Local & Munl. (1899) Department.

Plague.

PRINTED.

G.O., No. 1066

DATED 12. 7. 99
Dspd 18. 7. 99

[Despatch Abstract.]

Compensation for damage done during disinfection of plague infected houses

Stating in what cases ~~[illegible]~~ and to what extent claims to ——— ~~of infected~~ ~~houses~~ may be admitted.

BACK PAPERS.

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

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
C No	3619	P 7 99					

Government (1899) of Madras.
LOCAL AND MUNICIPAL.

Recd.	1899.	*Enclosures*
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G.O., No. 1066 P., 12th July 1899.

JULY.

Compensation for damage done during disinfection of plague-infected houses.

Stating in what cases and to what extent claims to — may be admitted.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—again the following paper :—

G.O., No. 1005 P., dated 29th June 1899.

ABSTRACT.—Stating that the Government concurs in the views expressed by the Sanitary Commissioner as to the necessity of exposing infected houses to sunlight and air and as to the mode in which this should be carried out.

READ—also the following papers :—

From the Plague Commissioner, dated 25th March 1899, Ref. on C. No. 3598.

From the Government of Bombay, dated 26th June 1899, No. 4127-P.

ORDER—No. 1066 P., dated 12th July 1899.

In the second paper read above, the Plague Commissioner raised the question whether compensation should be given for damage done to houses during disinfection. It has been ascertained that in the Bombay Presidency no such compensation has ever been paid, and Government considers that such claims should be admitted only in exceptional cases. No compensation should in any case be given either for replacing floors, or for filling up holes in the walls, but where roofs have been destroyed, so much may be given as will enable the occupiers to place the roofs in fair repair. Any such compensation should be given only where the disinfecting work has been done by organised gangs of coolies or sepoys.

(True Extract.)

for Ag. Secretary to Government.

To all Collectors (A—K).
,, the Sanitary Commissioner.
,, the Surgeon-General.
,, the President, Municipal Commission, Madras.
,, the Deputy Adjutant-General, Madras Command.
,, General Officers Commanding Districts.

Exd. A. F. Eccleston.

Government (1899) of Madras.

LOCAL AND MUNICIPAL.

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[L. & M.
600—4-8-99.]

Papers to be read in Proceedings :—

Again G.O., No. dated 189 .
Again G.O., No. 1005 P dated 29. 6 1899.
Current No. 640 P of 1899, dated 25 3 99, from the Plague Commr
„ „ 1682 P „ 1899, „ 26.6.99, „ the Govt of Bombay
„ „ „ 189 , „ , „

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669 To all Collectors. — ~~(A-M)~~ (A-K)
3 „ the Sanitary Commissioner.
5 „ the Surgeon-General.
6 „ the President, Municipal Commission, Madras.
3 „ the D.A.-G. Madras Command.
44 „ the General officer Commanding D.S.

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Fwd. H.S. 18.7.99

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been done by organized gangs of coolies or sepoys. The grant of compensation on these grounds should, however, form the exception and not the rule.

2. The attention of the Collectors is drawn to the ~~second~~ third paper read above from which it will be seen that no compensation for disinfection has ever been granted in the Bombay Presidency, notwithstanding that plague has been raging there for so long in much greater dimensions and with much greater virulence.

(From orders)

To
all Collrs
the Sanitary Commr
" Surgeon-Genl.
" Presdt. M.C. Madras

EJ
8/7/99

Government (1899) of Madras.

LOCAL AND MUNICIPAL.

Abstract

Recd. } 1899. Enclosures
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G.O., No. 1005 P., 29th June 1899.

JUNE.

Unroofing of plague infected houses.

Stating that the Government concurs in the views expressed by the Sanitary Commissioner as to the necessity of exposing infected houses to sunlight and air and as to the mode in which this should be carried out.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following papers :—

From R. H. CAMPBELL, Esq., Acting Collector and District Magistrate, North Arcot, to the Plague Commissioner, Madras, dated Camp, Baireddipalle, 26th April 1899, R. C. No. 1594-P.

I have the honour to draw your attention to the enormous expenditure which is being incurred in the town of Vellore on account of compensation paid to owners of disinfected houses. In my letter of yesterday, I enclosed a statement of plague charges for the month of March in Vellore; and you will find on referring to that statement that the figure for compensation alone appearing under unpaid bills comes to over Rs. 5,000.

2. So far we have had anything but a severe epidemic of plague in Vellore; and if the disease were really to assume a virulently epidemic form, I leave you to imagine what the expenditure on compensation would rise to.

3. Considering the above facts and bearing in mind the possibility that the plague may return with perhaps greater severity after the hot weather, I feel it my duty to submit to you certain proposals the object of which is to lessen the expenses incident to our measures for coping with plague and at the same time to render those measures more popular.

4. By far the largest item in the compensation bills referred to is the sums paid in compensation for the partial unroofing of tiled houses; and if this practice were to be pursued in a place where plague was really severe, the charges on that head alone would be simply enormous. I have been driven by the following considerations to seriously question whether this measure is a necessary and desirable part of an efficient plague policy. In the first place, the practice of destroying property and giving compensation at all is a great evil even if it is a necessary one and should be restricted as far as possible. Even if the compensation is considerably in excess of the actual value of the property destroyed, the vexation and worry caused to the owners is not at all made up for by the money profit, and leads to great discontent. The evils are exaggerated in the case of Vellore. Here owing to the practice of home segregation the inhabitants are put to the discomfort of living in an unroofed house for ten days or more. The tiles are not replaced, but are left stacked (often broken and spoilt) on the unremoved portion of the roof which also suffers in the process. The owners are left to replace these tiles themselves and if, as is often the case, the houses are left unroofed for many weeks, it is unfair to lay the whole blame on the inmates. All the satisfaction they receive is a promise of compensation which is often long unpaid and which in proportion as it becomes a really adequate recompense for the extreme discomfort they have been subjected to, becomes a more and more intolerable drain on the municipal exchequer.

5. So far I have shown that the practice of unroofing houses for disinfection is highly objectionable and can be only justified by the most stringent necessity since it causes either by its injustice, great disaffection and opposition to plague measures or else, if adequate compensation is given, great expenditure of public money.

6. But is the unroofing of houses either a necessary or an efficacious means of disinfecting? I cannot say that I think it is either.

7. To begin with, as at present carried out, it does not ensure that the sun shall reach every portion of the house. The roof is taken off in longitudinal slips which leave many corners untouched by the sun throughout the day where the microbes can rest undisturbed. Indeed, the total removal of the roof itself would not ensure the letting of the sun into every portion of a house, for large portions of the northern wall at least must be left untouched; and surely it cannot be maintained that any partial destruction of the microbes in a house, however large the proportion destroyed, will adequately disinfect the house.

8. Disinfection by the sun could only be rendered thorough by practically demolishing the building. Unroofing alone cannot be efficacious. Curiously enough the parts least exposed to the sun by removing the roof are those very parts of the house which, according to a very generally-accepted theory, are the most favourite, if not the only resort, of the microbe, viz., the floor and the lower portions of the walls. There are surely strong reasons to believe that the microbe rarely moves many feet above the ground.

9. For those important parts and for all parts not touched by the sun we are compelled to depend solely on saturation by means of perchloride of mercury or other disinfectants. It seems to me that we cannot regard unroofing as either efficacious or necessary and that it would be more logical to depend entirely on the disinfectant washing.

10. It would be different if the unroofing could be regarded as a small additional precaution requiring little trouble or expense and entailing little opposition, but in fact it occupies the foremost position in all our disinfectant operations; it costs much and causes great discontent; and if persisted in during the rainy season, it might easily lead to a riot. In fact, the trouble, danger and expense it involves would only be justified by the assumption that it was absolutely efficacious and absolutely essential to a satisfactory disinfection. When the rains come, I do not see how we can possibly carry out unroofing and home segregation combined, and it would be just as well to abandon the former now, if it has to be given up eventually.

11. I may remark in conclusion that should unroofing be discontinued there would, in my opinion, be but little opposition to plague preventive measures, even in the event of a virulent epidemic of plague. The people dimly understand the point of our other measures and submit to them with a tolerable grace, but they see no possible good in the unroofing and resent most keenly the hardship of having their houses so roughly handled and rendered temporarily uninhabitable.

12. Feeling as I do the necessity of curtailing our expenditure and at the same time carrying the people with us in our efforts to combat the plague, I recommend most strongly that the practice of partially unroofing tiled or terraced houses in large towns like Vellore be entirely discontinued and that the disinfection of such houses be restricted in future to saturating the floors and the whole interiors with perchloride solution and (when the floors are made of mud) afterwards digging up and burning the floors.

Ref. on C. No. 4599, dated 1st May 1899.

Referred to the Collectors of Kurnool, Bellary, Anantapur and Salem, and the Sanitary Commissioner for favour of remarks. It is understood that no compensation for damage done during disinfection has been given anywhere outside North Arcot, except where houses have been burnt down.

(Signed) L. E. BUCKLEY,
Plague Commissioner.

From Lieutenant-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, dated Madras, 19th May 1899, No. 1500-S.

With reference to Plague Commissioner's Proceedings, Ref. on. C. No. 4599, dated 1st May 1899, I have the honour to remark as follows.

In paragraph 6 Mr. Campbell states that he does not think the unroofing of houses is "either a necessary or efficacious means of disinfecting". His grounds for the former conclusion seem to me more a plea of expediency than to touch the question of "necessity", whilst in regard to the latter it seems to me he adduces no proof whatsoever. His paragraphs 7, 8 and 9 exhibit the popular belief that, unless the direct rays of the sun act upon infected matter, no disinfection can result. He regards, further, the openings made in the roof as having reference solely to the admission of these direct rays of the sun. In both premises he is incorrect. The action of direct as against diffused daylight upon micro-organisms may be roughly said to be five times greater; but in diffused daylight inimical action nevertheless proceeds. Whilst, therefore, the direct rays of the sun are to be preferred wherever their application is possible, diffused daylight is not to be despised. But the holes in the roof have other important functions beyond the mere admission of sunlight, namely, of securing free ventilation, which could frequently not otherwise be attained. This free ventilation is especially necessary during "home segregation" on behalf of the attendants upon the sick; and, during the process of disinfection, the same applies to the men employed for the purpose. It has been clearly proved that the detrimental action of sunshine upon microbes is of a chemical nature, that is, it is the actinic rays which influence the result. This action, however, cannot be effected without the presence of free ventilation, because it is due to the production of the peroxide of hydrogen; hence whilst the direct rays of the sun are desirable, diffused daylight is of value, provided free ventilation is afforded and, with it, moisture. The latter is usually fully supplied by the use of liquid disinfectants upon the floor and, if not, by the damp condition of houses of the class where this disturbance of the roof would be necessary.

2. I regret I cannot understand Mr. Campbell's remark in his paragraph 8 where he affirms: "curiously enough the parts least exposed to the sun by removing the roof are those very parts of the house which, according to a very generally accepted theory, are the most favourite, if not the only resort of the microbe, viz., the floor and the lower portions of the walls." It seems to me if there be any place which is likely to be reached by the direct rays of the sun after unroofing of the house, it would be those indicated by him.

3. Mr. Campbell then expresses the opinion that "there are surely strong reasons to believe that the microbe rarely moves many feet above the ground." It must, however, be apparent to him that if the microbe "rarely" moves above the level stated by him, it is quite possible that it may be moved. For instance, according to Simonds, the fæces of plague-infected rats and of their parasites (fleas) contain the plague microbe. Rats dwell in native houses largely in the interior of "mud roofs" and between the tiles in the tiled roofs. With reference, therefore, to the roof as an infected place and as a convenient position for aiding in ventilating a dwelling, it cannot be safely put out of reckoning, irrespective of claims as to aiding disinfection by other means. Bacteriological evidence is in direct discord with Mr. Campbell's suggestion that the mode is not an "efficacious means of disinfection."

4. As to its necessity, I think there can be no possible doubt when dealing with certain, as it happens, very frequent, class of cases, namely, where the houses are dark and ill-ventilated. Frequently the rooms in native houses are so dark that nothing can be seen without a light, and how often they are absolutely devoid of any mode of ventilation except the door is notorious. In such instances I consider it would be unjustifiable before undertaking disinfection to do more than to send into them the officer in charge of plague operations and his immediate assistants until these defects had been completely remedied, that is to say, the ordinary cooly staff employed on

disinfection work should not be called upon to face such risks, especially under such arrangements, as exist in North Arcot, where the Plague Commissioner has justified the complete absence of the most ordinary care in pneumonic plague cases undergoing "home segregation," on the ground that it is impossible to carry out all precautions in "home segregation."

5. But, in using this method, no "rule of thumb" should be employed. It does not follow that because a dwelling has been attacked with plague, it must be unroofed; especially during rains, when, indeed, the sides of the walls of the house may be advantageously pierced, instead of the roofs. Further, it does not follow that all native dwellings do require an access of light and ventilation—though certainly they usually do. In such instances, the use of the acid perchloride of mercury solution would doubtless suffice. Moreover, if the highly objectionable method of "home segregation" must be employed, I do not see that during illness of the patient, it is requisite to do more than provide for efficient ventilation. This, as already stated, could frequently be secured by making temporary windows in the sides of the house. When the question of disinfection arises, after convalescence of the patient, *each case should be considered on its own merits, in reference to possibility of infection by rats, and the nature of dwelling rooms as to ventilation and light.*

6. As to whether compensation should or should not be given, I think where damage to property is done of a nature that the tenant has to lay out funds to secure repair, it should certainly be given, and be given with a promptitude that should prevent its being imagined by his neighbours that he has been harshly treated. Whilst compensation to the manifestly poor should be invariable and full, there are conditions of life where, if a man insisted in using "home segregation" to the risk of his neighbours, he should be called upon to suffer the full consequences, whilst there may be other instances when a grant-in-aid, but not complete compensation, would meet requirements. These are matters for local discretion. Whilst then believing in the necessity of maintaining the principle of compensation, unless the people are to be provided with a good excuse for discontent, I think here also there should be no "rule of thumb" as to methods. Estimates are frequently not satisfactory either to the local authority nor the house-owner. In the case of Vellore, the Plague Officer represented to me the man engaged for this work had manifestly over-estimated charges, as proved on his having resorted to another authority for the necessary figures. So far as removal of tiles is concerned, if the gangs are made to understand it must be conducted with care, and if by them replacement is also insisted upon, compensation for broken tiles need never run up to much. Wherever other repairs can be done, they should, where feasible, be effected without money passing to the owner under the Plague Officer.

From E. A. ELWIN, Esq., Acting Collector of Bellary, to the Secretary to Government, Local and Municipal Department, dated 27th May 1899, D.D. No. 938-P.

Adverting to the Plague Commissioner's R. C. No. 4599, dated 1st May 1899, I have the honour to remark that the question of unroofing tiled or terraced houses in large towns has not arisen in this district. It is no doubt highly desirable to allow a free current of air to pass for some days through all plague-infected rooms, and as there are windows in most substantially built houses, this can generally be effected by keeping them as well as all doors open for the period decided upon: where there are no windows or the windows are too small, the difficulty can, in my opinion, be met by making a hole or holes in the outer walls just as well as by partially removing the roof.

2. I enclose a copy of the note sent to me on the subject by the District Medical and Sanitary Officer.

Enclosure.

Copy of the note, dated 19th May 1899, from the District Medical and Sanitary Officer, to the Collector of Bellary.

The Collector of North Arcot evidently considers that it is unnecessary to partially unroof houses as a means of disinfection and his conclusions are drawn from the fact that the sun's rays do not reach every portion of the house, consequently several microbes lurking in corners are not destroyed.

2. The conditions favourable to the development of plague, as far as the houses themselves are concerned, are overcrowding and defective ventilation and it is principally as regards the latter that openings are absolutely necessary in ill-ventilated houses, and with admission of the sun and disinfection of floors, roof and walls there is very little chance of the microbe not being destroyed.

3. In pucka built houses, whether terraced or tiled, where there are sufficient doors and windows, there is no necessity to make any holes either in walls or roof. There is nearly always a necessity to unroof a portion in houses of Muhammadans, as the gosha system prevents free ventilation, all crevices, windows, if any, are closed with rags, &c.

4. Another reason for making openings in the roof is for the admission of light, which also assists in the destruction of the microbe.

5. As regards the careless manner in which the tiles are removed and broken, efficient supervision would prevent this, and further at the end of the 10 days the tiles could be replaced without difficulty by those employed on disinfection duty.

6. Compensation should be given only to the indigent.

From B. MACLEOD, Esq., M.A., Barrister-at-Law, Collector of Anantapur, to the Secretary to Government (Local and Municipal Department), dated 1st June 1899.

With reference to Plague Commissioner's Reference on C. No. 4599, dated 1st May 1899, regarding the unroofing of tiled or terraced houses for disinfection purposes, I have the honour to state that in this district the houses are generally of flat mud roof and the making of small holes in the roof did not cause much damage and it was repaired with little cost. In the case of tiled houses the damage was no doubt greater and the cost of repair was likewise so. The amount of compensation paid in this district on account of unroofing comes up to only some 440 rupees.

2. Though it is true that through these small openings the sun's rays will not spread to every corner of a house and kill the microbes, yet more sunshine and fresh air will be let in as the houses of ryots in the villages in these parts are more close and shut up, having no windows of any kind.

3. I submit herewith copies of reports received from the Medical Officers (Doctor Hunter and Doctor Robertson) who think that the unroofing is not without any good effect.

Enclosures.

From JOHN HUNTER, Esq., M.B., C.M., Additional Medical Officer, Hindupur, to the Collector of Anantapur, dated 14th May 1899, No. 1769.

With reference to your R. C. No. 1292, dated 8th instant, on the Proceedings No. 4599, dated 1st May 1899, of the Plague Commissioner, Madras, I have the honour to inform you that I am of opinion it is not necessary to open up the roofs of infected houses although a free admission of sunshine and air tends to further minimise the chance of a recrudescence.

From Major R. ROBERTSON, I.M.S., to the Collector of Anantapur district, dated Madras, 16th May 1899.

With reference to your R.C. No. 1292, dated 8th May 1899, I have the honour to submit my views thereon.

1. The Collector of North Arcot assumes that the object of opening up roofs is solely to allow the sun's rays to enter the house, so that plague germs may be killed thereby. I may also assume that the object of perchloride of mercury and kiln burning the floors aim exactly at the

same point. I think we are all agreed that the latter exactly fulfils our wishes, so that apparently the sunlight is superfluous; I do not think that is our sole object in opening up roofs. In addition to what little amount of sunshine which will enter a house through a 4-feet opening in the roof at all angles of the sun's tour we have ventilation of the house and that means oxidation or combustion of organic matter adhering to the walls and to a much greater depth in the floor than the upper two inches which have been removed by the kiln process. It is this organic matter which supplies food for the plague and other bacilli. The floors and lower part of the walls of native houses are usually amply saturated with this organic matter and in small compartments or one-roomed houses. The requisite moisture for the growth of the bacillus is always available. If then we simply saturate the floor with 1·2000 or stronger solution we lose a very important agent for other work, viz., pure air.

2. The next point is the opening of the roof. This opening is I take it always a partial opening and not the unroofing of a house. In a tiled or thatched roof I always advocated one foot of material to be removed from each side of the ridge pole. In tiled houses a considerable number, nearly 25 per cent., of these will be broken in removal and great delay occurs afterwards in procuring new tiles or in granting compensation. This is the only roof I have found that gave me any trouble and I dare say if my coolies had had any training in removing tiles my breakages would have been less. Leaving the village reddi and a few coolies to make the necessary openings always leads to wholesale destruction of tiles. Regarding the thatched roof I see no difficulty in removing the necessary foot on each side of the ridge pole; a few bundles of the particular variety of grass is all that is necessary to fill up the gap. Regarding flat-roofed houses (mud roofs) there is no expense here either. A few pieces of jungle wood, cholam stalks and mud is all that is necessary. I do not think repairs would cost more than one rupee to a roof of this type.

All roofs do not require to be opened out and in many houses ventilation is free excepting the cook-house which rarely possesses a window.

In conclusion I strongly advocate ventilation in those houses—if that is done away with, then the result will be that perchloride of mercury solution has such a rapid germicidal action that it will only be necessary for the villagers to vacate their houses for a few hours. This last policy was tried in December 1898 at Guntakal with unexpected results.

From M.R.Ry. Diwan Bahadur R. V. SRINIVASA AIYAR Avargal, B.A., Acting Collector of Kurnool, to the Secretary to Government, Local and Municipal Department, dated 10th June 1899, Dis. No. 552-P.

Adverting to Plague Commissioner's Reference on C. No. 4599, dated 1st May 1899, I have the honour to state that as I joined this district only very recently and as I have had no personal experience of the methods of disinfection adopted in the infected parts here, I am unable to offer any remarks of value. I submit herewith for the information of Government copies of the reports received on the subject from the District Medical and Sanitary Officer, the Tahsildar of Pattikonda and the Deputy Collector of Pyapali division. It will be observed that the District Medical and Sanitary Officer regards the partial unroofing of dark houses "as a very important part of the disinfection", while the Tahsildar of Pattikonda states that "disinfection by partial unroofing" is thoroughly ineffectual. Whatever may be the efficacy of the process in question it seems to me inexpedient to resort to it during the rainy season which is just setting in, as rain water by entering the houses through the openings made in the roofs will damp the floor, and this moisture may tend to develop plague germs more rapidly than can be counteracted by the influence of the light and heat of the sun on clear days.

Enclosures.

From the District Medical and Sanitary Officer, Kurnool, to the Collector of Kurnool, dated 19th May 1899, Dis. No. 365-P.

In reply to your letter, No. 669-P. of 16th instant, I have the honour to state that the roofs in this district were opened up by making large circular holes of such number as seemed to be required for the free letting in of the sun and I think that in most cases the whole interior was exposed at some time of day to the direct rays of the sun. In the case of all suspected houses the system of partial unroofing was adopted in this district.

In the dark and dirty houses in the villages of this district I would not care to trust entirely to disinfection, especially as the disinfecting staff would have to work by lamp-light or in the dark unless the whole of the house were lit by sunlight from the roof, thus causing the work to be less efficiently done. The opening up of the roofs in the cases of the dark houses referred to above, I regard as a very important part of the disinfection.

From M.R.Ry. S. RAMU AIYAR Avargal, Deputy Collector, Pyápali, to the Collector of Kurnool, dated 16th May 1899, R. C. No 222-P.

With reference to your R. C. No. 669-P. of 1899, dated 5th instant, I have the honour to state that as I was absent on leave when the plague broke out in my division, as for some time even after my return, I had little to do with the plague operations owing to there being a Special Deputy Collector in charge of them, and as, since his employment was discontinued, the plague has fortunately all but ceased, I do not possess the requisite experience to enable me to give any valuable opinion on the question of the efficacy of the measure of unroofing houses infected with plague, as one of the methods of disinfection.

2. I submit, however, the report of the Pattikonda Tahsildar on this subject. It will be seen therefrom that the unroofing of houses for the purpose of disinfection was not systematically resorted to, but only in some cases here and there, and that whenever unroofing was had recourse to, the roofs were not wholly removed, but only partially. I have personally seen the system of unroofing as adopted by the Plague Inspector at Pattikonda. He opens here and there sky-lights of irregular shapes. They are not so wide as to admit of the sun-light reaching every portion of the inside. They merely serve to let in more light than the precious little which people in these parts manage to secure by their mode of building houses.

3. I have reason to believe that the unroofing of houses, as also the digging up of the floors, is distasteful to the people, especially as no compensation is given and as the house-owners are obliged to reroof and refloor their houses at their own expense. Of course, it is not to be expected that they would or could be made to reconcile themselves, except perhaps in rare cases, to the inconveniences and losses arising from such measures, from any conviction of the advantages derived therefrom by themselves or their neighbours.

4. I believe that disinfection is carried out only after the inmates evacuate or are made to evacuate the houses concerned.

5. The generality of houses in these parts being mud-roofed and the timber which serves as joints being cheap jungle wood, the amount of loss occasioned by unroofing must necessarily be less than what it may be in places like Vellore, &c., where the houses are tiled or have concrete terrace. At the same time, as the people at large in these parts are as I think, poorer than those in the southern districts, the damage caused by unroofing, though small as regards its intrinsic money value, is nevertheless likely to be felt. If, therefore, the unroofing of infected houses were to be resorted to as an essential part of the system of disinfection, and if such unroofing were to be carried on on a large scale, in the event of the plague spreading, and without payment of any compensation, it may probably lead to discontent and active opposition on the part of the people. On the whole, it seems to me that no hard and fast rule need be laid down, and that the measures to be adopted be regulated and modified when it need be, by actual experience, and with due regard to the degree of the intensity and extensiveness of the outbreak.

From the Tahsildar of Pattikonda, to the Deputy Collector of Pyapali, dated Ratana, 10th May 1899, Dis. No. 484-Rev.

In returning herewith your C. No. 222 of 1899, dated 8th instant, I beg to report as follows.

2. So far as I know, disinfection has been carried on in this taluk mostly by saturating the floor, walls and ceiling with *solution* and then white-washing. Digging up the floor and burning it over was also resorted to but only in a few cases. Unroofing houses was also had recourse to, but only partly, and I am not aware of even a single house which has been wholly unroofed. As far as I am aware no compensation has been either claimed or paid for damages done to houses either by unroofing or by digging up the floor. There was no active opposition to such a step, but I am sure the people concerned did not relish the act but rather resented it.

3. Personally I know only a few cases of disinfection in minute detail. The villages of Alardinne, Togalakallu and Dudekonda were disinfected thoroughly by Supervisor Mr. Berlie under the Plague Commissioner's personal orders and may be consulted with advantage, as I know nothing as to how it was done, though I can safely presume that saturation with perchloride of mercury and hydrochloric acid was one of the ways in which it was done. At Pattikonda I know the sanitary inspector dug up the floor of some houses and unroofed houses partly. At Maddikera too the houses were unroofed partly and the floor was dug up in some cases. Everywhere the most common method was saturation with the solution and white-washing.

4. As stated by the Collector of North Arcot I am entirely of opinion that disinfection by partial unroofing is thoroughly ineffectual. Saturation with the solution seems to me to be the best method known now and the unroofing of houses so thoroughly as to let in the sun in every nook and corner may also probably equally be advantageous. The digging up of the floor and burning it over thoroughly well seems also to be rather efficacious.

5. As far as I know, no compensation has been paid except for burnt houses and for burnt valuable moveable property.

From R. B. CLEGG, Esq., I.C.S., Collector and District Magistrate, Salem, to the Secretary to Government, Local and Municipal Department, dated 14th June 1899, No. 1099 P.

With reference to the Proceedings of the Plague Commissioner, No. 4599, dated 1st May 1899, I have the honour to report as follows.

2. The Collector of North Arcot states that the partial unroofing of tiled houses which is done as a necessary item of the process of disinfection is not very efficacious as it does not ensure that the sunlight shall reach every part of the house, that it is productive of worry and discomfort to the inmates who have to live in an unroofed house for ten days or more, that the discomfort will be greater if the measure were insisted on during the rainy weather, that it may even lead to a riot and that it is very costly on account of compensation which has to be paid to the owners in consequence. At Mattigiri, where indigenous plague first broke out in the district, the whole of the roofs were removed in the beginning, but later on in the village and elsewhere at the instance of the Plague Commissioner, the roofs were only partially removed. The untiling was done by special coolies engaged by us and by the sappers except in some cases at Mattigiri where the people themselves undertook to do it. On the whole there was no opposition to the measure either in the Hosur taluk or in the Municipal towns of Salem, Vániyambádi and Tiruppattúr though in the last three places owing to a few imported cases it was carried out only to a limited extent. The people experienced no discomfort in consequence as whole villages were evacuated in the Hosur taluk and the villagers camped out in fields. The re-tiling in the villages in the Hosur taluk was done by the sappers and to some extent by the owners themselves of their own accord. At Salem and Vániyambádi the untiling and the re-roofing were carried out by the Municipality concerned at a cost of As. 10 and Rs. 20, respectively, but no compensation has been paid anywhere to the owners for untiling and re-tiling.

3. Regarding the efficacy or otherwise of the measure, the District Medical and Sanitary Officer, Salem, states that "as light and ventilation are very important aids in the removal of infection from houses and that as native houses or many parts of them are very deficient in both these respects the removal of the roof in whole or in part is often the only feasible means of admitting light and air to infected rooms." He adds that this method should not be abolished entirely though it may be modified according to circumstances, for instance in the case of a single roomed house where evacuation cannot be effected, this measure should not be enforced as the occupants would be exposed to the weather. I agree with this opinion that removing the roofs to let in light and air is as necessary as any other process of disinfection. We have not had many instances in this district of house segregation, but where such has been allowed (in the municipal towns) we have never removed the roof of a room while the inmates were still in it. In houses of more than one room there is not much opposition to untiling one room at a time while the inmates remove to another. A great deal depends upon the nature of each building and the state of the weather as to what can be done, but I am strongly opposed to abolishing this measure altogether. To remove the roof of the apartment where a family is residing will no doubt create as much opposition as forcible segregation and is not desirable. No compensation will be necessary if the untiling and re-roofing is done by a staff of servants or by troops engaged by the Municipality or the Local Board and the cost of labour cannot be much even in large towns.

ORDER—No. 1005 P., dated 29th June 1899.

The papers read above will be communicated to all Collectors with the remark that the Government concurs in the views expressed by the Sanitary Commissioner as to the necessity of exposing infected houses to sunlight and air and as to the mode in which this should be carried out.

(True Extract.)

C. J. WEIR,
Ag. Secretary to Government.

To all Collectors (A—K).
„ the Sanitary Commissioner.
„ the Surgeon-General.
„ the President, Municipal Commission, Madras.

Exd. P. Seetharam.

Local & Munl. (1899) Department.

This is not v.u. & I am sure HM wd like Mr Hammick's views. Keep for him
HT 29 3 99

CURRENT No. 6409

2 leaves

For HM.

From The Plague Commr

Order

Repor No. 3598

Dated 25.
Received 27.
Registered 27.
} March '99

Enclosures

Spare copies

SUBJECT.

Submitting, with remarks, his opinion on the subject of granting compensation for disinfection.

Sent 14/4

This does not appear to have been seen by the Secretary –

BACK PAPERS

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

R.O.C. No. 3598 d/25.3.99

6407

Note for the Local and Municipal Departme

ASSISTT SECY TO G.O. LOCAL, MUNL EDL & LEG DEPT
27 MAR. 1899

Subject.

Should compensation be given for disinfection ?

:::::

In carrying out thorough disinfection of a house, (1) the floor, if of mud, is dug up for depth of 4 inches or so, and carried away and burnt, (2) holes are made in the roof to admit light and air, and (3) perchloride is freely applied. Process (3) causes no damage. Process (1) causes no very great damage. Process (2) causes considerable damage and is objected to in conquence but submitted to. If houses are tiled, tiles are removed in lines of about 1 to 2 feet in breadth -- vertically or horizontally according as the run of the reepers is, and the reepers below are removed. This causes damage no doubt but damage that can be easily repaired though of course many tiles and reepers get broken. In the Deccan roofs are usually flat; they are made of interlaced boughs, covered with mud. To make proper openings, the mud has to be broken away for a circle 3 to 4 feet in diameter, and the boughs cut away. The damage is very considerable, for it must be a difficult job to repair the roofs.

2 But, in the Deccan, as far as I know, no compensation has been given for

I should say that when at first I recommended fairly liberal & prompt compensation, I was dealing with cases where the Tahsildar at Guntakal, satisfied the people amply by payment of 2 Rs. & 3 Rs. & so on. I never contemplated any cases such as Mr. B. has found where 70 Rs. have apparently been given. In the Deccan villages I found if the Sepoys were fairly careful all that was wanted was a small sum to purchase sticks & pay cooly hire for reroofing. The holes in the walls were easily set right often by the Sepoys themselves. I considered that when you had taken the roof off, which was actually the result of disinfecting work in the flat roofed houses of the Deccan, you had really destroyed his house. I should think anything like R50 as compensation can only be necessary in the rarest cases.

12 iv 99

Yes - in my experience! quantities -
12 IV. 99

The whole roof has to be replaced as a rule
12 IV. 99

6th Ap/13 This does not appear to have been seen by the Secretary -

damage done during disinfection, unless ~~a~~ the roof has been burnt. In the North Arcot District, however, in Vellore and Arcot, compensation is being given for damage done to houses during disinfection. This amounts in some cases to Rs 80 to 100 a house with an average of, say, 30 to 50 and is a serious item of expense when 4 or 5 houses may have to be disinfected in a day. Payments are made to conciliate the people.

This seems very large
Wt
12. iv. 99.

3 Original Regulation 6 provides "When a building or place has, in the opinion of an officer appointed in this behalf, been so infected with the plague as to render its further occupation a source of danger to the inmates thereof, the Collector ---------- may summarily cause such building or place to be vacated and thoroughly cleansed and disinfected—

x x x x xx x x .

The owner or the occupier or the tenants or actual inmates or occupants of any building or place dealt with under this Regulation shall not be entitled to claim any compensation on account of anything done thereunder."

4 Original Regulation 9 provides. "If the Collector of ~~a~~ the District or an officer generally or specially authorized by him in writing in this behalf is of opinion that the destruction of any hut or shed is necessary to prevent the spread of the plague, the Collector or such officer as aforesaid may summarily take measures for the destruction of such hut or shed and the materials of which it is

constructed and the Chairman of the Municipal Council or the President, District Board, as the case may be, may in his discretion grant compensation, but no person shall be entitled to claim it of right, for any loss or damage caused by reason of such destruction out of Municipal Fund constituted under Act IV of 1884 or the Local Fund constituted under Act V of 1884 as the case may be!

From this it seems to have been contemplated that compensation should be given only when a hut or shed is destroyed and then not necessarily. It may be contended that our disinfection measures amount to a partial destruction of a house, and compensation should be given accordingly. Original Regulation 21 provides for compensation for clothing, bedding and personal effects destroyed instead of being disinfected; compensation may be given at discretion, but cannot be claimed as of right. Mr. Hammick's circular advocates the giving of compensation freely to begin with to conciliate the people.

5 My own opinion is that we should give no compensation for damage done to houses when disinfecting, unless the whole place is burnt down. If we get a real burst of the disease throughout the Presidency after the monsoon, as is to be feared, the cost will be prohibitive, and the sooner we put an end to hopes of such payment the better. As already said compensation is not given in the Deccan, unless huts are destroyed. Compensation may I think be given for valuable articles

Office put up draft to Bombay asking what rules have been in force as regards grant of compensation for damage done to houses &c. when disinfected & how much has been spent.

We must prepare to restrict Expenditure. Find out what is done in Bombay. the way

AA 14. 4. 99.

15.iv.99

Mr. B. has not apparently found out what has been the rule on this matter in Bombay – but probably where wholesale evacuation & disinfection took place little if any compensation was given. If plague really grips the Presidency next year & attacks village after village – wholesale disinfection & segregation will be almost impossible – what will happen probably will be, that all the villagers will bolt to the fields & the authorities will have to depend on local labour and the sum for disinfecting; anything like thorough destroyed, but as many as possible should be disinfected. Articles destroyed usually consist of dirty mats, gunnies and such like, for which compensation is not really necessary.

M. S. Mascarenhas
25/3/99
For Plague Commissioner

disinfection by Sepoys will be an impossibility - In this case of course compensation will not be necessary = I would suggest that certainly no compensation be given either for replacing floors, or for filling up holes in the walls, but that where roofs have been destroyed so much sh.d be given as will enable the occupier to place the roof in fair repair - & that compensation sh.d really only be given where the disinfecting work has been done by organised gangs of coolies or Sepoys - H.S. 25.3.99

when the Villagers do the work themselves. perhaps no compensation is necessary: It is wonderful what a good Tahsildar can do - I remember at Timmancherla the people howled for compensation. I told the Tahsildar to try & arrange something & some few hours afterwards the Villagers took I think it was R60 and odd for compensation for about 60 houses! They were quite content -

12.iv.99.

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12.iv.99.

Plague.

L. & M.
1,000—10-5-99.

Local & Munl. (1899) Department.

CURRENT No. 1682 P.

Put up recent G.O. about necessity of disinfection of houses, await its return

H.
30/6

Proof of G.O. 1005 P dt 29-6-99 is put up – H.S.

3 headings

From The Govt of Bombay

No. 4127/P.

Order

Submitted with reference to H.M's note dated 14-4-99, at Q. Vellore is the only place where compensation has been paid on a liberal scale. Nothing has been spent on this account in Bellary, only Rs 30 in the Salem Dt, Rs 440 in Anantapur & very little in Kurnool – vide papers printed in G.O. No 1005 P dt 29-6-99.

H.S.
30/6/99

Lms
4/7/99

H. M.

It might be inexpedient to lay down any hard & fast rules that no compensation should be given.

Dated 26-6-99

Received 29-6-99

Registered 29-6-99

Enclosures

Spare copies

SUBJECT.

Informing that no claim for the grant of compensation for damage done to houses when they are disinfected has ever been paid in Bombay and that there are no rules bearing on the subject.

But Collector might be informed that no compensation for disinfection has ever been granted in Bombay Presidency and that Govt considers that any grant of compensation on this ground should be the exception & should be restricted to such cases & granted only under the conditions specified in Mr. Hammick's note of 12.4.99. (portions marked with blue pencil).

C. S. W
6.7.99

N.B.
The original Madras Regs. apparently only contemplated compensation being granted under ~~section~~ Reg. 9. in case of destruction of huts & sheds.

CSW

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

R

7.7.99

C No 1682 P

No. 4127/P. OF 1899.

GENERAL DEPARTMENT (PLAGUE).

Bombay Castle, 26th June 1899.

FROM

A. F. WOODBURN, Esq., I.C.S.,
Acting Chief Secretary to Government;

TO

The Secretary to the Government of Madras,
Local and Municipal Department.

Don't send Reminder
29/6

SIR,

With reference to your letter No. 572 P. Mis., dated the 20th April 1899, requesting to be furnished with the rules in force in Bombay regarding the grant of compensation for damage done to houses when they are disinfected and enquiring how much has been spent in that way, I am directed to inform you that no claim for such compensation has ever been paid in Bombay and that there are no rules bearing on the subject.

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

A. F. Woodburn

Acting Chief Secretary to Government.

29 JUN. 1899