Field Diary XVI

David Livingstone
Published by Livingstone Online (livingstoneonline.org)
[0001]
[0002]
[0003] David Livingstone Bemba Dec ^r 1872.
Length of watershed mound [Calculation.]
Continent across [Calculation based on coordinates " 12° E. and 40° East".
[0004]

1st December 1872 Rt Katanta in Wemba country - It is continuous with Burungu of Kasonso = Ruins of village which soon disappear = Anthills alone are enduring structures here = A nutmeg tree in full bearing on the right bank of the Rt Katanta - Who planted it

XVI.

2nd Heavy rains all morning - March at noon among low long tree covered hills of fine grained schist igneous rocks of red white & green colours

[0005]

over a range of hills and down to a valley having village of Nyina Kapembwa stoe The young plasterer or Sphex is very fat on coming out of its clay house and a good relish for food - course W & SW. - 4½ no food to be got The effect of Motoka's raid & of Tipotipo's people

3^d Dec^r A stupid or perverse guide took us away today N.W. & WNW - villagers refused to lead us to Chipwite's where food is to be had He is SW & 1½ off

[0006]

but guide had us at his mercy for he said if you go SW you will be five days without food or people = cross Kaňomba 15 yds & keedeep Guide disappeared & so did the path - We crossed Rt Lampussi twice 40 yds & knee deep course WN.W about $4\frac{1}{2}$ camped & sent men off to search for a village with food 3 $\operatorname{Dec^{r}}$ on Lampussi Noon [Group of 3 numbers linked together by curly bracket under temperature 92° and "x 3.18".] No 3 incurably injured by x 3.18 carrier sliding on clayey path & falling

3 PM [Group of 3 numbers linked together by curly bracket under temperature 86°.]

[0007]

 4^{th} December 1872 Men sent for food did not return today - were directed by country people falsely & went where nought could be bought - people them[-] -selves living on wild produce - grubs roots fruits - one sinner destroyeth much good A man came to us demanding his wife & child - probably in hiding - the slaves of Tipo Tipo have been capturing - waiting for the men in a green woody valley on the Lampussi 10 - 30 AM

[Group of 3 numbers linked together by curly bracket under temperature 81°.] clouded over

[0008]

5th Dec^r 1872 still waiting for the men sent for food - people collect leaves and large mushrooms very poor food

People returned at 5 PM with two of Kafimbe's men & a present of food to me = a little was bought & we go on tomorrow to sleep two nights in the way & reach on the third day Kafimbe is Nsama's brother & fights him R-Malunda or Lampussi

Lampussi Olis Mer Alt

*, Achernar

Index Er 0" [Calculation based on astronomical readings.]

[0009]

Sintila village & Rr 6th across Malunda or Lampussi again & up to a mountain along which we went = a long way then down to ruins This was 5 hours then 2¹/₄ more to Sintila vil. about W. 7¹/₄ We hasten along as fast as hungry men & four sick can go to get food

 7^{th} off at 6 - 15 - a leopard came into our camp about 1 AM &

bit a woman - she screamed & so did the donkey & it ran off - came along between two ranges of low hills then where they ended went along a good sized stream 30 yds or so & down into a valley to Kafimbes W.. 5½

[0010]

3 - 30 PM 7 $\stackrel{\rm th}{-}$ Dec 1872 at Kafimba's

[Group of 3 numbers linked together by curly bracket under temperature 88° and "clouded".]

 $8^{\rm th}$ Kafimbe's Dec^r [...] 12 - 3 AM ^ S.E. Rain 23 - .39 7 - 8 AM silent Rain .36

 $12^{\underline{\mathrm{th}}}$ 6 - 7 AM Mukubve Rt silent - Nil

 $13^{\underline{\mathrm{th}}}$ Mokuwe Rr 4 - 5 AM .25

 $14^{\underline{\mathrm{th}}}$ vil 5 hours SW. 4 AM .7

 $15^{\underline{\mathrm{th}}}$ vil of Rillchikatule 5 - 6 PM S E .54

 $17^{\underline{\text{th}}}$ vil - 8 to 12 AM S E .68 - Kisinga near head of R. Kalungwesi = 4 PM N.E & round E. & S. not measured

18th Kalungwesi Noon & 1 PM. SE. 1.96 - 1 - 2 PM quiet .11

 $20^{\underline{\mathrm{th}}}$ Kalungwesi near 4 AM silent NW .14 Dº Noon - 1 PM silent .10 at Chama's

[0011]

 $\rm D^{o}$ 2 PM silent NW .45 $\rm 3--$ NW 21 12 $\rm 5$ - 6 NW 2.13 very cold with it 8 PM & Midnight .32

 $23\overset{d}{=}$ South of Chamas. about 16' 3 - 4 PM NW .6 7 - 8 PM .12

 $24^{\mbox{\scriptsize th}}$ drizzly - then silent rain from S.W & S. Nil

 $25^{\underline{\text{th}}}$ Drizzling cold that shews nothing in gauge Noon .22 1 - 2 SW silent 2.31 3 - 4 PM D° 1 .4 By night silent .14[...]

[0012]
[...]
intelligent pleasant young
man who has been
attacked several times by
Kitandula successor
of Nsama of Itawa &

compelled to shift from Motononga to this Rt Motosi which flows into Kisi & thence into Moero

9th send off men to a distance for food & wait of course = Here there is none for either love or money

[0013]

A man came from the Arab party on the Lovū of Kombakomba with a present of Mchele & a goat = They havekilled Cazembe whose people concealed from him the approach of the enemy till they were quite near & having no stockade he fell an easy prey to them = put his headand all his ornaments on poles - His pretty wife escaped over Mofwe & the slaves of the Arabs ran riot everywhere = We senta return present of 2 dotis Mer, 1 Jorah Kanike - one doti of coloured 3 lbs beads & a paper of needles

[0014]

 $10^{\underline{\text{th}}} \ \text{Dec}^{\underline{\text{r}}} \ 1872$. Left Kafimbe = he gave us three men to take us into Chama's village - He came ^ a mile along with us - an

active clever young
man - our course
very winding as it took
us from one little desert[-]
-ed village to another =
very many = chiefly
West 5 hours

3 PM [Group of 3 numbers linked together by curly bracket under temperature $86^{\rm o}$ and "clouded over".]

11th Being far from its water we went 2 hours across the plain dotted with villages to a muddy rivulet & camped in a village on a height R^t Mukubwe for Moero = chief Morenga very liberal w food

[0015]

An Arab Juma bin
Seff sent a goat today
They have been riding
it rough shod over all
the inhabitants - and
confess it - I return
1 doti Mer. & 1 Jorah
Kanike with a civil
message = the chief a
young man of no promise
came & I gave him a
second cloth as he has been
liberal = is a nephew of
Nsama of Itawa

12th S. service = Marenga sent a present of Dura flour & a fowl & asked for a little butter as a charm - seems to be unwilling to give us a guide though told by Kafimbe to do so instead of his men who returned Many Garaganza about They trade in leglets & ivory and slaves

[0016]

 $\frac{1}{2}$ an hour Mokoe R 30 yds & much water goes into Malunda = Moero

13th Dec^r 1872 Went about ^ by South & crossed a river ^ Mokobwe 35 yards & flowing West - Ill & after going S W camped in a deserted village S.W. 5 Chipambala R Mekonda 2W Meňomba 3 where all cloudy

Always too cloudy & rainy for obsⁿ of stars

14th guides turned N.W to take us to a son of Nsama and play the usual present into his hands - I objected when I saw their direction but they said the

[0017]

path turns round in front - after going a mile along the bank of the Meňomba which has much water Susi broke through - ran South till he got a S & by W path which we followed & came to a village having plenty of food - as we have none camped in village - and men were sent off to recall the fugitive women who took us for Kombakomba's people S & by W 2 crossed Lupere midway - goes into Mokobwe - -

[0018]

15 Dec^r 1872 country level & full of pollarded trees for clothing - ashes for manure - many deserted villages = few birds - cross river Lithabo 30 yds thigh deep - running fast to South West - joined by a small one near = reach vil. of Chipala = at Chikatula Rt goes to Moipanza = Lopanza Lithabo goes to Kalongwesi about S.W course 4

16th off at 6 AM across the rill Chikatula & after ¾ cross the Lopanza 12 yards & waist deep at being in flood the Lolela after half an hour 8 yds & thigh deep both perennial & embowered in tall umbrageous trees that love wet - both to the Kalongwezi came to quite a group of villages having food & remain to purchase as we got only driblets in the last two camps = met 2 Banyamwezi carrying

[0019]

salt to Loemba for sale About S. & by W.2

Liobemba of Moamba went to Kabuire for it and now retail it in the way back. Noon Kasianes villages

[Group of 3 numbers linked together by curly bracket under temperature 78° and "cloudy".] near Rivulets Lopanza & Lolela The headman a relative of Nsama brought a large present of flour of dura and I gave him 2 fms calico

17th looked rainy but we waited ½ an hour & then went on $1\frac{1}{2}$ when it set in & forced us to seek shelter in a village Head of it very civil = gaveus two baskets cassava & one of dura = I gave a small present first -District called Kisinga and flanks the Kalung[-] -wezi $1\frac{1}{2}$

[0020]

 18^{th} Dec^r 1872 over same flat pollarded forest until we reached R Kalungwesi course South 4¾ We are on Kalungwesis right bank and about 21/4 NorthEast of the confluence of the Luengana or Kisaka = thisside is Itawa Kisinga other is Chama's & Kisinga too Luena comes from Jange in Cazembe's land or WSW. from this Kalungwesi comes from SE of this and goes away NW.

Kisinga on this & on

other side to Kabanda

3 PM [Group of 3 numbers linked together by curly bracket under temperature 73° .] clouded over after heavy rain

7 AM [Group of 3 numbers linked together by curly bracket under temperature 69°.]

[0021]

Donkey sends a foot every now & then through the roof of cavities made apparently by ants & sinks down 18 inches or more = nearly falls these covered hollows are right in the paths

19th so cloudy & wet that no observation for the Latitude & Longitude of this real geographical point can be taken

Kalongwesi ^ sixty or eighty yards broad and four yds deep about a mile above confluence of Luena crossed it in very small canoes - swamped one twice but no one lost Marched South about 1¹/₄

[0022]

20th Dec^r 1872 shut
in by dense clouds
wait to see if it clears
up - Went on at 7 -15
drizzling as we came
near the Mosumba or
chief's stockade = son of
Chama tried to mislead
us by setting out West
but the path being grass[-]
covered I objected and

soon came on to the large clear path = guide ran off to report to the son but we kept on our course & he & the son followed us - met by a party one of which tried to regale us by vociferous singing & trumpetting with an antelope's horn but I declined the deafening honour = flat tree covered country = once cultivated = valley of Mosumba has a raised side on the East

[0023]

course nearly South 3¼
Had we suffered
the misleading we
should have come
here tomorrow after[-]
noon [Group of 3 numbers bracketed under the comment "very 70° wet".]

[Group of 3 numbers bracketed under the comment "73 drizzling *".] * The carrier fell at 6 PM on a slippery path on $3^{\underline{d}}$ Dec^r and N° 3 jerked round to 29 = when the others shewed 25. - on the $19^{\underline{th}}$ I turned the screw behind up till it shewed 25.65° and today it shews as above

A wet bed last night through my bed being in the canoe that was upset - It is so rainy there was no drying of it - 7 AM 21st [Group of 3 numbers bracketed under the comment "70°.5 clouded over".]

[0024]

 21^{st} December 1872 at Chama's = heavy clouds drifting fast from Nor East & North and falling drizzling and from SE at Noon

Noon [Group of 3 numbers bracketed under the comment "69 clouded over".] Chama's brother tried to mislead us vesterday in hopes of making us wander hopelessly & helplessly -Failing in this from my refusal to follow a grass[-] covered path - He ran before us to the chiefs boma or stockade and made all the women flee which they did leaving their chickens damless - We gave him two handsome cloths = one for himself & one for Chama & said we wanted food only and would buy it = they

[0025]

-are accustomed to the bullying of half castes who take what they please for nothing - they were alarmed at our behaviour & fled today so we took quiet possess--ion of the stockade as where he put us was on the open defenceless plain - seventeen human skulls ornament - they left their fowls and pigeons - there was no bullying = our womenŧ went in to grind food and came out without any noise = this flight seems to be the act of a foolish brother of the chief and it is difficult for me to prevent stealing by my horde = thebrother came drunk & was taking off a large sheaf of arrows = we scolded & prevented him

[0026]22 Dec^r 1872

[Group of 3 numbers bracketed under the comment "69 cloudy".] 6 AM [Group of 3 numbers bracketed under the comment "81° clear 3 hours South of Chamas.] crossed Rivulet of Chamas vil. ten yards or so & thigh deep - and went on South 1^{1} 4 then came to a sedgy deep stream which we could barely cross = hauled a cow over bodily = Went on 1^{1} 2 mainly South and through much Brakens South 2^{3} 4

23^d off at 6 AM in a mist and in an hour & a quarter came to three large villages by three rills called Misangwa & much sponge - Went on to other villages about South & a stockade 3 arrows [Calculation.] one bundle Chama's arrows

[0027]

24th Closed in sky with drifting clouds from S & SW - went on & stopped at a village 1½ hour but it was drizzly only = Went on another hour &

at a village it came only wetting = sent back Chama's arrows as his foolish brother will not now use them against us SW 2½ The midway village was at the R. Mopoposi running W to Lofubu about 7 yds running fast over rocks having aquatic plants = peoplenot afraid of us here as they were so dis--tressingly elsewhere We hope to buy food here

[0028]

 24^{th} Dec^r 1872 2. PM beyond Mopoposi Rr

[Group of 3 numbers bracketed under the comment " 70° "] 25^{th} Christmas [Group of 3 numbers bracketed under the comment " 67° 5 cloudy.]

F 27 25^{th} Christmas day - I thank the good Lord for the good gift of his son Christ Jesus our Lord. Slaughtered a cow and gave a fundo and a half to each of the party This is our great day so we rest - It is cold and wet day & night headman gracious & generous which is very pleasant compared with Awe Awe refusing to sell or stop to speak or shew the way

S. $28\ 26^{\text{th}}$ along among the usual low tree covered hills of red & yellow &

green schists = pathswet & slippery = came to the Lofubu 15 yards broad and very deep water clear flowing N.W. to join Luena or Kisaka = as theMopoposi goes West too into Lofubu it becomes large as we saw - We crossed by a bridge & donkey swam with men on each side of him = 3 villages on other side & many iron furnaces - wet drizzly weather made us stop soon SW 2

a herd of buffaloes scared by us rushed off & broke the trees in hurry otherwise no game or marks of game visible

Sleep tomorrow in

[0030]

S. 29- 27th December 1872 Leave the villages on the Lofubu & see a cascade coming down on our left - country undulating deeply = hills sometimesrise up from 300 to 400 feet - all covered with stunted wood and much Fern of the common Braken sort ^ and Hart's tongue - cross one rill running to Lofubu course S.S.W 4 camp by a blacksmiths rill in Jungle No rain fell today for a wonder but lower tier of clouds still drifts fast from N.W.

the Forest ^ Nyika without people then on third day reach vil. of a man of Chungo a Babisa headman no game = killed a Naia haje 7 long its hind

[0031]

part reared up & turned to fight
The under NorWest
stratum is composed
of fluffy cottony masses
the edges spread out as
if on an electrical
machine = the upper
or South East is of broad
fields of striated cats
hair = the N.W. flies
quickly the S.E. slowly
away where the others
come from

No observations have been possible during most of this month - People assert that the new moon will bring drier weather and the clouds are preparing to change the N.W. lower stratum into S.E. Do Do - and the N.W be the upper tier

[0032]

M 30 28th December 1872 A man ill & unable to come on was left all night in the rain without fire = we send back men to carry him Wet & cold N.W. but little rain in gauge 6 AM = N° 3 not so

[Group of 3 numbers bracketed under the comment " 66° cloudy".] sensitive now as formerly

We are evidently

9 AM [Group of 3 numbers bracketed under the comment " 69° clearing off".] ascending as

we come near the Chambeze

The N.E clouds came up to meet the NW. this morning and then the SE came across as if combatting the NW so as the new moon comes soon it may be a real change to drier weather

[0033]

[Group of 3 numbers bracketed under the comment "3 PM 75° clouded thickly over".]

4.PM - man carried in here very ill we must carry him tomorrow

 $29^{\underline{\text{th}}}$ our man died during the night - New last night a quiet good man = Barometer same as at 3 PM now 6AM

[Group of 3 numbers bracketed under the comment " 63° clear".] Chipangawaze died & was buried this morning - the disease began at Kampamba's

 $29^{\underline{\text{th}}}$ or $1^{\underline{\text{st}}}$ Jany 1873 I am wrong two days

[0034] $T 31 29^{th} Dec^{r} cont^{d} 1872$ After the burial & planting four branches of Mariñga at the corners of the grave we went on Southwards 3½ to a river ^ the Luongo running strongly ^ W and South to Luapula = then after one hour crossed it 12 yards & waist deep SSW = 4Meet a man with four of his kindred stripping off bark to make bark cloth = saysthat this is the Luongo that goes into Luapula abovebelow where I crossed =Achernar 84' 30 [Markings of a set of crosses or stars[?].] [Calculations and some astronomical symbols and readings.]

[0035]

[Calculations based on astronomical readings.]

1 W 30th came on at 6 AM W. very cold saying that the rains have ceased for a time = along side of denudation of the river long ago which is some 500 or 600 feet up - then through forest to the village of the man who met us yesterday As we have been unable to buy food through the illness & death of Changawaze I camp here South 2

9 - 30 AM [Group of 3 numbers bracketed under the comment " 73° 5 clear w. nimbi".] Noon [Group of 3 numbers bracketed under the comment "75.3 Nimbus in masses".]

- 2 January 1873 Thurs. Wednesday was 1^{st} I was two days wrong

[0036]

Luongo Lat [Calculation.] hours From Man's grave 4 N Then from Lofubu $\underline{4\ NNE}$ 8 = 16'? Lofubu Lat 9° 51 to Luena

hours Back to Christmas vil. 2 – vil. on Mopoposi R $\underline{1}$ – arrows sent back $1\frac{1}{2}$ near Ursangwa 2 vil. sleeping place 1 To Chama's vil. & R^t $2\frac{3}{4}$

Mopoposi R^t 3 = 6 - [Calculation.] $10^{1/4}$ Lat of Mopoposi 16

To Chamas S - 16 - 9° 29' Lat.

Back to Luena from Chamas $3\frac{1}{4}$ vil beyond ford Luena $1\frac{1}{4}$ Luena confluence 9° 20, 8° 9° 9° 9°

Luongo Lat 10° - 7 forwards or South - 2 hours S to H vil on Rt Kitila 4'=2 camp Rt Situngulu S. 7' $3\frac{1}{4}$ camp Ketebe's vil $\underline{5'}=\underline{2}\frac{1}{2}$ 2' beyond Lopopozi = $16=7\frac{3}{4}$ Lopopozi is in Lat. = 10° 21' $+\underline{4}$ Ketebe's = 10 25 Moenjo's 10° 31

[0037]

Lat. $10^{\circ} 38$

Chungu's 7

The villagers very anxious to lead us to the West to Chikumbi = guide tookup off West but I refused to go - we then after Kitila crossing the rivulet 15 feet over rocky bottom to the Luongo = went into the forest S. without path for $1\frac{1}{2}$ then on a path through flat forest much fern & no game = South - camp in $\hat{}$ at Situngulu Rt forest $3\frac{1}{4}$ A little quiet rain through night = a damp climateLichens on all the trees even those of 2 inches diameter our last cow died from injuries recieved in crossing the Lofubu = people buyit for food so it is not an entire loss

[0039]
Sat. 4th South S.E. one hour
to the Lopopozi or
Lopopo[...] ziha stream
of 25 or 30 feet & now
breast deep flowing
fast N.S. to join the Chambeze

course S & by E. 2½

at Ketebe's ^ on Rt Kirima 2 PM after very heavy rain

[Group of 3 numbers bracketed under the comment " 82° cloudy".] at 4 PM [Group of 3 numbers bracketed under the comment " 80° clear".]

S. 5th A woman of our party is very ill = she will require to be carried tomorrow

[0040]

 $6^{\underline{\text{th}}}$ January 1873 Ketebe or Kapesha very civil and generous - sent three men to guide us to his elder Chungo - His men drum & sing harshly for him constantly -I gave him half a lb of powder & he lay on his back rolling & clapping his hands & all his men lullilooed - then turned on his front & did the same = menvery timid == no wonder the Arab slaves do as they choose with them women burst through the stockade in terror when my men broke out into a chorus in pitching the tent cold, cloudy & drizzling much land cultivated far from the stockades

[0041]

came to a young relation of Ketebe in a stockade about South 2¾ Moenje vil 3 PM wet & cloudy

[Group of 3 readings bracketed together under a temperature value of 73°.] 6 AM Rainy
[Group of 3 readings bracketed together under a temperature value of 66.]
Sponges here are now full & overflowing by the continuous & heavy rains = crops of mileza maize - Cassava = Dura tobacco = beans = ground[-] nuts growing finely
A border is made round each patch manured by burning the hedge

and castor oil plants pumpkins = calabashes planted in it to spread out over the grass

[0042] 7th January 1873 a cold rainy day keeps us in a poor village very unwillingly same vil. 3 PM fair

[Group of 3 readings bracketed together under temperature 72.] after rain all morning Moenje vil Rt Kamolopa Wet till Noon & afterwards Rt Kamolopa into Kamolozze & it into Kapopopozi

8th Detained by heavy continuous rains in this vil Moenje = We are near Bangweolo and in a damp region got off in afternoon in a drizzle = crossed a rill 6 feet but now very deep & large running sponges on each side - Kamolopa - then one hour beyond a sponge sluggish

[0043]

rivulet 100 yards broad with broad bank sponges = waist deep - & many leeches in it - came on through flat forest as usual SW & S 3 Kalulwe = Kamonunse all into Lopoposhi Kimpuko R tomorrow Nkulumola D° Chiremba = Liemba

[Group of 3 readings bracketed together under "75.5 clear".] Kamonunse R^t

9th Mosumba [Group of 3 readings bracketed together under " 75° ".] of Chungo = after one hour we [Group of 3 readings bracketed together under "3 PM 76° ".] crossed the R^t & sponge Nkulumuna 100 feet of rivulet and 200 yds of flood besides some 200 yards of sponge full & running off

[0044]

We then after another hour crossed the large Rivulet Loposliosipopozi by a bridge which was 45 feet long & shewed the deep water = then 100 yards of flood thigh deep = and200 or 300 yards of sponge called Liñkanda Then we crossed two ^rills & their sponges - the rills in flood 10 or 12 feet broad thigh deep = after crossingthe last we came near the Mosumba and recived a message to build our shed in the forest which we did = Chungo knowswhat a nuisance a safari makes itself = cloudy day & at Noon heavy rain from NW South & SE. 3½ Headman on recieving two cloths said he would converse about our

[0045]

ford & shew it tomorrow no observations can be made from clouds & rain -

10th January 1873 Mosumba a Chungu rest today & get an insight into the ford cold rainy weather at 6 AM

[Group of 3 readings bracketed together under "69 6 AM".] [Group of 3 readings bracketed together under "9 AM 73° cloudy".]

[Calculations.]

[Group of 3 readings bracketed together under "79 Noon".]

[0046]

 10^{th} continued When we prepared to visit Chungo we recieved a message that he had gone to the plantations to get millet then sent for us at 1 PM to come but on reaching the stockade we heard a great Kelele or uproar and found it being shut from terror - spoke to the inmates but in vain so we returned - Chungo says that we would put his head on a pole like Cazembe's = We shall go onwithout him tomorrow the terror guns have inspired is extreme

11th Chungo sent a goat & big basket of flour & excused his fears because

guns had routed Cazembe and his head was put on a pole = and his young men raised

[0047]

a noise = We remain today to buy food as there is scarcity in Mombo in front cold & rainy weather never saw the like but this is among the sponges of the Nile & near the Northern shore of Bañgweolo Noon after drizzly morning

[Group of 3 readings bracketed together under "71º drizzle".]

12th a dry day enabled us to move forwards one hour to a rivulet & sponge but by ascending it we came to its head & walked over dry shod
Then one hour more to another broad rivulet
Pinda sluggish & having 100 yards of sponge on each side

[0048]

12th January 1873 continued This had a stockaded vil. & men in terror shut the gates - our men climbed over and opened them but I gave the order to move forward through flat forest as usual till we came to a running rivulet of about 20 feet have over 100 yards of sponge on each side = the white sand had come out & formed as usual the bottom

here we entered a village to pass the night = some had bought or stolen little children - I ordered them to be returned - one swore that he did not know from whom he got the child, I gave him one blow as a thief & ordered him out of the camp S - 3½ Kalombosi Rt

[0049]

Pass mines of fine black iron ore "motapo" - it is magnetic

13th storm stayed by
rain & cold at the vil
on R^t. Kalombosi near
Chambeze - never was
in such a spell of cold
rainy weather except in
going to Loanda in
1853 - Send for food back
Noon
[Group of 3 readings bracketed together under "69°".]
[Group of 3 readings bracketed together under "4 PM 77° clear".]
Rainy
all over

14th Went on dry SE & then South 2 hours to River Mosiñga & went along parallel to it till we came to confluence of the Kasie Mosinga 25 feet = waist deep with 150 yards sponge on right bank & about 50 yds on left = pass one village then another S.S.E. == 4½

14th January continued 1873 very many plots of ^ cassava maize millet - dura - ground nuts voandzeia in the forest all surrounded with strong high hedges skillfully built - & manured with wood ashes villagers much afraid of us after 4½ hours we were brought up by the deep Rt M ^ panda to be crossed tomorrow in canoes - many flowers in the forest - mary-golds a white jonguil looking plant without smell = manyorchids white yellow & pink = asclepias with bunches of French white Methonica gloriosi gladiolas $flowers = clematis \hat{a}$ blue & deep purple Polygalas Grasses with white starry seed vessels = & spikelets of brownish red & yellow Beautiful blue flowering bulbs, and new flowers of pretty delicate forms & but little scent - very few birds or any kind of game = but the hedges say

[0051]

that at times large game come around = people catching fish in baskets They are Babisa and all have fled from the West

We may add Balsams compositae of blood red colour and of purple other flowers of liver colour bright canary yellow Pink orchids on spikes thickly covered all round & of three inches in length spiderworts of fine blue or yellow or even pink.

Different coloured Asclepediae - as French white crimson & blood red sages = + blue six petals bulbs Beautiful yellow & red umbelliferous flowering plants - and Dill and wild Parsnips = pretty flowering Aloes yellow & red in one whorl of blossoms = Peas and many other flowering plants which I do not know

[0052]15th January 1873 found out that Chungu had let us go astray towards the Lake and into an angle formed by the M ^ panda Lipoposhi & Lake full of rivulets crossed with canoes = Chisupa aheadman on other side of R M $\hat{}$ panda sent a present and denounced Chungu for heartlessness - we explained to the men of the Safari our change of route & went first to N.E. then East to the Monsinga which we forded again at a deep place full of holes & rust of iron water in which we floundered over 300 yards = We crosseda sponge thigh deep

[0053]

Mosinga = then on in flat forest to village in a stockade = the whole march about E. 6

before we came to the

16th away North East & North to get out of the many rivulets near the Lake = back to the River Loposhosi which now looms large & must be crossed in canoes = we have to wait till these are brought & are in a vil. on the banks of a sponge = we came only Nearly North 1³/₄

We were treated scurvily by Chungu = He knew that we were near Chambeze but hid the knowledge & himself It is terror of guns.

[0054]

 17^{th} January 1873 - We are troubled for want of canoes but have to deal gently with the owners otherwise they would all run away as they have done around Chungu's in the belief that we were coming back to punish their silly headman By waiting patiently yesterday we drew about twenty canoes towards us this morning = all too smallfor the donkey so we had to turn away back NorWest to the bridge above Chungu's = If we had tried to swim the donkey alongside a canoe it would have been terribly strained as the Lipoposhi is here quite two miles wide & full of rushes except in the main stream - It is all deep and the country

[0055]

being very level as the rivulets come near to the Lake they become very broad = crossed two spongesand rivulets in their centres = much cultivationin the forest = wood ashes the only manure the people know & when a hedge is burned down castor oil plants = calabashesand pumpkins are planted along its burned site = In the secondyear the mileza and maize are sickly and yellow while in the first year with fresh wood ashes they are dark green and strong - very much of the forest falls for manure - the people seem very eager cultivators = courseabout N.W 3 Possibly mounds have the potash brought up in forming

[0056]

18th January 1873 We lost a week by going to Chungo a worthless terrified headman - and came back to the ford of Liposhosi which we crossed only from believing him to be an influential man who would explain the country to us = Wecame up the Liposhosi 3 hours yesterday after spending 2 hours in going down to examine the canoes - then two & a half hours this morning and on its Eastern side one and a half more – crossing two sponges of between 200 & 300 yards with rills

in their centres = Course NE & S. 4
We heard that Syde bin Ali is returning from Katañga with much ivory

[0057]

 19^{th} after prayers we went on to a fine village and on from it to the Mononse = which thoughonly ten feet of deep stream flow S. had some 400 yards of most fatiguing plunging deep sponge often waist deep = thisdeep sponge was in a mass of dark coloured rushes that looked as if grass burned off - many leeches plagued us = We were now $2\frac{1}{2}$ hours out went on 2 miles to another sponge & village but went round its head dryshod then two hours more to sponge Lovu & R^t flat forest as usual Course about S.E. $4\frac{1}{2}$ but deduct ½ for crossings ==4

 $\begin{array}{l} [0058] \\ 19^{\underline{\mathrm{th}}} \ \mathrm{January} \ 1873 \ 3 \ \mathrm{PM} \end{array}$

[Group of 3 readings bracketed together under "90 cloudy".] 6 PM clouds like rain [group of 3 readings bracketed together under "79°"]

Aldebaran [Calculations based on geographical coordinates.]

Capella [Further calculations based on result of the previous one resulting in Lat values.]

20^{th} 6 AM

[Group of 3 readings bracketed together under "69° clear".] Tried to observe

Lunars in vain = clouded
over all = thick & muggy came on disappointed
and along Lovu a mile & half
crossed it by a tree felled
and lying over it = about
6 feet broad & deep with
about 150 yards of sponge
then on East whole

[0059]

march about 2 very unsatisfactory as progress

 21^{st} Fundi lost himself yesterday & we are looking out for him = He came at Noon = wandered inthe eager pursuit of two herds of eilands = Havingseen no game for a long time he lost himself in anxiety to kill one We went on $2\frac{1}{2}$ hours and were brought up at the Malalanzi R^t which is about 15 feet broad waist deep and has 300 or more yards of sponge -Guides refused to come as Chituñkūe their headman did not own them = we started alonea man came after us tried to mislead us in vain

[0060]

22nd January 1873 We pushed on through many deserted gardens & villages = the man evidently sent to lead us astray from our S.E course turned back when he saw that we refused his artifice = crossed another R^t now broad & deep possibly Lofubu and then came to another of several deep streams in rushes but sponge not more than 50 ft in all - Here we remained having travelled in fine drizzling rain all morning time & course S.E. $2\frac{1}{2}$ population all gone from the war of Chitoka with this Chituñkūe

No Astro. observations worth naming during Dec^r & January -= impossible = clouds & Rains

[0061]

Note = It is trying beyond measure to be baffled by the natives lying and mis--leading us whenever they can = they fear us verygreatly - and with a terror that would gratify an anthropologists heart their unfriendliness is made more trying by our being totally unable to observe for our position = It is eitherdensely cloudy or continu--ally raining day & night country covered with brakens - and rivulets occur at least once every hour = these are now deep & have a

broad selvage of sponge -Lower stratum of clouds moves quickly from the N.W = upper more slowly from S.E. & tell of rain near

[0062]

23^d January 1873 We have to send back to villages of Chituñkūe to by food It was not reported to me that the country in front was depopulated for three days - so I send a day back I dont know where we are and the people are decietful in their state--ments = unaccountablyso though we deal fairly and kindly = rain rainrain as if it never tired on this watershed The NE showers shew very little in the gauge but keep every thing & place wet and sloppy

People returned with a wretched present from Chituñkūe = bad flour & a fowl = meant to be rejected = an exorbitant demand for guides

[0063]

and for gunpowder refused his present =
& must plod on without
guides = this from the
numerous streams
is very difficult -

24th Went on E & N.E. to avoid the deep part of a large river which requires 2 canoes but the men sent by the chief would

certainly hide them ^ - drizzling - 1¾ to large stream = at least 300 yards of deep water among sedges & rushes - ^ & 100 of sponge one part 50 feet was neck deep & water cold = plunged in elephants footprints for ½ hour = then came on 1 hour to a small rivulet 10 feet broad but waist deep = bridge covered and broken down - course about E & by N. 2¾ sore on the women

[0064]

 24^{th} January 1873 cont<u>d</u> carrying me across one of the broad deep sedgy rivers of these parts is really a very difficult task - one we crossed today was at least 1000 feet broad or more than 300 yards -The first part - the main stream came up to Susi's mouth and wetted my seat and legs = one held up mypistol behind = then one after another took a turn and when he sank into a deep elephants foot[-] print he required two men to lift him so as to gain a footing on the level which was over waist deep others went on & bent down the grass to insure

[0065]

sure footing on the side of the elephants path = Every ten or 12 paces brought us to a clear stream flowing fast in its own channel while overall a strong current came bodily through all the rushes & aquatic plants
Susi had the first spell
then Farjella = then a
tall stout Arab looking
man then Amoda then Chanda - then Wadi
Sale and each time I
was lifted off bodily &
put on another pair
of stout willing shoulders
and 50 yards put them
out of breath = no wonder
It was sore sore sore on the
women folk of our party

[0066]

24th January 1873 cont^d It took us a full hour and a half to cross all over and several came over twice to help me & their friends - the water was cold and so was the wind but no leeches plagued us When we crossed the second Rivulet rain threatened from the NW and we hastened on the building of sheds = after 4 PMit came on a pouring cold rain when we were all under cover We are anxious about food - the Lake is near but we are not sure of provisions as there have been changes of

[0067]

population - our progress is distressingly slow wet wet wet sloppy weather truly and no observations except that the land near the Lake being all very level the streams spread out into broad firths & broad sponges = the streamsare so numerous that there has been a scarcity of names = Here we have Lovu and Luena = We had two Lovus before and another Luena = and severallarge rivulets that seem to deserve names but they are not mentioned by the people = never mind

[0068]

25th January 1873 Raining during the night & early morning kept us a little at camp where we were joined by a man of Unyanyembe said to have been left sick by an Arab = came on $1\frac{1}{4}$ to a rill 18 inches broad & calf deep - sponge some 30 yards = then on overflat forest in which as usual we can see slope only by the leaves being washed into heaps in the direction the water in the paths wished to take -1½ more to another rill and then to the Lovu a large stream with bridge destroyed = sent to makerepairs before we go over cloudy & spitting of rain course E or E & by N. 3

[0069]

Repaired bridge and then all crossed over a deep river of 50 feet flowing fast to the South ^ & SW and having about 50 yards of sponge & 200 yards of deep flood flowing in long grass = knee andwaist deep = clear waterThe men built their huts and had the camp ready by 3 PM = a gooddays work not hindered by rain - country all depopulated so we can buy nothing = and we see no cultivation though soil is very rich and water in abundance = Elephants and antelopes have been here lately

[0070]

26th I arranged to go to our next river Luena & ascend it till we found it small before crossing = asit has much TiñgaTinga or yielding sponge But another plan was found by night and we were requested to go down the Lovu - not wishing to appear overbearing I consented until after two hours Southing we came to several miles of TingaTinga = people of a fishing station ran away from us & we had to wait for some sick ones = womencollecting mushrooms

A native came near but positively refused to guide us to Matipa or anywhere The sick compelled us to an early halt S. & S.E. 3¹/₄

[0071]

27th Went on up stream one hour & crossed its head though large at our camp then through forest to another rivulet running South 10 feet & thigh deep with over 50 yards of flow sponge on each side - saw marks of buffalo & gnu in forest = nopeople seen = Went on in usual flat forest with very few large trees but much fern for 1¾ & came to a rill of 3 feet & deep - sponge 20 yds on each side = to pass the night = SE. 2%I lose much blood but it is a safety valve for me and I have no fevers or other ailments

[0072] 28^{th} January 1873 a dreary wet morning and no food that we know of near - It drop drops and drizzles & is cold from the Norwest -= killed our last calf but one last night to give each a mouthful 9-30 were allowed by the rain to leave (Tsetse) our camp - and march SE. 2 hours to a strong deep rivulet - 10 feet broad only but waist deep and 150 yards of flood all deep too sponge about 40 yards in all & running fast out Then went on 1½ through the usual forest - no people

last 1¹/₄ S. general course about S & by E. 3¹/₄ camp by a broad prairie or Buga

[0073]

29th no rain in night for a wonder = we tramped 1¼ to a broad sponge having at least 300 yards of flood = clearwater flowing S.W. but no ^stream in centre as usual = all was streamflowing through the rushes and knee & thigh deep with about 30 yards of weeping sponge on one side and 130 yds on the other Then went on 1 hour through the usual forest to another sponge with only 30 yards of flood in it - & 150 of sponge. = on again to broad branching sponges 40 minutes at which resolved to send out scouts S - SE. & SW. the music of the singing birds the pleasant voices of the Turtle doves - the screaming Francolin proclaim man to be near = South = 3

[0074]

 $\frac{29^{\underline{\text{th}}} \text{ January } \underline{\text{continued}}}{3 \text{ PM}}$ [Group of 3 readings bracketed together under "86°".] $1^{\underline{\text{st}}} \text{ Feb - 9 AM [Dated group of 3 readings bracketed together under "70° wet" and date.]}$ clear

30th Remain waiting for the scouts = Manua Sera returned at dark having gone about 8 hours South & seen the Lake and two islets smoke now appeared in the distance and a very broad wet Bŏga so he turned & the rest went on to the smokes to buy food = wet evening.

 $1^{\underline{st}}$ February 1873 waiting for the scouts - they Returned unsuccessful Saw a very large River flowing into the Lake but not a single soul forced by hunger to return $2\frac{1}{2}$ hours

[0075]

Killed our last calf

Return [Calculations which seem to be adding distances travelled to various locations.]
= ^4 days hard
travel = for us
all = send 4
men forward
or rather back[-]
ward to Chitunkue's
to buy food in
advance & bring it back

 $2^{\underline{nd}}$ march smartly back six hours to our camp of $28^{\underline{th}}$ ult = people bear their hunger well collect mushrooms & plants and wander $3^{\underline{d}}$ Return march to our bridge on the Lofu 5 hours = In going we went astray & took six hours to do the work of 5 = Tried Lunars in vain = Either sun or moon in cloud = on Luena 5

[0076]

February 4th Return 2¾ to camp on rivulet with much Methonica gloriosa on its banks Our camp being on its left bank of 26^{th} ½ to Tingatiñga river probably LofuKwala = a longtime to cross all over though now the elephants footprints were filled up which made passage easier Then on 1½ to camp of $25^{\text{th}} + 2^{3/4} + \frac{1}{2} = 3^{1/4} + 1^{1/2} =$ 4% === camp 4%among deserted gardens affording a welcome supply of cassava & sweet potatoes Men sent on before us slept here last night & have decieved us by going more slowly without loads than we who are loaded.

[0077]

5th arrived at Chutinkue's crossing a broad deep brook at starting, then on 2 hours to another sluggish one at a village then about 34 more to Malalanzi now swolen and having at least 200 yards of flood and of sponge ^ 300 a good deal more = saluted by a drizzling shower

We are now at Chituñkues mercy = Return 234

February

Chitunkūe more civil than we expected = saw each chief had his own land & peculiarities he was not responsible for others - we had been near to Matipa & other chiefs & he would give

us guides if we gave a cloth & some powder

[0078]

Returned our 41 miles in 15 hours through much deep water = our scouts played us falsely both in time and beads = the headmen punished them

Febry 5^{th} continued = got lunars for a wonder = visited Chituñkubwe as his name properly is = a fine jolly looking man of a European cast of coun--tenance = very sensible & friendly = gave him 2cloths for which he seemed thankful & promised good guides to Matipa = shewedme two of Matipa's men who had heard our guns fired for a stray one & followed us = we were close to human habitations but knew it not - we

have lost half a month by wandering but it was all owing to the unfriendliness of some & fears of all

[0079]

I begged for a more Northern path where the water is less - It is impossi[-] -ble to describe the amount of water near the Lake -Rivulets without number they are so deep as to damp all ardour

Passed a very large striped spider in going to visit Chituñkubwe The stripes were of yellowish green & it had two most formidable reddish mandibles the same shape as those of the red headed white ant = It seemed to be eating a kind of ant with a light coloured head not seen elsewhere a man killed it and all the natives said that it was most dangerous

Passed gardens of Mthama or dure leaves all split up with hail & forest leaves all punctured

[0080] 6th Chituñkubwe gave a small goat & large basket of flour as a return present - I added ¾ lb of powder February 5

[Calculations based on astronomical observations.]—

 $7^{\underline{\text{th}}}$ this chief shewed his leanings by demanding

prepayment for the guides - this being a preparatory step to their desertion I resisted

9 AM cloudy [Group of 3 readings bracketed together under "81°".] [Calculation.]

[0081]

Sent men to demand what he meant by his words and he denied all and said that his people lied not he = we take this for what it is worth He gives 2 guides tomorrow morning & visits us this afternoon 3 PM Raining

[Group of 3 readings bracketed together under "74".] and $\,$ from N.W.

8th chief dawdles in giving guides though he promised great things yesterday - the blame is put on his people who did not prepare food yesterday on account of the rain time is of no value to them - We have to remain over today

[0082]

8th February 1873 continued It is most trying to have to wait on most frivolous pretences = I have endured such vexatious delays I ought to have learned to be patient = guides came at last with quantities of food to make bargains with my people in the
way = went East to
a deserted vil - 2
A Nassicker who carried
my saddle was found
asleep near our camp

9th slept in a most unwholesome ruined village = rank vegetation had run over all & the soil smelled offensively crossed a sponge - then a rivulet & sponge running into Mtwale

[0083]

then by a rocky passage the Mofiri or great TingaTinga water running stronly waist & breast deep about 30 feet broad here but very much broader below - then a sponge & rill - then a deep rivulet the Methonica one but we build a camp above our former one = the human ticks called Papasi by Swaheli and Karapatos by the Portuguese made even the natives call out against their numbers & ferocity

[0084]

10th February 1873 Back again to our old camp on the Lovu or Lofu by the bridge We left in a drizzle which continued from 4 AM to 1 PM - we were three hours in it and all wetted just on reaching camp by 200 yards of flood mid deep but we have food = At 4 PM drizzle began again, and continued E. 3 till dark

11th Our guides took us across country where we saw many marks of buffaloes and in a meadow the head of a sponge we saw a herd of Hartebeests

[0085]

a drizzly night was followed by a morning in a damp cold fog but in three hours we came to our old camp though as we went it took us six - and in coming back five = camp on a deep bridged Rivulet a bridge shews the rivulet of five feet broad to be perennial name Kiachibwe

3 PM cloudy & [Group of 3 readings bracketed together under "74°".] camp of $28^{\rm th}$ & $2^{\rm nd}$ now of $11^{\rm th}$ SE == $3^{\rm 1}\!\!/4$

[0086] 12^{th} February 1873 $1\frac{1}{2}$ to cross Kasoso a small rivulet & sponge going into the Mokisya

which flows NW - then on & in ½ an hour cross Mokisya = deep &broad stream - sluggish mid deep = then on anhour to cross Mfungwe then over a small rivulet & sponge near its head - and away through the usual flat forest for three more hours = fewtrees thicker than a man - cross a small R^t & sponge to camp = S. 6Lofubatse goes to Luena SE Kamatesi tomorrow

[0087]

[Group of 3 readings bracketed together under "93 in box".] 3PM clouded over

13th 4 hours to in sight of Luena & Lake Forest trees larger many elephants and other game but shy - Guides as much or more at a loss than we as they always go in canoes in the flat rivers & rivulets = Went East then round to South East then South 4
3 PM Rainy

[Group of 3 readings bracketed together under "83°".] 14^{th} 6 AM [Group of 3 readings bracketed together under "68" and "cloudy".]

[0088] 14th Feby 1873 public punishment for Chirango for stealing blue beads 15 cuts – diminished his load to 40 lbs - giving blue & white beads to be strung

The water stands so high in the paths that I could not walk dry shod & I found in the large buga or prairies in our front that the water was knee and thigh deep on to Luena the palm or Muale palms of which we see = I sent on two men to cross Luena & go to first villages of Matipa and ask for a canoe to carry me across the prairie and ask Matipa for large

[0089]

canoes to navigate the Lake - or give a guide to take us East to the Chambeze to go round on foot =

Halima informed on Chirango as he offered her the stolen beads for a cloth = this was so far faithful in her but she has an outrageous tongue (I remain also because of an excessive discharge Haemorrhagic)

If the good Lord gives me favour & permits me to finish my great work I shall thank & bless him though it has cost me untold toil - pain = and travel = this trip has made my hair all grey -

6 AM near Luena R

[Group of 3 readings bracketed together under "697 Rainy".] 6 AM [Group of 3 readings bracketed together under "69 cloudy".] 15th February 1873 service and killed our last goat while waiting for messenger to return from Matipa Evening messenger came back foiled by TingaTinga & deep Buga fired his gun three times but no answer came Then as he had slept one night away he turned but found some men hunting & came here with them They say that Matipa is on Chirube islet a good man too but the isle is far

[0091]

16th sent men by the hunter's canoe to Chirube with a request to Matipa if he has canoes to transport us West If not tell us truly and we will go East & cross Chambeze where it is small

Chituñkubwe's men ran away refusing to wait till we had communicated with Matipa Here the water stands underground 18 inches from the surface They played us false & this is why they escaped

[0092]

17th Men away negotiating with Matipa for canoes
They have to go all the way out to the island Chirubwe in canoes and will
return tonight or tomorrow -

Suffered a furious attack at midnight by the red Sirafu or Driver ants - our cook fled first their onset - lighted a candle and remembering D^r van der Kemp's idea that no animal will attack man unprovoked - I lay still - the first came on the foot quietly then some began to bite between the toes - then the larger ones swarmed over the foot bit furiously & made the blood start out - I then went out of the tent and my whole person was in a moment covered as closely as small[-]

[0093]

pox, not confluent, on a patient - fires were lighted of grass & my men picked some off my limbs & tried to save me = not so one of the Nassick pupils he growled out to Majwara "Dont take grass off my hut" - far from offering assistance he grudged the assistance rendered by others and a little dry straw; after they had finished their own. It is a fair specimen of the disobliging nature they imbibe with their reading = My men say they have been taught "reading only" It seems true - After battling & burning for an hour or two they took me into a hut not yet invaded, and I rested till they came (the pest) and routed me out there too.

[0094]

17th February 1873 continued Then came on a steady pour of rain that held on till noon as if trying to make us miserable - at 9 AM I got back into the tent -

I neglected to add above that Majwara said to the growling Nassicker "Who will take you to "Matipa if he does not" a neat reproof - the large sirafu have mandibles curved like reaping sickles, and very sharp = as fine of point as the finest needle or a bees sting. Their office is to remove all animal refuse cockroaches &c and they took all my fat

[0095]

Their appearance sets all the cockroaches into a flurry and all ants white & black get into a panic - On man they insert the sharp curved mandibles, and then with six legs push their bodies round so as to force the points in by lever power. They collect in masses in

their runs & stand, mandibles extended as if defying attack = the large ones stand thus at Bay while the youngsters hollow out a run half an inch wide & about an inch deep = they remained with us till late in the afternoon, and we put ^ hot ashes on the defiant hordes - they retire to enjoy the fruits of their raid & come out fresh another day -

[0096] 18th Febr

18th February 1873 The men [have] gone to Matipa will probably come today
We wait hungry & cold & hope the good Lord will grant us influence with this man

Our men returned today having obeyed the native to sleep instead of going to Matipa = bought food and then believed that the islet Chirube was too far off and returned with a most lame story = We shallmake the best of it by going Nor-West to be near the islets & buy food till we can communicate with Matipa = If he failsus by fair means we must sieze canoes & go by force = the men say fear of me makes them act very cowardly

[0097]

I have gone among the whole population kindly & fairly but I fear that I must now act

more rigidly for when they hear that we have submitted to injustice they at once conclude that we are fair game for all and they go to lengths in dealing falsely that they would never otherwise attempt It is I can declare not my nature nor has it been my practice to go as if my "back were up"

 $\begin{array}{c} [0098] \\ 19^{\underline{\text{th}}} \text{ February } 1873 \end{array}$

A cold wet morning keeps us in an uncomfortable spot = when it clears up we go to an old stockade to be near an islet to buy food = people knowing o[...] [u]r need are extortionate

Went on at 9 AM over an extensive water covered plain = I was carried 3 miles to a canoe and then in it we went West in branches of Luena very deep & flowing W. for 3 hours - we were then near enough to hear Bangweolo bellowing water on the plain 4.5 7 feet = rushes & ferns and papyrus = arums 2 Lotuses in abundance

[0099]

many dark grey caterpillars clung to the grass & were knocked off as we paddled or poled - camped in an old village of Matipa where in West we see Luena enter the Lake - but all is flat Prairie or Buga

filled with fast flowing water save a few islets covered with palms & trees It continued sprinkling us from N.W. all morning Elephants had visited over the ruins eating a species of grass in seed -It resembles millet & the donkey is fond of it -I have seen this & another species of grass in seed only eaten by the Elephas Afric--ana = trees & bulbs fruits are his dainties also Ants whose hills he overturns

[0100]

19th February 1873 continued A large party in canoes came to us with food as soon as we reached our new quarters had heard of us in search of Matipa = All are eager for calico though they have only raw cassava to offer for it - they are clothed in bark cloth and skins - without canoes no movement can be made for all is water

everywhere = water above & water below

20th Feby 1873 = Sent a request to a friendly man to give me men and a large canoe to go myself to Matipa says he will let me

[0101]

know today if he can. Heavy rain

by night & drizzling by day -

He has not come but we are getting food enough for all and Matipa will hear of us soon as he did when we came and returned back for food

Engaged another man to send a canoe to Matipa & shewed him his payment but retain it here till he comes back -

Men demanded beads & cloth to be spent by them = refused as they buy beadsgrass with the beads

 $\begin{bmatrix} 0102 \\ 21 \\ \end{bmatrix}$ February 1873

The man engaged refused to go = they have no honour Raining and uncomfortable but people bring food for sale another man spoken to to go to Matipa explained that they had to pass an islet before getting to Chirube & run the risk of being killed by the hostile islanders = It is so wet we can do nothing -

22nd Rainy morning I was ill all yesterday but escape fever by Haemo.rr A heavy mantle of N.W clouds comes daily floating over us = no Astro.

 obs^{ns} can possibly be made never was in such misty cloudy weather in Africa

[0103]

9 AM A man turned up to carry our message to Matipa & Susi and Chuma and went with him The good Lord go with them and lend me influence & grant me help -

 $23^{\underline{d}}$ S. service = Rainy 24^{th} tried hard for a Lunar but moon was lost in glare of the sun

25th did not rain till 4 - 5 PM & then from N.W. as usual = People bring food for sale from far but hold out for cloth which is inconvenient -Susi not appearing

Susi not appearing may mean that the men are preparing canoes & food to transport us

[0104]

 $26\underline{^{\mathrm{th}}}$ February 1873 -

Susi returned this morn[-] ing with good news from Matipa who declares his willingness to carry us to Kabende for the five bundles of brass wire I offered = He is not on Chirube but amid the swamps of the main[-] land on Lake's North side -Immense swampy prairies all around except at Kabende -Matipa is at variance with his brothers on the subject of lordship of the lands and the produce of the Elephants which are very numerous -I am devoutly thankful to the Giver of all for favouring me so far and hope that he may continue his kind aid

[0105]

No mosquitoes here though Speke at the Victoria Nyanza said they covered the bushes and grass in myriads and struck against the hands & face most disagreably

26th Near confluence of the R Luena with Bangweolo 3 PM clouded over

[Astronomical readings, temperature values and calculations based on these readings.]

[0106]

 27^{th} February 1873

waiting for other canoes to be sent by Matipa = His men say that there is but one large river on the South side of Bañgweolo and called Luomba They know the mountains on the South East as I do and on the West but say that they dont know any on the middle of the watershed They plead their youth for \(\frac{\ldots}{\ldots}\)-knowing so little Phacochoerus Aliani warthog

Noon [Group of 3 readings bracketed together under "83".]

[0107]

Boiling point = Noon

[Astronomical observations, temperature readings, calculations.] Found that the $\ ^{\circ}$ column of mercury was parted in two of the thermometers by vol falling in trying to unite the column I broke N° 2 - N° 1 useless. Matipa's men proposed to take half our party tomorrow but I refuse to divide our force they say that Matipa is truthful

[0108]

28 February 1873

No night rain after 8 PM for a wonder - Baker had 1500 men in health on 15^{th} June 1870 at Lat 9° 26' N. and 160 on

sick list = many dead Liberated 305 slaves - his fleet was 32 vessels wife & he well = I wish that I met him -

Matipa's men not having come = it is said they are employed bringing the carcase of an elephant to him I propose to go near to him tomorrow = some in canoes & some on foot The good Lord help me New this evening

[0109]

 1^{st} March 1873 embarked women and goods in canoes and went 3 hours S.E. to Bangweolo = stoppedon an island where people were drying fish over fires = Heavy rain wet us all as we came near the islet - drops as large as half crown pieces by the marks they made = We went over flooded prairie 4 ft deep & covered with rushes and two varieties of Lotus or sacred lilly both are eaten and so is Papyrus = buffaloesat a loss in the water

 $\begin{array}{l} [0110] \\ 1^{\underline{st}} \ \mathrm{March} \ 1873 \ \mathrm{continued} \end{array}$

Three canoes behind = men

great cowards = I tookpossession of all the paddles & punting poles as the men shewed an inclination to move off from our islet - the water in the country is prodigiously large plains extending further than the eye can reach have 4 or 5 feet deep of clear water and the Lake & adjacent lands for 20 or 30 miles are level = We are on amiserably dirty fishy islet called Motovinza and all are damp - surrounded by scores of miles of rushes = an open swardand many Lotus plants but no mosquitoes

[0111]

 2^{nd} March It took $7\frac{1}{2}$ hours punting to bring us to Matipa on an island and then the miserable weather rained constantly on our landing into the Boma which is well[-] peopled = The Prairie is 10 hours long or about 30" by punting Matipa is on an island too with four bomas on it - a river the Molonga runs past it & is a protection Men wear a curious head dress of skin or hair & large upright ears

[0112] $3^{\underline{d}}$ March 1873 at Matipa's = paid offthe men who brought us here = Matipa says that 5 sangos or coils which I offered will do to take us to Kabende -I sincerely hope that they will = His canoes are off bringing the meat of an elephant Many dogs in vil. used to hunt and bring elephants to bay

Noon visited Matipa an old man slow of tongue and self possessed recommended our crossing to South bank

[0113]

of Lake to his brother who has plenty of cattle and to go along that side where there are few rivers and plenty to eat = Kabende landwas lately over run by Banyamwesi who now inhabit that country but as yet have no food to sell. Moanzabamba was the founder of the Ba--bisa tribe and used the curious plait of hair that makes curious large ears

[2 drawings to illustrate hairstyle as described - one side-portrait, the other face-on.]

[0114]

I am rather in a difficulty as I fear that I must give the five coils for a much shorter task but it is best not to appear unfair though I will be the loser He sent a man to catch a sammpa for me = the largest fish in the Lake & promised to have men ready to cross for mine tomorrow -

Matipa never heard from any of the elders of his people that any of his forefathers ever saw a European = He knew perfectly about Pereira = Lacerda & Monteiro going towards Cazembe and my coming to the islet Mpabala

[0115]

No trace seems to exist of Captain Singleton's march =
Matipa is deeply marked by smallpox Native name of Pereira is Moenda Mondo
— of Lacerd = Charlie of Monteiro's party
Makabalwe or the donkey men = but no other name is heard

[0116]

Canopus [Calculations, geographical coordinates & astronomical symbols, all dated 3^d March 1873]

 4^{th} March 1873 sent canoes off to bring our

men over to the island
of Matipa = they brought
ten but donkey could
not come as far through
the <u>TingaTinga</u> as they and they took it back
for fear that it should
perish = spoke to Matipa
this morning to send
more canoes & he consent to
We move outside as
town swarms with

[0117]

mice & is very closely built & disagreable this is a sandy islet and about 80 feet above the level of Lake = others were of black loam & very disagreable found mosquitoes in the town

 $5^{\rm th}$ time runs on quickly Long. 31° 3' = Lat. 11° 11' S Men not arrived yet Matipa very slow

6th building a camp outside the town for quiet & cleanliness and no mice to run over us at night This islet is some 20 or 30 feet above the general flat country and water adjacent

[0118]
6th March 1873 contin^d
3 PM moved up to
the highest part of the
island where we can
see around us and

have the fresh breeze from the Lake = Raining as we went up as usual

7th we expect our men today - I tremble for the Donkey - camp sweet and clean but it too has mosquitoes from which a curtain protects me completely - a great luxury but unknown to the Arabs I have spoken to about it - Abed was overjoyed by one I made for him, others are used to their bites as was the man who said that he would get used to

[0119]

a nail through the heel of his shoe -

Men came at 3PM but 8 had to remain the canoes being too small = the donkey had to be tied down as he rolled about on his legs & would have forced his way out = bit Spekeslame hand and came stiff from lying all day tied = shampooedhim all over but he could not eat dura feels all sore - Susi did well in the circumstances and we had plenty of flour ready for all -Chanza is near Kabinga and this last is coming to visit me in a day or two

[0120]

8th I Press Matipa to get a fleet of canoes equal to our number = He complains of his canoes having been stolen by rebel subjects says that Kabinga his brother would have been here some days ago but for having a son killed by an elephant and he is mourning for him but he will come soon - Kabinga is on the other side Chambeze a party of male & female drummers and dancers is sure to turn up at every village = the first here had a leader who used such violent antics the sweat ran off his whole frame = I gave a few strings of beads but the performance is repeated today by

[0121]

another lot and 0 rebel and allow them to leave me me unheeded

[Groups of temperature values, readings, and weather observations corresponding to various times of day during 9^{th} .]

We got a sheep for a wonder for a doti = fowls and fish alone could be bought but Kabinga has plenty of cattle = Raining
The eight men came from Motovinza this afternoon and now the whole party is joined Donkey now shews many sores inflicted by the careless people

think that force alone can be used to inferior animals

 $\begin{array}{c} [0122] \\ 10^{\rm th} \ {\rm a \ wet \ night \ makes} \\ {\rm everything \ damp \ and} \\ {\rm uncomfortable} \end{array}$

[Group of readings, temperature values and weather observations relating to times 3 PM and labeled "78 cloudy."]

[Group of readings, temperature values and weather observations relating to times 6 PM and labeled "69° clear."]

11th Matipa says wait Kabinga is coming & he has canoes = Time is of no value to him His wife is making pombe for him and that will drown all his cares but mine increase & plague me

Matipa & wife sent
each a huge calabash
of pombe - I wanted only
a little to make bread with
but better news the
son of Kabinga is to
come this evening &
we shall concoct

[0123]

measures together

12th the news were false = no one came from Kabinga = strung beads today and I wrote out part of my despatch for Earl Granville ^ insert here

13th Went to Matipa & proposed to begin the exportation of my men at once as they were many and he has not canoes sufficient to take more than a few at a time = has sent off a big canoe to reap his millet - when it returns he will send us over to see for ourselves where we can go = explained the danger of setting my men asteady

[0124]

14th Rains have ceased for a few days Went down to Matipa and tried to take his likeness for the sake of the curious hat he wears. |Engrave|

15th Finish so far my

Despatch

"Level of Lake Bangweolo" [2 groups of readings, temperature values and weather observations relating to times $2~\mathrm{PM}$ and $6~\mathrm{AM}$ respectively.]

[...] here

16th S. service - spoke sharply to Matipa for his duplicity = he promises everything and does no--thing = He has in fact no power over his people = Ill all day = bowels = Matipa says that a large canoe will come tomorrow & next day men will go to Kabinga to reconoitre = there may be

[0125]

a hitch there which we did not take into account Kabinga's son killed by an elephant may have complications - blame may be attached to Matipa, and in their dark minds it may all appear important to settle the affair before having communication with him

17th The delay is most trying = so many detentions have occurred they ought to have made me of a patient spirit

As I thought Matipa told us toay that he has been reported to have got some Arabs who will attack all the Lake people forth[-] with and he is anxious for us to go over and let them see we are peaceful

[0126]

 $18^{\frac{\text{th}}{\text{}}}$ send off men to reconoitre at Kabiñga's and make a camp

Rain began again after nine days dry weather -NW but in morning thin fleecy clouds came from SE. in patches Matipa acting the villain & my men afraid of him =
they are all cowards &
say that they are afraid
of me only - this is an
excuse only for timidity [Drawing of side view (left) of a male face with large headdress.]

[0127]

Matipa [Drawing of side view (left) of a male face with large headdress.]

[0128]

[Drawing of right side & front view of male face with large headdress - a smaller sketch beside it is a similar view.]

[0129]

[Drawing of upper part of female figure, seen from left side.]
[Drawing of landscape features including waterfalls, trees, greenery, clouds.]

[0130] 19^{th} March 1873thanks to the Almighty Preserver of men for sparing me thus far on the journey of life = canI hope for ultimate success = ? = so manyobstacles have arisen = Let not Satan prevail over me, Oh my good Lord Jesus =8 AM got about twenty people off to canoes = Matipa not friendly they go over to Kabinga on South W. side of Chambeze, and thence we go overland -9 AM = men come back & reported Matipa false

[0131]

again = but one canoe had come = Made ademonstration by taking quiet possession of his village & house =fired a pistol, and called men = ten being left to gaurd camp - Matipa fled to another village -People sent off at once and they brought three canoes - so at 11 AM men embarked quietly they go across Chambeze and build a camp on its left bank = AllKabinga's cattle quite wild = aredriven into the water, and pursued like buffaloes when one is wanted for meat - no milk is ever obtained of course -

[0132]

20th March 1873 - Cold & cloudy N.W weather but rainfall small as the South East stratum comes down below the NW by day N.W. rain at Noon

Afternoon - Matipa sent two large baskets of flour (cassava =) a sheep & a cock Hoped that we should remain with him till the water of overflood dried - and help him to fight his enemies but I explained our delays & desire to finish our work and meet Baker - will visit him tomorrow

21st very heavy N.W rain

& thunder by night & morning Gave Matipa a coil of
thick brass wire and his
wife a string of large
neck beads = and explained
my hurry to be off = He
is now all fair and
promises largely

[0133]

has been much frightened by our warlike demon[-] stration - glad I had to do nothing but make a shew of force

22nd Susi not returned from Kabinga = Hopethat he is getting canoes and men from Kabinga to transport us all at one voyage = It is floodas far as the eye can reach = flood 4 - 6 ftdeep or more = with 3species of rushes 2 kinds of Lotus or sacred lillies = Papyrusarum &c one does not know where land ends & Lake begins = the presence of land grass says this is not always flooded = water stands at two feet below highest lands

[0134]

23^d March 1873

Men returned at noon

Kabinga mourning for his son killed by an elephant continues in seclusion = camp formed on rightleft bank of the Chambeze =

24th people took the canoes away but in fear sent for them - got 4 & started with all our goods - gave a present that no blame should follow me - punted 6 hours ^ S.E. to a little islet without a tree, and no sooner did we land than a most pitiless pelting rain came on = turned up

[0135]

a boat & got shelter -We shall reach the Chambeze tomorrow -Wind tore tent out of our hands & tore it too loads all soaked, and with the cold bitterly uncomfortable = Aman put my bed into the bilge & never said = "bale out", so I was safe for a wet night, but it turned out better than I expected =no grass = but wemade a bed of the loads, and a blanket fortunately put into 6 SE. a bag = The powerof the air is an old fool

Nothing earthly will make me give up my work in despair -I encourage myself in the Lord my God and go forward = got off from our miserably small islet of 40 yards at 7 AM = a grassysea on all sides with a few islets in the far distance = 4variieties of rushes round = triangular &fluted - rise from 18 inches to two feet above water = the caterpillars seem to eat each other & a web is made

[0137]

round others = the [...] in the midst or rather the numerous spiders may have been the workman of the mesh -The wind makes a sound on the rushes like the waves of the sea = the flood extends out in slightly depressed arms of Lake for 20 or 30 miles and far too broad to be seen over = fish abound and anthills alone lift up their heads with bees on them =Loangwa is an islet Lukutu goes from E to W to Chambeze =Lubanseuse goes into D^o After another 6 hours

punting over the same wearisome prairies or Buga we heard the merry voices of children

[0138] $25^{\underline{th}}$ March cont \underline{d} - It was a large village on a flat which seems flooded at times, but much cassava is planted on mounds made to protect the plants from the water = Water standing in the village but we got a dry spot for the tent = people offer us huts = Hadas usual a smart shower in the way We passed [...] islet Luangwa to & Kasenga to sleep 6 SE.

276 we started at 7.30 and got into a large stream out of Chambeze called Mabziwa - and one canoe sank in it and we lost a slave girl of Amoda = fished up three boxes & two guns = but

[0139]

the boxes being of cartridges were much injured = lost donkey's saddle - cross Lubanseuse near its confluence $\underline{\mathbf{w}}$ Chambeze = 300 yds & 3 fathoms deep = slow current many cattle on an islet of Kabinga, quite wild, & never milked. islet called Kalilo &

near confluence crossed Chambeze
about 400 yards & a
quick ^ clear current ^ of 2 knots = 3 fathoms
like Lubanseuse but
it was slow but clear also in current =
one great loch after
another with thick
mats of hedges of aquatic
plants between = water
enormous in quantity
five hours to camp 5 \[\frac{\frac{1}}{\text{...}\} \] SE.

[0140]

27th March 1873 = Send the canoes and men back to Matipa's to bring all the people who remained = told them to ship them at once on arriving, and not to make any talk about it.

Kabinga keeps his distance from us and food is scarce = Noon he sent a man to salute me in his name =

28th Making a pad for Donkey to serve instead of a saddle = Kabinga attempts to sell a sheep at an exhorbitant price = says that he is weeping over his dead child - Mabruki Speke's hut fired by night cartridge box burned

29th bought a sheep for a hundred strings of

[0141]

beads = I wished to begin the exchange by being generous & told his messenger so = then a small quantity of maize was brought and I grumbled at the mean[-] -ness of the present = there is no use in being bashful as they are not ashamed to grumble too the man said that Kabinga would send more when he had collected it -

30th S - a lion roars nightly = the fish hawk utters his weird voice in the mornings as if he lifted it up to a friend at a great distance in a sort of falsetto key

 $\begin{array}{l} [0142] \\ 30^{\underline{\mathrm{th}}} \ \mathrm{March} \ 1873 \ \mathrm{cont}^{\mathrm{d}} \\ 6 \ \mathrm{AM} \ \mathrm{conf}^{\mathrm{ce}} \ \mathrm{of} \ \mathrm{Chambeze} \end{array}$

[Readings, temperature values and weather observations relating to times $6~\mathrm{AM}$ and labeled " $66~\mathrm{cloudy}$."]

[Readings, temperature values and weather observations relating to times noon and labeled "76° clouded over & strong SE wind."]

[Readings, temperature values and weather observations relating to times 4 PM and labeled "82.5 clouds wind hight."]

5 PM men returned but the large canoe having been broken by the donkey we have to go back & pay it & take away about 20 men now left -Matipa kept all the payment from his own people, and so left us in the lurch = thus another five days lost New this evening

 31^{st} March 1873 send the men back to Matipa's for all our party - Islanders are always troublesome from a sense of

[0143]

security in their fast--nesses = I give two dotis to repair the canoe

 $\begin{array}{l} {\rm Made\ stirrups\ of\ thick}\\ {\rm brass\ wire\ four\ fold\ =}\\ {\rm They\ promise\ to\ do\ well} \end{array}$

Sent Kabinga a cloth and a message but he is evidently a niggard like Matipa - but we must take him as we find him - There is no use in growling

Seven of our men returned having got a canoe from one of Matipa's men =

Kabinga pleased with the cloth said that he would ask for maize from his people and buy it for me = He has rice growing = says that he will send a canoe to carry me over next river

[0144]

 1^{st} April 1873

 $2^{\rm nd}$ Men will come today

7 AM Bar. Bañgweolo [Group of readings, temperature values and weather observations relating to 7 AM and labeled " 66° ".]

7 AM Bar. [Group of readings, temperature values and weather observations relating to 3 PM and labeled "88° clouds partial".]

S[...]—nap Lunars = two sets with difficulty from clouds Temp 85°_{-} Bar 25.80.

3^d very heavy rain last six inches fell in a short time Men all come from Matipa =

 $4^{\rm th}$ send over to Kabinga to buy a cow = Kambari fish of Chambeze 3 ft 3 in. in length - bought a fat cow for $2\frac{1}{2}$ dotis to give the party a feast ere we start pass a few pups

Lopatakwao. Polwe [Drawing of fish.]

[0145]

Simbamwene 54
days from coast Lokutu
Teymondo to Lokutu
Umbi D°
Mopombwe and Luena
Kasabi = cross boundary Lobumbu
Lubanseuse
Mononse into L seuse

Nsunga country Moñombo

They all go up Chambeze as rains begin to spawn a carp Pumbo Cazembe's people make

[Drawing of fish with the following text "scales reddish blotches fins half pink".] caviare of spawn

Lopatakwao [Drawing of fish.]

[0146]
Lolingila Chambeze
Manzia in South side
R Monikazi canoe & foot
Lolotikila canoe
Lombatwa on foot
Molikolu on foot
- Lilimala on foot
canoe Luombwa to Luapula
6 days on foot
Chinga = Lochung
1 = 2 to each

R Lichaia other side Lotikila Gandochite chief Lokolumanda Kashiamanda

[0147]

The wonderful absorption by the sand of Atbara shews the impotence of the Blue N to contend unaided with the Nubian & exists which were it not for the steady volume of the WN would drink every drop of water before the river could pass the 25th degree of Lat Atbara 45 yds 25 to 30 feet deep during rainy season

Junction of the 2 Niles is a vast flat as far as the eye can [see] being about 2' some distance above this point = Nile & Solias bank full in January 120 yds - 27 feet deep

[0148]

earthy matter of a red colour is carried by Blue river Atbara is dry for 150' from March to June Blue Nile falls too low for vessels to transport the grain to Kartum rain of Abyssinia begins in May but torrents do not fall till the middle of June In middle of June WN is at a considerable height but not its highest Blue N & Atbara allow the entire drainage of Abyssinia and the sudden rush of water descending from its Hglands into the main channel causes the annual inundation

[0149]

Extensive marshes near B Gazal formed by surplus water of White Nile flowing into a depression No water mark on trees in January 7th made him think that the actual rise of the water level during the rainy season is very trifling as the

water extends over a prodigious extent of surface the river having no banks p34

The river is like an entangled skein of thread no wonder the ancients gave up exploration when they came to the countless windings & difficulties of the marshes 34p

White Nile has a disagreable taste of vegetation - The Blue Nile is clear & delicious if not in flood

 $\begin{array}{l} [0150] \\ 6^{\underline{th}} \ \mbox{borders of Lake Noon .45} \\ \mbox{Night - \& early morn - 21} \end{array}$

Total of $6^{\underline{\text{th}}}$ up to $8 \underline{.66}$.52

 $9^{\underline{\mathrm{th}}}$ Momkazi R. 7 PM. NW ~.60

 D^{o} 11 $\frac{th}{}$ 3 PM SE .95

 13^{th} Lotikila R - SE .6

16 R Lombatwa 5.65 7 - 9 PM SE. + = 44

On $16^{\underline{\mathrm{th}}}$ night 6.09

Total up to $16^{\rm th}$ April 16.22 inclusive

17 Opposite 3 hills 1 PM $\,$.5 D° : D° 4 PM W $\,$.24

Total $17\frac{\text{th}}{}$ 16.51

[0151]

$1 \checkmark$
2
2
2
1
2
1
1
$\overline{12}$ loads

on 11^{th} March 1873

Rainfall Bangweolo = April 1873 for Thunder $1^{\underline{st}}$ April Kabinga's 1 PM E. .10 D° 3 - 4 PM E & SE — .80 D° $2^{\underline{nd}}$ 7 - 8 PM = E. 5.32 D° D° later 9 - 11 PM .71

To $2^{\underline{nd}}$ April ===(6.93)

[0152]

Nor West dark & thick

masses were still above it slowly passing to S.E. and imparting cold to us
18 th 1 - 6 AM NW .82
D° 19 th 8 PM S.E & NE .24
20 th Bangweolo Noon N.W45
^ 21 night & morn. NW 2.03
21^{st} Nil shower = night
22 = 7 PM NW & NE16
24^{th} at islet 4 PM SE wind tore tent out of hand .78
up to 24 th March == 11.64 27 th 6 PM. E .14
28^{th} Chambeze $3 = 4$ PM. NW rolling $= .35$

 $29^{\mbox{\scriptsize th}}$ D° 4 PM NW $\,$.38 D° D° 6 PM NW $\,$.31

Rainfall of March ===13.12 on Watershed

continued next page for thunder

[0153]

Rainfall Bangweolo

Lobisa = March 1873 - $1^{\underline{st}}$ islet Motovinza Brt forward .76 $2^{\underline{nd}}$ Islet Mosumba of Matipa 7 - 8 PM NW. 2.20 9 PM D° .19

 $3^{\underline{d}}$ Matipa's 5 - 7 AM NW 52 Midnight .31

 4^{th} Do Midnight = NW .55

 $6^{\rm th}$ D° eve & night NE. S.E & NW latest .67

 $7\frac{\rm th}{\rm }$ D° night & early morn .64

 $9^{\rm th}$ gentle rain SW. 8 - 9 AM .18 through night S.E. silent 1.15

 $14^{\underline{\text{th}}}$ Do 7 PM NW $\underline{.5}$ On this day the $(9^{\underline{\text{th}}})$ the $\underline{\text{the }78}$ South East stratum became the lower stream = a shower fell from it of only .5 On $17^{\underline{\text{th}}}$ fleecy clouds still flowed from S.E. but

[0154]

[3 drawings - side view of African male head with sketches on either side.]

A male Insobe had faint white stripes across the back & one well marked yellow stripe along the spine = the hips had a few faint white spots which shewed by having longer hair than the rest - A kid had white belly

[0155]

R Ikampolo $\frac{1}{2}$ ba or $\frac{1}{2}$ kampolombo largest R of Kabende

Kabinga brother of Matipa on other or S. side Lake Chifunaburi R Muanakatongo R W of Kabende incha = poku mokobe = otter Insobe = Nzoe a branch of the Chambeze the Malonga comes past Matipas town

[0156]

Mansamuria islet has goats on our SW Karima NW Kasimoloba SW

[Sketch map showing area around Matipa's land, including notations for Mansa Muria, Kasma, Kokoto, motovinza, and Karima.]

Mabruki Speke

Mabruki Speke cartridge box & belt to be paid $28^{\frac{\text{th}}{\text{m}}}$ March 73

Ghamees = a sword

[0157]

[Drawings of 4 fish with accompanying list - Pumbo, Kupe, Mfuso, Mboa, Sampa, and notes "Pumbo a carp with red ventral fin" and "Large perch Nkamba".]

The roe of Pumbo is very large and the people dry it over fires as preserved provisions = Sampa is the largest fish in Lake and is caught by a hook Mosumbo is Matipa's isle = Luena goes in to Bangweolo kua Islandangao

[0158]

Blue

Indigo

Violet

Kabende river far off Muanakatonga Chifunaburi

R Luomba the largest on South side

Kabende chiefs
[expelled
by Banyam[-]
wezi]
Mokoso
Kaloko
Kubula of islet in
Luapula arm

Mphombo is chief
of Chirube
Luapula [...] from
Mpabala is 50'

[0159]
while the stealing [...]

Retard its motion & forbid its waste

"Thomson

incessant weeping of these drains

"Doo
"'secrets of the dark abyss'"

the full adjusted harmony of things

" D^{o}

Many a cool translucent brimming flood

" D^{o}

"

The chief of human race - the large ambitious wish to make them blest - the sigh for suffering worth

"&c "the fearless great resolve"

,,

For sluggards know the laurel never grows Renown is not the child of indolent repose

" Do

Red Orange 50 Yellow white Green

[0160] would go with Stanley not for pay but to be respectably employed - When he laughs it is

only with his mouth His small somewhat deformed eyes look serious & scan you as they move from side to side - When in difficulty or in fear the mouth takes on the grin it does in feigned laughing He lifted Speke out of the disagreable position of being a silent looker on in all Burton's conversations with the country people and Speke naturally felt very grateful to him Before getting him Speke sat on his bottom "only

[0161]

Bombay has the Yao peculiarities exaggerated very timid & very apt in making excuses however false = He volunteered to go with me but Grant said he is ^ such a fine fellow for humbugging the natives" - this was enough as I felt sure he was Do Do for his employers -He seemed ashamed that I did not jump at the offer of his company and to smooth the dis--appointment I said that I had men enough already - He turned this rebuff to his own advantage by telling M^r Stanley that I asked him to go but though he refused me he

[0162]

her a little food as she was weakened greatly by the starvation we endured before I knew Two of the women became tired of her and the man has proved more kind hearted than they

[Calculations, including one running through the double horizontal line.]

 $5^{\underline{\text{th}}}$ April 1873 = March from Kabinga - luggage in canoes & men on land = on flood 6 ft deep with many anthills covered with trees course SSE. for 5 miles to across Lobingela 300 yds

6th leave in same way but Kabinga's men were sent to steal the canoes party separated = 6 or 7 hours SW in great difficulty

[0163]

A poor little girl was deserted by her Banyamwezi mother - when escaping from a man with whom she had travelled some weeks = I overheard the men attributing this heartlessness to the mother being now pregnant This is believed to cause cooling of the affections towards the children already begotten for a mother having left her child in climbing up a steep mountain side

with a load intending to go back for it was caught by Hassani and he made a faint of killing the child still unborn in order to deter her from deserting the other This little girl walks wonderfully = I send

[0164] 5 PM NW .28

9.40

 $1^{\underline{st}}$ March 1873 Lake 1 - 2 PM S.E. .64

8 PM NW. .12

Rainfall / in 72 November 1872 = 8.41Rainfall December 1872 in Uruñgu or Buurungu January 47 = 15.04

To February Total = 40.83Total February = 9.40Total up 1st March = 50.23Total of March = 13.12Total R.F. to 1st April = 63.35Total up to 16 April = 16.22added to March = 16.22added to March = 16.22Total of year 79 86

for Thunder

 $\begin{array}{l} [0165] \\ 13^{\underline{\text{th}}} \text{ February 1873 Rainfall} \\ \text{Lofubatze Rt 4 AM .39} \end{array}$

 $15^{\rm th}$ Nil showers on $14^{\rm th}$ then night & morning steady rain NW .80

Brought ford page ante $3.06\,$

Total of Feby to $15^{\underline{\mathrm{th}}}$ 4.25

 17^{th} Feby Luena 6 = to Noon .43

 $18^{\text{th}} \text{ D}^{\text{o}} - 9 \text{ AM N.W.}$.10

 $\frac{\mathrm{D^o~D^o}}{\mathrm{5~PM}}\,\frac{\mathrm{2~PM}}{\mathrm{21}}\,\mathrm{NW}$ _ .16

 $19^{\underline{\text{th}}}$ D° Showery all night & moring NW .34 A N.W. sprinkling till 2 PM

 20^{th} Midnight NW 1.04

 $21^{\rm st}$ drizzling Nil 6 PM smart shower and early morn = NW .31

 $24^{\rm th}$ - Luena 7 - 8 PM $\,$.34

 25^{th} D° 4 - 5 PM NW .38

[0166]

Rainfall 1^{st} Feby 1873 Scouts Buga 7 AM .16

 12° NW of D° 3 PM NW $-\!-\!-$.70

3^d D^o Nil night showers
– Luena R. 5 PM NW
very heavy rain & winds .75
continued steady all .28
night - silent

 $3^{\rm rd}$ Malalansi $R^{\rm t}$ Nil shower at noon = wetting only - 4 PM Nil shower .

 6^{th} Night of still rain = .20

 $7^{\underline{ ext{th}}}$ Malalansi - 1 PM NW. - .16 = 4 - 6 PM stead rain .52 = .68 $8^{\underline{\text{th}}}$ 4 PM SW & S with very loud near .10 During night + .19 = .29

 $10^{\underline{\mathrm{th}}}$ drizzle from 4 AM to 1 PM & then 4 PM - not measured but everything wet

11 Drizzle 4 - 5 AM Nil Total 3.06

[0167]

Brought forward from 4 pages back = Rainfall in Lobemba & Bangweolo in January 1873 in $Br^{\underline{t}} \text{ forward } == 24^{\text{th}} \text{ } 10.20$ $24^{\underline{th}} \text{ Rivulet near the }$ $\underline{Lovu} \text{Nkwala } 4 \text{ - } 6 \text{ PM NW} \quad .62$ After dark steady .48

26th Lofubu 2 PM NW .6

27 East of Lofubu Noon NW $\,$.18 $-\!\!\!\!-- 4$ - 5 PM NW $\,$ - .29

 $28~\mathrm{D^o}$ night steady down [-] pour for hours - .50

 $29^{\underline{\text{th}}}$ No rain but N.W. stratum lines of clouds flying fast - the upper or SE stratum going slower

and spread out into thin flakes of cat's hair 8 PM came on with .11 and continued all night [...] - at Scouts Buga 1.75

30th cont at Scouts Buga 4 - 5 PM NW - <u>.85</u> Total Rain Jany <u>15.04</u> near Bangweolo

[0168]

a small caterpillar seems to have been deposited in egg in the upper part of the corn safes - It descends by means of spiders web sort of thread that comes from its mouth = then abandons its rope and commences to eat grass which speedily increases its bulk = It is black with a double yellow bar along its entire length this opens at the head & allows a round black spot there - then it opens below the neck behind & shews two elevated velvetty black spots & one more above the tail = yellowspots along the sides and

all covered with a whitish hair which enters the pores of the skin & causes much irritation - Furjilla climbed into a corn safe and his eyelids were so swelled as nearly to blind him

[0169]

[19th January 1873 these were caught plundering the batatas & cassava of the people and recieved 10 cuts with the cane in presence of = the villagers]

Khengete Wadimusa Mostapha Hassani

not to get any beads or presents. When punishing the thieves the headman said let them alone but I refused & told him that it was to prevent thieving in front as well as pain for the present acts = they refused to go to buy food when sent with beads today & Manua= -sera weakly called out $\begin{array}{l} \underline{\text{bassi}} \ \underline{\text{bassi}} \ \underline{\text{enough}} \\ \underline{\text{enough}} = \text{as if to appear} \\ \underline{\text{more tender hearted than I}} \end{array}$

[0170]

knew that the great rains were over This coincides with my previous observation that the during the great rains the Nor West stratum of clouds changes place with the South East & becomes the lower cold stratum = theSouth East has most of the winds of the afian = [...] and the thunder storms It causes the Lichens and the direction of the trees & branches

[0171]

I have the pleasure – that on - I at last succeeded in reaching four remarkable fts each of which at no great distance off becomes —— and which possibly may be the same that were mentioned to Herodotus in Egypt some four hundred years before our Era as the sources of the Nile - they rise &c

14th January 1873 An old Mobisa gave me the important fact today that the rains from the North West prevailed during all the rainy season and when they began to come from the South East they

[0172]

 $8^{\underline{\mathrm{th}}} \ 4 - 6 \ \mathrm{AM} \quad 1.52$ 7 - 11 AM quiet .13

 $10^{\rm th}$ Noon $\,$ in SE & rain NW .38 5 - 6 PM NW $\,$.18

 $11\frac{\text{th}}{\text{J}}$ January steady & quiet all night - NW .62 drizzly & showery all day = cold = quiet .21

12 vil near Chambeze 1 - 2 PM SE .12

 $13^{\underline{\text{th}}}$ 6 AM N.W. .6 Do near Chambeze 6 - 10 AM 5.8

 14^{th} Nil shower in way NW stratum below - going fast S.E. above = thin = much faster

 $20^{\rm th}$ Lofu or Lovu of Chambeze 1 PM NW $\,$.19

 21^{st} 5 AM silent .10

 $23^{\underline{d}}$ several Nil 10.20 showers during night and morning = cold see 4 pages forward

 $24^{\mbox{\scriptsize th}}$ drizzle at 6 AM & at 1 PM - Nil in gauge

[0173]

For December Rainfall in Urungu see near beginning of this notebook Total Rainfall in Urungu in December 1872 == 17.38

January $2^{\underline{d}}$ 1873 in district of Kuzinga near R Luongo 5 PM .18 During night ..15 $5^{\underline{th}}$ Situngulu R 3 - 5 AM .66 - - 7 AM NW cold .9

 $5^{\underline{\text{th}}}$ 2½ hours South at 1.02 1 - 2 PM NW then round to NE. The most I ever measured = I doubted 9.45 it but was assured it was very heavy rain (?4 in.)

 $6^{\underline{\text{th}}}$ vil 3 Hours S. of the above Ketebe's son = 10 - 11 AM .18 3 - 4 SW .9

7th 1 - 6 AM silent NW .45 7 - 8 AM NW silent .20 9 - 10 AM NW — .8 Noon ———— .9 82

[0174]

How is it that the smallest ants select the most tender or vulnerable parts of man for attack? The nape of the neck may be chosen by the clothes leading up to that part but then they prefer the tender skin in the flexure of the fingers & worry where their bite gives real pain

Lokeleñañga = & one dog - & mark of his staff = & hatchet with which he cut a stick Uchéwa place L. came from West on a mat across Lualaba 1st April 1873 A small snatch of Bisa ancient lore - they say Uchéwa is SE of this

[0175]

Manyuema as the Luá & Machila are of inky blackness and make the whole main stream of a very dark Nilotic hue - [...]—An acquaintance with these dark flowing rivers and scores of rills

of water tinged as dark as strong tea was all my reward for plunging through the terrible Manyuema mud or "glaur" Christmas 1872

Chikokoma earthquake 2 years ago at Kabinga Muanza-bamba first of Babisa

[0176]the vis inertiae of the more slowly moving river and both united pass on to form the great inundation of the year in lower Egypt The Blue river brings down the heavier portion of the Nile deposit while the White river comes down with the black finely divided matter from thousands of ^ square miles of Forest in Manyuema which probably gave the Nile its name & is in fact the real fertilizing ingredient in the mud that is annually left - some of the rivers in

[0177]

Chama's son gives the true account of Cazembe's death which the Arabs would fain claim the merit of = later I doubt his tale as Banyam[-]

The White Nile carry forward its large quasi[-]
tidal wave presents a
mass of water to the
Blue Nile which acts
as a Buffer to its
rapid flood - the White
Nile being at a considerable
height when the Blue [Nile]
rushes down its
steep slopes presents
its brother Nile with
a soft cushion into
which it plunges &
is restrained - by

[0178]

The pugnacious spirit is one of the necessities of life = When people have little or none of it, they are subjected to indignity & loss = My men walk intohuts where we pass the nights without asking any leave and steal cassava without shame - I have to threaten and thrash to keep them honest, while if at a village having a little pugnacity they are as meek as sucking doves - the peace plan involves indignity and wrong - I give a little presents to the headmen and to some extent heal their hurt sensibilities This deed is much appreciated & produces profuse hand clapping

 $16^{\frac{\text{th}}{\text{L}}} \text{ Dec}^{\frac{\text{r}}{\text{L}}} 1872 \text{ very rainy}$ weather = partial showers on some part every day cloudy & thundering but the sponges are yet dry -Floods by these sporadic rainfalls have discoloured water as seen in Lopanza & Lolela today - grass all springing quickly up & Maliza growing fast. The trees generally in full foliage - Different shades of green the dark prevailing especially along rivulets The hills in the distance are covered with dark blue haze = Here in Lobembathey are gentle slopes of about 200 or 300 feet & sandstone crops out over their tops = In some parts clay schists which look as if they had been fused or much baked by intense heat -

[0180]

14th Dec^r 1872 a leech crawling towards me in the village this morning elicited the Bemba idea that they fall from the clouds = or sky = "mulu" It is called here "Mosumda a maluze" or leech of the rivers = Luba the Zanzibar name = (Mokopa Rt) here

18th counted nineteen leeches on our path in about a mile = rain had fallen and their appearance out of their hiding places suddenly after heavy rain may have given rise to the idea of their fall with it as fishes do and the Thunder frog is supposed to do -

[0181]

By putting leaven in a bottle & keeping it from one baking to another or 3 days good bread is made & the dough being surrounded by banana leaves - or Maize leaves - or forest leaves of hard texture and no taste or simply by broad leafy grass is pre-served from burning in an iron pot - The inside of the pot ^ or leaves is greased then the leaves put in all round and the dough poured in to stand and rise in the sun -

When Palm oil palms are cut down for toddy they are allowed to lie three days - then the top shoot is cut off smoothly and the toddy begins to flow - and it flows for a month or a month and a half or so lying on the soil -

[0182]

[Annotated insert from the Stirling University Conservation Project from 1986.]

[0183]

[Calculation on scrap pasted into diary.]

[0184]

[Calculation on scrap pasted into diary.]

[0185]

P298. grassy & jungly depression and arrived at a deep dirty viscid nulla (a watercourse that runs only in wet weather), draining the Eastern country into the Southern end of the creek = named at Jordan 299

[0186]