bitten "S. T. C.," for in the "Ancient Mariner" we have the well-known lines:—

Till clomb above the eastern bar The horned moon, with one bright star Within the nether tip.

Dr. Geo. Macdonald had a lecture on the wondrous poem, which admirably suited his spiritual nature, in which he gave some explanation of this celestial prodigy, but at this distance I forget what it was. Perhaps some of your readers have more retentive memories.

ALEX. MACDONALD.

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EQUATORIAL AFRICA TO-DAY.1

I HAVE seldom read a more interesting, easily assimilable, truthful book on modern Africa than this record of Mr. J. Du Plessis's recent journeys backwards and forwards across Equatorial Africa. Between 1913 and 1916 the missionary-author visited the Gold Coast and

Ashanti, was on the outskirts of Dahomé, travelled through Lagos and Abeokuta to Hausaland, up the Benue to the Shari, explored the western Cameroons, visited a great deal of Belgian and French Congoland, of Uganda and British East Africa, passed from Congoland through Northern Rhodesia, and revisited Nyasaland and the Mocambique coast.

I have reviewed elsewhere the political and ethical aspects of the book; let me deal here with the light it may throw on the ethnology and zoology of West and Central Africa.

"The journey" (from the coast to Ashanti) "which occupied Sir Garnet Wolseley . . . four months was accomplished by us in a single day," writes Mr. Du Plessis, who travelled from Sekondi to Kumasi by rail. Nevertheless, the mass

of the Gold Coast forests retain their former magnificent luxuriance of growth; and perhaps after the war they may be used as object-lessons in botany (like those of eastern Sierra Leone). Certainly our official world, especially our Treasury (which grudges the tiny allowance of money for finishing the Flora of Tropical Africa that the late Lord Salisbury ordained), overlooked the fact that those West African and Cameroons forests under the British flag are distinctly among the world's wonders, and, besides being striking in their splendour, are replete with wealth for commerce which we might turn into coin of the realm were we only as a nation better educated in the lore of the twentieth century. Yet Mr. Du Plessis was a little shocked at evidences of modernity when he saw the forest-dwellers roofing their huts with

1 "Thrice through the Dark Continent: A Record of Journeyings across Africa during the Years 1913-16." By J. Du Plessis. Pp. viii+350. (London; Longmans, Green, and Co., 1917.) Price 14s. net.

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corrugated iron, and when one of them—in excellent English—inquired if he was a dentist, as he wanted a tooth stopped!

The author has much to say about the real "dangerous animals" of Africa, the insects that spread all manner of germ diseases. His remarks about the vicious and cunning tsetseflies on the Gribingi River are distinctly He points out that, while the interesting. tsetse-conveyed sleeping sickness is being got well in hand, and even extinguished in French and Belgian Congoland, it is spreading fast and far in Nyasaland and the adjoining part of Unfortunately, too, in this Northern Rhodesia. direction the disease is more virulent and less curable than elsewhere. Apparently, also, it is now proved that the ordinary Glossina morsitans of South and East Africa, as well as the wicked palpalis, can convey the trypanosomes.

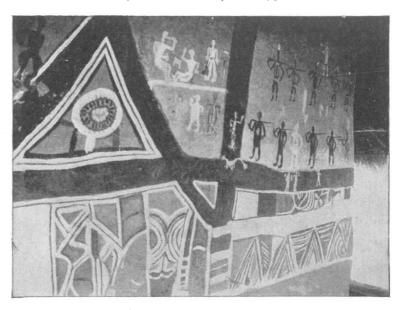


Fig. 1.—Mural ornamentation of the Basongi (Belgian Congo). From "Thrice through the Dark Continent."

Mr. Du Plessis tells us much about the interesting Munshi or Tivi people south of the central Benue. But he is mistaken in regarding their language as one that is quite isolated and almost unknown. It has recently been effectively illustrated—chiefly in the pages of the African Society's Journal, also in manuscripts that I am shortly publishing; and it stands out very clearly as a Semi-Bantu language with strong Bantu affinities, but otherwise connected as regards word-roots and syntax with other Semi-Bantu speech-forms in Nigeria and in the Cross River basin.

The author has something to say about the interesting Mundang tribe of the northern Cameroons, and his example of the language indicates that, like so many other forms of Sudanic speech, it possesses Bantu word-roots, though it can scarcely be called Semi-Bantu. There must be a strong underlying element of Semi-Bantu in many

of the negro languages between the Shari River on the east and the forests of West Africa, overlaid as these innumerable types of speech may be by other unrelated tongues, implanted at a later date in Equatorial Africa. We now know that the range of actual Semi-Bantu languages extends from the Lower and the Upper Gambia eastwards to the watershed of Lake Chad. Mr. Du Plessis lays stress on the ethnic importance of the A-zande, or Nyamnyam. Undoubtedly they will play a part in the future development of the western Bahr-al-Ghazal and the Mubangi-Wele basin as important as that of the Fula in Nigeria or the Mandingos of Senegambia.

Much information is given concerning the artistic aptitudes of various negro peoples, espe-

has long been one of the primary aims of astronomy to execute this enumeration. Considerable difficulties of a practical nature have to be faced in the course of the work, however, and only now do they appear to have been so far overcome as to enable a consensus of opinion to be formed amongst astronomers regarding the main features of the results. Whether visual or photographic methods are used, it is anything but easy to determine star magnitudes according to an absolute scale of light-ratio, and to maintain a constant zero point for the scale in widely separated regions of the sky.

The photometric work done at the Harvard and Mount Wilson observatories has greatly facilitated this task, and at these institutions, moreover,

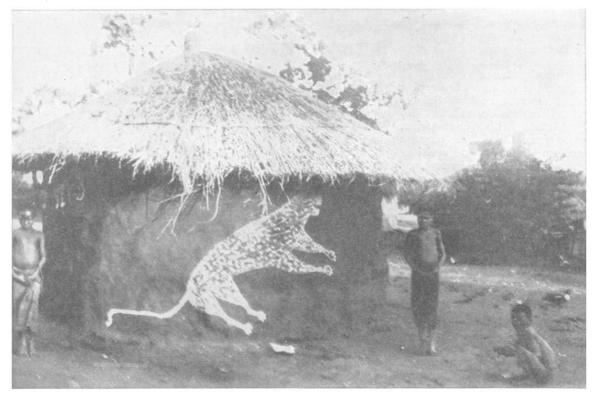


Fig. 2.-A specimen of native art (British Nyasaland). From "Thrice through the Dark Continent."

cially of the Nyamnyam, the Basonge (of central Congoland), and the A-nyanja of Nyasaland. A good deal of this desire to draw and paint and decorate is subsequent rather than prior to the establishment of European influence. Personally I believe that the negro may rise very high in the pictile arts, and that he has an inherent good taste and originality in design.

H. H. Johnston.

THE NUMBER AND DISTRIBUTION OF THE STARS.

A N enumeration of the stars, classified according to their brightness and their position in the sky, must form a part of any general investigation into the nature of the stellar universe. It

Groningen Astronomical Laboratory; an account of this work, and a brief note upon that done at Mount Wilson, have lately appeared. In both cases the investigation has been extended to very faint stars (of magnitude 15.5 and 17.5 respectively); these are so numerous that counts of small sample areas, and the formation of statistical averages, afford the only practical means of attack upon the problem. The areas dealt with were among those

extensive schemes for the photographic survey of

sample areas of the sky have recently been carried

out. The Harvard plates have been measured,

and a preliminary discussion of them made, at the

1 Publications of the Astronomical Laboratory at Groningen. No. 27: "On the Number of Stars of Each Photographic Magnitude in Different Galactic Latitudes," By Dr. P. J. van Rhijn. (1917.)
2 F. H. Seares, Proc. Nat. Acad. Sci., Washington, v l. iii., p. 217. (1917.)

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