

the Ka-Ka Parrot cannot in this point be said to approach the *Trichoglossi* (badly so called).

The peculiarity of the tongue of *Nestor* consists in the fact that the anterior edge of the unguis, always free (though for a very short distance) and jagged, as mentioned above, in the other birds of the class, is here prolonged forwards, beyond the tip of the tongue, for about $\frac{1}{10}$ inch as a delicate fringe of hairs, with a crescentic contour. This fringe seems to result from the breaking up into fibres of the forward-growing plate, which is always marked by longitudinal striations, clearest anteriorly, the result of unequal density and translucency of the tissue composing it, though on making a cross section I was not able to find any of the longitudinal papillary ridges which are present in the human nail and which the striation led me to expect. The unguis is also longer than broad, and very narrow considering the size of the bird, as is also the whole tongue, though the length is greater than in others of the class. In the living bird the mouth is moist, as in the Lories, and not, as in the Cockatoos and others, dry and scaly.

From these considerations, and a comparison of the accompanying drawings of the tongues of *Stringops*, *Nestor*, and *Trichoglossus*, it is evident that the structure of this organ would lead to the placing of *Nestor* among the typical Parrots, though an aberrant one, and not with the *Trichoglossinæ*; and other points in its anatomy favour this conclusion.

November 5, 1872.

The Viscount Walden, F.R.S., President, in the Chair.

The Secretary read the following reports on the additions to the Society's Menagerie during the months of June, July, August, and September, 1872 :—

The total number of registered additions to the Society's Menagerie during the month of June 1872 was 211; of which 72 were by birth, 25 by presentation, 92 by purchase, and 22 were received on deposit. The total number of departures during the same period, by death and removals, was 94.

The most remarkable additions in June were :—

1. A fine pair of Vulturine Guinea-fowls (*Numida vulturina*), presented, June 14th, by Dr. John Kirk, C.M.Z.S., H.B.M. Consul at Zanzibar. Writing from Zanzibar (August 3rd) Dr. Kirk informs me that this Guinea-fowl has a more northern range than he had previously supposed, being essentially a Somali-land species. Dr. Kirk doubts whether it is ever found south of the river Juba, the information that it was to be met with at Lamoo (P. Z. S. 1867, p. 953) not resting on sufficient authority.

2. A specimen of a new species of small Parrakeet of the genus *Loriculus*, from Cebu, Philippine Islands, purchased June 18th, of Dr. A. B. Meyer.

In April 1871 we obtained from a dealer in Liverpool a pair of

the same species of Parrakeet. These I determined as *Loriculus culacissi**; and when Dr. Meyer showed me his bird I told him that I believed it to be of that species. Dr. Meyer, however, was of a different opinion, and in order to settle the question was kind enough to allow me to examine the specimens of *Loriculus* in his collection made in the Philippines. On comparing Dr. Meyer's skins with the descriptions given in Dr. Finsch's monograph, I found that Dr. Meyer was undoubtedly correct. Three species of *Loriculus* were represented in his collection, namely *L. culacissi* from Luzon, *L. regulus* from Negros and Panay, and the present bird, which appeared to be undescribed, from Cebu. Under these circumstances I sent a short notice of the last-mentioned species to 'The Ibis' for July last, and proposed to call it *L. chrysonotus*, from its golden back †.

The total number of registered additions to the Society's Menagerie during the month of July 1872 was 122; of which 31 were by birth, 57 by presentation, 17 by purchase, 5 by exchange, and 12 were received on deposit. The total number of departures during the same period, by death and removals, was 94.

Almost the only arrival of special interest was twelve Natterer's Bats (*Vespertilio nattereri*, Kuhl), presented, July 19th, by Lord Lilford, F.Z.S. We vainly endeavoured to keep these animals alive in captivity: they all died within a few days.

The total number of registered additions to the Society's Menagerie during the month of August 1872 was 115; of these, 20 were by birth, 45 by presentation, 29 by purchase, 4 by exchange, and 17 were received on deposit. The total number of departures during the same period, by death and removal, was 141.

The most noticeable of the additions were:—

1. A female two-horned Rhinoceros, stated to have been captured in Malacca, purchased of Mr. W. Jamrach, August 2nd, for the sum of £600. As soon as this animal arrived in the Gardens it became obvious that it was of a different species from the female two-horned Rhinoceros previously purchased of Mr. Jamrach ‡, and that consequently there must be two species of this form of Rhinoceros in existence.

On reference to authorities it appeared evident to me that the animal last received was the true *R. sumatrensis* § of previous writers.

This might have been expected from the locality in which it was obtained, the fauna of Malacca being notoriously similar to that of Sumatra.

Under these circumstances it became, in my opinion, necessary to give a new name to the animal previously received from Chittagong; and in a communication made to Section D of the British Association at Brighton on the 16th of August last, I accordingly proposed to call it *Rhinoceros lasiotis* ||, from the peculiar long hairs which

* See P. Z. S. 1871, p. 479, and Rev. List of Vert. p. 202.

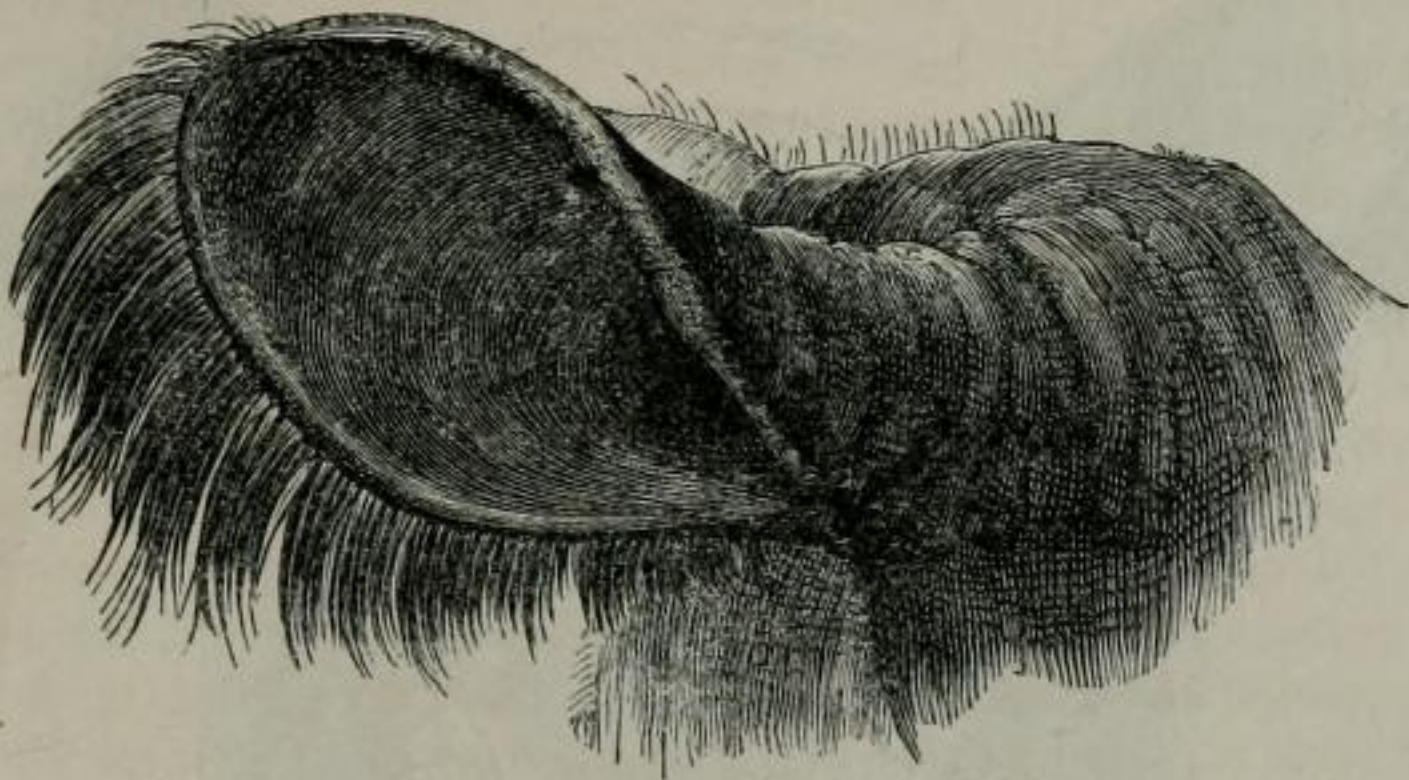
† See Ibis, 1872, p. 323, pl. xi.

‡ See *antèa*, p. 493, pl. xxiii.

§ *Rhinoceros sumatrensis* of Cuvier, Règne An. i. p. 240 (1817), founded on Bell's description of an animal killed in Sumatra, published in Phil. Trans. 1793. Raffles in 1820 named the same animal *R. sumatranus* (Linn. Trans. xiii. p. 268).

|| See 'Times' of August 19, p. 5; and 'Athenæum,' August 24, p. 243; also 'Nature,' October 24, p. 518.

Fig. 1.



Right ear of *Rhinoceros lasiotis*.

border the outer edge of the ear-conch (see fig. 1), and which are of themselves sufficient to render the animal easily recognizable from *R. sumatrensis*. Dr. J. Anderson, in his excellent description of our Chittagong animal under the name of *R. sumatrensis* (*antea*, p. 130), has specially commented on this peculiarity, but, not being aware that he was dealing with a different species, was inclined to think it might be individual. In *R. sumatrensis* (*verus*) (fig. 5, p. 793) the ears are filled with short bristly hairs internally, but there is no special elongated fringe on the outer edge. In *R. lasiotis* (fig. 3, p. 792) the interior of the ear-conch is nearly naked.

Our Sumatran Rhinoceros, although an adult or rather aged animal, was much smaller in bulk than the hairy-eared, and at least 6 inches less in height at the shoulder*.

Another point of distinction between the two animals is the longer tail of *R. sumatrensis*, which is only covered by short black straggling bristles. In *R. lasiotis* the tail is shorter and tufted, terminating in long brown hairs.

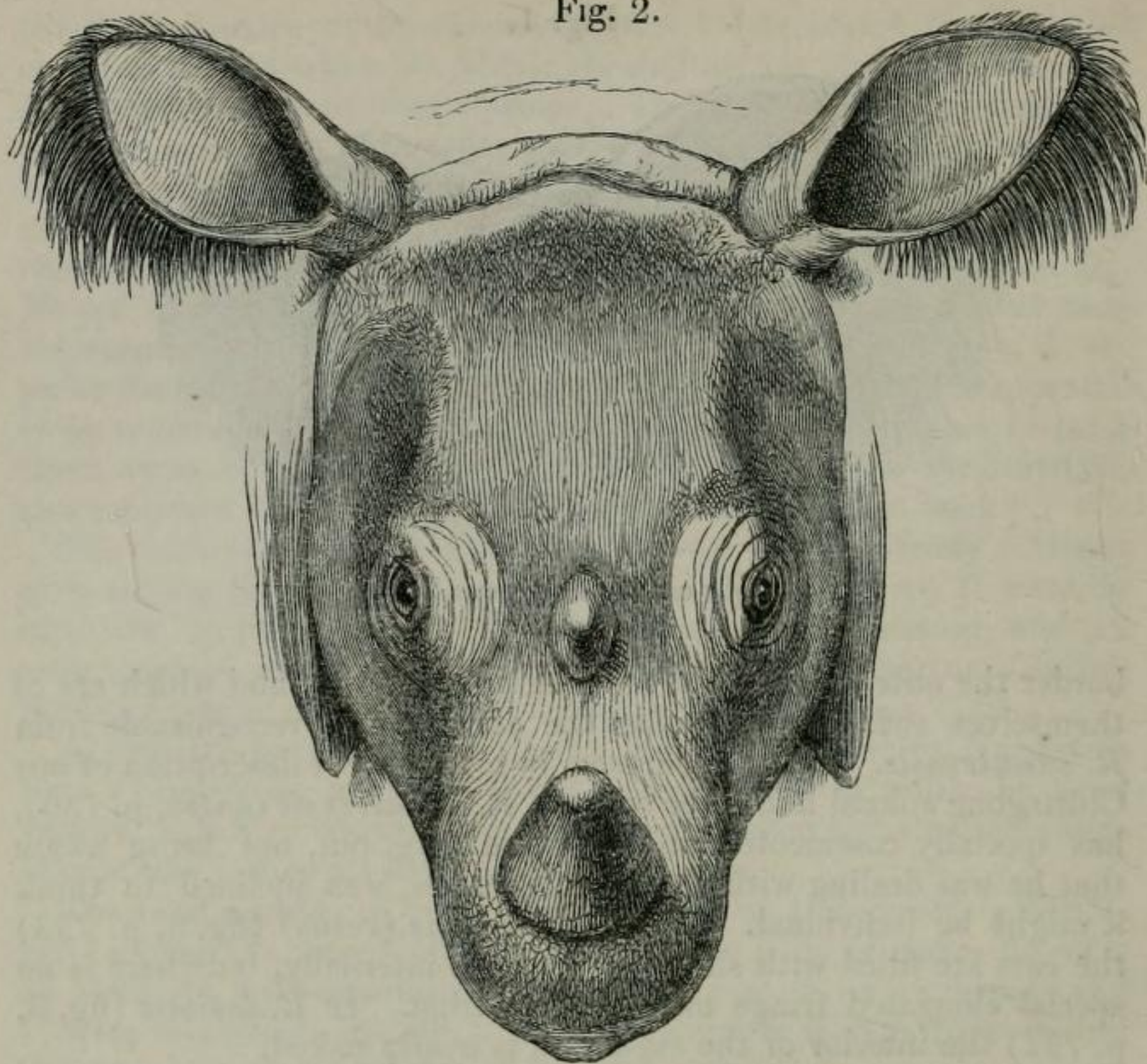
The distance between the ears is much greater in *R. lasiotis* than in *R. sumatrensis*, as will be seen by the accompanying drawings (figs. 2 and 4, pp. 792, 793); and there can be no doubt that the skulls of the two species, when they can be compared, will exhibit corresponding differences.

The skin of *R. lasiotis* is smoother and paler in colour; the hairs are longer and finer and of a rufescent hue, giving the animal a general colouring of lightish brown. In *R. sumatrensis* the skin is much darker and the hairs are short and bristly.

* Mr. Bartlett's measurements of our five Rhinoceroses (August 24, 1872) are as follow:—

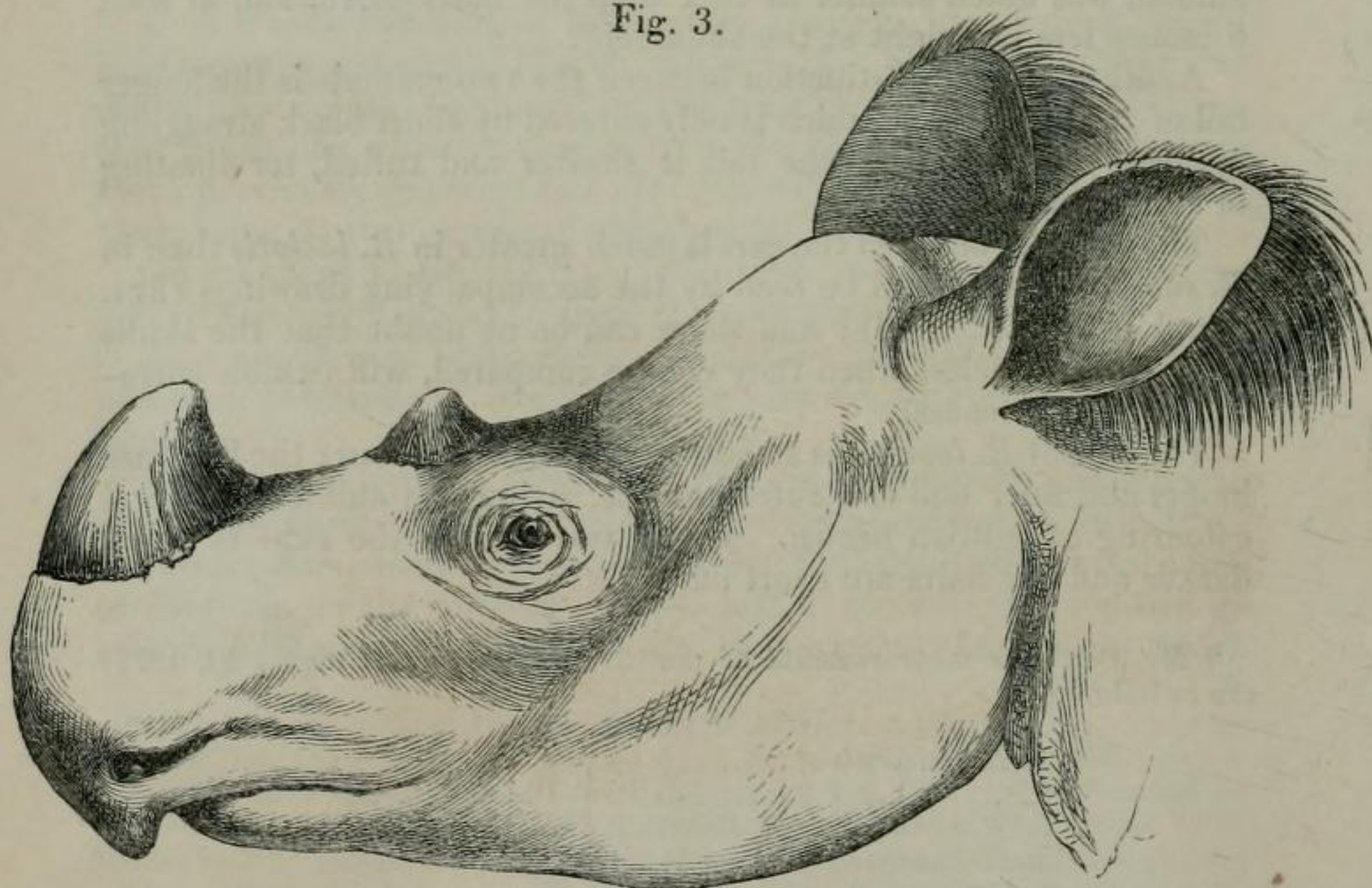
	ft.	in.	
1. <i>R. unicornis</i> ♂	5	4	} height at shoulder.
2. " " ♀	5	2	
3. <i>R. sumatrensis</i> ♀	3	8	
4. <i>R. lasiotis</i> ♀	4	4	
5. <i>R. bicornis</i> ♂	4	6	

Fig. 2.



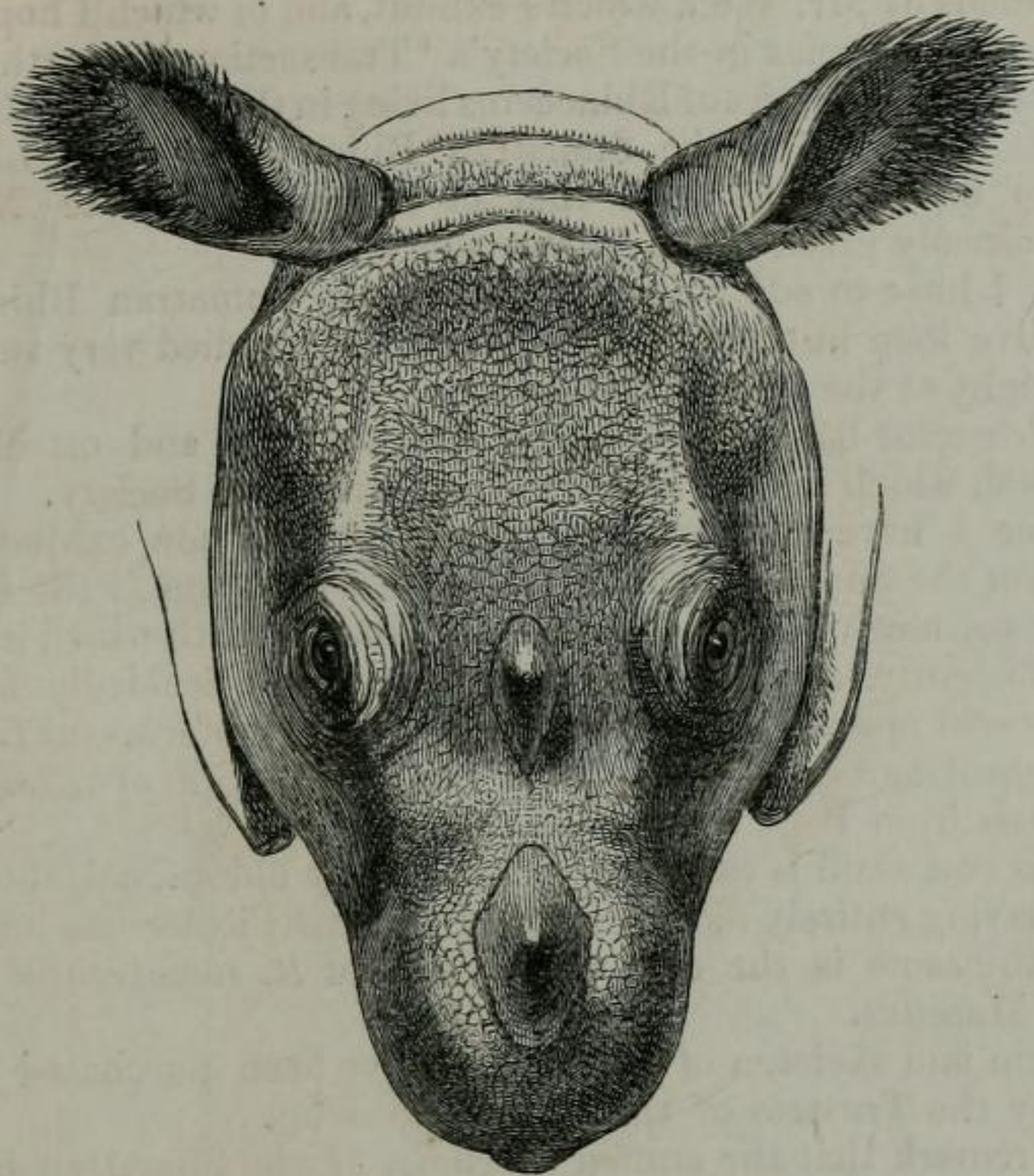
Front view of head of *R. lasiotis*.

Fig. 3.



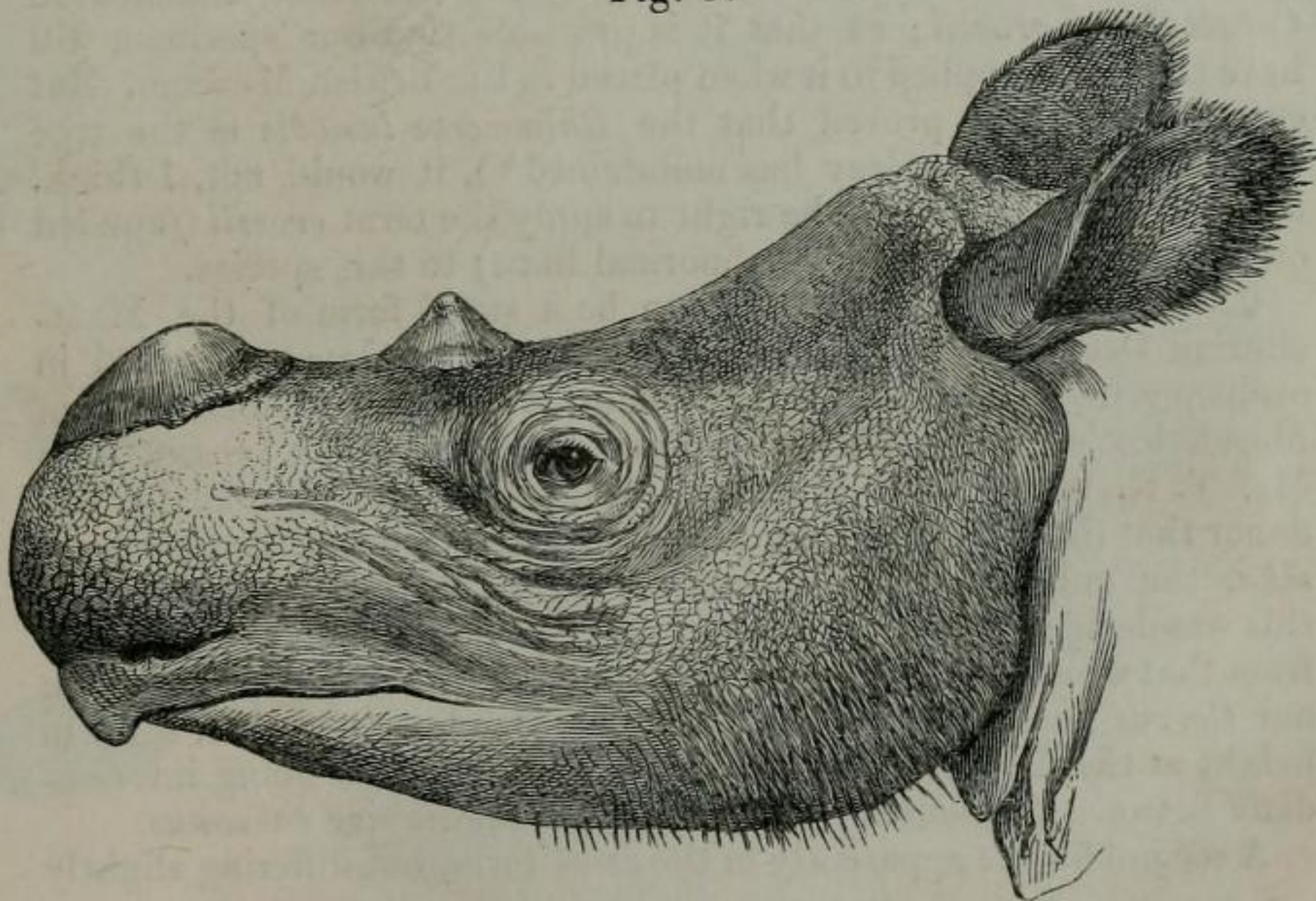
Side view of head of *R. lasiotis*.

Fig. 4.



Front view of head of *R. sumatrensis*.

Fig. 5.



Side view of head of *R. sumatrensis*.

These differences are well shown in the water-colour drawings of these animals by Mr. Wolf, which I exhibit, and of which I hope hereafter to publish copies in the Society's 'Transactions,' together with some notes on the species of Rhinoceros living in the Society's Gardens.

Mr. Smit's figure of the Sumatran Rhinoceros (Plate LXVII.) may also be compared with that of *R. lasiotis* (Plate XXIII., p. 494) already given in the 'Proceedings.'

Lastly I have to add with regret that our Sumatran Rhinoceros did not live long in the Society's Gardens, but died very suddenly on the night of the 21st of September.

Our Prosector has made notes on the anatomy and osteology of this animal, which he will shortly bring before the Society. In the mean time I have compared the skull (which I now exhibit) with the skull of the Sumatran Rhinoceros in the Museum of the College of Surgeons, received from Sir Stamford Raffles, with which it agrees quite sufficiently, although the nasal portion is decidedly broader in the present specimen. Mr. Garrod, however, informs me that the present skull agrees perfectly with the adult skull of *Rhinoceros sumatrensis* from Pegu in the British Museum.

The present skull is evidently that of a very old animal, the lower incisors having entirely disappeared. Professor Flower has informed me that the same is the case with a skull of *R. sumatrensis* in the Brussels Museum.

The skin and skeleton of this animal have been purchased of the Society by the Trustees of the British Museum.

I may remark that the stuffed specimen of the Sumatran Rhinoceros in the Gallery of the British Museum (which originally came from the Leyden Museum) is evidently a young male of the same species. I observe that it has recently had its name changed to *Ceratorhinus crossii*; so that it is probable that our specimen will have this name applied to it when placed in the British Museum. But even should it be proved that the *Rhinoceros lasiotis* is the true *sumatrensis* (as Dr. Gray has maintained*), it would not, I think, under any circumstances, be right to apply the term *crossii* (founded on what is probably only an abnormal horn) to this species.

2. A female of what appears to be a small form of the Manchurian Deer (*Cervus mantchuricus*), inhabiting Japan, received in exchange from the Jardin d'Acclimatation of Paris. On the 18th of March last we received a male of this same animal as a present from Mr. T. R. Wheelock of Shanghai. Having been informad by the donor that this Deer was from Japan, I at first referred it to *Cervus sika*, the only described species of *Cervus* of that country. But this was decidedly an error; that is, the species is decidedly different from that which we call *Cervus sika* †, and does not much differ from our *Cervus mantchuricus*, except in size, standing only 2 ft. 8 in. in height at the shoulders, instead of 3 ft. 8 in., and thus being intermediate between *C. mantchuricus* and *C. pseudaxis* sive *taëvanus*.

A second female apparently of the same form, but differing slightly

* Ann. Nat. Hist. ser. 4, vol. x. p. 207, "On the double-horned Asiatic Rhinoceros." See also my remarks, *ibid.* p. 298

† Cf. Trans. Zool. Soc. vii. p. 346.



J. Smith. del.

RHINOCEROS SUMATRENSIS ♀

M. N. Hanhart. imp.