*Gustav Mann, English Translation of the German report, to Hooker, written from the Cameroons, 27 February 1862, from AEX/1/59 – 71.*  No. 1420.

Read, June 5/62.

59<sup>1</sup>

Cameroons. 27 Feby. 1862

Sir.

I have the honour to transmit you a Report upon<sup>2</sup> my expedition to the Cameroons Mountain and at the same time to advise you that the collection which I have made there are shipped to England in the same steamer that brings this letter.<sup>3</sup> I left Fernando Po on the 4 Decr. 1861, about 2 o'clock <sup>4</sup>in the afternoon in a boat<sup>5</sup> which I had<sup>6</sup> anxiously awaited for a<sup>7</sup> week. As soon as we had left<sup>8</sup> the harbour & sailed round Point William

we were<sup>9</sup> favoured by a strong Sea-breeze & reached Cape Auratis<sup>10</sup> before Sun Set, from whence we steered towards Ambas Bay, & shortly before night set in saw the Cameroons rising from the sea & losing itself in the clouds.

Soon after<sup>12</sup> 8 o'clock in the evening<sup>13</sup> <sup>14</sup>

the Islands of Ambas Bay came in sight<sup>15</sup> & after passing the first Mondori Island the sails were taken in & the anchor let go,  $-^{16}$ 

<sup>17</sup> &<sup>18</sup> On the next we<sup>19</sup> in reached the anchoring place at 8 o'clock.<sup>20 21</sup>
when I immediately landed.

<sup>11</sup> "5<sup>th</sup>." written in ink next to this line. Crossed out in pencil: "I went to sleep immediately [illeg.] Sun Set having been exposed to the Sun all day, at about"

<sup>14</sup> Crossed out in pencil: "was awakened by the voice of the man in command of the boat who ordered his men in the fore part of the boat to keep a sharp look out on the coast. Each minute this became more distinct/ every minute & in 4 hours". (only "each minute" is crossed out in ink, and "every minute" was added in ink by the same handwriting).

<sup>15</sup> Crossed out in pencil: "before us".

<sup>17</sup> "5<sup>th</sup> day" added next to this line in ink.

<sup>20</sup> "" added in pencil.

<sup>&</sup>lt;sup>1</sup> Circled, red.

<sup>&</sup>lt;sup>2</sup> Crossed out in pencil: "the success of".

<sup>&</sup>lt;sup>3</sup> Crossed out in pencil: "As I have already remarked in my last letter".

<sup>&</sup>lt;sup>4</sup> Side line added in pencil next to the following 2 lines.

<sup>&</sup>lt;sup>5</sup> Crossed out in ink: "for" and "in".

<sup>&</sup>lt;sup>6</sup> Crossed out in ink: "spent an".

<sup>&</sup>lt;sup>7</sup> "Awaited for a" added in ink.

<sup>&</sup>lt;sup>8</sup> Crossed out in ink: "Immediately on leaving"; "As soon as we had left" added in ink.

<sup>&</sup>lt;sup>9</sup> "We were" added in ink.

<sup>&</sup>lt;sup>10</sup> Crossed out in ink: "by" and "b"

<sup>&</sup>lt;sup>12</sup> "Soon after" added in pencil.

<sup>&</sup>lt;sup>13</sup> Seems to have been moved before ,,the Island of Ambas Bay came in night" five lines below.

<sup>&</sup>lt;sup>16</sup> Crossed out in pencil: "as some of the people were sufficiently acquainted with the place to bring the boat with safety at night time near to the rocky coast".

<sup>&</sup>lt;sup>18</sup> "&" added in pencil.

<sup>&</sup>lt;sup>19</sup> Crossed out in pencil: "succeeded" and "reaching"; "Reached" added in pencil.

<sup>&</sup>lt;sup>21</sup> Crossed out in pencil: "by tacking with a light land breeze,".

On landing I was received by my old host, & on reaching the house of Mr Saker<sup>22</sup> was informed he was at the Cameroons. I received permission to keep the materials & goods which I had brought to use in place of money with the natives in the Magazine of the Mission. The place was as I The<sup>23</sup> natives were not found it a year before. more numerous. & consequently the settlement had not enlarged. I found the place the same & nearly all the inhabitants<sup>24</sup> living. No<sup>25</sup> more certain plan & method were introduced<sup>26</sup> which could place<sup>27</sup> the inhabitants of such a place almost entirely cut off from intercourse with Europeans in a position to obtain the needful material of<sup>28</sup> life by labour.

Work & the small-pox<sup>29</sup> are two things of which the Africans are equally afraid, & provided with food by the riches of the soil & mildness of the Climate they disregard almost all other requirements which <sup>30</sup>labour might obtain for them & loiter through life as in a dream<sup>31</sup> with their heads wrapped in clouds too dense to receive the instruction offered to them.<sup>32</sup>

I must reluctantly say that were it not for the oppressive idleness of the Africans that their place could raise plenty of cacao by cultivation & require very little labour to be very productive, for this place is undoubtedly<sup>33</sup> very suitable for it. – In the latter half of the day I was much<sup>34</sup> refreshed<sup>35</sup> by the constant sea-breeze<sup>36</sup> which in Fernando Po we seldom enjoy, & which renders Victoria such a pleasant & agreeable residence for Europeans. How much more beneficial<sup>37</sup> would it be for unwell<sup>38</sup>

if a sanatorium was established<sup>39 40</sup>

one of the many hills which surround

<sup>38</sup> Crossed out in pencil: "sick people"; added in pencil: "unwell".

<sup>&</sup>lt;sup>22</sup> Crossed out in ink: "I".

<sup>&</sup>lt;sup>23</sup> After that, everything up until "very suitable for it." is crossed out in pencil.

<sup>&</sup>lt;sup>24</sup> Crossed out in ink: "of the place".

<sup>&</sup>lt;sup>25</sup> Something illegible crossed out in ink.

<sup>&</sup>lt;sup>26</sup> The letters "tr" of the word "introduced" seem to have been crossed out in ink.

<sup>&</sup>lt;sup>27</sup> "Could place" added in ink.

<sup>&</sup>lt;sup>28</sup> A dot of ink was place on each side of the word "of".

<sup>&</sup>lt;sup>29</sup> Crossed out in ink: "(?)".

<sup>&</sup>lt;sup>30</sup> Side line added in pencil next to the following 4 lines.

<sup>&</sup>lt;sup>31</sup> Crossed out in ink: "«mit viel zu dichtem Nebel am Kopfe» & consequently accept with open hands the teaching I offered them".

<sup>&</sup>lt;sup>32</sup> Crossed out in ink: "too much"; "with their heads wrapped in clouds too dense to receive the instruction offered to them" added in ink.

<sup>&</sup>lt;sup>33</sup> Crossed out in ink: "is undoubtedly".

<sup>&</sup>lt;sup>34</sup> "Was much" added in ink.

<sup>&</sup>lt;sup>35</sup> Crossed out in ink: "myself much".

<sup>&</sup>lt;sup>36</sup> Crossed out in ink: "with".

<sup>&</sup>lt;sup>37</sup> Crossed out in pencil: "agreeable"; added in pencil: "beneficial".

<sup>&</sup>lt;sup>39</sup> Crossed out in pencil: "an establishment"; added in pencil: "a sanatorium was established".

<sup>&</sup>lt;sup>40</sup> Crossed out in pencil: "were set up on for the reception of such on" (first "on" not included which is crossed out in ink).

this<sup>42</sup> settlement.<sup>43</sup> When<sup>44</sup> Europeans & especially the English who live in great number in the vicinity,<sup>45</sup> could in 5 or 6 days exchange the dangerous climate of the Gulf of Guinea for their own without the great expense with which such an exchange is at present connected.

The forest surrounding the settlement is the same as I saw last year,<sup>46</sup> beautiful in the beginning of December when from<sup>47</sup> the change of<sup>48</sup> season many of the trees appeared in all the beauty of their young leafage<sup>49</sup> with large masses of flowers through<sup>50</sup> various shades of green;-<sup>51</sup> especially conspicuous was a Baphia sp. (715 my coll.) the flower of  $5^{2}$  which looked like a Paeony amongst its Lophira alata was leaves in the forest. already in full bloom;<sup>53</sup> the Lady-natives wear in their hair & ears the light red wings of the fruit of this The shore is bordered by the Amomum plant. 1034 which is here very common along the coast, but I endeavoured in vain to find the white-flowered one<sup>54</sup> which I noticed last year. Monodora grandiflora was conspicuous from its beautiful foliage but my hope of obtaining fruits for the Museum was in vain for I came too late & they were already fallen.

I found, however, living seeds which I believe to be distinct from the specimen which I have sent from St. Thomas in fruit & Princes Island in flower (No 1100). The fruits<sup>55</sup> are the same.<sup>56</sup> I found the interpreter<sup>57</sup> who had accompanied me last year in my excursion to one of the highest of the villages after the Mountain still in Victoria & <sup>58</sup> ready to accompany me on this expedition.

When<sup>59</sup> however he heard that I sh? [sic] be ready in one or two days to leave the coast he made many difficulties,<sup>60</sup> <sup>61</sup>this is a favourite<sup>62</sup> stratagem of the natives who are unable to settle anything quickly but

- <sup>43</sup> Crossed out in pencil: "It would be a great benefit for the".
- <sup>44</sup> "When" added in pencil.
- <sup>45</sup> Crossed out in pencil: "who".
- <sup>46</sup> Crossed out in ink: "&"
- <sup>47</sup> "From" added in ink.
- <sup>48</sup> Crossed out in ink: "the".
- <sup>49</sup> The word "leafes" [sic] seems to have been crossed out and then corrected to "leafage" in ink.
- <sup>50</sup> Crossed out in ink: "the".
- <sup>51</sup> Crossed out in ink: "&".
- <sup>52</sup> "The flower of" added in ink.
- <sup>53</sup> Crossed out in ink: "&".
- <sup>54</sup> Crossed out: "Amomum", written above in ink: "one".
- <sup>55</sup> Seems to have been corrected with pencil.
- <sup>56</sup> Seems to have been corrected with pencil.
- <sup>57</sup> Seems to have been corrected with pencil.
- <sup>58</sup> Crossed out in pencil: "also".
- <sup>59</sup> The following last section of this page is crossed out in pencil.

<sup>60</sup> "," added in pencil. Also the following sentence was written in pencil on the left margin, to be inserted here: "After two following days were [illeg.] in tedious [illeg.] to organize with the fickle natives my party of guides interpreters & [illeg.]." Also added there in pencil: "with aid of [illeg.]".

<sup>61</sup> The following two lines seem to be crossed out in pencil.

<sup>62</sup> Illegible word crossed out in ink.

<sup>&</sup>lt;sup>41</sup> Circled, red.

<sup>&</sup>lt;sup>42</sup> Subsequently altered in pencil: originally "the".

require  $^{63}$   $^{64}$  a fortnight to talk about it. Their market is every 3 days<sup>65</sup> chiefly for the exchange of Plantains, Yams, Coco<sup>66</sup> (the roots of Colocasia esculenta) & palm-fruits (Elaeis guineensis) for Fish (?). The first products are<sup>67</sup> brought from the Mountains by the natives, whilst the fish are<sup>68</sup> taken by the Bimbia people for the purpose<sup>69</sup> Very often the transaction of the natives of exchange. ended in a row in which however seldom any weapons except stones were used & which seemed more for the sake of a change than for any bad feeling between<sup>70</sup>the On the same day I heard of a man who parties. offered himself to serve<sup>71</sup> as a guide to the last village "Mapanya" whereupon I at once set out & asked what pay he would have. He would not tell me until he had consulted with several of his countrymen, yet he showed me that I did not know the true Mapanya & the place where I was last year cannot be it.<sup>72</sup> My interpreter excused himself with a lame foot till Monday when the other man came to the same resolution. – When at last the wished-for Monday came<sup>73</sup> & I after much difficulty succeeded in talking to the two people who<sup>74</sup> would serve as interpreter & guide other people<sup>75</sup> had offered themselves to carry a part of my things, & when I asked them about the pay which they would have I found the interpreter satisfied with the reward offered him, the guide, however, & his companions 4 in number, each would<sup>76</sup> have five large articles worth £5, & thus I should <sup>77</sup> give each for one day, as I did not require them longer,  $\pm 5. - I$  was so disgusted that I turned them out of the house<sup>78</sup> & determined to wait till the next day which was a market-day in the hope that I should find some of the people from the Mountain

<sup>&</sup>lt;sup>63</sup> "Require" added in ink.

<sup>&</sup>lt;sup>64</sup> The whole page is crossed out in pencil.

<sup>&</sup>lt;sup>65</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>66</sup> "Cocoa" altered to "Coco" in ink.

<sup>&</sup>lt;sup>67</sup> Crossed out in ink: "were"; "are" added in ink.

<sup>68</sup> Crossed out in ink: "last were"; "fish are" added in ink.

<sup>&</sup>lt;sup>69</sup> Crossed out in ink: "& used for"; "for the purposes" added in ink, "s" of "purposes" crossed out in ink.

<sup>&</sup>lt;sup>70</sup> Crossed out in ink: "in"; "between" added in ink.

<sup>71 &</sup>quot;To serve" added in ink.

<sup>&</sup>lt;sup>72</sup> Crossed out in ink: "Mapanya"; "it" added in ink.

<sup>&</sup>lt;sup>73</sup> Crossed out in ink: "it brought me many difficulties".

<sup>&</sup>lt;sup>74</sup> Crossed out in ink: "sh?".

<sup>75</sup> Crossed out in ink: "who".

<sup>&</sup>lt;sup>76</sup> "Each" seems to have been moved after "would".

<sup>&</sup>lt;sup>77</sup> Line on the side added in pencil.

<sup>&</sup>lt;sup>78</sup> This sentence is written above a crossed out part in ink. Crossed out are the words "tired" and "(to get them out of the house?) I & concluded".

<sup>80 81</sup>who would serve as guides & carry my things. When I left Fernando Po I believed that I should leave probited by the greater population of the Mountain I found however in the boundless impudence of the people a greater hindrance. <sup>82</sup>On the morning of the 10th I succeeded, with the aid of Miss? Pinnock & Johnson in the house of the latter<sup>83</sup> in having a conference with a number of the natives & found a man who had relatives in Mapanya & was ready to conduct me thither. As however his family had little influence & there was strife between the districts of Cumbi & Mapanya, he said that<sup>84</sup> first he must have leave from the chief<sup>85</sup> to pass through the former. He would let me know the result next market-day. I gave him small presents that he might obtain the permission. On the 10<sup>th 86</sup> H. M. S. Bloodhound let go her anchor near the settlement & Consul Burton accompanied by Commander Dolbin landed. - He first informed me that it was also his desire to visit the Mountain & we agreed that 10 days later - thus on the 20th that I should send some<sup>87</sup> of my people to Victoria in order to fetch some more food & at same time serve as guides to Consul Burton. On the night of the 12th - 13 the rainy season bade goodbye to the coast however<sup>88</sup> after<sup>89</sup>few days of fine weather the rain poured down & brought<sup>90</sup> to my recollection all the difficulties under which I had brought my first collection from the Mountain of Fernando Po. At the same time I concluded to commence my ascent of the Mountain on the next day with or without the leave of the natives. The<sup>91</sup> man who was sent with presents to the "chiefs" of Cumbi had transferred<sup>92</sup> them to the "chief" of Mapanya (Botani) & as I expected I re-

<sup>&</sup>lt;sup>79</sup> Circled, red.

<sup>&</sup>lt;sup>80</sup> Written in the corner of the page in ink: "2".

<sup>&</sup>lt;sup>81</sup> The first part of the page seems to be crossed out in pencil up until "permission".

<sup>&</sup>lt;sup>82</sup> Added in ink: "10th".

<sup>&</sup>lt;sup>83</sup> "In the house of the latter" seems to have been moved after "a number of the natives".

<sup>&</sup>lt;sup>84</sup> Crossed out in ink: "before".

<sup>&</sup>lt;sup>85</sup> Crossed out in ink: "(?)".

<sup>&</sup>lt;sup>86</sup> Added in pencil: "On the 10<sup>th</sup>"; crossed out in pencil: "Shortly after".

<sup>&</sup>lt;sup>87</sup> Superscript note added in pencil, illegible.

<sup>&</sup>lt;sup>88</sup> "However" seems to have been moved after "weather" at the end of the line.

<sup>&</sup>lt;sup>89</sup> Crossed out in ink: "for a"; "after" added in ink.

<sup>&</sup>lt;sup>90</sup> Crossed out in ink: "back".

<sup>&</sup>lt;sup>91</sup> The following section (ongoing on the next page) is crossed out in pencil.

<sup>&</sup>lt;sup>92</sup> Crossed out in ink: "(?)".

ceived the answer from him, he desired I should wait 3 days longer as he had some "rows" to settle.

Both the chiefs of Bassumba<sup>93 94</sup> having<sup>95</sup> come to the market & I agreed with them to go with them to their habitation & from thence<sup>96</sup> on  $to^{97}$  them to Mapanya. I also met with 8 natives of  $^{98}$  Bassumba who were willing to carry part of my things for 4 pieces (worth  $\pounds 4$ )<sup>99</sup> & finally on the 13<sup>th 100</sup> I left the settlement with 1 interpreter, 6 Kroomen & 8 natives. - Mr. Pinnock of the Mission, living in Victoria accompanied me & after a 3-hours walk we reached the village of <sup>101</sup>The country Bassumba (B.P. 210.4). which we passed through was of the same forest tract which surrounds Victoria & amongst the trees was<sup>102</sup> principally conspicuous the [illeg.] which attained an enormous circumference. Also Anthocleista nobilis & Monodora grandiflora were conspicuous from their beautiful foliage & Sterculia tragacantha – without leaves & covered over with carmine-colored fruits. Ipomoea & Momordica grew over the trees & bushes on every side where the wood was a little more open. Among the ferns was chiefly observable the beautiful Hypolepis (No 789).

Here & there the forest was interrupted by a plantation of Plantains, & where the wood had been thinned the surface was occupied by <u>Saccharum spontaneum</u>, <sup>103</sup>Panicum plicatum & <u>Amomum Danielli</u> which over run the whole of the roads where ever sufficient air for their support penetrates thro' the trees.<sup>104</sup>

On<sup>105</sup> the road from Victoria to Bassumba we twice crossed a small river which flows in to the sea close to Victoria & provides clear cool water to the inhabitants.

<sup>&</sup>lt;sup>93</sup> Pencil note subsequently added: "the first village of the Mt.".

<sup>&</sup>lt;sup>94</sup> Crossed out in pencil: "(Micunbi & Nangassica)". Pencil note subsequently added, illegible.

<sup>&</sup>lt;sup>95</sup> Subsequently changed with pencil: originally "had".

<sup>&</sup>lt;sup>96</sup> Crossed out in ink: "should"; crossed out in pencil: "be".

<sup>&</sup>lt;sup>97</sup> Crossed out in pencil: "accompanied by"; "on to" added in pencil.

<sup>&</sup>lt;sup>98</sup> Two ink dots next to the word "of".

<sup>&</sup>lt;sup>99</sup> Brackets added in pencil.

<sup>&</sup>lt;sup>100</sup> Crossed out in ink: "at length"; "finally" added in ink; "on the 13<sup>th</sup>" added in pencil.

<sup>&</sup>lt;sup>101</sup> Symbol "x x" added in pencil.

<sup>&</sup>lt;sup>102</sup> Crossed out in ink: "were"; added in ink: "was".

<sup>&</sup>lt;sup>103</sup> Side line added next to the following 4 lines.

<sup>&</sup>lt;sup>104</sup> This sentence, from the word "which" to its end, was added in ink. Crossed out in ink: "which found everything needful to their existence in the air which penetrated through the trees?)".

<sup>&</sup>lt;sup>105</sup> The following 5 lines are crossed out in pencil.

Crossing a small<sup>107</sup> river the small Aroid (No 104) attracted my attention by its snow-white beautiful flowers. It covered the stones in the stream as well as the banks. Anchomanes Hookerin was seen on everv<sup>108</sup> sides yet manifestly smaller than in Fernando Po. Elaeis guineensis & Raphia vinifera are common <sup>109</sup> the latter grows to a height of 700 ft above the sea & here serves as everywhere <sup>110</sup>on the coast as the chief material in the construction of the huts. <sup>111</sup> when I left Bassumba on the morning of the 14<sup>th</sup> to go to Mapanya all the natives declared they were tired & that they could only go on the following day so that I was compelled to wait. I made an excursion during the day & found amongst other things the large Aroid-bulb which I send alive,<sup>112</sup> I gave the interpreter leave to go back to the settlement to see his sick mother on the condition that he came back in the evening. He did not do this whereby I should have been in great difficulty had not Mr. Pinnock a youth with him who was acquainted with<sup>113</sup> the language & whome he kindly allowed to re-On<sup>115</sup> the morning of the 15th 114 main with me. when I was ready to go forward & told the chief he should call his people who had engaged to carry my things he told me that I could not go higher up the Mountain before he had received some more presents & he took means that some of the people should come. After much talk which the Negro delighted in I gave him a large present on the condition that he should bring all the people <sup>116</sup> & we left the place at 9 o'clock & after a 4 hours walk reached Mapanya (B.P. 207. 5).<sup>117</sup> The way led through the forest & cultivated fields of Mountains where an Erythrina (704)

<sup>&</sup>lt;sup>118</sup> thickly covered with flowers, but without leaves, <sup>119</sup>

<sup>&</sup>lt;sup>106</sup> Circled, red.

<sup>&</sup>lt;sup>107</sup> Crossed out in pencil: "in this"; "crossing a small" added in pencil.

<sup>&</sup>lt;sup>108</sup> Crossed out in ink: "all"; "every" added in ink.

<sup>&</sup>lt;sup>109</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>110</sup> "Every way" changed to "everywhere" in ink.

<sup>&</sup>lt;sup>111</sup> Crossed out in pencil: "14<sup>th</sup>"; "?" added in pencil.

<sup>&</sup>lt;sup>112</sup> "Alive," added in pencil.

<sup>&</sup>lt;sup>113</sup> Unclear whether "with" was deliberately crossed out or not.

<sup>&</sup>lt;sup>114</sup> Crossed out in pencil: "16<sup>th</sup>"; "?" added in pencil.

<sup>&</sup>lt;sup>115</sup> The following two sentences are crossed out in pencil.

<sup>&</sup>lt;sup>116</sup> Crossed out in pencil: "together. This was done"; crossed out in ink: "took place".

<sup>&</sup>lt;sup>117</sup> "." added in pencil.

<sup>&</sup>lt;sup>118</sup> Crossed out in ink: "was".

<sup>&</sup>lt;sup>119</sup>Note added in pencil on the left margin: "After another [illeg.] with the natives who employed every stratagem to obstruct my ascent".

looked<sup>120</sup> like masses of flower in the distance & <sup>121</sup>beautifully adorned the landscape. We passed no other village<sup>122</sup> as I afterwards learnt with the design of depriving the<sup>123</sup> people of the presents which they would have claimed.<sup>124</sup> This was not to save me any expense but through fear that they might be losses by it & to avoid the unpleasantness of seeing others receive anything from me. Shortly<sup>125</sup> Before<sup>126</sup> reaching Mapanya I observed the last Elaeis which was not taller<sup>127</sup> than 40 ft. & had a very dwarfed growth. The natives here are accustomed at break of day to climb the palm-trees & bring down the palm-wine<sup>128</sup> leaving<sup>129</sup> an empty gourd-flask for the next day. During this employment they make a loud laughing cry which is repeated from the surrounding trees which I can compare to nothing better than the crowing of  $^{130}$  cocks. The palm oil was only prepared for household use on the Mountain & the fresh nuts taken out of the spikes<sup>131</sup> were taken to market.132 <sup>133</sup> I found The Chief Botani<sup>134</sup> an unusually polite man & quite different from the rest that I had previously He had one of the huts cleaned for me at once seen. & asked about my requirements.<sup>135</sup> These were nothing but water which he provided for a reward in tobacco. When<sup>136</sup> I was about to give him his present

he said we would leave it till the next day & I was glad to be his guest. On the morning <sup>137</sup>of the next day he came to me to receive his present which consisted of clothes, tobacco, arms & powder.

<sup>&</sup>lt;sup>120</sup> Originally: "looking". Changed to "looked" in ink.

<sup>&</sup>lt;sup>121</sup> Side line added in pencil next to the following 5 lines.

<sup>&</sup>lt;sup>122</sup> Crossed out in ink: "(".

<sup>&</sup>lt;sup>123</sup> Crossed out in ink: "other".

<sup>&</sup>lt;sup>124</sup> Crossed out in ink: "?)".

<sup>&</sup>lt;sup>125</sup> All over the lines above is a symbol in pencil, resembling a big "M".

<sup>&</sup>lt;sup>126</sup> Subsequently changed with pencil; originally: "before".

<sup>&</sup>lt;sup>127</sup> Crossed out in pencil: "higher"; "taller" added in pencil.

<sup>&</sup>lt;sup>128</sup> Crossed out in ink and pencil: "&".

<sup>&</sup>lt;sup>129</sup> The word seems to have been altered with pencil.

<sup>&</sup>lt;sup>130</sup> Crossed out in ink and pencil: "a".

<sup>&</sup>lt;sup>131</sup> Crossed out in ink: "of".

<sup>&</sup>lt;sup>132</sup> Crossed out in pencil: "The natives of Mapanya seldom visit the market at Victoria because it is too far".

<sup>&</sup>lt;sup>133</sup> Crossed out in pencil: "was not at the place when we arrived & we had but a short time to wait for him. When he came".

<sup>&</sup>lt;sup>134</sup> "The Chief Botani" seems to have been subsequently moved from the beginning of the preceding crossed-out sentence to replace a crossed-out "him" in the following sentence. The alterations were made in pencil. <sup>135</sup> Symbol "x" added in ink.

<sup>&</sup>lt;sup>136</sup> After that and ongoing on the next page, the text is crossed out in pencil (up to and including "& a Table Knife which she received in return.").

<sup>&</sup>lt;sup>137</sup> "16<sup>th</sup>" added in ink.

<sup>139</sup>When<sup>140</sup> all was spread out & he was asked if satisfied with accustomed greediness he naturally said Where upon I showed him he should have nothing no else; I promised however that in case he gave me a guide to the Mountain<sup>141</sup> that I would give him another weapon & the guide also a rifle. This satisfied him & I pressed him to let me have the guide the next day, knowing that if I did not get him while the recollection of the presents was fresh I should have more to pay. Soon after his mother was <sup>142</sup>brought before me bringing<sup>143</sup> a 'bushel' of plantains as a present & begging for tobacco, rum & a Table Knife which she received in return. - The natives here do not smoke, but snuff all the more, consequently I had provided myself with the latter<sup>144</sup> which the people of both sexes 'accepted'. Even children of 3 or 4 years took a pinch which plainly showed the custom to be an In<sup>145</sup> the afternoon he (the chief?) old one with them. made me a present of a pig of<sup>146</sup> which according to the custom of the country he should receive half for <sup>147</sup> his own use. On the next morning at daybreak the chief told me that the guide was<sup>148</sup> ready to go with me up the Mountain whereon I left the hut & to my no small astonishment found 11 instead of<sup>149</sup> one. I now gave the chief his arms & made each of the people a present of some clothing & tobacco. I then gave 4 of my Kroomen orders to go back with Mr? Pinnock to Victoria to await the arrival of Consul Burton & return with him. I then<sup>150</sup>I [sic] left the place with 2 of my people accompanied by 11 natives. First we ascended<sup>151</sup> a few bushy hills, with a few trees & on both sides of the way, Saccharum spontaneum 8-10 ft. high.

- <sup>143</sup> Crossed out in ink: "who brought"; "bringing" added in ink.
- <sup>144</sup> Crossed out in ink: "snuff"; "the latter" added in ink.
- <sup>145</sup> The following sentence is crossed out in pencil.

- <sup>148</sup> "The guides were" changed to "the guide was" in ink.
- <sup>149</sup> Crossed out in ink: "eleven".
- <sup>150</sup> Crossed out in ink: "Here after"; "I then" added in ink.
- <sup>151</sup> Crossed out in ink: "climbed"; "ascended" added in ink.

<sup>&</sup>lt;sup>138</sup> Circled, red.

<sup>&</sup>lt;sup>139</sup> "3" added in ink to the upper left corner of this page.

<sup>&</sup>lt;sup>140</sup> There are pencil strokes all over the first eleven lines of this page.

<sup>&</sup>lt;sup>141</sup> Dot added in ink.

<sup>&</sup>lt;sup>142</sup> Two horizontal pencil dashes added next to this line.

<sup>&</sup>lt;sup>146</sup> "Of" added in ink.

<sup>&</sup>lt;sup>147</sup> Crossed out in pencil: "16<sup>th</sup>".

The Amomum had disappeared & 2 species of Impatiens were common;<sup>152</sup> when we had left behind us two huts & the last plantation of plantains we found ourselves in a forest which I soon recognised as the beginning of the Fern-region, & soon the vallies were seen filled with beautiful Cyatheas. The stems of the trees were clothed with Trichomanes & Dicksonia selinifolia grew on nearly every stem of Cyathea Hypolebis pteridioides appeared & a small orchid not in flower grew over the branches of the trees.

The soil was covered with a thick clothing of Selaginella Vogelii as with a beautiful green carpet, adorned with the beautiful flower heads of Haemanthus (779) 6 ins. in diameter & the less conspicuous but no less beautiful flowers of Calanthe sp. [illeg.].

After an<sup>153</sup> x-hours walk through this forest we reached the end<sup>154</sup> of a lava-stream<sup>155</sup> which flowed from the Mountain in a S.S.W. direction. The extremity<sup>156</sup> or basin (?) (B.P. 204.3) was clothed with the small Nephrolepis (1396) & the<sup>157</sup> Moss (1413) in which I sunk to the loins & which contained a great quantity of water. Here the Ericinella appeared first in company with Leucothoe angustifolia, Rubus apetalus & Clematis simensis on the border of the wood which margined the Lava-stream<sup>158</sup> After we had climbed an hour on both sides. on the lava the nephrolepis disappeared & the moss & lichens (1411-1412) took their place, which we every where found to form the first vegetation on the Lava-fields near these 2 sp.<sup>159</sup> of orchids were observed which continued for the next 5 hours & were<sup>160</sup> only at last outnumbered<sup>161</sup> by a Crassulacea Crassula Mannii. [illeg.]<sup>162</sup> (No 1304). After the lapse of this time I saw before me 3 small hills of which two were coloured black & formed the crater from which the

<sup>&</sup>lt;sup>152</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>153</sup> "An" added in ink.

<sup>&</sup>lt;sup>154</sup> Crossed out in ink: "(source?)".

<sup>&</sup>lt;sup>155</sup> Crossed out in ink: "river"; "(lava-stream ??)" added in ink, with the two question-marks crossed out again.

<sup>&</sup>lt;sup>156</sup> Crossed out in ink: "source"; "extremity" added in ink.

<sup>&</sup>lt;sup>157</sup> Crossed out in ink: "tiny".

<sup>&</sup>lt;sup>158</sup> "Lava-" added in ink.

<sup>&</sup>lt;sup>159</sup> "Sp." either crossed out or smudged by ink.

<sup>&</sup>lt;sup>160</sup> "Was" changed to "were" in ink.

<sup>&</sup>lt;sup>161</sup> Crossed out in ink: "(?)"; "at last" seems to have been moved after "outnumbered" in ink. <sup>162</sup> "Crassula Mannii. [illeg.]" added in ink.

lava-stream had flowed by which we had made our ascent. When we had reached this my guides asked me where I would sleep whereon I told them where I sh? find water. (B.P. at base of these hills 200.2). Consequently we made only a short rest here again & passing the base of a row of hills we reached after 12 hours walk the beginning of a forest at the bottom of a grass-green crater we followed a foot-path which seemed to be for the use of hunters. I here saw the small 'Blaesia spicata, & the other beautiful plants Hypoxis villosa var<sup>164</sup> (No. 1224. / 1281). On approaching the borders of the wood I saw the Hypericum & the other magnificent plant Lasiosiphon [illeg.]<sup>165</sup> (1201) in full flower. Pittosporum Mannii & Paratropia Mannii gave the forest a beautifully fresh green while the other Paratropia elata<sup>166</sup> (1181) had lost nearly all its leaves & was just coming into flower. On entering the forest I found myself among<sup>167</sup> a mass of flowers which highly delighted me; I was scarcely able to see a simple leaf for the 2 plants (Acanthaceae!<sup>168</sup> 1259 & 1260) were loaded with flowers which hid the leaves of the latter <sup>169</sup> a Salvia (Plectranthus insignis)<sup>170</sup> (125)/ without leaves was here, I also saw for the first time the 3rd species of Impatiens & the various Umbelliferae of the collection. My portfolio was soon filled & I left the collecting of most of the plants until another visit to this place.

After penetrating a few hundred<sup>171</sup> paces into the wood we found a spring which offered good water in abundance. I had met with nothing so fortunate for a long time as the sight of the spring, which [illeg.] all the difficulties I had dreaded before coming to the Mountain & which made me nearly independent of the natives. – (B.P. 199.2)

<sup>&</sup>lt;sup>163</sup> Circled, red.

<sup>&</sup>lt;sup>164</sup> "Hypoxis villosa var" added in ink.

<sup>&</sup>lt;sup>165</sup> "Lasiosiphon [illeg.]" added in ink.

<sup>&</sup>lt;sup>166</sup> "Elata" added in ink.

<sup>&</sup>lt;sup>167</sup> Crossed out in ink: "in"; "among" added in ink.

<sup>&</sup>lt;sup>168</sup> "Acanthaceae!" was added subsequently in ink over the two following numbers in brackets.

<sup>&</sup>lt;sup>169</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>170</sup> "(Plectranthus insignis)" added in ink.

<sup>&</sup>lt;sup>171</sup> "Hundred" added in ink.

After filling our vessel with water I wandered about comfortable & happy & when we had gone half an hours walk further from the foot of the crater already mentioned we came to a small Hut where the natives prepared their beds & I pitched my tent close by. Half of the natives went a little further to a recess (hollow) as there was not room enough in the small hut for all. 18th <sup>172</sup>After a sound sleep through the night only once disturbed by the howling of a Hyaena close by my tent I awakened in the morning when the natives out of the recess (Hohle) announced to their fellow travellers that they had risen by the laughing cry already mentioned. A short time after we left the place & went on when the Mountains rose before us in great number, amongst them one distinguished by its height. I turned towards this in order to ascend it but had not reached it when looking back I observed that nearly all the natives had left me expecting 2 who also refused to go further. I told them they sh. await my return & I went with<sup>173</sup> both my Kroomen to the Mountain. When I reached its foot I saw before me another higher one towards which I then turned, but I was for some minutes enveloped<sup>174</sup> in so dense<sup>175</sup> a mass of cloud that I c? see nothing around me so I was not in a<sup>176</sup> position to go much further as I had no food & the natives had already gone back; so I turned back to the Mountain we had left. Its summit (B.P. 196) I now climbed; I hung my self registering thermometer & followed the natives who looking out<sup>177</sup> for me showed me the road by the blowing of a war-trumpet

<sup>&</sup>lt;sup>172</sup> Crossed out in pencil: "17"; "18<sup>th</sup>" added in pencil.

<sup>&</sup>lt;sup>173</sup> Crossed out in ink: "my".

<sup>&</sup>lt;sup>174</sup> Crossed out in ink: an additional "enveloped".

<sup>&</sup>lt;sup>175</sup> Crossed out in ink: "thick"; "dense" added in ink.

<sup>&</sup>lt;sup>176</sup> Ink dash under "a".

<sup>&</sup>lt;sup>177</sup> Crossed out in ink: "showing"; "looking out for me" added in ink.

<sup>179</sup>as the clouds would not permit me to see further than 10 paces. I soon reached it & turned directly to the Lava-field. On the field traversed I observed on the borders of the wood first of all the Myosotis (1266) & the Adiantum 1367 & later, on another lava-field, the Cheilanthes 1372; Hifolium Seinense, Cyanotis abyssinica & a species of Habenaria were all dried up. On returning I found the descent of the Lavastream as difficult & tiring as the ascent & reached Mapanya again at about<sup>180</sup> 6 in the evening without shoes as both the pairs which I had taken with me were completely destroyed by the sharp On the next day, the 19th, I heard in lava. the afternoon that Europeans approached the place, & saw the chief supported by his cousin being busy performing<sup>181</sup> certain ceremonies which should ward off bad luck from the place. These consisted first in their pouring water over a small broom<sup>182</sup> in the middle of the village where was a store, & repeating this ceremony on all the roads that led out of the village. after which they went back into their huts & I set off to meet<sup>183</sup> the arrival. They soon appeared & I was delighted to see not only Consul Burton but also Mr. Saker & Sr. Calvo the judge After<sup>184</sup> they had rested a little of Fernando Po. the chief appeared in a soldiers jacket with <sup>185</sup>epaulettes, without trousers & his behaviour<sup>186</sup> so absurd as to show<sup>187</sup> a great change in him;<sup>188</sup> the appearance of 3 Europeans with their followers where a European had never been seen before had nearly<sup>189</sup> deprived him of his senses. -<sup>190</sup>On the next day Consul Burton sent some

<sup>&</sup>lt;sup>178</sup> Circled, red.

<sup>&</sup>lt;sup>179</sup> "4" was added to the upper left corner of this page in ink.

<sup>&</sup>lt;sup>180</sup> "About" added in ink.

<sup>&</sup>lt;sup>181</sup> Crossed out in ink: "preparing for"; "performing" added in ink.

<sup>&</sup>lt;sup>182</sup> "17" added in pencil.

<sup>&</sup>lt;sup>183</sup> Crossed out in ink: "receive"; "meet" added in ink.

<sup>&</sup>lt;sup>184</sup> The rest of this page is crossed out in pencil.

<sup>&</sup>lt;sup>185</sup> Side line added in pencil next to the following 3 lines.

<sup>&</sup>lt;sup>186</sup> "His behaviour" added in ink.

<sup>&</sup>lt;sup>187</sup> Crossed out in ink: "that I saw"; "as to show" added in ink.

<sup>&</sup>lt;sup>188</sup> Crossed out in ink: "& he soon showed that".

<sup>&</sup>lt;sup>189</sup> Crossed out in ink: "had".

<sup>&</sup>lt;sup>190</sup> "20<sup>th</sup>" added next to this line in ink.

people<sup>191</sup> back to Victoria to fetch some things, gave the chief the presents, & after we had made a short excursion to another village I began to pack my things for the next day. Whereupon I was interrupted by the chief who was drunk & quarelled with his brother about the presents & bought the youth<sup>192</sup> who served as any interpreter into the mess & at last<sup>193</sup> would take him away<sup>194</sup> which I prevented.<sup>195</sup> The brother of the chief who was beaten in the quarrel, immediately began to beat a wooden drum & gave the token of disagreement. In the next half-hour the nation of the place & neighbourhood came to the place with weapons & kept guard until the chief was sober, when all was quiet & I proceeded with <sup>196</sup>my packing. The morning of the next day Miumbe the Chief of Bassumba came to Mapanya & bought the news that the people who were sent back to Victoria had slept at his place & would soon be at Mapanya. Miumbe begged for a bottle of rum which<sup>197</sup> was not given, upon which he persuaded Botani to demand more presents.

Then seated themselves outside the tent where Consul Burton & Mr. Saker were & demanded no fewer than 400 articles as a present, which in a short time they reduced to 300. After we had tried in vain to bring them to a reasonable demand Botani<sup>198</sup> brought part of his presents back & requested us to leave<sup>199</sup> his place whereupon we all prepared to do it as quickly as possible.

<sup>&</sup>lt;sup>191</sup> The whole page is crossed out in pencil.

<sup>&</sup>lt;sup>192</sup> Crossed out in ink: "where I".

<sup>&</sup>lt;sup>193</sup> "At last" added in ink.

<sup>&</sup>lt;sup>194</sup> Crossed out in ink: "at last, on".

<sup>&</sup>lt;sup>195</sup> Crossed out in ink: "him".

<sup>&</sup>lt;sup>196</sup> "21" added next to this line in ink.

<sup>&</sup>lt;sup>197</sup> Crossed out in ink: "wish".

<sup>&</sup>lt;sup>198</sup> Crossed out in ink: "tried to bring p".

<sup>&</sup>lt;sup>199</sup> Originally "leaf", alteration made in ink.

<sup>201</sup>When<sup>202</sup> Botani saw this he quickly took back the returned presents into his hut & went a little aside to watch us packing & telling his people that none of them sh? show us the way. which was of no consequence as I sufficiently knew it myself.

Mr. Saker & Sr. Calvo left the place<sup>203</sup> with the people excepting 2 to prepare a resting place in the neighboring forest. & then sent them<sup>204</sup> back to bring the things which had been left. The latter appeared again in about 4 hours & consequently we reached the resting place just after sun-set.

 $^{205}$ On the 22<sup>nd 206</sup> early in the morning we set out to the above named spring that we might leave a great part of our things hidden. After we had travelled half of the lava-stream Consul Burton pointed out to us a place where with little labour water might he found in case of need, which place we distinguished as Burton's well. -

When we had arrived at the foot of the first of the above mentioned craters we found it impossible to proceed & concluded to stay there for the night.

As we had suffered the whole day from want of water which made many of the people incapable of progressing as quickly as ourselves, & we had no hope that they would reach the crater before night  $I^{207}$ , with some of the people who came with me, went to fetch water turning<sup>208</sup> back soon after sun-set<sup>209</sup> found that half of the people had <sup>210</sup>not reached the place.  $On^{211}$  the 23<sup>rd</sup> Dec? after a cold night spent wrapped in our clothes upon the ashes at 4 o'clock in the morning some people were sent again for water, & after they returned all the people present were despatched<sup>212</sup> to the spring with the things & told to prepare a sleeping-place. We had however to await the arrival of the people yet missing

<sup>212</sup> Crossed out in ink: "sent"; "despatched" added in ink.

<sup>&</sup>lt;sup>200</sup> Circled, red.

<sup>&</sup>lt;sup>201</sup> "5" was added to the upper left corner of this page in ink.

<sup>&</sup>lt;sup>202</sup> The first two sections of this page are crossed out in pencil.

<sup>&</sup>lt;sup>203</sup> "The place" added in ink.

<sup>&</sup>lt;sup>204</sup> "The people" altered to "them" in ink.

<sup>&</sup>lt;sup>205</sup> , 22<sup>nd</sup>, written next to this line in ink.

<sup>&</sup>lt;sup>206</sup> Crossed out in pencil: "next da"; "22<sup>nd</sup>" added in pencil.

<sup>&</sup>lt;sup>207</sup> Crossed out in ink: "therefore". <sup>208</sup> "Turned" altered to "turning" in ink.

<sup>&</sup>lt;sup>209</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>210</sup> "23<sup>d</sup>." written next to this line in ink.

<sup>&</sup>lt;sup>211</sup> The following section is separated from the rest of the page by a pencil line.

& follow with them. After we had waited until 2 o'clock & the people had not yet come we left the place excepting a man who staid behind with water for them. We reached the rendezvous after <sup>1</sup>/<sub>4</sub> hours walk & the rest of the people arrived at 5 in the morning. – On the morning <sup>213</sup>of the 24th we made an excursion towards the Mountain where I had left my thermometer, which after reaching the summit, was<sup>214</sup>named by Mr. Saker "Mt. Helen". (Max. 71¼ Min. 39¼). We had splendid weather & saw the summit of the Mountain & also<sup>215</sup> many others in a wonderful Panorama & admired the beauty of<sup>216</sup> the scene The first [illeg.] mountain<sup>217</sup> presented itself as two prominent summits<sup>218</sup> which we named "Mt. Victoria" & "Mt Albert." The<sup>219</sup> power of the Elements shows itself perhaps nowhere more than in a storm at sea or in the eruption of a Volcano. I<sup>220</sup>never witnessed the latter, but when my eyes ranged over<sup>221</sup> the mountainous Panorama spread before me & I figured to myself the<sup>222</sup> power which had here caused<sup>223</sup>Mountains from 100 to 2000 ft in height to rise<sup>224</sup> in great numbers in the course of a few<sup>225</sup> hours, I felt how small is the capacity of man<sup>226</sup> compared with that of Nature. Consul Burton & Mr. Saker made their geographical observations & shortly before noon we turned back & the rendezvous. During the day I felt way unwell & when I had put in my plants I was obliged to go to bed. On Xmas day I felt myself worse than before & was unable to do anything. Mr. Saker left us promising to return in 8 or 10 days. My<sup>227</sup> illness became worse daily<sup>228</sup>& I was unable to continue my excursions & <sup>229</sup>collecting. On the morning of the 27th Consul Burton & Sr. Calvo left the place in order to find a

<sup>219</sup> All over the following eleven lines are pencil marks.

<sup>&</sup>lt;sup>213</sup> "24<sup>th</sup>" written next to this line in ink.

<sup>&</sup>lt;sup>214</sup> "Was" added in ink.

<sup>&</sup>lt;sup>215</sup> Crossed out in ink: "of".

<sup>&</sup>lt;sup>216</sup> Crossed out in ink: "nature".

<sup>&</sup>lt;sup>217</sup> Illegible note added in pencil, "mountain" added in ink.

<sup>&</sup>lt;sup>218</sup> Crossed out in ink: "mountains"; "summits" added in ink.

<sup>&</sup>lt;sup>220</sup> Crossed out in ink: "wa".

<sup>&</sup>lt;sup>221</sup> Crossed out in ink: "I glanced at"; "my eyes ranged over" added in ink.

<sup>&</sup>lt;sup>222</sup> Crossed out in ink: "I felt the boundless"; "& I figured to myself the" added in ink.

<sup>&</sup>lt;sup>223</sup> Crossed out in ink: "created these"; "here caused" added in ink.

<sup>&</sup>lt;sup>224</sup> "To rise" added in ink.

<sup>&</sup>lt;sup>225</sup> "The course of a few" added in ink.

<sup>&</sup>lt;sup>226</sup> Crossed out in ink: "& the smallness of mans power"; "I felt how small is the power of man" added in ink. "power" is in turn crossed out and replaced by "capacity". <sup>227</sup> Crossed out in ink: "Each day"; "my" subsequently altered to "My".

<sup>&</sup>lt;sup>228</sup> "Daily" added in ink.

<sup>&</sup>lt;sup>229</sup> Crossed out in ink: "to".

suitable place where to<sup>231</sup> provide water for an When they returned in excursion to the summit. the evening I heard that Consul Burton had found time to ascend Peak<sup>232</sup> Victoria, unfortunately however he had injured his foot which prevented his leaving the place for the next<sup>233</sup>4 weeks. – I was in the same predicament<sup>234</sup> till the 30th when I felt well enough to undertake a<sup>235</sup> stroll which I repeated on the two following <sup>236</sup>days. On the 2<sup>nd</sup> Jan? 1862 I felt so well that I set out on<sup>237</sup> my brief excursion to the summit with Sr. Calvo. We reached Mt. Helen shortly after noon & after we had rested a little we directed our steps towards the next high mountain which Consul Burton had named Mt. Isabel. -

This<sup>238</sup> we reached towards 2 o'clock & while our people prepared a sleeping-place in the crater <sup>239</sup>we let off to the summit which<sup>240</sup> from we enjoyed a magnificent view over that part of the Mountain which we had just passed;<sup>241</sup> in the opposite direction saw Mounts Victoria & Albert rise up before us with a number of small hills in front<sup>242</sup> the formation of which was to be ascribed to an earlier period as the lava-field which surrounded them was formed by eruption from Mt. Victoria & Mt. The highest<sup>243</sup> mountain of the latter Albert. I took the liberty to call Mt. Hooker. On the field which we had traversed this day the few plants which I might term arborescent were Leucothoe angustifolia & Marica salicifolia Hochst.<sup>244</sup> No. 1203 which reached a height of 20 feet but was only to be seen in hollows or craters & even there but very scattered. Hypericum angustifolium only occurred<sup>245</sup> as a shrub not higher than Cytisus Mannii was<sup>246</sup> in full splen-6 or 8 ft. dour quite covered with flowers & found every pretty

<sup>246</sup> Crossed out in ink: "here".

<sup>&</sup>lt;sup>230</sup> Circled, red.

<sup>&</sup>lt;sup>231</sup> Crossed out in ink: "we might"; "to" added in ink.

<sup>&</sup>lt;sup>232</sup> "Peak" seems to have been moved after "Victoria".

<sup>&</sup>lt;sup>233</sup> "The next" added in ink.

<sup>&</sup>lt;sup>234</sup> Crossed out in ink: "My condition was the same"; "I was in the same predicament" added in ink.

<sup>&</sup>lt;sup>235</sup> Seems to have been written over another word.

<sup>&</sup>lt;sup>236</sup> "2 d" and a side streak were added next to the following two lines.

<sup>&</sup>lt;sup>237</sup> Crossed out in ink: "undertook"; "set out on" added in ink.

<sup>&</sup>lt;sup>238</sup> Subsequently altered: originally "These".

<sup>&</sup>lt;sup>239</sup> Crossed out in ink: "of it".

<sup>&</sup>lt;sup>240</sup> "Which" seems to have been moved after "from".

<sup>&</sup>lt;sup>241</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>242</sup> Crossed out in ink: "before them"; "in front" added in ink.

<sup>&</sup>lt;sup>243</sup> Crossed out in ink: "of of" [sic].

<sup>&</sup>lt;sup>244</sup> "Marica salicifolia Hochst." added in ink.

<sup>&</sup>lt;sup>245</sup> Crossed out in ink: "was only seen"; "only occurred" added in ink.

little trees. with round tops. Helichrysum foetidum was in every direction,<sup>247</sup> H. Hochstetteri peeked out of all the<sup>248</sup> hollows & Wahlenbergia rose everywhere  $over^{249}$  the surface of the grass. The Stalice? 1309 was here only formed on the west side of Mt. The other small plant 1286 (Umbilicus pendulinus)<sup>250</sup> grew in the Isabel. <sup>251</sup>Lava-fields. – On the morning of the 3<sup>rd</sup>. Jan? at 7 we left the crater (B. P. 194.2) & turned towards Mt. Hooker going round the west side,<sup>252</sup> on the No. side of the foot two [illeg.] 10 o'clock we<sup>253</sup> found a suitable place to pass the next night. After we had rested an hour we left the place to climb the summit of Mt. Albert which we accomplished on the west side after 3<sup>3</sup>/<sub>4</sub> hours labour. I found this part of the mountain quite naked consisting only<sup>254</sup> of<sup>255</sup> loose ashes in which we often made 1 step forwards & 2 backwards. – When we reached the summit <sup>256</sup>(B. P. (consul Burton & his [illeg.]?) 189<sup>1</sup>/<sub>4</sub>) we found the wind so strong that it nearly blew us away & at the same time so cold (451/2) that it<sup>257</sup> made our tropical hands almost useless. – After half an hours [illeg.] we hung out<sup>258</sup> the self- [illeg.] thermometer<sup>259</sup> & left the summit with frozen finger-ends & noses;<sup>260</sup> water was brought from our<sup>261</sup> eyes by the high wind,<sup>262</sup> so we left without any thought of further<sup>263</sup> observations & admiration of the surrounding grand scenery. - We reached the rendezvous about 3 o'clock;<sup>264</sup> my collection this day was not<sup>265</sup> very rich. – Besides the Gramineae I found Helichrysum Mannii, the Crassulacea above-named, Swertia [illeg.] & Veronica Mannii, which all grew on the enormous lava-

fields which surrounded the highest Mountain. Ι felt very weak & unwell & some found<sup>266</sup> that I had

<sup>&</sup>lt;sup>247</sup> Crossed out in ink: "to be seen everywhere, &"; "in every direction" added in ink.

<sup>&</sup>lt;sup>248</sup> Crossed out in ink: "every"; "all the" added in ink.

<sup>&</sup>lt;sup>249</sup> Seems to have been written over another word.

<sup>&</sup>lt;sup>250</sup> "(Umbilicus pendulinus)" added in ink.<sup>251</sup> "3 d" added next to this line in ink.

<sup>&</sup>lt;sup>252</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>253</sup> "We" added in ink.

<sup>&</sup>lt;sup>254</sup> "Only" added in ink.

<sup>&</sup>lt;sup>255</sup> Crossed out in ink: "nothing but".

<sup>&</sup>lt;sup>256</sup> Symbol "x" added in pencil.

<sup>&</sup>lt;sup>257</sup> Crossed out in ink: "&"; "that it" added in ink.

<sup>&</sup>lt;sup>258</sup> "We hung out" added in ink.

<sup>&</sup>lt;sup>259</sup> Crossed out in ink: "which we had hung out".

<sup>&</sup>lt;sup>260</sup> Crossed out in ink: ,,the".

<sup>&</sup>lt;sup>261</sup> Crossed out in ink: "the"; "our" added in ink.

<sup>&</sup>lt;sup>262</sup> Crossed out in ink: "which".

<sup>&</sup>lt;sup>263</sup> "Further thought of the" changed to "any thought of further".

<sup>&</sup>lt;sup>264</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>265</sup> Crossed out in ink: "ri".

<sup>&</sup>lt;sup>266</sup> Crossed out in ink: "noticed"; "some found" added in ink.

 $^{268}a^{269}$  relapse of my previous illness. This induced  $^{270}$  us next day to set out on our return: When we reached Mt. Isabel we perceived on the opposite side of the crater a native destitute of clothing save a piece about the loins accompanied by two dogs with wooden bells fastened to their necks. As I wished to see him nearer that I might sketch<sup>271</sup> him I gave him to understand that he sh? came to us, – this he declined by signs & soon made off. With the exception of one who stayed thro' the affair all our Kroomen were so frightened at his appearance that they took to their heels. –

We continued on our way leaving an order for the people to follow & reached the chief rendezvous  $^{272}$ at 5 ½ P.M. On the next day Mr. Saker accompanied by Mr. Smith, also a Missionary, came again to us. My condition daily grew worse & I c? not think of plant collecting; I laid nearly the whole day in my hammock, using<sup>273</sup> every means at hand but without success. – While Consul Burton was prevented leaving the rendez-vous by his wounded foot, Messrs. Saker & Smith fell ill of fear so that we were a pitiful company for Mountain <sup>274</sup> research. On<sup>275</sup> the 9th I concluded to turn back to Victoria & on the 10<sup>th</sup> was carried down by my men as I was already too weak to go on foot.

Sr. Calvo who wished to be at Fernando Po on the arrival of the Mail, accompanied me.

In<sup>276</sup> one of the places which we passed the chief was much astonished that I sh? be carried & when he saw me of my coverings of red cloth he offered me first a pig then a goat; then a small boy & at last a tall young lady, & was grieved when he could not have it for all of them.

<sup>&</sup>lt;sup>267</sup> Circled, red.

<sup>&</sup>lt;sup>268</sup> "6" written in the upper left corner of this page in ink.

<sup>&</sup>lt;sup>269</sup> An illegible word crossed out; "a" written above.

<sup>&</sup>lt;sup>270</sup> "4 d" written next to this line in ink.

<sup>&</sup>lt;sup>271</sup> "Make a sketch of him" altered to "sketch him".

<sup>&</sup>lt;sup>272</sup> "5 d" written next to this line in ink.

<sup>&</sup>lt;sup>273</sup> "& used every means in" altered to "using every means at".

<sup>&</sup>lt;sup>274</sup> "9<sup>th</sup>" and "10<sup>th</sup>" are written in ink next to this and the next line but in turn crossed out in pencil.

<sup>&</sup>lt;sup>275</sup> The following section is separated from the rest of the page by a pencil line.

<sup>&</sup>lt;sup>276</sup> The following section is crossed out in pencil.

<sup>277</sup>On the 11th about noon we reached Victoria when I immediately began to employ things recommended to me but unsuccessfully & I continued to grow <sup>278</sup>worse. On the 15th Mr. Smith came back to Victoria suffering much from fever & the following day Mr. Saker who 2 days ago previously <sup>279</sup>had been on the summit & only<sup>280</sup> left Victoria on the 20th On the same day I improved & began January. to have new hope. On the morning of the <sup>281</sup>22<sup>nd</sup> we had a tornado,<sup>282</sup> when it had passed over we observed snow on the North-East side of the summit of the Mountain. On the 24th <sup>283</sup>I again left Victoria & reached the forest<sup>284</sup> beyond Mapanya in the evening. When<sup>285</sup> I would pass the latter place Botani wished me to stay over night & made me a present of a hen in order to attain this; but I thought it better to have no connection with him & went on <sup>286</sup>further. On the next day I climbed for the 3<sup>rd</sup> time the lava stream & reached early in the afternoon the rendez-vous where Consul Burton was & learned that on the previous day he had set out on his <sup>287</sup>first excursion. On the day after<sup>288</sup>day he visited the <sup>289</sup>"hollows" before mentioned & on the 27th we left the place & climbed the summit for the last time.

After we had reached Mt. Nabel & had rested Consul Burton climbed the summit & made his observations while I completed a sketch which I had began & then collected till 5 o'clock. We slept in the <sup>290</sup>crater of this Mountain & on the next day went to a small crater where Mr. Saker had previously had his resting-place. After enjoying ourselves a little we went to the principal Mountain & when we had reached it we turned to the East in order to have a view in a N.E. direction, when we reached

<sup>&</sup>lt;sup>277</sup> "11 d" written next to this line in ink.

<sup>&</sup>lt;sup>278</sup> "15 d" written next to this line in ink.

<sup>&</sup>lt;sup>279</sup> Large question mark added in ink next to this and the following line.

<sup>&</sup>lt;sup>280</sup> "Only" added in ink.

<sup>&</sup>lt;sup>281</sup> "22 d" written next to this line in ink.

<sup>282</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>283</sup> "24 d" written next to this line in ink.

<sup>&</sup>lt;sup>284</sup> Crossed out in ink: "which".

<sup>&</sup>lt;sup>285</sup> There are pencil marks all over the following lines.

<sup>&</sup>lt;sup>286</sup> "25 d" written next to this line in ink.

<sup>&</sup>lt;sup>287</sup> "26 d" written next to this line in ink.

<sup>&</sup>lt;sup>288</sup> "On that day" altered to "On the day after" in ink.

<sup>&</sup>lt;sup>289</sup> "27 d" written next to this line in ink.

<sup>&</sup>lt;sup>290</sup> "28 d" written next to this line in ink and a "28" written and crossed out in ink one line above.

69<sup>291</sup>

the shoulder of the Mountain we again found ourselves upon an extended lava-field & saw the crater of Mt. Victoria straight before us. While I prepared a sketch of it<sup>292</sup> went towards it & I followed him a while more to the Eastward when I for the first <sup>293</sup>time saw<sup>294</sup> the N.E direction of the Mountain range which looked like a place country. When I reached the crater<sup>295</sup> I found it very large,<sup>296</sup> much larger than I had seen before & considerably larger<sup>297</sup> than that of the Peak of Fernando Po. The absence of the people prevented C. Burton from making the observations he intended. I found on the crater side <sup>298</sup>much more of interest to me than on the West as the former was more or less covered with vegetation to the top. I found amongst other things the pretty erect Lycopodium (1410) the very pretty Compositae (Senecio Burtoni. Mf.)<sup>299</sup> (12411) & the plant (NO 1290) (anthospermum asperuloides)<sup>300</sup> Helichrysum Mannii grew every where at the bottom of the Mountain The Ericin-& on this side extended to the top. ella & the Cytisus both reach to the middle of the Mountain. Mt. Albert is without doubt of more recent formation than Mt. Victoria or it w? be clothed with more luxuriant vegetation than the latter as the wind is nearly always N. E & as I have always observed vegetation consequently remains far poorer on the side exposed <sup>301</sup>to it. On the next day I visited this side again & enlarged my collection with some mosses while C. Burton visited for the first time the Princes & Albert craters. & employed himself in measuring the distances. After I had climbed the summit of Mt. Victoria & had made a drawing of the two above craters & of Mt. Albert I set off to the latter to bring the thermometer,- but found it<sup>302</sup> to my

<sup>&</sup>lt;sup>291</sup> Circled, red.

<sup>&</sup>lt;sup>292</sup> "Consul Burton" added in ink.

<sup>&</sup>lt;sup>293</sup> Side line added in pencil next to the following 2 lines.

<sup>&</sup>lt;sup>294</sup> Crossed out in ink: "in a" and "the"; "the" added in ink.

<sup>&</sup>lt;sup>295</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>296</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>297</sup> "Larger" added in ink.

<sup>&</sup>lt;sup>298</sup> Crossed out in ink: "I found".

<sup>&</sup>lt;sup>299</sup> "(Senecio Burtoni. Mf.)" added in ink.

<sup>&</sup>lt;sup>300</sup> "(Anthospermum asperuloides)" added in ink.

<sup>&</sup>lt;sup>301</sup> "29 d" written next to this line in ink.

<sup>&</sup>lt;sup>302</sup> "It" added in ink.

sorrow in a very different place to that in which I had left it, hanging only on one hook & with the bulb uppermost & the spirit had changed from a red to a pale yellow colour. I lost thro' this misfortune  $^{303}$ the result of a month & must be content with <del>a</del> daily After I had again arranged it & after observation. enjoying a good view of the unvisited Mountain chain to the N.E. I set off tow? the crater where I met Consul Burton who had sent his servant to set up the British flag on Mt. Victoria. After this we emptied a bottle of champagne in honour of the day & then separated again, I going down & C. Burton climbing Mt. Albert. When the latter returned I learnt that he had found crevices from <sup>304</sup>which smoke ascended. On the next day I again climbed the Mountain<sup>305</sup> (B.P. by C. Burton this therm.  $189^{34^{\circ}}$ ) & then went to Mt.

Albert & fetched the thermometer:  $I^{306}$  found the highest Temperature 55°F the lowest 27°F & the spirit at the time of my return 35°F. – I visited the chinks to measure the temperature;  $I^{307}$  did not find smoke, but a lower temperature in them than outside. From this I set on to Mt. Hooker at the base of which I boiled the thermometer (B.P. 193) & then climbed the summit & repeated it (B.P. 191.5) &  $3^{308}$  returned.

While the N.E. side of the latter Mountain is covered with the very pretty [illeg.] (<u>Deschampsia caespilosa</u>)<sup>309</sup> (No 1352) which forms masses of 2-3 ft diameter & 2 ft. high I found all over the S.W. side from the base to the highest summit covered with <u>Supericum</u>, <u>Ericinella</u>, <u>Cytisus & Helichrysum chrysocoma</u>. On the way to Mt. Isabel I was enveloped in<sup>310</sup> such thick clouds that I c? only see 1 or 2 steps in advance which made the road, which in fine weather is difficult, very disagreeable as we could not see

<sup>&</sup>lt;sup>303</sup> Side line added in pencil next to the following 2 lines.

<sup>&</sup>lt;sup>304</sup> "30<sup>th</sup>" written next to this line in ink.

<sup>&</sup>lt;sup>305</sup> Crossed out in ink: "Mt. Victoria as yesterday".

<sup>&</sup>lt;sup>306</sup> Crossed out in ink: "&".

<sup>&</sup>lt;sup>307</sup> Crossed out in ink: "but".

<sup>&</sup>lt;sup>308</sup> Crossed out in ink: ,,then".

<sup>&</sup>lt;sup>309</sup> "(Deschampsia caespilosa)" added in ink.

<sup>&</sup>lt;sup>310</sup> Crossed out in ink: "covered by"; "enveloped in" added in ink.

<sup>312</sup>any of the many holes until upon the margin of them. When I had reached Mt. Isabel & the weather cleared up & I set off to the principal rendezvous when after my arrival C. Burton informed me that there had been a heavy shower of hail during Also at the camp heavy rain had fallen the day. & wetted almost all the things we had left. <sup>313</sup>At noon of the 31st Jan? C.B. & his people left the rendezvous for Victoria. The weather considerably improved & a hurricane during the day & evening which blew down some old trees here & there near the camp was all that was noteworthy (unusual) that day. – On the following day <sup>314</sup>when I was going to collect & was busy putting away the pretty plant (Brucea anticlysenterica)<sup>315</sup> (No. 1188) sheltered in a hollow from the strong<sup>316</sup>wind I suddenly observed a native close by<sup>317</sup> who without seeing me had unwittingly dropt upon me. When I addressed him he stretched out his head & after<sup>318</sup>some minutes pronounced the word "Tobacco". I called to him to come nearer<sup>319</sup> which he was unwilling to do & when I went towards him I saw that 'he trembled with fright". – He was a head higher & nearly twice as stout as I without clothes except a small piece of thin cloth about his loins. He had arms & a cutlass. I made him understand that he should bring me a Hyaena & a Gazelle which he promised & slowly went away<sup>320</sup> looking back as though frightened that I should lay hands upon him. -<sup>321</sup>On the 2<sup>nd</sup> Febr? I left the camp early in the morning, went tow? Mt. Helen, - made a sketch of Mt. Isabel & turned to the Eastward-lying Mountain Eliza <sup>322</sup>which lies on the border of the ascending Lava-field & the wood which reached to the sea. In fact – half is in the wood & half above it, while the Northern part

<sup>321</sup> "2<sup>d</sup>" written next to this line in ink.

<sup>&</sup>lt;sup>311</sup> Circled, red.

<sup>&</sup>lt;sup>312</sup> "7" written in the upper left corner of this page in ink.

<sup>&</sup>lt;sup>313</sup> "30<sup>st</sup>" written next to this line in ink.

<sup>&</sup>lt;sup>314</sup> "Feb 1." written next to this line in ink.

<sup>&</sup>lt;sup>315</sup> "(Brucea anticlysenterica)" added in ink.

<sup>&</sup>lt;sup>316</sup> Crossed out in ink: "heavy"; "strong" added in ink.

<sup>&</sup>lt;sup>317</sup> Crossed out in ink: "to me"; "by" added in ink.

<sup>&</sup>lt;sup>318</sup> Crossed out in ink: "for"; "after" added in ink.

<sup>&</sup>lt;sup>319</sup> Crossed out in ink: "me".

<sup>&</sup>lt;sup>320</sup> Crossed out in ink: "wh".

<sup>&</sup>lt;sup>322</sup> Side line added in pencil next to the following three lines.

& the crater are covered with a thick growth of trees. On the top I had the most beautiful panorama before me which I had hitherto seen in the Mountains - beginning with Mt. Victoria & ending with the "Black crater." I brought the circuit on-to paper, noted the direction of the various Mountains & then let out on return to the encampment. This I did following a foot-path which from the<sup>323</sup> N.E side<sup>324</sup> of the Mountain runs N.W from Mt. Eliza W.d.W. from Mt. Helen, through Calvo's crater to the west side of the Mountain. To judge of the depth to<sup>325</sup> which <sup>326</sup>the path is worn it must serve as a communication between the inhabitants of the west<sup>327</sup> & these of the N.E. side of the Mountain as the hunters that visit the Mountain & that w? follow the path<sup>328</sup> are very few.

When I approached the rendezvous in the evening I saw the No. side of the Mountain on fire which the high wind favoured & quickly spread over the Mountain.

<sup>329</sup> On<sup>330</sup> the next day while busy collecting seeds the native seen two days before came<sup>331</sup> with a companion to the rendezvous bringing<sup>332</sup> honey & said that he had as yet not shot any of the animals I had requested. On the 6th one of my people brought me from Victoria the <sup>333</sup>news that Botani would have me<sup>334</sup> know that he would take<sup>335</sup> possession of all my things when I I [sic] went down as C. Burton & the rest of the gentlemen had not paid <sup>336</sup>& said the (not clear)

This induced me to have brought down immediately such of my things as I could (not?) do without & especially my collections, so that in case I should have  $^{337}$ to run away with my people they would not leave too much to carry (this is not clear). –

On the 10th Febr? there came with my returning

<sup>&</sup>lt;sup>323</sup> Crossed out in ink: "N.W".

<sup>&</sup>lt;sup>324</sup> Crossed out in ink: "summit"; "side" added in ink.

<sup>&</sup>lt;sup>325</sup> Crossed out in ink: "from"; "to" added in ink.

<sup>&</sup>lt;sup>326</sup> Crossed out in ink: "these have risen".

<sup>&</sup>lt;sup>327</sup> Crossed out in ink: "side".

<sup>&</sup>lt;sup>328</sup> "& that w? follow the path" added in ink.

<sup>&</sup>lt;sup>329</sup> "3 d" written next to this line in ink.

<sup>&</sup>lt;sup>330</sup> The rest of the page is crossed out in pencil.

<sup>&</sup>lt;sup>331</sup> "Came" added in ink.

<sup>&</sup>lt;sup>332</sup> Crossed out in ink: "& brought"; "bringing" added in ink.

<sup>&</sup>lt;sup>333</sup> Number "6" and side line added in pencil next to the following 5 lines.

<sup>&</sup>lt;sup>334</sup> Crossed out in ink: "let me"; "Would have me" added in ink.

<sup>&</sup>lt;sup>335</sup> "Had taken" altered to "would take" in ink.

<sup>&</sup>lt;sup>336</sup> Crossed out in ink: "& the foremen first people who".

<sup>&</sup>lt;sup>337</sup> Side line added in pencil next to the following 3 lines.

people<sup>339</sup> a Native of<sup>340</sup> Mapanya who brought Cocoa for sale & before he left the place there came a chief of a District of the N.E. side of the Mountain accompanied by six people, who brought me a fowl<sup>341</sup>, Cocoa & Palm-wine as a present. He approached the camp very slowly with an open blue umbrella<sup>342</sup>, a 4-coloured small hat on his head a red blue & white undergarment over the upper part of his body & a piece of thin cottoncloth about his loins. He gave me to understand by signs from where he came & said his name was Beabonn. The native of Mapanya was apparently uneasy at the appearance of the people and soon made off to give his Chief-Botani the news. Beabonn also soon after went away after <sup>343</sup>receiving a return present & promised to come back in 2 days. On the evening of the same day we had again<sup>344</sup> very heavy thunder <sup>345</sup>which was repeated each day after. On the 13th I <sup>346</sup> left the place with my people & reached the Forest a little above Mapanya late in the evening (Ridge-Camp. B. P. 205.5). On<sup>347</sup> the way I met the people lead by Botani with fowls, Cocoa & Palm wine & the request that I would still go back to Victoria by the way of Mapanya & not thro' the district of the Chief Beabonn of<sup>348</sup> whom Botani was plainly jealous & gave me to hope that I would have no difficulty I spent 4 days at this place on my return. of which 2 from the very heavy rain were almost On the morning of the 14th at 5 quite lost to me. o'clock the thunder began & lasted till 4 o'clock in<sup>349</sup> the afternoon<sup>350</sup> & sometimes in the middle of the day it was so dark that the screech-owl & the great Bats left their hiding places & made themselves known by their unpleasant cries. I succeeded however in collecting

<sup>&</sup>lt;sup>338</sup> Circled, red.

<sup>&</sup>lt;sup>339</sup> Half of the page (up to the line beginning with "I left the place") is crossed out in pencil.

<sup>&</sup>lt;sup>340</sup> Crossed out in ink: "of"; "of" added in ink.

<sup>&</sup>lt;sup>341</sup> Seems to have been written over another word.

<sup>&</sup>lt;sup>342</sup> Originally this word seems to have had a letter more.

<sup>&</sup>lt;sup>343</sup> Crossed out in ink: "he had".

<sup>&</sup>lt;sup>344</sup> "Again" seems to have been moved before "had" in pencil.

 $<sup>^{345}</sup>$  ,  $13^{\text{th}"}$  written next to this line in ink.

<sup>&</sup>lt;sup>346</sup> There is an additional crossed out letter in the gap.

<sup>&</sup>lt;sup>347</sup> The following section is crossed out in pencil.

<sup>&</sup>lt;sup>348</sup> "Of" added in ink.

<sup>&</sup>lt;sup>349</sup> "4 o'clock in" added in ink.

<sup>&</sup>lt;sup>350</sup> Crossed out in ink: "of the 11".

all the plants I wished, amongst them the beautiful <u>Mussaenda</u> sp. & the 2 spp. of <u>Aucuba</u>. On the afternoon of the 17th when upon an Excursion downwards I met Mr. Smith & Mr. Pinnock who had been good enough to come in case Botani should have any unfriendly intentions. They had however found him very well satisfied & we passed Mapanya <sup>351</sup>on the next day without meeting with disturbance & reached Victoria in the afternoon.

<sup>352</sup>On the following day I packed my plants & left Victoria on the morning of the 24th in company of Mr. & Mrs. Saker & Mr. Smith in a boat of the Mission & reached the Cameroon river at 3. A.M. of the 25 intending to return to Fernando Po by the next steamer. I owe many thanks to Mr. & Mrs. Saker & Mr. Smith who have & espec? in Victoria have always assisted me with the greatest kindness & politeness, & thus [illeg.]<sup>353</sup> many of<sup>354</sup> the unpleasantness connected with the Expedition. <sup>355</sup>

In the trust that the result of this Expedition may meet your approval & that the flora of the Mountains of W. tropical Africa may thereby become known to science. I have the honour to remain<sup>356</sup>

G. Mann

<sup>&</sup>lt;sup>351</sup> "18<sup>th</sup>" written next to this line in ink.

<sup>&</sup>lt;sup>352</sup> "19<sup>th</sup>" written next to this line in ink.

<sup>&</sup>lt;sup>353</sup> Crossed out in ink: "Many of"; note added, illegible.

<sup>&</sup>lt;sup>354</sup> "Many of" added in ink.

<sup>&</sup>lt;sup>355</sup> Crossed out in ink: "were [illeg.]"

<sup>&</sup>lt;sup>356</sup> Three symbols added to separate signature from the text above.