

*Affinities.*—*Linophryne lucifer* belongs to the family *Ceratiidæ*, and resembles *Melanocetus johnsonii*, Günth. (Proc. Zool. Soc. 1864, p. 301) in several particulars, viz. that only one single spine in the first dorsal is developed (the nasal tentacle), in the enormous mouth, the almost square head, as well as in its small size, its black and smooth skin, and pendent abdominal cavity, besides in its having  $2\frac{1}{2}$  pairs of gills and unarmed branchial arches; but it differs from this species by the formation of its teeth, the oblique mouth, its rudimentary gill-openings, its short and thick nasal tentacle, in the number of its fin-rays, the spiny armature of its head, and its comparatively well-developed eye.

It differs from all the *Ceratiidæ* in its having a long guttural tentacle, also in the low number of rays in its second dorsal and anal fins.

*Locality.*—A single specimen, with a total length of 49 millim., was caught by Capt. P. Andresen in May 1877 floating in the sea (about  $36^{\circ}$  north latitude,  $20^{\circ}$  west longitude)  $3^{\circ}$  N.W. of Madeira, and was presented to the Museum of the Christiania University. During several years it remained unnoticed in the private house of the late Director of the Museum, Prof. Esmark, but after his death it was returned to the Museum (December 1885).

Mr. Andresen, who is now residing in Christiania, reports to me that on the day mentioned he was on a voyage to the West Indies. He was capturing turtle in his boat; there was a heavy swell, but the water was smooth. After a time he caught sight of this little black fish, which lay on the surface quite alive, but almost motionless, which was not surprising when it was discovered that it had just swallowed a fish longer than itself. It did not lie on its side, but was apparently unable to swim away. By getting the bailer under it, he lifted it out with ease, and in order to keep it fresh he gave up his search for turtle and rowed back to the ship, where it was placed in spirit for preservation.

#### EXPLANATION OF PLATE XV.

- Fig. 1. Full view of *Linophryne lucifer*,  $\frac{2}{3}$ .  
 2. Front view of head, showing open mouth.  
 3. Guttural tentacle,  $\frac{5}{8}$ .

2. Note on the External Characters of *Rhinoceros simus*.  
 By P. L. SCLATER, M.A., F.R.S., Secretary to the Society.

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(Plate XVI.)

The heads of the two African Rhinoceroses exhibited by Mr. E. Gerrard, Jun., at the last meeting of the Society, and again placed on the table this night by Mr. Gerrard's kind permission, have



enabled me to make a comparison between *Rhinoceros bicornis* and *Rhinoceros simus*, which I have never before had an opportunity of doing. Indeed, as is well known, such specimens of the latter species, with the exception of a single immature example in the British Museum, are almost unknown in Europe.

On looking at the two heads now before us side by side, the points by which this part of the two animals may be distinguished present themselves very appreciably. In the first place, as is already well known, the "White" or "Square-nosed" Rhinoceros, as it is much better called, is distinguished by its short upper lip, which is quite apparent in the example now before us. In *R. bicornis* the central portion of the upper lip is far extended, and forms a quasi-prehensile organ. This is sufficiently manifest in the specimen now on the table, but is still better seen in the living example of the same animal in the Society's Gardens.

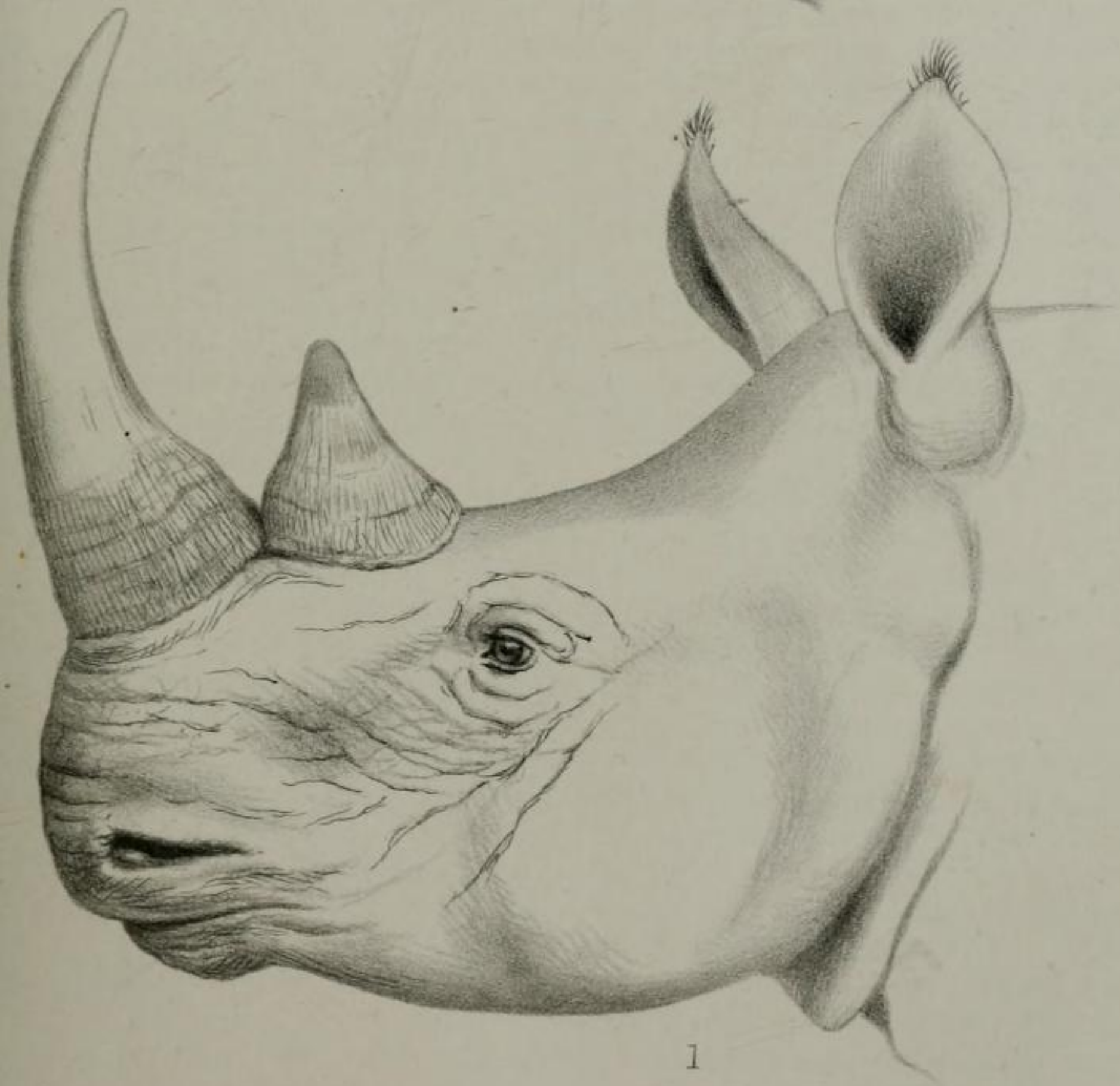
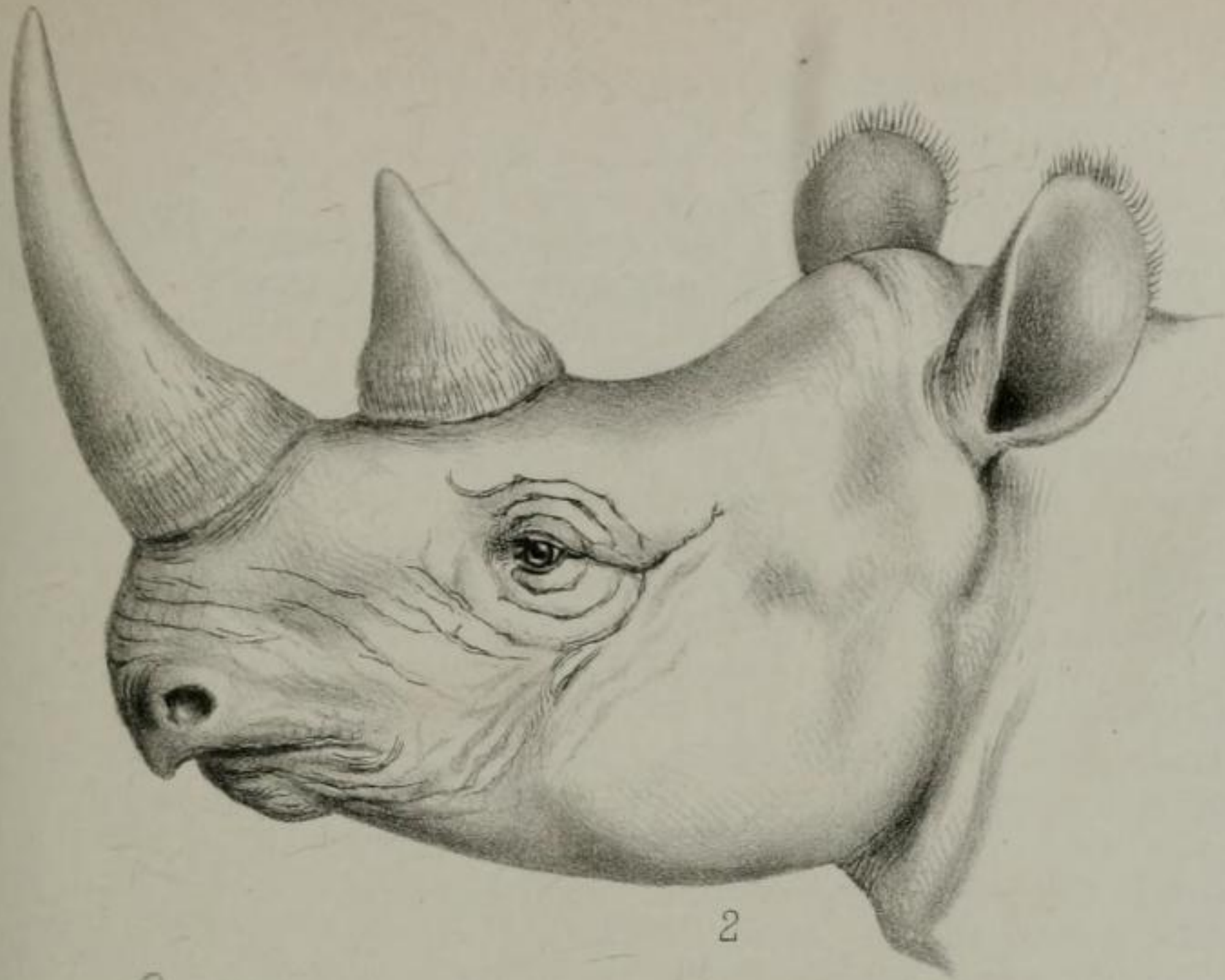
A second point in which the heads of the two African Rhinoceroses differ materially is in the size and shape of the ears. In *R. bicornis* (Plate XVI. fig. 2) the ear-conch is much rounded at its extremity and edged by a fringe of short black hairs which spring from the margin. In *R. simus* (Plate XVI. fig. 1) the ear-conch is apparently much more elongated and sharply pointed at its upper extremity<sup>1</sup>, where the hairs which clothe its margin constitute a slight tuft. While the upper portion of the ear-conch is much more expanded in *R. simus* than in *R. bicornis*, in the lower portion the two margins are united together for a much greater extent, and form a closed cylinder, which in the present specimen rises about 3 inches above the base. The total length of the ears in the present specimens is, in *R. simus*, 12.5 inches and in *R. bicornis* about 9.5 inches.

A third point in which the two species appear to differ is in the shape of the nostrils, which, judging from the present specimens, are, in *R. simus*, elongated in a direction parallel with the mouth, while in *R. bicornis* they are more nearly of a circular shape. Again the eye in *R. simus* appears to be placed further back in the head than in *R. bicornis*.

As regards the well-known differences in the skulls of these two Rhinoceroses, which are obvious enough on a glance at the specimens on the table, I will say nothing on the present occasion, but simply refer to De Blainville's figures (*Ostéographie, Rhinoceros*, pl. iii. and iv.), and to Prof. Flower's remarks on this subject in the 'Proceedings' of this Society for 1876 (p. 452).

<sup>1</sup> This peculiar feature is well shown in the figures of *R. simus* given by Smith (*Ill. S. Afr. Zool. Mamm. t. xix.*), and Harris (*Portraits, &c. pl. 19*).





mit. lth.

Hanhart imp.

HEADS OF RHINOCEROS SIMUS (Fig.1) AND R. BICORNIS. (Fig.2)