

## Letter to John Washington, 18 December 1858

*Livingstone, David, 1813-1873*

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

Thanks for your kind little notes - the sun's places came too late for this year. Remember me please kindly to M<sup>rs</sup> W.

David Livingstone

Tette 18<sup>th</sup> Dec<sup>r</sup> 1858

My Dear Captain Washington

We went up to examine Kebra basa as soon as we were all safely housed in the house of the Commandant, and while the water in the Zambesi was at its lowest. We collected all the information we could in Tette and that was just nothing more than the Portuguese writers all asserted on the same sort of testimony. "An obstruction to navigation" "a number of rocks jutting out of the water across the stream" - only one man had gone beyond the entrance, and we steamed up 4 miles beyond and found that the affair is an obstruction to navigation in what - canoes only. The difficulty consists in the Zambesi being confined by mountains to a bed about 1/4 mile broad This bed which we shall call  
[0002]

the flood bed is covered with enormous boulders black glazed & slippery - porphery & syenite twisted & huddled together in every possible way form the subsoil (!) and in it winding from side to side there is a groove or rut 30 or 40 yards wide & as we sailed up the man at the lead kept calling out "No bottom at ten fathoms". the walls

generally perpendicular are worn  
into potholes and rise from about  
30 to 80 or more feet high.  
there are rocky islands in it  
which increase the force of the  
current and as ~~both~~ [neither] canoes &  
this feeble vessel cannot stem  
a four knot current. It is Kaora  
-basa, it is "cut the toil" (of paddling)  
and they cut their over the level  
Shidima country instead. The cant  
paddle against 4 knots, nor punt  
at 60 ft. nor tow at a height  
of 80 over jagged & slippery rocks  
hence the "obstruction to navigation"  
We did not wish to go up now so  
when we came to a four knot  
current we left the vessel and went  
[0003]

forward to examine on foot. We  
found one rapid the fall in which  
was 5 ft. but when we returned  
the river had risen three or four  
and the place was level. But  
fancy the effect of a perpendicular  
rise of clear eighty feet. We  
measured it carefully at different  
places and this must take place  
before the upper flood bed is  
covered. The worst cataract of  
all comes down at an angle  
of 30° but I stood in a pothole  
which is annually submerged  
30 feet and dropped down a  
measuring tape 53 ft to the water  
There cannot be a vestige of  
broken water at 40 ft rise  
and there the water stands long  
for the black glaze reaches that  
height. This last or the only  
cataract worth the name is  
called Morumbua and immense  
difficulty we had in getting there  
climbing as hard as we could  
over stones & rocks so hot we  
could not hold the hand on them  
[0004]

for an instant we could not make  
more than one mile in three  
hours. four Makololo went with  
us and shewed their horny soles

blistered & the blisters broken. Our strong boots wore through the soles in a fortnight and that fortnight made us all return lean & haggard as if recovering from severe illness. In truth it was the hardest bit of travel I ever went through & I feel sure that had we come this way in 1856 I never should have reach Tette. The mountains are upwards of 2000 ft and very steep but the steepest bit of all is just at Marumbua. the side walls rise up from 300 to 600 perpendicularly - no line could be carried past but we are all of opinion that a good strong steamer - capable of going 12 or 14 knots would walk through in flood with ease. B. did us an immensity of harm by rejecting the Ban - we could have taken up all our luggage between 25 & 30 tons at one trip & then gone on to Sekeletu with all the Makalolo. We are now working below the rapid [0005]

Have been prevented by an unusual scarcity of food the consequence of want of rain last year from sending off branch explorations but by February the young corn will ripen, & we may go to Manica & Gorongozo. This partly from Tette, is also written on our way down river to ascend the Shire which is said to come from Lake Nyanja. Next letter we hope to give you some information about that part Thornton reports having found three seams of coal near Tette - 1<sup>st</sup> 7 ft thick, 2<sup>d</sup> 13 feet 6in, 3<sup>d</sup> - 25 feet thick all in fine cliff sections the last was fired by lightning a few years ago and burned for a long time. There is no lack of harmony among us but I have to speak cautiously now for I found out that while I was truly &

[0006]

faithfully reporting the same before  
our naval officer was dogging my  
steps to every one with whom I happened  
to talk with "What was he talking about"  
We are, thank God, favoured with  
good health. We have had no fever  
except among the Kroomen and  
I would prefer Englishmen to them  
as more safe and effective. We take  
no quinine up at Tette. We slept  
without cover during the whole  
fortnight of exploring the rapids  
and generally did not draw on the  
blanket till morning. We have had  
nothing but colds modified a  
little by the malaria of the Delta  
Baines had a slight sunstroke but  
is now quite well. I send you  
a tracing of the river above Tette  
by D<sup>r</sup> Kirk a worthy good fellow  
as ever lived. They all work at  
anything they are desired to do  
without hesitation

Should the Government send us  
out another vessel there are various  
matters you might send us too  
I scarcely expect it this flood  
but if in time for next January  
our two years supplies may

[0007]

be getting low. The man Evans who  
supplied the last did very well - the  
meal alone being badly soldered was  
wasted on the Quay at Liverpool  
M<sup>r</sup> J. A. Turner M. P. for Manchester  
would supply the cloth to our advantage  
We are not by any means out  
of anything of importance now  
but looking forward it may be  
well to suggest some addition  
By the way I made a mistake about  
sugar the natives do make it  
near to this and I bought 6 pots  
at the rate of two yards of calico or  
say a shilling for 20 lbs. We have  
put up our little engine - saw  
mill & sugar mill at Tette to shew  
what can be done. Major Secard  
carried them up for us - the

Buaze is ripe in February - the  
seed D<sup>r</sup> Kirk says is full of  
oleaginous matter & the Portuguese  
say it gives good oil for painting  
Coming back to the affair of the  
vessel - M<sup>r</sup> Rae with a second  
engineer & Roe the leading stoker  
[0008]  
would manage the engines - one  
of the Makololo makes an excellent  
stoker. I think we have proved  
that with due exercise & other precautions  
you need not fear for Europeans  
when they get beyond the Delta - D<sup>r</sup> Kirk  
and I have had uninterrupted good  
health.

I know you will do what you  
can to forward our plans and besides  
aiding in the arrangements necessary  
I hope you will not allow any of our  
matters to fall into the hands of M<sup>r</sup>  
Laird. this is the shabbiest engine  
ever turned out of shop. M<sup>r</sup> Medlycott  
of the Lynx tried her without an ounce  
of cargo and a brisk breeze held her  
paddles so that we stood still. You remember  
my protesting against the want of power  
and M<sup>r</sup> M. Laird said "O steam is very  
little understood". One can understand  
a little when obliged to spend half our  
time in wood cutting. We are now  
less than 1/16 of an inch thick and  
dare not tow her up the rapids - carrying  
is an absolute impossibility. It must  
be done over mountains which cost  
us three hours to cut a path over for ourselves