

(1) Number of pages \_\_\_\_\_

(2) Date of repair \_\_\_\_\_

(3) Initials of the Referencer \_\_\_\_\_

## MADRAS RECORD OFFICE.

Government of Madras.

*Pulse Wom* DEPARTMENT.

|                        |               |
|------------------------|---------------|
| G.O. No. 1988-89       | Press<br>Mis. |
| 343-65                 |               |
| Dated 21st August 1872 |               |

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,  
21st August 1872.*

No. 343. Read the following letter from the Assistant Secretary to the Government of India, Public Works Department (Buildings and Roads—Military), to the Secretary to the Government of Madras in the Public Works Department, dated Simla, 3rd July 1872, No. 797-B M —

THE Government of India in this department having been furnished with a copy of the report of the Committee assembled for the purpose of examining Mr. Orr's scheme for pulling punkahs by steam power in the General Hospital at Madras, I am directed to inquire what are now the views of the Madras Government on the subject.

No. 344. ORDER THEREON, 21st August 1872, No. 1,988.

MILITARY WORKS, No. 9.

ORDERED that the following letter

be sent —

Here enter No. 1,989, dated 21st August 1872 )

(True Extract )

(Signed) G. W. WALKER, Colonel, R.E.,  
*Secretary to Government.*

PUBLIC WORKS DEPARTMENT,  
OOTACAMUND, 21st August 1872.

No. 345.

No. 1,989.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,  
PUBLIC WORKS DEPARTMENT.

MILITARY WORKS, No. 10.

SIR,—I am directed, in reply to  
your letter No. 797 B M. of 3rd July,  
inquiring what are the views of the

Madras Government on the subject of Mr. Orr's scheme for punkah pulling by  
steam power, to forward copy of a memorandum by the Chief Engineer of the  
Department Public Works, and to state that His Excellency the Governor in  
Council acquiesced in the purchase of the engine and machinery for the sum of  
Rupees 15,000 named by Mr. Orr on condition that that sum should include the  
right to use the same arrangements free of royalty all over India in places where  
they would be likely to succeed financially as well as mechanically.

2 Mr. Orr however having neither consented to allow the use of his arrange-  
ments for that sum out of the limits of the Madras Presidency where there is no  
scope for their successful development nor having named any other sum that  
would satisfy him, and having left for England on the 3rd instant, it has been  
impossible to do more than arrange for the continuance of the present system of  
punkah pulling at the Madras General Hospital till the close of the present hot  
season on payment of its actual cost, after which Rupees 3,000 are to be paid for  
the engine and machinery now in use at the General Hospital, Madras, with full  
power to continue its use.

3. It is presumed to be Mr. Orr's intention to negotiate further on the subject  
in direct communication with the Supreme Government and Government of  
Bombay.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R.E.,

Secretary to Government.

Exd. E. C Shunker.

57

MEMORANDUM BY CHIEF ENGINEER.

---

THE mechanical success of Mr. Orr's method of pulling punkahs by machinery is admitted by all.

2. That it is not financially successful is owing to the experiment having been tried at Madras where punkah-pulling labour seems to be available at the very low rates of Rupees  $2\frac{1}{4}$  to  $3\frac{1}{2}$  per mensem, and to the limited number of wards in which punkahs are worked in the General Hospital at Madras. With a larger field of action, and competing against higher paid labour, it would be profitable to work even Mr. Orr's engine, condemned as it is by the Committee.

3. They appear to me to have hardly done justice to the superior quality of the work performed by the engine over that effected by manual labour. The latter gives a pull only one way, while Mr. Orr's arrangement pulls both ways, thus making each side of the punkah a Bengal side, as it is termed, and ventilating and cooling the wards much more effectually. For such advantages, especially in hospitals, a higher rate of remuneration may reasonably be allowed.

4. And it is to be desired that the Committee should have stated what saving might be effected by the use of the condensing engine which they recommend, in the only item of cost for working by steam which would be affected by a change of engine, namely, the cost of fuel, amounting to Rupees 231 out of the total monthly charge of Rupees 525 debited against Mr. Orr's engine when working the punkahs of sixteen wards.

5. The waste of power objected to seems to me attributable to the flexible medium through which it is transmitted over long distances, and not to defect of the engine itself; and I should look for its remedy rather to a more rigid connection of each system of punkahs than to change of the machine, Mr. Orr's appearing to work very simply and directly. Should the Government decide on purchasing Mr. Orr's engine and plant at the price named by him, it should include the right to use his arrangements free of royalty all over India; so that further experiments may be made in Calcutta, Bombay, or other hot stations where there are large hospitals and labour rates are high; and that wide opportunity may be given for possible improvements being suggested by men of mechanical attainments in other parts of the country.

(Signed) G. W. WALKER, Colonel, R.E.,  
Chief Engineer.

All communications  
should be addressed to  
the Secretary

No. 797 B-M.  
GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

BUILDINGS AND ROADS.

Military

To, The Secretary to the Govt. of Madras,  
in the Public Works Department.

Simla, 3<sup>rd</sup> July 1872.

Sir,  
The Government of India in this  
Department having been furnished with a copy of  
the Report of the Committee assembled for the purpose  
of examining Mr. Orr's scheme for pulling Punkahs  
by steam power in the General Hospital at  
Madras, I am directed to enquire what are now  
the views of the Madras Government on the  
subject.

I have the honor to be,  
Sir,  
Your most Obedt. servant,

L. T. C. V. T.

Asst. Secretary to the Govt. of India

gk

I am disposed to  
think that we should  
do well to purchase  
for our machinery,  
~~at~~ the price named  
by him, and with the  
disputations suggested  
at the end of the Memoir.

There is no doubt  
that the invention is, as  
applied in the General  
Hospital at Madras  
and apart from financial  
considerations, immensely  
successful: and there

The mechanical success of Mr. Orr's method of pulling punks by machinery is admitted by all. That it is not financially successful is owing to the experiment having been tried at Madras where Punkah pulling labour seems to be available at the very low rates of Rs. 2 1/4 to 3 1/2 per mensem, and to the limited

Dec 11. 1872. *Helix*  
 One of good size 3380

March 3<sup>rd</sup> } Sunday 17<sup>th</sup>  
March 12<sup>th</sup> }

1897

beginning the  
wings of the stars.  
Government will be  
active for putting  
fundable by steam  
the General Hospital.

No 343

1116 1988-1989-21 *Adelphi*

limited number of  
wards in which punkahs

are worked in the

General Hospital at  
Madras. With a larger

field of action, and  
competing against higher

paid labour, it would  
be profitable to work

even Mr. Orr's Engine,  
condemned as it is

by the Committee.

They appear to me  
to have hardly done

justice to the superior  
quality of the work

performed by the Engine  
over that effected by  
manual labour. The

remains only the  
question of cost.

Now it appears that  
the additional cost of  
this <sup>method</sup> ~~method~~, as

compared with similar  
work done by the  
ordinary manual labour,

is not more than £120  
annually; - the annual

cost of the two methods  
being, in round figures,

£350 and £230  
respectively. Looking to

the immense superiority  
of the more expensive over  
the cheaper ~~method~~ <sup>process</sup>,

and to the extreme  
importance of that superiority

from a medical point  
of view, this additional  
£120 seems no great price

to pay for it.

Further, it would seem  
that ~~the~~ even the additional  
cost is due to the limited

area over which the  
motion of punkahs is

required in the Hospital  
at Madras: and that the

same machinery, if applied  
in any of the large hospitals  
or other public institutions

of India, would be not  
only mechanically but  
financially successful.

This consideration greatly  
strengthens the case for the  
proposed purchase in the

latter gives a pull only  
one way, while Mr. Orr's  
arrangement pulls <sup>both</sup> ~~both~~

both ways, thus making  
each side of the

Punkah a Bengal <sup>side</sup>  
side, as it is termed;

and ventilating and  
cooling the wards

much more effectively.

For such advantages,  
especially in Hospitals,

and that the same  
machinery, if applied a higher rate of remuneration may reason-  
ably be allowed -

And it is to be  
desired that the Com-  
mittee should have  
stated what saving  
might be effected by  
the use of the <sup>improved</sup> ~~improved~~

Engine which they re  
mended, in the only  
of cost for working  
steam which would  
be affected by a change  
of engine, viz the cost  
of fuel, amounting to

Rs 231 out of the total  
monthly charge of Rs  
525 debited against  
Mr Orr's Engine when  
working the Pimkaho  
of 16 Wards -

The waste of power  
objected to seems to me  
attributable rather to the  
flexible medium through  
which it is transmitted  
over long distances,  
and not to defect of the

conditions suggested  
Mr. Walker and if  
this view is adopted  
may reply accordingly  
Mr. Fort of India

*[Handwritten signature]*  
*[Handwritten signature]*  
*[Handwritten signature]*  
J. B. S.

13/11  
Engineer of the  
should look for its  
remedy rather to a  
more rigid connection  
of each system of  
pimkaho than to a  
change of the machine  
Mr Orr appearing  
to work very simply  
and directly - should  
the Government de-  
cide on purchasing  
Mr Orr's Engine and  
Plant at the price  
named by him, it  
should make the  
right to use his ar-  
rangements free of  
royalty all over India  
So

So that, further expenditure  
 suggested may be made in Calcutta,  
 Bombay, or other hot  
 stations where there  
 are large Hospitals,  
 and labour rates are  
 high - And that wider  
 opportunities may be  
 given for possible im-  
 provement being suggested  
 by men of mechanical  
 attainments in other  
 parts of the Country.

*W. H. Jones*  
 Chief Engineer.

My dear Sir  
 15th  
 1898.

Ordered that the  
 following letter be sent.  
 R. H. Hogg

To: The Secretary to the Govt.  
 of India, P.W.D.

Sir  
 I am directed, in  
 reply to your letter of 3rd July, inquiring what are the views of the Madras Govt. on the subject of Mr. Orr's scheme for Puntah pulling by steam power, to forward copy of a

no notice is taken  
 of the scheme for use  
 in the General Hospital  
 for Rs 3000. I think this  
 might be accepted. It  
 must be a pity to have  
 the engine removed.

A. V.  
*[Signature]*

forward copy of a

impossible to do more  
than arrange for the  
continuance of the  
present system of  
Punkah pulling at  
the Madras General  
Hospital till the close  
of the present hot season,  
on payment of its ac-

tual cost, after wh. Rs 3000 is to be paid  
for the engine and  
machinery now in  
use at the General  
Hospital. Mr. Orr's inten-  
tion to negotiate  
further on the subject  
in direct communica-  
tion with the Supreme  
Govt and Government  
of Bombay. G.M.W.

desps 27/8/72 int. 7/9/72  
of the Ch. Secy. Genl.

D. 16 Oct 1872

30

2

12. 30/8/72  
12. 10/9/72  
13. 10/9/72

Accordingly infor-  
mation regarding Mr.  
Orr's scheme for  
pulling punkahs  
by steam power at  
the General Hospital,  
Madras.

C/5386

Govt. of 1872 Madras.

PUBLIC WORKS. ✓

To the Secretary to the Govt  
of India

Dated

Recd.

Encl

G O 21 Aug 1988-1989

Nos. 343-344 & 345

Punkahs. Mr. P. J. orders in  
letter from the Govt of India  
regarding the rent of the  
Madras punkah for Mr. J. J.'s  
scheme for pulling punk-  
kahs by steam power  
at the General Hospital.

of the Commission

D. 16. 2. 1989