

1. Number 10
2. Date 7-6-37
3. Initials of Officer

M.R.O. 1-33,400-59-11-00

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.
Cons. 17.2.57

G.O. No. <i>302</i>	Press Mis.
<i>11-12</i>	
Dated <i>13-2-</i>	<i>1857.</i>

Not to be folded or roughly handled

8

Fort Saint George, Public Works Consultation of 17th February 1857.

No. 11. Read the following Extract from the Proceedings of the Chief Engineer, dated 29th January 1857, No. 9864.

Read the following letter from WILLIAM FRASER, Civil Engineer; to Colonel C. E. FABER, Chief Engineer, dated Ootacamund, 5th January 1857.

SIR,

On the 20th September 1855, I asked to be supplied with a mountain Barometer &c.

I regret very much that these instruments were not supplied to me, for had I had them, during my examination of this country, I could now supply you with valuable information regarding its levels.

The use of the Barometer has now almost become a necessity to me. Thus. In connection with the Reservoir at Pallaoor (12-7) there must be a canal from *some point* on the Bhawani, high enough to enable us to get on to the water shed, between the Bhawani and Noyeel rivers.

To ascertain this point and take the necessary trial levels, *with a spirit level*, would be a great loss of time, when it could be done nearly as well by the use of a good Barometer.

The common mountain Barometer such as were supplied to Captain Francis, or Captain Ludlow, some time ago, and one of which he lent to me, are of no use when accuracy is required. The best of them allows the Mercury to escape from the cistern, and there being no arrangement for adjusting the surface of the Mercury to Zero, the readings cannot be depended on.

When this arrangement is attached as in Fortins Barometer, it becomes an excellent instrument.

The kind I would like to get is Gay Lussac's. It is the most portable and most correct, as well as being the cheapest and most easily renewed in case of an accident, as you have only to fill a fresh tube and put it in.

Will you therefore order me two of these Instruments; two or three spare tubes, some pure Mercury, and two detached Thermometers, a dry bulb, and a wet one.

The reason why I ask for two is, that I would wish to leave one at, say the District office, to be registered daily.

Should these Instruments, not be procurable at Madras, and that you order them from England, please send me in the meantime an aneroid. It will answer my *present* purposes at Coimbatore, but will not be generally useful, being of no use at an elevation exceeding 2,000 feet above the sea.

Whatever Instruments are sent to me, I would wish them to be compared with the Standard ones at Madras, and the difference in the readings noted.

Ordered that Mr. Fraser be informed, that there are no Barometers of the peculiar pattern he requires, either in the Government Stores or in the Shops at the Presidency, application will be made to the Surveyor Generals Department Calcutta for the supply of a Gay Lussac's pattern Barometer for Mr. Fraser's use.

2. Resolved to forward a copy of Mr. Fraser's letter to Major Thullier Deputy Surveyor General, and to state that the Chief Engineer D. P. W., Madras will feel much obliged if Major Thullier can assist him in obtaining the instrument required by Mr. Fraser on particular service.

3. Resolved also to request the Government (with copy of Mr. Fraser's letter) to apply to the Honorable Court for 4 or 6 Barometers with latest apparatus attached, of pattern recommended by M. Gay Lussac.

(Signed) C. E. FABER, Colonel,
Chief Engineer.

Fort Saint George, Public Works Consultation of 17th February 1857.

No. 12.

ORDER THEREON, No. 302; dated 15th February 1857.

Ordered accordingly that application be made to the Honorable Court of Directors for 6 Barometers of the description required by the Chief Engineer for the use of the Department of Public Works.

(Signed) H. FORBES,
Acting Secretary to Government.

3.
N^o 1081
Extract from the Proceedings of the Chief Engineer
in the Department of Public Works.

Under date the 24th January 1857.

Read the following

Ootacamund

5th January 1857.

From

William Fraser

Civil Engineer

To

Colonel Faber

Chief Engineer

Sir,

On the 20th September 1855, I asked
to be supplied with a mountain Barometer &c.

I regret very much that these instru-
ments were not supplied to me, for had I had them,
during my examination of this country, I could
now supply you with valuable information regard-
ing its levels.

The use of the Barometer has now
almost become a necessity to me. Thus. In connection
with the Reservoir at Pallaoor / 12.7 / there must
be a canal from some point on the Bhawani,
high enough to enable us to get on to the water
shed, between the Bhawani and Royeel Rivers.

To

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To ascertain this point and to see
the necessary trial levels, with a spirit level, would
be a great loss of time, when it could be done nearly
as well by the use of a good Barometer.

The common Mountain Barometer
such as were supplied to Captain Francis, or Captain
Ludlow, some time ago, and one of which he lent to
me, are of no use when accuracy is required. The best
of them allows the mercury to escape from the ves-
tern, and there being no arrangement for adjust-
ing the surface of the Mercury to zero, the read-
ings cannot be depended on.

When this arrangement is attached
as in Fortin's Barometer, it becomes an excellent
Instrument.

The kind I would like to get is
Gay Lussac's. It is the most portable and most
correct, as well as being the cheapest and most
easily renewed in case of an accident, as you
have only to fill a fresh tube and put it in.

Will you therefore order me two
of these Instruments, two or three spare tubes,
some pure mercury and two detached thermome-
ters, a dry bulb, and a wet one.

The reason why I ask for two is,
that I would wish to leave one at, say the District
Office, to be registered daily.

Should these Instruments not
be

5
be procurable at Madras, and that you order them
from England, please send me in the mean time
an aneroid. It will answer my present purposes
at Coimbatore, but will not be generally useful,
being of no use at an elevation exceeding 2000 feet
above the sea.

Whatever Instruments are sent to me,
I would wish them to be compared with the standard
ones at Madras, and the difference in the read-
ings noted.

I have the honor to be &c
(Signed) William Fraser.

Ordered that Mr Fraser be informed,
that there are no Barometers of the peculiar pat-
tern he requires, either in the Government Stores or
in the Shops at the Presidency, a application will
be made to the Surveyor General's Department in
Calcutta for the supply of a Gay Lussac's pattern
Barometer for Mr Fraser's use.

2. Resolved to forward a copy of Mr
Fraser's letter to Major Thullier Deputy Surveyor
General, and to state that the Chief Engineer
D.E.W. Madras will feel much obliged if Major
Thullier can assist him in obtaining the instru-
ment required by Mr Fraser on particular service.

3. Resolved also to request the Govern-
ment (with copy of Mr Fraser's letter) to apply to
the

the Honorable Court for 4 or 6 Barometers with
latest apparatus attached, of pattern recommended
by M. Gay Lussac.

(True Extract)

Mrs. Lator Colonel

Chief Engineer

To The Secretary to Government
Public Works Departt.

For Orders.

Public Works Department N. 197
Extract Pro. Chief Engineer 29th July 1857 -

Supervisor of the

Engⁿ suggestion.

A

W. M.

Colfax in do. H. & E.
ap. 160 St. Library 1857. No 4

Feb. 11th 1857 (Debt)
Dob. card 1st February.
J^h 1857

Extract from the proceedings
of the Chief Engineer
of the Secretary to Government
Sub. Works Dept^y

Dated 29th Dec^r 1857
Rec^d 29th Jan^y 1857

49864

John

Submitting copy of a letter
from H. Fraser Esq^r Civil Eng^r &
and enclosing the Govt^y to apply to
the General Court for leave to ex-
amine, with latest apparatus
attached of pattern recommended
by Mr. Gray Esq^r.

Robert firm the 20 of the third
beginning of June 1922. 19.3.30

With your Order.
No. 302 - 13100 by J. J.

18302

Ordered accordingly

that application be made to the
Honorable Court of Directors for
a Barometer of the description
required by the Chief Engineer
for the use of the Department
of Public Works
JH

Sept 28th George
18th February 1859

Admiral Sir John
Dundas

4 July 1922
C30 Day 02: 05:00