

LETTERS TO THE EDITOR.

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History of a White Rhinoceros Skull.

In his interesting "Natural History Essays," in which occurs the description of the white rhinoceros, Mr. Graham Renshaw makes the following reference to the first skull of this animal which was brought to England:—

"It would be interesting to know if the white rhinoceros head brought to England by the Rev. John Campbell, about 1815, is still in existence. It appears to have been preserved as late as 1867 in the Museum of the London Missionary Society at Finsbury, but there seems to be no mention of it during recent years in zoological literature. In a figure now before me the artist has absurdly furnished the open jaws with an imaginary series of perfectly regular pseudomolar teeth: the square mouth has been distorted to resemble the prehensile lip of the black species, though the slit-like nostrils, position of the eye and semi-tubular ears are delineated with fair correctness. The anterior horn of this individual is said to have been 3 ft. long: and, as figured, from its slender-

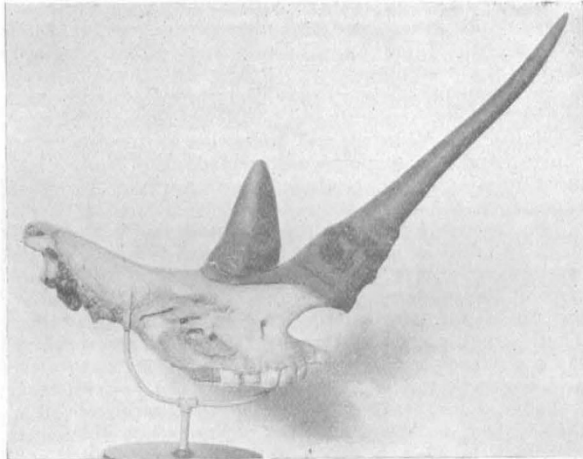


FIG. 1.—Skull of the White Rhinoceros in the American Museum of Natural History.

ness recalls Col. Hamilton Smith's description of the mysterious horn, brought from Africa, from which he sought to deduce the existence of a true unicorn in the interior of that Continent" (p. 146).

In 1902 this very skull was purchased from Mr. Cecil Graham for the American Museum of Natural History by Mr. J. Pierpont Morgan. Mr. Graham has made a large and valuable collection of rhinoceros horn weapons, clubs, knob-kerries, and battle axes, and in course of correspondence he wrote of his discovery of the skull as follows:—"There is no record as to how or when the specimen was first brought to England. I found it by chance a few years ago in the City, lying neglected and dirty on the floor of a back room of the London Missionary Society. No doubt it was presented by a missionary before 1821. I especially value the letter dated 1821."

The letter referred to by Mr. Graham is from William Cooke, of the Royal College of Surgeons. It is dated November 20, 1821, and addressed to William Alers Hankey, Esq., Fenchurch Street. It reads as follows:—

"My dear Sir,
"The head in the missionary museum supposed to be the head of the unicorn, appears to belong to a species of Rhinoceros previously unknown in this country, at least, there is no such specimen in the Hunterian Museum which may be regarded as the National Depository for comparative anatomy. In that grand collection there are

heads which nearly resemble it, but there are points in which the diversity of conformation indicates a decided specific difference.

"Permit me to suggest to you, and through you to the Directors of the Missionary Society, that a rare specimen of that nature is entitled to a place where it can be more justly appreciated than it ever will be in their collection. I need not suggest to you the advantages which result from a concentration of the different productions of nature—from bringing under one view the genera and species of the various natural sciences—especially when they are not only rendered available for minute distinction, but by a liberal policy are accessible to men of science from all parts of the world. I can have no selfish motive in suggesting that the head possessed by the Missionary Society would become much more an object of interest if deposited in the Hunterian Museum, than it ever will be should it remain in the Old Invry. If deposited at the College of Surgeons it will not only fall under the notice of Naturalists from all quarters, but it will likewise be a subject of reference in the lectures on comparative anatomy annually delivered at that Institution.

"The Missionary directors unquestionably will consider the advantages which may result to their own Society, as well as the promulgation of scientific knowledge; and if I might presume to express an opinion on this subject, it would be in favour of the head being presented to the College. It would there be preserved as a testimony of praiseworthy liberality—it would soften prejudice, where perhaps there is a deep-rooted antipathy to religion, but where conciliation is of great importance; and if it remain in its present situation for a few years it will be liable to destruction, or to essential injury at least.

"If you have never seen the Museum of the College of Surgeons it would afford me great pleasure to accompany you thither any Friday.

"I feel assured, my dear Sir, that you will excuse the liberty I have taken in addressing you on this topic;—and believe me to be

"Yours most obediently and

"respectfully

"(signed) WILLIAM COOKE."

In spite of this appeal, the skull evidently remained in the possession of the Missionary Society until Mr. Graham rescued it from oblivion. Although the occipital portion has been sawn off, it is a remarkably fine specimen, as shown by the accompanying photograph. The nasal horn is firmly attached to the skull; the frontal horn is detachable, but readily fits in place. The principal measurements are as follows:—

| | | |
|----------------------------------|--------|-----------------------------------|
| Total length of skull, along top | .. | 778 mm. = 30 $\frac{5}{8}$ inches |
| Length of grinding series | | 287 ,, = 11 $\frac{1}{4}$,, |
| ,, frontal horn | | 280 ,, = 11 ,, |
| ,, nasal horn | | 890 ,, = 35 ,, |

(Measured on a straight line.)

The skull is now exhibited with two war clubs manufactured from the nasal frontal horns of the white rhinoceros, with a skull of the related woolly rhinoceros from Siberia, presented by the Moscow Museum, through Madame Pavloff, also with a skull of the *Rhinoceros pachygnathus*, a related or ancestral form, from Pikerimi, presented by the Munich Museum through Prof. von Zittel.

HENRY FAIRFIELD OSBORN.

American Museum of Natural History, New York,

April 24.

Fictitious Problems in Mathematics.

YOUR reviewer gives a new definition of "a perfectly rough body" (NATURE, June 1), which he says is that of the mathematician. The definition appears to me to contradict what he has elsewhere said. But I need not enlarge on this point, for his criticism of a problem should be tried, not by his definition, but by that given in the book in which the problem occurs.

The reviewer accuses Cambridge examiners "of endowing bodies with the most inconsistent properties in the matter of perfect roughness and perfect smoothness"