

(1) Number of pages _____

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MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 1667	Press
175-176	Mis.
Dated 11-4-1870	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
11th April 1870.*

No. 175 Note by the Acting Chief Engineer for Irrigation, dated 5th March 1870, No 56 —

Read the following letter from F. G. STONEY, Esq, to the Chief Engineer for Irrigation, dated Madras, 2nd March 1870

REFERRING to your letter of the 26th ultimo, I have the honour to propose that, upon my arrival in England, I shall construct for the Madras Government one set of my large equilibrium valves suitable for head sluices, and one set suitable for deep tanks.

2 The valves to be of cast-iron, with screw lifting gear and brass fittings where necessary, and to be adapted in each case to the circumstances of position, head of water and area of water-way, as specified in your letter above referred to

3- I could not make these first sets of valves, with their lifting gear, for less than £200 Sterling, and I propose that, as soon as I have the work ready for being shipped, I shall receive the above sum.

4 I have not gone into a description of my valves or attempted a full specification, as you are aware of the principle and general features of what I propose, and you know it is my own interest to send out the best materials, arrangement, and workmanship

5 I shall have all my drawings completed by the time I arrive in England, so that no time shall be lost

My address is Seatown Place, Dundalk, Ireland.

I HAVE had two interviews with Mr. Stoney on the subject of his equilibrium valves for sluices, and, as the result of my conversations with him and of an examination of his drawings, I stated that I should be ready to submit, for the consideration of Government, any proposition which he might think fit to make for the construction in England, whither he is proceeding by the *Renown*, of two experimental sets of sluices on the principle indicated in the tracing which accompanies his letter. Mr. Stoney proposes to make up two sets of sluices, one adapted for head sluices, such as those of the main channels of the Kistna Delta, and the other for deep tanks for Government, at a cost, with lifting gear, of £200

2. Mr. Stoney has had considerable experience in designing iron work, and he has, while in the employment of the Madras Irrigation and Canal Company, had an opportunity of becoming acquainted with the requirements of large irrigation works, and I believe therefore that, if the Government should be pleased to accept the proposal he has made, it may reasonably be expected that patterns of sluices adapted to the requirements of the classes of works for which they are intended and capable of being easily worked, will be obtained

3. I do not suppose that the sluices, after the patterns of approved designs have been prepared, will cost, per set, more than perhaps one-third of the sum named by Mr Stoney, but, as that gentleman points out, the cost of the first sets must be considerable, and it is more than probable that when he comes to work out his ideas, parts of the designs will have to be modified, so as to secure facility of transport and of replacement of parts when worn, as also to combine the maximum of strength and the minimum of wear and tear with a moderate weight of metal.

Proceedings of the Madras Government, Public Works Department,
11th April 1870.

4 I would beg, therefore, to recommend that Mr. Stoney be allowed to carry out the proposed experiment, and I would suggest that he be requested to transmit to this office a copy of his matured designs, the tracing now forwarded being intended to indicate the general principle and leading features only, and that on their approval he be paid an advance of £100, and the remaining £100 on the completion of the two sets of sluices with their gear, on his transmitting to the India office an invoice, and reporting that the sluices are packed ready for shipment.

5 Should I be in England before the close of the current year, or before the sluices are reported ready, I will arrange, if the Government wish me to do so, to inspect the work before it is packed for transmission to Madras.

6 A copy of my demi-official note to Mr. Stoney is subjoined.

(Signed) J. MULLINS, Major, R.E.,
Acting Chief Engineer for Irrigation.

MY DEAR MR STONEY,—I have shown your design for a balanced set of shutters to Colonel Orr, and I think that, if you were to make an official application asking the Government to assist you in carrying out your idea, it is very probable that they may be willing to meet your views. I would suggest that you should work out the details, 1st, for a shutter for a head sluice, with a maximum depth of water on the front sill of 20 feet, and an opening of 6 feet span in the vent behind or below the shutters. Shutters to be worked from platform 26 feet above sill, lift 6 feet, 2nd for a tank sluice to work under a head of 90 feet, area of openings not more than 6 square feet or thereabouts, shutters to be worked from a platform 115 feet above sluice sill.

2 If you can state what the cost of making an experimental set of each kind would be, I shall be quite ready to recommend that you should be authorized to make the trial at the expense of Government. You can however make any request you think proper, either now or after your arrival in England, and your letter will receive careful consideration.

MADRAS,
26th February 1870

P S—The Government would wish to know also what the cost would be of making up sets of shutters of each kind, with gearing complete, supposing fifty sets of the head sluice pattern and twenty of the tank sluice pattern were ordered.

(Signed) J. MULLINS.

FORT SAINT GEORGE,
9th March 1870.

No 176

ORDER THEREON, 11th April 1870, No. 1007.
(True Copy)

IRRIGATION, No. 20.

The Government sanction the construction of the experimental sluice shutters and gearing referred to in these papers, at a cost of £200, and they approve of the arrangements detailed in the note by the Acting Chief Engineer for Irrigation. Mr Stoney will accordingly be requested to transmit to the office of the Chief Engineer for Irrigation a copy of his

Proceedings of the Madras Government, Public Works Department,
11th April 1870.

matured designs when ready, and on their approval an advance of £100 will be authorized.

(True Extract.)

(Signed) J. MULLINS, Major, R.E.,
Acting Joint Secretary to Government.

To the Chief Engineer for Irrigation
To Mr. F G Stoney
To the Controller of Public Works Accounts

Govt. of 1870 Madras.

PUBLIC WORKS.

To

THE CHIEF ENGINEER FOR IRRIGATION

Ac. Ac. Ac.

Dated April, 1874

Recd

Encl

G O, 1104 April 1870 N. 1,007

APRIL

Nos. 175 176

Equilibrium valves for sluices
the Note by the Chief Engineer for
Irrigation dated 11th April 1874
valves for sluices

N^o 56

Note by the Acting Chief Engineer for Irrigation

I have had two interviews with Mr Storey on the subject of his equilibrium valves for sluices, and as the result of my conversations with him and of an examination of his drawings, I stated that I should be ready to submit for the consideration of Government my proposition, which he might think fit to make for the construction in England, whether he is proceeding by the Penon, of two experimental sets of sluices on the principle indicated in the tracing, which accompanies his letter. Mr Storey proposes to make up 2 sets of sluices, one adapted for headsluices, such as those of the main channels of the Krishna Delta, and the other for deep tanks, for Government, at a cost with lifting gear of £200

2. Mr Storey has had considerable experience in designing iron work, and he has, while in the employment of the Madras Irrigation and Canal Company, had an opportunity of becoming acquainted with the requirements of large irrigation works

works, and I believe therefore that, if the Government should be pleased to accept the proposal he has made, it may reasonably be expected that patterns of sluices adapted to the requirements of the classes of works for which they are intended, and capable of being easily worked, will be obtained.

3. I do not suppose that the sluices, after the patterns of approved designs have been prepared, will cost, per set, more than perhaps $\frac{1}{2}$ of the sum named by Mr. Stoney; but, as that gentleman points out, the cost of the first sets must be considerable, and it is more than probable that when he comes to work out his ideas parts of the designs will have to be modified, so as to secure facility of transport and of replacement of parts when worn, as also to combine the maximum of strength and the minimum of wear and tear with a moderate freight of metal.

4. I would beg therefore to recommend that Mr. Stoney be allowed to carry out the proposed experiment, and I would suggest that he be requested to transmit to this office a copy of his matured

matured designs, the tracing now forwarded being intended to indicate the general principle & leading features only, and that on their approval he deposit an advance of £100, and the remaining £100 on the completion of the two sets of sluices with their gear, on his transmitting to the India office an invoice and reporting that the sluices are packed ready for shipment.

5. Should I be in England before the close of the current year, or before the sluices are reported ready, I will arrange, if the Government wish me to do so, to inspect the work before it is packed for transmission to Madras.

6. A copy of my demi-official note to Mr. Stoney is subjoined.

Voluntarily

John S. G. G. G.
5th March 1870

Major
Acting Chief Engineer for Irrigation
The Secretary to Government
P. W. Department

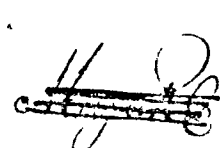
My dear Mr. Stoney,

I have shown your design for a balance

balanced set of shutters to Colonel Orr & I think
that, if you were to make an official application
asking the Government to assist you in carrying out
your idea, it is very probable that they may be will-
ing to meet your views. I would suggest that you
should point out the details: 1st for a shutter for a
head sluice, with a maximum depth of water on the
front sill of 20 feet, and an opening of 6 feet span in
the vent behind or below the shutter. Shutter to be
worked from platform 26 feet above sill. Lift 6 feet.
2nd for a Tank sluice to work under a head of
170 feet, area of openings not more than 6 square
feet or thereabouts, Shutter to be worked from a plat-
form 115 feet above sluice sill.

If you can state what the cost of making an ex-
perimental set of each kind, would be, I shall be quite
ready to recommend that you should be authorized
to make the trial at the expense of Government.
You can however make any request you think proper,
either now or after your arrival in England, & your
letter will receive careful consideration.

Madras
26th February 70

(Signed) John Mullins 
Genl.

PS The Government would wish to know also
what the cost would be of making up sets of
shutters of each kind, with gearing complete, sup-
posing 50 sets of the head sluice pattern, and 20
of the Tank sluice pattern were ordered.

True Copy

John Mullins Major
9th March 1870 Acting Chief Engineer for Irrigation

Madras
2nd March 1870

To
Major John Mullins R.E.
Consulting Engineer for Irrigation

Sir
Referring to your letter of the
26th ultimo, I have the honor to propose,
that, upon my arrival in England, I
shall construct for the Madras Government,
one set of my large equilibrium valves,
suitable for head sluices, and one set
suitable for deep tanks. —

The valves to be of cast iron, with
screw lifting gear, and brass fittings where
necessary; and to be adapted in each case
to the circumstances of position, head of
water and area of water way, as specified
in your letter above referred to. —

I could not make these first sets
of valves, with their lifting gear, for less
than £200 - - Sterling; — and I propose,
that

25 March 1870 Q.R. 204/15

10/175

Note on the Standard
Equilibrium valves for
Sluices.

10/175-11/175
fine drawing

Letter 5th March 1870
Revised 10th March 1870
2/10/56

The Secretary to
Government of Madras
Engineer for Irrigation
The Chief Engineer
13th April 1870
From the Secretary to
Government of Madras

that as soon as I have the work ready
for being shipped, I shall receive the above
sum. —

I have not gone into a description
of my valves, or attempted a full speci-
-cation, as you are aware of the principal
and general features of what I propose,
and you know it is my own interest to
send out the best materials, arrangement
and workmanship. —

I shall have all my drawings
completed by the time I arrive in England,
so that no time shall be lost. —

My address is, Seatown Place,
Dundalk — Ireland.

I have the honor to be
sir

Your Most Obedient Servant

J. G. Stony.

P. W. Department.
1850-1

P. W. Department.

1007

Proceedings of the Madras Government.

Under date the 11 April /70

Read the following

From The Ag. Chief Engineer for Irrigation { H. E. No 56 of 5 March 1870

The Government sanction the construction of the experimental sluice, shutters and gearing referred to in these papers, at a cost of £200, and they approve of the arrangements detailed in the note by the acting Chief Engineer for Irrigation. Mr. Stoney will accordingly be requested to transmit to the Office of the Chief Engineer for Irrigation a copy of his matured designs when ready and on their approval an advance of £100 will be authorized.

From Mr. F. G. Stoney

M 960/70.

Dated 2nd Decr 70 Recd 8th Decr 70

Proposes that on his arrival in England he shall construct for the Madras Government one set of his large equilibrium valves with 16 in head sluices & one set suitable for deep tanks

N

To the Chief Eng: for Irrigation. To Mr. F. G. Stoney.

Sentance Place. Dated 11th April 1870

To the Controller of P.W. accs. W. H. ...

19/5/70

[Signature]

Rec'd 16/4/70 to the Ch. reg.
+ Controller + a share copy to
Mr. Fraser for a private letter

C. 28. March 1970 R. 2nd April

Cue 960
Gibt. of 1870. 30 Dec.

PUBLIC WORKS.

The Chief Engineer
for Irrigation

Dated

and

Page 2

G. O. 11 April 1870, No 1007

Nos. 175-176

Equilibrium valves Papering orders
on the hole by the Chief Eng. for
Irr. regarding the Stoney's Equi-
-librium valves for sluices.