

XLIX.—ON THE IDENTIFICATION OF THE ANIMALS AND PLANTS OF INDIA WHICH WERE KNOWN TO EARLY GREEK AUTHORS. By V. BALL, M.A., F.R.S., Director, Science and Art Museum, Dublin.

[Read, June 9, 1884.]

IN a communication made by me last year to the Royal Geological Society of Ireland, entitled "A Geologist's Contribution to the History of India," I endeavoured to identify many mineral productions which are mentioned by the writers of antiquity. Partly by the recorded characteristics of these minerals, partly by such indications as are given of the localities whence they were derived, I was enabled, by a comparison with our present knowledge of the mode of occurrence and distribution of minerals in India, to arrive at a number of conclusions, the main tendency of which has been to show that many apparently extravagant and fictitious stories by these early writers rest on substantial bases of facts.

While engaged upon that inquiry with reference to minerals, I came upon numerous allusions to animals and plants, for some of which, in spite of their apparently mythical character, I felt sure that equally substantial foundations could be found by subjecting them to the same sort of analytical comparisons with known facts. From time to time, as leisure has been found for the purpose, I have carried on this investigation, and have occasionally published some of the results.¹

Inquiries like these belong, if I may use the expression, to a border land where the student of books and the student of nature may meet and afford one another mutual assistance.

I possess no special philological qualifications for this kind of work, and have only a slight acquaintance with a few of the languages of India; but, on the other hand, I think I may lay claim to the possession of some special knowledge of the animals and plants of India, the ideas about them which are current among the natives, and the uses they put them to. During my travels in the wildest regions of India I have ever taken an interest in the customs and beliefs of the so-called aboriginal tribes, and have had many opportunities for tracing out stories believed by them, and also sometimes by Europeans, to the sources from whence they had originated. This kind of experience enables me now to take up the tale of explanation where it has often been left by linguists and historians, and carry it forward to a satisfactory conclusion.

A want of personal acquaintance with India, or when that was possessed, a want of such information as can only be acquired by a

¹ *The Academy*, April 21, 1883, and April 19, 1884.

10. THE ELEPHANT (Ἐλέφας).

Elephas indicus, Cuv.—The Indian Elephant.

There are, as might be expected, numerous allusions to the Elephant by Megasthenes, Arrian, and the author of the Periplus. Its mode of capture is described, as also are its training, its uses in the chase and in war, its habits, and certain peculiarities of its constitution. Some of these latter, as, for instance, those connected with the coming together of the sexes, are correct, though a myth in reference to this last exists even at the present day, and is very commonly believed by many.

The elephants of Taprobane (*i. e.* Ceylon) are distinguished, according to Ælian's account—derived perhaps from Megasthenes—as being larger, and more intelligent, than those of the mainland. The same author, too, describes a white elephant, and relates in reference to it a story of its devotion to its master.

The author of the Periplus mentions several ports, both in Africa and India, whence *elephas* (*i. e.* ivory) was an article of export, as we know it had been since the days of Solomon.

A very fair monograph of the habits and external characteristics of the elephant might be written from the facts recorded by the above authors, supplemented by such as are given by Strabo and Pliny.

11. THE KARTAZONON AND THE INDIAN ASS (Καρτάζωνον, Ἰνδικὸς ὄνος).

Rhinoceros indicus, Cuv.—The Rhinoceros. *Genda*, Hin.

The *Kartazonon* of Megasthenes and the Horned Ass of Ktesias, although separately described by Ælian as if they were distinct animals, appear to be both capable of identification with the rhinoceros. This fact has been already more or less generally accepted by writers, although some particulars, especially those as to the colour, have given rise to much discussion and argument. It seems probable that the Rhinoceros was also the original of the *monokeros*, or unicorn, which, as we have good cause to know, is usually represented as an Horned Ass. Ælian's²² description of the *Kartazonon* is as follows:—“It is also said that there exists in India a one-horned animal, called by the natives the *Kartazon*. It is of the size of a full-grown horse, and has a crest and yellow hair soft as wool. It is furnished with very good legs, and is very fleet. Its legs are jointless, and formed like those of the elephant; and it has a tail like a swine's. A horn sprouts out from between its eyebrows, and this is not straight, but

²² Hist. Anim., xvi. 20, 21.

curved into the most natural wreaths, and is of a black colour. This horn is said to be extremely sharp. The animal, as I learn, has a voice beyond all example—loud, ringing, and dissonant.”

Photios's³³ account of the “horned wild ass” of Ktesias agrees, in the main particulars, with one by Ælian.³⁴ That by the former is as follows: “Among the Indians there are wild asses as large as horses, some being even larger. Their head is of a dark-red colour, their eyes blue, and the rest of their body white. They have a horn on their forehead, a cubit in length (the filings of this horn, given in a potion, are an antidote to poisonous drugs). This horn, for about two palm-breadths upwards from the base, is of the purest white, where it tapers to a sharp point, of a flaming crimson, and in the middle is black. These horns are made into drinking-cups, and such as drink from them are attacked neither by convulsions nor by the sacred disease (epilepsy); nay, they are not even affected by poisons, if either before or after swallowing them they drink from these cups wine, water, or anything else. While other asses, moreover, whether wild or tame, and indeed all other solid-hoofed animals, have neither huckle bones (*astragalus*) nor gall in the liver, these one-horned asses have both. Their huckle bone is the most beautiful of all I have ever seen, and is in appearance and size like that of the ox. It is as heavy as lead, and of the colour of cinnabar, both on the surface and all throughout. It is an exceedingly fleet and strong animal, and no creature that pursues it, not even the horse, can overtake it,” &c.

Regarding the *astragalus*, or huckle-bone, the statement of its absence in solid-hoofed animals is incorrect, and I can offer no explanation of the reputed characteristics of that of the horned wild ass, except that an example seen by Ktesias had simply been dyed and weighted with lead. For short distances the rhinoceros can charge with great speed and force, and its voice is such as to merit to some extent the description by Megasthenes.

In reference to the colours of the animal, when I recall that I have often seen in India horses with tails and manes of a bright magenta, and with spots of the same colour all over their otherwise white bodies; that I have also seen elephants belonging to rajahs ornamented on their heads by the application of various pigments—I am led to conclude that the rhinoceros from which Ktesias's description was taken was a domesticated one which, in accordance with the natives' taste for bright colours, had been painted to take part in some pageant. Domesticated rhinoceroses are still kept by many natives; and they have, I believe, sometimes been trained like elephants to carry *howdahs*, with riders in them. I once met a native dealer in animals who had taken with him, for several hundred miles through the jungles, a rhinoceros, which he ultimately sold to the rajah of Jaipur, in

³³ *Elogia in Photii*, Bibl. lxxii. 25; *Cf. Anc. India*, by J. W. McCrindle.

³⁴ *Hist. Anim.*, iv. 52.

Madras. He drove the animal before him, he told me, "as if it were a cow."

The horn of the rhinoceros is still held in much esteem by the natives of India, both for making into cups and for the preparation of a drug. They will pay sportsmen a high price for these horns, but are particular about obtaining the right article, as I learned from a gentleman who, as a speculation, brought a number of rhinoceros horns from Africa, but failed to dispose of them in the Calcutta bazaar.

Having thus offered an explanation of what has hitherto been a difficulty to commentators, I should not be surprised if evidence should be forthcoming to prove that it has been the custom with the natives to adorn with coloured pigments the cuirass-like hides of tame rhinoceroses.

Since the above paragraph was written, I have obtained sufficient confirmation of the correctness of this view, for, on turning to Rousset's work on the Native Courts of India,³⁵ I find an account of a rhinoceros' fight at Baroda, which took place before the Gaikowar. The two animals were chained at opposite sides of the arena—one of them was *painted black, the other red*, in order that they might be distinguished, for otherwise they resembled each other in every point.

Ktesias' horned ass, therefore, had probably been whitewashed, and had had his horn painted blue and scarlet by his owner—who little foresaw what food for discussion and comment he was affording, by that simple act, to twenty centuries of philosophers and historians.

12. WILD HORSES AND ASSES (Ἴπποι καὶ ὄνοι ἄγριοι).

Equus onager, Pallas.—Wild Ass of Cutch, &c.

According to Ælian³⁶ there are herds of wild horses and also of wild asses. "These interbreed, and the mules are of a reddish colour, and very fleet, but impatient of the yoke and very skittish. They say that they catch these mules with foot-traps, and then take them to the king of the Prasians, and that if they are caught when two years old they do not refuse to be broken in, but if caught when beyond that age they differ in no respect from sharp-toothed and carnivorous animals."

The mention of both horses and asses is no doubt due to the somewhat mule-like characters of the wild ass which is found in Western India, and is called *Ghor-khur* in Hindustani, and *Ghour* by the Persians. A closely allied species is the *Kiang* of Thibet. (*E. hemionus*, Pallas.) Even now by travellers they are sometimes spoken of as wild horses, but their neigh or bray, and tail, prove them to be true asses. In the Bikaner State, according to Dr. Jerdon, "once only in the year,

³⁵ L'Inde des Rajahs.

³⁶ Hist. Anim., xvi. 9. Cf. Megasthenes, by J. W. M'Crindle, p. 163.

PROCEEDINGS

OF THE

Vol. 16

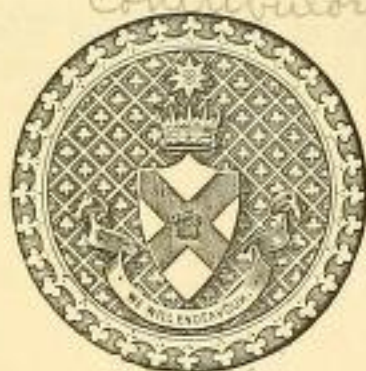
ROYAL IRISH ACADEMY.

Second Series.

*5.06.(41.5)A
ca*

VOLUME II.—POLITE LITERATURE AND ANTIQUITIES.

Lacks Index but has list of contributors



DUBLIN:

PUBLISHED BY THE ACADEMY,

AT THE ACADEMY HOUSE, 19, DAWSON-STREET.

SOLD ALSO BY

HODGES, FIGGIS, & CO., GRAFTON-ST.

AND BY WILLIAMS & NORGATE,

LONDON:

EDINBURGH:

14, Henrietta-street, Covent Garden.

20, South Frederick-street.

1879—1888.