it receives the River Loomi (of Rebmann), and at its west end sends out a river which, after joining the Jagga river, flows south through the plain lying between the Ugono and Anuisha ranges to the river of Pangani. Between the Kilimanjaro and Anusha ranges is a small watershed, which sends the rivers of Western Madjami to the west.

"Mr. Rebmann's map and description, as given in the first volume of the 'Missionary Intelligencer,' give a very fair idea of the country, and, considering he had no instruments, his map is very accurate."

2. Ascent of the Ogun, or Abbeokuta River. By Captain RICHARD BURTON, F.R.G.S., H. M. Consul at Fernando Po, with Captain Bedingfield, R.N., F.R.G.S., and Dr. Eales, R.N.

CAPTAIN BURTON'S characteristic letter will be found printed at length at p. 64. It is therefore unnecessary to do more here than shortly allude to it. He visited Abbeokuta; and his remarks show that, while impressed with the cotton-producing powers of the soil, he takes a less favourable view than is usual, of the civilized progress to which the inhabitants have actually attained. He points out that the new colony of Lagos is deficient in a sanatorium, which should be sought in the mountainous country of the Cameroons. A minute survey of the River Ogun, by himself and Captain Bedingfield, accompanies the letter.

3. Journal of the Proceedings of H. M. S. 'Bloodhound' up the River Volta, West Coast of Africa, under Commander Dolben, B.N., F.B.G.S.

The author, conveying his Excellency the Governor of Cape Coast Castle, steamed to the mouth of the Volta, a river near Lagos, with a view of ascending it,—a feat that had never before been accomplished by white men. A rapid survey of the bar proved it was not that impassable barrier it had always been reputed, and that its features had become exceedingly different from those described in the sailing directory. An expedition of four well-armed boats, manned by thirty-nine men, then proceeded to enter the river. They crossed the bar without difficulty on October 28th, 1861, in 11 feet water. The Bloodhound herself could have been taken across it.

Partly sailing and partly rowing, the expedition ascended the river for 120 miles without difficulty or molestation, when their voyage was brought to an abrupt close by rapids. Though impracticable to ship's boats, the rapids are not absolutely impassable; for the small strong native canoes can be forced through them to

The appearance of the locality seems to me to confirm this tradition; and, although my want of geological knowledge does not enable me to form any accurate opinion, I should consider that the whole country to the northeast of the lake of Tortoum bears evident traces of volcanic disturbances. The walls of two churches, the one at Ishkirt, the other at Vank (near the lake of Tortoum), are cracked in the manner I should be inclined to attribute to the action of an earthquake; and I would mention a remarkable rift known in the country by the name of the Dunya Buzurgu (Greatness of the World): this rift splits the mountain from top to bottom, and is about fifteen feet broad at the entrance. It took me from twenty minutes to half an hour to ride through it. The strata on the opposite sides correspond; and, though a small stream flows through it, I should think, from its depth, the chasm can hardly have been formed by the action of water.

After careful inquiry on the spot I was unable to ascertain that shocks have, within memory, been felt in the valley of Tortoum, or on the districts to the north-east; and I am inclined to believe that the slight shocks which I have above mentioned as a frequent occurrence are (except as they may form part of a wider system) confined to the town and plain of Erzerum; and I am disposed to think are scarcely felt in that part of the plain which lies to the north of the branch of the Euphrates, which divides it into two portions.

I have, however, ascertained that within the last two years shocks, but apparently slighter in character than those experienced in this neighbourhood, have been felt at many points in the area, which would be bounded by lines drawn between Erzerum, Tiflis, Van, and Bayazid; but I am unable to collect sufficient information to connect the dates or directions of such shocks with the dates or directions of those experienced here.

In conclusion, I may state that many buildings of solid construction have, for instance, at Van and its neighbourhood (about 200 years ago), at Bayazid, about sixty or seventy (?) years since, been destroyed, or have severely suffered by earthquakes; although the shocks experienced of late appear, in this part of Turkey, to have been most severe in this immediate vicinity.*

3. Letter from Capt. Richard Burton, f.r.g.s., H.M. Consul to Fernando Po, to Dr. Norton Shaw.

ENGLOSED is a compass-sketch of the Ogun or Abeokuta river, which has not yet been regularly surveyed.

Captain Bedingfield, Dr. Eales of the Prometheus, and I left Lagos on the

29th October, in the first and second gigs, manned by Krumen.

Our line was across the large lagoon called in maps the Cradoo Waters: the word should be written Koradu, and the name is derived from a well-known market-town opposite Lagos. After two hours' rowing we entered the Agboi Creek, a short cut running nearly northwards. You will find it roughly laid down in Lieut. Glover's map, whereas the Ogun river sweeps round to the east.

On our return we came out by the mouth of the Ogun, which was nearly choked with grass. These rivers have no influents in their lower courses, and the soppy, muddy nature of their deltas, combined with want of waterfall, makes them shrink in volume as they near the sea.

After three hours' paddling up the fetid Agbai, and encountering a sharp tornado on the way, we entered the main river, a goodly stream, about 100

^{*} Monsieur Abich, a distinguished Russian Seisologist, has published an account of the earthquake at Erzerum, of June 1859, and the earthquake at Schamake of the same period.

yards broad, belted on both sides with an immense growth of forest and little affected by the tide. After sunset we neared the village Igáon, which, in the dry season, is the terminus of the boat traffic: a path leads from it to Abeokuta, the main road being on the other side, viz. the west of the Ogun river.

The next day took us to a miserable mass of huts on the left bank, Mabban

-a fine specimen of maritime Africa-all mud, miasma, and mosquitos.

Our third night was spent at Takpana, a large hamlet surrounded by well-cultivated fields; maize, manioc, and sweet potatoes. The aspect of the country had improved; the walls of dense vegetation upon the banks had yielded to the Guinea-grass, and the stream had become shallow, and showed sandbanks and boulders. My companion compared it to the upper part of the Zambezi river.

At 11 A.M., on the 1st November, we landed at Agbarneya, the southern

"port" of Abeokuta, distant about 8 miles from Ake, our destination.

The river is navigable for boats as far as Aro, some 6 miles higher up; above that point a ridge of rocks crosses the bed and forms an impassable rapid. Small cances can thread it for a short distance in the upper waters; but the general style of ferry is a large calabash, which the traveller takes to his bosom. At Agbarneya we were met by Messrs. Wilcoxon and Roper, of the Church Missionary Society, who obligingly escorted us up to the town of Ake, from which the alake or chief derives his title, and we found quarters in

the hospitable home of Dr. Harrison.

Our stay at Abeokuta lasted a week, from the 1st to the 8th November. It was consumed in "palaver" touching the war with Ibadan, kidnapping, slaving, and human sacrifice. A revolting case of sacrifice had just occurred, and hardly had we returned to Lagos than we were informed of another. The Egbas, or people of Abeokuta, are one of the weak semi-monarchical African tribes; "every man," as their proverb says, "is king in his own house." The chiefs are influential and refractory as the sheiks of a Bedouin tribe; and the alake, though aspiring to regal title, has not half the power nor a quarter of the state of the pettiest Indian rajah. Abeokuta has been so often described that I shall say little about it. The population has apparently been underestimated by travellers and limited to 100,000; I should prefer 150,000. The extreme circumference of the walls is about 27 miles. Most of the interior, however, is granite knob and field; and in point of uncleanness it beats anything I ever saw. The frontispiece to 'Sunrise within the Tropics' should be called "what Abeokuta ought to be." Like the little book itself, it is all couleur de rose—Africa, with an Italian tint.

There is no mistake, however, about cotton-growing in these regions. It can be carried out all over Yoruba; a kingdom once extending from the Volta river to the Niger, and including Benin and Dahomy: but, to give it due extension, wars must cease and treaties must be made with the several chiefs. I would here correct a mistake, universally made by those who have written upon the subject. The land is not, as stated by Mr. Campbell and others, common property, nor will the people allow strangers to take it. Litigation upon the subject is quite as general as in England; and if, as Sir Culling Eardley proposes, free negroes and mulattos were sent here from America, there would follow the agrarian wars and troubles of New Zealand. Even in the towns a stranger cannot obtain building-ground, except it be granted with the understanding that it is not alienated in perpetuity, but shall revert, when no longer

in use, to the original proprietor.

If you want a colony in West Africa, send it to me, near the Cameroons. At some future time I will (D. V.) enter fully into the subject. Suffice it to say for the present that Lagos requires a sanatorium—the nearest now being Teneriffe and Ascension; and the Oil rivers want a key, after losing Fernando Po. At Abeokuta the cotton is grown in the farms. I was shown the green seed or upland (short staple), and the black seed or long staple. There is,

moreover, a very valuable kind, called "akashe," soft as silk. Eight seeds are sold for a penny. Before the war, the export was doubling every year; since then it has declined. The Cotton Association of Manchester exported 20,000 bales in 1839-60, and received only 3447. With the return of peace it will revive. The wars are conducted in the usual African style. Seventeen thousand men meet, blaze away with "long Danes" from the hip all the day, retire and advance, as if by mutual consent, and separate with the loss of half-a-dozen killed and wounded: and this stuff they call fighting! It is serious only to the allies, who, being weaker than those who assist them, are sold off by way of commissariat. The Egbas of Abeokuta are nominally fighting to defend their friends the Ijáyes against a common foe, the Ibadans. It is generally asserted that the unhappy Ijáyes have at this time lost 20,000 of their number by famine and the slave-market. The real casus belli lies deep; the Abeokutans are determined to monopolize transit-dues by keeping the northern people from the coast. Every African tribe knows that it cannot prosper without seaboard, and then the war began.

We were informed that the King of Dahomy was busy sacrificing before beginning his annual slave-hunt. It is the practice of this amiable monarch, as of his predecessors, to muster his forces, arm, drill, train them, and march them round the capital till the spirit moves him to rush in a particular direction

and drive and harry the land.

Concerning Dahomy, however, I must warn you that there is a vast amount of fabling, which originates with certain slave-dealers, who think to alarm strangers by spreading abroad all manner of horrible tales. To this category belongs the report that his Majesty sadly wants to catch an English officer, to be used as a stirrup when mounting his charger. The Amazons may be reduced from 6000 to 2000. Messrs. Duncan and Forbes were, I believe, imposed upon by seeing the warlike dames marching out of one gate and in to another. A similar story is told concerning commissariat bullocks in the good old times of India. I have no doubt that the Amazons, like the tender begums of Oude and Hyderabad, are mighty contemptible troops; and I should like to have a chance of seeing them tackled by an equal number of stout English charwomen, armed with the British broomstick. After taking leave of the alake, we left Abeokuta on the 8th November, and on the 9th I found myself once more under the comfortable roof of my excellent friend the Acting Governor of Lagos, Mr. McCoskry. The trip has led me to doubt that sunrise has yet taken place within the tropics, though not to question that it can take

On the 21st ult. I left Lagos in H. M. S. Bloodhound, Lieut.-Commander Mackworth Dolben, which Captain Bedingfield kindly detached for the purpose of visiting the Oil rivers. We entered the Nun river on the 24th November, passed through the Akassa Creek, whose waters saw for the first time a manof-war; visited Brass and Fish towns, and we are now proposing to sound the

bar of St. Nicholas river.

You will probably hear from me by the next mail, unless I happen to be on the top of Cameron's Mountain.

4. A Missionary Journey up the Cavalha River, and the Report of a large River flowing near the Source of the former. By the Rev. C. C. HOFFMAN.

Communicated by Mr. John Marshall of Cape Palmas, West Africa.

At your request I furnish you, with pleasure, with a few particulars of a missionary tour I made to the interior last July. On the 9th of July we left Cavalla, the station of Bishop Payne, and reached the Cavalha river after a