

my object-glass to correct performance after having removed it from its cell [in a telescope of 45 inches focus, made by Dollond in 1771], that I may venture, with considerable confidence, to recommend trial of the method to those who wish to perfect glasses of this construction."

V. *On a new Species of Rhinoceros found in the Interior of Africa, the Skull of which bears a close Resemblance to that found in a Fossil State in Siberia and other Countries.* By Sir Everard Home, Bart. VPRS.

"It has been hitherto asserted," we are informed in the commencement of this paper, "as one of the most curious circumstances in the history of the earth, that all the bones that are found in a fossil state, differ from those belonging to animals now in existence; and I believe that this is generally admitted, and that there is no fact upon record, by which it has been absolutely contradicted; but the observations I am about to state respecting this rhinoceros, illustrated by the drawings that accompany them, will go a great way to stagger our belief upon this subject."

"The skull of the animal belonging to this new species of rhinoceros, now living in Africa, was brought to this country by Mr. Campbell, one of the missionaries sent there from the London Missionary Society, and is deposited in their Museum in the Old Jewry."

Sir Everard then proceeds to give, from Mr. Campbell's memoranda, an account of the locality and habits of the animal, but as the substance of these has already appeared in various publications, we shall pass to the description of the skull. This is shown, with the assistance of two engravings, "to bear so close a resemblance to the fossil skulls from Siberia, as to leave no prominent characteristic mark between them;" whence the author is led to believe, "that although many animals belonging to former ages may be extinct, they are not necessarily so: no change having taken place in our globe, which had destroyed all existing animals, and, therefore, many of them may be actually in being, although we have not been able to discover them." After arguing from the existence in Africa of immense tracts of country yet unexplored, that "we have no right to assume that large animals, although not met with, do not exist;" he gives the following particulars of the migration of an animal of another kind, as explaining "in what way particular animals may elude our inquiry at one time, and at another be brought within our reach."

"Mr. Campbell says, he found that the wild ass or quagga, migrates in winter from the tropics to the vicinity of the Malaleveen river, which, though further to the south, is reported to be warmer than within the tropic of Capricorn, when the sun has retired to the northern hemisphere. He saw bands of 200 or 300, all travelling south, when on his return from the vicinity of the

tropic; and various Bushmen, as he proceeded south, inquired if the quaggas were coming. Their stay lasts from two to three months, which in that part of Africa is called the Bushmen's harvest. The lions who follow them are the chief butchers. During that season, the first thing a Bushman does on awaking is, to look to the heavens to discover vultures hovering at an immense height; under any of them he is sure to find a quagga that had been slain by a lion in the night."

These are succeeded by observations on the docile and tameable character of the elephant, and on the savage and stupid nature of the rhinoceros, which are followed by some inferences respecting the latter subject, from the diminutive cavity of the cranium, and consequent smallness of the cerebrum in the last-mentioned animal. An account of the manners and habits of the Asiatic rhinoceros, kept for three years in the menagerie at Exeter Change, is subjoined; and the paper concludes as follows:

"The account in the Bible of an unicorn not to be tamed, mentioned by Job, has so great an affinity to this animal, that there is much reason to believe that it is the same, more especially as no other animal has ever been described so devoid of intellect. In that age, the short horn might readily be overlooked, as it cannot be considered as an offensive weapon; and the smoothness of the animal's skin would give it a greater resemblance to the horse than to any other animal."

VI. *Extract of a Letter from Capt. Basil Hall, RN. FRS. to William Hyde Wollaston, MD. FRS. containing Observations of a Comet seen at Valparaiso.*

VII. *Elements of Capt. Hall's Comet.* By J. Brinkley, DD. FRS. and MRIA. and Andrew's Professor of Astronomy in the University of Dublin. (In a Letter addressed to Dr. Wollaston.)

This comet, which had been seen by astronomers in Europe, before it passed its perihelion, remained visible at Valparaiso for 33 days, and Capt. Hall has furnished a valuable set of observations on it, from which Dr. Brinkley has deduced its elements by an improved mode of calculation. On April 8, 1821, it was distant nearly 1.41 from the earth, the sun's distance from the earth being unity, and on May 3, when last seen, about 2.64. It is interesting to astronomers on account of its small perihelion distance; out of 116 comets in Delambre's Catalogue, the orbits of which have been computed, there are only three that pass nearer the sun. In this, as well as in its great inclination, this comet agrees with that observed in 1593, whence it is probable that they are the same. Some sketches of it by Capt. Hall are annexed to his letter in a plate.

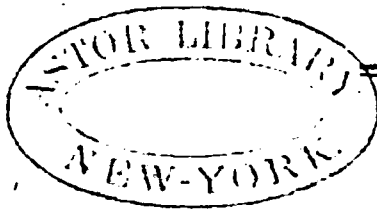
VIII. *On the Electrical Phenomena exhibited in vacuo.* By Sir Humphry Davy, Bart. PRS.

It is remarked in the commencement of this highly interesting paper, that the relations of electricity to heat, light, and chemical attractions, together with the discovery of its connexion

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