C. Johnson; Lord Keane; J. W. Malby, Esq.; Ch. P. Serocold, Esq.; Captain J. Stopford, R.N.; Anthony W. Twyford, Esq.; Captain S. Webb; and James Young, Esq., were elected Fellows.

Accessions.—Among the more important donations received since the last meeting, were Plans of Lucknow, by the Hon. East India Company and James Wyld, F.R.G.S.; Fullarton's and Spruner's Atlases; Admiralty Charts; Track Surveys of the River Paraguay, by Captain Page, of the United States Navy; Plan of a portion of the Great Orange River, and Map of Little Namaqualand and Great Bushman Land, by R. Moffat, Esq., F.R.G.S., &c.

The President said: Before we proceed to the ordinary business of the evening, I feel impelled by affection and duty to call attention to the great loss which the scientific world has sustained, and geographers in particular, by the decease of my illustrious friend, Admiral Sir Francis Beaufort. I know it is unusual to allude to deceased individuals except in the anniversary address, and when the occasion for that arrives I will endeavour to do justice to the merits of this great geographer. I now depart from the ordinary custom of the Society that we may pay a special mark of respect to the memory of Admiral Beaufort, the perfect type of an English seaman, a disinterested, generous, noble-hearted Englishman, who devoted his whole energies to the advancement of geographical science, who lost no opportunity of serving his friends, and who, above all, was the strenuous and unceasing advocate for the discovery of traces of the expedition of his old and cherished friend, the illustrious navigator Franklin.

I have next the pleasure to state that Lord Clarendon has communicated to us the expression of his wish that the Society should place before his Lordship their suggestions with reference to the proposed expedition of Dr. Livingstone to ascend the Zambesi and explore the interior of Africa. Having brought that subject under the consideration of the Council, I have the satisfaction to state that my associates unanimously approved of all the suggestions which Dr. Livingstone had proposed to Lord Clarendon. Dr. Livingstone explained his whole plan to the Council, and gave in the names of the gentlemen whom he had fixed upon as the most proper to accompany him. It is no breach of confidence to read the names, because they have been approved. not only by the Council of the Society, but also by the Zambesi Committee of the Royal Society. The first is Commander Norman B. Bedingfeld, R.N., F.R.G.S., who is known to geographers especially for his exploration of the Congo. Dr. John Kirk, M.D., F.R.G.S., is proposed to go as the surgeon and economical botanist of the expedition. Possessing a sound knowledge of botany and natural history, he is also a good animal physiologist, and will be able to inquire into the nature of that remarkable insect the tsetse, which destroys so many animals in South Africa, and possibly to devise some remedy for this scourge. I may add that Dr. Kirk was recommended by Sir W. Hooker and Dr. Hooker and Dr. Belford. As a mining geologist I have recommended Mr. Richard Thornton, of the Government School of Mines; and you all know the importance it will be to Dr. Livingstone to be accompanied by a person who can point out to him the real value of ores and minerals during his progress, and test the qualities of coal in that country.

As it is desirable that the artist should be a person thoroughly competent to delineate effectively the features of the country, the expedition is fortunate in having secured the services of Mr. Thomas Baines, F.B.G.S., who has distinguished himself by numerous drawings exhibited in this room, and who is

well known both by his travels in tropical Australia and in South Africa, and who has shown his competency in plan and chart drawing. Dr. Livingstone will farther take out his brother the Rev. Charles Livingstone, as his secretary. Mr. Livingstone is to take charge of the establishment, which it is proposed to fix for a year upon the confluence of the river Kafue with the Tambesi

I need not tell you that the Council will afford Dr. Livingstone every possible aid as to advice, instruments, and method of observation, so that everything may come before us eventually in a well-digested and graphic form. Lastly, I have to state that the Council has expressed a very decided wish upon one point which they hold to be of the greatest consequence. Considering the well-known unhealthiness of the Zambesi below Tete, the Council urgently recommend to Her Majesty's Government that Dr. Livingstone and his associates be forwarded from the mouth of the river to Tete in a decked steam-vessel of light draught with as much celerity as possible, and that the steam-launch now constructing for the exploration of the upper part of the river by our associate Mr. Macgregor Laird be employed to transport the party from that point upwards only.

The Papers read were -

1. Extracts of Reports from the Niger Expedition. By Dr. WM. B. BAIKIE, R.N., F.R.G.S., and Mr. D. T. MAY, R.N., F.R.G.S.

Communicated by the Right Hon. the Earl of CLARENDON, K.G., F.R.G.S., H.M. Secretary for Foreign Affairs.

Dayspring, off Rábba, 28th Sept. 1857.

My Lord,—As I expect in a very few days to be able to forward letters and despatches to England, through the Yóruba country and Lagos, I shall draw up for your Lordship's information an account of the proceedings of the Niger Expedition up to the present time.

At the date of my last despatch (No. 7, 7th July) we were just on the point of leaving the Brass River, and crossing to the Nun by a creek which I had the day previously caused to be examined. For a vessel of the size and draught of the Dayspring there is at all times sufficient water; but the schooner we had in tow being larger and deeper, she grounded several times, and we had to wait for two successive flood-tides before we could get her off. We spent altogether 28 hours in this gloomy mangrove creek, which is in some places not more than 30 yards wide. During the night we passed there we were nearly literally devoured by the myriads of mosquitoes which swarmed around while we lav aground. I took advantage of the time to examine in our boats some other portions of the network of muddy creeks which, as far as we went, were laid on our chart, and I got a native, who was induced to come on board, to spend the forenoon in giving to the Rev. Mr. Taylor of the Church Missionary Society a few specimens of the Brass or Nímbe dialect, which is, as yet, almost unknown to philologists.

We took our farewell of the sea and commenced our ascent of the Niger proper at daylight on the 10th of July, and proceeded through the delta at rather a slow rate, partly on account of numerous stoppages, but chiefly retarded by having to tow a heavy vessel against a strong current. I communicated with all the larger and with most of the smaller towns and villages in the Delta, endeavouring to establish friendly relations with the chiefs and people; announcing to them the views of Her Majesty's Government, and warning them against any hostile or predatory acts on their part, and was always successful in making friends with them. They invariably promised to behave properly towards white men, and to commence proper trade with them. At some places where Europeans had never previously stopped there was sometimes a little suspicion on the part of the inhabitants, but in such cases my practice was to land with only two or three companions, and to assuage their fears. In one or two places they met us on the shore armed, but this was not with any hostile view, but only as a matter of precaution, to be ready for any emergency. The product of this tract of country, extending along the river for upwards of 100 miles, is palm oil, the supply of which is very abundant, but which might, were the demand for it carried to their own doors, be very greatly augmented.

On July 20th we anchored off the town of Abó, which may be considered as the extreme apex of the delta, and at this populous and important place we delayed for three days, making arrangements with the chiefs and people, who are very much disposed to be friendly: indeed, our only difficulty arose from the extremely grasping character of one of the chiefs, who was unwilling that any other district should benefit from our arrival except his own.

We called at several other large towns in this, which is the Igbo (pronounced Iho) country, and at one, named Onitshá, about 150 miles from the sea, we remained a week to enable the master of the steamer to erect a trading-house, and where we also made our first missionary establishment. This town had never before been visited by Europeans; but we easily secured the confidence of the people, and, on my asking from their king ground for our purposes, it was readily granted. Here also I left three men, who had accompanied me from Sierra Leone as settlers; they being either Igbo or of Igbo descent, and who thus formed the beginning of an immigration of liberated Africans from Sierra Leone into these their native lands. This town, Onitshá, is well placed on rising ground with a dry soil: it is the key also along the river to the extensive Igbo

districts, and is the proper spot for a trading nucleus; on these grounds I recommended it, and it will doubtless be retained as a missionary establishment, though whether as a trading post I cannot say. The principal productions of Igbo are palm-oil and red wood. Cotton is grown for their own use, and might, if due encouragement were offered, be largely produced.

We next entered upon the Igara country, and on the 4th of August reached a large creek that had not been previously examined, and which we descended in our boat as far as time would allow. On the 5th we reached the capital, Iddá, where we found that the attá, or king, who reigned when I was in the Niger in 1854, was lately dead; but we saw his successor, a man of more pleasing manners and appearance than his predecessor, who readily renewed all former engagements with us, and who with all around him behaved in a very friendly way towards us. At Iddá I met a former acquaintance, Ama-aboko, chief at the confluence, who, being in a manner a dependant of Igara, was then attending the election of the new king. As formerly, he was extremely friendly, sent to his eldest son, who was acting in his absence, desiring him to assist us far as he could, and he sent with me one of his own attendants, to tell us the names of towns we might pass, and to introduce us at various places where we might visit. Igara yields a little palm-oil, some ivory, and cotton of good quality; but during the unpopular sway of the late attá, Igára lost many of her best people, who removed to other districts.

On the 10th of August we anchored at the confluence of the Chadda and the Niger, and on my landing at Ghébe, or Igbégbe, I was at once recognised and met with a very warm reception. The authorities at once gave us, on my asking them, ground both for a factory and for a missionary establishment, allowing us to select our own sites. Here most of us possess the confidence of the people so entirely, that I believe Mr. Crowther or myself could induce them to do anything we chose, within the bounds of reason. The inhabitants are much more civilized than any met with near the sea; they are quite devoted to trade, and under due guidance might soon be greatly improved.

I remained in this neighbourhood until the 27th of August, partly to advance, as far as I could, the settlement of traders ashore and to see the missionary establishment fairly started, and partly also to complete the triangulation of the hilly district which is characteristic of this region, and which, under the able conduct of Lieut. Glover, rapidly advanced towards completion. At the confluence we left the schooner George, which had been with some difficulty towed up

the river, and we also left Captain Alex. Grant, the sailing master, who was desirous of superintending his trading post.

On the 27th of August we left the confluence and entered the main stream of the Niger; and as there was plenty of water, we got on without difficulty, visiting all the larger towns, laying down the districts and countries, and, whenever practicable, ascending the hills for surveying purposes. At the large town of Egau (Egga of the charts), which was the farthest point reached by Captain Trotter in 1841, we remained for some days on very friendly terms with the people; this being the commencement of the extensive and important kingdom of Núfi (often Núpi), we were constantly referred to the king Assúmo Záki, who had just returned to his domains after an exile of twelve years, during which this unhappy country had been in a state of anarchy and confusion. The various rivals had been at length reconciled, and the two principal ones, viz. the king and his half-brother Dásabá, were living together. Very shortly afterwards, the news of our being in the river having reached the king, we were met by messengers from himself and his brothers, inviting me to visit him. We found on inquiry that they were residing at a temporary encampment, said to be near the banks of a small tributary stream, which we accordingly sought for, and ascended against a rapid current for about 15 miles to a small village, whither horses were sent for myself and party. A ride of about 14 miles through a fine but mild country brought us to the encampment, which had quite the appearance of a town, only that the huts, being temporary, were entirely constructed of straw, while the population, including women and children, could not be under 60,000; it was a finely chosen spot, although they had been induced to encamp there partly by accident, as the final battle in which their last opponent had been defeated and slain had taken place in this neighbourhood about three months previously. We were received most kindly and hospitably by all, and I spent nearly two days in the place visiting and making friends with all the principal people. The king himself and his half-brother Dásabá, who is a very intelligent person and really the working man, were most kind, and during our stay we were feasted on, to us, the luxuries of milk, butter, and honey. Being, next to the Sultan of Sókoto, the most powerful chief in this part of Central Africa, I did all I could to cement a friendship, and made to all those of importance, or to those who showed civility towards us, such presents as I considered suitable. We next returned to the ship with no farther inconvenience than having to wade breast high after dark along a narrow muddy creek, which by the rise of the waters had become filled,

and intervened between the bank of the river and our road. It is the intention of the king and his friends, as soon as the dry season commences, to return to the town of Rábba and rebuild it, as it has now been a mass of ruins since he was defeated and driven away in 1844 or 1845.

Since we left the king's encampment at Bida we have continued our ascent, and on the 18th we reached Rábba. Here I have since remained to enable us to get our boilers and engines cleaned, some needful repairs completed, and a supply of wood obtained. We have also taken advantage of the time to rerate our chronometers, to fix the town accurately, and to prepare and finish despatches and tracings of our work for sending to England, and I have now on board a messenger kindly sent with us by the king of Núfi and Dásabá to carry our despatches to Hónu, as the two brothers possess considerable influence in the Jóruba country. I believe that with their aid there will be very little difficulty, if any, experienced in opening up a safe road from Lagos through the Jóruba country to Rábba, and establishing a regular postal communication; Rábba being also on the regular caravan route.

When our despatches shall have been forwarded it is my intention to continue the ascent of the river to endeavour to ascertain the navigability of the rocky channel said to exist below Búsa, during November to return to the confluence to meet the steamer then expected from England, by which I hope to receive some fresh chronometers and supplies of stationery, and then in December to return to Rábba for the purpose of making our journey to Sókoto, which is now impracticable from the state of the roads and weather, most of the low country being flooded, and severe tornadoes with thunder and tremendous falls of rain being almost of daily occurrence: another reason which will oblige us to return is to obtain provisions.

Our work hitherto may be summed up thus:—From the mouth of the Brass up to this spot a new and very accurate chart has been laid down, containing numerous corrections on those previously done, especially between the confluence and Rábba. The soundings taken have been very numerous, and we have examined many channels before untried, and our survey of any rocky passages has always been particularly careful. We have also ascertained the existence of six or seven tributary streams previously unknown, have ascended one of them, and hope to be able to examine others.

Our health continues fair; all, from frequent exposure, have had attacks of fever, but not of undue severity, and at this moment we are well. Of the ship's company I cannot say so much, illness

having been more rife among them and more troublesome in its effects, and I regret to say that among them one death has occurred.

We have now been 87 days in the river, and are, as far as the Government party is concerned, as ready for work as the day we left the sea: such points as require alteration I shall mention in a separate despatch.

This morning we felt it chilly, with the thermometer at 76°, though in the afternoon it will probably be close and roasting, with a heat of from 93° to 96° in the shade; two days ago the range extended from 72.5° to 98°, and in the sun ashore we have experienced it as high as 149°.

I have, &c.,

W. B. BAIKIE,

In charge of the Niger Expedition.

The Right Hon, the Earl of Clarendon.

Encampment near Jéba, 29th Oct. 1857.

My Lord,—It is with much regret that I have to transmit to your Lordship information of the loss of the expedition steamer Dayspring, on a sunken rock near this place, on the forenoon of the 7th October. The Dayspring left Rábba on the afternoon of the 6th October, continuing her ascent the following morning, in the course of which she left the flat alluvial country which had long prevailed, and entered on a totally different region, the banks becoming stony, rocks showing in the river, and hills and mountains appearing ahead. About 10 o'clock we reached a place where a huge precipitous rock, some 250 feet high, divided the river into two nearly equal channels. We inquired of a man whom we had shipped as a pilot at Rábba which channel to take, and followed his advice; but on clearing this we found the river again divided into several passages, through the largest of which the water was rushing impetuously at a rate of about six knots. We accordingly anchored, and Lieutenant Glover went in the gig to sound and examine the river.

One channel, in which the current did not exceed five knots, and of a breadth of about sixty yards, was found to be free from rocks from side to side, and to have a depth of three fathoms. This we accordingly determined to try, some natives in a canoe alongside saying also that the passage was clear. In approaching it, however, we were obliged, on account of the direction of the current, to keep close to a rock on our left-hand side, on which, being caught by a

strong eddy, we were first thrown, but without receiving any damage.

On clearing this we entered the passage, where the current caught us on the port bow, driving us towards the opposite side, and making the vessel steer very badly; and scarcely had she commenced to obey the helm, which was hard a-starboard, than the current, now catching us on the quarter, and before we were quite clear, threw us with great violence on a sunken rock, jerking the leadsman overboard.

On our trying to get the vessel off, the after part remained fixed, while the steamer heeled over so much as to give us the idea that she was about to slip broadside off.

After the first excitement passed away, we all began to suffer from fatigue, exposure, and sleeping near the swamp, and we have all had attacks of fever more or less severe,-Lieutenant Glover, Mr. Davis, and myself, being the most sharply seized. My assistant, Mr. Dalton, who had been very ill previously, had a relapse of dysentery, and was very dangerously ill, but now, happily, all are either convalescent or well. Our canvas tent being extremely hot during the forenoon, the thermometer standing in it, when freely suspended, at from 95° to 99°.5 F., we got bamboos and mats from the natives, and constructed a more comfortable residence, about 40 feet long by 25 broad, and 16 feet high. Our encampment is the wonder of the natives, as we have cleared a considerable space of ground, have our tents well removed from each other, and keep the roads and ground clean. Taken altogether, it is a very good site, as, although we have a swamp not very far off, the wind never blows from that direction, and the health of all is improving.

I have sent to the king of Núfi to ask him for a couple of canoes to send a few of our most useless hands to the confluence, and at the same time to hurry up Mr. Laird's other steamer, which will be due in the river very shortly, and until she comes up we must content ourselves here, not having the means of transporting so many persons, and as I am also unwilling to risk their health so far. We have saved enough of damaged goods to enable us to buy provisions from the natives for some time to come; and, though we have neither salt meat, biscuit, sugar, coffee, cocoa, nor wine, and only a very small quantity of tea, flour, rice, salt, and rum, yet we procure daily fowls, yams, pumpkins, corn, and occasionally a goat or a little honey.

We managed to save almost the whole of the Government instruments, including all the chronometers, but most of our stationery is gone. Of our large botanical collection, Mr. Barter saved only a

part, and that damaged; but, by great exertion since, he has again put them into fair condition, and he is hard at work trying to replace his specimens as far as this neighbourhood will allow. I have especially to lament the destruction of a great part of Lieutenant Glover's surveying work, the portfolio containing which, after having been placed in what seemed a secure place on deck, was by the heeling of the ship thrown overboard and totally lost.

I have great satisfaction in being able to express my entire approbation of the conduct of the officers serving under me, both during and since the wreck.

I have, &c.,

WILLIAM B. BAIKIE,
In charge of the Niger Expedition.

The Right Hon. the Earl of Clarendon.

Clarence, Fernando Po, Nov. 24th, 1857.

My LORD,—I have the honour to report to your Lordship my arrival at this place yesterday morning, per Mail S. S. Candace, from Lagos.

In pursuance of Dr. Baikie's instructions to me of the 31st October, 1857—a copy of which I have the honour to enclose—I left the encampment near Jéba, with two native attendants and messenger, about 3 p.m. of the same day, arriving at Fángan, a small town on the right bank of the Niger, situated midway between the encampment and Rábba, about 8 miles' distance from each, where I passed the night. At Fángan a small tributary, the "Osin," falls into the Niger, which I subsequently crossed, when but five hours' walk short of "Ilorin," where it was a river 30 yards broad, rapid, and just fordable for horses: it is not navigable for canoes from this point to the Niger in consequence of fallen trees and obstructing rocks.

On the following morning, Sunday, 1st November, I left Fángan, and walked continuously until past five in the evening, when I reached a town "Kpandáragi," where I rested for the night. The walk extended over 26 miles, during which we passed the three inconsiderable towns of Banyagífa, Koagír, and Gurúfu. Previously to reaching the first, the road had lain through almost continuous swamps, such as are common to the vicinity of the river at this season of high water.

After leaving it the roads improved, and we entered higher and drier country.

Leaving Kpandáragi the following morning (the 2nd instant),

three hours' walk brought me within the boundary of the Yóruba country, and at a very large and most important town, called Saré, when, after an interview with the chief, second in actual, but first in executive authority, whose title is Balogon, or war chief, I was furnished with comfortable quarters, and with what pleased me equally, assurances of their pleasure at my visit, and willingness to forward me on my journey. Saré is a large and important Yóruba town, several miles in circumference, and it was impossible for me either to attempt a measurement or obtain reliable information during the few hours I remained there. The inhabitants are Mohammedan, and up to the time of my visit the town was unvisited and almost unknown to Europeans.

Towards the close of the day I was summoned to a more social interview with the Balogon, at a large piazza full of inferior chiefs, when I enjoyed a very lengthened conversation, affording me an opportunity of publicly explaining the objects and intentions of white men in visiting their country, our arts and manufactures, our numerous useful discoveries, our sentiments upon the slave trade, our social laws and customs, and many other subjects, which were received and understood in a manner and to an extent which surprised me. The chief promised that a horse and a messenger should be both ready for me at an early hour in the morning.

Dr. Baikie could only furnish me with two inconsiderable presents for the chiefs at Ilorin; so that, on quitting Saré the following morning, I had nothing to offer but apologies and explanations, which were better received than I had a right to expect; and the Balogon having requested that a pair of pistols might be brought to him on my return, Consul Campbell at Lagos has undertaken to procure them if possible, and, if unable, to send him some other suitable present.

To-day's travel—the 3rd instant—was about 20 miles, terminating at half-past 5 at the town of "Osin," on the left bank of the tributary of that name previously mentioned, during which I passed two towns, "Akpádo" and "Kpáni," the road throughout lying either through well-wooded ridges or hills, or crossing numerous small streams; the ground in the higher parts strong and bad, with ironstone, granite, or a conglomerate of quartz and mica predominating, and in the lower parts level and sandy.

I left "Osin" before daylight on the morning of the 4th, passed the considerable towns Keyi and Okanshi, and, after with some difficulty crossing the Unyu and the Aza, two branches of a considerable tributary, said to fall into the Niger at Sángan, arrived at Ilorin at noon.

Ilorin, situated on a slope two or three miles south of the conspivol. II. cuous and isolated conical mountain of Sobi, is an independent town, and the stronghold of Mohammedanism in the Yóruba country. At 10 P.M. I was admitted to a private interview with the Balogon,—my attendant interpreter, Asímo Zákí's messenger, he, and myself alone being present, and the piazza kept quite dark, excepting a dull light thrown only on the mat on which I sat. I fully explained my objects, wishes, and intentions, as instructed by Dr. Baikie. My reception was everything I could have wished, and I was to be presented to the king on the next day. The following day was one of vexatious delay to me; the king was too busy to see me; and, until a stranger has seen him, he is a prisoner, not being permitted to go beyond the premises allotted to him.

On the 6th I was received by the king, chiefs, and head men, with much formality. The king himself I never saw: a moving mass of silk and satin on similar cushions, at a hole in the wall, nearer to which than several yards I was not allowed to approach, was nevertheless him. As it had been hinted to me that the presents were paltry, I took this opportunity of explaining the circumstances of our inability to offer more suitable ones. About five months previous to my visit a party of three American missionaries had visited Ilorin, only one of whom saw the king, and no permission could be obtained to proceed beyond into Núfi. The king told me of this visit, and, on asking me if they were friends of mine, I took the opportunity of more fully introducing myself as a messenger from the British Government, sent to assure Africans of our desire to know and befriend them, to supply them with those things which we possess and which they so much covet, of our need of those things which their country so plentifully produces, pointed out our abhorrence of slavery, and to the utmost of my ability dilated upon those matters which I conceived our duty as Englishmen and Christians points out to us, and which are quite in accordance with the wishes of your Lordship and Her Majesty's Government in creating this expedition. The king made me a present of a sheep and several thousand cowries, and, after repeated expressions of satisfaction at my visit, my objects, my explanations, &c., the ceremonious and public interview ended.

I was now at liberty to move about the town, but my anxiety to forward arrangements for my departure prevented me entirely availing myself of it. The population of these large towns in Yóruba is by no means to be estimated from the extent of ground on which they stand; they are invariably walled and ditched, and within, though clusters of compounds or series of dwellings are numerous, much the most considerable space is occupied by isolated ones, situated in plots about as extensive as one of the smaller

metropolitan parks. The estimation I obtained from some of the principal men as to the circumference of Ilorin was between "five days' walk" and "five days' hard riding with a very fast horse." I now sought an early interview with the Balogon, obtained from him the mails, which were left at Ilorin nearly a month previously, and pressed upon him my speedy departure. He assured me of his intention of looking for a horse for me "to-morrow," so that I might start the next day. He strongly impressed upon me his great desire to have a tent or some canvas to make a house for his use on war expeditions, which I have strongly recommended to Dr. Baikie.

About 4 P.M. on Sunday, 8th November, 1857, provided with a tolerable horse and two messengers in addition to my own party, I left Ilorin, having at the last moment, at the request of the Balogon, illustrated the advantages and effects of my five-barrelled revolver, which filled him and the crowd with astonishment and delight, and of course elicited the request that when I came back I would bring one similar for him.

The invariable mode of travelling between Ilorin and Ogbómosho (Ibomasha), my next town, is to leave the former at this hour, reaching a farm or small village just before dark. Here I learnt that my horse could not be permitted to pass without a special messenger from the king authorising it. Whilst hundreds were setting out the next morning on the long day's journey to Ogbómosho, I was thus detained until noon, and by 7 P.M. had not reached my destination, and was compelled to halt in the bush. A ludicrous instance of African hospitality which occurred to me here will more clearly show the kindly feelings of the people of this country than I should be able to explain. After settling ourselves on the roadside under some trees, our voices attracted the attention of a farmer and his family in the vicinity, who, approaching us and discovering who we were, soon offered us such accommodation as the farmhouse a little way off afforded. We accepted, and, after a tedious walk, arrived at it, and were furnished with a mat, and afterwards with a portion of food, by which time I discovered that the ground was still to be our couch and the sky our canopy, as the hut was no larger than necessary for their own accommodation. At 4 A.M. on the morning of the 10th I left this hospitable abode, and, after meeting a fresh horse and messengers sent to me by Mr. Clarke, the resident American missionary, arrived soon after 6 at Ogbómosho.

Accompanied by my messengers, I soon sought an official interview with the chief, was introduced, and repeated my explanations, &c., and after a friendly reception was promised an answer "tomorrow." Mr. Bowen, an American Baptist missionary, who after very many obstacles penetrated to this place and established a mis-

sion, has returned to the United States, and published a work containing a much more detailed account of this place, and the country between it and Abbeokuta, than my hasty journey could possibly afford me the opportunity of doing. On the following day a message reached me from the king that a horse would be ready for me; but on subsequently visiting him to bid him "good bye," I learnt that a horse could not be provided, but that I should have some men to carry me in a hammock.

It affords me great pleasure to mention the kind assistance I experienced at the hands of the Rev. Mr. Clarke, who, in addition to his hospitality to myself, furnished me with a supply of stores, of which Dr. Baikie and party stood in great need, and which I forwarded to them.

It was noon of the 12th when I left the south gate of Ogbómosho, accompanied by carriers, messengers, and suite, and arrived at 3 P.M. at a halting-place, where our party wished to stop for the night, as the next could not be reached before dark. I was by this time growing alarmed at the prospect of missing the mail steamer due at Lagos on the 20th, and would not hear of this delay. I then moved the party on, much against their will, accomplished a good deal of our journey in the cooler part of the day, and halted at dark in the bush for the night. On the morning of the 13th we started again at 5·30, and at 7 crossed the "Obba" river, which was then fordable; and after a toilsome journey, sometimes walking and sometimes being carried, arrived at the north gate of "Awyaw" at noon.

"Awyaw" (Aggo Oja), the capital of Yóruba, ranks, however, in point of size only in the second class, with Ogbómosho and Ijave, &c., and is the least interesting town I passed through. Perceiving that the interval between this and the 20th would not admit of such delays as I had been subjected to. I determined if necessary, to decline the aid and cognizance of chiefs from this point. I speedily had an interview with the chief, who, it appears, is privileged to receive white men, and made the usual explanations to him, coupled, however, with an intimation that, although I much desired such assistance as I had received at other towns, I could not possibly prolong my stay beyond next day morning. This chief was very civil to me, and my story, &c., was duly carried to the king, who sent to tell me that he had looked for a horse for me, but had failed to find one, and that he could not procure men to carry me. There are no resident European missionaries at "Awyaw," but a native convert is usefully engaged there on behalf of the Church Missionary Society.

At 9 A.M. on the 14th instant, having taken leave of the chief to

whom I had been introduced, and by whom I had been provided with a house, &c., I left "Awyaw," he having explained to me that there was no impediment to my doing so on the king's part, since indeed, it was quite customary for white men to come and go as they chose. An hour's walk brought me to a small town, "Ilara," and at half-past one I reached a still smaller one, "Iron." After a farther walk for about two hours I was fortunately met by a horse sent from the Church Missionary Catechists in charge at "Ijave," arrangements which I had made to that effect having succeeded; and by this means I was enabled to reach the Church Missionary premises in that place after five in the evening. This is the station of the Rev. Mr. Mann, of that Society, who, however, was now in Europe: there is here also an American Baptist Mission. My two attendants being much fatigued, I resolved to wait at this place the following day (Sunday, 15th). From "Ijaye" to "Abbeokuta" the journey may be performed in three ordinary days, or, by a new road recently formed, in two days' long journey. I adopted the latter, and provided, by the kindness of Mr. Phillips, with a pony, I set out on the morning of the 16th of November, and reached a halting-place about 9 miles from this point. The nature of the country through which I travelled completely changed: whereas before it had been by tolerable roads, through fine, open, cultivated, or lightly wooded and park-looking country, with views in every direction for miles, I now entered upon a wretched road, extending for many miles through sombre forests, and with a view never extending beyond the trees immediately lining the road, or the grass, 20 feet in height, touching me on each side. After noon we halted on the site of an old town, "Ido," clearly traceable by pottery or vestiges of walls, &c .- one of the numerous examples there are to be seen of the effects of the wars which desolated Yóruba not many years since. At 5 p.m. our day's journey ended by our arriving at a small town called "Ilirgun," which is indeed nothing but a resting-place, with houses of temporary and rude construction for the shelter of travellers, but was once a large and flourishing town. Its re-establishment is however anticipated, aided by the importance attaching to it since the new route has passed through it. I left Ilirgun at an early hour on the following morning (17th November, 1857), prepared for the longer of the two long days' journey, and arrived, after continuous travel, at "Atade," a very small town, about four hours' journey from Abbeokuta. My two attendants, who latterly failed much in their walking, more perhaps in consequence of their being unaccustomed to it, and the roads growing worse, than from actual fatigue (for our intervals of rest were frequent, and sometimes, as at Ilorin, much too long),

now complained very much, and the consequences were that a four hours' journey occupied just six, so that it was 6 P.M. when I arrived at Abbeokuta at the Church Missionary premises, and was most hospitably received by the Rev. Henry Townsend. I had proposed, and, on its being recommended, determined to pursue my journey hence per canoe down the "Ogun" to Lagos (a two days' journey). although there is a land route which occupies but a little more time, and is, of course, more used coming up. Four P.M. of the following day (10th) being selected as a judicious hour for my departure, I had opportunity in the interval of paying a visit to the chief of this considerable place. At 4 P.M. of the 18th I embarked in a canoe at Abbeokuta, it having been distinctly arranged with its proprietor and paddlers that they were to travel all night, and not stop until reaching Lagos. In spite of this, however, three separate times during the night they stopped and made the canoe fast, and it was only by exercising something stronger than eloquence that I could get them to proceed. Indeed, on the third occasion I left them on the shore, and proceeded without them down the river, which had the effect of bringing them in haste after me, and prevented future attempts to delay. After journeying in this way thirty-seven hours, which would have been unpleasant but that the rest it afforded was much relished by all of us, I arrived at Lagos on the morning of the 20th instant, and was kindly received by Mr. Consul Campbell. Four hours afterwards the mail steamship Candace from England arrived in sight, thus showing that my haste had been far from unnecessary.

Thus, accompanied by two native attendants, I have accomplished the journey from Dr. Baikie's encampment on the Niger to the sea at Lagos in twenty days, having travelled over near 300 miles of country, sometimes on foot, sometimes on horseback, opening up the part of that route which has hitherto proved inaccessible to Europeans through the jealousy and caution of the rulers at Ilorin.

From the river to Abbeokuta certainly three-quarters of the whole country through which I passed was under cultivation, corn being the almost invariable article cultivated, which forms the staple, and, with yams, the sole food of the people. The grain was of three kinds—common Indian corn, and the two sorts known to us as "Dawa" and "Gero." Nor was this the only evidence of the industry of this country, as everywhere cotton spinning and weaving are carried on. Yoruba is famous for its cloths. The iron-smelting and pottery works are by no means despicable, and other useful employments are to be witnessed; whilst from town to town for many miles, and particularly to and from "Saré," the entire road presents a continuous file of men, women, and children,

carrying articles of their production for barter or sale. Palm-oil and cotton, of course, find their way to the sea, and will serve to account for the peculiarly brightening prospects recently observable in the trade in the latter article at Abbeokuta and Lagos.

Jan. 11, 1858.] REPORTS FROM THE NIGER EXPEDITION.

Being unprovided with a barometer, I was unable to make observations on the various elevations, but on leaving the river we speedily gained high ground, and continued to do so until reaching Ogbómosho, which I place as the culminating point. From it to Abbeokuta there is a descent. At this point we reach the delta of the Ogun.

I was furnished with three pocket-chronometers, one of which stopped on the day of my departure, and, as I soon discovered, repeated the same whenever I attempted to carry it in my belt; but with the other two, and the various astronomical observations I have made, I hope to produce an amended chart of this part of Yóruba.

Throughout the entire route I have experienced the utmost civility and often kindness from every native. To the Rev. Mr. Townsend, of the Church Missionary Society at Abbeokuta, I am much indebted for his kindness and assistance.

On my arrival at Lagos I ascertained that Mr. Laird's expected second steamer was preparing for her voyage at the time of the departure of the Candace from England, and might in two or three weeks be expected on the coast. In accordance, therefore, with Dr. Baikie's instructions, I left my two attendants in the care of Consul Campbell, to return on the 23rd instant, carrying the despatches for Dr. Baikie, which were received from the Fernando Po mail-bag in the Candace, together with various small supplies for Dr. Baikie, and a few small presents, &c. The mails and a tracing of Lieutenant Glover's charts of the river I duly delivered to Mr. Campbell for transmission to your Lordship's office, and, taking a passage in the Candace, arrived at this place as beforementioned.

I am at present the guest of Governor Lynslager, on whose zealous assistance, coupled with that of Consul Hutchingson, I may safely rely in facilitating the departure at least of the Sunbeam from this place for the river.

Trusting that my manner of carrying out the business intrusted to me by Dr. Baikie, as well as the various opinions I have ventured to express in this despatch, may meet your Lordship's approval,

I have the honour to be, &c.,

DANIEL J. MAY, R.N.

The Right Hon, the Earl of Clarendon.

Extract of Dr. Baikie's Despatch to the Earl of Clarendon.

Dated December 12, 1857.

"I have much pleasure in recording the proceedings of my own party. In a few days I shall expect to see Mr. May on his return from Lagos, after having successfully opened and restored the route from this to the sea. Lieutenant Glover, with another party, has ascended the river from this spot by boat, and having gone some distance beyond that reached by the late Mr. Beecroft, and having passed the so-called 'Iron Gates,' he at length reached a spot, at a Núfi town named Wúru, where, from the very rocky nature of the channel and the extreme force and rapidity of the current, all passage, either by boat or canoe, was impracticable. There he landed on the right bank, in the kingdom of Borgu, and proceeded by land by special invitation to the large town of Wawa, where were waiting messengers from the important town of Busa, to which place he will next direct his steps. I heard from him two days ago, reporting his progress and asking for further supplies, his letter being dated the 7th inst., a day's journey from Wawa; and before his return, which will probably be towards the end of the month, I hope he will have done much towards exploring a rich and little known country, and in which he and his people have been most kindly received."

The PRESIDENT.—The Society will be happy to learn that the Admiralty have at once ordered out the Sunbeam, Mr. M. Laird's new vessel, to proceed to the Niger and relieve the expedition.

Dr. McWilliam, M.D.—I must express my admiration at the perseverance and industry with which Dr. Baikie has so far accomplished his mission. It is very much to be regretted that, after getting above Rábba, and escaping many difficulties, the vessel was lost. It evidently got upon one of those rocks where, about twenty miles farther up, the illustrious traveller Mungo Park lost his life. The former expedition by Dr. Baikie, and this expedition, redound very much to his honour, and I shall augur very favourably of any further effort he may make in the Sunbeam. I know Dr. Baikie well, and I have great confidence in his abilities, skill, and zeal.

The only improvement is the more liberal administration of quinine, which may do much, both as regards the prevention and treatment of the African fever; but the main secret in such an enterprise is, I imagine, to employ native agency as much as possible, to have a vessel with ample room, to avoid crowding Europeans together, and to pass as rapidly as practicable through the delta. In the expedition of Captain Trotter, of which I was principal medical officer, out of 132 blacks 11 only were attacked by fever, and none died. Those attacked had all for some years been in England—a fact tending to show that the immunity from endemic disease in warm countries which is enjoyed by the dark races is, to a certain extent, destroyed by a temporary residence in another climate. Of 108 negroes entered at Sierra Leone not one was attacked.

Dr. Barth, F.R.G.S.—It is an important circumstance that Rábba has always been a great centre of intercourse for the whole commerce of the Niger and the country to the east and west. In the time of the expedition of Captain Clapperton the province of Núpe or Nyffi was in a turbulent state, and the gallant traveller had great difficulty in traversing it in his journey to Sókotu. Othmán Záki, the former governor of that province, was living in retirement in the Birnin Kebbi at the time of my journey, and behaved very friendly towards me. Now that that governor has returned from his exile, and intends to rebuild Rábba, it is to be hoped that Dr. Baikie will find the country in a better state, and that intercourse with the whole region may be now fairly established. It must, however, be borne in mind, that the Director of the Niger Expedition has to deal with two different chiefs, namely, that of Sókotu, and the other, almost equally powerful, who resides in Gando, four days southwest of the former, and to whom the provinces on the Niger especially belong. Even if Dr. Baikie had not lost the Dayspring, he would not have been able to get to Sókotu at the time, because the whole country between the Niger and Sókotu is quite impassable in September and October; so that if he is able to resume his journey now, he will only have lost two months, as he could not have gone on before November. It is certainly unfavourable that he should have lost the whole of his presents, for without presents he will find a difficulty in proceeding into the interior, and those chiefs always want some presents, especially the people composing the court of Sokotu and Wurno: but it is very favourable in this respect, that some presents have been forwarded by the Earl of Clarendon to Alíyu, the present Emeer el Mumeneen, who resides at Wurno, along the northern route, by way of Tripoli and the country of the Tawarek.

CAPTAIN WILLIAM ALLEN, R.N., F.R.G.S.—It is twenty-five years since I was in that part of the Niger alluded to. In the survey which I made of the river I was totally unaided, and it was, no doubt, imperfect; nevertheless, I may say that the succeeding expedition under Captain Trotter was safely guided by it. Subsequent surveys have been made with better means and opportunities, therefore I cannot add any information on the subject; but I am glad to find that the results of the recent ascents of the river have confirmed my original suggestion that the rainy season is the most favourable for navigating the Niger, that is to say, the latter end of June or the first week of July. The river is then beginning to rise; the dangers, especially the rocks, can be seen and avoided; and in the event of a vessel grounding on a sandbank, the swelling flood would soon lift her off. The climate is then more healthy, as the remains of decayed vegetable matter have been dissipated in the dry season. The two first expeditions were delayed by various causes, and could not enter the river until near the time of the periodical inundation. which is the main cause of its unhealthiness. On both occasions our crews were attacked by fevers on passing the delta. In the second season of Lander's Expedition, 1833, we left Rábba at this time, namely, when the river was full and had begun to fall. This was precisely the time, to a day, that Dr. Baikie attempted to pass the rapids above that city, when the rocks were covered, the channel concealed, and the current was running with the greatest rapidity.

Captain Beecroft, in the Ethiope steamer, tried this passage at a similar time, and found the current so strong that, although perhaps going at a greater speed, the vessel made no progress. The reason was, that she was opposed to an inclined plane, up which the paddles had not power to lift her: they only made their revolutions through the water. I fear this rapid will be found to be an impassable barrier.

In the Admiralty chart of Dr. Baikie's explorations, now exhibited to the Society, I observe a river was explored, the mouth of which I passed and laid

down in my survey. It was called the Kudunia by Lander, and appears to come from the mountains to the north-east of Kattam Karafi. It may be one of the streams crossed by that enterprising traveller on his way from Zegzeg to Jacoba, when he was carried back, and obliged to return to the sea at Badagry, by his former route with Captain Clapperton, R.N.

Mr. Gallon, F.R.G.s.—Does Captain Allen corroborate the remark of Dr. Baikie as to the great improvement in the type of the African as you go inland?

Captain Allen.—I cannot say that I found much physical improvement, though, in civilization, the tribes on the coast are far surpassed by those of the interior. I met with two remarkable instances of tact and courtesy: one was the king of the Filalahs at Rábba; the other a judge at the town of Iddah; neither of them had seen white men before. Nevertheless, in other parts inland I found tribes in a very low condition.

The President.—Before I quit the subject of Africa, I beg to call attention to the sketch on the wall, made by Mr. Baines, the artist to the expedition, of the steam launch in course of construction for Dr. Livingstone's expedition up the Zambesi. As I see Captain Bedingfeld present, who is to command the launch, we shall be glad to hear what he thinks about her.

Captain Bedingfeld, f.r.g.s.—I am sorry that I can say very little about the launch at present, for I have not seen her. I am afraid that her length will be a great inconvenience to us. She is eighty feet long and only eight feet beam, and in that picture the house appears rather high for a puff of wind. I believe she is in three pieces, and I hope we shall be able to put the two ends together if we find her too long. However, when we are left to our own resources, I dare say we shall get her up the river in some way or other.

MR. MONTGOMERY MARTIN, F.R.G.S.-With regard to this expedition, or that to the Zambesi River, I venture to observe, that I have visited the Zambesi and all the Portuguese settlements on the eastern coast of Africa. The experience I had of the Portuguese settlements induces me to think it of the highest importance to get the practical co-operation of the Portuguese Government in this most important expedition, which is viewed with deep interest by the Christian and commercial, as well as by the scientific world. It appears to me that nothing should be left undone to secure the efficient and complete exploration of the country by Dr. Livingstone and his small band of brave and devoted companions, who, both on the east and on the west coast, will have to traverse Portuguese territories. It does seem to me advisable that the Council of the Geographical Society should request our Government to ask the King of Portugal, who is known to be an enlightened sovereign, whether one or two scientific gentlemen might not be disposed to accompany this expedition? Dr. Livingstone is himself the best judge whether such a proposal be worthy of consideration, and I venture to think it would be acceptable to this large assembly to hear his observations upon it.

Dr. Livingstone, f.r.g.s.—There may be some difficulty in getting members of different nations to act in concert who do not understand each other's language. We shall find sufficient difficulty with the natives with whom we shall come in contact. The Pasha of Egypt acted upon the principle suggested, to a great extent, and spent about 20,000% in sending a number of men of different nations on an expedition up the Nile to discover the sources of that river. Before they got above the first cataract they, however, got to loggerheads, and the only man who passed the cataract was an Englishman—young Twyford, a Fellow of this Society. If we may take warning by this example, I think it is not advisable to join the members of different nations together in one expedition. There is another thing to be borne in mind. We are Englishmen, and we do not like slaves. All the Portuguese out in that country are in the habit of using slaves. I would not like to have slaves in my party. I like to go and be able to say to the natives—"You see my men—they are

all free men; we have no chains amongst us. We are free men, and want you to give up the slave-trade." Now, although the Government of Portugal is very anxious to get slavery abolished, yet their officials out there may not have the same enlightened views. I have the fullest confidence in the King of Portugal, and that he would do anything in his power to put an end to slavery in all his dominions. Very excellent laws are made, but as soon as they get out there they are entirely inefficient. That is the case in a great many other instances. Take the carrier-system, for instance, in Angola. One law after another has been passed in Portugal putting an end to this system in Angola, but it goes on all the same as ever it did. I think it would be best for the success of the expedition to have it as simple as possible, and as few men in it as possible. If we have a great number of men we shall have a great number of tempers. and we are none of us perfect. A few men can always get on very much better than a large body of men. There are other considerations that induce me to think it would be better to have a limited party. This is a tentative expedition. sent out to get certain information. I came out of that country alone. I stated the impressions that were made upon my mind by what I saw. But before any decided action has taken place I should like to gain fuller information about the country. On that account I propose to take a practical mining geologist, who will be able to give a clear idea of the mineral resources of the country. I want, too, a practical botanist, not one who will run about after a new species of cryptogamia and things that we do not care to know about, but a man who is acquainted with the medicinal properties of plants. Several medicines go from the east of Africa to Bombay, and are thence brought in that roundabout way to England. I want a man who knows the medicines we now use, to see if they are to be found in that country, who understands about different fibrous substances used in commerce, and also the different dve-stuffs. I want this man to give a full account of the resources of the country. Then, if any action is taken, let it be taken on the full report of these scientific men. I think the men we now have will form a very compact body, and I hope we shall all keep our tempers, and come back with some valuable information.

The PRESIDENT.—Dr. Livingstone has very well explained the reasons for not having a mixed expedition, but has omitted to state that the British Government has decided that no person should be attached to the expedition but those with special scientific vocations. If three or more Portuguese gentlemen with their servants were to be added, all talking a separate language, the expedition would be much hampered.

MR. MONTGOMERY MARTIN.—Has the sanction of the Portuguese Government been obtained to the expedition? because we shall have to go through their territory.

The PRESIDENT.—The communications of the Portuguese Government have been of the most friendly nature; and through their minister here, the Count de Lavradio, who has already shown deep sympathy and interest in the cause, they have expressed their earnest desire to assist Dr. Livingstone. I may add, that Dr. Livingstone intended to visit Lisbon, notwithstanding the prevalence of the yellow fever, but that our Government restrained him on account of the risk to his own valuable life; and even now, if the expedition be fitted out in time, Dr. Livingstone would willingly proceed by Lisbon, in order to wait upon the King, and show the perfect amity and good feeling that exists between the two governments in relation to this exploring journey.