MAN AND BEAST IN . EASTERN ETHIOPIA

From Observations made in British East Africa, Uganda, and the Sudan

BY

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spaces in the frontal bones are absent in young animals, and appear gradually with the growth and development of the facial and cranial bones. The formation of the horn core is a post-natal event, and as the air sinuses extend into the frontal bone in some antelopes they involve the base of the horn core; the extent to which it is permeated depends on the age of the animal. pedicle, or bridge, which forms the support for the horns of hartebeests is quite hollow. This is also true of the horn core of the topi. The large horn-cores of the kudu and oryx are solid. The museum of the Royal College of Surgeons contains some specimens, obtained from Sir Victor Brooke's collection, which specially illustrate this point. Also some sections of horn-cores from oxen, so permeated with sinuses as to appear on section like honeycombs.

The horns of the rhinoceros, as its name specifies, grow on its nose; they contain no bony core, yet that

portion of the nasal bone which underlies the horns of these huge and ugly beasts has a bony projection, but it does not enter into the composition of the horn, for this part of the rhinoceros is formed from the superficial (epithelial) layer of the skin which undergoes a change termed by physiologists, keratinisation, which means that the part becomes converted into horn. As a matter of fact the horns on the nose of a rhinoceros are from an anatomical point of view a mass of agglutinated hairs. Sir John Willoughby shot a rhinoceros in East Africa (1889) with three horns in a row, one behind the other. The skin with the horns on it was shown at a meeting of the Zoological Society,

London.

Of the two horns the front one, that nearest the animal's snout is usually the longer, it rarely exceeds a foot in length, but some examples have measured as much as forty inches. Rhinoceros horn is used for making handles for walking sticks and umbrellas, it is easily cut with a knife and if a fragment be soaked in