THE MACLEOD FALLS* ON THE MAO KABI, FRENCH EQUATORIAL AFRICA.

By P. A. TALBOT, B.A., F.R.A.S., F.L.S., F.Z.S., etc.

On our arrival at Lere, in French Ubangi, we learned that no European had as yet succeeded in discovering the falls of the Mao Kabi, which are mentioned in Commandant Lenfant's book, 'Le grande route du Tchad.' Monsieur Bertaut, the Resident of the district, was determined to find them before his return to France, and on learning our wish most kindly agreed to our joining in the search.

On October 25, therefore, Miss Olive MacLeod, my wife, and myself set out for Fuli, where we were joined next day by our kind escort, who was unable to start before owing to stress of work.

We had heard much of the difficulties and dangers of the march, of the depth of the many rivers to be passed, and the strength of their currents; but save for that of the Mao Kabi itself, however, which was strong enough to strain to the utmost the strength of the paddlers sent up from Lere, we found the way easy. Many a steep-banked bed was crossed, but at that season boulders were found to act as stepping-stones over most of the deepest parts, and in many places only a few pools were to be seen lying cool and seductive here and there along the sandy bottom. Our camp was reached without the least hardship, and while dining a breeze sprang up, on which was borne the sound of the far-off falls.

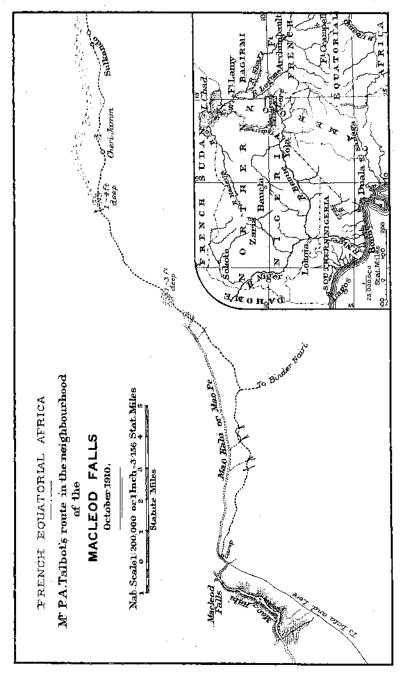
According to local legend, these had never yet been seen by mortal eyes. Natives shun them because of the devils who are said to dwell within; while Europeans are kept from profaning the solitude by troops of guardian giraffes, which have only to show themselves in order to lure away white intruders.

Next morning at sunrise we set out, through a hunter's paradise. At each little stream where water was still to be found, great lion pads were printed in the soft wet sand, and on the road itself tracks of rhino, hippo, bush-cow, and hartebeest were plentiful. Before long the Mao Kabi was reached, at a point where it is joined by a small tributary, and on the other side of this we pitched camp.

The natives assured us that the falls lay to the eastward, so we followed their directions. It soon became evident, however, that no considerable rise of land was to be hoped for on that side. We therefore decided that our guides were probably in league with the guardian giraffes in trying to lure us away, so recrossed the tributary, and followed the course of the Mao Kabi. The way led through high grass, and bush unusually thick for this part of the world, and was strewn with

^{*} The permanent retention of the name MacLeod Falls depends on its adoption by the French Government.

great masses of rock, the clefts and fissures of which were hidden by the



undergrowth. The banks rose generally on either side into sheer walls

of granite, between which the river swirled down in a series of rapids, at the rate of about 10 miles an hour, while every step brought us nearer to the deep boom of the falling water.

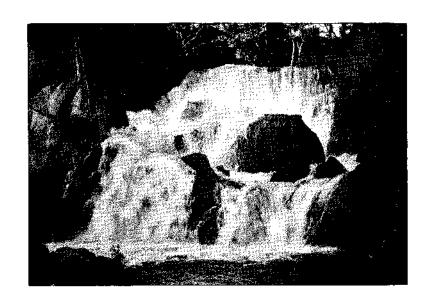
After some distance, the opposite bank was broken by a beautiful cascade, a little further another appeared with a greater volume of water, and after a scramble of about ten minutes more, a spot was reached where two rivers came foaming down in a long series of falls. Owing to want of time, it was impossible to find out whether these rivers were distinct tributaries, falling into the Mao Kabi, or simply branches of the latter, which had split off by the Tuburi lakes, and here rejoined the main stream. They seemed, however, to be distinct; the more southerly one is probably the Mao Lide. The cascades are separated from one another and from the main stream by steep promontories of jagged rock, wooded up to the summit, and form with the Mao Kabi itself, which bends sharply at this point, a great gleaming St. Andrew's cross. After photographs had been taken it was too late for further exploration that evening, so, very reluctantly, we returned to camp.

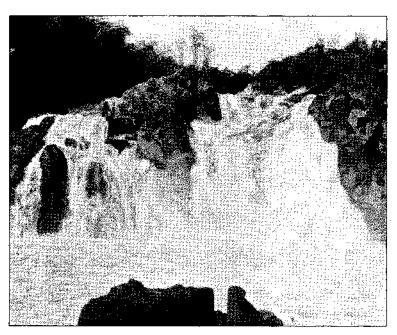
Next day, to our great regret, Monsieur Bertaut was obliged to leave, owing to pressure of official work, so all further investigations had to be made alone. We decided to retrace our steps toward Fouli, and follow the course of a river which seemed to promise to lead us into the Mao Kabi, after the latter had reached a lower level. The sandy bottom of this stream was thickly marked in many places by lion tracks and those of other bush beasts, while its steep banks were overgrown by patches of blue and pink flowers.

At this time of year the upper stretches were almost dry, but it did not form the easy road for which we had hoped, as it was barred every here and there by precipices of sheer granite, worn smooth and polished in places by the water which dashes over them during the short rainy season. Several of these walls were 20 to 40 feet high, and at their bases clear pools were usually to be found.

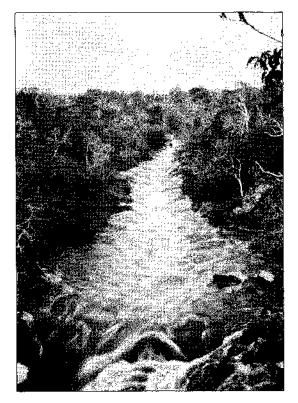
When the lowest level was reached the water became continuous, and finally broadened out into a great swamp, across which the Mao Kabi could be seen in the distance, just breaking out from its deep gorge. We decided not to skirt the swamp, but to strike the river again at a point further up on the left bank. This was done, though it was somewhat difficult, as the river was now enclosed by granite walls about 400 feet high.

The sun beat down with such intense heat as to make the masses of rock over which we had to scramble almost scorching to the touch. An unfortunate leak was discovered in our water-bottle, and we found ourselves, with lips so parched as to crack with the heat, gazing longingly at the clear, cool unattainable water below. After a while a spot was reached whence one of our men managed to climb down at great risk and get some for us. A little later we came suddenly to the place where the

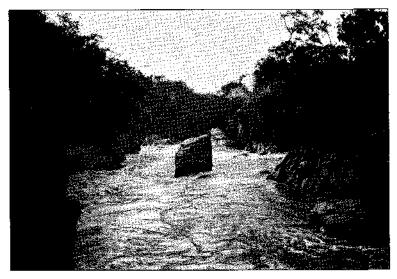




THE MACLEOD FALLS ON THE MAO KABI.

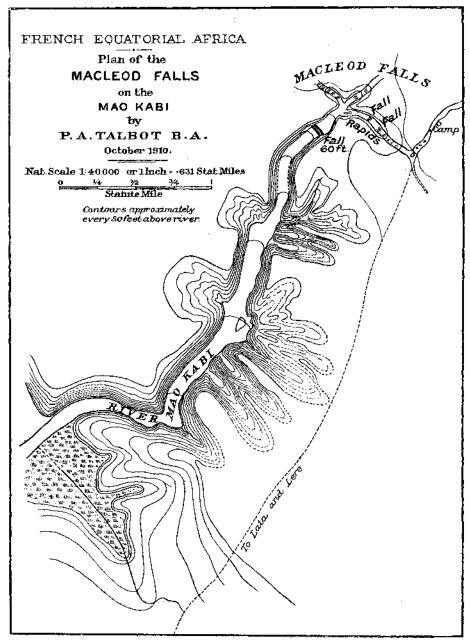


THE BAPIDS.



THE MAO KABI, SHOWING THE HIGH BANKS OF GRANITE.

whole river slides over a precipice at least 60 feet high. The detonation was terrific, owing to reverberation from the walls on either side.



After a scramble down almost perpendicular rock, a point was reached which jutted over the water in such a way as to make it possible to take

photographs. Clouds of spray were driven in every direction, $s\rho$, though we tried to protect the lenses, good results are somewhat doubtful.

No words can do justice to the beauty or grandeur of the scene. At this time of year the river is still full, and the mass of water flings itself over in a resistless green torrent, to break into masses of gleaming foam and seething rapids. At the base of the fall plays a rainbow of elliptical shape, about 200 feet in diameter. This is caused by the sun shining through the clouds of spray, on which the quivering, dazzling tints perpetually play, and thus form a great contrast of peace to the turmoil of the water.

The mysterious falls have given up their secrets at last, and without the firing of a single shot to affright their strangely shaped gentle guardians.

A long-enough stay was made in the neighbourhood to enable me to map the river from above the first fall to below the last. This was rendered rather difficult through the steepness of the ravines by which the banks were broken, and which necessitated perpetual descents and reascents.

Perhaps it may be remarked that these falls are of considerable importance, as they form the main obstacle to a navigable waterway between the ocean and Lake Chad.

As the falls had no native name, Monsieur Bertaut made the kind suggestion that they should be called after Miss Olive MacLeod, daughter of Sir Reginald MacLeod of MacLeod, who had gone every step of the way during their exploration. Colonel Maillard, Commandant du Territoire Militaire du Tchad, expressed his cordial approbation.

It would be ungrateful to end this little account without a word of thanks to the French authorities, who not only showed us the greatest kindness during our whole stay in their territory, but so generously welcomed our presence on this little journey of exploration.

INAUGURATION OF THE OCEANOGRAPHICAL INSTITUTE OF PARIS.

WILLIAM S. BRUCE, LL.D., F.R.S.E.

Before Stanley crossed Africa, Nansen the North Polar basin, and before Peary reached the North Pole, Shackleton the highest southern latitude, and David the south magnetic pole, many thought these feats were to be the end of geographical exploration. Now it must be generally recognized that they were but the opening of the door to newer, wider, and more intensely interesting fields of exploration.

Recently Sir John Murray and Dr. Hjort have, by their exploration of the North Atlantic, shown how much is yet to be done in the exploration of the sea; and last month the Prince of Monaco crowned his