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Dep. G.O. No.	14	Press Mis.
Dated	6 - 6 -	1859.

Not to be folded or roughly handled

PUBLIC WORKS DEPARTMENT.

PUBLIC.

No. 14 of 1859.

TO

THE RIGHT HONORABLE LORD STANLEY,
SECRETARY OF STATE FOR INDIA.

My Lord,

Para. 1. We have the honor to forward copy of a letter from the Chief Engineer, and of its enclosures, being communications from the District Engineers of the Godavery Division and of Chingleput giving cover to reports from Messrs. Moncrieff and Kennedy on certain defects discovered on setting up two of the five Steam Dredges supplied by the late Court of Directors as notified in their Despatch of the 10th February 1858 No. 6.

2. Mr. Moncrieff, at present acting as Superintendent of the Dowlaishwarum Foundry states that the Dredge for the Godavery Division has been erected according to the drawings furnished; and from what he has seen of its working, he considers it badly designed and arranged and not at all adapted to work in the Canals of the District. He says it draws too much water when weighted to an even Keel, the Boiler end drawing 22 inches, and the Bucket end 27 inches; that in its natural floating position the Gunwale at the Bucket end is almost immersed within 8 inches of the water's edge, the opposite side being 20 inches out of the water. He has furnished a drawing shewing how unequally it sits on the water when not weighted, and he ascribes this to the unequal distribution of the machinery or weight which he considers to have been badly designed. He says it is quite impossible to work the Dredge in its natural floating position, and that he had to ballast the Boat with 1,660 lbs. weight to bring it on an even Keel, and that without such weight, the Boat and its machinery would in all likelihood be swamped by the first wave. He adds that the narrowness and otherwise small dimensions of the Hull, compared with the immense amount of top weight that it has to sustain when at work, cause it to be very crank and to roll from side to side, and that this defect will have a tendency to expose the Buckets to a constant strain which will affect the machinery, the result being breakage and immense wear and tear.

3. One great defect which will add considerably to the expences of the Dredge is stated to be the method used for drawing the Boat along when at work, viz. by manual power applied to a crabwinch in place of attaching and making the Engine do this duty. Other defects and deficiencies are also pointed out, but it is needless further to refer to them in this place.

4. Mr. Kennedy, the Executive Engineer reports to a similar purport in respect of the Dredge for the "Coast Canal." He states that from a miscalculation of the floatage power by the makers, the Boat is unfit for its intended purpose and cannot be used unless materially altered. He states that the draught water is 17 inches, and at the stern 33 inches when floating at rest, and will be still more when the Buckets are loaded. That it is so top-heavy as to require

to be guyed from the top of the Bucket framing on each side, without which it would capsize immediately.

5. Captain Rundall proposed to remedy the defects in the Steam Dredge of the Godavery Division "by increasing the floatation and stability of the Boats by lengthening them amidships 20 feet and widening them to 12 feet, at a cost of Rupees 1,200." As the five Dredges are believed to be all alike the Chief Engineer has recommended that the whole should be altered at a cost of Rupees 1,200 each, or 6,000 Rupees for the five, and we have sanctioned the measure and directed it to be carried out provided that on further consideration, and after consulting those best competent to give an opinion, the present Chief Engineer is satisfied that the proposed are the proper means of correcting the defects.

6. The five Dredges in question are those alluded to in the letter of the late Court of Directors dated 16th February 1858. They are stated to have been built by Messrs. Forrester and Co. of Liverpool and to have been supplied on the Military Indent of this Government dated 9th February 1856; which we find included twenty Steam Dredges. From our proceedings of this day's date your Lordship will observe that we have no information whatever respecting the application for these five Dredges; and that we cannot learn who determined their dimensions; we must therefore leave this matter in your Lordship's hands with the view of your deciding who is responsible for the errors of construction and of your taking such measures thereon as may seem fit.

7. The twenty Dredges above referred to were applied for without our knowledge. Your Lordship will see in para. 5 of our proceedings that we have laid it down as a rule for future observance that all Indents for Stores and Machinery in the Public Works Department shall receive our approval prior to being sent to England.

We have the honor to be,

MY LORD,
Your Lordship's most obedient
humble Servants,

Fort Saint George, }
6th June 1859. }

Exd. Wm. Thomas.

FORT SAINT GEORGE
PUBLIC WORKS DEPARTMENT.

Letter to the Right Honorable
the Secretary of State for India,
Dated 6th June,
No. 14 of 1859.

Forwarding correspondence regarding the defects
on certain Steam Dredges sent by the late Court of
Directors.

21th of 1859.

P. H. D.

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To

The Right Honorable Lord Stanley,
Secretary of State for India

My Lord,

*dated 11 March 1859 to 8800.
in P. O. 6th June 1859.*

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P.S. We have the honor
to forward copy of a letter from
the Chief Engineer, and of its
enclosures, being communications
from the District Engineers of
the Godavery Division and of
Chingleput giving cover to reports
from Messrs Moncrieff and
Kennedy on certain defects dis-
covered in the setting up of two
of the five steam Dredges sup-
plied by the late Court of Directors
as notified in their Despatches
on the subject of the same
of the 10th February 1858 at 6.

2 Mr Moncrieff, at
present acting as Superintendent
of the Dowlaishwarum Foundry
States

states that the Dredge for the
Godavary division has been
erected according to the Drawings
furnished, and from what
he has seen of its working, he
considers it badly designed
and arranged and not at all
adapted to work in the Canals
of the District. He says it
draws too much water when
weighted to an even keel, the
Boiler end drawing 22 inches,
and the Bucket ^{end} 27 inches;
that in its natural floating
position the gunwale at the
Bucket end is almost im-
mersed within 8 inches of
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5. Captain Rundall proposes
to remedy the defects in the
Steam Dredge of the Godavary
division by increasing the
floatation and stability of
the boats by lengthening them
amidships 20 feet and widens-
ing them to 13 feet, at a cost
of Rupees 1200: as the five Dredges
^{believed to be}
are all alike, ~~and fit for any purpose~~
~~present in their present state~~ the
Chief Engineer has recommended
that the whole should be altered at
a cost of Rupees 1200 each, or 6000
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sanctioned the measure and
directed it to be carried out pro-
vided that on further consideration

and after consulting those best
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the proper means of correcting
the defects ~~in question~~ in question

6 The five Dredges are
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are stated to have been supplied & built by Messrs Forrester
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Government dated 9th February 1866, ~~which we find~~ ^{which we find}
~~included in that~~ ^{included}
~~includes twenty steam dredges~~
From our proceedings of this
day's date your Lordships
will observe that we have no
information whatever res-
pecting the application for
these five Dredges, and that
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①
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designed. He says it is quite
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in its natural floating position,
and that he had ~~remains~~ to
ballast the Boat with 1600 lbs
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keel, and that without such weight
the Boat and its machinery would
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from the narrowness ~~of the~~
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Hull, ~~and~~ ^{compared with} the immense amount
of top weight ^{that} it has to sustain
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stant strain which will affect
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3 One great defect which will add considerably to the expenses of the Dredge is stated to be the method used for drawing the Boat along when at work viz. by manual power applied to a Crab-winch in place of attaching and making the Engine do this duty. Other defects and deficiencies are also pointed out, but it is needless further to refer to them in this place.

4 Mr Kennedy, the Executive Engineer, reports to a similar ^{purpose} in respect of the Dredge for the ^{the sluice} "Coast Canal" that from a miscalculation of the floating power by the makers, the Boat is unfit for its intended purpose and cannot be used unless materially altered.

No.

responsible for the errors of construction and of your taking such measures ^{thereon} as may seem fit.

7 The twenty dredges above referred to were applied for without our knowledge. Your Lordship will see in paragraph 5 of our proceedings that we have laid it down as a rule for future observance that all Indentments for stores and machinery in the Pub. Works Dept. shall receive our approval prior to being sent to England.

Forth George
6th June 1859

[Signature]

S. W. D.

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Letter to the Right
Honorable the Secretary of
State for India.
Dated 6th June 1859.

Orig^l: J^r Meamr. Caudin 9th June
Dupo: J^r Meamr. Caudin 9th June
Tripo: J^r Meamr. Nemesis 25th "

Copy to the Government of India
7th 11th June 1859 J^r Meamr. Dugal

For forwarding corres-
pondence regarding the defects
on certain Steam Dredges
sent by the late Court of Directors