

MADRAS RECORD OFFICE.

Government of Madras.

Public DEPARTMENT.

G.O. No.	<i>831</i>	Press Mis.
Dated	<i>10-7-</i>	<i>1968.</i>

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Department,

10^h July 1868.

No. 72. Read the following letter from Surgeon Major J. L. RANKING, Sanitary Commissioner, Madras, to the Chief Secretary to Government, Fort Saint George; dated Madras, 7th July 1868, No. 734.

Adverting to my report upon the sanitary condition of Ootacamund, under date the 23rd May last, and especially

ENCLOSURE 1.
1 Copy of a letter to the Vice-President and Members of the Municipal Commission, Ootacamund, dated 10th June 1868.

with reference to paragraph 4 of that report, in which I bear testimony "to

the existence within recent periods of grave types of disease that were quite unknown twenty years ago," I think it advisable to lay before Government some further information in elucidation of that remark, in order that they may have before them more precise knowledge of the disease more especially alluded to.

2. I am induced to submit this letter in continuation of my report, in consequence of its having been affirmed in the public papers that no disease tending to rob that sanitarium of the character it once enjoyed for salubrity, or to create alarm in the minds of visitors accustomed annually to resort to it for the benefit of their health, exists.

3. The question is one deeply concerning the public, and intimately affecting the interests of owners of property on the Hills; and although I shall have to show that disease of a grave character has existed, and did exist at the period of my recent visit, though I was not made aware of it till after the submission of my report, I conceive that a precise knowledge of the nature of the disease (to which I shall presently refer more at length) and to the conditions and agencies held to be connected with its origin, localization, and spread—by enabling the Government to decide upon the measures of assistance to be afforded to the Municipality in modifying or eradicating those conditions, and by indicating to landlords the necessity of adopting all those measures of conservancy upon their several properties that are requisite to place and keep them under sanitary conditions, calculated to remove any existing prejudices against certain houses (and such prejudices undoubtedly exist and are not altogether unfounded), and thus guard against the recurrence of cases of this specific disease to which I will now draw attention—precise knowledge of this nature, and the action that will doubtless be taken upon it, will do, I repeat, more to reassure the public mind than any controversy carried on through the medium of the public Press.

4. The disease I allude to is the enteric fever of Europe and America, commonly known as typhoid fever.

This fever is a specific one, as different from any other fever, as small-pox is from measles, or the latter from scarlatina, and attended by its own special internal lesions.

5. That this fever has become endemic on the Hills I think there can be no question. It prevailed amongst the troops at Wellington in 1863, when I was present at the examination of the body of a soldier who had died of it, and in which case the characteristic lesions found after death placed its nature beyond a doubt. On this occasion I was only on the Hills for three days. In 1866, I visited Ootacamund on privilege leave, and was consulted both by Dr. Miller and Dr. Colvin Smith, then the Resident Medical Officers, in many cases in which none of us had any doubt as to the nature of the disease. One patient, a lady under Dr. Miller's

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10th July 1868.*

care, presented a perfectly typical case. The others were also sufficiently marked cases.

6. But, referring to more recent times, a very few days after submission of my report under date the 22nd May last, I was consulted by Dr. Furnell in the case of a lady, and I at once pronounced it an instance of the specific fever under reference, and of a very grave type. In this opinion, Dr. Furnell coincided. The lady died. A few days later, Dr. Furnell spoke to me regarding another lady on his hands, and said that he feared the case would prove to be of a similar nature. I did not see this case, for I was unable to visit it in consultation with Dr. Furnell on the occasion he named, as I was on duty that day with His Excellency the Governor.

The lady was removed to Coonoor and died there; and Dr. Wilson, in reply to a query from a friend, wrote, "I have no hesitation in saying that the dysentery from which Mrs. ——— died was complicated with typhoid fever." Dr. Miller, Surgeon to His Excellency the Governor, who saw that lady at Coonoor also authorizes me to say that he is quite satisfied that it was a case of this specific fever. A good deal of sickness also prevailed at Ootacamund at the time of my visit, in the form of bowel complaints, generally spoken of as dysentery, but I have reason to know that the nature of many of these cases was somewhat obscure; and although I cannot affirm that they were mild cases of this specific fever, I think it quite possible that they may have been.

7. At any rate I have adduced sufficient evidence of the existence of typhoid or enteric fever at Ootacamund, and now proceed to state the conditions under which it usually originates or re-produces itself.

8. When I state that the fever has been designated by a very high authority, Dr. Murchison, "pythogenetic fever," or fever "born of putrescence," I sufficiently indicate the sources from which it may arise, and my report upon Ootacamund, above referred to, abundantly establishes that the atmosphere of that sanitarium has long been vitiated to an extreme degree by "putrescent" matters strewed broadcast over the place.

Moreover, during the hot and dry season, when water is scarce and wells resorted to largely, there is little doubt that the supply is vitiated by percolation through the soil of much putrescent organic matter. These wells, some of which are resorted to by the gentry, are generally in valleys or at the foot of hills, and the gathering grounds of the supply have been long in a most filthy state from human ordure, stable refuse, and dung heaps.

9. But, without entirely endorsing Dr. Murchison's views that this specific fever may *originate* in "putrescence," there is no doubt that, the germs of the disease once sown, they are revived and matured by putrefactive processes, by the emanations, that is, from drains, cess-pits and dung heaps, and that through these they are disseminated in the air and water.

That these germs have been sown in the soil of Ootacamund is clear, and (in the words of Dr. Parkes) "this great fact is (also) clear that the occurrence of typhoid fever points unequivocally to defective removal of excreta, and that it is a disease altogether and easily preventable".

10. The measures of prevention are the removal from the neighbourhood of dwellings of all the sources of atmospheric impurity or contamination of any water

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10th July 1868.*

supply above indicated, especially the removal of all excreta, or their deodorization by dry earth, ashes, charcoal, &c.

11. In regard to the houses occupied by visitors to the Hills, I have stated in my report that the removal of all refuse of this nature by municipal carts, owing to the distance at which houses are apart, and the inaccessibility of many to carts, cannot be carried out, and, consequently, the only alternative is to deposit all such stuff in pits, and to deodorize it by frequent addition of ashes and dry earth.

But, as regards the houses in which cases of typhoid fever may have occurred, it will be necessary that landlords and tenants should adopt further measures, and it is clearly to the interest of landlords, if they really desire to remove any evil reputation that their houses may have acquired, to adopt them at once.

12. These measures are to destroy all refuse capable of being thus disposed of by fire, to remove the soil to the depth of a foot or two, upon which old dung heaps may have been allowed to accumulate, and to cover it with a thick layer of fresh earth. Any *existing* dung heaps it will be advisable to disinfect *before disturbing them*, by treating them liberally with MacDougall's disinfecting powder, a cheap disinfectant, and one which it would well repay every one to keep for use upon the premises.

13. This process of disinfection must be more especially enforced upon sites used for deposit of night soil, and where the typhoid fever germ (which specific germ is cast off from the bowels of fever cases) is especially sown. These localities should be liberally treated with the disinfectant *before being disturbed* for the removal of the soil, the ground should then be dug up, being freely mixed with the disinfectant, which should be occasionally used in the pits which in future are to be used for deposit of night soil, instead of the method generally practised when I left the Hills of throwing it upon the surface.

14. If any landlord, especially those in whose houses cases of fever or any suspicious bowel affection may have occurred, or which may have an unenviable reputation for want of cleanliness, will adopt the measures I have indicated, it is not too much to say that typhoid fever may be eradicated, and the fears of the public allayed.

15. The Government having sanctioned the scheme of water supply, I may be permitted to urge its rapid completion. The water supply is now, to say the least, under suspicion. Many of the streams have in late years dried up, and many persons who formerly obtained their domestic supplies from such sources now resort to wells sunk in tainted ground, and the supply of which is derived from gathering grounds strewed with much surface impurity.

The completion of the scheme will bring water from regions at a level above all ordinary source of contamination, though the distribution of the water in open channels, unless they be most rigorously conserved, will still expose it to risk. The expense attending its distribution by pipes is, I am informed, too heavy to admit of that method of supply being entertained.

16. In conclusion, I would solicit permission to send a copy of the report with this letter to the Municipal Commissioners, and to the Local Press on the Neilgherries, so as to give every possible publicity to the measures which it is incumbent upon owners of property in their own interest to take, to remove the causes of a specific disease that I have shown to exist, and to restore confidence to the public—

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a confidence which has certainly been shaken, and which is more likely to be revived by a knowledge of the conditions under which disease may arise, and of measures that will conduce to its eradication, than by attempts to ignore its existence in the face of deaths which have desolated the homes, and that quite recently, of members of the society on the Hills.

17. I annex a copy of a letter I addressed to the Municipal Commissioners upon the subject, on the morning of my departure from Ootacamund.

From the Sanitary Commissioner for Madras, to the Vice-President and Members of the Municipal Commission, Ootacamund; dated Ootacamund, 10th June 1868.

I have the honor to enclose a letter from Major Finlay relating to the condition of a pit in which filth is being deposited near his house.

2. I inspected this some time since with Mr. Dawson, when I advised that, provided house sweepings only were deposited in the hollow, and a thick layer of earth be daily strewed over the whole, it will not be an objectionable way of filling it up. It was not contemplated that filth of any kind should be deposited.

3. I find that decomposition is going on in the mass, and that deleterious emanations are extricated. I therefore advise that no more refuse be deposited, but that the pit be at once filled in with *fresh earth*.

4. The prevalence of typhoid fever in the place, from which two deaths have recently occurred (one contracted in Major Finlay's house), renders it advisable that all possible sources of atmospheric contamination should receive immediate attention; and I would suggest that your Sanitary Inspector be directed to commence a detailed examination of every private compound in the place, in view to notices being served upon all owners or occupiers of premises upon which dung heaps and such like accumulations of deleterious refuse exist.

No. 73. ORDER THEREON, 10th July 1868, No. 831.

The Government direct that the report of the Sanitary Commissioner above recorded be communicated to the Municipal Commissioners of Ootacamund.

2. It is observed that Dr. Ranking has already, in a letter addressed to the Vice-President and Members of the Municipal Commission of Ootacamund, suggested the necessity of a detailed inspection of the house compounds of that station, with a view to the owners of houses being compelled to take the measures indicated to prevent the occurrence of the causes of the typhoid fever which has shown itself with fatal results at Ootacamund.

3. The Government approve of Dr. Ranking's suggestion, that his report be communicated to the local Press on the Neilgherry Hills, so as to give publicity to the measures which are necessary for the protection of the public health of Ootacamund.

(True Extract).

Chief Secretary.

To the Sanitary Commissioner, Madras.
,, Inspector General, Indian Medical Department.
,, Municipal Commissioners, Ootacamund.
,, Editor of the Neilgherry Excelsior.
,, Editor of the South India Observer.

Ed. J. H. Burns.

Ootacamund 10th June 1868.

To,

*The Vice President and Members
Municipal Commission*

Sirs,

I have the honor to enclose a letter from Major Finlay relating to the condition of a pit in which filth is being deposited near his house.

I inspected this some time since with Mr. Dawson, when I advised that provided house sweepings only were deposited in the hollow, and a thick layer of earth be daily strewed over the whole, it will not be an objectionable way of filling it up. It was not contemplated that filth of any kind should be deposited.

I find that decomposition is going on in the mass, and that deleterious emanations are extricated. I therefore advise that no more refuse be deposited, but that the pit be at once filled

filled in with fresh earth.

The prevalence of Typhoid fever in the place, from which two deaths have recently occurred, (one contracted in Major Finlay's house) renders it advisable that all possible sources of atmospheric contamination should receive immediate attention; and I would suggest that your Sanitary Inspector be directed to commence a detailed examination of every private compound in the place, in view to notices being served upon all owners or occupiers of premises upon which dung heaps and such like accumulations of deleterious refuse exist.

I have ~~read~~
(Signed) J. Le. Ranking
Sanitary Commissioner
for Madras

(True Copy)

J. Le. Ranking

Sanitary Commissioner for Madras

2
Enclosure in a letter from the
Sanitary Commissioner for Madras
to the Chief Secretary to Govern-
ment No. 734 dated 7th July 1868.

Copy of a letter to the Vice-President
and Members of the Municipal Com-
mission Octagonum relating to
the filling up of a filthy pit near
Major Finlay's house.

J. Le. Ranking
No 1246

No. 734

OFFICE OF SANITARY COMMISSIONER,

MADRAS, 7th July 1868.

From,

The Sanitary Commissioner, Madras,

To,

The Chief Secretary to Government
Fort Saint George.

SIR,

Enclosure One
Copy of a letter to the
Vice President Mem-
bers of the Municipal
Commission Ootacamund
dated 10th June 1868.

Adverting to my Report upon the
sanitary condition of Ootacamund under date
the 23rd May last, and especially with refer-
ence to para 4 of that Report, in which I
bear testimony "to the existence within recent
periods of grave types of disease that were
quite unknown twenty years ago," I think
it advisable to lay before Government
some further information in elucidation of
that remark, in order that they may
have before them more precise knowledge
of the disease more especially alluded to.

2. I am induced to submit this letter in
continuation of my report, in consequence
of its having been affirmed in the public
papers, that no disease, tending to rob
that sanitarium of the character it once en-
joyed for salubrity; or to create alarm in
the minds of visitors accustomed annually
to resort to it for the benefit of their health, exists.

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3. The question is one deeply concerning the public, and intimately affecting the interests of owners of property on the Hills; and although I shall have to show that disease of a grave character has existed, and did exist, at the period of my recent visit, though I was not made aware of it till after the submission of my Report, I conceive that a precise knowledge of the nature of the disease (to which I shall presently refer more at length) and to the conditions and agencies held to be connected with its origin, localization, and spread; by enabling the Government to decide upon the measures of assistance to be afforded to the Municipality in modifying or eradicating those conditions; and by indicating to Landlords the necessity of adopting all those measures of conservancy upon their several properties that are requisite to place and keep them under sanitary conditions, calculated to remove any existing prejudices against certain houses, (and such prejudices undoubtedly exist and are not altogether unfounded) and thus guard against the recurrence of cases of this specific disease to which I will now draw attention:— precise knowledge of this nature, and the

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action that will doubtless be taken upon it will do, I repeat, more to reassure the public mind than any controversy carried on through the medium of the public press.

4. The disease I allude to is the Enteric Fever of Europe and America commonly known as Typhoid Fever.

This Fever is a specific one, as different from any other Fever, as Small Pox is from Measles, or the latter from Scarlatina and attended by its own special internal lesions.

5. That this Fever has become endemic on the Hills I think there can be no question. It prevailed amongst the troops at Wellington in 1863 when I was present at the examination of the body of a soldier who had died of it, and in which case the characteristic lesions found after death placed its nature beyond a doubt. On this occasion I was only on the Hills for 3 days. In 1866 I visited Rotarua on Privilege leave and was consulted both by Dr. Malle and Dr. Colvin Smith then the Resident Medical officers, in many cases in which none of us had any doubt as to the nature of the disease. One patient a Lady

under
largely,

under Dr. Miller's care presented a perfectly typical case - The others were also sufficiently marked cases. -

6. But referring to more recent times, a very few days after submission of my report under date the 22nd May last, I was consulted by Dr. Funnell in the case of a Lady and I at once pronounced it an instance of the specific fever under reference, and of a very grave type - In this opinion Dr. Funnell coincided. - The Lady died. A few days later Dr. Funnell spoke to me regarding another Lady on his hands and said that he feared the case would prove to be of a similar nature. - I did not see this case for I was unable to visit it in consultation with Dr. Funnell on the occasion he named, as I was on duty that day with His Excellency the Governor. -

The Lady was removed to Comoor and died there, and Dr. Wilson in reply to a query from a friend wrote "I have no hesitation in saying that the dysentery from which Mrs. — died was complicated with Typhoid Fever." Dr. Miller Surgeon to His Excellency the Governor who saw that Lady at Comoor also

authorises

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authorises me to say that he is quite satisfied that it was a case of this specific Fever - A good deal of sickness also prevailed at Aotacamund at the time of my visit in the form of bowel complaints generally spoken of as Dysentery, but I have reason to know that the nature of many of these cases was somewhat obscure and although I cannot affirm that they were mild cases of this specific fever, I think it quite possible that they may have been. -

7. At any rate I have adduced sufficient evidence of the existence of Typhoid or Enteric fever at Aotacamund and now propose to state the conditions under which it usually originates, or reproduces itself. -

8. When I state that the fever has been designated by a very high authority - Dr. Murchison - "pythogenetic fever" or fever "born of putrescence" I sufficiently indicate the sources from which it may arise, and my report upon Aotacamund above referred to abundantly establishes that the atmosphere of that sanitarium has long been irritated to an extreme degree by 'putrescent' matters strewn broad cast over the place. -

Moreover during the ^{hot} and dry season when water is scarce, and wells resorted to largely,

largely, there is little doubt, that the supply is vitiated, by percolation through the soil, of much putrescent organic matter - These wells some of which are resorted to by the gentry are generally in valleys or at the foot of hills, and the gathering grounds of the supply have been long in a most filthy state from human ordure - Stable refuse and dung heaps. -

9. But without entirely endorsing Dr Murchison's views that this specific Fever may originate in "putrescence," there is no doubt that the germs of the disease, once sown, they are revived and matured by putrefactive processes, by the emanations that is, from drains, cess-pits and dung heaps, and that through these, they are disseminated in the air, and water. -

That these germs have been sown in the soil of Botocumund is clear, and (in the words of Dr Parkes) "this great fact is (also) clear that the occurrence of typhoid fever points unequivocally to defective removal of excreta, and that it is a disease altogether and easily preventible." -

10. The measures of prevention are the removal from the neighbourhood of dwellings of all the sources of atmospheric impurity and the supply above

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indicated, especially the removal of all excreta or their deodorization by dry earth, ashes, charcoal, &c. -

11. In regard to the houses occupied by visitors to the Hills I have stated in my Report that the removal of all refuse of this nature by Municipal Carts, owing to the distance at which houses are apart, and the inaccessibility of many to Carts, cannot be carried out, and consequently the only alternative is to deposit all such stuff in pits and to deodorize it by frequent addition of ashes and dry earth. -

But as regards the houses in cases of Typhoid Fever many have occurred it will be necessary that Landlords and tenants should adopt further measures and it is clearly to the interest of Landlords, if they really desire to remove any evil reputation that their houses may have acquired, to adopt them at once. -

12. These measures are, to destroy all refuse capable of being thus disposed of by fire, to remove the soil to the depth of a foot or two, upon which old dung heaps may have been allowed to accumulate, and to cover it with a thick layer of fresh earth. Any existing dung heaps

heaps it will be advisable to disinfect before disturbing them, by treating them liberally with MacDougall's disinfecting powder, a cheap disinfectant and one which it would well repay every one to keep for use upon the premises. -

13. This process of disinfection must be more especially enforced upon sites used for deposit of night soil and where the Typhoid Fever germ (which specific germ is cast off from the bowels of fever cases) is especially sown - These localities should be liberally treated with the disinfectant ~~before being disturbed, for the removal of~~ the soil. the ground should then be dug up being freely mixed with the disinfectant; which should be occasionally used in the pits, which in future are to be used for deposit of night soil, instead of the method generally practised ^{when} I left the Hills, of throwing it upon the surface. -

14. If any Landlord, especially those in whose houses cases of fever or any suspicious bowel affection may have occurred, or which may have an unenviable reputation for want of cleanliness, ~~will not take the measures there indicated,~~

17
it is not too much to say that Typhoid Fever may be eradicated, and the fears of the public allayed. -

15. The Government having sanctioned the scheme of water supply, I may be permitted to urge its rapid completion - The water supply is now, to say the least, under suspicion - Many of the streams have in late years dried up, and many persons who formerly obtained their domestic supplies from such sources, now resort to wells, sunk in tainted ground, and the supply of which is derived from gathering grounds strewn with much surface impurity. -

The completion of the scheme will bring water from regions at a level above all ordinary source of contamination, though the distribution of the water in open channels, unless they be most rigorously conserved, will still expose it to risk - The expense attending its distribution by pipes is, I am informed, too heavy to admit of that method of supply being entertained. -

16. In conclusion I would solicit permission to send a copy of the Report with

this

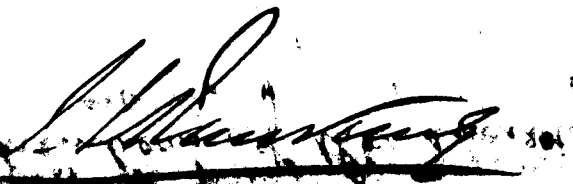
with this letter to the Municipal Commissioners
and to the local Press on the Neilgherry
so as to give every possible publicity to the
measures which it is incumbent upon owners
of property in their own interest, to take,
to remove the causes of a specific disease
that I have shown to exist, and to restore
confidence to the public, a confidence which
has certainly been shaken, and which is
more likely to be revived by a knowledge
of the conditions under which disease may
arise, and of measures that will conduce
to its eradication than by attempts to
~~its existence, in the face of facts~~
which have desolated the homes, and that
quite recently, of members of the society
on the Hills. -

17. I annex a copy of a letter I addressed
to the Municipal Commissioners upon the
subject on the morning of my departure
from Cochin. -

I have the honor to be,

Sir,

Your most obedient Servant



Public 1868 Deputy
thos of July.

From,

The Sanitary Commissioner
for Madras.

The Chief Secretary to Government
Fort St. George.

Dated 7th }
Recd 8th } July 1868.

Enc 1 No 1244
N^o 734

Reports on the Fever now
existing on the Nilgherry Hills
and suggests measures for
eradicating the disease.

as July
72

Public

Dear letter for day Aug 4 1868 - 720

10th July 1868 N^o 831.

The Govt direct that
the report of the Sanitary
Commissioner above recd
be communicated to
the President Municipal
Commissioners of Madras
where.

It is observed that
Mr. Ranking has already
sent a printed copy in a letter addressed
of this letter to the Vice President
of Mr. Ranking.

James report
on Othamund

and Members of
the Municipal Com-
mission of Othamund
suggested the necessity
of a detailed inspection
of the house compounds
of that station with
a view to the owners
of houses being compelled
to take the measures
indicated to prevent
the occurrence of

of the causes of the
Typhoid fever which
has shown its self with
fatal results at
Othamund.

The Govt. ~~see~~ approve
of Dr. Rankings sug-
gestion that his
report be communicated
to the Local Prep on
the Kelghery Hills
so as to give publicity

to the measures which
are necessary for the
protection of the
Public Health of
Colacumund.

R.L.

I suppose these papers
will be laid on the Editor's
table here? - It is prob-
able that a committee
composed of local interests
may advise the Editor
of the Nidghony ~~to~~
to direct the papers from
publication in his column.
In that case the error
will be corrected { the Nidghony
papers -

At the Sanitary Com. Madras
Hosp. Genl. Med. Depart.
Municipal Com. Colacib
Editor of the Nidghony Expositor
South India Review.

28 July
R.L.

72.7.3.

Public 1868 Depature

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Proceedings of Government
Dates 10 - July 1868

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