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MADRAS RECORD OFFICE.

Government of Madras.

Public DEPARTMENT.

G.O. No.	1655	Press
		~~Mis.~~
Dated	2-12	1869

Not to be folded or roughly handled

8/2/37

Proceedings of the Madras Government, Public Department,
2nd December 1869.

No. 10. Read the following letter from the Inspector-General of the Indian Medical Department and the Sanitary Commissioner for Madras, to the Chief Secretary to Government, Fort Saint George, dated Madras, 1st November 1869, No. 3169.

We have the honour, under the Order of Government in the Public Department, No. 1169, of the 19th August 1869, to submit a report upon the best means of giving effect to paragraph 3 of Despatch, No. 12, (Sanitary,) of the 24th June 1869, from the Right Honourable the Secretary of State, upon analyses of potable waters in this Presidency.

2. The recommendations of the Army Sanitary Commission, in accordance with which the reports called for are to be framed, comprise the following propositions:—(a) that the chemical examinations be carried out all over India; (b) that special attention be devoted to waters used in localities where cholera, dysentery, and fever are endemic; (c) that in view to determine whether the saline constituents are derived from the geological features of the soil or from previous sewage contamination, analyses of the soils at different depths be made in relation to each source of water supply; and (d) that the question of source and distribution of each supply, which includes raising, storing and filtering, be dealt with upon the principles recognised in England.

3. The chemical examination of waters used by the troops and civil population has, for some time past, engaged the attention of Government, and numerous analyses have been made by the Chemical Examiner at the Presidency. The results have not yet, however, been systematically arranged, nor has any report been prepared upon them.

We think that the Chemical Examiner should be called upon to submit a report upon the work already done, passing an opinion upon the general characters of the supply in individual stations—submitting, in fact, a report similar to those rendered by Dr. Macnamara in Bengal. By a return furnished by the Chemical Examiner, we find that, up to the 30th September last, 228 samples of waters transmitted from different stations, Civil and Military, have been analysed, and it is very desirable that a concise report upon them should be prepared.

4. The Sanitary Commissioner, impressed with the necessity that existed for a much more extended examination of the water supplies used by the troops, than the Chemical Examiner is able, unaided to institute, recently proposed that the services of the Assistant Surgeons trained at Netley should be brought into requisition, and drew up a plan of analytical procedure for general adoption which received the

approval of Government, who sanctioned* the required apparatus being procured from England.

* G. O., (M. D.,) No. 3813, dated 29th September 1869.

5. The method of analysis proposed was based essentially, so far as relates to the determination of organic matters, upon the plan so strongly recommended by Dr. Angus Smith in the paper appended to the Memorandum by the Army Sanitary Commission. It is satisfactory to find Dr. Smith maintaining the excellence of the permanganate of potass as a test for the measurement of putrid organic matter. Dr. Smith comments upon the use of the permanganate to this end in the following

*Proceedings of the Madras Government, Public Department,
2nd December 1869.*

words:—"No other method does measure it (the putrid organic matter) or even pretends to measure it."

6. The rules already drawn up for the examination of sources of supply and analyses of the waters, appear to meet all the points suggested by Dr. Smith. That gentleman, however, considers that the estimation of organic matter by Wanklyn's process might, with advantage, be added to other processes. This suggestion was also made by Dr. Ranking in his letter, recorded in Proceedings of Government, No. 1030, of 22nd July 1869.

7. So far then as refers to examination of sources of supply and analytical procedure, the rules that have already met the approval of Government, if supplemented by Wanklyn and Chapman's process, for the determination of organic matter containing nitrogen, and rules for the analyses of soils as required in the Memorandum by the Army Sanitary Commission, will suffice to insure a satisfactory record of the physical and chemical characters of waters.

8. In regard to the agency to be employed in as rapid an examination of the sources of water supply in this Presidency as possible, it remains to be determined whether the services of a Medical Officer trained at Netley shall be assigned to every station as proposed by Dr. Ranking, or whether the plan adopted in Bengal of nominating *selected* Medical Officers, of more advanced analytical skill, as itinerant analysts, should be followed.

9. The latter has its advantages (and we recommend it for adoption) inasmuch as that it is very advisable that standard analyses of certain selected samples should be carried out in greater detail, or, to use the words of Dr. Angus Smith, "selected specimens should be examined with all the minuteness which chemistry can give."

10. In Bengal, in the first instance, the Government of India nominated nineteen Officers to this duty, and eight or ten are now so employed. We would recommend that, in this Presidency, four be appointed, three for the Indian Peninsula and one for Burmah.

11. We find in the Proceedings of the Sanitary Commissioner with the Government of India for the months of March and April of the present year, that Medical Officers employed as water analysts in Bengal, were recommended to receive a special allowance in addition to deputation and travelling allowances.

12. We do not know what rate of remuneration was finally granted; but we beg to recommend that similar allowances be passed to those gentlemen who may be selected for the duty in this Presidency.

13. The Medical Officers we would desire to recommend for the duty are Drs. Porter, Macrae, and Nicholson, (Her Majesty's British Service,) and Sub-Assistant-Surgeon Harvey, now Assistant to the Chemical Examiner. From the testimonials in the office of the Inspector-General, these Officers are the best qualified for the duty

No. 11. ORDER THEREON, 2nd December 1869, No. 1654.

His Excellency the Governor in Council resolves to forward a copy of the foregoing report and of the Proceedings of Government, dated the 19th August last, No. 1169, which contain the Despatch from the Secretary of State, dated the 24th

*Proceedings of the Madras Government, Public Department,
2nd December 1869.*

June 1869, No. 12, to the Government of India, with a view to ascertaining from them whether, under present circumstances, it is intended to give immediate effect to the instructions of the Secretary of State for carrying out the analyses of the potable waters in this Presidency, and if so, the extent to which funds should be provided for the purpose in the Budget Estimate for the ensuing year.

2. His Excellency in Council resolves also that the Chemical Examiner at Madras be called upon to submit a report, upon the work already done, similar to the reports made by Doctor Macnamara in Bengal.

(True Extract.)

Chief Secretary.

To the Inspector-General of the Indian Medical Department.

„ Sanitary Commissioner.

„ Chemical Examiner.

Exd. J. Wright.

PUBLIC DEPARTMENT.

No. 1655.

FROM

THE HON. R. S. ELLIS, C.B.,
Chief Secretary to the Government of Fort Saint George,

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
HOME DEPARTMENT.

SIR,

I am instructed to transmit copies of the Proceedings of the Madras Government, noted in the margin, and to request, with reference to the Despatch* from the Secretary of State, and the joint report† of the Inspector-General of the Indian Medical Department, and the Sanitary Commissioner, Madras, which are embodied in the Proceedings, whether the Government of India are prepared to give immediate effect to the instructions of the Secretary of State for carrying out the analyses of the potable waters in this Presidency; and if they are, the extent to which funds should be provided for the purpose in the Budget Estimate for the ensuing year.

FORT SAINT GEORGE,
2nd December 1869.

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

Chief Secretary.

Exd. J. Wright.

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PUBLIC.

2nd Dec 1869

THE INSPECTOR-GENERAL OF THE
INDIAN MEDICAL DEPARTMENT

For Govt. Secy.

Dated December, 1869.

Recd.

G. O. (and Circular) No. 1012.

1869-10-12

Memorandum of the proceedings of the Madras Government, and of the instructions of the Secretary of State, and the joint report of the Inspector-General of the Indian Medical Department, and the Sanitary Commissioner, Madras, which are embodied in the Proceedings, whether the Government of India are prepared to give immediate effect to the instructions of the Secretary of State for carrying out the analyses of the potable waters in this Presidency; and if they are, the extent to which funds should be provided for the purpose in the Budget Estimate for the ensuing year.

Nov. 4. 1869

My dear Ellis

In answer to your
queries on the rock
letter:-

1st - The water analysis
are intended to have
only this work to do; &
if it be well done, the
duty is one that will
occupy all their time.
2nd Yes - the mass of the

Nov 19 August 1869 Nov 15-1869
Nov 22 October 1869 Nov 17-1869
Nov 29 Sept 1869 Nov 3-1869

(David King)
Public's Letter to Congress
5th December 1870
No 133.

Public 1869 Sept

From. Nov. 22 Dec 1869

To. Brackets. see Sept 1869

Proprietor's License

Nov. 22. Nov 1869

King on King's L. R. King

Secretary's Commission

for Brackets

To. The Chief Secretary to Gov

Public's Department

Nov 1869

Letter 1
Nov 5th November 1869

No 2422. Nov 3/69

Report upon the know
ingness of giving effect to the
disposal of the land, the decision
of date on the analysis
of potate water in the
Frederick.

217/11-
12/11-11

to meet the cost. -

5. No funds have been provided for this in our Med. Budget. -

Dunlop has read your queries & agrees with me in these replies.

Yours sincerely
W. Macleure

Memorandum for orders

On the 12 April 1869 -
The Army Sanitary Com^{rs} reviewing the Reports on Water Supply in Bengal by Dr. Macleure recommended "that the whole subject of these water sources may at once be taken up in India, with the view of devising some practical method for providing both land and civil population with pure water."

In a despatch dated 24th
June 1869 - The Secretary

of State desires "that
His Excellency in Council
[Madras] will issue the
necessary instructions for
obtaining reports on the
potable waters in the
Presidency of Madras, in
accordance with the recom-
mendations of the Army
Sanitary Commⁿ."

The Inspector General I. Med
Dept. & the Sanitary Commⁿ
were called on for a joint
report how this could
best be done - and I
beg to circulate their report
& a private note from D. Mackenzie.

It will be seen that already
228 samples of water transmitted
from Civil & Military Stations
have been analyzed by the Chem.
Examiner - He should be called
upon to submit a report si-
milar to that of D^r.
But the detailed analyses
contemplated by D^r. Angus
Smith and by the War
Office Sanitary Commⁿ will
necessitate the employment
of, for this Presidency
four special Medical
Offic^{rs}. This will involve
a very heavy expenditure
of which it will have to be provided
in our Budget. & the
previous sanction of the Govt.
of India is necessary.

Public Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter

From the Inspector General
Indian Med. Dept. & Sanitary Comm. } New enter 1st Nov. 1869 No 3169.

Order thereon 2^d December 1869. No 1654.

His Excellency
the Governor in Council re-
solves to forward a copy of
the foregoing report and of
the Proceedings of Govt. dated
the 19th August last No 1169
which contain the Despatch
from the Secy. of State dated
the 24th June 1869 No 62, to
the Govt. of India, with a
view to ascertaining from
them whether they have
~~been~~ ^{been} ~~forwarded~~ ^{forwarded} effect to
the instructions of the Secy.

under present circumstances,
it is intended to give im-
mediate

In these times of arbitrary
whenever it seems in con-
sistent to make this expenditure
even on so useful an object
as the analysis of potable water
the sanitary process may be
sufficient to protect the health
of our troops.

I suggest that the joint
report of Mr. Mackenzie
and Ranking may be sent
to the Govt. of India - and
that we may ask them
with reference to instructions
we have probably been issued
for other administrations whether
they are prepared to give effect
to the orders of the Secy. of State and
whether we may make a ~~report~~ ^{report} on our Budget

my m. N.
A.P.
W.G.

and to what extent in
M.L.

of State for carrying out
the analysis of the portable
waters in this Presidency,
and if ~~they are~~^{so} the extent
to which funds should be
provided for the purpose
in the Budget Estimate
for the ensuing year.

2. His Excellency
in Council resolves also
that the Chemical Exami-
ner at Madras be called
upon to submit a report
upon the work already
done, similar to the reports
made by Dr. Macnamara
in Bengal.

MU

The Supt. Genl. & Ind. Secy.
Sanitary Commissioner.
Chemical Examiner

6 Sept 87

despatched with
3 copies of G.O. No. 1169
6 copies of No. 1154.

Public Department

No. 1655.

To,
The Secretary to the Government of India
Home Department

Sir,
I am instructed to transmit copies of the Proceedings of the Madras Govt. noted in the margin, and to request, with reference to the Despatches from the Secy. of State and the joint report of the Inspt. Genl. Ind. Med. Dep't., and the Sanitary Commissioner, Madras, which are embodied in the Proceedings, whether the Govt. of India are prepared to give effect to the instructions of the Secy. of State for carrying out the analyses of the portable waters in this Presidency, and if they are, the extent to

immediate

* Dated 19th August/69 No. 156-157.
" 2nd Decem^r /69 No.

* Dated 24th June/69 No. 12.

* Dated 1st Nov^r /69 No. 3169.

Cont. of 118 } Enclosure.

Public.
No. 114 of 1870.
296 of 1871.
419 of 1872.
390 of 1873.
Reed. } 1869, No. 1654.

Nos. 10. 12

Transmitting certain papers on the subject and referring to Enquire whether the Govt. of India are prepared to give effect to the instructions of the Secy. of State for carrying out the analyses of the portable waters in this Presidency, & requesting the Chemical Examiner to refresh on the work already done.

Public (Sanitary) Secy.
to Govt. of India
10th Decem^r 1870
No. 33.

Recd. 11.

to which funds should be
provided for the purpose
in the Budget Estimate
for the ensuing year.

11/11

Fort St. George.
2^d Decr. 1869

Public (Cambridge) letter
to the 2nd 5th December
1970 No. 33.

sent 11 Dec 1869

Pres. 2^d December 1869
Home 1869 Dept.
No. 2 Decemb
Public
From Government of
Fort St. George.
Dated Dec. 2 }
R. } No. 1
Enclosures.
spare copies.
D. No. Progs. { D.
L. No. 1655. { No.

10. 12.
#114 + 296 of 1870

Forwarding certain papers on
the subject and making inquiry
whether ^{the Govt. of India} are prepared to
give effect to the instructions
of the Secy. of State for carrying
out the analyses of the potable
waters in this ^{Presidency}, if they are, to
what extent funds should be
provided in the Budget

12

12.