## Letter to Roderick I. Murchison, 26 November 1860

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II.

My dear Sir Roderick

We unfortunately missed the opportunity of sending overland by the Elephant hunters so I open the letter written at Sesheke to insert some further particulars.

The river was so

low we could easily see to the bottom of one half of the Fizzure which forms Victoria Falls. And indeed people could wade from the North bank to my garden island to form a stockade for fresh seeds. The depth is not 100 feet but 310 feet, probably a few feet more as the weight attached to the line rested on a slope near the bottom. The breadth from bank to bank is not one thousand yards as I conjectured in 1855 but between one statute and one geographical mile. We say 1860 yards to assist the memory, but it is a little more yet not quite 2000 yards. the lips of the crack at Garden island may be more than 80 feet as we could not throw a stone across, but the sextant gave that. Now come to the other or [South] Eastern side of the crack and the fizzure which from the upper bed looks like the letter is prolonged in a most remarkably

zigzag manner. the water after leaping sheer down 310 feet is collected from both ends to the upright part of the letter as the escape and then flows away in the zigzag part [0002]

the promontories formed thereby are

are flat at the top and of the same level as the bed of the river above the Falls the base of the first on the right is only 400 paces from the Fall Fizzure and that on the left about 150. their sides are as perpendicular as the Fall and you can walk along among the trees and by a few steps see the river some 300 or 400 feet below jammed in a space of some 20 or 30 yards and of a deep green colour. As a whole the Victoria Falls are the most wonderful in the world. Even now at extreme low water or when it is 2 feet lower than we ever saw it there are eight hundred feet of water falling on the right of garden island. And the two columns of vapour with the glorious rainbows are a sight worth seeing. A fall called Momba or Moamba, below this is interesting chiefly because you look down to it from a height [of] some 500 feet. It is really nothing after Mosioatunya.

We visited the river twice on our way down to Sinamames & found it in a very deep crack. the boiling point gives 1600 feet of descent from the falls to Sinamanes M<sup>r</sup> Moffat informs me that all the rivers in Mosilikatze's country run N.W. or N.N. West. they enter the Zambesiabove Sinamanes and above a remarkable mountain, which possibly was the dam that shut in the waters of the ancient Lake before Mosioatunya was made. They are therefore not where from oral information they have been put in the map. A conjecture [0003]

the whole country below and around the falls has been the scene of comparatively recent volcanic operations & some parts look as recent as Aden. some are of frothy lava and all present a burnt appearance like  $\mathbf{m}$ [Catacacaumena] in Greece - (I fear my Greek is at fault) A conjecture that the [calcareous] tufa of Sesheke valley was emitted from a volcano like that which covered the cities Pompei and Herculaneum does not account for the roots of reeds therein over the bidental sauvans of the ancient Lakes and I question if a volcano ever threw mud over 200 miles square as this lake has done. Wherever we have had igneous action in this country we have had large quantities of tufa bearing water after it. I cannot account for the enormous quantity of gravel and shingle below the Falls. the bed of the river and country generally are covered with it to considerable depths

there is none above the falls and none below Chicova

We purchased canoes and dropped down stream in order to examine all at low water Kansalois no difficulty - Kariba a few miles below is a basaltic dyke stretched across the stream, but it has a wide opening in it dangerous for canoes the gunwales of which were only 6 inches above the water. A [at] Mburumas there is a rapid of about 100 yards in length which runs at six knots an hour. this is the most rapid part we have seen in the whole river. We measured the most rapid part [0004]

below Chicova on our way up and found it to be under four knots. but a fall of about 15 feet before our return developed several dangerous rapids & even cataracts which were quite smooth when we passed Chicova seemed [from the shore] a trap dyke across the stream like Kariba but it had two openings. We passed through either the one or the other without observing the dyke - but we saw a large seam of fine coal in the bank. there is another in the bank at Manyerire hill and besides seeing fragments of the mineral in many rivulets on both banks we verified the existence of the coal field north of Zumbo only as I formerly pointed out [but] to nearly to Sinamanes below Victoria Falls. The only real difficulty in the river is Morumbua and that could be passed in full flood for a rise of eighty feet must smooth it over.

On arriving here two days ago we had travelled from Linyanti & back some 1400 miles the greater part on foot. We have thus kept faith with the Makololo though we have done nothing else. Of Sekweba, Sekelutu said "He was my child and died for me" I wished ten and sixteen came but most fear the fate of Sekwebu & of those who died of smallpox. We were swamped once, but the men behaved admirably, leaping out and swimming alongside till we got into smooth water. In another place one canoe was upset and property lost. We then abandoned the canoes and came home on foot thankful to say all well.