will not here pass in review the various memoirs in physics which you have published in the 'Philosophical Transactions,' since all carry the impression of the inventive genius which ever distinguishes all that you have done." The method of measuring the velocity of electricity and the duration of the spark are then mentioned; and next, the applications of the rotating mirror, so important and various in experimental physics; the invention of the stereoscope; the "rheostat;" and the "Wheatstone's Bridge," for the measurement of electric currents, of the resistance of circuits, and of electromotive forces. "To you," adds the President, "we principally owe the practical invention and the true realisation of the electric telegraph. All these great acquisitions, procured by you, to physical science, render you well worthy of this distinction from the Italian Society of Science. May you be preserved in health and activity; and your country and all your admirers and friends are certain to find in the discoveries still to be added while you continue to work, some compensation for that immense and irreparable loss which natural philosophy has sustained by the death of Faraday."

MY FIRST ENCOUNTER WITH A TIGER.

When I first came to India, now many years ago, I was posted to a district in which there were many hills, much jungle, and very good shooting. By good shooting, I mean of large game, such as tiger, bear, cheetah, sambre (the elk), and so forth. There is abundance of other descriptions of shooting in nearly every part of India, such as antelope, bustard, wild duck, grouse, jungle-cock, and snipe; but all such sport is tame and uninteresting compared with the excitement of the pursuit of the larger kinds of game. My duty obliged me to be constantly moving from place to place, and whenever I was in the neighbourhood of jungle (or forest), and could spare the time, I always devoted a day to shooting. It was early in the year 1857, just prior to the commencement of the great mutiny, that I had pitched my camp in a beautiful little valley, well watered, and surrounded on three sides by hills. On the east, nearly opposite to my tent, the hills were about one thousand feet high, and near their summits densely wooded with small forest trees, from the depths of which in the early morning could be heard the sonorous trumpeting of sambre. To the north, the hills were lower, and not so thickly wooded; but they were split up into deep ravines, in which the black bear and the wild pig were to be found. To the west, and behind my camp, the hills were comparatively bare, showing near their summits bluff inaccessible cliffs, two or three hundred feet sheer precipice, in the crevices of which were numerous and large combs of wild honey.

Previous to retiring for the night, I had been contemplating the prospect of a day's shooting, and the reddy (head man) of the village, who was a keen old shikaree (or hunter) had been going over with me the pros and cons of the possibility of my meeting with a cheetah. Bears and sambre we were sure of; but, although I had frequently seen cheetahs in my rambles, I had never been able to get a shot at one, and now that I was near a well-known haunt of cheetahs, I did not wish to lose the opportunity afforded me. The cheetah, or leopard, is a very handsome but very cowardly beast; attacks and carries off sheep, goats, and dogs, but has seldom been known to attack a man, except when severely wounded and brought to bay.

The skin is a rich light brown, covered with irregular nearly circular spots, which near the belly are dark brown, but become almost black as they approach the back. The animal is about three feet high, and from five to six feet in length; has a very vicious cat-like face, and is usually seen creeping through the jungle with its belly almost touching the ground. I have, however, once seen a cheetah at full gallop, tail extended, head up, and a young kid in its mouth. The reddy and I parted without coming to any conclusion, except that some difficulty would be experienced in collecting the necessary number of beaters, and I shortly afterwards retired for the night.

I think it must have been one or two o'clock in the morning, when I was awakened by one of the most unearthly howls I ever heard; so prolonged, so dismal, yet so horrible was the sound, that I sat up on the cot feeling quite scared. I listened, but not a sound broke the stillness of the night, and I began to think that the howl was but the effect of imagination; that, in fact, I had been dreaming, when again, and this time apparently close to me, the same terrible yell broke forth, and echoed through the valley. I sprang out of bed and rushed to the door of the tent, and there, not ten paces from me, was a cheetah, evidently preparing for a third howl. The beast was really calling its mate. Startled, I suppose, by my sudden appearance, the beast made off into the adjacent forest; but I was now resolved to devote the following, or rather the present, day to the pursuit of this animal, and, if possible, become more intimately acquainted with my unpleasant visitor. The reddy was sent for, and no sooner did he and his people hear that a cheetah had been down from the hills than all difficulties about beaters and shikarees vanished. The reddy himself was too ill and weakened, from a late attack of fever, to accompany me; but by four o'clock he had collected seven shikarees, each with his long matchlock loaded and primed, matches alight, and powder horn slung in front, and about fifty beaters. About five a.m. we started; the shikarees in front as guides, and the beaters bringing up the rear. For the first half mile or so a continual chatter was kept up, but as we entered the jungle, the whole party broke into single file, and conversation quite ceased. So we plodded on, occasionally starting a spotted deer, a peacock, etc., until about eight a.m., when we stopped to rest under the shade of a wild mangoe tree, and by the side of a little hill stream. About nine a.m. we reached the appointed place, and after a long consultation, in which every one joined, it was decided that I, with six shikarees, should remain under a tree, while one shikaree and all the beaters were to form a half-circle and drive out our friend the cheetah, who had been tracked down to this neighbourhood. Waiting is weary work, and it will therefore suffice to say that after several ineffectual beats we all met again, disappointed and somewhat dispirited, at about two p.m. Breakfast was the first thing to think of, and, accordingly, while my servant prepared something for me, each native commenced upon his own store of rice, which he had no sooner swallowed than he laid himself down and went to sleep—a common practice with the natives of India. About three p.m. we started again, and I promised that if we could meet with no fresh tracks we would get back to camp.

We had proceeded about one hundred paces, when from thick bamboo jungle we suddenly emerged into a little open glade, and there met a woodcutter, who in a great state of excitement informed us that a female cheetah and an "immense number" of cubs had just passed that way. Sure enough we found in the sandy

soil the tracks (which at the time I thought very large) of a cheetah and two cubs. A female cheetah with cubs is often a very dangerous beast to meddle with, and I was for allowing her to pass away quietly, but I was overruled by the shikarees.

I was young in the country in those days, and prone to rely too much upon what a native said of himself and of his courage, and I now credited what the shikarees said of their devotion to me, and of their former exploits in cheetah and tiger hunting. The beaters, under the charge of one of the shikarees, were told off about six paces from each other, thus forming a line of three or four hundred yards in length, and then after a short walk I was posted under a tree on the top of a small rising ground, but in the midst of dense bamboo jungle, so dense that I could not see more than twenty or thirty paces distant. I had a double-barrelled gun loaded with ball, and six shikarees stood behind me, so that I could with confidence rely upon having eight bullets to throw at the cheetah.

Presently, far away in the valley, we heard the first shouts of the beaters. They approached nearer, their shouts became more distinct, when suddenly, and apparently from the very midst of the beaters, we heard a most unmistakable and ominous roar—a roar that sounded to me strangely unlike any noise I had ever heard from a cheetah. The shouts of the beaters stopped at once, and I guessed that the cheetah had been roused and driven from its lair. I turned for a moment to warn the shikarees to be ready, when to my dismay I saw that all had clambered up the tree and left their matchlocks piled at the foot. For a moment I thought of following their example, but, while I yet hesitated, a rustling was heard, the bamboos shook, bent and parted, and out trotted—not the angry cheetah I had been expecting, but a magnificent tigress. I see the beast now as she came into the open space with a long quick stride, head down, and belly almost touching the ground, and then, as she caught sight of me, stop suddenly and fix her savage bright eyes on me; not a movement in her except a gentle but most ominous motion of the tail. I was so utterly astonished, so totally unprepared for meeting a tigress, that I stood apparently paralysed, my gun at the ready and my eyes almost starting out of my head. I stirred neither hand nor foot; I do not think that my eyelids even moved, for I was too startled, ay, and too much afraid to make even the slightest movement; for I knew well that had my hand trembled, had a branch of the tree overhead snapped, no earthly power could have saved me. I was conscious at the time that my unnatural quietude was due not to presence of mind so much as to an involuntary feeling that not a muscle, not a hair must so much as quiver; and yet, with all that, I remember how much I admired and envied the perfect stillness and repose of the brute before me, and how I became possessed of an insane desire to shout, or to do something to make the beast move. I know that my pulse was not quickened; but the beating of my heart seemed to me to be so unnaturally loud, that in the moment of greatest peril I feared the beast would hear it. All kinds of thoughts passed with marvellous rapidity through my brain, but one thing I remember well, and that is, I felt positively grateful to the cowardly villains in the tree above me for being so quiet. I do not suppose the tigress and I stood thus face to face for more than a minute; but it seemed an hour, and a very long one, to me, before she slowly walked off, keeping her eyes steadfastly fixed upon me until the intervening jungle hid us from each other. Then the reaction came—my gun seemed made of lead and dropped out of my trembling hands, my pulse rose rapidly, and I broke out into such profuse perspiration that I felt as if I had been plunged into a bath. I soon recovered myself and remembered that I had escaped from a great and imminent danger, and I hope I did not forget that true thanksgivings for such an escape were due. A tigress is a fine-looking animal behind the bars of a cage in the Zoological Gardens, but she is a very different beast in her native forests, particularly when she has been partially deafened and wholly enraged by a gang of two-legged enemies, and when she suddenly comes upon one of those enemies all alone and apparently determined to intercept her. Had a finger moved while she thus stood glaring at me, she would have been upon me in a single bound, and before I could have raised my gun to my shoulder; and one stroke of her paw, or one grip of her formidable teeth, would have finished the story of my life. I can only suppose that the reason why she went off so quietly, was partly because *I* was so unnaturally still, and partly because her cubs must have been in the neighbourhood.

I had been wondering at the mutual silence of the beaters, who after the roar of the tigress appeared to have been struck dumb. I was on the point of despatching one of the boasting cowards of shikarees (who by-the-bye had descended from the tree now that all danger was past) to call in the beaters, when the whole gang came in. It appeared that as one of the beaters was passing a rock and yelling like a maniac, the tigress sprung upon him from behind, clawed his back from shoulder to heel, and then, with a roar, made off into the jungle. The beaters were so terrified at this mishap, and at the unexpected sight of a tigress, that, lifting their wounded comrade, they made off as silently and rapidly as possible. I washed the poor fellow's wounds with gunpowder and water, and then sent him in to the nearest station (forty miles distant) for medical treatment. He recovered from his wounds and returned to his village, but his system had received a shock from which it never recovered, for a month afterwards he died, and literally of "tiger fear." So ended my first adventure with a tiger, and I can only say that I have never since relied upon a native shikaree in moments of danger.

THE SATURDAY HALF-HOLIDAY.

When a working-man has been toiling with the regularity of a machine for weeks or months together from Monday morning till Saturday night—rising early in order to keep time at the counter, in the warehouse, or in the workshop, and often retiring late because compelled to work late—it is small wonder if he grows weary and spirit-broken and discontented with his lot. Well-meaning people are apt to call him reckless and vicious because when he does escape from his long labours he turns for refreshment and recreation to the public-house. They do not reflect that in many cases others are more to blame than the late labourer—that very often his week's wages are paid to him in the public-house, and he has to wait there on the Saturday night until he gets them; that not seldom his wife comes to wait there too for the money which is wanted for the late market where the Sunday's dinner must be bought. This system of late Saturday-night's pay is too common even now, and it is a source of degradation as well as of heart-burning to thousands; but twenty years ago it was, among an extensive class of employers in London, the rule rather than the exception. The motives that led to such a