III.

NOTES ON SOME ROCK-BASINS, CUP-AND RING-MARKED STONES, AND ARCHAIC CUSTOMS CASUALLY MET WITH IN INDIA. BY CAPTAIN J. H. ANDERSON, F.S.A. SCOT.

Rock-Basins.—At a camp in the hills about 70 miles north of Ranikhet, I found a rock with several beautifully-rounded "pits" or "rock-basins," about 6½ inches in diameter and 6 inches deep. None of the other rocks were marked in any way, and as this occurred at the junction of two streams (always more or less a sacred spot to Hindus), I came to the conclusion that there might be some similarity between these "pits" and the Scotch cup-marked rocks. But about 30 miles further on, I found other pits of the same kind, which required no theoretical explanation, because I found them in use. They were simply a kind of primitive mortars for shelling rice. The rice is put into the rock-basin, and is pounded and worked round by an iron shod beam about 3 inches in diameter and 6 feet long. Afterwards I found many more of these mills in use, and, on my return journey, found the old foundations of several huts, that I had not observed at my first inspection, hidden in the brushwood close to the original pit-marked rock.

Ring-Marked Stones without Central Cups.—In a Hindoo temple inclosure near Dwarahat, a small town about $13\frac{1}{2}$ miles north of Ranikhet, in the province of Kumaon, I found a stone with two concentric rings, incised, to the depth of about half an inch, the channels being a little wider than their depth. The inner circle was $2\frac{3}{4}$ inches in diameter, the outer circle $6\frac{3}{4}$ inches in diameter, and from it there proceeded a "duct" $11\frac{1}{2}$ inches in length. The stone is a slab about $23\frac{1}{2}$ inches by 17 inches, and is lying face uppermost on a pile of loosely built up stones, and is very much weathered. The inclosure contains numerous stones more or less carved, chiefly of the usual Phallic types, but there are only two others, broken and very much defaced, which at all resemble this one.

In the Terai near the Hundspoor camping ground, about 18 miles due east of Huldwani, I found another stone with a single ring incised, the channel being about $\frac{3}{8}$ of an inch in depth and $\frac{1}{2}$ an inch in width, and the interior diameter or space enclosed by the ring 1 inch in diameter. From this ring there proceeded a "duct" 8 inches in length. The whole was surrounded by an oval channel of about $\frac{3}{4}$ inch in width, narrowing towards the outer end of the "duct." There is no temple or any other carved stone in the neighbourhood. The stone was propped up against a tree, and is evidently still held in veneration, as there were numerous rags and threads tied to the branches of a tree close by. The few native cowherds who live near for a few months in the cold weather professed to know nothing about it.

Though I examined many stones, more or less carved, over a very wide area, these are the only ones I found presenting these particular patterns.

"Dug-Out" Canoes.—On the Sarda River, which for part of its course forms the boundary between Nepaul and British India, I found numerous dug-out canoes in use.

One I examined, in the neighbourhood of Tanackpur, was about 36 feet long, 2 feet wide, and over 18 inches in depth. Both ends were neatly rounded, and tapered off from underneath. It was made out of a single log, and I was told was hollowed out and shaped entirely with the ordinary native axe.

I understand that when the river is in flood, two of these canoes are lashed several feet apart by bamboos at the bows and stern.

The canoes are propelled by long poles in shallow water, and by paddles in the Canadian fashion in deep water.

In this neighbourhood (Tanackpur), I found the natives storing their grain in large vessels often 4 feet high. These vessels are constructed of ordinary basketwork, covered with slime (mud), and then dried in the sun.

Fishing.—About 20 miles south of Tanackpur, in the Chouka River, a tributary of the Sarda River, a sluggish stream with large weed-covered pools, the native method of fishing is curious.

A small erection of piles is made in the pool, just far enough out to enable a man to wade out to it waist-deep. The fisherman sits, or rather squats, on the pile erection, and has at his right side, floating on the water, about a dozen lengths of thin bamboos, roughly shaped at the ends to allow of their being jointed into each other.

The hook is baited with a paste of coarse flour. The line fixed to the end of the first bamboo length allowing about 4 feet of free line, the remainder of the line is coiled up on the seat beside him. This first length of bamboo is now pushed out and rested on top of the thick bed of weeds. Another length of bamboo is jointed on and pushed out and so on till the made up rod measures 45 to 50 feet, about 4 feet of the first point projecting beyond the weed bed, thus allowing the spare end of the line and the hook to be suspended in the open water on the far side of the weeds. Personally, I never saw any fish caught, but was told that they were frequently up to about 2 feet long; and that when hooked they were simply hauled in over the weeds—the line being pulled in and coiled with the left hand, while the right hand disjointed the rod as it came back, the joints being allowed to float in the water close at hand and ready to be used again in making up the rod.

Methods of snaring wild animals.—When on a shooting trip in March 1900, on the borders of the Bickaneer Desert, I found the natives snaring black buck and chinkara (or ravine deer) in two ways:—

(1) In pitfalls.—These are deep holes about 8 feet deep and about 4 feet by 5 feet. They are either dug in gaps in thorn or grass-wattle fences or else on the far side of a low part of the fence, so that the deer just clearing the fence will jump into the hole. The pits are covered with thin brushwood, over which sand and loose earth is carefully spread.

A very similar method for catching wild elephants was carried on in the Kumaon Terai, till stopped many years ago by the British Government. I have seen the remains of many of these old pits, which appear to have been generally in groups of four or five. I was informed by the mahouts and natives that these pits were covered with brushwood, with a layer of about 6 inches of fine earth on the top. This was then sown vol. XXXIV.

with rice, which began to grow about the rainy season, and attracted the elephants right on to the pitfall, the sides of which were too steep and deep to allow of the elephant scrambling out.

(2) By means of snares.—The second method is by means of an ingeniously contrived snare of peculiar construction, a specimen of which I have presented to the Museum. It consists of a hoop of bamboo, $7\frac{1}{2}$ inches in diameter, covered with skin, and having a large number of slim pegs of wood set radially within the hoop, these pegs being firmly attached to its inner circumference, but free in the centre. This apparatus is attached by a rope of sinews with a running noose at the end to a rough piece of branch. The method of its use may be thus described:

A round hole is dug in the earth about a foot deep and just large enough round to support the "disc" part of the snare, which is placed so that the small sticks forming the rays are inclined downwards. The noose of twisted sinew is carefully adjusted round the circumference of the disc, and attached to an "anchor" consisting of a rope of hair, or sometimes hair and hemp mixed, about $1\frac{1}{2}$ to 2 feet long, fixed with the aid of a short stick, placed crosswise, firmly and perpendicularly into the ground. Sand and fine earth are then scattered over the whole contrivance.

When a deer places its foot on the disc, the rays (or spokes) give with the weight and the foot sinks through into the hole. On the leg being withdrawn the disc remains, the spokes catching hold of the leg, thus supporting the noose on the leg. On the leg being carried forward or shaken to try and kick off the disc, the noose is drawn tight, and the deer snared. These snares are placed just outside the crops, or on paths leading through the crops, and in groups of five or six. Although I never personally saw an animal snared, I was assured by the natives that they caught a great many by this method.

Since writing the above I have come across an interesting notice by Sir Samuel Baker 1 of the use of a trap of precisely similar construction:—

¹ Wild Beasts and Their Ways. By Sir Samuel Baker, 1890, p. 293.

"Another proof of rhinoceros will be found in the vast piles of dung, nearly always against the stem of a considerable tree; it is a peculiar custom of this animal to visit the same place every night, and this regularity of functions brings it into the traps which are cumingly devised by the natives for its capture. A round hole, the size of an ordinary hat-box, is dug near the tree. This is neatly formed, and when completed it is covered with a wooden circle like the toy wheel of a child's waggon. The spokes are made of flat bamboo, with sharp points overlapping each other in the centre, in the place where the nave would be. This looks rather like a sieve when fitted carefully as a cover to the hole. If any person were to thrust his fist through this elastic substance, the points of the bamboo would prevent his hand from being withdrawn, as they would retain his arm. In the same manner this sieve-like cage would retain the leg of an animal should it tread upon the surface and pass through, accordingly a noose is laid upon the surface. The rope is constructed specially, of great strength, and the end is fastened to a log of wood that weighs 200 or 300 lbs. This is buried slightly in the earth, together with the cord. A quantity of dung is thrown carelessly over the freshly turned ground to conceal the fact. The rhinoceros, like many other animals, has a habit of scraping the ground with its fore-foot when it visits the nightly rendezvous; during this action it is almost certain to step upon the concealed trap. The foot sinks through, and in the withdrawal the noose fixes itself upon the leg, prevented from slipping off by the pointed support beneath, which remains fast, adhering to the skin. The moment the rhinoceros discovers that its leg is noosed it makes a sudden rush; this draws the noose tight, and, at the same time, the jerk pulls the buried log out of the trench. The animal frightened at the mishap gallops off with the heavy log following behind. . . The log which trails behind catches in the innumerable bushes and thorns, causing great fatigue, until the rhinoceros, thoroughly wearied, is obliged to halt. When discovered by the hunters, it is generally entangled by some attempt to turn, which has hooked the log around a tree. The fight then commences, as the beast has to be killed with spears."

Unfortunately, Sir Samuel Baker does not give the exact locality where the snare is in use, but I presume from the context that it is in the neighbourhood of Abyssinia. It seems to me a most interesting speculation: How did two tribes so far apart hit upon the same idea? Has there been any communication between them in ages gone by? Or did they both invent the same thing independently?