ACROSS AFRICA1

OUR readers are no doubt already familiar with the main results of Commander Cameron's remarkable march across the continent of Africa; many details concerning it have appeared through various channels. These, however, have only been sufficient to what the appetite of all who take an interest in African exploration for the complete narrative; this we find quite as interesting and informing as we had reason to believe it would be. Commander Cameron has not attempted

be. Commander Cameron has not attempted to produce a highly polished summary of the copious notes he seems to have taken by the way; he takes the reader along with him step by step and day by day over the long and to him often tedious route he had to travel, and in the end the reader finds he has become possessed of a substantial amount of new information concerning one of the most important sections of one of the most interesting continents.

Commander Cameron's story is so well known that to summarise it here would merely be to repeat what we have already given on various occasions. The primary object of the expedition which he commanded, it will be remembered, was to seek and succour the great Livingstone, whom Stanley had just discovered, after the explorer had been hidden in the centre of Africa for five or six years. Cameron as leader, with Dr. Dillon, Lieut. Murphy, and poor young Moffat, who had sold his all to enable him to find and help his uncle, set out from

Bagamoyo with a large following, early in 1873. They had only got as far as Unyanyembé in October when they were sadly surprised by the bearers of Livingstone's remains, the great traveller having died in the previous May on the south of Lake Bangweolo, almost on the same day as his enthusiastic nephew perished on the threshold of his search for his uncle. Under the new circumstances Lieut. Murphy decided to return, Dillon

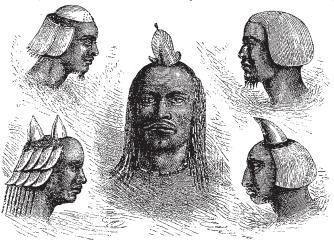
was compelled by the state of his health to accompany him, and Cameron resolved to proceed alone to take up and continue the work of his immortal predecessor. By doing so, he rightly believed he was carrying out the spirit of his instructions. Dillon's sad end, a few days after he left Cameron, is already known to all.

Cameron's route may be divided into four sections. First, from the coast to Ujiji; second, the survey of Lake Tanganyika; third, his journey to Nyangwé, on the banks of the broad Lualaba; and fourth, from Nyangwé, south and west, to the west coast. The first part of this route is already to a considerable extent familiar to those who have read the narratives of Burton, Speke, and Stanley. Nevertheless, it will be found that Commander Cameron has added considerably to our knowledge of its appearance, its products, and its people. The admirable series of levels which he was able to take from first to last, and the results of which are condensed in the section that accompanies his interesting map, shows that the ground rises till about the thirty-fourth degree west, when it slowly slopes to the centre of

the continent, which is a wide hollow or basin, rising very gradually towards the western coast, on which side the descent is very steep. The country between the coast is varied in character, sometimes level, and sometimes very hilly, frequently swampy and liable to be inundated by

1 "Across Africa." By Verney Lovett Cameron, C.B., D.C.L., Commander R.N. 2 vols (London: Daldy, Isbister, and Co., 18.7.)

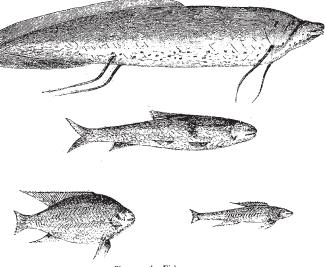
the overflow of the numerous rivers which water it, but very often well wooded, thickly populated, and fertile. It is cut up into a number of states inhabited by various small tribes independent of each other, the appearance, manners, and customs of which are frequently referred to by Commander Cameron. Of the Wanyamwesi, especially, he has much to say, for at Unyanyembé, in their territory, he was detained for many weeks by fever, and indeed did not reach Ujiji till February, 1874, after innumerable troubles caused by his scratch lot of followers,



Heads of Men of Manyuéma

and being fleeced at every hand by the chiefs through whose villages he had to pass.

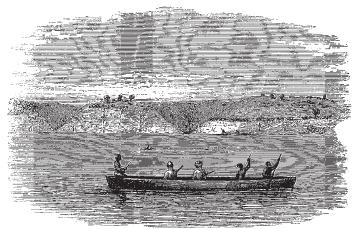
Cameron was well-received and well-treated by the Arab traders at Kawelé, the capital of Ujiji, and here he fortunately secured Livingstone's papers. After measuring a short base-line, he set out on March 13 to circumnavigate the southern half of Lake Tanganyika. Our readers will remember that Burton and Speke were able



Tanganyika Fishes.

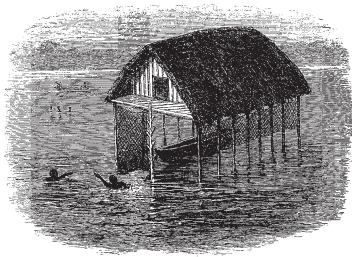
to survey a comparatively small portion of the lake in the neighbourhood of Ujiji, while Livingstone and Stanley coasted the east side of the northern part, and a portion of the north-west coast. Cameron has, therefore, by his survey been able to add considerably to our knowledge of this interesting lake. He sailed along the eastern side of the southern half, crossed to the west just before reach-

ing the end of the lake, passed up the west side, examined the Lukuga, and returned to Ujiji on May 9. His work contains a great deal of information as to the result of this survey, and he has been able to lay down, we have no doubt with considerable accuracy, the contour of the shores. These are mostly high and rocky, covered with trees and other vegetation, often fringed with dense reeds, and cut up by a multitude of streams. Animal life of all kinds, quadrupeds, birds, insects, fishes, abounds



Nyangwé from the River.

around and in the lake, the scenery of which Cameron describes as of surpassing beauty. The western shores are well peopled by a fairly industrious population, but many portions of the east coast have been devastated by slave-hunters, evidences of whose destructive raids were seen all along Cameron's route. With regard to the river Lukugu, which Cameron believes to be the outlet of Lake Tanganyika, and an affluent of the Lualaba, he has some interesting notes. He believes he traced a distinct cur-



Hut in Lake Mohrya.

rent westwards, and sailed up several miles until stopped by a dense barrier of vegetation which crossed from side to side. As we said when referring to this point previously, we do not think much is to be gained by discussing the question in its present shape. It is not as if no further data were to be obtained, the question is one capable of demonstration by the attainment of additional information, and we hope that Mr. Stanley will be able to set it at rest as satisfactorily as he has settled the contour

of the Victoria Nyanza. To Cameron geographers are greatly indebted for the large additions he has made to a knowledge of Lake Tanganyika.

About a fortnight after his return from this survey—which, we ought to say, was carried out amidst innumerable difficulties caused by the timidity and inefficiency of his crews—Cameron crossed the lake to make for

Nyangwe in the hope of obtaining boats to take him

down the Lualaba. He passed over pretty much the same route as did Livingstone, whose memory he still found alive among the people. The two main districts in this route are Uguhha and Manyuema, and the people are among the most interesting with whom Cameron came in contact. In Uguhha copper is largely worked, and shaped into curious cross-bars, and in Manyuema iron ore is found and largely smelted in elaborately and ingeniously-constructed furnaces. The people of Manyuema are in many respects peculiar, and although undoubted cannibals, superior to the tribes round them. Cameron believes them to be a superior intrusive race, the lower classes being aborigines. They live in well-built houses, arranged in neat villages, and are of fine physique. They seem well deserving of further

At Nyangwe Cameron was well treated by an old Arab who had been kind to Livingstone, but to his great disappointment he failed in obtaining boats to carry out his cherished

obtaining boats to carry out his cherished purpose. He was assured by many people, both here and in his journey southwards, that the Lualaba, a fine broad stream at Nyangwé, flowed westwards into a large lake, Sankorra, to which men came in large boats capable of holding 200 people, for the purpose of trading. From the interesting data collected by Cameron we must say that he has good reason for connecting the Lualaba with the Congo, and regarding the latter as the great drainer of all the region to the west and north-west of Tanganyika. The Lualaba is in the very lowest

Tanganyika. The Lualaba is in the very lowest part of the great Central African basin, is a river of very large volume, which, in the upper part of its course receives various affluents, and it is difficult to conceive what other south-west African river except the Congo could carry off all this drainage. Still there is an extensive region, from about 5° N. to 10° S. waiting to be explored, and until this is done we think it premature and unnecessary to maintain any positive theory on the subject. The solution cannot now be far off with so-many-expeditions either on the field or about to be sent out. The data obtained by Commander Cameron are of great value, and will form an important guide to subsequent explorers.

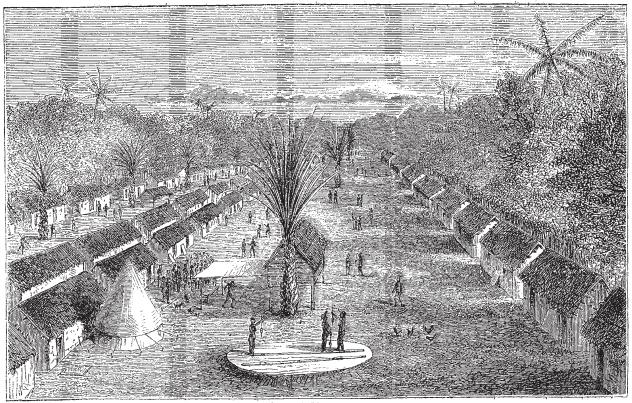
In company with an Arab trader, Cameron proceeded southwards in the hope of being able to work his way north to Lake Sankorra. In this, too, alas, he was grievously disappointed, his designs being thwarted on every hand by the caprices of besotted chiefs and brutal slave hunters, and the cowardly fears of his own men. The greater part of the ground from Nyangwé to the coast region, south

from Nyangwe to the coast region, south and west, over which Cameron now travelled, is quite new, never having been before explored by any European, so far as is known. Much of the second volume, on this account, possesses novel interest. Most of the country is fertile, well watered, and well wooded. Innumerable streams were crossed, and so level is the watershed between the streams going east and those going west, that during floods, which seem to be frequent, their courses must sometimes be changed. About 200 miles

south of Nyangwe, Cameron came to Kilemba, the head-quarters of Kasongo, the chief of the extensive district of Urua, and where is the principal station of the remarkable Arab trader, Jumah Amerikani. This individual has extensive trading connections over Central Africa, is a man of considerable intelligence, and was able to give Cameron much geographical information which he had gathered during his widespread journeys. Cameron was compelled to remain at Kilemba for about eight months, and had it not been for the ever-to-be-remembered kindness of this humane and generous Arab trader, his life must have been intolerable, even if he had been able to preserve it. The treatment of Cameron by this remarkable man is beyond all praise. Cameron found at Kilemba a black slave-hunter from the Portuguese settlements, than whom probably a more barbarous blackguard does not exist. The cruelties practised by this man and

the chief Kasongo are almost incredible and painful to read of. The whole country here is being rapidly devastated by these slave-hunters from the west coast, and until their fiendish practices are put a stop to, the country can never be opened up either to exploration or legitimate traffic.

be opened up either to exploration or legitimate traffic. While staying here Cameron visited an interesting little lake, Mohrya, studded with houses built on high piles. He also heard of a people who dwell in caves in this region; we believe that Livingstone refers to this in his "Last Journals." Cameron also paid a visit to a Lake Kassali, a short distance south of Kilemba, and which contains many floating islands; but he was not permitted to reach the shores. He has collected much interesting information about the people among whom he was compelled to sojourn, and collected many notes from various sources concerning the geography of the region. But the capricious restrictions under which



Village in Manyuéma

he was placed compelled him to lead a life of comparative idleness, so that when Kendele, the brutal slave-hunter, whose pleasure he was compelled to await, was ready to march with his ill-gotten human booty, the wearied traveller was heartily glad. This was in June, 1875, and starved and nearly dead with scurvy he reached Benguella in November.

Of the value of Commander Cameron's work we think there can be but one opinion. Every page is interesting,

and he has been able to add materially to our knowledge of the hydrography, the geology, the people, and products of the important part of Africa he traversed. The general results he discusses in two concluding chapters, and botanists will be pleased to find in an appendix an enumeration of the plants collected in the region about Lake Tanganyika, drawn up by Mr. Oliver. The flora of the region, Mr. Oliver states, may be taken as belonging to the basin of the Congo.

THE TROPICAL FORESTS OF HAMPSHIRE 1

WE have in the series of beds, the aspect and formation of which I have endeavoured to describe, a total thickness of perhaps somewhere about 1,000 feet. We

thickness of perhaps somewhere about 1,000 feet. We
1 Continued from p. 261. This concluding article is the substance of a
paper read by Mr. J. S. Gardner, F.G.S., at the Geologists' Association,
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read in Lyell's "Geology" and other works that river and delta deposits are accumulated with comparatively great rapidity, as in the case of the Rhone delta above Geneva, which has advanced one-and-a-half miles in historical times. Throughout the Bournemouth district we have in the great and sudden deposits of coarse grit evidence of quick deposition. We also find leaves folded over with half an inch of sediment between the folds, and leaves sun-cracked