A FOSSIL *ORYCTEROPUS* FROM THE LIMEWORKS QUARRY, MAKAPANSGAT, POTGIETERSRUS

By J. W. Kitching

The family Orycteropodidae (Grey 1821) comprises the antbears of the Old World and is known from fossil evidence to have existed in Europe, Asia and Madagascar, but the living species, confined to one single genus, now occur only on the continent of Africa.

The presence of fossil Orycteropodidae has been recorded from Pleistocene deposits in East Africa, among the Olduvai and Vogel River faunas (Leakey 1931), and from Gambles Cave II, Kenya (Leakey 1951), as well as from an Iron Age deposit in the Mumbwa Caves on the fringe of the Kafue flats near Lusaka, Northern Rhodesia (Clark 1942), to mention only a few of the localities. In none of these recorded cases has descriptive information been given so that these remains could be compared with those from Makapansgat. The following short description is the first record of this family from a dolomitic-limestone cave in South Africa.

In 1961, while sorting and classifying some fossil remains which had been extracted from the Limeworks grey breccia, I noted a right mandibular fragment of an antbear, with a broken off M2 and a complete M3. Under similar circumstances, a second specimen, an isolated M1 was found at the end of December, 1962. The fragmentary state of the mandible is attributable to blasting operations during the removal of the dripstone underlying the grey breccia.

Orycteropus cf. *afer* Pallas

The Limeworks specimens are the fragments from two adult individuals, showing a certain amount of wear on the bi-columnar surfaces of the teeth.

On measuring the teeth of five adult *Orycteropus afer afer* (Pallas) skulls, three from the Zoology Department (Z.D.), University of the Witwatersrand, and two in the collection of the Bernard Price Institute for Palaeontological Research (B.P.I.), certain irregularities were noticed in the form and structure of the lower and upper third molars.

In Z.D. 80, both the lower and upper third molars are bicolumnar and the socket of a right subsidiary upper molar is present, while in Z.D. 81 and B.P.I.

1, the upper third molars are single-columned, but the lowers are bi-columnar. The upper third molars in Z.D. 393 have single columns as well as the left M_3, but the right M_3 has double columns, while the lower and upper third molars in B.P.I. 2 have only single columns.

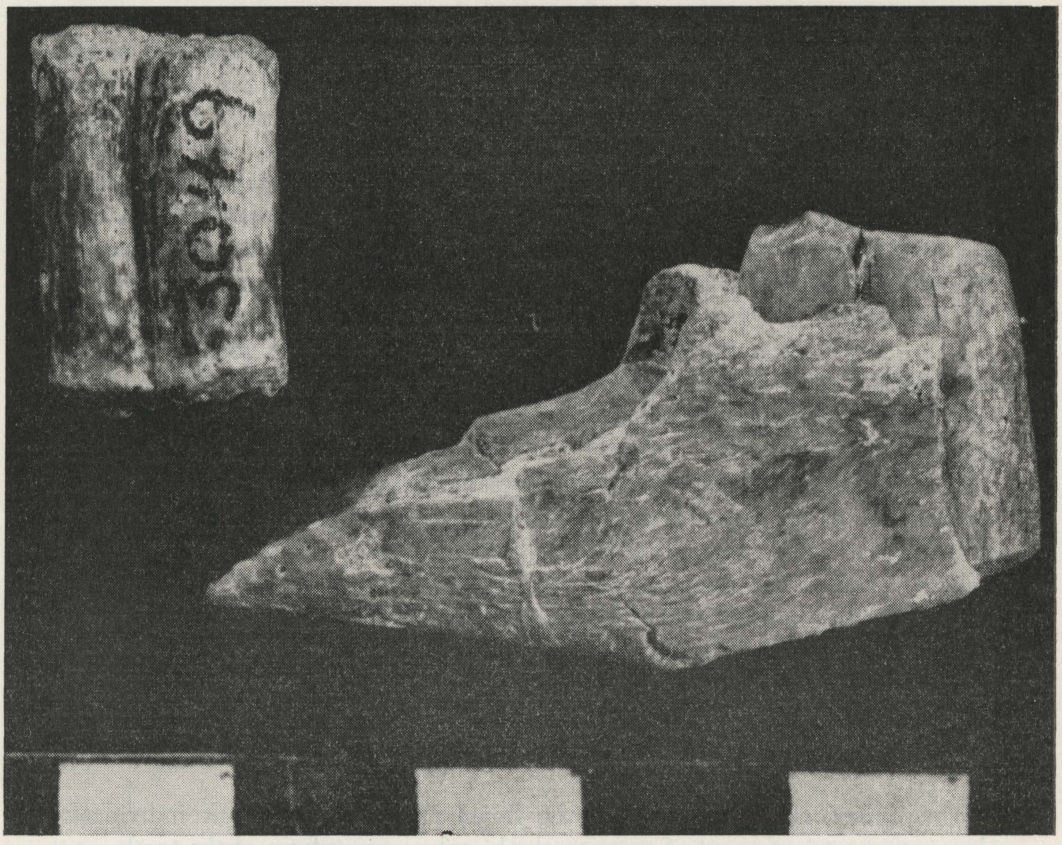

Fig. 26—*Orycteropus* cf *afer* Pallas. Side view of upper left first molar, and fragmentary right lower jaw with broken off second and complete third molar.

The following table gives the greatest lengths and jugal breadths (in mm.) of the five recent skulls, as well as the measurements (in mm.) of the fossil teeth, compared with their opposite numbers in these skulls.

	Z.D. 80	Z.D. 81	Z.D. 393	B.P.I. 1	B.P.I. 2
Greatest length.	230	211	216.4	233	227.2
Greatest breadth.	89	83	82.3	83.3	84

Measurements (in mm.) of fossil and recent upper left first molars.

	Antero-posterior length	*Buccal-lingual breadth*
Fossil	12.8	8.0
Z.D. 80	11.9	7.0
Z.D. 81	12.0	7.3
Z.D. 393	12.7	8.7
B.P.I. 1	12.6	8.2
B.P.I. 2	12.0	8.3

Measurements (in mm.) of fossil and recent right lower second and third molars.

	Antero-posterior length		*Buccal-lingual breadth*	
	M_2	M_3	M_2	M_3
Fossil	16.6	14.5	9.0	9.0
Z.D. 80	11.3	10.5	9.0	8.0
Z.D. 81	13.5	10.2	9.3	7.3
Z.D. 393	14.0	10.0	9.3	8.6
B.P.I. 1	12.8	10.0	9.4	7.4
B.P.I. 2	13.0	11.5	10.0	8.8

Owing to the wide range of variation in the form and measurements of the teeth, irrespective of skull size, as well as the lack of descriptive information on the fossil Orycteropodidae recorded from elsewhere in Africa, the two fragments are here referred to the extant species *Orycteropus* cf. *afer* and are placed on record as the only elements so far discovered of the type in any of the cave deposits in the Makapansgat valley.

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