

NATURE AND MAN IN EASTERN AFRICA.¹

(1) MR. KITCHING is already favourably known to students of Africa as the author of an outline grammar of the Gang language, the Gang, or Gañ, being one of the Nilotic tribes of central Uganda known previously by the Luganda name of Bakedi—"the naked ones." One might at first classify the work under review as a study of the Nilotic peoples of the northern and central parts of the Uganda Protectorate; but as it includes passages dealing with the Bantu races of the same region, especially in regard to the Banyoro, the more general descriptive title is the better. Still, the most valuable

most confusing and misleading to the reader, the more so as apparently in some passages by an oversight *n̄* is to be taken as representing the nasal after all.)

For the rest, there is good material in this book for the ethnologist. The only other criticism one might raise is that the book is plastered with Mr. Rudyard Kipling's rhymes to an extent which is, to say the least, unusual. No doubt in dealing with backward races in Asia especially, and in Africa, an occasional line or couplet from Mr. Kipling is much to the point; but a more or less serious work dealing with ethnology has no need for such copious quotations, and quota-

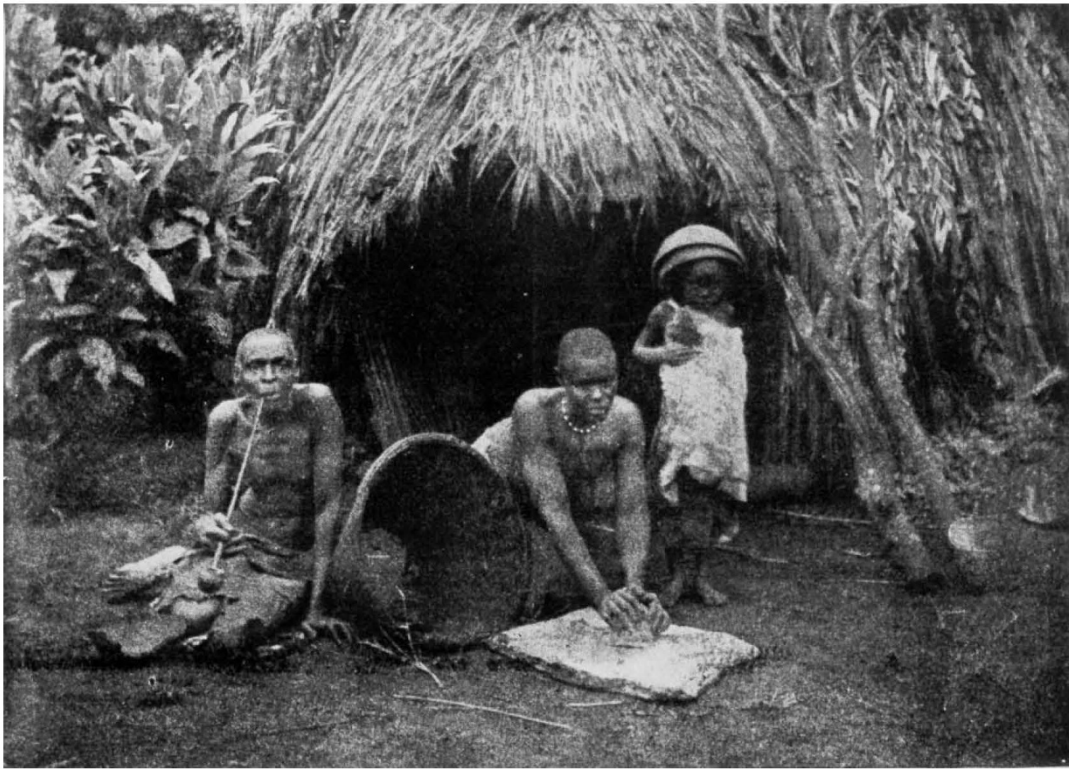


FIG. 1.—Mwenge woman grinding millet. Tobacco is seen growing beside the house on the left. From "On the Backwaters of the Nile."

part of the book is the study of the Teso and Gañ peoples. (In regard to this last, I have fault to find with the author in that, instead of following well-established systems of orthography for dealing with African languages, such as were good enough for Barth and other African philologists of the first rank, he starts a variant of his own, in which *n̄* is used in the Spanish acceptance, and not, as it should be, to express the nasal consonant in words like "ringing" and "bang." This he expresses by another symbol, the *n'*—

¹ (1) "On the Backwaters of the Nile." Studies of Some Child Races of Central Africa. By the Rev. A. I. Kitching. With a preface by Dr. Peter Giles. Pp. xxiv+295 (London: T. Fisher Unwin, 1912.) Price 12s. 6d. net.

(2) "Animal Life in Africa." By Major J. Stevenson-Hamilton. With a Foreword by Theodore Roosevelt. Pp. xvii+539. (London: William Heinemann, 1912.) Price 18s. net.

tions which do not always show the poet at his best.

In one of the appendices there is an excellent selection of fifty proverbs in the Lunyoro language, in which the original version is given as well as the translation. These have every appearance of being authentic, and represent very fairly the wit and wisdom of a most interesting Bantu tribe. One becomes very weary of seeing in books and newspapers dealing with Africa a host of bogus proverbs expressed in English and attributed to the African merely because the writer of the book or newspaper thinks that is what the African ought to say. But this contribution to the stock of the negro's wit and wisdom on the part of Mr. Kitching is quite otherwise; it is genuine.

(2) The work by Major J. Stevenson-Hamilton, warden of the Transvaal Government game reserves, deals with the big game, and to some extent the small mammals and birds, of the north-

tion leaves out many important features, and states others incorrectly. His maps illustrating gaps in the distribution of species are not altogether correct. For example, the oryxes extend far into Senegambia and almost to the Atlantic coast of the Sahara. In common with the gazelles, they are also probably found immediately to the south of the Upper Niger. In the map of the Ethiopian region the West African faunal area is quite wrongly delineated. This area covers no very wide belt of territory along the west coast of Africa, and certainly does not extend so far north as the great bend of the Niger. On the other hand, it stretches across Central Africa to the kingdom of Buganda, to the west coast of Tanganyika, and down to the shores of Lake Mweru, besides covering much of northern Angola.

In his treatment of the distribution of mammals the author—like so many other writers on questions of zoography—omits any reference to the limited range

of the zebra and the African wild ass. So far as extant information goes, no form of zebra has ever been met with *near the Nile to the north of the 10th degree of N. latitude, or west of the Mountain Nile*. Zebras are found to the

eastern Transvaal, and to a lesser extent of East Africa, Uganda, and the Upper Nile. There is an interesting picture of the white rhinoceros of Zululand from a specimen just killed—for, alas! the care over this wonderful creature exercised by the authorities of Natal seems to take the form chiefly of killing it as specimens for museums. There are many striking photographs of gnus, impala, and lycaon hunting-dogs in the open, and of leopards, zebra, and eland in captivity—more or less; and there is much interesting and novel information regarding the life-history of lions, leopards, antelopes, and elephants.

There is one defect in the work which irritates the eye, and that is commencing the italicised Latin name of a genus or family with a small letter (examples, *bovidae*, *equus zebra*). Some authors annoy the reader by spelling the specific name with an initial capital in addition to that of the genus. This is confusing. But the practice adopted by Major Stevenson-Hamilton of giving generic and family names without a capital letter is more vexatious.

With regard to the first chapter on the great game of Africa, it is vitiated by a lack of sufficient acquaintance with the fauna of Western and West Central Africa. The author's survey of this ques-

south-west of Tanganyika, and thence right across southern Congoland into Angola, but have never been heard of elsewhere in West Africa. The ordinary black rhinoceros extends its range *west*

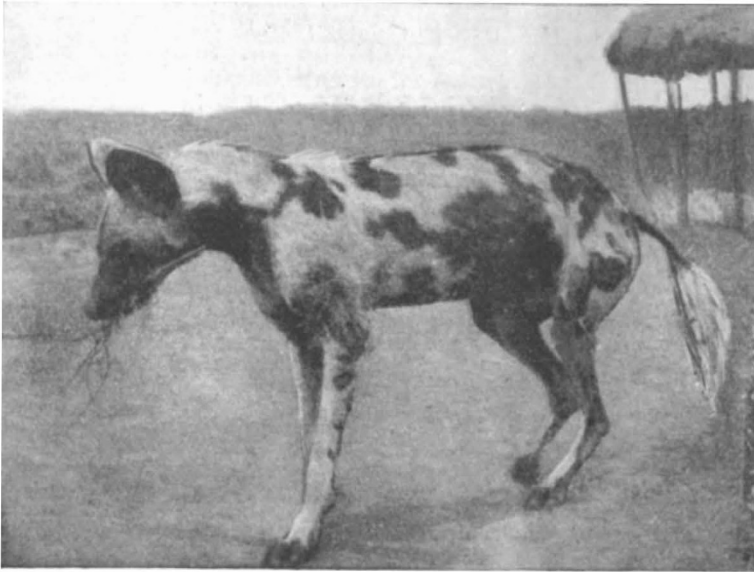


FIG. 2.—African hunting dog from the north-eastern Transvaal. From "Animal Life in Africa."



FIG. 3.—A waterbuck bull in the act of rising. From "Animal Life in Africa."

of the Nile not only to Lake Chad, but to the Upper Niger, and is found within the Niger bend. But in all that vast region of the western Sudan no form of wild horse is met with.

There are persistent stories from Arabs to the effect that there is a wild ass like that of Ethiopia in the western Sahara, and Mungo Park mentions seeing wild asses in northern Senegambia, but so far no proof has come to hand in the shape of skulls and skins. Amongst the fossils of Algeria are equine skulls very like that of the zebra. It is possible, therefore, that in late Pliocene or early Pleistocene times there was a zebra type existing in Northern Africa, but why the striped horses have since restricted their range to the easternmost and southern portion of Africa, and do not, like so many of the antelopes and the rhinoceros, extend their range westward of the Nile, is an unsolved problem.

H. H. JOHNSTON.

NEW AUTOMATIC TELEPHONE EXCHANGE.

A VERY interesting experiment has just been started in the new telephone exchange at Epsom. This exchange is the first in the United Kingdom to be installed on the automatic plan. In this system the subscriber, by means of an attachment to his telephone, himself selects and calls up the desired number, instead of communicating his wants to the exchange operator and being "put through" by her. The exchange operator is thus dispensed with.

The mechanism at the subscriber's telephone simply consists of a means by which a set of contacts are closed or separated a certain number of times—determined by the actual figures of the number required. These operations result in a series of impulses (or of breaks in an otherwise permanent current) over the telephone line and through the mechanism of the exchange. The movement of this mechanism puts the two lines into electrical connection. If the required subscriber be already engaged, the caller's apparatus returns to zero and gives him the well-known signal. Under the system the meter does not record a charge against the person telephoning until the required subscriber has answered. The whole system was described in detail in our issue of October 12 last year.

The system is complete as regards its own exchange, but when a subscriber on another exchange is required, a little more complication is introduced. At present such calls are dealt with by an operator. A slight extension of the principle is to allot a certain number of lines to the main exchanges and to number these with the subscribers. A caller then simply gets through to the required exchange automatically, and then asks for the number required in the usual way.

The working and development of the exchange will be watched with great interest by all telephone users.

MAJOR-GENERAL E. R. FESTING, C.B., F.R.S.

A LARGE circle of friends, both amongst his late colleagues and followers of science and art, will be grieved to hear of the death of Major-General E. R. Festing (late R.E.) on Thursday last, May 16, from heart failure. Festing was born in 1839, and was educated at Carshalton during the headmastership of Prichett. He was transferred to the Royal Military Academy at Woolwich, and from there was gazetted as a lieutenant in the Royal Engineers when he was only fifteen years of age. His teachers often held up Festing as a worthy example to follow. He learnt thoroughly all he had to learn whilst under tuition, and he had the reputation of being "a calculating boy" from his early youth. The present writer has often had opportunities of knowing that in Festing's later years this power of mental arithmetic had not deserted him. In 1857 the young lieutenant of seventeen was sent to India as one of the officers of a company of sappers and miners, in which capacity he served under Sir Hugh Rose until 1859. On his return from India he was selected by Sir Henry Cole as deputy general superintendent at South Kensington. On the re-organisation of the museum he was appointed assistant director of the Science Museum, with charge of the Works Department under Sir Philip Owen. On this officer's retirement he was appointed director of the Science Museum, which office he held until his own retirement in 1904. For his services to the Department he was created a C.B. in 1900.

Festing was one who was universally beloved by his colleagues and by the subordinates who served under him. He was strict, but absolutely just, and was no self-seeker. He was always ready to further the welfare of his men, or to assist in aiding the science teaching or research with which he daily came in contact at the Royal College of Science. He himself was a man of science, and carried out many investigations, the gist of which is to be found in the pages of the Transactions and Proceedings of the Royal Society, of which he was elected a Fellow in 1886. Electrical science was perhaps what he loved best, though other departments of physics generally attracted him.

Brought into contact, by his position, with inventors, men of science, and artists, when they had gauged Festing's worth they soon became his friends instead of mere acquaintances, and many such will miss him. He was a general favourite of those brother officers with whom he had served in India or elsewhere, as he was with those younger ones of his corps who, when in London or its neighbourhood, found a warm welcome at his home.

Festing leaves a widow, two sons, and a daughter. The elder son is in the Ceylon Civil Service, and the other in the Artillery, whilst the daughter is well known as an author.