

from caves in very similar rock, and which they consider to be of great fattening value for their live-stock, the presumption at present is undoubtedly to the effect that the Elgon caves were excavated by man for a similar object.

Anyone who realises the size of East Africa and the difficulty and cost of exploration work will readily understand that the full solution of this and many other kindred questions may have to wait until the country is in a position to bear the cost of a properly equipped geological survey.

A great deal can, however, be done by the accumulation of data by officers resident in the districts, and by planters and farmers who reside for years in one area, and attain a more detailed knowledge of a particular locality than it is generally possible for a district officer to obtain. I desire to express a grateful acknowledgment of the data supplied by Messrs. Dobbs, Deacon, and Knight-Bruce.

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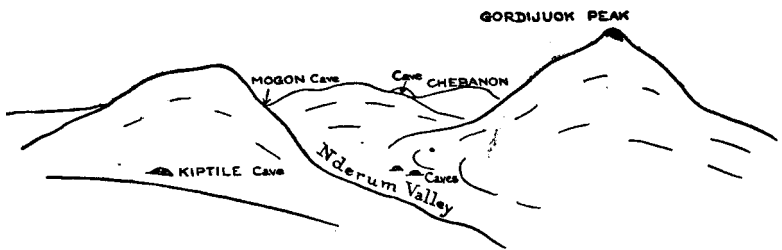
## DESCRIPTION OF CAVES ON NANDI ESCARPMENT

BY P. L. DEACON

The largest of the caves called Kiptile is situated a short distance from the top of the escarpment beneath the hill on which is a beacon. This hill is the next one to the west of the Gordi Juok, which is the name of a large and prominent rock, easily visible from Kisumu or the Uganda Railway. This cave is situated on a ledge some two or three hundred feet from the summit of the escarpment, and there are huts near by. It must be some 2000 feet or more above the level of the lake. The cave is about 20 yards long and 10 broad, and has a curved roof over 7 feet high in the middle. It is hollowed out from beneath a gigantic boulder or possibly in the middle of the boulder. The boulder gives the impression of having been eaten away to form the curve. The floor is solid stone, and is probably part of the same boulder. It is covered with earth to a depth of a foot. Flakes<sup>1</sup> of rock

<sup>1</sup> These turn out to be of a pink granite.

chipped off the roof are sent. They are coated with soot, for herdsmen with their cattle still make use of the cave and build fires there. The cave is perfectly straight, and does not bend round. Nothing of interest was found by digging in the floor of the cave. The formation of the cave is somewhat different from any of the others about to be described. The other caverns are apparently originally formed by the falling together of two or more large boulders which have come to rest, leaving a space beneath. This space forms a cave, and has been apparently hollowed out gradually by fresh-water springs which still exist in some caves. The large cave above described, however, is formed by a single boulder, and is not the result



Outline of Nandi Escarpment showing Position of Caves.

of other boulders falling together. From the ledge on which this cave is situated a magnificent view is obtained of the whole of the country bordering on the Kavirondo gulf, as far as Uyoma.

Ascending to the top of the escarpment and skirting the beacon hill, one is guided down the valley of Nderum, on the further side of which are two of the most interesting caves of all. Climbing a short steep rise and cutting your way through bush, you approach two large boulders closely adjacent to each other. This place is called Kakamaketa, the place of hyenas: leopards and jackals are said to live here. It is an eerie place, and the entrance to each cave is exceedingly unattractive. Nandi natives do not use these caverns. You can only enter on hands and knees, but after entering you find you can stand up. The first cavity is formed by a large

boulder which is held up and supported by several smaller boulders, something after this position :



You go round the boulder by a curved passage and find a centre room under the boulder with a stream running through it. This is where a herd of cattle was extracted by the troops during the Nandi expedition, but the herdsmen escaped. There are three or four shafts by which an exit is possible. Emerging from this cave, you approach the other. The entrance to this is even more uninviting, being a very small hole through which it is just possible to squeeze. As it is also the reputed home of leopards and jackals, hesitation is natural. However, a Nandi moran crawls in first, and you hand him the lamp and follow. You meet nothing worse than a few bats, which brush past your face, startled by the lamp. After crawling a few yards, you find a small chamber on your right in which you can stand up. There are other open spaces inside, and the whole thing resembles an underground dungeon or oubliette. Passing along, you see light ahead, and emerge from the other side of the boulder.

At the top of the valley in the hill called Magon, behind Arap Kossabey's camp, is another small cave. This, as in the case of all the caverns except the large one, is difficult of approach. It is a long, narrow passage under a big overhanging rock, and can only be entered on hands and knees. It is about 15 yards long, and is formed apparently by two large boulders having fallen together.

There is another typical cavern at the back of Chebanon hill. This does not face the escarpment, but is situated in a valley separated from it by a hill. It is exceedingly difficult of approach, and is, like the others, formed by two large boulders having come together, and leaving a cavity beneath. The cavern inside is curved. You can proceed for about 20 yards, and in the inmost recesses there is a running stream. The

floor is solid rock covered with soil a foot deep thickly mixed with cattle manure. This is a cave in which some Nandi took refuge during the expedition and lived for a month with their cattle. They placed a barricade of small boulders at the entrance, and these can still be seen lying where they were when pulled aside. It is said that the Masai levies, who accompanied the forces, advanced behind a wall of shields. The roof and side of the cave, as in all these caves, is smooth and hard, and it was impossible to obtain a specimen of the stone, and digging in the soil produced no results. In the neighbouring hills many small cavities were observed under overhanging rocks, in many cases with small streams running through them.

In general, to the lay mind, these caverns appear to have been caused by a severe earthquake powerful enough to shake together the huge granite boulders, leaving open spaces beneath them. Many of them have been increased by the water action due to streams. The whole country-side is full of these boulders, and presents a rugged appearance as if on the morrow of some huge upheaval.

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#### NOTES ON SALT CAVES IN LUMBWA DISTRICT

BY A. KNIGHT-BRUCE

There are, it is believed, some nine caves of considerable size in the above district, and their names are as follows :

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|---------------|----------------|-------------|
| 1. Gitoi.     | 4. Kibarabara. | 7. Sausit.  |
| 2. Kibrisin.  | 5. Kiptoi.     | 8. Riptoit. |
| 3. Kibipiten. | 6. Choma.      | 9. Bagau.   |

The approximate altitude of the principal caves above sea-level is as follows :

Gitoi, 6000 ft.	Riptoit, 6900 ft.
Kibipiten, 6500 ft.	Sausit, 6100 ft.

They are used at the present day by the Lumbwa natives, who dig a saline earth in them which they remove in baskets and feed to their cattle and sheep outside the caves.