"There are other calcareous concretions that contain no kind of organic nucleus, but are composed of precisely the same materials as those which are found around the bones, and present many of the irregular shapes of the tuberous roots of vegetables; some of them also have the elongated *conical form of slender stalactites*, or clustered icicles—a form not unfrequently produced in beds of loose calcareous sand, by the constant descent of water along the same small cavity or crevice, to which a root or worm hole may have given the first beginning:" p. 383. Mr. DEAN's collection has many examples of encrusted twigs and roots.

Fig. 19, the specimen which so much puzzled the gentlemen who examined the collection while in Mr. D.'s possession is in fact one of the most curious of the whole, nor is yet certain to what animal it should be assigned. Mr. PEARSON, on seeing it, pointed out its great resemblance to the cervical vertebra of the young camelopardalis, which died in Calcutta, a few years since, and of which he preserved the skeleton. Lieut. BAKER has favored me with a drawing of a similar bone, which he states to belong to a fossil elk in Serjeant DAWE's collection. (See Pl. XLIV. and the description in page 507.) There are others of much larger dimensions, he says, in the Dadupur museum, the contents of which will form the subject of a plate in the ensuing number of the Journal.

The specimen set down as a small petrified fish, which it much resembles in outward form, is, on making a longitudinal section, found to be formed of oval concentric concretions, similar to those of the country almond; possibly they are the convolutions of some shell, but certainly not a fish.

VI.—*On the Fossil Elk of the Himálaya. By Lieut.* W. E. BAKER, *Engineers.*

[In a note to the Editor.]

The fossils represented in the accompanying plate, XLIV., are stated by the natives who collected them to have been found in the Haripur pass of the Sub-Himálayan range. The original specimens are in the possession of Mr. DAWE of the Canal Department.

The fragment of antler (fig. 3,) appears undoubtedly to have belonged to a species of elk, and it is possible, that the two vertebræ (figs. 1 and 2) may have formed a part of the same animal: as they are stated to have been brought from the same locality, and this statement is corroborated by the similarity of colour and general appearance of the fossils. One of the vertebræ (fig. 2) was actually

Fossils from the bed of the Jumna River

Fossil Elk from the Sub-Himalayas.

1/3rd Nat. Size.

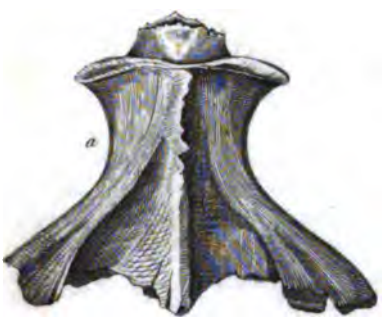

fig. 2.

fig. 1.

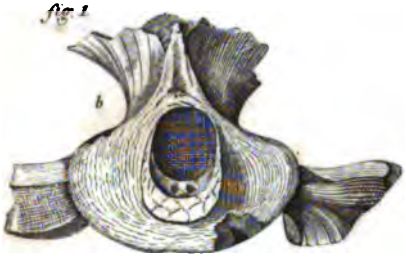

fig. 3.

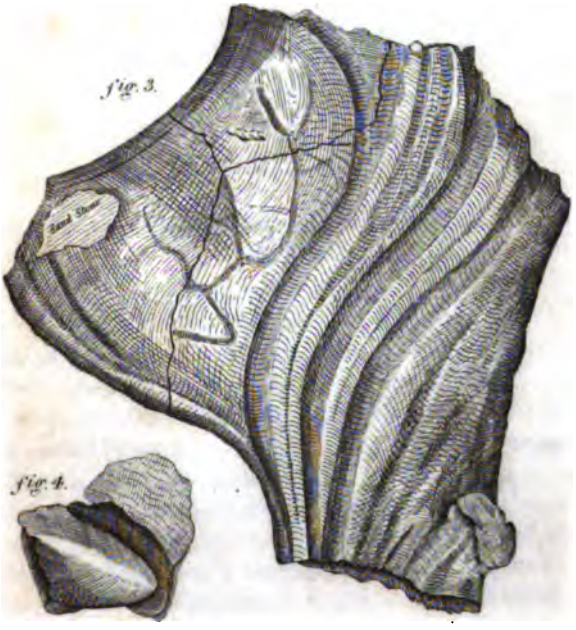

fig. 4.

Scale of Inches.

adhering to the antler at the time when I undertook to clear away the sandstone with which they were all partially covered up.

The fragment (fig. 4) consisting of one of the occipital condyles of a large ruminant, was obtained afterwards from the same person who brought the others, and who stated that he had found it in the same spot. I purpose availing myself of the first opportunity of visiting this pass, where, from the admirable state of preservation of these specimens, I hope to meet with others equally perfect.

The axis (fig. 1) must have belonged to a very large ruminant, being in linear dimension about double the size of the corresponding bone of the common bullock of Hindustán. But supposing it to have belonged to our elk, it would appear that this individual at least did not in size equal the elk, of which the remains have been found in Europe.

Besides the specimens represented in the plate, there are in the Dadupur collection, many fragments of bones, more or less perfect, of gigantic ruminants: amongst others, cervical vertebræ, far exceeding in size that represented in fig. 2.

Another year will, I hope, give us a more perfect acquaintance with the former possessors of these huge fragments; in the mean time, it may be worth while to note the discovery of the first undoubted remains of the elk, as I am not aware that this animal has been hitherto found in a fossil state in India.

Dadupur, June 9th, 1835.

VII.—*Note on the Vegetable Impressions in Agates. By Mr.* J. Stephenson.

[In a letter to the Editor.]

A few of the scientific gentlemen of Calcutta, who have seen specimens of my collection of agates from the Sone river, having imbedded the organic remains of plants, have doubted the existence of such remains; asserting (agreeable to the old notion), that the appearances are ceased by *metallic oxides, merely assuming arborescent forms,* I am well aware, that long cherished opinions are difficult to eradicate, and most people are tenacious of parting with what they have hugged as truths for half a century. I well remember when Sir Humphrey Davy explained Lavoisier's beautiful theory of combustion, that a good many of my contemporaries would not be convinced, though demonstration stared them in the face; and it was only after years of argument, that they were compelled, at last, to embrace the new and