Archives I 10,006—16-8 77.

(1) Number of pages 26

(2) Date of repair 23.10.86

(3) Initials of the Referencer bas.

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D DEPARTMENT

G.O. No. B.P. No.	473-W	Press. Mis.
Dated	19.2.1879	~~197~~.

R.R.

Not to be folded or roughly handled

473/1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

19th February 1879, No. 473 W.

General.
Account.

Read the following paper :—

No. 145. From A. DeCLOSETS, Esq., Civil Engineer, to the Chief Engineer, Public Works Department, dated Madras, 3rd February 1879.

In behalf of science as well as of public utility I came to ask you whether you will be willing to lend me one of the *boring apparatus* you have in the Public Works Department Stores.

There is a gentleman who is willing to go to the expense of boring an Artesian well in the tertiary and cretaceous formations about eight miles west of Pondicherry and upon the English ground under my direction. But he has not a proper apparatus to reach the depth required, and as such work requires much care and good implements, I have been induced to make you my demand.

Should you agree to grant it, I will be bound to return the boring apparatus to Government after having used it, and in good condition.

On a similar occasion when I was boring in the Madras Island (for a projected harbour) I had the loan from the Public Works Department Stores of a boring apparatus which I returned safely after.

ARTESIAN WELLS IN PONDICHERRY.

Since a long time it was thought that an aquiferous stratum was in existence under the French Settlement of Pondicherry. As far as 1835, Mr. Rabourdin, the Chief Engineer of Government, made a sounding at the foot of the tertiary formation bordering on Pondicherry, but the work was abandoned for unknown reasons. In 1853 I bored myself a hole with the view of procuring water for a foundry near Pondicherry, but left the work undone on account of my departure, after giving the nature of the strata as alluvial. Last year Mr. Paulain, the Director of a large Spinning Mill, took the matter in hand again and bored an Artesian well in his factory; after two or three months' work he succeeded in finding a water-bearing stratum at 180 feet below and water came out freely; the hydrostatic pressure of the column was 1·80 metres above the level of the ground. Encouraged by this success, the same gentleman bored another well nearer the sea in the other spinning factory; there the water stratum was tapped at 90 feet about (October 1878).

These two wells have since continued to flow freely, without any diminution in the quantity delivered. In presence of these results the French Government indented for a complete boring apparatus, on the receipt of which the Chief Engineer began a boring in the grounds of the "Jardin Colonial," and forty days after he succeeded in tapping the aquiferous stratum at 56 metres (183 feet) nearly; the hole was 0·18 metre in diameter (about 7"); by hydrometric tests the water was found to have the same composition as the other streams already found, which proves also that they belong to the same sheet. These waters are very wholesome; they contain a very small amount of oxide of iron.

It must be said that the borings executed in those three different cases have been done in the alluvial soil, which extends from the red hills of Pondicherry to the range of the Mount Kopper near Cuddalore; the strata traversed were sand, sand mixed with clay, grey sandy clay, blue clay, whitish sand, grey clay, &c. No rock has been encountered. Sundry pieces of laterite, of felspar, and fossil wood have been extracted during the boring, but it is to be believed that they have been transported by streams at certain times from the neighbourhood where similar stones are found.

PUBLIC WORKS DEPARTMENT, 19TH FEBRUARY 1879, No. 473 W.

The Chief Engineer continued boring deeper, sinking an iron pipe at the same time for ascertaining whether it would be possible to meet other sheets of water underlying. At my last visit he had arrived at a depth of 230 feet, nearly without result, but he was supposing to be near the tertiary formation underlying the alluvial soil of Pondicherry; consequently he has resolved to raise his pipe to 56 metres again to restore the water streams, and to bore another well into town.

It is not necessary to deal upon the value for irrigation purpose of these wells; there are now many inquiries about the practicability of these wells in several localities, and several borings commenced. My opinion is that the water obtained at Pondicherry proceeds from the Ponear and perhaps Gingee rivers, penetrating the sands 10 or 12 miles westward inland.

(Signed) A. DECLOSETS, C.E.

No. 146. ORDER THEREON, 19th February 1879, No. 473 W.

THE boring apparatus asked for by Mr. DeClosets will be supplied to him on loan.

2. The Government regard the subject as one of great interest, and will be glad to learn the results of Mr. DeClosets' attempts to obtain water from Artesian wells.

(True Extract.)

Colonel, R.E.,
Ag. Secy. to Govt., P.W.D.

To Mr. A. DeClosets.
To the General Superintendent, Public Works Stores.
„ Superintending Engineers, for information.
„ Consg. Engr. for Rlys.

Exd. E. C. Shunker.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of (1879) Madras.

PUBLIC WORKS.

To

Mr A. DeCLOSETS.
&c. &c. &c.

Dated February 19th.

Issued

Recd.

G. O., 19th February 1879, No. 473 W.

FEBRUARY

Nos. 145-146

The Boring Apparatus asked for by Mr. DeClosets for the purposes of obtaining water from Artesian wells to be supplied to him on loan.

Rd. 4th Feb/79 473/3 3e February 1879

P 1

Dear Colonel Forde,

In behalf of Science as well as of public utility, I came to ask you whether you will be willing to lend me one of the boring appara as you have in the P. W. D. Stores.

There is a gentleman who is willing to go at the expense of boring an Artesian well, in the tertiary and Cretaceous formations about 4 miles O of Pondicherry and upon the English ground; [illegible] under my direction,

nature of the strata is alluvial,

But he has not a proper apparatus to reach the depth required; and as such work requires much care and good implements, I have been induced to make you my demand.

Should you agree to grant it, I will bound to return the boring apparatus to Govern after having used it, and in good condition.

In a similar occasion when I was boring in the Madras Island (for a projected Harbour) I had the Loan from the P. W. D. Stores of a boring apparatus which I returned safely after.

I remain
yours sincerely
A De Closets C.E.

9. Armenian Street. Madras

the Nature of the Strata is alluvial,

Pro 9 19-2-79 No 47-38

P.W. 1879 Dept.

No 1257

From [illegible]

Dated 3rd } Feby
Recd 10th } 1879

Encl. [illegible]

Ci 10-2-79

AH3 473/5

Artesian Wells in Pondicherry.

Since a long time, it was thought that an aquiferous stratum was in existence under the French Settlement of Pondicherry, as far as 1835 Mr Rabaud the Chief Engineer of Government made a boring at the foot of the tertiary formation ~~[illegible]~~ of Pondicherry, but the work was abandoned for unknown reasons.

In 1853, I bored myself a hole with the view of procuring water for a foundry near Pondicherry, and left the work undone in account of my departure; ~~after having~~ the nature of the strata is alluvial,

Last year Mr Paulaini the Director
of a large Spinning Mill
took the matter in hands
again and bored an artesian
well in his factory, after
2 or 3 months work, he
succeeded at finding a water bearing stratum at 180 feet below and
the water came out freely; the
hydrostatic pressure of the
column was 1m.80 above 1.80 meters
the level of the ground.
Encouraged by this success
the same gentleman bored
another well nearer the sea
in the other spinning factory
there the water stratum
was tapped at 90 feet
above. (october 78)
these two wells have since

1873/6

continued to flow freely,
without any diminution
in the quantity delivered.
In presence of these results
the French Govt. indented
for a complete boring
apparatus, at the receipt
of which the Chief Engineer
begun a boring in the
grounds of the "jardin
colonial" and 40 days
after he succeeded in
tapping the aquiferous
stratum at 56 metres tres
(186') nearly; the holes
was 0m,18 in diameter
(about 7") by hydrotimetric
tests the water was
found to have the same

composition as the other streams already found, which proves also that they belong to the same sheet. — These waters are very wholesome, they contain a very small amount of mix of Iron. —

It must be said that the borings executed in these 3 different cases have been done in the alluvial soil which extends from the red hills of Pondicherry to the range of the Merkapper near Cuddalore. The strata traversed were: sands; grey sands mixed with clay, sandy clay, blue clay, whitish sands, grey clay &c

no rock have been encountered. Sundry pieces of laterite, of feldspar & fossilified wood have been extracted during the boring, but it is to be believed that they have been transported by streams at certain times, from the neighbourhood where similar stones are found.

— The Chief Engineer continued boring deeper, sinking an iron pipe at the same time for ascertaining whether it would be possible to meet other sheets of water underlaying, at my last visit, he was arrived at a depth of 230 feet nearly without result, but he was supposing to be near the tertiary formation underlying the alluvial soil of Pondicherry Consequently he has resolved to rise his pipe to 56 inches again to restore the water stream and to bore another well into town.

It is not necessary to dwell upon the value for irrigation purpose of these wells, there is now many inquiries about the practicability of these wells in several localities; & several borings commenced. My opinion is, that the water obtained is various & proceeds from the Ponear & perhaps Gingee Rivers penetrating the sands 10 or 12 miles ~~Westward~~ inland.

E. Wallison C.E.

D.B.

Public Works Stores and Workshops,
Madras, 11th Feb 1879

My dear Colonel

What guarantee must I take from Mr. De Closet for the boring apparatus you have decided to let him have - bill or simple receipt & letter be sufficient or ought he to give a deposit to be returned to him when the articles are returned in good order - Also am

I at liberty to send him
the apparatus without
any payment of their
hire –
Mr McCleod is now waiting
to take away the tools,
so I have thought it
better to write direct to
you. Yrs very truly

W C [illegible]

Mr A. De Clouets
9 [illegible] Street

GOVT. OF MADRAS. } 1878! 13 FEB 79 { P. W. DEPT.

SECRETARY.

Fort St. George, Feby 12 1879.

G.O. No 473 W - 19-2-79

OFFICE NOTE.

To Genl Supt - P.W.W.S. & Stores

The Genl Supt with reference to His D.O. accompanying this note, will be guided by the Rules of the Depts and demand such security as he deems sufficient to cover total loss of the articles in question.

By order

W [illegible] C.E.
D C Engr
12.2.79.

C.E.
Lodged W 14.2.79

with D.O.

Mr De Closets address is No 9 Armenian Street Black Town

This office note with the [illegible] called and returned [illegible] 13/3/79

OF 187

473/11

PUBLIC WORKS DEPARTMENT.

From A De Closets C.E. dated 3rd February 1879 with some notes on the Artesian Wells at Pondicherry.

~~FOR ORDERS.~~

Circulated for information.

12/2

E A [illegible] Col R.E.
Secty to Govt P.W.D.

I presume the request for the Boring apparatus has been complied with.

The subject is one of much interest & I should like to see experiments made in our own territory.

10th Feby 1879

Yes. The Genl Supt. received orders to supply the D.O. with the articles required.
17/2

Put up these papers
7/2

[illegible] 17/2

FOR ORDERS.

~~[illegible]~~

Would [illegible]

Mr DeClosetts

boring experiments

Cir 18-2-79 RL 13.2

No. 473/12

Genl Acct

Wat

No. 473 W Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 19th Feby 1879.

Read the following :—

From Mr A DeClosetts CE (K.E.D) 3d Feb/79

The boring apparatus asked for by Mr DeClosetts will be supplied to him on loan.

The Government regard the subject as one of great interest, and will be glad to learn the results of Mr. DeClosetts attempts to obtain water from Artesian wells.

Mr. A DeClosetts 1

Genl Supt Mr Stores 3

Supg Engrs - for information 9 3

CE fa Rys 1 9

17

Desp. 19-2-79

Cw 1252

Papers in [illegible]

Govt. of {1879} Madras.

PUBLIC WORKS.

21-2-79

To

Dated

Issued

Recd.

Encl.

G. O., 19 Feby 1879, No. 573W

Nos. 145-146

The Boring apparatus asked for by Mr De Clossets for the purpose of obtaining water from Artesian wells to be supplied to him on loan.