

## SOME REMINISCENCES OF SPORT IN ASSAM

By

H.G.H.M.

### PART I

Shikar and love of the jungle life must be one of the inheritances in my make-up; and my development in this direction, while no doubt subjected to the inner push of hereditary forces, was also much assisted by the environment of my early years. All the days of my boyhood spared from the needs of education were devoted to various forms of sport, and the reading of the travels and adventures of renowned hunters of the past century—Gordon Cumming, Forsyth, Selous, Sanderson, and a number of others. The early years of my army service were passed in the United Provinces and the Punjab where small game shooting, and the pursuit of black buck and chinkara with rifles of small calibre afforded good training for more serious shikar later on.

After some eight years of life in the plains I was fortunate in being transferred to Assam where, except for the years of the Great War, I served for another twenty-five years. During all these days in Assam, a country which has been said to consist of jungles and tea planters, many opportunities of sport were afforded to me, and it is on reminiscences culled from an unusually retentive memory that I will now embark.

Though I had been in Dhubri several times I had not met the Rajah of Goalpara until I was posted to the Goalpara District as Civil Surgeon, but shortly after taking over charge I called on him. Of course I had heard about him as a sportsman and an extraordinary shot, both with rifle and gun, but was surprised to find him a delicate, nervous man of retiring disposition. At the time of this meeting I had shot specimens of most of the big game to be found in Assam, but had never been able to bag a tiger, though I had sat up very many times, both in machans and on the ground, without success. I had always been discovered, and it appeared to me that I was always detected from the direction the men had been working on the machan, and this was usually from the back. I am convinced that a tiger, if at all suspicious, and they have always been so on the numerous occasions I have waited for them, circles round the 'kill' to make sure, before approaching it, and my humble opinion is that they get the scent of the men who have made the machan, and having got this scent soon discover the waiting sportsman, for their hearing is so keen that the very slightest noise will be heard and, suspicions aroused, they very soon know exactly where is the hidden danger. The tiger may now go right away, or he may lie concealed in the jungle waiting developments. If the shikari leaves his machan or other concealment after dark the tiger will very frequently partake of his deferred dinner, for he now well

knows that the danger is over. If he has not returned to the kill it can be taken as certain that he is away for good and will kill in some other locality.

One often reads of tigers not returning to their kill, and the impression is given that they just did not come back. This is entirely wrong, for a tiger kills to eat, and the reason for the kill not having been touched is nearly always that the owner of it has come back and discovered danger. I have many times heard a tiger late in the evening moving round the machan and gradually making the circles smaller, and am convinced that tigers can detect scent of man and animals. Their sense of smell, though not highly developed as with deer and bison etc., is yet sufficient to enable them to detect the scent of human beings having been near their kill, or being concealed near by. I know that most of the writers on the habits of tigers say they have no sense of smell yet I feel quite sure that they have. If they have none at all how is it that they follow deer when they change their feeding ground? If they do not follow by scent how do they manage? None of the writers give a reason.

A tiger does not hunt altogether by scent; if he did he would never go hungry and no animal would ever escape. He actually hunts by sight as everyone knows, aided very much by his phenomenal sense of hearing. His sense of smell informs him that his food, whatever it may be, is in the particular locality and, knowing this, he uses his sense of hearing and of sight to procure it.

The Rajah of G—, who has taught me almost all I know about tigers and their habits, returning to camp of an evening has said to me, 'of course you know where to find tiger during the day—all streams, the thicker the cover the more does the tiger appreciate it, for it means concealment, coolness, and shade; but do you know where to find the tiger in the late afternoon and evening?' I did not know, and said so. 'Well', said he, 'you will find them often on an open plain behind a bush or tuft of grass which you would say could not conceal a tiger, and it would seem impossible that a tiger should be there. This fact has been demonstrated to me on many occasions. A tiger coming down through thick jungle growing on both sides of a small stream gets the scent of cattle; he remains in the cover during the day; as late afternoon approaches he emerges and comes to the edge of the plain—to survey abandoned or recent cultivation where the cattle are grazing. Hiding behind cover that one would think would not conceal a hare he waits until a cow or calf comes within distance, or he may cautiously shift his ground to be in a better position for the attack. On many occasions I have seen tiger dislodged from bushes you would have said to be impossible for concealment of such a great beast. He will allow elephants to pass him on all sides without moving. To find tiger in these positions every bush or isolated patch of grass should be searched by the besting line. In these cases the shot is usually a long one.'

On one occasion I was out after bear, and while on my way to their haunts some villagers ran up to say that a tiger had just

killed a cow near their habitations. This killing had taken place at 10 a.m., in the plains, at the foot of the Garo Hills and not far from the Dalu Inspection bungalow. It seemed that the cow was not dead when the villagers ran up to it, and in their anxiety to get it away they tried to make it rise, and in so doing pulled the body round completely so that the head was facing to the opposite direction. I went up to the small hill on the other side of the road and having selected a position got the people to cut away some of the jungle so that I could get a clear shot towards whichever direction the tiger might approach. I felt certain of a shot, as the well from which women had been drawing water when the kill took place was within 15 paces of the kill. Such is the boldness of the un hunted tiger; and I felt sure the animal would return late in the afternoon, and before dark. At 4 p.m. I heard the noise of an animal coming down the opposite hill and thought it must be a sambur. It came near the kill and I did not hear it move away. While the animal was approaching down the hill, and for a considerable time after, a squirrel on a tree behind me was very noisy. It was not scolding me, but because it had seen the animal. I sat perfectly still, and made no movement, so could not have been detected by sense of hearing. The animal went, and the reason I had not heard the departure was that there was a game path and the two tigers had gone away by this! When I, the enemy, was discovered, it is difficult to say; and how and why they discovered me it is difficult to say. The matter remains a mystery. I waited until dark and then returned to the bungalow. It was found next morning that the tigers had not visited the kill proving, to my mind, that I had been detected. But how? It must have been by scent, as my small hillock was on the opposite side of the road from the larger hill down which the tigers approached. The village was fifty yards to my right. I was sitting on the ground in midst of a bush, made no sound, and could not possibly have been seen. Maybe I was not detected and the tigers sneered off because the kill was not in the position they had left it, for it had been turned completely round. But such jungle tigers as these should not have been put off by this. Very little clearing of twigs etc., had been done near the kill. The villagers knew me, and knew that the reward I would give would be divided among them. No: there was no *hadmash!* in this instance. Had the kill not been moved would the tigers have fed on it? Perhaps. The moral of the story is that nothing can be left to chance: the kill must not be moved, the sportsman must not move, and the breeze must not be from the wrong direction.

It is within the experience of many sportsmen to be 'seen off the premises' by a tiger. The last time I waited for a tiger was at a shooting and fishing spot—Nechuguard, at the foot of the Naga Hills and the commencement of the Nambur Forest. Late in the afternoon I came on a fresh tiger kill and got behind a bush in the hope that striders would return during daylight; a not unusual occurrence in dense jungle. But I had forgotten the place was 2 or 4 miles away from the road! With me was a Gurkha lad. We left at dusk and were two miles from the road when

it became dark. All the time I sensed I was in great danger. I had seen and heard nothing, but yet was in a terrible and uncontrollable fright. On reaching the road I was in a bath of perspiration. Asking the boy if he felt afraid he replied that he had been so frightened that he could not speak. He knew we were being followed nearly the whole way by the tiger, for he described the spot where he first heard the animal, and after that he heard it nearly the whole way. I had heard nothing, but am slightly deaf. The lad had wanted to tell me but could not speak!

I had another curious, and fortunate, experience. Arrived at Kirappara, the second stage on the way to Dalu, Garo Hills, on the Mymensingh border, a place fifty miles from the nearest human habitation, I went for a walk in the afternoon and saw the pug-marks of tiger along the road. With the aid of my cook, a Muhammadan with a liking for shikar and a very courageous man, these were rubbed out. On the way back we found fresh marks, so the tiger was in the habit of using this road between the hours of four and six in the afternoon. I decided to remain a day and try for the animal, so the next afternoon took up position in dense cover and close to the road.

This was in 1919 after return from the 1914-18 war. Kalia (the cook) cut sticks and made a rest for the rifle, using my khadi pillow case to wrap round the wood to prevent barrel-jump. Had the tiger come along I would have had an easy shot. Before going on Service I had sold all my weapons and all I now possessed was a 20 gauge shot gun and a 22 H.V. Savage Magazine Rifle. At about this time I had read a lot about the 22 being ideal for tiger. The writer said that he was with the Prince of Wales' slaying party in Nepal and was using this weapon on that shoot. He must have arrived at his opinion on the weapon from one lucky shot, and without further experience, for I have seen the 22 H.V. used on tiger a number of times and can say it is certainly not a weapon to be used against any of the big cats; not fair to the shooter himself, to his companions, or the game. All this is by-the-way, for the expected tiger did not appear. Next morning the cook went early to recover the pillow-case, which had been forgotten, and returned to tell me to dress quickly and see what had happened in the night. This is what we found. A known rogue elephant of the locality had come along the road, scented the pillow case, gone straight to the spot, removed the rest-bar, stripped off the pillow case by putting his foot on the bar and pulling off the cloth, and then walked back to the road where he left it in the dust. Fortunate for us that we had come away before the elephant came along, for the 20 bore gun and the .22 rifle would have done little damage and caused an already testy temper to be exceedingly violent!

On my taking leave from the Rajah he laughed in his nervous way and said to me, 'You will shoot your first tiger in April. I will invite you to my camp, but the notice will be short, as when tiger are about arrangements for the hunt have to be made very quickly.' Thanking him, I returned to Dhubi which is some six miles from Gauripur.

It was perhaps two weeks later that I received one morning the expected invitation and request to be at the Ferry that afternoon at 3 p.m. My wife accompanying me, we met the Rajah as arranged, and having crossed the wide Brahmapootra river to Fakirganj drove in a dog-cart to the camp which was situated a few miles from South Salmara.

Next day being Good Friday I said I would rather not go shooting, so the Rajah went to a locality where tiger would not be disturbed, to shoot some deer for the camp followers who needed meat. To keep the camp contented in this respect makes the people keen and willing.

While he was away I had been to the South Salmara Dispensary and on the way back was informed by a small boy that a tiger had just killed a cow and dragged it into some jungle. Very excited was the mahout, and also crestfallen when I explained that the pipe I was smoking would not be of much avail! When Gauripur returned to camp in the evening we talked the matter over and it was arranged to start at 10 the next morning.

Having learned that the Rajah expected great punctuality on such occasions we were ready ten minutes before the hour. We were to meet Royalty—The Royal Tiger—so pad elephants had to be in position ten minutes before the hour; guns and guests on the pads by ten sharp; howdahs, spare elephants, and beaters ready at the meeting place when the Rajah and his party arrive.

By 11 a.m. we were on the ground. The plan shows the position of the 'kill' and the lay-out of the beat. Arrived at 'A' the Rajah called up his head shikari and after hearing what he had to say went off, as is his habit, to see things for himself. He followed the 'drag' cautiously, and very slowly, until he found the remains of the cow. Then he returned and came again to A and proceeded to B, almost immediately finding the 'animal run', or game track. This he followed on towards the river, and being satisfied that other 'runs' did not exist in that particular portion of the jungle returned again to A, where I and my wife were in the howdah on back of the mighty Jung Bahadur. Now he said to me, 'If you will permit me to explain I should like to tell you something of the art of driving a tiger in a particular direction'. I assured him I would be only too glad to learn for I knew nothing of the game. While this was going on the elephants were collecting at D—with them one howdah elephant. 'Well', said he 'the first thing to note is that if I attempted to drive the tiger in the direction of the fields he would refuse to go, and would fight. Whenever it is possible the tiger must be brought to the gun without annoying him, and so ensure a quiet and fatal shot. The next point to remember in this particular drive is to drive very slowly and without any noise; just the slow forward advance of the elephants is sufficient: this will keep him from crossing the river. Were he beaten out with a great noise the tiger would be scared and would be certain to rush to the river, jump in, and swim across. A great aid in preventing the tiger going to the river is to keep the line of elephants diagonal, the right end advanced along the river bank with the howdah elephant on the Nulla side in the open as far as possible

and some distance in advance of the beating line and in line with the leading elephant. When the tiger hears the elephant on the river bank he will not hear those farthest away, and as the howdah elephant is not in the jungle but walking just outside he will not hear him except when he comes out and sees him, and that will make him go back into the jungle. The beat continuing in this diagonal manner will edge the tiger away from the river and quietly swing him on to the nala side, which is your side, and when the tiger reaches the 'animal run' he will follow it and give you an easy shot. If he attempts to cross the river I will take a long shot.' He then took me to B, and Jung Bahadur was ordered to push down a small tree so that it would fall towards the nala. Then some grass was pulled away until the animal run could be seen entering the lighter jungle just as it quitted the tall grass and heavy cover. 'Now', said Gauripur, 'your tiger will appear there', pointing to the exit of the run, 'I will take post at C. Mark the line of beating elephants coming into position with the aid of your binoculars, and carefully watch the 'hullee', as the shaking of the grass tops is called when the tiger moves from place to place, for that is your sure indication of the whereabouts of the tiger.' Then he signalled to the line to advance and went off to his selected position at C.

Soon came the signal from the line that the tiger had been found in the rose-bush cover. 'See', called the Rajah, 'the tiger is now in the heavy jungle, watch the 'hullee'. Carefully I watched the 'hullee' which followed zig-zag between the nala and the river. Suddenly it ceased and I knew the quarry must be in the animal run. Now my pulse hummed rapidly and my heart thumped, for the Royal beast was at hand and my excitement intense. Slowly I brought the rifle to bear on the expected place. Sure enough, there, where the Rajah said it would, appeared the head, and soon the line of the back was plainly visible. I pressed the trigger and experienced a thrill of delight as I saw the tigress—for it was the 'Queen' and not the 'King' on this occasion, fall over on her side. I had used a .280 double rifle and was still covering the animal when the Rajah came up. The distance from muzzle to animal was not more than 15 yards. Jung Bahadur is a very tall elephant and the tigress was below me and slightly to my left. 'Good shot' said the Rajah, 'but it is always wise to put in a second bullet, for it does not damage the skin as most people think'. But this time I had brought the rifle on to the bowdah rail with the muzzle pointing skywards, as is the strict order of the Rajah. The beating elephants were crowded around the place so that I could not with safety deliver a second shot. I said so and the head shikari, who heard my remark, was told by Gauripur to tell the mahouts; and to tell them also that by crowding round in that manner they stood a good chance of a bullet if the person in the howdah became excited. In the evening I was told that I had gained the confidence of the mahouts and that, to a sportsman, spells success. 'Now the mahouts will trust you' he told me, 'and that is half the battle in tiger shooting.'

I handed my rifle to the Rajah and he was in the second shot 'to make sure' saying to the mahouts that I had wished it. The

a very possible retreat for a tiger. Towards the end of the beat my mount, Jung Bahadur, whose howdah was occupied by my wife and I suddenly stopped, as he was almost on the top of the crouching tiger, which growled at him and started the adjacent elephants trumpeting and making the well known metallic sound, sure indication of a tiger in the vicinity, by beating the ground with curled-up tips of their trunks. Ad this indicating that the tiger was likely to try and break back through the line of elephants. The Rajah called out for Jung Bahadur to be at once taken out of the cover, and just as we emerged into the open a shot was heard, and immediately upon that came a shouted instruction from the Rajah for me to go on with my elephant and kill the tiger struggling on its back. This I did, with two shots, as Jung Bahadur was steady as a rock. The Rajah was pleased as a boy would be, although this was about his three hundredth tiger, for the shot had been a long one, something like a hundred and thirty yards. The Princes and Rajahs of India are many of them marvellous shots both with rifle and gun. They have plenty of practice! In days long gone by, an Indigo Planter held the record with 1000 tigers to his own gun. There is at the present time one Ruler in the centre of India who has shot over 600! This animal was a tigress a little larger than the one I had killed earlier in the day. The rifle used by the Rajah was a .465 by Holland and Holland which had been presented to him when he was a boy by the old Maharajah of Kooch Bihar as reward for his already marvellous shooting. His other two favourite weapons were a .577 and a .450, both black powder rifles.

After the tiger had been padded and sent to camp we beat out the cover again as pig had been seen, and I shot one with my .280; killing it dead—a close shot.

That night we had a long talk on shikar and of course the day's sport was discussed in detail. My wife was asked what she thought of tiger shooting. 'It is very interesting and very exciting', she replied, 'but that tigress you brought out to my husband was well trained; was a Viceroy's tiger, blue ribbon round its neck sort of thing.' 'G' laughed and said, 'I hope to show you, if not on this shoot some other time, that all tigers do not wear blue ribbons. If the danger is not too great I will make a tiger demonstrate for your edification.' The next morning it was not long before the quickly descending vultures had picked clean the bones of both the animals dragged into the open for them to demolish. There was the usual fighting, screaming, and scrimmaging, with sometimes that rug-of-war, when two birds have either end of a tasty morsel, which is so amusing to watch and at the same time a somewhat obscene spectacle.

On the Monday morning we went to a place indicated by the scouts but it turned out that the kill was a very old one and the Rajah was proportionately annoyed. 'However', said he 'we may as well beat the place. I will place myself just in front of that path which passes through the jungle.' The beat was in progress when a villager, walking along behind my elephant (J.B.) spoke to the mahout. 'What are you look-

ing for?' said he. Mahouts do not usually possess a sense of humour, but 'Kats', he replied. The vnaiger did not even laugh but said, 'If you are looking for tiger, there is one standing behind you!' And so there was! The beat was stopped and I was placed in best position for the shot, but the tiger crossed back three times this occurred. The tiger was able to play this game because we only had out about a dozen beating elephants on this morning. The next beat found the tiger bolting across a long open space in order to gain some extensive, continuous, jungle out of which it would not have been possible to beat him with the few elephants available. 'G' took a long shot and killed the beast, bowling him over like a rabbit. A marvellous exhibition of accuracy and judgment of pace. A fine male tiger.

Not far from this place another tiger was put up in a large patch of grass jungle which was beaten on the chance of it bowing something. There was an opportunity for the Rajah to show how to make a tiger demonstrate. Thus he did by driving her—for it was a tigress—towards some fields. Naturally she objected, and went up and down the line of elephants growling and jumping up at almost every one of them. As she jumped the elephant would roll up its trunk, screech, and back on its hind legs. Again the shot was to be mine but I was looking to my right when the beast passed close to my left. My waz pointed and called to me but I was too late and the tigress disappeared into thick cover. 'Now' said the Rajah, she will probably charge, and if she does you must get off two shots, for even if you miss this will be likely to bank her spring at the elephant. Of course she may not charge—and perhaps give you an easy shot. Good luck,' and he turned away. When the tigress broke she jumped out with a grunt and instead of charging galloped in and out among the beating elephants just emerging from the cover. It was impossible for me to fire and she got away into the open. 'G' was behind me and to my right. He waited until the beast was well clear, and then killed her stone dead with a shot in the the shoulder which turned her head over heels. The distance was something like two hundred yards. Not many men are there who can bring off shots like that.

We had only just moved off when there was heard a loud 'Proot-proot'. All except my wife and I knew what this portended, and were we to again hear it we would at once be galvanized into action. Right and left all the elephants made off to the cover into which they disappeared like a sounder of immense pigs. Looking behind I saw that a tusker elephant was coming for us and the next moment there was a crash as Sibjee, a large tusker, struck Jung Bahadur in the rump. The impact was terrific. Fortunately J.B. was such an immense brute that Sibjee failed to knock him over, but the shaking we got in the howdah was terribly frightening—words cannot convey what the shock was like; to understand it it has to be experienced. My wife lost her hat, umbrella, etc. The mahout urged J.B. to his best pace and Sibjee accelerated him from the rear by three tremendous pushes. It was all we could do to remain in the howdah.



It has been suggested to me that I should have fired a shot at Sibjee, but that was impossible both on account of the motion and the fact that the mahout was still on Sibjee's neck wielding his ankus with tremendous digs deep into the head and then pulling hard on the heavy iron implement with all his strength. The chase went on for near a mile, and at last Sibjee's mahout got the animal under control by pulling a blanket from under him and putting it over the maddened beast's eyes. The great danger had been lest J.B. should have attempted to turn to meet his assailant. In course of doing that he might have been struck sideways and knocked over, with perhaps fatal results to all three on his back. That this might occur was in the mind of the mahout for J.B. had once been used to catch wild elephants, being sent into the stockade to punish recalcitrant tuslers, a duty which he used to do very thoroughly. That was before he came into the possession of his present owner and when he had belonged to the Rani of Bigni. Had J.B. started on Sibjee he would have made a thorough job of it; and what would have happened to us! Our mahout did the right thing by heavily punishing his elephant in order to get him clear of the assault as soon as possible.

After a while J.B. calmed down and quietly grazed with the other animals gathered around us. Besides his keddah experience J.B. had at one time been used as a fighting elephant at displays of that kind: he would have given Sibjee a great thrashing. Sibjee had been known as unreliable having killed several mahouts and grass cutters, but this was the first time he had attacked an elephant. Years after this occurrence he attacked a female elephant, upsetting her and killing her mahout, after which he was used only as a provision carrier and kept a mile or so behind all other elephants. The sight of a tiger seemed to upset him. After we went to Bangalore the Rajah most kindly sent us an invitation to another shoot saying, 'I hope Mrs. M. will come. Tell her that Sibjee is dead and she need have no fear of such an occurrence again.' After that first shoot we went to many another but my wife had had too nerve-racking an experience and always remained in camp.

Next morning the shoot was closed down as the mahouts were rather agitated over what had happened, and when in that state of mind would not work well. The elephants swam across the wide Brahmapootra and we returned to Dhubri well pleased with our first experience of tiger shooting and grateful to our kindly host for having afforded us the ever memorable experience. Many have been the shoots I have been at since then, but that first one will always stand out as the shoot.

At time of preparing these reminiscences for the Natural History Journal I received with much sorrow the sad news of the death of my friend, the much beloved Rajah of G. He has gone, as he himself said when nearing the end, 'to the Happy Hunting Grounds'. Before he died he read with much pleasure and interest the first two parts of this series and I, holding his memory in affectionate remembrance, am glad that was so.

Since the shoot above described the Head Shikari referred to

may also go on to the Happy Hunting Grounds and the elephants Subjee and Jung Bahadur are also dead. Stories about them will be related in that country for many years to come and the Rajah will always live in the affectionate memory of his people.

(To be continued)

NEW SPECIES OF CEROPEGIA AND THE SYNONYMY OF THE INDIAN SPECIES.

BY

CHARLES MCCANN, F.L.S.

For the past few years I have been studying the Indian species of the genus *Ceropogia*. My studies have been carried out in the field as far as possible, and at the same time I have examined all the herbarium material available in the country. In this connection I must thank the heads of the various institutions who so kindly sent me the material for examination. The work is almost complete, but unfortunately, owing to the present paper shortage it will be a considerable time before I am able to publish the results of my work in full. However, I feel that in spite of all the restrictions at least the descriptions of the new species should be published together with the synonymy as adopted in my revision of the genus. The text and the illustrations of the revision will be published in full at the proper opportunity.

*Ceropogia Evansii*<sup>1</sup> sp. nov.

<sup>1</sup> *C. Evansii* accedit ad *C. hirsutum* habitus generalis, sed facile distinguitur foliis corollae lobis atque exterioris corollae lobis breviter bifidis, dentibus obtusis; in *C. hirsuta* lobis sunt profunde biidis, dentes acuti. *Nyxos* hinc species folia sunt largiora ac margine cordata quam in *C. hirsuta*.

*Description*.—Roots-system a tuber, 2.5 x 1.5 cm., subglobous, usually depressed; roots fibrous. Stem twining, 3m. or more in length, simple or branched, green or tinged with purple, deep purple, or almost black. Leaves up to 18.5 x 8-10 cm., reducing upwards, the lower ovate or ovate-lanceolate, lanceolate above, membranous, hairy above and along the nerves beneath, ultimately glabrous or nearly so, margins shortly ciliate, dark-green above, paler beneath, base rounded or subcordate, with a few (2-6) glands near the insertion of the petiole, apex acute or acuminate, petiole up to 40 mm. or slightly more, smooth, channelled above. Flowers small or large (varying much in accordance with the vigor of the individual) arranged in umbellae cymae; peduncle 1.5 cm. long dark purple, hirsute with stiff bristles; pedicels 1-2 cm. long, green; calyx divided to the base, 6 mm. or slightly more, glabrous, segment-linear or subulate; bracts subulate; corolla up to 37 mm., base inflated, globose, slightly constricted above to form the funnel-shaped tube beneath the lobes; the united corolla lobes form a subobovate or oblong head about 1/3 the length of the entire flower; lobes broadly ovate or ovate-oblong (when opened flat), softly pubescent within, margins ciliate, the upper 2/3 of the lobes lemon yellow passing into white below, the tube greenish white often with a faint pinkish tinge, internally the lower half of the corolla tube is tinged purple; corona, outer lobes 2-fid, the denticulations obtuse, margins ciliate with a few hairs, inner lobes subulate or subclavate, yellow tinged with pink. Petioles up to 12.5 cm. at first erect, then divaricate.

*Locality*.—Khandala, Western Ghats, 1,800 ft., Dombay Presidency, McCann 467; (Type Herb. McCann); Santapau & McCann 509, A.B.C.B.D.; McCann 464, A.B. to 466 & 468 to 469; 480 (Co-type Herb. McCann); Santapau

<sup>2</sup> Named in honor of the late Mr. F. V. Evans of Liverpool who helped me much for many years in carrying on my research work.

<sup>3</sup> My thanks are due to Rev. Fr. H. Santapau, S.J., for the Latin descriptions.

Junior who gave him a mortal wound with a heavy conical bullet from his 12 bore Paradox. The wounded beast then passed through a clear space, going slowly, and Dorothy got her first view of a wild tiger, and a big one too. I fired and he rolled over into the grass. A fine beast measuring ten feet over the curves.

I have always considered skin measurements over the curves to be the better method, as it is then possible to compare lengths of animals with those shot in the years before the peg-to-peg measurements began to be considered correct. The difference between curve and peg measurement, if each are properly taken, is some six to eight inches. The twelve feet tigers of former days were the result of wet skin measurements, skins after removal from the animals being pulled out as far as they would go thus giving the appearance of a striped python on the ground. A friend has recently told me that he himself read the original report of a sportsman who wrote, not twenty years ago, to the Civil Officer of the District that he had just shot three tigers 13 ft. 9 in., 12 ft. 7 in. and 11 ft. 10 in. in length! That was the method employed; so the foolish practice seems to still exist.

One day four tigers were obtained, one of them being shot by me with the .280. My daughter now begged to be allowed to shoot a tiger, and the Rajah said he knew this request was coming as he had received a letter from her husband saying 'she is a very good shot at a target'. 'So', said G. 'your girl may have her chance provided you take charge of her and see she makes no mistake'. To this I of course agreed and the beat next day was arranged for her benefit, but so that she could only fire in one direction, the elephants of the brothers M. being on either side of ours. G. lent D., which will stand for either Dorothy or 'Diana', his D.B. .450 black powder rifle. The tiger was pressed forward, but seeing our elephant waiting for him growled and went back into heavy cover where he demonstrated against some of the elephants causing them to scare. G. then went to the beating line and brought it along very silently.

Being over anxious that nothing untoward should happen I loaded D's rifle in the left barrel only, telling her to pull the left trigger. The tiger jumped out with a grunt, and in her excitement D. pulled the right and not the left trigger. She had a good view of the tiger, and it can be said that the loss of her opportunity was my fault as the right barrel should have been loaded. G. realized that I, her father, had too great a responsibility so, with his usual kindness and generosity, took her next day in his own bowdah. Two three-quarter cubs appeared in the first beat. In a second beat one of these two beasts was brought to D's gun and killed by her, her first tiger and one of three killed that day.

\* \* \* \* \*

The author of this series read the almost completed compilation, culled from his several Note Books, before he became ill early this year (1944).

Major H. G. H. Munrowd was not, unfortunately, a member of the Bombay Natural History Society. His death took place at Bangalore on the 21st March 1944. All members will be at one

with the Committee in expressing regret to his family that he should have passed away before seeing his experiences in print and contributing, as he had hoped to do, some more of his interesting Assam Reminiscences.—Eds.

(The end.)

## THE RIDDLE OF THE BEARDED PIG.

A PROBLEM OF DISTRIBUTION.

BY

J. E. KEMPE

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(With 4 plates)

Three distinct species of wild swine have for long been recognized in the western portion of the Malaysian sub-region, that is the area (excluding Celebes and the Philippines), lying south and east of Burma, together with a number of somewhat disputable local forms. These are *Sus cristatus* (local representative of *Sus scrofa* of Europe and western Asia including India and Burma), *S. barbatus* of Sumatra, Borneo and the Riau Archipelago and *S. verrucosus* of Java. The last is not of interest in this discussion and may be dismissed. *S. cristatus* and *S. barbatus* overlap and occur together e.g. in Sumatra. But that the only wild pig of the Malay Peninsula was *S. cristatus* was never in question until 1918, when Dr. W. S. Leicester of the Malayan medical service, stationed at Pekan in the State of Pahang on the east coast of the peninsula some 100 miles directly north of Singapore, shot the sow of a species new to him. Dr. Leicester kept a pack of mongrel dogs and for some years hunted that remote country as a regular pastime. He apparently shot several half grown young pigs as well about the same time, and in December of that year sent the sow's skull to the Director of Museums at Kuala Lumpur (the late Mr. H. C. Robinson). The latter, in his own words, found 'the occurrence so remarkable and so at variance with preconceived ideas of geographical distribution, that, pending further evidence, it was not considered advisable to place the occurrence on record'.

Thus the matter rested till September 1921 when the writer, stationed at Pekan as District Officer and quite unaware of the foregoing, was shown the skull of a pig shot by an old Chinese named Lee Chu'ah with whom he frequently hunted. Chu'ah shot the animal at Sungai Genoh a week before, a mile or two out of the town. It was an old solitary boar and much emaciated. What impressed the man was its great height and length of leg, the length of its skull, a pallid skin, the tufts of hair under its eyes and above all its whiskery beard. It weighed 244 pounds and he thought that in condition, it should have scaled well over 300—and a Chinese is no mean judge of pig-flesh. Chu'ah had hunted that coast for nearly forty years and never before saw such

LOCALITY	FISH
46. <i>Rajong</i> . On the Mahanadi 40 miles by road from Cuttack. Raja's Bungalow.	Great fishing for Cock-up, after the Monsoon, a few miles below.
47. <i>Chamtabor</i> . Travellers Bungalow. Where the tide recedes for miles. About 12 miles from Balasore.	Good fishing from country craft for Cock-up, etc. in deeper water. Season November to January. A few flat-bottomed boats available. Local fishing mostly with stake-nets.

SOME REMINISCENCES OF SPORT IN ASSAM.<sup>1</sup>

BY

H. G. H. M.

## PART II

*(Continued from page 209 of volume 45).*

It may be as well, before proceeding to relate further shooting reminiscences, to say something about the rules regulating the sport of hunting tiger with the aid of elephants. In this matter of the right way and the wrong way to do things the Rajah of G— was very particular, and rightly so, as carelessness in the handling of weapons has resulted in not a few fatal accidents.

A basic and inviolable rule is that, when the rifle or gun is removed from the howdah rack, or carried in the hand when shooting from a 'chaujamah', or a plain pad, it must be held—until actually aimed and fired—with the muzzle pointing upwards. This rule is insisted upon even during a scrimmage such as takes place on the tiger attacking the elephant; and also under the very dangerous and exciting circumstance when the tiger is on the elephant's rump and endeavouring to get at the occupants of the howdah. A weapon should be kept at safe, or uncocked if a hammer arm, until just before firing, and returned to safety before being replaced in the rack or held (as on a pad elephant), ready for further use. When changing from pad to howdah and vice versa, also when mounting or dismounting from elephants, it is very necessary that all weapons be unloaded.

On one occasion I remembered that I had forgotten this, and went back miles to find the howdah elephant and unload my rifles left in the rack. I became a privileged person in that, when using a very heavy rifle, I was permitted to stand in the howdah with the rifle breech open and the weapons resting in the howdah rail, for I found the strain on the muscles of the right hand, holding a heavy weapon with the muzzle upwards and the butt on the rail, to be very great if continued for any length of time. 'Yes' said the Rajah, 'you may try that and see what the mahouts say.' As soon as the muzzle came down on the rail the mahout said 'Sahib!' and pointed upwards. I asked him to stand up and see how safe the method was, and then he grinned and said, 'Well, it is you, and we trust you, you can do as you like.'

<sup>1</sup> It is regretted that through an error the author's reminiscences have been associated with the 'Raja of Goolpara'. The second line of paragraph 3 of Part I of this article, published on page 209 of Vol. 45, No. 2, should read:—'Rajah of G— until I was posted to the Goolpara District.'—Ems.

This brings home the point that the mahouts are very critical; and once they distrust a sportsman it is good-bye to his chance of bagging a tiger. The next day the Rajah said to me, 'I see the mahouts have granted you permission; you are a privileged person; not to everyone would they accord their consent in such a vital matter.'

As in small game shooting under ordinary circumstances, so in tiger shooting from elephant-back, shots across the front of the line must never be taken. On one occasion a relation of G's Dewan shot across my front at an imaginary tiger and was exceedingly angry when his elephant was ordered out of the line; but he had to go. The Rajah made no exceptions, and took the strongest action, whoever the offender might be. In connection with this occasion there was an amusing incident. A great friend of the Rajah's, who did not shoot, was always to be seen in the back seat of the Rajah's howdah. Some of the other guests were laughing, and laughed all the more when I asked what had caused the offender to fire across me, for I had not seen a tiger and the beat came through without putting up any animal. One of them remarked, 'Look at G's friend: see his ears twitch!' Then I noticed that he had, in a marked degree, the ability to move his ears about in the way small boys often do when making grimaces. The offending sportsman, when asked what he had fired at, replied: 'Why a tiger of course, I saw its ears twitching,' hence the shot across my front. After that it was always a great joke, and the Rajah's friend would violently twitch his ears when a tiger was missed.

Another strict rule is that when the line of beating elephants is approaching from the front no shot must be taken at a distance of more than about twenty yards: the closer the better, for longer shots may endanger the lives of the mahouts. Many accidents have happened from non-observance of this rule, and doubtless there will be many more; yet, if it is adhered to, no such accidents will occur. There have been many extraordinary accidents owing to glancing or ricochet shots. The nearer the shot is taken the less chance is there of the huller going astray.

Unless general shooting is proclaimed by the Master of the Shoot no one may fire at any thing but the tiger. Birds flushed ahead of the line—jungle fowl, peafowl, partridge may all be indications of a tiger on the move; so also the 'hullee' of some animal, a sambar or other deer, or a pig. All such signs have to be watched for, and experience soon teaches the sportsman what is indicated by them. Though the beating line may be a long way off yet a flushed bird may show that the tiger is close by, so one has always to be watchful, vigilant, with the mind concentrated on the business in hand. Right on the heels of a breaking sambar may be the tiger, for when alarmed all animals are thinking of their own safety and way of escape and indifferent to the larger carnivora which, they well know, are not hunting them.

No chance shots may be taken; no firing at moving grass; for if you fire and kill a deer, or other animal, you may ruin

the chance for the tiger and, moreover, may perhaps not again be asked to a shoot by that particular host.

A howdah elephant is often placed in the beating line. The occupant may not fire at a tiger, for by doing so he may spoil any chance of the tiger being shot. His job is to act as a beater, to assist in directing the line, and to drive the tiger to the waiting guns ahead.

On one occasion I was guilty of killing a tiger from the beating line but it was under exceptional circumstances, and G said I was acting rightly. This was the largest tiger I have shot—over ten feet, with a short tail. I may relate the occurrence later; but it was pleasing to me when the Rajah led the cheering; and the mahouts cheered with a will for they believed this animal to be a man-eating tiger. It was confirmed the next year because all killings of people in that district had ceased.

It is very often that the beating line views the tiger, and I recollect Mr. L., afterwards Sir A. L., Governor of Assam, taking stones in his howdah to throw at the tiger and make him move on. Before he left Assam he had killed perhaps fifty tigers. He frequently used a .405, the weapon the late Theodore Roosevelt called the 'medicine gun for lions', and found it an efficient weapon for howdah shooting.

When your elephant has been placed at a particular spot you must on no account move from that spot, for by doing so you may not only be incurring danger to yourself and your mahout, but may let the tiger escape.

Sometimes, when there is a large expanse of heavy grass, elephants are used to trample a clear space, along the hither side of which the guns are placed. The line of beating elephants forces the tiger towards the cleared tract and the animal, not knowing it is there, will afford a shot as he hesitates on the further side of it. Always must the guns be on the hither side. That, of course, is common-sense, and a rule even in small game shooting, for shots at animals and birds scurrying past you unexpectedly from behind are very chancy, and you cannot face the other way as you would see nothing before it was right on top of you.

In Assam, and also I am told along the Terai, as the jungle country along the foothills of the Himalaya is termed, are swampy and boggy places into which elephants cannot go, and indeed will not go, for they know the danger of it. When tiger make such places their haunt they are exceedingly difficult to get at. To meet this kind of situation G. devised a method of which I have not heard, or read, anywhere else.

He had a supply of 12 gauge 'firework' cartridges which could be fired from an ordinary shot gun without fear of damaging the barrel. When fired the charge will rise to a height of sixty or seventy yards and then burst, producing a wonderful firework effect. So also, when fired into cover, it produces an effect highly discomfiting to the tiger! The method was for two howdah elephants to walk on each side of the boggy patch, the firework cartridges being fired into the grass during their slow advance. Eventually these unwelcome and unusual sounds start the tigers mov-

ing, for in such cover they are often in pairs, and once the animals are discovered by the 'hullee' of the grass to be roused, it is fairly easy to keep them on the move, and eventually drive them to the guns on the waiting line of elephants at the further end.

It could be known by pug-marks in the swampy ground that the game was 'at home', and the animals were kept inside the cover and prevented from breaking out to one side by a shot or two ahead of the 'hullee'. I have seen this method successful over and over again. The bosting elephants and their mahouts like it, for there is less exertion and they see all the fun.

Sometimes tigers slip out of a beat to one side or the other when being hunted in ordinary cover, and their manoeuvre is often given away by excited twitterings of small birds and calling of jungle crows. On the very last shoot I was on, a crow kept flying from tree to tree—small trees little larger than shrubs—plainly saying, 'Here he is, here he is!' and on this accurate information a fresh beat was quickly arranged and the tigress shot. Sometimes the tiger, having heard the sound of an approaching hunt, will slip off to gain a more undisturbed locality and will be given away by all sorts of birds, and alarm calls of the smaller deer. Of the birds the babbler family, 'Striped squirrels' ruced, the mynas perked and picked, the seven brown sisters chattered in the thorn,— are one of the most reliable of these aids to the hunt, for they persistently follow the tiger, scolding all the time. He cannot escape their vigilance. When tiger and panther and the wild cats sleep they are not molested, only when on the move are they given away.

The reader will be tired of nothing but tigers so I will relate an exciting elephant experience and return to the tigers later on.

#### ELEPHANTS

We had toured through the Garo Hills, my wife and I with our two children, then quite small, and had been walking until we reached Dabra. It was winter time, and between Dabra and Goalpara good duck shooting was available. When tired of walking in the hills Douglas and Dorothy used to be carried on a Garo's back in a basket supported by a strap going across the forehead: even grown-ups are carried in this way by the sturdy hill-people. At Goalpara we boarded the river steamer. The trip down the Brahmaputra to Dhubri is a very enjoyable one and we always hoped the steamer would run aground, for if this occurs it takes perhaps three or four days for another steamer to arrive and pull the ship off the sandbank. A rest of a few days on the river craft is always appreciated, for the food, at any rate in those days, was good, as also the accommodation. After a day at Dhubri we crossed the river by ferry to Fakirganj and from there went on to Fulhari whence, after a short stay, we proceeded to Hallidayganj.

Elephant catching was in progress near Fulhari and we saw some of the newly caught animals. It was mostly done by 'mela shikar', that is, no stockades had been built and the wild elephants were caught singly. There was one baby elephant caught only



a few days previously and this little creature thought it great fun to undo one's boot- or shoe-laces; very pretty to watch and highly amusing for the children. The people responsible for the taking of this small elephant said that had they not done so it would have died, or been killed by a tiger, and that it was of no advantage to them to capture it as it cost a lot to feed and would be of no value for a number of years.

The roads were in a dreadful state but passable by the old tin Lizzie brought along from Dhubri. Hallidaygunj Inspection Bungalow is on a small hill so I backed the car into a sheltered place off the road and left it there covered by a tarpaulin. Next morning villagers came to me saying that a rogue elephant had killed one of their buffaloes, and asked me to shoot it. I thought it might not be a wild elephant but one of those belonging to the elephant catchers, in which case the killing of it might mean a very large sum as compensation. That afternoon they again came to me and said, 'You would not shoot the elephant and now it has killed two men whose lives would have been saved had you listened to us.' Now I felt fully justified in going in pursuit of the beast so, taking my .475 rifle and some cartridges, went with the men and saw the two bodies being taken to the village in a bullock cart.

I followed the tracks of the killer until it became dark, and then returned to the bungalow. Early next morning we packed up and went down to the car, finding the elephant had been quite close to it; why he had not attacked it was difficult to say. We drove to Mankachar, the .475 ready for action if needed, but saw no sign of the animal which was evidently keeping to the hills. After tea with the Mauzidar we pushed on to the ferry which takes loaded cars across the river, and landing on the other side saw things wrapped in matting, and asking what these were learned they were the bodies of three men the rogue elephant had killed. One was a tailor of Mankachar, the place we had just left. The elephant, they said, was following the main road and was on its way to Garobada, and for all they knew might be in the jungle along the road we were travelling. Though I said nothing I was fairly terrified as there would be 3 miles of a mud road and no possibility of turning; and glad and relieved I was to get into the bungalow at Rangapani. The building was not much protection, for an elephant could have easily knocked it down. I had thought that the cartmen, learning of the killing of the three men, would not have faced that length of road, but they came on to our great relief and comfort.

Next morning we could obtain no definite information so drove on to Garobada, the .475 affording a comfortable feeling of security. Nearing a bamboo bridge which is renewed every season after the rains, a Policeman ran into the road with violently waving hands and gave the news that the elephant had just gone into the jungle this side of the bridge. The safest thing was to get on to the bridge as speedily as possible for no elephant would venture on such a structure. Learning soon that the dreaded beast was across a small jungle stream we hurried on to the foot of

the hill on which is the bangalow and there parked the car in a safe spot, my wife and children went up to the house.

From the time the policeman was met all information gained was shouted from men perched in the safety of trees. There were nine men in trees, each with a gun or rifle, and I was asked to go in after the elephant and kill it; they would protect me! 'Yes,' I said, 'you will see the grass moving and take me for the elephant. Not much' or words to that effect. The cover was tall elephant grass interspersed with clumps of bamboo, so small hope of obtaining a successful shot.

There were some elephants not far off belonging to a party of elephant catchers but none of them, very naturally, would consent to giving me a mount to go after the rogue. I told the men in trees to get away from the jungle and I would go and have some lunch and think the matter over. While at this pleasing occupation some men came to say that the elephant was now out in the river and might make his way towards a 'hat' (a market held on certain days) where there would be hundreds of people, and that not more than a mile away. It was evident that something in the way of action was necessary. Already this brute had killed two men at Hallidnygunj; three near Rangapani; had met carts on the way to Garobadha and there smashed up several carts, killed two cartmen and destroyed a bullock or two; seven human beings had he already slain, and at the 'hat'—? It was a terrifying thought.

All who had seen him described the animal as a single-tusker. Taking a handful of cartridges (Solids) and the .475 I ran down to the road leading to the 'hat' and there saw the tusker in the river sporting about in the water which was about 4 feet deep at that place. Directly I showed myself on the bank of the stream he curled up his trunk and charged. His head was held very high. I sat down for the shot and tried to get the bullet past his trunk in hope of reaching the brain, but failed. On receiving the shot he screamed and went back on his haunches, but so quickly did he turn in his tracks that the second shot aimed at his chest (side) hit him near the tail: those who have not seen elephants in the wild state can have no conception of the rapidity of their movements on such occasions as this. I only had time to ram in one cartridge and fire as the beast was disappearing into the bamboo on the further side of the stream. This shot fairly knocked him over, but only temporarily. I heard the crash but did not actually see him fall. My wife and children up on the hill saw and heard the whole affair: the charge, the scream, the bucking on the haunches, the second shot, the third shot, and the fall. Servants and Garos standing on the hill also witnessed the whole affair; such an exceptional scene as can have but rarely been laid out as a spectacle for spectators.

Had I only known it at the time I could have gone along the road until opposite the car and then got close to the bank without being seen. The shot would have been a close one and from safety, as there the bank was very steep. However I did not know all that and had to act quickly and take my shot at about 20 yards.

There was no elephant I could use for following the wounded animal. One of the elephants was a 'Jung Bahadur', but not such a grand animal as G's elephant of that name. Had he been available the hunt after this rogue would have been a highly exciting business, and a successful one also. Hurrying down the road I found the elephant had crossed about three miles on and I followed on some miles further, but got no news of him. He was found dead near a Garo village fifty miles away and Mr B, the Forest Officer, sold the tusk for me for Rs. 400.

Those who have been charged by an elephant will tell you that the on-coming animal appears as if a great railway engine is advancing on you and that it is impossible to stop it. That is what it feels like even though experienced several times. Every time you feel as if nothing could stop the huge thing. The charge usually takes place from grass jungle and you do not see the animal until it is almost on top of you, so all the more do you feel that it cannot be halted. That is my own feeling. With all dangerous game I am terribly excited and frightened until I am actually taking aim and then I become perfectly calm and able to shoot accurately. As soon as the danger is over reaction takes place with me and the whole of my body trembles for minutes. I have never killed a charging elephant dead in its tracks but have always been able to stop and turn him. It seems to me that a charge of shot into the turned-up trunk would stop a charge, for elephants greatly dislike their trunks being hurt; watch a mahout make an elephant obey him by jabbing the trunk lightly with a spear: but I will let someone else try the shot gun experiment.

Padre P of the American Baptist Mission located at Tura, Garo Hills, was keen on big game shikar. I had obtained permission to kill two rogue elephants, a tusker and a mukna which always went about together. The Garos came to say that these two were giving trouble near a village five miles away, so I wrote to the Padre and asked him to come along and he should have the first shot. He arrived with his .400 H.V.D.B. H'less express and we started off, I with my .475. Some distance from the village the Garos began to track, and after about an hour we arrived at a small stream which was not fordable. As I am unable to swim I held on to two Garos who swam through the deep portion with me. Having had a rest and dried ourselves we slowly followed the tracks up a hill, on the top of which we found a flat portion of ground covered with lantana having among it a few open spaces. Soon we spied the two elephants standing in the shade of a tree. The mukna was clearly visible, but not the tusker. P, moving a bit to one side said 'I can see the tusker', and before I could stop him dived into, or rather under the lantana. The mukna backed and the tusker moved round the tree. P, who of course could not see what was going on, got very near the mukna—actually within ten feet of it!—and the beast rolled up its trunk, put its head down and was about to charge into the lantana when I decided that the Padre was in a very dangerous position and fired from the side to reach the brain. I was fifteen paces away and

the solid bullet, though not reaching the brain, knocked the animal over. P stood up immediately and told me he had, before it fell, fired a shot into it at very close range. As soon as he could he came back on his hands and knees, got up a small tree and stood on a branch so thick that one's arm and started firing shot after shot into the fallen elephant's head and chest.

He suddenly said that his rifle was misfiring and I handed my .475 to him. This also misfired and then the elephant stood up. I was now behind a large forked tree with the supposed disabled weapon and put in two cartridges in the hope that perhaps the rifle would act. Then P. actually succeeded in getting off a shot which, fired from above, found the brain and the beast fell dead. The poor beast had eleven bullet wounds, and when standing blood was streaming down its chest, a terrible and pitious sight. When an organ that is not usually protruding, protruded it was certain that the beast was dead. This was P's first elephant. It turned out that he had been loading the right barrel and pulling the left trigger; then he would load the left barrel and pull the right trigger. In excitement funny things happen. There was nothing the matter with the rifle. When my weapon was examined it was found that the right striker was broken.

It will be noticed that this story furnishes at least one moral: one's rifle should be carefully examined before starting after dangerous game.

On another occasion we had permission to shoot a large tusker and, to cut the story short, P took the shot and immediately started running; he had not got very far when he naturally fell, tripped up by a creeper. He persisted in running away after a shot and I could not get him to give it up. He did it every time, and fell every time! This time the elephant was only stunned and we never came up with it again.

That little tale leads up to this one. A rogue makna elephant had been proscribed by the D.C. Garo Hills and three of us—Mr. W. I.C.S., the D.C., Padre P and I started out to hunt it. The only one with any experience was myself. I made a bad mistake and we were lucky to get out of the difficulty as easily as we did. The mistake was in following the beast in very dense grass jungle. I should have gone round the hill until it was certain where the animal was and then planned an attack on it. As it was I followed the tracks into difficult jungle well knowing that an animal, especially an elephant, is likely to return on its own tracks. This is what happened, and it is fortunate we saw the upraised trunk reaching for some food. I immediately put P, who was to take the shot, into position near an opening in the cover where it was certain the elephant would pass. He came into the clearing as expected, affording a clear side shot at the side of the head to reach the brain. This is supposed to be an easy shot and a sure one, but I have seen it to be not a sure one for the bullet may strike a projecting bone and glance off in a wrong direction, or the cancellous bony structure of the skull may divert it. The shot on this occasion was a very close one, and the Padre discharged both barrels of his .400 H.V. rifle simultaneously. The ani-

mal fell over dead—but we did not know it was dead. P, after firing, did his usual sprint and ran away to, as usual, catch his foot in a creeper and fall sprawling. W jumped backwards at the shot and fell into thick *lantana* which supported him, but he was in a difficult position had anything happened unarmed as he was for he had only come out to see the fun. As the animal fell a fairly thick bamboo hit me on the head and knocked me down. Fortunately the elephant was dead.

When the usual sign proclaiming death was seen we walked up to examine the beast. It was seen to have a number of bullets just under the skin—projectiles from native weapons, so no wonder that it had turned rogue. By the wound on its head we thought that both the bullets had reached the brain, but it was later found that both had been deflected and that the cause of death was injury to the spine—a badly fractured spinal vertebra: an altogether very extraordinary affair; and, 'all's well that ends well!' The bullets used were soft nose; and not solid as are usually used for elephant.

#### BUFFALO

Some villagers from across the *Brahmaputra* came to the D.C. Dhubri, Mr. H, I.C.S., to say that a wild buffalo bull was giving them a great deal of trouble, having killed some of the tame bulls and lately taken to chasing the people. H. sent word to S. (Forest Officer) and me suggesting we should go to the assistance of the villagers, who would give all help in the matter.

These single wild buffaloes—we may call them 'Rogue Buffaloes', become very dangerous to villages where tame buffaloes are kept. When I was in the Garo Hills I had to examine a man who had been killed by one of these 'rogues'. The buffalo had got the body of the man up against a bank in such a position that he could use the massive bony forehead, which is about eleven inches wide between the horns, to the greatest advantage. The result, propelled by the enormous strength of an animal weighing near a ton, can be imagined. The man's chest was flattened and nearly all the ribs in the body had been broken. A gruesome sight.

S. and I each possessed .475 H.V. rifles. We set out as soon as we could and crossed by ferry to Fakirganj. There the villagers put us into a bullock cart and after a few miles, the track being deep in mud and slush, we were transferred to a cart drawn by buffaloes. When this form of conveyance could take us no further we got into a dug-out canoe and were propelled by means of poles along miniature canals among the rice fields. The water was waist deep and in some places deeper. S was a man of over six feet and much felt the aches and pains of being doubled up with his knees touching his chin, expressing his discomfort in very forcible terms. The dug-out wobbled so much that I realised it would be almost impossible to shoot from it. We tossed for the shot and I won, so prepared for action. I loaded with a soft nose bullet in the right barrel and a solid in the left. S pinned his faith on solids so loaded accordingly.

In conclusion it is perhaps worth stating that I can find no evidence for the inclusion of the following species or races in the avifauna of Afghanistan though that country is included in their range as given in the second edition of the *Fauna of British India, Birds*. That many of them do actually occur within Afghan boundaries is of course not improbable.

<i>Corvus splendens eugmayeri</i> .	<i>Scotocerca inquieta striata</i> .
<i>Dendrocytta vagabunda</i>	<i>Cephalopyrus flammiceps</i> .
<i>Parus major intermedius</i> .	<i>Sturnus vulgaris humei</i> .
<i>Parus palustris korejewi</i> .	<i>Uroloncha malabarica</i> .
<i>Molpastes leucogenys leucogenys</i> .	<i>Mycerobas melanocephalus</i> .
<i>Certhia himalayana taeniura</i> .	<i>Hirundo rustica gutturalis</i> .
<i>Oenanthe monacha</i> .	<i>Anthus hodgsoni hodgsoni</i> .
<i>Phoenicurus frontalis</i> .	<i>Eremophila alpestris longirostris</i> .
<i>Rhyacornis fuliginosa</i> .	<i>Cinnyris asiatica brevirostris</i> .
<i>Calliope pectoralis pectoralis</i> .	<i>Clamator jacobinus</i> .
<i>Prunella himalayana</i> .	<i>Gyps himalayensis</i> .
<i>Pericrocotus roseus</i> .	<i>Columba leucocata</i> .
<i>Phylloscopus tyleri</i> .	<i>Pterocles lichtensteinii</i> .
<i>Phylloscopus pulcher kangrae</i> .	<i>Lerwa lerwa</i> .
<i>Scircercus xanthochistos albosuperciliaris</i> .	

### SOME REMINISCENCES OF SPORT IN ASSAM.

BY

H. G. H. M.

(Continued from page 332 of volume 45).

#### PART III.

In some parts of the plains of Assam are to be found vast stretches of country covered by grass in patches, in some places high and dense, in others light and interspersed with open spaces covered by green grass. These uncultivated areas are called 'chapis' and a well known one is the 'Pakar Chapri' which is surrounded by heavy, dense jungle bordered on three sides by a stream in which there used to be very good fishing. I use the past tense, for in Assam, as in most parts of India, the people of the country have woefully diminished the freshwater fish supply of the land by all sorts of poaching and destructive malpractices: and this is true of even the larger rivers.

To get to the Pakar Chapri from Sadiya one drives to the bank of the Brahmaputra river which is then crossed by means of a 'mar'. On the other side is a wide stretch of sand—this is in the cold season when the river runs low—over which is laid a brushwood track for the easier passage of motor cars. Thus one arrives at Saikwa Ghat, the terminus of the Assam-Bengal Railway. From here one motors for miles and miles through heavy tree jungle, the haunt of all sorts of wild animals, and a rich avian life. Then one arrives at Kobo on the Brahmaputra which is reached by again crossing the river on a 'mar'. During this passage over the river there are sandbanks to be avoided and there are days when the crossing can be dangerous owing to a sudden rise in the river which at this place has not long issued from the mountains. Thinking of Kobo brings to mind the occasion when the Assistant Commandant at Pasighat was on his

way down to Saikwa Ghat. He ran his car down the bank too fast and so shot over the 'mar', burst through the pole barriers on the further side of it and plunged into the river! 'More haste less speed', 'Safely First' and that kind of thing. In the car was a box containing his wife's party frocks and fripperies. The box was to be forwarded to her in Shillong, and as the car was not retrieved from the water for several hours the state of the garments can be imagined, as also the state of mind of the poor wife when she saw them.

From Kobo we drove through more forest to Pasighat. This used to be a very pleasant place as the houses of the officials were along the river bank and one had only to go a hundred yards or so to fish for mahseer. There were times when there was not at Pasighat anyone fond of fishing. What waste of opportunity! On the way down river from Pasighat to Pakar Chapri there are many rapids to be negotiated, some of them, to the mind of a non-swimmer, appearing very dangerous, but good fun to those less timorous. I was in a large dug-out which could have easily been capsized, for the river had suddenly begun to rise and it was impossible to stop the boats which were, however, most skilfully managed by the expert and courageous boatmen. On the return journey I preferred to ride an elephant.

The elephants were made to swim across the river, and so swift was the water that they were many times submerged, only their trunks being above the surface, and how the mahouts managed to stick to their charges was a mystery to me, but all crossed in safety.

Life in this camp was very delightful. We had fishing and all sorts of shooting with rifle and shot gun. Daily the *chapri* was explored on elephant-back. A number of buffalo was seen, as many as sixteen in one herd, among them two young bulls; and one female had such enormous horns that we debated whether they were not something approaching the record which is nearly fourteen feet tip to tip across the forehead! I don't suppose they were within a couple of feet of that but it was seriously discussed whether we should shoot the animal and pay the fine of fifty rupees. Better counsels prevailed so she was left in peace. She was not an old animal, though to have attained such imposing horns she must have been well on in years.

Green-pigeon and jungle-fowl were shot, some of the latter with a .22 rifle as they pecked about on the edge of the cover across the stream. Green-Pigeon were in thousands in those parts, the larger flocks containing birds of several well-known species. Large bags are made during the months succeeding the breeding season, the time when this has ended being known by the birds collecting into huge flocks which, with some species, amount to many thousands. The largest bird is the Bengal Green-Pigeon; others are the Ashy-headed and the Thick-billed both of which are very fast fliers, and the Orange-breasted Green-Pigeon. The jungle fowl is the Common Red variety and among other game birds is the Black-breasted-Kalij Pheasant not easily come by owing to its skulking habits. That shoot at Pakar Chapri in company with our son-in-

law, C. of the Police, T. the Forest Officer, and N. of the Saw Mills (Bird & Co.) remains a very pleasant memory to us both. But I have forgotten the rogue elephant. There was known to be one in the jungles through which we had to pass on our way to camp: and my wife, who had not been on an elephant where tiger could be met since she experienced the charge previously related, was very much alarmed when the mahout suddenly pointed to a spot in the forest where an elephant had evidently just passed. I did not feel too happy, having with me only one of those all-in-one three-barrelled weapons—a double 12 gauge with a .405 barrel beneath. We pushed on as fast as possible and left the tree jungle for the open grass land as soon as could be managed. By doing this we saw various kinds of game animals: buffalo, sambar, hog-deer, also wild cats and pig. In the stream not far from camp quite large mahseer were caught.

On a number of occasions the Rajah of G. arranged shoots for the Governor of Assam and other high officials; then he would supplement his own elephants by animals of the Forest Department and others borrowed from zamindars. He did not very much care for these big occasions but always did his best to make them a success. From the time he arrived in camp he every evening interviewed 'khubberias'—bringers of information of the whereabouts of tigers, and decided what beats to carry out the next day. Buffaloes were never tied out as baits as is commonly the practice in other parts of India. Months before these important shoots his shikaris toured through all the likely jungle tracts and marked down all the places where cattle were being killed. A central spot was chosen for the camp—usually on the banks of a stream and in open country, so that those bringing information could have ready access to it. The men would cover all the country within ten or twelve miles round the camp. The informant was given ten rupees for each tiger shot, was fed in camp for as many days as was necessary, and taken out on a pad elephant when his particular tiger was to be hunted.

Every evening the Rajah arranged details of how the elephants should be fed, making fodder arrangements for twenty-four hours. He would also listen to all complaints, make particular enquiries as to any tusker becoming 'musth', and if in any doubt would personally inspect the animal. All elephants had to be daily examined for sore backs or other injuries, rope-galls and the like. In all this he was thorough and painstaking, as a good Commander should be, hence his known success on all occasions. A start was always made by 10 a.m. and the shooting ground reached by 1 or 2 p.m. Then, as soon as the Rajah had personally ascertained the lie of the land and the signs of the tiger being present were good, beats would be arranged, the guns placed in position, and the beat started, he himself giving orders as to the manner and direction of the drive. If tiger were few the sport was perhaps over by 3-30 p.m. when lunch would be served; but if there were several tigers then it was good-bye to lunch. On the way out and back all guests rode pad elephants, these animals having faster paces: they did not generally take part in the beats.



On return to camp tea was available, and dinner at 9-30 to 10 p.m. After that one could go to the big tent in which was singing and dancing. The first time I saw a boy dressed as a girl I was asked his sex, knowing the Rajah did not allow women in the camp I said 'Middle-sex'; and this was thought a great joke, that boy being ever after known by the name of Middlesex. The Rajah always said of these semi-official outings that they were not 'shoots' but huge picnic parties, and that it could be very dangerous both to guns and beaters. 'I like punctuality,' he said, 'and the starts are frequently delayed for one reason or another so the shooting ground is not reached in time and lunch is demanded, tables laid out, chairs placed, and so on, all meaning delay and waste of time, so that it is after 3 o'clock before a start can be made. Then the guns, having had lunch and beer are in an excited mood and do dangerous things; it is difficult to control, and frequently the tiger gets away from the beat.' One reason for tigers escaping without being shot at is that the mahouts, seeing the 'hullee' approaching and having little confidence in the howdah guns, deliberately cause their elephants to turn away and fidget, or even run away. The visiting sportsman as often as not knows nothing of 'hullee' sign, or that the elephant is being wilfully made unruly and does not connect this with the advancing tiger which quietly slips by and escapes the beat.

Mahouts have to be considered. Seated astride the necks of their majestic beasts they are in considerable danger from the attacking tiger, and it is natural they should be anxious as to the nerves and weapons of the sportsmen in the howdah, not only the guns on his own elephant but those on either side of him. They do not like single barrel weapons or small bore rifles, and one cannot convince them of the efficacy of magazine weapons. Very naturally mahouts discuss among themselves the merits and demerits of the various sportsmen, more especially on these semi-official shoots, and also gather information from camp servants as to their respective masters.

The Rajah always strongly objected to ladies shooting; he was ever afraid of something happening and there was once a terrible tragedy during one of his semi-official shoots. He never spoke of it. A mahout was killed, one of the guests shot in the ankle, and an elephant subsequently died of a bullet wound. To guests not known to him, not known that is as to nerves and straight shooting, he gave a card of 'Don'ts' and arranged for a reliable and experienced man to be at the back of the howdah. During beats he walked his own elephant backwards and forwards behind the line of howdah elephants and shot at those tigers only which were missed by the guests. I have seen him shoot a number of tigers under these circumstances.

The question whether tiger shooting from elephants is a dangerous sport is often discussed. Many there are who assert that it is not, but much can be said for the opposite view. Shooting tigers by sitting up over a kill at night is often looked down upon by those who bag tigers by beating for them. In the latter case the sportsman is almost always perched in a tree, on a ladder, or

other elevation as also in the former. In both instances the sportsman is in almost no danger unless and until he wounds the tiger.

Then, it must be admitted, he more or less takes his life in his hand when he follows up—as he must do; and, it has to be added, his mostly unarmed followers, without whose help he would, in most cases, be unable to locate and bring the wounded beast to action are equally exposed to death or injury.

Tigers are hunted and shot from elephant-back in jungles where to pursue them on foot is mostly impossible owing to the denseness of the cover. To heat them out without elephants is almost hopeless, the only alternative being sitting up, or through some more or less chance encounter.

Is tiger shooting from elephants dangerous? I think I can demonstrate from a number of experiences that, though it is not always so, it can be and may be; not so much on account of the attacks of wounded, surrounded, infuriated tigers as through the uncertainties and vagaries of elephantine tempers and irresponsible actions of people on their backs.

In the same year, the first of my tiger shooting career with elephants, there were, besides the charge of Sibjee against Jung Bahadur, two other instances of the kind. One took place at Bijni, the headquarter station of the Bijni Raj: the other at an estate owned by the zamindar of Rupsi. The Bijni Raj was then in the Court of Wards and the Manager had asked Mr. H. of the A.B. Railway and living at Haflong to a small tiger shoot. Both Mr. and Mrs. H. took part in the shoot and though tigers were seen none were shot owing to the small number of elephants available: one howdah and five beaters. Among the elephants was a notorious brute known to have killed some 15 mahouts and grass-cutters. During the beats he behaved himself, but when the party was returning he suddenly charged the elephant in front of him on which was seated Mrs. H. The animals were in single file and H., just behind, shouted to his wife to jump off and she was able to do this before the assault of the charging elephant arrived, falling between the oncoming beast and the one she had left with such presence of mind. I met her not long after at Dhubri and heard from her that she could not remember exactly what happened after leaving her elephant, only that she kept on rolling away. The attacking elephant knocked the other one heels over head, instantly killing the mahout. It was a miraculous escape for Mrs. H.

The other charge took place at a small tiger shoot on the Rupsi Estate when some twelve elephants were out. At the end of the day a male elephant charged sideways at a female, knocking it over. Of the three people aboard one was uninjured, the mahout was killed, and the other man had his jaw broken. Having some knowledge of dentistry I tried to improvise methods to keep the bones together but had to fall back upon the usual treatment which succeeded absolutely—a perfect result. This man could only remember that he found himself mixed up with elephant legs and then became unconscious. He probably received a kick from a fore-foot and was fortunate not to be more seriously injured.

The Zemindar of Rupsi, whom I knew well, met his death

through avoidable circumstances. The Zemindars of Lakipur got up a shoot to which Rupsi contributed his own nine elephants. With him was a Khasia boy he was supporting and educating. When the Zemindars learned that Rupsi intended to put this Khasia lad into howdah to use a rifle they objected, saying he had no experience and it would be unwise. Rupsi said he was certain the boy could use a rifle as well as any of them and that he would not be frightened if he saw a tiger. After these preliminaries the Zemindars decided to place the lad on the extreme right of the line of waiting guns as they did not expect the tiger to go there, and Rupsi was placed next to him. In Rupsi's howdah was sitting the 11 years old child of an English lady, the wife of one of the Zemindars. Things will happen, 'Kismet' one can call it. As soon as the line of beating elephants advanced the tiger was seen to be moving in the direction of the Khasia boy so Rupsi, an experienced sportsman, seeing this, moved down to the lad's elephant but was too late to steady the boy and give him confidence. The tiger was seen by the lad, who panicked, brought up his rifle in direction of Rupsi instead of the tiger, and pulled the trigger. Poor Rupsi was killed instantly, the high velocity bullet passing through his arm and on through the chest. In doing this it went very close to the small girl sitting next to him. A terrible experience, for she was drenched in his blood. We were on our way to a shoot with the Rajah of G when I met his Dewan who told me all this, at the same time informing me that three of G's elephants had gone *musth*, and in addition that a known bad elephant had escaped from the Zemindars' camp some forty miles away and was reported to be making towards G's camp.

Having heard all the news I drove on in my car and got into a bad bit of road where the car became ditched. Some villagers were yelling that the *musth* elephant was coming across the plain and I found the car could not be re-started. With me were .475 cartridges but the rifle had gone in advance to the camp; so we took suitable cover to see the elephant take no notice of the car and proceed on down the road. Were we relieved! This was a female called Megmala. Had I known, that in time I might have been able to stop her and ride her to the camp.

The car was started without difficulty after it was found that my wife's handbag handle had slightly turned the switch key! When we got to R's camp we found there had been yet another tragedy. The Rajah of G had been out looking for tiger tracks and village 'Khubber' and somewhere about midday his mount Sibjee charged this female elephant Megmala from behind, knocking her heels over head and instantly killing the mahout. I saw the dead man; a good mahout whom I knew well. Megmala made her way across country to Gauripur, swimming the Brahmaputra on the way. For many years she was G's best howdah elephant but having been badly mauled by a wounded tiger could not, after that, be depended on.

That night I took my .475 (in case of accident!) and went to see the three *musth* animals picketed about a hundred yards from

the tents. Had one of these broken loose that dark night there would indeed have been trouble. The shoot was abandoned and being 'late in starting we did not catch the ferry, so returned to the Fakirganj Inspection Bungalow for the night. Our slumbers were not sound as Sibjee and the musth elephants were tethered in the compound! Glad indeed were we to return safely next day to Dhubri. Can tiger shooting off elephants be dangerous?

There will be more 'incidents' in course of these reminiscences, but at this point a method of shooting tigers off elephants which affords good sport and is not ordinarily dangerous may be suitably mentioned. The requirements are two reliable elephants, one for the sportsman, the other for two shikari attendants and to carry the bag to camp. A 'Charjamah' which is a pad having low rails is better than the more cumbersome howdah, which is not suitable for forest work. The method requires that the sportsman should be thoroughly acquainted with the habits of tigers; should know the language of the countryside; have a good manner in dealing with the people; and be not too niggardly, or the reverse, in payment for services rendered.

Where wild elephants are not uncommon all jungle animals are easily approached, and it is by quietly wandering along in the likely places, especially in the vicinity of any kill the whereabouts of which may be indicated by crows, birds of prey, or vultures, that tigers may be shot out of hand without incident, or may sometimes be moved out of cover by the pad elephant. Should the tiger be wounded there may be plenty of incident, but the sportsman is at any rate not in peril from actions of other elephants or sportsman. Silence on the sportsman's elephant is essential: any instructions to the other elephant being by whistle or signs, or signal horn when really necessary.

In course of Shikar of this description much jungle life may be observed—life of animals, birds, and insects which would otherwise never be seen, for it is a leisurely affair with plenty of opportunity for observation. It is not too much to say that a week of such hunting will furnish more experience of nature in the jungle than many 'shoots'. Elephants can be used with much success for fishing in deep and rapid streams where dug-outs or other boats are not easily obtained, carried, or used. From elephant back many places otherwise quite inaccessible owing to trees and riverside jungle growth can be well fished, and return to camp made without trouble. On such excursions a rifle or gun is usually taken in case of need as, apart from some chance opportunity of bagging a feline, the camp larder needs replenishing both for oneself and one's followers.

Howdahs in use over eighty years ago, as seen by illustrations in shikar books of those and earlier days, were of better design than many in use at the present time. There were, as there should be, places—racks—for several weapons on either side of the occupant of the front seat in the howdah. All sportsmen of experience say that more than one weapon is essential for howdah work, and one of these a shot gun. The Rajah of G always had 4

weapons with him and sometimes as many as six; but as many as that may be thought unnecessary.

A shot gun is advisable as, when a tiger is on the elephant, and perhaps trying to get into the howdah, a charge of shot is sufficient. On one occasion when shooting off Sibjee the Rajah was following a supposedly wounded tiger which was, however, unhurt. The tiger was a bad tempered beast and charged several times, being missed on each occasion owing to Sibjee dancing about. Eventually Sibjee turned and bolted or rather, as G said, the mahout it was who turned tail. The rampaging tiger followed apace—the whole shooting party seeing this wonderful show—caught up the elephant, jumped on from behind, and tried to get into the howdah. The Rajah had trouble with the occupant of the rear seat who lost his head and would not keep down, so the first essay with the shot gun was a miss. The noises of it caused the tiger to quit but he followed along and again got on to the elephant. By this time the back-seater was frantic and as G explained when it was all over, only by keeping the man's head down with his hand was it possible to use the gun. To use the weapon with one hand while the elephant was running as fast as it could was almost impossible; however, by pressing his knees against the howdah to steady himself as much as possible, he was at last able, as the tiger's ferocious head came over the howdah rail to place the muzzle against the beast's neck and press the trigger. So all was well.

This has been a long digression from the subject of howdah design but has an important bearing on it. I have seen a number of howdahs which are fitted with doors to admit of easy entry on either side. These doors sometimes fly open. Had that happened in the above encounter there would have been certain tragedy. In earlier days G's howdahs, and those I have seen on elephants of two Maharajah's had side doors, and were also too low front and back. A man sitting or standing in those howdahs was certainly not really safe as it would not take a great deal of movement on part of the elephant to toss him out. An instance was what happened to Captain R, then a Civil Surgeon. He was invited by the Rajah of G to a tiger shoot and while taking aim at an advancing tiger about twenty yards away his elephant suddenly lurched forward, causing him to hit against one of the doors which opened and shot him out somewhere near the tiger! G laughed at it afterwards, as R shinned up a small tree near by with the agility of a monkey; but it was no laughing matter at the time. After that occurrence G had all his howdahs altered to a fool-proof design.

Things may happen which put howdah construction to the most extreme test imaginable. Even when the elephant is tumbled on to its side it is possible for the sportsman to remain in the howdah, but only if it has high sides and no doors. This was the way of it.

The M brothers are two of the nicest men one could meet, both of them very good shots. They have seen hundreds of tigers

killed. On one occasion a large tiger pressed home his attack, landing on the head of the elephant on whose back was M senior. The elephant sank on one knee, which is their habit in an endeavour to kneel on the tiger and crush it. The tiger jumped on to the ground and with its forearms round the head, before the elephant could stand up, pulled it over on to its side. M's rifles and ammunition fell out of the howdah and it was with difficulty he remained inside, but he managed to do so by holding on to the rails. Three times the tiger pulled the elephant over. M still in the howdah, when finally, for no reason that could be imagined it suddenly abandoned the fight and was shot by other guns on nearby elephants. Things occur so rapidly in cases like this that it is impossible to see in detail what actually takes place. Only a cinema picture could show that, and changes in position take place so rapidly that it was not possible for guns on other elephants to risk shooting. In after years M was often asked what it felt like when the elephant went on its side with the tiger in touching distance. 'Yes', he would say, 'it was very touching, and I hope if it happens to you it will develop your sense of humour'. He himself had sense of humour particularly developed.

In a book 'My Sporting Memories', by Major General Wood-yatt, it is said, 'a tiger, though spined, struck a tusker elephant with its paw with such force that 2 claws were actually embedded in the elephant's thigh.' When told of the above the Rajah of G. remarked, 'Quite true. I have seen something similar. I once wounded a tiger at the end of a field, just short of the edge of heavy jungle. He was hit far back and the spine was broken. I pushed my elephant along and as I got close to him he was in a sort of sitting up position. I was preparing to kill the tiger when I saw to my left a number of tame buffaloes, among them an enraged bull pawing the ground and making ready to charge. Wishing to see what would happen I held my fire and to my surprise the bull actually charged the tiger which, in his crippled condition, waited until the bull put his head down. Then the tiger with a smack with one paw and a turn with the other knocked the buffalo over, killing him instantly. I could not believe the bull dead and waited for him to rise. Having killed the tiger we found the vertebrae of the neck had been dislocated'. I have read in shikar books of tigers, when breaking back through beaters, smashing a man's head like an egg-shell with a mere passing tap with a paw and can well imagine it happening: indeed, Mr Hazlitt, I.C.S., who was the Superintendent of the Lushai Hills, told me that he actually saw this happen. A tiger was seen to jump over the spot where an old woman was collecting firewood; when the party got to this place the woman was found dead with a fractured skull. As he jumped over he had just hit the head with his paw.

Most people having acquaintance with elephants know how much they dislike dogs, especially yapping ones of the small terrier variety but there are other animals equally obnoxious to them. In beats for tiger I have seen them show fright of even rats which

run squeaking out of the cover, and they have a marked dislike of wild pig, even giving the tiger sign—the metallic rap of the trunk on the ground with the accompanying low rumble, on their approach. At times they will even turn and run away from these small creatures, even rats!

One speaks of an elephant being perfectly steady but what is meant is that he will stand without movement, his mahout having given him the order by recognized pressure of knee or driving-hook, for the actual shot to be taken, a matter of a few seconds. While waiting for the beating elephants to approach he is constantly moving his ears and tail and shifting his weight from one leg to another, also swishing his legs with tufts of grass etc., to keep off flies: all this ceases for the taking of the shot; that is, it does when the animal is properly trained. A mahout will often be dozing during a beat but is wide awake when the time comes to be alert, and in any case a touch from the sportsman is sufficient warning. Just as a nervous rider will communicate his condition to his mount so will a mahout to his elephant. A good mahout will have a steady elephant as the sagacious beast soon knows he can trust him.

Bees and hornets may at any time be met with so a blanket is always carried. Blankets are also of use to quieten excitable animals, for even elephants becoming musth, if taken in time, can be controlled by a blanket over the eyes, thus averting possible serious consequences. Mahouts like the fun of tiger shooting and will deliberately leave camp on 'musth' elephants. It may be in case of beating elephants that they wish to enjoy the sport, for they all get an allowance whether staying in camp or not; and the drivers of howdah elephants are reluctant to forgo the chance of an extra ten rupees should the tiger be shot from their howdah. It behoves the organizer of the shoot to be always on the watch for an appearance of 'musth', and it is well for sportsmen also to be able to recognize the signs.

I have mentioned in connexion with the shooting of a rogue elephant that the right striker of my .475 H.V. rifle was found to be broken and that of course might have had serious or fatal consequences. Had I tested the rifle before setting out this would have been known. Such a thing should never occur, for it is so easy to make the necessary tests before putting the weapons away after cleaning. Dummy cartridges should always be used in hammerless weapons to guard against strikers being broken or damaged by snapping against no resistance. Before putting away hammerless and ejector weapons the springs should be eased; and it is seldom that the owners of ejectors know how this is done. Ejector springs cannot be expected to work for ever if put away at tension for months on end.

There is no doubt that a double barrelled rifle is better than a single for howdah shooting. The great advantage of the double is fully realized when a second shot has to be immediately taken. The few seconds longer needed to get off the single weapon may be all important; the bagging of the tiger or not. Shots at the head should be avoided. From elephant-back the plunging shot

between the shoulders is always fatal, that is if the bullet is what it should be. One of the secrets of successful tiger shooting, whether with elephant or with men, is never to hurry the animal, which ought to be brought to the waiting gun as unalarmed as possible so that a quiet unhurried shot may be taken, the angle being judged so that the bullet will find a vital place. Further dissertation as to shots to take and weapons to use or not to use must be held over to another time.

This rather rambling writing may be closed with some tales which occur to me as being perhaps of interest to the reader. Mr de C. was an Assam Police Officer who stood no nonsense, a man of action, if sometimes a little eccentric in some things. I can vouch for the following. He and a Sub-Inspector were in a hole in the ground waiting for the return of a tiger to his kill. The tiger was dragging the kill away in the darkness when de C got out of the pit, ran towards the kill and as soon as he was able to get his torchlight to bear killed the beast with a shot in the chest. This detail was given by the Inspector. On another occasion de C. was asked to witness the enclosure of a tiger in netting, a method practised in other parts of India also. He went with the Inspector of Police to see the fun. This was in the Dibrugarh District. He and the Inspector were standing very near the netting when the tiger suddenly charged and though it did not break through it tore the Inspector's coat and inflicted some scratches. This was too much for de C. He took an old D.B. 12 gauge shot gun from one of the villagers, put some shot cartridges in his coat pocket, loaded the gun with 'Lethal' bullets, raised the lower edge of the net and walked in. He had not gone far in the direction to which the tigress—for it was a female—had retreated when she charged at him belly flat to the ground, as he described it and as I have several times seen—no bounds or jumps. Before she reached him he shot her dead. Good work. He was making sure the tigress was dead when he was charged by a wild boar. He had just time to jump to one side and fire as the pig passed. The boar turned and again charged, but waiting until there could be no miss or ineffectual shot he killed the animal almost at the muzzle. Again good work. By this time the fore-end of the old weapon had dropped off and, without noticing this he reloaded with shot cartridges and leant the gun against the pig's body. How it happened he cannot say but both barrels went off and peppered some thirty coolies. Not such good work! Fortunately the distance was such that the pellets only penetrated skin deep. It was always a great joke: de C. bagging on one day a tigress, a boar and thirty coolies. But it was no joke at the time and the affair eventually cost de C. about a month's salary one way and another.

*(To be continued.)*