## Letter to John Washington, 5 November 1859

Livingstone, David, 1813-1873

Published by Livingstone Online (livingstoneonline.org) [0001]

(III)

River Zambesi, Shupanga,

5 Nov- 1859

Captain Washington R. N.

Sir

In answer to the letter of M<sup>r</sup> Laird of 4<sup>th</sup> January 1859 a copy of which you enclosed I have to remark that the statements of that gentleman disagree in the most marked manner with the promises [he] held forth respecting the Steam Launch, and which I possess in his own hand writing, dated as follows,

" Hamilton Square

Birkenhead

Jany 16/58

"Dear Sir,

Dr Livingstone's Launch will more probably exceed Ten knots than fall below it - when kept in proper trim - she appears admirably adapted for what she was proposed for, the upper Zambesi above "Tete" [0002]

if she is heavily laden with stores her speed will of course be diminished as her draught of water is increased. As they are putting the engine together it is impossible to alter the power "even if desirable - which it is not."

(Here follows an irrelevant sentence

## about $D^{\underline{r}}$ Baikies expedition

"D' Livingstone may calculate upon one Ton for every inch Disp<sup>t</sup> in the Launch, and as in the river he may safely load her to 2 feet from ten to twelve Tons will be available for stores and crew - as to space the plan sent up shews accurately the Room.

"On the Indian Rivers where light draught is so essential - all the River steamers are used as Tugs which is the best application of the power and if my advice is taken this Launch will always "be kept light and any extra weight towed

I remain faithfully yours

Macgregor Laird

a true copy

David Livingstone

the above note was sent to the Admirality [0003] in answer to my protest against an engine of Ten horse power only.

The note which M<sup>r</sup> Laird has been good enough to print shews indisputably a disposition on my part to be satisfied. It was written while the Launch was still supplied with coal by the Pearl, and it was only when the coal was expended that I discovered the imposition that had been practised on the Expedition. It was somewhat mortifying, now that we were away from all the means of remedying the evil, to hear the statement made publicly. "Well these Liverpool people must have imposed on me", and to find that at the "trial by wood alone" "coal has seen to be thrown in once and again" and other things which though they can be proved I forbear mentioning

At the trial trip in the Mersey she drew 19 inches without anything

in her [but the weight equal to the house drew 25 inches] and since she came out here and recieved her gear, she has never drawn less than Two Feet One Inch

Her crew of twelve kroomen - no
provisions - no fuel brought her
down to two feet two inches

[0004]

While one days fuel (about a ton) and
as near as we could ascertain nearly

Four Tops brought her down to

as near as we could ascertain nearly
Four Tons brought her down to
Two feet six inches. M<sup>r</sup> Laird
"designed her to carry when loaded"
to 2 feet Ten or Twelve Tons!"

I beg leave to submit the particulars of our last trip in M<sup>r</sup>
Lairds "Dispatch boat" up the Shire.

We had four barrels of salt meat and two bags of coffee, a medicine chest, boxes of instruments of no great weight & half a bale of calico the whole would not be a Ton in weight. [Fuel say another Ton] We had forty four Makololo all men of light weight and six

Englishmen. M<sup>r</sup> Laird "intended" her to draw 13 inches we found ourselves drawing about 30 - and with the steam between 50 & 60 lbs could not make three and a half knots.

We passed over ground therefore at the rate of less than one knot an hour & took nearly a month to go from Kongone Harbour to Chibisa's about 200 miles the women carrying loads on their heads walked on to the next bend of the river then waited till we came up again; (against the 2.1/2 knot current of the Shire) and to our disgust we saw a lame man walk away ahead of us altogether. [0005]

But it will be said "She was overloaded Not at all we had taken the precaution of towing all the Makalolo except about a dozen to work the vessel in two whalers behind - and when doing so at a sudden bend the current rushing past caught her bow and one of the whalers when drawn across stream with her was swamped and to our sorrow one poor fellow was drowned.

Take another example of the per-

formances of the Launch - In going down from Shupanga to the sea We were a good deal lighter than in the last trip having no cargo & not 1/2 a ton of nails [fuel] & with but 14 natives and four Englishmen. M<sup>r</sup> Medlycott of the Lynx took charge, and was dumfoundered to find that a stiff breeze held her paddles to a dead lock [with between 50 & 60 lbs steam] and obliged us to anchor. that was nothing wonderful to us, for wherever we have a 3 1/2 knot current we cannot stem it even with 60lbs of steam [0006]If M<sup>r</sup> Laird will explain why at the trial trip she ran with the tide only in one direction then waited till the tide turned and ran back with it in the other, the discrepancy of performances here and there may be accounted for. Her top speed in the Zambesi against the current \*

\* measured by anchoring in a part which we cannot stem while going at full speed

measured repeatedly by Patent and common log - has been 3 1/2 knots with between 50 & 60 lbs of steam. M<sup>r</sup> Laird promised over "Ten knots"

Funnel - Furnace - Deck and Bottom all become shaky simultaneously, after only Twelve months work - i.e £1200 for 12 months. Extras all paid for besides. It ought to be known to the Admiralty that do what we would we never could keep our cabin dry. We have had carpenters from men of war attempting to remedy this evil, but have been obliged to sleep on damp rotten cushions continuously notwithstanding all our efforts. Our botanist cannot take his collections to the sea without eminent risk of their suffering the same fate as those of poor  $D^{\underline{r}}$  Vogel of the great Niger Expedition. He mentions in his journal that his cabin was always in the same state as ours, and public blame was most injustly

attached to the Admiralty. I enclose a report in view of the bottom of this most unworkmanlike & flimsy vessel.

Copy

Report

 $1^{\text{st}}$  August 1859. At Kongone harbour

Beached the vessel furnished by M<sup>r</sup> Macgregor Laird to the Zambesi Expedition on the right bank of Kongone harbour and dug out the sand from the middle compartment in order to examine her bottom. Found the plates which were only one sixteenth of an inch at the beginning to be fairly worn & rusted through in several places, and the whole so very thin that it is quite impossible to patch them - bolts would have nothing to hold on by. The rent would be made worse by any mending welding hammering - no other process such as wedging or staying can be applied We are therefore obliged to puddle the [0008]

bottom with clay in canvas bags over the holes (covered with India rubber) as the only means in our power of keeping her afloat to perform the service of taking us out of the unhealthy Delta. The Funnel is also full of holes

(signed)

David Livingstone

John Kirk M.D.

Charles Livingstone

A true copy

David Livingstone

In conclusion as every point advanced respecting the engine - boiler & vessel for the information of the Admiralty has been the result of my own patient and minute investigation, I am sorry to observe the

mean, ungenerous & totally unfounded insinuation against our "Clyde Engineer" who was not only recommended by Tod & Macgregor of Glasgow (a firm in every way superior to M<sup>r</sup> Laird's) but as the very best man in their employment, and we have been thoroughly satisfied with his skill, zeal, and trustworthyness, but he has joined us at a considerable pecuniary disadvantage to himself as he occupied a post of chief engineer in the largest sea going ships. We intend sending the engine & boiler to a Museum in Glasgow.

David Livingstone