

kacha (cf. *Ariana Antiqua*, Plate XIII, Nos. 11, 12, 20, reverses, and Plate XVIII, No. 14). Their coins, therefore, show a type intermediate between the Indo-Scythians and Guptas, and may be dated, as Gen. Cunningham says (*Arch. Rep.*, Vol. XIV, p. 141), "about the third century A. D., shortly after the decline of the Indo-Scythian power, and during the early period of the Gupta sway." This is confirmed by the character of the letters of the inscriptions which are of the earlier Gupta type. It is further confirmed by the character of the language of the inscriptions which is the same as that used in the Mathurá inscriptions belonging to the time of the later Indo-Scythian kings.

I have only to add that there are three seals which have no inscriptions at all, but only some figure or emblem. On one there is the figure of a lion on guard; on another a humped bull recumbent; on the third a large ornamental *triśul*.

One seal, I may add, shows the curious name of *Jujja*. It is inscribed on the obverse with *S'ri-Jujjasya*, on the reverse with *Rudra-sarma*. On both sides there is, in addition, the *triśul* emblem of Siva. *S'ri-jujjasya* is another specimen of the ancient North Western Prákrit; it is the equivalent of the Sanskrit *S'ri-yujyasya* or perhaps *S'ri-júryasya*; *yujya* and *júrya* meaning "kinsman" and "old man" respectively; both, however, being probably in the present case proper names.

The NATURAL HISTORY SECRETARY exhibited some stone implements from New Guinea, New Britain and the Admiralty Islands.

The following papers were read:—

1. *On the recent extinction of a species of Rhinoceros in the Rajmahal Hills and Bos Gaurus in the Mirzapur District.*—By JOHN COCKBURN, Esq.

(Abstract.)

In this paper, Mr. Cockburn purposes to shew that the *Rhinoceros sondaicus*, which is yet plentiful in the Sundarbans, was found in considerable numbers at the northern base of the Rajmahal Hills, so late as the year 1820, and quotes Dr. Jerdon's *Mammals of India* in support of this view. He also gives an extract from the *Bengal Hurkaru* newspaper of the 14th December 1820, containing an account of a hunting expedition from the Governor-General's camp in that locality, about 12 miles above Rajmahal, in which it is mentioned that 3 or 4 Rhinoceros were sighted, and that one of them was shot dead by Captain Brooke of the Commissariat Department.

Mr. Cockburn then alludes to the interesting discovery made by him, from information received from the villagers of the districts in the vicinity of Mirzapur, of the existence of the Bison or *Bos Gaurus* in that locality some 20 to 25 years ago,—and remarks that the Gaur is still found in Sirgoojah, two marches south of the Mirzapur district.

In a footnote, Mr. Cockburn makes some remarks on the alleged invulnerability of the hide of the Rhinoceros and appears inclined to the opinion that it is more easily penetrable than the hide of the elephant.

2. *On the durability of hæmatite drawings on Sandstone rocks.*

—By JOHN COCKBURN, ESQ.

In the discussion that followed the reading of my paper “On the Petrographs in the caves or rock shelters of the Kaimur range in the Mirzapur district” great doubt was expressed whether drawings made merely by hæmatite on the surface of sandstone could last in such perfect preservation for so long a time as was supposed by me* (Proceedings for July and August, 1883).

In compliance with a hint from the then Natural History Secretary, I take the liberty of sending the Society a fragment of sandstone from the Lohri cave near Robertsgunge bearing the pigment in a tolerable state of preservation. It is a portion of a so-called ring marking (concentric circles with avenues). I would like the specimen to be presented to the Indian Museum when done with.

In the paper in question I was not disposed to consider the mass of the drawings as more than six or seven centuries old, and there is reason to believe that this is a very moderate antiquity for some of the drawings and scroll writing.

It will be observed that the pigment is laid on a semi-vitreous quartzite translucent at the edges. This rock is more durable than granite, and weathers extremely slowly as from its composition it is less likely to be acted on by the carbonic acid of the atmosphere or any chemical solvent action of rain water. The paintings in good preservation are as a rule those done on smoothly fractured surfaces often presenting a superficial area of several square feet, and in some few instances these surfaces appear to have been intentionally produced by fracture of strata transverse to the bedding. Pencils and lumps of the pigments used occur in the soil of the caves.

The red pigment was hæmatite occasionally of the submetallic variety, but as a rule of moderate hardness.

In many of the drawings, the rhinoceros hunt for example, no actual coating of pigment remains as is the case in the fragment sent, but the

* Mr. Cockburn was not present at the meeting.