

TOPOGRAPHY

OF

ASSAM,

BY

JOHN M'COSH,

OFFICIATING SECOND ASSISTANT SURGEON GENERAL HOSPITAL,
OFFICIATING LECTURER IN CLINICAL MEDICINE NEW MEDICAL COLLEGE,
CALCUTTA.

PRINTED BY ORDER OF GOVERNMENT.

Sic magna fuit censuque virisque
Perque decem potuit tantum dare sanguinis annos
Nunc humilis veteres tantummodo Troja ruinas
Et pro divitiis tumulos ostendit avorum.

CALCUTTA:

G. H. HUTTMANN, BENGAL MILITARY ORPHAN PRESS.

1837.

EN

John
M'Cosh

CHAPTER V.

1, Animals. 2, Elephants. Rhinoceroses. 4, Tigers, Leopards and Bears. 5, Buffaloes. 6, Cows. 7, Horses. 8, Sheep. 9, Hogs. 10, Poultry. 11, Game. 12, Porcupines. 13, Snakes. 14, Leeches. 15, White Ants. 16, Crocodiles. 17, Tortoises. 18, Porpoises. 19, Fish. 20, Fishing.

V. ^{1.}Compared with those of most other jungly countries, there is scarcely any peculiarity in the animals of Assam.

^{2.}
Elephants. Wild Elephants are plentiful, and move in large herds, and are very destructive both to the crops and to human life; entering villages in day light, and plundering granaries, and stores of salt, of which latter they are very fond. Great numbers are caught every season, and transported to other countries; but the speculation is very precarious, as many of them die before they are domesticated. The plan adopted for catching them is by female elephants, called Koonkis. The females are driven into the haunts of the wild ones, where they are joined by the wild males. In the course of the courtship the *Mahouts* so contrive to shackle the unsuspecting gallants to some convenient tree, that they are fixed to the spot immovably, and thus are allowed to remain till confinement and want of food render them easily tameable. From 700 to 1000 elephants are exported from Assam every year. Their average value is 300 rupees.

A duty of 10 rupees was formerly levied at V. Goalpara on every elephant exported. Great numbers are killed every year merely for their Ivory. The Singphos kill them by poisoned arrows fired from a musket, and after striking out their teeth, leave the carcasses to be devoured by beasts of prey.

The Rhinoceros inhabits the densest parts of the forests ; the young ones are a good deal looked after for transmission to Europe ; but they are so difficult to be found, that a party with two or three elephants don't succeed in catching above one or two in a season, and these when caught frequently die in the nursing. The mode of taking them is to shoot the mother, which is easily done by a large bullet, if struck on the forehead, when the calf is secured. Frequently the mother lays hold of the young one with her teeth, and in her dying agonies, lacerates it so severely that it dies of its wounds. The old ones are frequently killed for their skin or their horn. The skin is valuable, and the best shields in the country are made from it. Great sanctity is attached to the horn; so much so that the general belief is that there is no more certain way of ensuring a place in the celestial regions than to be gored to death by the horn of the rhinoceros. These horns are as hard as bone, very stout, and broad at the base, and seldom longer than eight or ten inches, though I have seen some at least seventeen: they have a slight curvature towards the forehead, and in colour resemble the buffaloe's. The horn is not a process of the bones of the nose, but united to

³
Rhinoceroses.

V. them by a concave surface so as to admit of being detached by maceration, or a severe blow. It has no pith, but the centre is a little more cellular than the rest of it. Considering the wild and sequestered habits of these the most retired of all animals, it is surprising how very easily they are tamed. With a little training a young one, a few months after being caught, may be turned loose to feed, and be ridden on by children. They speedily contract a strong affection for their keeper and come at his call, and follow his heels like a dog wherever he goes.

4.
Tigers, Leo-
pards & Bears.

Tigers, Leopards, and Bears, are numerous, but though the tigers occasionally carry off a bullock, accidents to human life are but rare. There is a reward of five rupees a head allowed by Government for their destruction ; certain castes adopt this as their profession, and make a good livelihood by it. They generally enter the jungles at the commencement of the cold weather, in parties of twelve or sixteen, but nearly one half their number fall victims to the climate. The *Shikaris* destroy the tigers, &c. by poisoned arrows. Having selected a recently frequented track, they fix a strong bamboo bow, (a modification of the cross bow,) horizontally upon three-forked sticks driven firmly into the ground, and just so high as to be on a level with the tiger's shoulders. The bow being bent, and the poisoned arrow fixed, a string connected with the trigger is carried across the path in front of the arrow, and secured to a peg ; the tiger in passing along comes in contact with this string, the bow is instantly let off, and the arrow is lodged

deep in his breast. He is commonly found dead V.
a few yards from the place where he was struck. The number of these animals killed in this manner is so great, that the amount of rewards absorbs a great portion of the revenue. Every species of deception is attempted by the hunters ; old cats with the fur abraded are presented as young leopards, and the naked skulls of dogs and monkeys as half grown ones ; some times only the skin of the tiger, without the cranium, and perhaps at another time the cranium without the skin, so that a strict examination, and a knowledge of comparative anatomy, which few but Medical officers possess, is necessary to prevent imposition.

Wild Buffaloes abound in all parts of Assam, they are not much sought for unless by some castes for eating. They are too fierce and formidable to be robbed of their young with impunity ; and as they are seldom found solitary like the rhinoceros, the calves could not be secured even at the expence of the parent's life. The buffaloes of Assam are much larger than those of Bengal ; the space between the horns is immense. I have found some the extreme spread of whose horns measured 5 feet 9 inches. It is the practice of the country to breed from the wild buffaloes ; no males are kept by the feeders ; the tame herd is driven towards the jungles, where they meet with the wild bulls which continue in the herd during the season. Of all the animals that frequent the jungles, the buffaloe is the most formidable, and the most to be dreaded when unprotected ; and more inhabitants are destroyed by their gore

5.
Buffaloes.

V. than by all others put together. Buffaloes are kept chiefly for making *ghee*; their value is from twenty to thirty rupees; many of them are sacrificed every year.

6. Cows. Cows are of very inferior quality, and are generally in wretched condition. They vary in price from two to five rupees.

7. Horses. There are no horses indigenous to Assam, but the wants are supplied from Bootan. The Bootan ponies are very superior animals, strong, rather handsome, and fit for any work; their prices vary from 30 to 150 rupees.

8. Sheep. Sheep are all imported from Bengal or Bootan. The Bengal ones thrive well but the Bootan do not.

9. Hogs. Wild hogs are very abundant, and almost all the hill tribes domesticate them; price 2 to 3 rupees.

10. Poultry. Poultry is not very abundant; though fowls sell at 12 for a rupee, ducks 8, and geese 4.

11. Game. Wild game is abundant. Deer, hares, jungle fowl, pheasants, peacocks, partridges, florican, snipe, and water fowl of all descriptions, are procurable, but no game keepers interest themselves in catching them.

The porcupine, the flying squirrel, iguana otter, pangolin, civet cat, and an infinite variety of monkeys and snakes are common to the country.

I once had a pet porcupine at Goalpara, I got him or her (for I could never use the freedom of ascertaining the sex) when very young. It afterwards became so tame as to run out and into the house like a dog, and was wont to make its appearance regularly at meals, and ate from my hand any thing that was at table, whether flesh or vegetable. It had a great deal of comic humour if I might so call it, and whether to gratify this whim, or from love of stolen treasure, became a great thief. Nothing that it could carry away was safe; a stick or a shoe, a boot-hook or a broken bottle, was dragged to its nest, but as it never meddled with any thing that was not on the floor, we were easily able to keep things out of its reach. Latterly this habit became very inconvenient; if any thing fell off the table and was neglected, it was certain to be carried off. On searching its hoard the lost article was frequently found, but I had sometimes reason to think, the porcupine was blamed for taking away things he had no share in. It became the torment of the dogs, and was wont to take a fiendish pleasure in pricking and annoying them. It had a large share of courage, and in fair field was more than a match for any one dog, for it had only to keep its tail towards him to save its head, the only defenceless part about it; sometimes two dogs set upon it at once, and on such occasions it took to its heels, but it only ran to the nearest corner of the room and spreading out its quills, so as to fill the corner, looked back at its persecutors with cool contempt.

G

V.
12.
Porcupines.

V. I never in any of its most fretful humours saw an instance of its throwing its quills to a distance, nor do I believe it has the power of doing so. It has a certain range, probably two or three inches, within which it can strike, and in some cases so severely, that the quill leaves its back and sticks fast in the object struck. This effect seems produced by muscular action, and the quills are jerked forward spasmodically as if by a spring attached to them. If a quill happened to be loose when it made an effort to strike, I could imagine it being propelled to a distance, but not if fixed in its natural state. I remember a striking instance of the force with which the porcupine can wound. A friend was dining with me one evening, and the porcupine as usual was under the table amongst our feet ; the Gentleman began to tease the porcupine, when in an instant he changed countenance, and said he thought the porcupine had struck him. He expressed much pain, and on pulling off his boot his toe was streaming with blood. I took up the boot and found a quill sticking fast in it, and on introducing my hand, found about a quarter of an inch of the quill projecting inside. The boot was made of leather, the wound of the toe healed without any bad effects. The porcupine was very cleanly in person as well as in all its habits, and made no distinction between the night and the day.

I have dwelt so much on the history of the porcupine, because even to this day there are

different opinions as to his power of throwing his quills. I trust the rare opportunity that I had of observing his manners will justify this episode. V.

Snakes of many kinds are numerous, and occasionally take up their quarters in the houses. Some of the largest have been caught in the roofs of houses inhabited by Europeans. The boa, or as some call it, the python, has been known to enter the poultry-house and carry away fowls. Such has been reported to me by my servants ; though I have not witnessed it, I think it probable enough. Few of the snakes are poisonous. The wildest natives are aware of the harmless nature of the python. I remember two or three Garrow prisoners bringing a large one alive to me, which they had caught on the hill. One man grasped it by the throat, and the other two bore the weight of the body. They turned it loose in the compound in order to shew its action, and readily seized it again with their hands. I believe they afterwards took it home and ate it.

13.
Snakes.

Leeches of several varieties abound in all parts of Assam. The medicinal leech is procurable for about one rupee per hundred, and is to be found at all seasons. There is a species of land leech prevalent upon the hills of Assam. At certain seasons, particularly during the rains, every bush and blade of grass is frequented by them, and it is impossible to walk a few yards through the jungle, without two or three attaching themselves to one's clothes. They are exceedingly small, seldom thicker than a crow

14.
Leeches.

V. quill, and so well armed that they readily bite through a worsted stocking. I believe they might be used for curative purposes as safely as the medicinal leech. I have been bit by hundreds of them, and never knew any bad consequences from their bite.

15.
White Ants.

White ants occupy a prominent place in the animal œconomy of Assam. In no part of India are their ravages more destructive. They devour the very houses as they stand, from the main posts sunk seven feet under ground, to the last bundles of thatch upon the ridge ; and the durability of a house may be calculated by the dead mass of wood, thatch, and bamboo, in its construction ; for a house is only valuable, or otherwise according as it contains, a larger or a shorter supply of provender for the white ant. The furniture requires to be constantly looked after; the feet of a table or a chair are very liable to disappear, and whole trunks may be eaten up though no outward signs be discernible. The white ants make as free with the trees of the forest as with the houses ; and probably every tenth tree met with falls a prey to their voracity.

The other domestic plagues are musquitos, sand flies, and fleas. Musquitos are not numerous, and for the most part disappear in the cold weather. Sand flies are often annoying, and in spring almost every house swarms with fleas, but these last seldom bite.

16.
Crocodiles.

Crocodiles swarm in all parts of the Brahmaputra ; they generally frequent some creek or bay where there is little or no current, and hav-

ing a sloping shore with a convenient retreat to plunge into deep water on being disturbed. During the heat of the day they lie basking on the sand in the sun ; in the evening they return to the river and swim about on the surface of the water apparently in search of prey. There are two distinct species of the crocodile family, the long nosed one gavial, or gurrial, and the round headed one muggur or bocha. The gurrials are gregarious animals and are commonly found in groups of four or half-a-dozen, the muggurs are solitary or only found in pairs, probably male and female, and are frequently found in tanks at a distance from the river. The gurrial is considered inoffensive by the natives, the muggur savage and dangerous, and on many instances they have been known to carry off individuals while bathing in the river or standing on the margin, and even to attack cattle. No friendship seems to exist between the gurrial and muggur : I do not remember ever seeing them in company. The gurrials are much more numerous than the muggurs. Both these animals are easily killed by a bullet if hit in a vital part. The inhabitants of some parts of Assam spear the gurrials and extract an oil from their bodies, and many of them have no objections to eat their flesh. The natives place a great deal of value on their teeth, and believe that one of them worn round their waist imparts the charm of making them more acceptable to the fair sex ; certain it is, that it is almost impossible to keep the teeth in the head of a skeleton, as the servants are sure to steal them.

V.

V. Both species possess the means of re-producing their teeth when lost, and two or three embryo ones are ready in each socket to spring forth for use when an old one is broken. It is worthy of remark that the manner of putting forth the embryo tooth in the two species is very different. The young tooth of the gurrial advances straight through the hollow centre of the broken stump and carries it out of the jaw on its point, whereas that of the muggur shoots forth like a sprout on the innerside of the old tooth, and eventually pushes it out on one side by its shoulder. Hence probably a reason why the teeth of the gurrial are so regular, and those of the muggur so much the contrary ; the new teeth of the former always taking up the position of the old ones, whereas those of the latter do not. This is a peculiarity that I do not remember to have seen stated in the natural history of these animals, but I believe it to be specific.

17.
Tortoises.

Tortoises are numerous and of all sizes, from that of a frog to that of a pack-saddle. They spend a large portion of their time sitting on lumps of clay on shore, they are extremely wary, and seldom move farther from the water than they can leap into it at one jump. They are no less timid in the river than out of it, and dive to the bottom on the slightest alarm. Tortoises are frequently caught in nets by the fishermen and form a staple article of food in the bazars. They are exposed in the market alive with their hind and fore legs on each side tied together, they are sulky and fierce in their bonds, and bite any living thing that disturbs them, and woe

to the finger or toe that they once get into their bony jaws, for they seldom let go their hold. V.

Porpoises (*Delphinus Gangeticus*) (Soos-Nat) are common, their favourite resort is the entrance of some tributary stream into the main river, where they are all day busily employed in pursuit of their prey. They are occasionally caught in nets, more by accident than from any design against them, and are either eaten or boiled down into oil. They are sometimes hunted in their native element by the inhabitants as they would hunt a hog, and the chase forms one of the most exciting amusements that can be imagined. The porpoise is generally attacked in a blind bay or *nulla*; the hunt is opened by a fleet of canoes scattered all over the bay, beating the water with their paddles and making a loud noise; the instant the porpoise rises to the surface some spearman is near him either to strike him or frighten him by beating the water; away he darts to another place to complete his inspiration, when he is closely pursued or met by another spearman; again he is disappointed in his mouthful of air, and again he dives and rises only to be again tantalized; till after running the gauntlet between the canoes, he is terrified and exhausted; and lies panting on the water, the prettiest mark possible for the spear, and becomes an easy capture.

18.
Porpoises.

The Brahmaputra abounds in a great variety of very fine fish, amongst which are the mullet, the hilsa, and the rue. The sudder stations are for the most part supplied well.

19.
Fish.

V. 20. Fishing. Fishing in Assam is carried on almost entirely by nets : very few hooks are used. It is either a joint stock, or a family concern. Where the establishment of nets is so large as to go across the river, a great portion of a village is connected with it ; but these extensive fisheries are rare. The market is for the most part supplied by single canoes managed by two men furnished with a triangular net extended between two long bamboos. One man at the stern propels the canoe down the stream ; while the other at the bow guides the net along the bottom, and when he has caught a fish he shovels it up above water. When they have dropped down the stream beyond the good ground, they pull up their net and paddle up the stream to where they began. Another mode of the triangular net and more consonant with Assamese habits, is to fix it to a frame-work of bamboo, on the side of the river so as to admit of its being moved on a fulcrum like a lever ; the long end with the net attached is allowed to sink to the bottom, a man stands by watching when any fish may chance to come over the net ; and when a favourable moment arrives, he steps or sits down on the shorter end and raises the net to the surface, when the fish is sometimes taken by surprise and caught. At the end of the rains when fish begin to leave the smaller streams that run dry in the cold weather, every rivulet is stockaded across with nets ; only a narrow outlet being left in the centre. In this outlet a bag net is fixed, so that every fish that attempts to escape is secured, and eventually every fin in the nulla.