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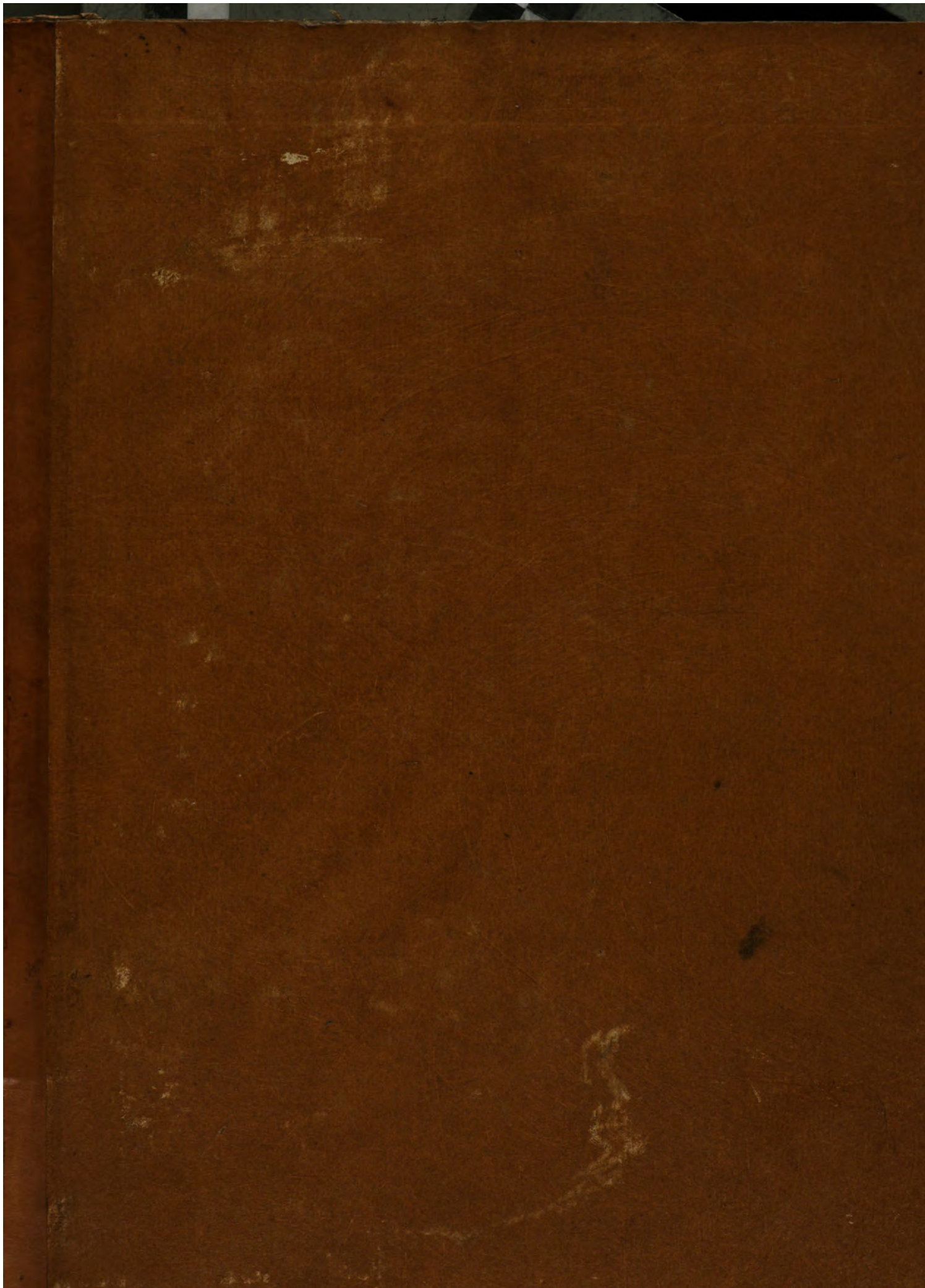
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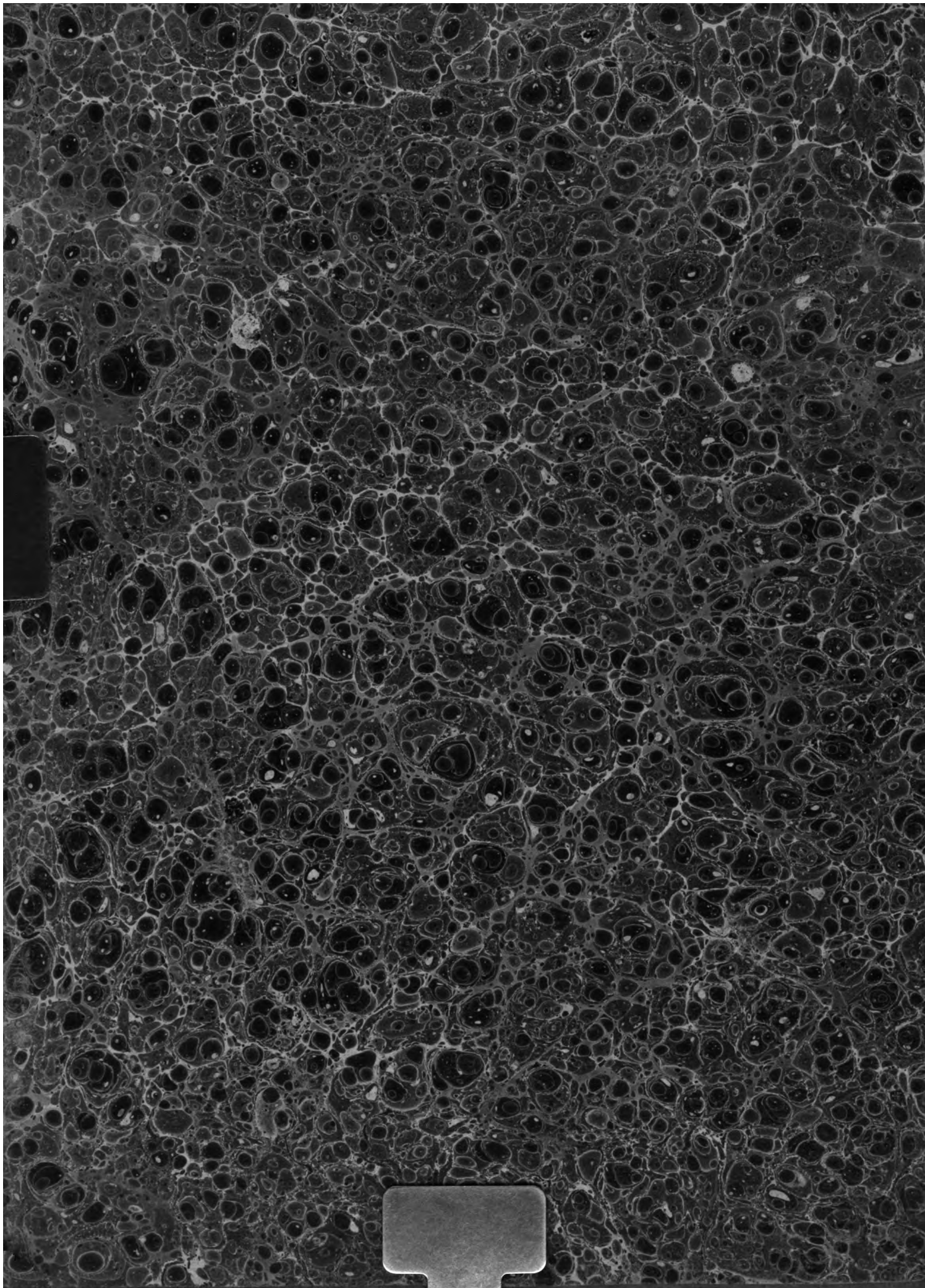
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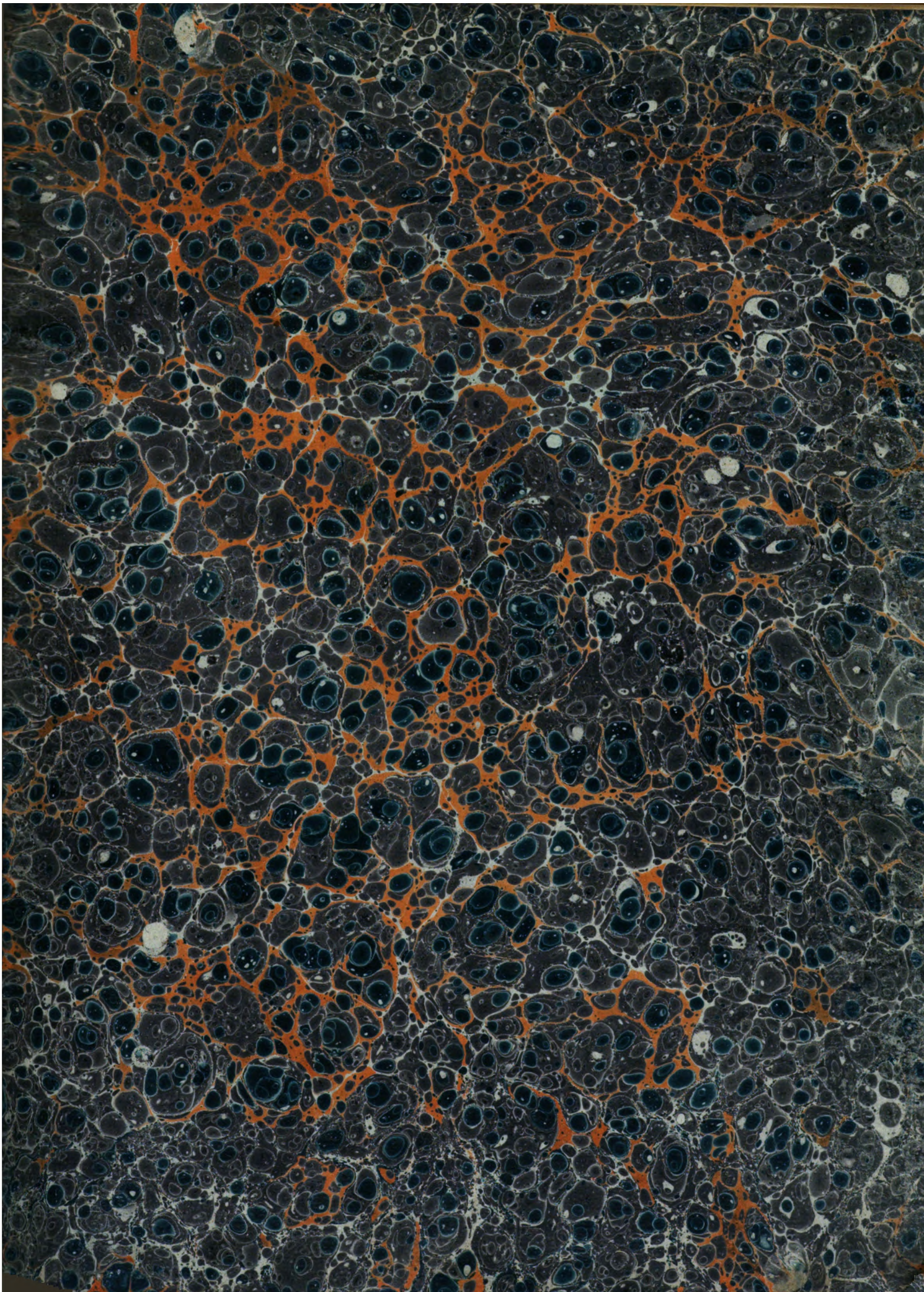
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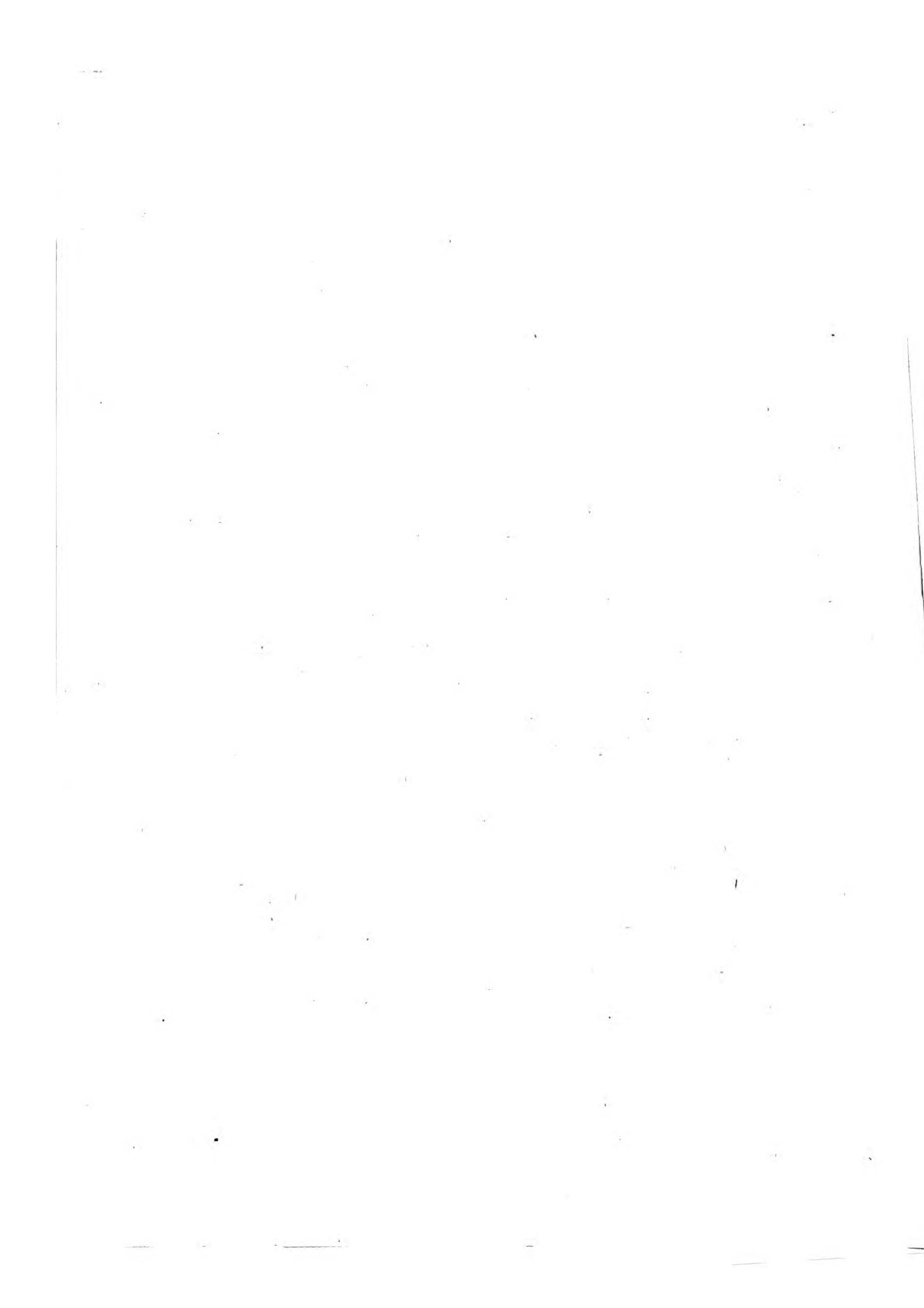


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Mr. Walden
from the Author

THE CONTRADICTIONS
in
PARK'S LAST JOURNAL.
Explained,
and
His Astronomical Observations
on 1796.

RE-ESTABLISHED
by the
CORRECTIONS
Necessitated by his having reckoned on
The 31st of April

By J. Edward Bowdich, Esq
Honorary Member of the Cambridge Philosophical
Society - of the Wetteravian Natural History Society.
Member of the Geographical Society of Paris. Conductor
of the Mission to Ashantee.

mandat fieri sibi talia Daphnis.
• In quicquam nobis tali dit. munere majus. ? *Virg.*

1821



In M. Walckenaer's Recherches sur l'Afrique we find the following remark: "Je remarque dans ce journal une inadvertance qui a échappé à l'auteur et aux éditeurs; il ya (p. 7.) un récit de ce que Mungo Park a fait le 31 avril: le mois d'avril n'a que 30 jours" p. 272. This is mentioned however merely as a matter of curiosity, for it did not occur to M. Walckenaer that the results of Park's calculation of the observations for latitude made subsequently to that period, were all affected by a considerable error, from his having continued to reckon his time one day too late, and, consequently, taking in every instance a wrong declination out of the Nautical Almanac. The important position of Sego, for instance, and that part of the course of the Niger, must be lowered more than a third of a degree.

~~D. 11. 1. 1. 11. 11.~~ ~~take place~~ in 1805, but the journal was not published in Pisanis, i. e. from his point of departure in the map constructed to accompany it, & the maps of Africa which have been in use since that period, and in M. Walckenaer's amongst

we find,

p. 7. of the 1st or 4th edition.

Dear Sir

You have excited my curiosity about Hutton's Travels, which I had not heard of until you mentioned them last evening: if you will lend it me for 2 or 3 days I will send it you back at the end of that time, with the 3 remaining volumes I have of yours, and a copy of my Supplementary Memoirs on Africa Geography.

Yours truly
R. B. Oswald

Sunday morning

bundles &c. p. 8.
and a bullock &c.

for and recording the circumstances of every day, without a single omission, so that it is evi-
dently unsuspected his error.

rare of this mistake in Park's journal, several years undiscovered; the very first
- de l'Afrique septentrionale, comprenant l'histoire
d'a ce jour. &c. &c. Didot. Paris. 1821.



*Museum
Museum Walcherenae
Sint Ewangelij d'Loop
87.*

In M. Walckenaer's Recherches sur l'Afrique⁽¹⁾ we find the following remark: "Je remarque dans ce journal une inadvertance qui a échappé à l'auteur et aux éditeurs; il ya (p. 7.) un récit de ce que Mungo Park a fait le 31 avril: le mois d'avril n'a que 30 jours" p. 272. This is mentioned however merely as a matter of curiosity, for it did not occur to M. Walckenaer that the results of Park's calculation of the observations for latitude made subsequently to that period, were all affected by a considerable error, from his having continued to reckon his time one day too late, and, consequently, taking in every instance a wrong declination out of the Nautical Almanac. The important position of Sego, for instance, and that part of the course of the Niger, must be lowered more than a third of a degree. Park's last Mission took place in 1805, but the journal was not published until 1815: the whole route from Pisania, i. e. from his point of departure, is erroneously laid down in the map constructed to accompany it, and it has been copied in all the maps of Africa which have been published in Europe since that period, and in M. Walckenaer's amongst the number.

Referring to Park's Journal we find,

April 28th set out for Pisania &c. p. 7. of the 1st or 4th edition.

" 29th visited Camilla &c.

" 30th Schooner arrived &c.

" 31st purchased apes &c.

May 1st tied and marked the bundles &c. p. 8.

" 2nd purchased more apes and a bullock &c.

" 3rd finished packing &c.

" 4th left Pisania &c.

and thus he continues accounting for and recording the circumstances of every day up to the end of his journey, without a single omission, so that it is evident he never corrected or even suspected his error.

Let us suppose that we are not aware of this mistake in Park's journal, which has thus remained for several years undiscovered; the very first

(1) Recherches Géographiques sur l'intérieur de l'Afrique septentrionale, comprenant l'histoire des voyages entrepris ou exécutés jusqu'à ce jour. &c. &c. Didot. Paris. 1821.

~~any~~ astronomical observation (May 15th p. 22) betrays the existence of a considerable error somewhere or other: He does not give us the date of this observation, but merely notes that at Walters' well (3 hours march north westward of the Neaulico) "Lat: by mer: alt: of the moon $14^{\circ} 38' 46''$ N." Pennell determined this part of the Neaulico, the same which (1) Park crossed in his route home in 1796, to be about $13^{\circ} 12' N.$ but Park's observation of latitude carries it up to $14^{\circ} 28' 46''$ i. e. into Foota Torra. Now this is proved to be an error, before we discover the entry of the 31st of April, from two palpable contradictions and several improbable consequences.

The first contradiction is, that it makes this part of Park's homeward route in 1796 north instead of south of his outward route in the same year; for the Kolor of the latter, which appears to be very nearly on the same meridian as the Neaulico, was determined by Park's own astronomical observations to be in $13^{\circ} 49'$ (2). It is not possible that Park could have imagined that he was travelling 34 miles south of his outward route when he was really almost a degree to its north of it, or that Major Pennell should have overlooked such gross inconsistencies as the data Park furnished him with must have presented if this had been the case; for it requires that Park in returning to Pisania should have recrossed his outward route without knowing it; and that Karfa Taura, the experienced conductor of the Slave caravan, should have been so ignorant of the direct route to the market as to have made a considerable and unnecessary circuit northwards by Foota Torra.

The second contradiction which the admission of Park's latitude of Walters Well subjects his own account to, is that he must have been travelling N. E. from Pisania or direct to the Senegal, when his compass and his own previous knowledge of the route shewed him that he was proceeding S. E. or towards the source of the Niger; for we are to recollect that Park's repeated astronomical observations in his first journey de-

(1) Map of Park's route. Proceedings of the African Association vol. 1. p. 333

(2) "Proceedings" vol. 1. p. 448.

= terminated Pisania to be in $13^{\circ} 35'$ (1)

Embarrassed by these contradictions we turn to p. 7 (of the 1st or 4^o edition of his journal) and find that Park has reckoned on the 31st of April, in-
=serting the circumstances of that day and of every other which followed
it, without the least suspicion of the error he had committed. It is clear
that his first observation, involving the contradictions just submitted,
instead of being made on the morning of the 16th of May (or during the
night of the 15th by astronomical reckoning) was made 24 hours or
one day later, and that he consequently applied a wrong declination.
Now the moon passed the meridian of Paris on the 16th of May at
14 h 45 m; (2) it must therefore have passed the meridian of Park's place
of observation (according to his account of his longitude as determined
the next day by observation) (3) about 15' or 1 hour later; the difference
between the moons declination on the 15th (the day taken by Park)
and the 16th (the day he ought to have taken), at midnight, is
-42' S; the difference between the moons declination at 12 and 18
hours on the 16th is -21'; so that we have to subtract 45' from
Park's result or calculation, which lowers Walters' Well from
 $14^{\circ} 38' 46''$ to $13^{\circ} 43' 46''$, and consequently (reckoning 10 miles
difference of latitude in a S.W. course on his 3 hours march the
next morning to the Neaulico) places the point of passage of that
river in $13^{\circ} 33' 46''$ or between 15 and 16 miles south of Kolor,
instead of 40 miles north of it. We thus verify Park's former ac-
=count and Major Rennell's conclusions within a few miles, in-
=stead of shewing the former to have been contradictory and the
latter absurd. (4)

Reading a little further we find (p. 39) that Park made the latitude of Beufreak
 $13^{\circ} 32' 45''$ by observation, and after two marches in a varied country, since he

(1) "Proceedings" vol. 1, p. 443. (2) *Com. des Temps* 1805. (3) *Journal* 4^e ed. p. 24.

(4) "On working these bearings over again; it appeared that Mr. Park had made a mistake; I mention this, to shew that he has acted fairly, in exposing his whole process; and even his errors." Rennell in the "Proceedings," vol. 1, p. 455.

mentions that he descended into a valley of Shea trees, found himself precisely in⁴ the same latitude within 45", for he determined that of Badoo, where he halted the second day, to be $13^{\circ} 32' 45''$: this of course is highly improbable. We apply the proper declination (that of the 27th instead of the 26th) to the observation at Bee-freek, and it gives $13^{\circ} 42'$ instead of $13^{\circ} 32' 45''$; and we discover that in calculating the observation at Badoo, Park, by mistake, took the right declination,¹¹ i.e. the 29th instead of the 28th, so that his result $13^{\circ} 32'$ holds good, and thus we find that he made between 9 and 10 miles difference of latitude instead of 45" in the two days march.

I will trouble the reader with only one more of the numerous contradictions which ought to have led the constructor of the map to have suspected and looked for some such error as has been now discovered. In the 9th of July, by Park's reckoning, he made the latitude of Boolinboombo $13^{\circ} 11'$ by observation, he marched the next day in a difficult country, "partly over a ridge of rocks which formed the only passage across a chain of hills," for the last "6 miles on a rocky and almost impassable road," and a little before sunset reached Sabooseera, the latitude of which he determined by a meridian altitude of the moon to be $13^{\circ} 50'$: so that in this very difficult and consequently slow days march, he made good a difference of 39 miles in latitude alone. By allowing such absurdities as these to remain unexamined and unexplained, we make Park, one of the most accurate of travellers, guilty of inconsistencies as gross as Governor

¹¹ This mistake of Parks on the right side has escaped the observation of the Editor, who detected one of a similar nature (p. 136.), and by correcting it, as he imagined, introduced an error in Park's calculation from which it had accidentally escaped. According to the *fon: des Temps*, for I have not the opportunity of consulting the Nautical Almanac, the Sun's declination for the 29th of May 1805 was $21^{\circ} 36' 1''$, Park has taken $21^{\circ} 37' 30''$, his longitude required a correction of about 25" only in the Paris declination, so that he ought to have taken $21^{\circ} 36' 30''$. The Declination of the 28th was $21^{\circ} 26' 7''$.

Dalziel, who allowed 108 g. miles for the difference of latitude between Gnywee⁵ and Stormy, whilst he admitted the distance by route to be only 96 miles; (1) or as M. Molliv who travelled 40 and 45 miles a day and made good 90 miles in one direct bearing. (2)

Our first question is how can these contradictions have escaped the Editor, or rather how can he have reconciled them in the construction of the route on the map? but we learn from the preface, that the Editor (a gentleman of superior knowledge and judgment) unfortunately did not undertake that part of the work, but that Major Rennell's notes together with Parks' journal "were placed in the hands of a respectable artist, employed by the publisher to construct the map intended to illustrate the work; at whose request the following statement respecting certain difficulties which have occurred in its construction, is subjoined."

"In compiling the map of Mr. Parks' route in 1805, much difficulty has arisen from the bearings of places not being mentioned in the Journal; and also in consequence of there being occasionally great differences between the latitudes and longitudes of places according to the astronomical observations, and the distances computed according to the journals. Considerable pains have been taken to reconcile these differences; but the general result has been, that it was found necessary in adhering to the astronomical observations, to carry Mr. Parks' former route in 1796 further north, and to place it in a higher latitude than that in which it appears in Major Rennell's map annexed to the former volume of Travels."

The artist, who favors us with no explanatory observations, in short with no other remark than the above, has thought proper to raise Pisania to $14^{\circ} 23'$ N. and Kotor to $14^{\circ} 48'$ N., although Parks' astronomical observations had determined the former to be in $13^{\circ} 35'$ and the latter in $13^{\circ} 49'$. (3) If artists had always been allowed to set astronomical observations at defiance in this manner, Ptolemy's system would never have been reformed, Feyre's and Gascon's discovery (in the 17th century) of an error of 500 leagues in the extent of the Mediterranean would have been disregarded, as entailing endless alterations, and De Lisle would not have taken the trouble to shorten Asia more than 24° , or to have raised Abyssinia 20° towards the north. (4) Perhaps, in spite of Parks' observation near Sego, Timbuctoo may appear in some ~~future~~

(1) Bowditch's Essay on the Geography of N. W. Africa; Paris. 1821. p. 68.

(2) Bowditch's British and French expeditions to Senegal with remarks on civilisation in Africa. Paris. 1821. p. 42. p. 40.

(3) Proceedings. vol. 1. p. 448. 449. (4) Bowditch's Essay on N. W. Africa. p. 53.

future map in the novel and convenient position lately assigned to it, i. e. three days navigation from the Gulph of Guinea. (1)

Pisania and Kolor are not the only places whose latitudes were determined by Parks astronomical observations in 1796 (admitted by Major Rennell to be "perfectly consistent with the other data, i. e. with the time, bearings and computed distances") and to which the Artist has assigned new positions without the least authority, as the following list will shew.

Parks Lat: by observation in 1796.	Lat: assumed in Map of 1815.	Diff:
Pisania..... 13° 35' .. N	14° 23' .. N	48'
Kolor..... 13° 49' .. "	14° 49' .. "	1°
Kooroorani... 13° 53' .. "	14° 50' .. "	1° 3'
Joag..... 14° 25' .. "	15° 26' .. "	1° 1'
Jumbo..... 14° 34' .. "	15° 38' .. "	1° 4'
Kanje..... 14° 10' .. "	15° 15' .. "	1° 5'
Feesurah.... 14° 5' .. "	15° 8' .. "	1° 3'
Jarra..... 15° 5' .. "	16° 9' .. "	1° 4'

D'Anville laid down the French fort St. Joseph or Galam in about 14° 20', (2) Parks two different observations at Joag, nine miles south of it, placed it in 14° 34'; thus agreeing within 14 miles with D'Anville, who must have had the best possible authority, short of an observation, for his position: the artist, however, disregarding both, has raised it to 15° 25'.

The following is a table of the latitudes observed and miscalculated by Park in 1805 (in consequence of his having reckoned throughout on the 21st of April), with the corrections resulting from the substitution of the declinations for the following day in each instance.

(1) "The resident traders at Lagos speak familiarly of Timbuctoo, and assert with confidence that canoes have come from thence to Lagos in three days. This account being confirmed by the Ishantees, I have no reason to doubt."

Robertson's Notes on Africa, p. 292.

(2) See the smaller map in Bowdich's Esay, &c.

ce.	Day of month and page in Park's Journal.	Observations (1)	Park's results.	Lat: corrected.	Diff:
'Well	May 15 th p. 22	Mer. alt: of Moon	14° 38' 46" N	13° 43' 46" N	55'
o K.	" 16 th " 25	" " of Sun	14° 4' 31"	14° 18'	14' 31"
Geo	" 21 st " 33	" " " "	13° 53'	13° 65'	12'
taoba	" 21 st " 35	" " " "	13° 33' 33"	13° 44'	10' 27"
'reek	" 26 th " 38	" " " "	13° 32' 45"	13° 42'	9' 15"
Badoo	" 28 th " 41	" " " "	13° 32'	13° 31'	1'
Mambani	" 31 st " 43	" " " "	13° 22' 40"	13° 30'	7' 20"
Julifunda	June 2 nd " 47	" " " "	13° 33'	13° 41'	8'
Baniserile	" 5 th " 49	" " " "	13° 35'	13° 41' 30"	6' 30"
Fankia	" 14 th " 65	" " " "	13° 22' 30"	13° 25' 30"	3'
Fajemnia	" 18 th " 69	" " " "	13° 35'	13° 36'	1'
Secoba	" 24 th " 76	" " .. Jupiter	13° 27' 26"	13° 26' 26"	1'
Boolincoombo	July 9 th " 91	" " .. Sun	13° 11'	13° 8'	3'
Salooceera	" 10 th " 92	" " .. Moon	13° 50' (2)		
Mariakorro	" 12 th " 96	" " .. Sun	14°	13° 51'	9'
La Woolima R.	" 20 th " 107	" " " "	14° 1'	13° 51' 30"	9' 30"
Rangapi	" 26 th " 115	" " " "	14°	13° 46' 30"	13' 30"
Koolihori	August 5 th " 122	" " " "	13° 41'	13° 25' 30"	15' 30"
hoomikoomi	" 14 th " 136	" " " "	12° 57' ⁺	12° 58'	1'
Kamaboo	Sept. 2 nd " 145	" " " "	12° 48'	12° 25' 40"	12' 20"
Koolikorro	" 13 th " 148	" " " "	12° 52'	12° 29'	23'
Gamina	" 15 th " 149	" " " "	13° 15'	12° 52'	23'
Samee near Sego	" 17 th " 150	" " " "	13° 17'	12° 54' 20"	22' 40"

(1) As Park has not corrected the Declinations for his different Meridians with any nicety, I have not been more scrupulous with regard to a few seconds in the corresponding corrections: perhaps, few of his observations will be found by future travellers to be exact within 30", and errors from 25" to 30" are insensible even in maps on a very large scale.

(2) It is impossible to correct this observation, of which Park gives us no particulars; for the Declination of the Moon on the 10th at 12^h was 23° 55' and on the 11th at the same hour 21° 34'.

future map in the novel and convenient position lately assigned to it, i.e. three days navigation from the Gulph of Guinea. (1)

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Tambico	" 21 st " 33	" " " "	13° 53'	13° 65'	12'
Sootetavba	" 21 st " 35	" " " "	13° 33' 33"	13° 44'	10' 27"
Bee fresh	" 26 th " 38	" " " "	13° 32' 45"	13° 42'	9' 13"
Badoo	" 28 th " 41	" " " "	13° 32'	13° 31'	1'
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The later observations, being made so near the Equinox, are materially changed by the correction, and Sego is so important a point in African Geography that the correction of an error of 23' in its latitude should not be postponed.

The discovery of the error in the Journal has thus enabled us to correct the astronomical observations of the second journey, to do away the apparent contradictions and improbabilities of Parks last account, and to confirm the astronomical observations of his former route; but the three or four observations of longitude offer an inexplicable difficulty. They were determined by the eclipses of Jupiters satellites, and the day they are noted to have been observed in his journal is the same as that which is assigned in the *Sommaire des Temps*, and *France*, in the *Nautical Almanac*: how is this to be explained? The error of a day in the reckoning stands confessed in the Journal; unless it is admitted and calculated on, Parks narration presents impossibilities and the astronomical observations of his former journey are all one degree more or less in error; and if we admit the error thus betrayed by the account and observations and confessed in the journal, Park must have been deceived in the eclipses of the satellites and could not have witnessed them at the time he thought he did. It is a pity that Park did not determine the longitude of his point of departure, Pizania, for if his first observed longitude (two hours march N.E. of the Neaulid) is correct, it must be laid down nearly a degree more to the west than it was concluded to be after his first journey, by Rennell, who, supported by Woodville's map and Parks data, had already placed it some miles more to the west than D'Anville.

M. Walckenaer seems to have made a judicious alteration in the direction of the latter part of Parks route in 1805, i.e. from Bangafsee to Banacor, which has led him to place Sego $1^{\circ} 32'$ instead of $44'$ west of Greenwich, its position in the map constructed for the Journal. It occurred to me that we might learn what Park himself considered the longitude of Sego to be, pretty nearly, from the correction he allowed to his Declination at Samee, but I find he has subtracted about $47''$, reckoning from Greenwich, (the Declination for Paris on the 17th of Sept. 1805 being $2^{\circ} 20' 54''$ and Park having allowed $2^{\circ} 20'$;) a correction equal to a difference of nearly 14° W. in longitude; so that he must merely have rejected the odd seconds without calculating the correction. Travellers cannot be too accurate in such points, since these niceties of calculation enable the Geographer to arrive at very important conclusions in the absence of all other information.

Captain Lyon's observation of the latitude of Mouryook, as might have been expected, confirms that of Hornemann; the former states it to be $25^{\circ} 54'$.

the latter in his journal transmitted to the Association from Tripoli $25^{\circ}54'15''$. It is singular that Major Rennell should have rejected this observation of Hornemann's, whose skill and habits of correctness were well known, adhering to a combination of verbal evidence in preference.

"M^r. Hornemann, in his journal transmitted from Tripoli, states the latitude of Mourzouk, by observation, to be $25^{\circ}54'15''$, a parallel so different from the result of the other authorities, that it becomes necessary to examine those authorities, minutely. The reported observation, differs nearly two degrees from the parallel assigned to it in the Proceedings of the Association printed in 1798. Without attempting to account for so great an (apparent) error, I shall proceed to adduce the authorities for its parallel, as assumed in the "present map" p. 223. By the construction, Zula bears about S. 70. W. from Sort; which, in respect of the difference of latitude, is much the same thing: and hence, Mourzouk ought not to be to the south of $27^{\circ}23'$ or thereabouts" Proceedings. vol. 2. p. 225.

By M. Malckenaers map, it appears that he preferred Major Rennell's conclusion to Hornemann's observation. Although the Patriarch of Geography was unfortunate in his conclusion of the latitude of Mourzouk, it must be allowed that he was very happy in that of the longitude. In his map of 1798 he placed that capital in $15^{\circ}5' E$. in 1802 after receiving Hornemann's journal he altered the position to $15^{\circ}36' E$; Capt^m. Lyons's observation has determined it to be in $15^{\circ}52' E$.

The itineraries collected in Ashantee compelled me to delineate the middle part of the course of the Niger two degrees lower than it appeared in Major Rennell's map, i.e. in the parallel of 14° when passing south of Kapsina. I have taken the pains to construct a small map of the Itineraries collected by Capt^m. Lyons, and the result is, that the course of the Niger, south of Kapsina, descends as low as the parallel of 11° : this I think is likely to be incorrect. ⁽¹⁾

The next question which arises from Capt^m. Lyons's information, so industriously collected and so candidly submitted, is whether Noofee is south or west of Yaworee: Hadji Hamet's report to M^r. Ritchie supports the latter position; ⁽²⁾ Hornemann ⁽³⁾ Ensiedel ⁽⁴⁾, and the Ashantee Itineraries the former.

⁽¹⁾ If Kapsina were laid down according to Capt^m. Lyons's report of its distance from Mourzouk, without correcting it by his own distance to Bornoo, that is in $129.30' N$. the Niger, which he states to flow 10 days south of that capital, would be lowered almost to the 9th parallel, or to the frontiers of Hi. ⁽²⁾ Quart. Review. vol. 23. p. 225-240. ⁽³⁾ Proceedings. vol. 2. p. 200. ⁽⁴⁾ In Sammlung de Cullen. Leips. pt. 3. 433-447.

Mr. Ritchie learned that there was an interior sea or immense lake at Nyffee; Capt^m Lyon heard nothing of it, neither did Hornemann, Park, Hutchison, or myself.

Capt^m Lyon tells us that Bornoo is 40 days journey or about 700 miles S. of Fegzan and that Kapsina is 56 days of 20 miles per diem S.W. & S. from Maaz-zak: this would place the capital of Bornoo in or about $14^{\circ} 10' N.$ and Kapsina in or about $11^{\circ} 15' N.$ and $11^{\circ} 10' E.$; but then the bearing of the route from Bornoo to Kapsina would be S.W. & W. whereas Capt^m Lyon afterwards learns that Kapsina is 16 journeys West from Bornoo. It is necessary, therefore, taking the mean or dividing the difference between the two positions, to lower Bornoo $1\frac{1}{2}$ degree, and to raise Kapsina the same quantity; but even then, under this most favorable construction, the 16 journeys from Bornoo to Kapsina must be of at least 24 miles a day, wherefore I think our various informants were right in agreeing that it was 28 journeys from Kapsina to Bornoo. Taking Major Rennell's position of Timbuctoo, Hadji Hamet's report to Mr Ritchie that it is 28 journeys from Kapsina, would place the latter in about $15^{\circ} 50' N.$ and $9^{\circ} 50' E.$; but he added that Kapsina was 17 journeys from Bornoo, and Mr Ritchie concluded the centre of Bornoo to be in about $16^{\circ} N.$ and $18^{\circ} E.$

It may be as well to submit the different conclusions for the positions of Bornoo, Kapsina, Timbuctoo and Sego.

	Sego	Timbuctoo	Kapsina	Bornoo
Rennell . . .	$14^{\circ} 10' N. \dots 2^{\circ} 32' W.$	$16^{\circ} 30' N. \dots 1^{\circ} 33' E.$	$16^{\circ} 46' N. \dots 11^{\circ} 33' E.$	$19^{\circ} 45' N. \dots 22^{\circ} 14' E.$
Browne . . .				
Walckenaer . .	$13^{\circ} 32' N. \dots 1^{\circ} 32' W.$	$17^{\circ} 38' N. \dots 19' W.$	$15^{\circ} 11' N. \dots 10^{\circ} 54' E.$	
Burckhardt . .				$19^{\circ} 18' N. \dots 15^{\circ} 50' E.$
Ritchie . . .				$16^{\circ} N. \dots 18^{\circ} E.$
Lyon . . .			$12^{\circ} 45' N. \dots 11^{\circ} 10' E.$	$12^{\circ} 45' N. \dots 16^{\circ} E.$
Bowdich . . .	$13^{\circ} 8' N. \dots 1^{\circ} 6' W.$	$15^{\circ} 37' N. \dots 1^{\circ} 10' E.$	$16^{\circ} 20' N. \dots 11^{\circ} E.$	$17^{\circ} 40' N. \dots 19^{\circ} 50' E.$

There is but little doubt that Capt^m Lyon's Ongornoo is Songooroo or Wangara, but it is by no means probable that it is E. of Bornoo; it appears however, that there is a second river flowing through this country.

It seems highly probable, from combining this subsequent information with that collected in Ashantee, that the Sharee is the Milselad of Browne flowing S. instead of N. It will be recollected that the river Sharee was first heard of in Ashantee, and that it was distinctly stated to flow into the

Niger from the north (1); but what becomes of the very large river of Karem, which M. Ritchie says flows S.E., (2) but which according to Capt. Lyon flows N.E. and is called Yaoo? (3)

Having occasion in the course of my botanical studies, preparatory to a second travel in Africa, to go through the Flore d'Awave et Benin of Baron Palisot de Beauvois, I find several geographical notices interwoven with this traveller's observations on the different genera of plants which he collected in that part of Africa, where the French at that time had a settlement. He tells us that he found the *Omphalocarpum procerum*, for instance, in the interior "nearly ten myriamètres, 25 or 30 leagues, from Buono Pozo behind Calabar; the *Stachygyndrum scandens* on a branch of the Formosa called New Town river, 14 or 15 leagues from the sea; that Agathon is the first town of Benin and is situated on a river bearing the same name, which joins the rivers Jabo and Aunis before it falls into the Formosa at about 12 leagues from the mouth; that there are deserts in the kingdom of Swavee just beyond Buono Pozo; and that he penetrated 100 leagues further than any European had been before him (4)

If M. de Beauvois had penetrated 100 leagues further than any Europeans had been before him (their ultimate point being the capital of Benin) he must have reached the 11th parallel of N. Lat: and got more than half way between the coast and the Niger, which we must be allowed

(1) "Mission to Ashantee, p. 204 &c." M. Bowdich avoit eu connoissance de la rivière Shary, et l'avoit de même placée à l'ouest du Bagherem; selon lui, elle coule "du nord au sud, et se jette dans le Quolla ou Niger. Il y a quinze jours de marche, selon les informations données à M. Burckhardt, depuis les limites du Bornou jusqu'au Dahr-Shary. Walckenaer's Recherches p. 149.

(2) Quarterly Review 1820 vol 23. p 225-240.

(3) Lyon's Narrative p. 129. Perhaps I have overlooked it, but I cannot find what Capt. Lyon promises in the following remark: "I shall have occasion, when speaking of the country of the Tibbo, to mention three rivers of note which I am able to trace to some distance at ten days to the north of Wadai."

(4) For the other authorities and statements on Benin, Wawee, Calabar, &c. see Bowdich's Essay, &c p. 73, 74, 75..... Beauvois vol 1, p 7 17, 55 vol 2, p 22 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

to doubt, since so important and extended a journey in this wholly unknown and highly interesting part of the interior, the immediate scene of so much hypothesis, must have produced information and facts which no traveller would have deferred publishing a moment, from the great interest which prevailed at that time throughout Europe respecting African discoveries. The year he published his Flora (which would have become a secondary result had he penetrated 100 leagues in the interior of Benin) was that in which Park proceeded on his second Mission. M. de Beauvois, on the contrary, merely gives a vague promise that he will publish a relation of his voyage; a promise which he never performed although it was made nearly 15 years before his death, which happened in 1819-20. I recollect, however, that Baron Guvier shewed me a MS account of these travels, lent to him by the family after this circumstance, and I much regret that I did not examine it, which I dare say I might have done. I should hope it will be published.

"At nos hinc alii sitientes ilimus Afros".

(1) Je traiterai plus au long, dans la Relation de mon Voyage, de tout ce qui a rapport aux idées fausses que l'on a de l'Afrique Equinoxiale, et au commerce qu'on y fait. Je dévoilerai toutes les erreurs que l'on a mises en avant contre ce pays, les mensonges et les calomnies employées pour faire valoir un système absurde, auquel nous devons la destruction de nos colonies et les massacres qui s'y sont faits." Note on the *Sterculia acuminata* Fiore d'Avare et Benin, vol. 2. p. 43.

Appendix

The flattering remark of the President of the Academie des Inscriptions et des Belles Lettres "tout ce que M. Bowdich ecrivra sur l'interieur de l'Afrique sera toujours un objet d'attention pour tout homme instruit" (Walckenaers Recherches p. 345.) makes me more anxious to correct the three following errors in his observations on my Essay on the Geography of N. W. Africa.

1st I have not delineated the Niger or Quolla as flowing into the Nisselad, but terminated its course in the map with the last distance afforded by the Itinerary i.e. south of Gaudes, merely indicating its presumed junction with the Nisselad by a dotted line. v. Walckenaer. ~~Recherches~~ p. 344.

2 I have as M. Walckenaer states (~~but~~ adding 'en ligne droite' which makes all the difference) written "Fifteen G. miles a day, I am persuaded both from experience and observation, as well as from a variety of evidence, both Moorish and Negro, is quite as much as should be reckoned on in a series of marches;" (Essay. p. 6.) and I have also, as he states, only allowed 12 G. miles in constructing my map: but he will find that I have explained in the map itself that the latter quantity is the horizontal value of a days journey in the more open countries, for at least 1/5 must be lost in the windings of the route, and I entered into further details on this subject in p. 40. of my Remarks on the British and French expeditions to Teembo. v. Walckenaer. ~~Recherches~~ p. 329.

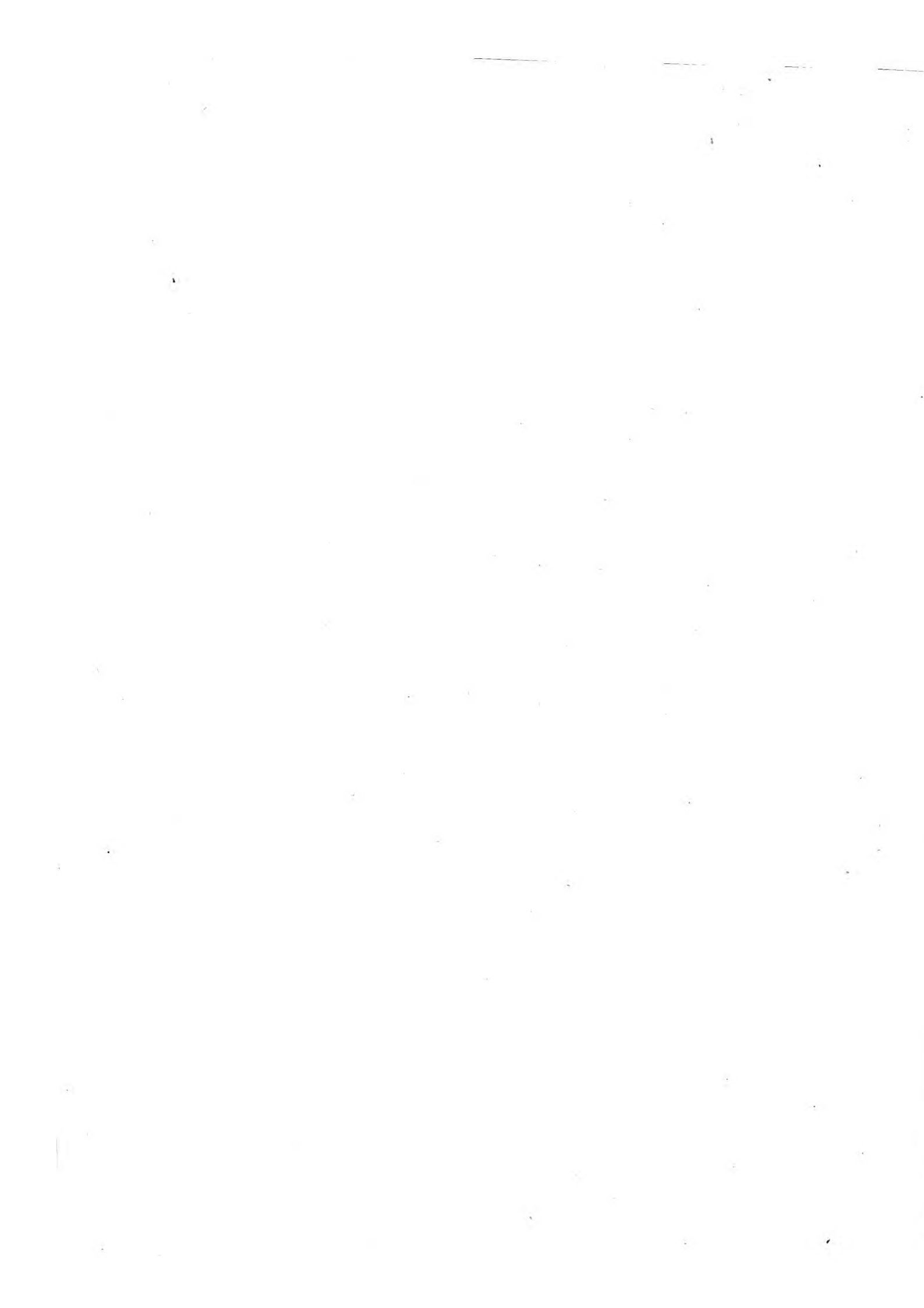
3. M. Walckenaers observation "dans des itineraires rediges sous la forme d'une simple liste de noms, sans aucune indication de temps ni de distances, la supposition qui fait compter le nombre des journees par celui des noms," is not applicable to the Ashantee Itineraries; he will find (referring to the figures on the lines of routes in my large map, to the Essay. p. 28-9 to the Mission to Ashantee, Chapter on Geography, p. 169-173. p. 177-184. p. 191-204. p. 207. p. 211-213 and to his own work p. 132) that the number of days is given in every one of those itineraries which I have ventured to lay down on my map, with the single exception of the first part of the Mecca Itinerary, i. e. as far as the Niger, because so far, as I have particularly explained (v. Essay, p. 26.) each town was stated to be a days journey, more or less long, from the other. v. Walckenaer. ~~Recherches~~ p. 327.

M. Walckenaer continues "Il n'en est pas de même des itineraires dressés pour l'usage des caravanes: non-seulement tous les lieux où l'on passe s'y trouvent nommés, mais ils contiennent en outre le nombre d'heures ou de jours de

"marche entre chaque station; et, comme le sol du désert se ressemble
 "considéré dans une vaste étendue, que l'allure des chameaux est
 "uniforme, il en résulte que la distance des lieux entre eux se trouve
 "en rapport assez exact avec le temps qu'on met à les parcourir.
 "Ici rien n'est vague, rien n'est arbitraire". ~~l.c.~~ p. 260. I was per-
 "fectly inclined to admit this observation, in its full extent, until in
 "the course of the work I met with the following paragraphs.
 "L'itinéraire de Mohammed, fils d'Ali, fils de Foul, qui renferme un très
 "grand nombre de positions, nous fait compter cent huit à cent dix journées de marche
 "entre Tripoli et Timbouctou; et comme nous savons, par l'analyse de l'itinéraire de
 "cheyk Hagg-fabem, qu'il ne faut que 82 journées de marche, par la route directe,
 "pour faire ce trajet, il en résulte que nous devons conclure que l'itinéraire de Moham-
 "med nous trace une route détournée, ou que les distances des journées ne sont pas
 "évaluées comme dans celui de cheyk Hagg-fabem." ~~l.c.~~ p. 302. "En effet, nous voyons
 "que l'itinéraire nous fait compter 34 journées et demie entre Tripoli et l'as-
 "trémité méridionale du territoire de Gadames; mais nous savons d'ailleurs
 "que Gadames n'est qu'à 13 journées de marche de Tripoli, et qu'il ne faut pas
 "ensuite plus de 4 journées de marche pour atteindre l'extrémité méridionale
 "de son territoire. Nous apprenons par-là que les journées de marche, dans le
 "commencement de cet itinéraire, sont de celles qui ne doivent être estimées
 "que la moitié des journées de caravane du désert." p. 303. "Au-delà de
 "Gadames, il n'y a aucune raison pour réduire les distances des journées
 "puisque la caravane, traversant les déserts, ne peut plus être suivie par
 "des hommes à pied, et s'arrange toujours de manière à n'être pas
 "tardée dans sa marche; cependant le nombre de 76 journées, que nos
 "itinéraires indiquent, entre la limite méridionale du territoire de Gadames
 "et Timbouctou, est encore trop considérable pour concorder avec la position
 "que nous avons assignée à cette dernière ville. La route que parcourt l'itiné-
 "raire doit donc faire un détour; et en effet nous voyons Haoufssa de
 "le détail des positions que nous donne notre itinéraire". l.c. p. 304. I think
 "it is here evident, from M. Walckenaers own ingenious observations, which
 "lay the whole of his materials, with all their imperfections, fairly open to
 "the candid criticism of others; that these northern itineraries are more
 "vague than those of the Ashantee Traders.

Finis.





le Kanem de Lyon est le yare p 11



