs". In his letter disposed of in Progs $\frac{570}{1-3-99}$ he speaks of the effect of perchloride of mercury on walls. Beyond these, & casual remarks about disinfection in his

[illegible] … seem

899) ~~Department.~~

CURRENT No. 3387

From The Sanitary Commissioner for Madras.

No. $\frac{927}{S}$

Dated 16-3-1899

Received

P. C. 20 MAR 1899

Registered 20-3-99

Enclosures

Spare copies.

SUBJECT.

perchloride + Describing the action of Perchloride of mercury on metals.

in tents, water and St., on methods of applying disinfectants.

P.T.O.

File no other papers.

~~Noted~~
20/4/99

25/4

Plague Commissioner's Office.

~~Local & Munl.~~ (1899) ~~Department.~~

Plague

CURRENT No.

For orders

~~Two Corrects.~~

From The Sanitary Commissioner for Madras.

21/3

Order

Recorded

Copy to all Collrs

21/3/99

No. 927/S

Dated 18-3-1899

Received P. C. 20 MAR. 1899

Registered 20-3-99

Enclosures

Spare copies.

SUBJECT.

Describing the action of Perchloride of mercury on metals.

Please put up the papers in which Col. King admits that perch[loride] is a good disinfectant & [illegible] of eggs. Also any remarks he may have made on the practice of throwing the perchloride into the wells, as has at times been practised in forts. As far as I can make out Lt. Lindeman's all our methods of applying disinfectants.

P.T.O.

4B Ref. on C. No. 3387 [illegible]

Sir,

Adverting to the correspondence ending with yours 927 S d 18.3.99. I h.t.h. to request you to be good as to suggest some practicable method of applying perchloride to the walls of houses.

2. In the case of large towns with long courses of rail, & in which much disinfn work has to be done, I am of opinion that the machine designed by you & recently on trial at Bellary, will, with a few minor improvements suggested by experience, work most easily & effectively.

3. But such a machine cannot be provided for use in the scattered villages or for scattered infected houses in Towns, in which plague has not become epidemic. In such cases the disinfectant may be applied (a) by spraying with a Chinese pump. (b) by throwing from an earthenware chatti. (c) by watering with cans.

You object to the latter method on account of the action of the metal on the disinfectant, & also because you fear that the workmen may ~~[illegible]~~ not bring the rose up to be watered on, holding the cans by the spout. The latter objection applies also to (b). Chinese pumps are theoretically perfect but ~~[illegible]~~ in practice they have been found defective. They have been constantly condemned by the S.C.s as useless, because the workmen cannot or will not learn how to work them, & they get out of order. [illegible] You yourself have admitted the difficulties in working them, but the greater objection is that even under careful supervision they do soon get out of order. Now the workmen take to dashing the perchloride on with chatties. I have always found that the workmen readily ~~[illegible]~~ use the watering cans in the way they should be used. I admit they do not apply the solution with the force that a new pump does, but they do not get out of order in the same way, & are consequently of the greatest practical use as a means of application. But at the same time the [illegible] of course do are liable to affect x

x the disinfectant if it is allowed to stand in them for any time. Cannot the cans be lined in some way to avoid this? or made of some material wh. will not act upon the perchloride? Whether with regard to these cans some are made in Bangalore, I will ask the Coll. if he can send a few samples.

23/4.

To S.C. 25.4.99

i.e. [illegible] 250. S. 1.9.9.

To S.C. Orders to [illegible] Bangalore, [illegible] to send samples of the cans referred to if available.

BACK PAPERS.

~~G.O.~~	No.	Department.	Date.
	3135	Do	16-3-99
Do	683	Do	6-3-99

FURTHER PAPERS.

G.O.	No.	Department.	Date.
	Despd 25-4-99		

Plague

C. No. 3387

[2,000—18-2 98.]

No. 927/S

OFFICE OF SANITARY COMMISSIONER,
~~Fort St. George~~ Madras, 18th March 1899.

From
~~SURGEON~~-LIEUT.-COL. W. G. KING, M.B., C.M., D.P.H.,
SANITARY COMMISSIONER FOR MADRAS,

To
THE Plague Commissioner
Madras

Enclosure.

SIR,

With reference to your letter Ref. on C. No 3135 dated 16th March 1899, I have the honor to state that in my opinion the action of metals in reducing the perchloride of mercury in the presence of free hydrochloric acid may fairly be described as quick. G.E. tin acts decidedly well. I trust you will understand that my solicitude is not on behalf of the tin watering cans, but for the solution used. This should reach the parts to be disinfected of a standard strength. The solution now used is in the proportion of 1-1000. It will therefore be understood that a very little visible

visible reduction means a considerable action.

2. The use of metals may at times be unavoidable. For example, in the disinfecting machine, sent to Vellore the mercurial solution passes over one coupling and the sprayer former. These should properly be of ebonite. The area brought in contact with the solution by a 1" tube is, however, a very different matter to that presented by a watering can of, say, six inches diameter and one foot in height. In Bombay on account of Chinese pumps giving so much trouble, metal pumps were ultimately used; but here an attempt to protect the surface by greasing it was made — a very poor mode. But here again the total area exposed was not much. In the case discussed, however, I see no reason for metal to be employed. In disinfecting floors earthen chatties are always available for flooding — hence watering cans are not necessary in this part of disinfection. When it comes to disinfecting the walls, I think the utility of these cans may well be doubted. It will be impossible to adjust the "roses" so as to attack the walls. What will result is, that the men will use the long spout as a handle to the complete neglect of the "rose", and will "chuck" the solution upwards. The cans will, in fact, become awkward ladles, and will indubitably, by waste of the perchloride solution brought about by this mode of use, be most expensive in the long run.

I have the honor to be
Sir
Your most obedt Servant
W G King
Lieut Col. I.M.S.
Sanitary Commissioner
for Madras

U

Ref. on C. No. 5387

Plague Commissioner's Office,
FORT ST. GEORGE,

Dated 24th April 1899 459

From

L. E. BUCKLEY, Esq., I.C.S.,
PLAGUE COMMISSIONER,

To

The Sanitary Commissioner,
MADRAS.

SIR,

Advertising to the correspondence ending with your No. 927/S dated 18th March 1899, I have the honour to request you to be so good as to suggest some practicable method of applying perchloride to the walls of houses.

2. In the case of large towns within easy communication by rail and in which much disinfection work has to be done, I am of opinion that the machine designed by you and recently on trial at Vellore, will, with a few minor improvements suggested by experience, work most easily and effectually.

3. But such a machine cannot be provided for use in the remote villages or for scattered imported cases in towns, in which plague has not become indigenous. In such cases the disinfectant may be applied:-

(a) by spraying with a chinese pump

(b) by throwing from an earthenware lotah

(c) by watering with cans.

You object to the latter method on account of the action of the ~~method~~ metal on the disinfect~~ion,~~ant and also because you fear that the workmen may dash the water on not using the rose but holding the cans by the spout. The latter objection applies also to (b). Chinese pumps are theoretically perfect but in practice they have been found defective. They have ~~be~~ been constantly condemned by Collectors as useless, because the workmen cannot or will not learn how to use them, and they soon get out of order. You yourself have admitted in para 5 of your No. 250/S dated 23-1-99 some of the difficulties in working them, but the greatest objection is that even under careful supervision they so soon get out of order. Then the workmen take to dashing the perchloride on with lotahs. I have always found that the workmen readily use the watering cans in the way they should be used. I admit they do not apply the solution with the force the new pump does, but they do not get out of order in the same way, and are consequently of the greatest practical use as a means of application. But at the same time the cans used of course are liable to affect the disinfectant if it is allowed to stand in them for any time. Could not the cans be treated in some way to avoid this, or made of some material which will not act upon the perchloride? I believe earthenware cans with roses are made in Ganjam and will ask the Collector if he can send a few samples.

I have the honour to be,
Sir,
Your most obedient servant,

(Sd) L.E. BUCKLEY
~~for~~ Plague Commissioner.

~~Copy to the Collector of Ganjam.~~

R.C.

(True copy)

Ref. on G. No. 3387 dated 24-4-99

Communicated to the Collector of Ganjam who is requested to send samples of the cans referred to if available.

O.C. (Sd) L. Buckley
~~for~~ Plague Commissioner

To
The Collector of Ganjam.

Local & Munl. (1899) Department.

CURRENT No. 1062 P.

Order

From
The Sanitary Commissioner
for Madras.

No. 1501/S

Dated 19th May 1899.
Received }
Registered } P.C. MAY 1899 20-5-99
Enclosures
Spare copies.

SUBJECT.

Submitting remarks with reference to Plague Commissioner's letter asking him to suggest some practicable method of applying perchloride to the walls of houses.

9

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

[400—15-12-98.]

Plague

No. 1501/S

Office of Sanitary Commissioner,
Madras, 19th May 1899.

78

5

From

Lieut.-Colonel W. G. King, M.B., C M., D.P.H., I.M.S.,
Sanitary Commissioner for Madras,

To

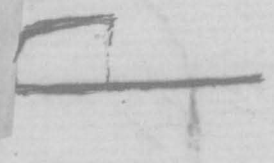
The Secretary to Government,
Local and Municipal Department.

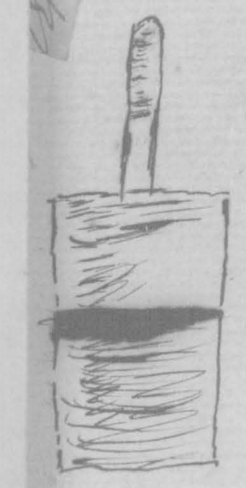
Enclosure.

Sir,

With reference to Plague Commissioner's letter No: REF: on C.No.3387 dated 24th April 1899, I have the honour to state that, in regard to his request as to a method for minimizing the effect of the Perchloride of mercury combined with hydrochloric acid solution upon the metal cans he proposes, the smearing of oil on the metal surface has been used for the purpose indicated. As, however, the oil must be washed off, it is probable that it must act detrimentally, in preventing contact of the watery solution with the walls. It is probable that a coating of paint, protected by thick coat of varnish, would secure the object for several days. When, however, it is remembered that the article once ~~used~~ issued would, when exposing patches of metal, rarely be regarded with care, I am still of opinion that the use of metal vessels should certainly be avoided. Of arrangements for merely dashing the solution against the wall as proposed by him, it is probable that wooden shovels modified by having a half or quarter covering over them something after the style of a coal-scuttle scoop, would suit requirements better than the earthern watering vessels he suggests. Judging by the description of wooden boxes and eating bowls made on the West Coast, I should think that contractors might be secured about ~~Alvgode~~ Olarakot, or by applying to Mr: Brown, Timber Merchant, Calicut.

etch Section

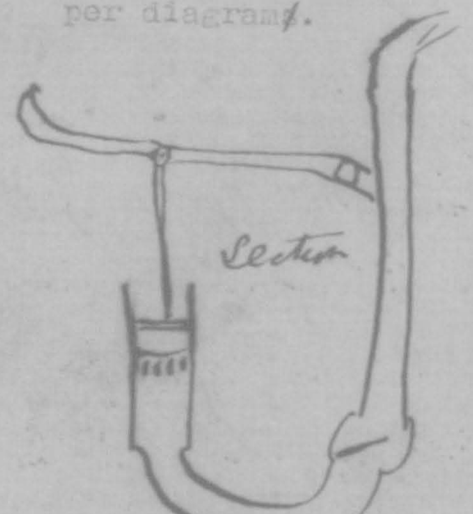




Sketch elevation

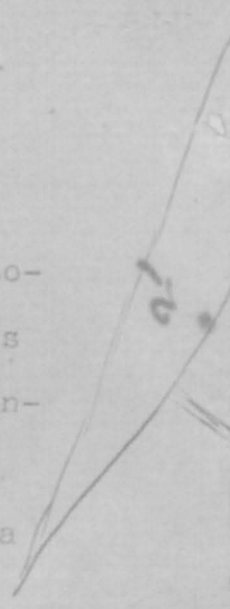
2.

2. It might also be possible to imitate on a smaller scale the " gravitation disinfector " designed by me, it being held in mind that it would be applicable only for houses such as met with in small villages namely-one storied-and with walls not exceeding 13 feet in height. This could be arranged by suspending a bucket provided with a canvas hose upon a frame made of bamboo-closely following the character of the wooden stand commonly used for support of a bicycle. It might further be worth while to experiment with an ancient form of wooden force pump, of which I give a sketch in the margin. It seems to me that this form would be exceedingly simple and little likely to get out of order. It might be adapted to requirements, by placing within it a bucket as per diagram.

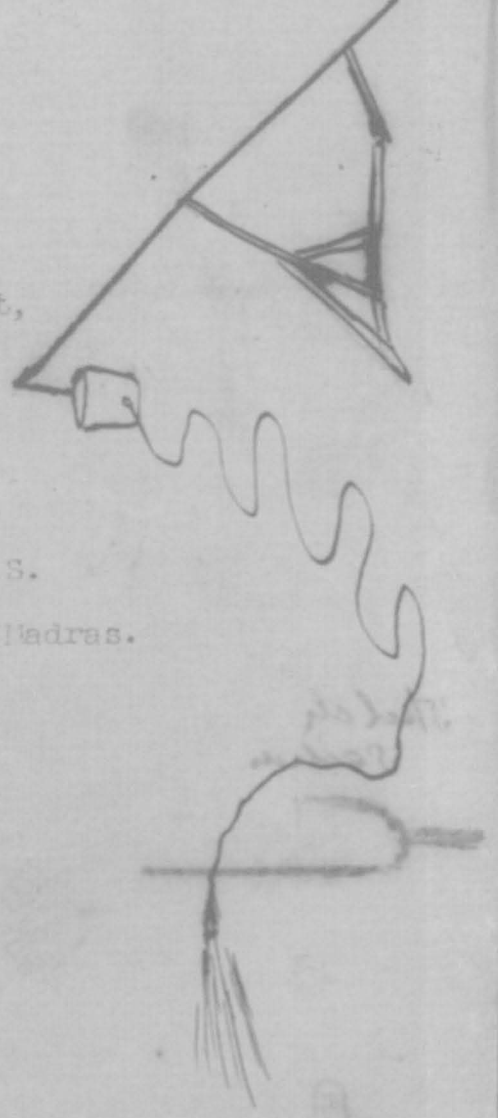


(From "the Engineer" Oct 25)

Modification suggested.



& to be weighted with round shot [illegible]



I have the honour to be,

Sir,

Your Most Obedient Servant,

M.B.,C.M.,D.P.H.,

Lieut-Colonel, I.M.S.

Sanitary Commissioner for Madras.

---

copy sent to Press.

ed for signature.

ed in print.

Number of copies required. { Order complete. / Letter only. / Order complete with Letter.

G.O., No. , dated

189

9

— P.C.'s Ref. on C. No. 3387 d/ 24-4-99 — A

rent No. 1062 P ——— A

closures to C. No.

der of Government .. .. ..

ter of Government.

ent with ditto.

s not filled up, being meant for despatch in original.

N.B.—

A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

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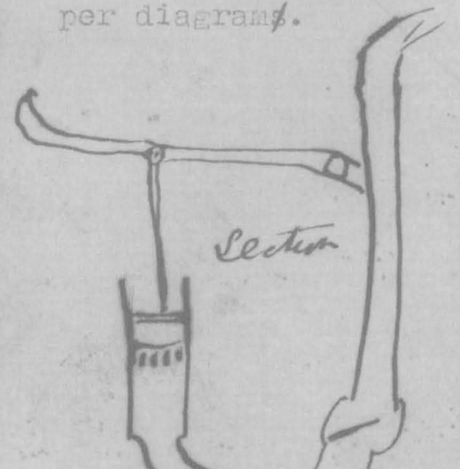
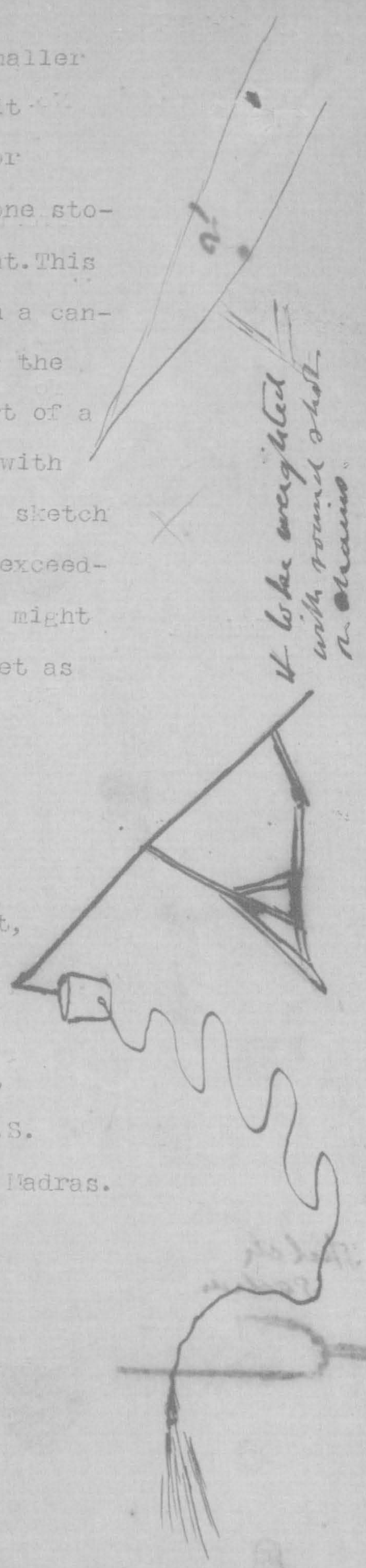
2. It might also be possible to imitate on a smaller scale the " gravitation disinfector " designed by me, it being held in mind that it would be applicable only for houses such as met with in ~~the~~ small villages namely-one storied-and with ~~the~~ walls not exceeding 13 feet in height. This could be arranged by suspending a bucket provided with a canvas hose upon a frame made of bamboo-closely following the character of the wooden stand commonly used for support of a bicycle. It might further be worth while to experiment with an ancient form of wooden force pump, of which I give a sketch in the margin. It seems to me that this form would be exceedingly simple and little likely to get out of order. It might be adapted to requirements, by placing within it a bucket as per diagram~~s~~.



(From "The Engineer" Oct 25)



It to be weighted
with round shot
in drains.

I have the honour to be,
Sir,
Your Most Obedient Servant,

M.B., C.M., D.P.H.,
Lieut-Colonel, I.M.S.
Sanitary Commissioner for Madras.

Modified as
suggested.

BACK PAPERS.

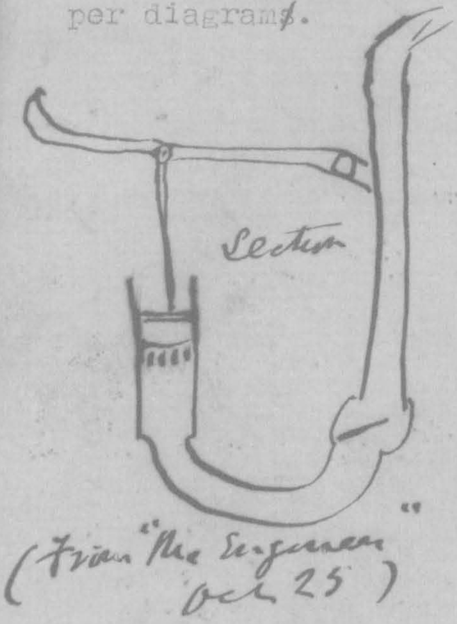
G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

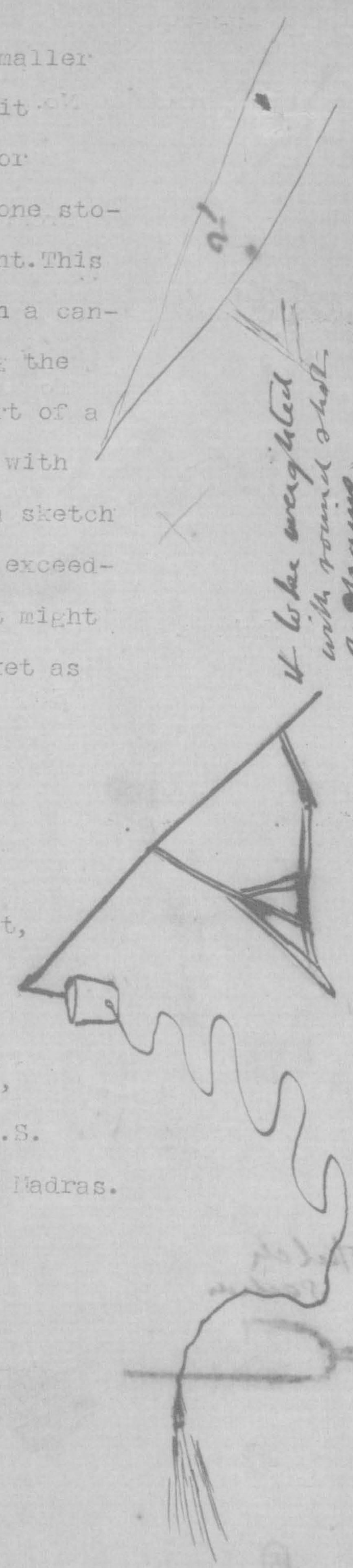
---

2. It might also be possible to imitate on a smaller scale the " gravitation disinfector " designed by me, it being held in mind that it would be applicable only for houses such as met with in ~~the~~ small villages namely-one storied-and with ~~the~~ walls not exceeding 13 feet in height. This could be arranged by suspending a bucket provided with a canvas hose upon a frame made of bamboo-closely following the character of the wooden stand commonly used for support of a bicycle. It might further be worth while to experiment with an ancient form of wooden force pump, of which I give a sketch in the margin. It seems to me that this form would be exceedingly simple and little likely to get out of order. It might be adapted to requirements, by placing within it a bucket as per diagram~~s~~.



(From "The Engineer" Oct 25)

Modified in ~~[illegible]~~ [illegible].



to be weighted with round shot or chains

I have the honour to be,
Sir,
Your Most Obedient Servant,

M.B., C.M., D.P.H.,
Lieut-Colonel, I.M.S.
Sanitary Commissioner for Madras.

9

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

[400—15-12-98.]

Plague

No. 1501/S

Office of Sanitary Commissioner,
Madras, 19th May 1899.

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From

Lieut.-Colonel W. G. King, M.B., C M., D.P.H., I.M.S.,
Sanitary Commissioner for Madras,

To

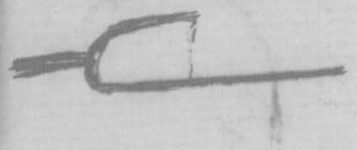
The Secretary to Government,
Local and Municipal Department.

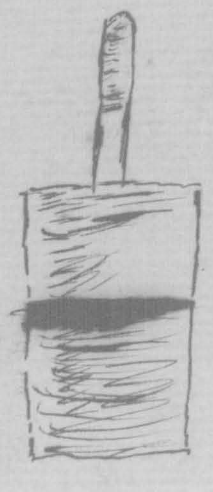
Enclosure.

Sir,

With reference to Plague Commissioner's letter No: REF: on C.No.3387 dated 24th April 1899, I have the honour to state that, in regard to his request as to a method for minimizing the effect of the Perchloride of mercury combined with hydrochloric acid solution upon the metal cans he proposes, the smearing of oil on the metal surface has been used for the purpose indicated. As, however, the oil must be washed off, it is probable that it must act detrimentally, in preventing contact of the watery solution with the walls. It is probable that a coating of paint, protected by thick coat of varnish, would secure the object for several days. When, however, it is remembered that the article once ~~used~~ issued would, when exposing patches of metal, rarely be regarded with care, I am still of opinion that the use of metal vessels should certainly be avoided. Of arrangements for merely dashing the solution against the wall as proposed by him, it is probable that wooden shovels modified by having a half or quarter covering over them, something after the style of a coal-scuttle scoop, would suit requirements better than the earthern watering vessels he suggests. Judging by the description of wooden boxes and eating bowls made on the West Coast, I should think that contractors might be secured about ~~Alvagode~~ Olavakot, or by applying to Mr: Brown, Timber Merchant, Calicut.

Sketch section





Sketch elevation

2.