

and Mtarika's villages. The Amakali Yao, on the Luchulingo, have Chiwagulu and Unyango for their principal seats. And lastly, there are the Yao of Mwembe, whose chief is Mataka. The predatory tribe of the Gwangwara are said to live about ten days' journey from Chitesi's.

The great chiefs of the country are Chitesi and Makanjila on the lake; Mponda, on the Shire; and Mataka, near the Lujende. Each of these commands 6000 men. Next to them rank Mtarika and Kandulu on the Lujende, the chiefs of Chiwagulu and Unyango to the west of the Luchulingo, and Masenje on the lake, with 4000 men each. Inferior chiefs of some note are Mponda, Chipogola, and Kanyinda on the Rovuma; Nyambi in the south; and Chiwanle near the lake, not far from Makanjila's.

The Kong Mountains. By Captain R. F. BURTON.

(Read at the Evening Meeting, June 26th, 1882.)

THIS range, which has almost disappeared from the maps, may have taken its name either from the town of Kong on the southern versant; or it may be a contraction of "Kongkadu," the mountain-land described by Mungo Park. MM. Zweifel and Moustier, who did *not* reach the Niger sources in 1879, explain "Kong" as the Kissi name of the line which trends from north-west to south-east, and which divides Koronko-land from Kono-land. When nearing their objective they sighted the Kong apex, Mount Daro. Older travellers make it a latitudinal chain running nearly east and west, with its centre about the meridian of Cape Coast Castle; and extending 500 to 600 miles on a parallel of N. lat. 10°. Westward it bends north behind Cape Palmas, and, like the ghauts of Hindostan, it follows the line of seaboard. About the parallel of Sierra Leone the feature splits into a network of ranges, curves and zigzags, which show no general trend. The eastern faces here shed to the Niger; the western to the various streams between the Rokel-Seli, the Gambia, and the Senegal; and the last northern counterforts sink into the Sahara Desert. The western versant supplies the gold of Senegambia; the southern that of Ashanti and Wasá. The superficial dust is washed down by rains, floods and rivers; and the dykes and veins of quartz, mostly running north and south, are apparently connected with those of the main range.

That such a chain must exist is proved by the conduct of the Gold Coast streams. The Ancobra, for instance, which often rises and falls from 20 to 40 feet in twenty-four hours, suggests that its sources spring from an elevated plane at no great distance from the sea. The lands south of the Kong Mountains are grassy and hilly with extensive plains. This is known through the Donko slaves, common on the

coast. Many of them come from about Salagha, the newly opened mart upon the Upper Volta; they declare that the land breeds elephants and ostriches, cattle and camels, horses and asses. Moreover, it is visited by the northern peoples who cross the Sahará.

Captain Clapperton, in his second journey, setting out from Badagree for Busa (Boussa), crossed a hill-range which would correspond with the Kong. It is described as about 80 miles broad, and said to extend from behind Ashanti to Benin. The traveller, who estimated the culminating point not to exceed 2500 feet, found the rugged passes hemmed in by denticulated walls and tors of granite, 600 to 700 feet high and sometimes overhanging the path. The valleys varied in breadth from a hundred yards to half a mile. A comparatively large population occupied the mountain recesses, where they planted fine crops of yams, millet, and cotton. The strangers were made welcome at every settlement. Ascending hill after hill they came to Chaki, a large town on the very summit of the ridge. The Caboceer had a house and a stock of provisions ready for his guests; put many questions, and earnestly pressed them to rest for two or three days. When the whole chain was crossed they fell into the plains of Yarriba (Yoruba).

The next eye-witness is Mr. John Duncan, who visited Dahomey in 1845. King Gezo allowed him a guard of a hundred men, in order to explore with safety the Mahi or Kong Mountains. His son and successor was not so generous; he systematically and churlishly refused all travellers, myself included, permission to pass northwards of his capital. The life-guardsmen found the chain, which is distant more than a hundred miles from Agbóme, differing from his expectations in character, appearance, and even position. The grand imposing line looked from afar like colossal piles of ruins: a nearer view showed immense blocks, some of them 200 feet long, egg-shaped, and lying upon their sides. Nearly all the settlements had chosen the summits, doubtless for defence. Mr. Duncan crossed the whole breadth of these Kong Mountains, and pushed 100 miles beyond them over a level land which must shed to the Niger.

These descriptions denote a range of grey granite, the rock which forms the ground-floor of the Sierra Leone Peninsula and the Gold Coast, possibly varied by syenites and porphyries. It would probably contain, like the sea-subtending mountains of Midian, large veins of eminently metalliferous quartz, outcropping from the surface, and forming pear-shaped extensions of the reefs below. From the coast-line the land gradually up-slopes towards the spurs of the great dividing ridge; and thus we may fairly expect that, the further north we go, the richer will become the diggings.

The Kong Mountains are apparently cut through by the Niger south of Iddah, where the true coast begins. Travellers describe the features almost in the words of Clapperton and Duncan; the towering masses of

granite which contrast so strongly with the southern swamps; upstanding outcrops resembling cathedrals and castellations in ruins; boulders of enormous dimensions; pyramids a thousand feet high, and solitary cones which rise like giant ninepins. We know too little of the lands lying south-east of the confluence to determine the sequence of the chain, whose counterforts may give rise to the "Oil Rivers." It is not connected with the Peak of Camarones, round which Mr. Comber of the Baptist Mission travelled, and which he determined to be an isolated block. Further south the ghauts of Western Africa reappear in the Serra do Crystal, and fringe the mighty triangle below the equator. They are suspected to be auriferous in places. An American merchant on the Gaboon river, Captain Lawlin, carried home, in 1843-4, a quantity of granular gold brought to him by the country traders. He returned to his station, prepared to work the metals of the interior, but the people took the alarm, and he failed to find the spot.

Cameron and I, prevented by the late season of our landing from attempting the interesting exploration, were careful to make all manner of inquiries concerning the best *point de départ*; and, if fate prevent our attempting it, we shall be happy to see some more favoured traveller succeed. The easiest way would be to march upon Crockerville, two days by the Ancobra river and three by land. Thence bush-paths, which would require widening for hammocks, lead north through Wásá. There are many villages on the way; and, in places, provisions can be procured; the people are peaceful, and willing to show or to make the path. I consulted at Axim a native guide, who knew the Kong village but not the Kong Mountains. He made the distance six marches to Safwi, where the grass lands begin; and here he ascended a hillock, seeing nothing but prairies to the north. Eight more stages—a total of fourteen—led him to Gyáman, where he found horses and horsemen. He also knew by hearsay the western route viâ Apollonian Béin.

M. P. M. Lessar's Journey from Askabad to Sarakhs.

IN an earlier number of the 'Proceedings' (vol. iv. No. 4) some account was given of the new Russo-Persian frontier, which included a brief notice of a paper which M. Lessar had read to the Geographical Society of St. Petersburg on his survey operations for the proposed extension of the Trans-Caspian railroad. The last number of the *Isvestija* of the Russian Geographical Society contains M. Lessar's paper *in extenso*, and we are enabled to lay it before our readers:—*

In the middle of September 1881 the Trans-Caspian military railroad was completed from Mikhailof Bay to Kizil-arvat, and although no immediate extension of the line was contemplated, it was nevertheless

* For map consult 'Proceedings B.G.S.,' New Series, vol. iii. p. 576.