

SCRIBNER'S MAGAZINE

HUNTING THE WHITE RHINO
AND THE TRIP
DOWN THE NILE

BY THEODORE
ROOSEVELT



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AFRICAN GAME TRAILS*

AN ACCOUNT OF THE AFRICAN WANDERINGS OF AN AMERICAN
HUNTER-NATURALIST

BY THEODORE ROOSEVELT

ILLUSTRATIONS FROM PHOTOGRAPHS BY KREMIJ ROOSEVELT AND OTHER MEMBERS
OF THE EXPEDITION

XII.—THE GREAT RHINOCEROS OF THE LADO



HE region of which I speak is a dreary region in Libya, by the borders of the river Zaire. And there is no quiet there nor silence.

The waters of the river have a saffron hue, and for many miles on either side of the river's oozy bed is a pale desert of gigantic water-lilies . . . and I stood in the morass among the tall lilies and the lilies sighed one unto the other in the solemnity of their desolation. And all at once the moon arose through the thin ghastly mist, and was crimson in color. . . . And the man looked out upon the dreary river Zaire, and upon the yellow ghastly waters, and upon the pale legions of the water-lilies. . . . Then I went down into the recess of the morass, and waded afar in among the wilderness of the lilies, and called unto the hippopotami which dwelt among the fens in the recesses of the morass." I was reading Poe, on the banks of the Upper Nile; and surely his "fable" does deserve to rank with the "tales in the volumes of the Magi—in the ironbound, melancholy volumes of the Magi."

We had come down through the second of the great Nyanza lakes. As we sailed

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northward, its waters stretched behind us beyond the ken of vision, to where they were fed by streams from the Mountains of the Moon. On our left hand rose the frowning ranges on the other side of which the Congo forest lies like a shroud over the land. On our right we passed the mouth of the Victorian Nile, alive with monstrous crocodiles, and its banks barren of human life because of the swarms of the fly whose bite brings the torment which ends in death. As night fell we entered the White Nile, and steamed and drifted down the mighty stream. Its current swirled in long curves between endless ranks of plumed papyrus. White, and blue, and red the floating water-lilies covered the lagoons and the still inlets among the reeds; and here and there the lotus lifted its leaves and flowers stiffly above the surface. The brilliant tropic stars made lanes of light on the lapping water as we ran on through the night. The river horses roared from the reed beds, and snorted and plunged beside the boat, and crocodiles slipped sullenly into the river as we glided by. Toward morning a mist arose and through it the crescent of the dying moon shone red and lurid. Then the sun flamed aloft and soon the African landscape, vast, lonely, mysterious, stretched on every side in a shimmering

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glare of heat and light; and ahead of us the great, strange river went twisting away into the distance.

At midnight we had stopped at the station of Koba, where we were warmly received by the district commissioner, and where we met half a dozen of the professional elephant hunters, who for the most part make their money, at hazard of their lives, by poaching ivory in the Congo. They are a hard-bit set, these elephant poachers;

offered a sharp contrast to those of Uganda; we were again back among wild savages. Near the landing at Wadelai was a group of thatched huts surrounded by a fence; there were small fields of mealies and beans, cultivated by the women, and a few cattle and goats; while big wickerwork fish-traps showed that the river also offered a means of livelihood. Both men and women were practically naked; some of the women entirely so except for a few beads. Here



Sail-boat at Wadelai Landing.

From a photograph by J. Alden Lowry.

there are few careers more adventurous, or fraught with more peril, or which make heavier demands upon the daring, the endurance, and the physical hardihood of those who follow them. Elephant hunters face death at every turn, from fever, from the assaults of warlike native tribes, from their conflicts with their giant quarry; and the unending strain on their health and strength is tremendous.

At noon the following day we stopped at the deserted station of Wadelai, still in British territory. There have been outposts of white mastery on the Upper Nile for many years, but some of them are now abandoned, for as yet there has been no successful attempt at such development of the region as would alone mean permanency of occupation. The natives whom we saw

we were joined by an elephant hunter, Quentin Grogan, who was to show us the haunts of the great square mouthed rhinoceros, the so-called white rhinoceros, of the Lado, the only kind of African heavy game which we had not yet obtained. We were allowed to hunt in the Lado, owing to the considerate courtesy of the Belgian Government, for which I was sincerely grateful.

After leaving Wadelai we again went down stream. The river flowed through immense beds of papyrus. Beyond these on either side were rolling plains gradually rising in the distance into hills or low mountains. The plains were covered with high grass, dry and withered; and the smoke here and there showed that the natives, according to their custom, were now burning it. There was no forest; but scattered over



crocodile shot
by Theodore
Dooosevelt at
rhino camp.



Ground Horn-
bill, rhino
camp.



bushbuck.



Wagtail.



Kobus maris,
Lake Nio.



Nightjar, with
long plumes in
wings.



Baker's lion
antelope,
Gaidokoto.



Fish eagle.

the plains were trees, generally thorns, but other kinds also, among them palms and euphorbias.

The following morning, forty-eight hours after leaving Butiaba, on Lake Albert Nyanza, we disembarked from the little flotilla which had carried us—a crazy little steam launch, two sail-boats, and two big row-boats. We made our camp close to the river's edge, on the Lado side, in a thin grove of scattered thorn-trees. The grass grew rank and tall all about us. Our tents were pitched, and the grass huts of the porters built, on a kind of promontory, the main stream running past one side, while on the other was a bay. The nights were hot, and the days burning; the mosquitoes came with darkness, sometimes necessitating our putting on head nets and gloves in the evenings, and they would have made sleep impossible if we had not had mosquito biers. Nevertheless it was a very pleasant camp, and we thoroughly enjoyed it. It was a wild, lonely country, and we saw no human beings except an occasional party of naked savages armed with bows and poisoned arrows. Game was plentiful, and a hunter always enjoys a permanent camp in a good game country; for while the expedition is marching, his movements must largely be regulated by those of the safari, whereas at a permanent camp he is foot-loose.

There was an abundance of animal life, big and little, about our camp. In the reeds, and among the water-lilies of the bay, there were crocodiles, monitor lizards six feet long, and many water birds—herons, flocks of beautiful white egrets, clamorous spur-winged plover, sacred ibis, noisy purple ibis, saddle-billed storks, and lily trotters which ran lightly over the lily pads. There were cormorants and snake birds. Fish eagles screamed as they circled around; very handsome birds, the head, neck, tail, breast, and forepart of the back white, the rest of the plumage black and rich chestnut. There was a queer little eagle owl with inflamed red eyelids. The black and red bulbuls sang noisily. There were many kingfishers, some no larger than chippy sparrows, and many of them brilliantly colored; some had, and others had not, the regular kingfisher voice; and while some dwelt by the river bank and caught fish, others did not come near the water and

lived on insects. There were paradise fly-catchers with long, wavy white tails; and olive-green pigeons with yellow bellies. Red-headed, red-tailed lizards ran swiftly up and down the trees. The most extraordinary birds were the nightjars; the cocks carried in each wing one very long, waving plume, the pliable quill being twice the length of the bird's body and tail, and bare except for a patch of dark feather-webbing at the end. The two big, dark plume tips were very conspicuous, trailing behind the bird as it flew, and so riveting the observer's attention as to make the bird itself almost escape notice. When seen flying, the first impression conveyed was of two large, dark moths or butterflies fluttering rapidly through the air; it was with a positive effort of the eye that I fixed the actual bird. The big-slate and yellow bats were more interesting still. There were several kinds of bats at this camp; a small dark kind that appeared only when night had fallen and flew very near the ground all night long, and a somewhat larger one, lighter beneath, which appeared late in the evening and flew higher in the air. Both of these had the ordinary bat habits of continuous, swallow-like flight. But the habits of the slate and yellow bats were utterly different. They were very abundant, hanging in the thinly leaved acacias around the tents, and, as everywhere else, were crepuscular, indeed to a large extent actually diurnal, in habit. They saw well and flew well by daylight, passing the time hanging from twigs. They became active before sunset. In catching insects they behaved not like swallows but like flycatchers. Except that they perched upside down so to speak, that is, that they hung from the twigs instead of sitting on them, their conduct was precisely that of a phoebe bird or a wood peewee. Each bat hung from its twig until it espied a passing insect, when it swooped down upon it, and after a short flight returned with its booty to the same perch or went on to a new one close by; and it kept twitching its long ears as it hung head downward devouring its prey.

There were no native villages in our immediate neighborhood, and the game was not shy. There were many buck: water-buck, kob, hartebeest, bushbuck, reedbuck, oribi, and duiker. Every day or two Kermit or I would shoot a buck for the camp. We



The great square-nosed rhino of the Ladu
We walked up to within about twenty yards.—Page 274.

From a photograph, copyright by Kermit Roosevelt.

generally went out together with our gun-bearers, Kermit striding along in front, with short trousers and leggings, his knees bare. Sometimes only one of us would go out. The kob and waterbuck were usually found in bands, and were perhaps the commonest of all. The buck seemed to have no settled time for feeding. Two oribi which I shot were feeding right in the open, just at noon, utterly indifferent to the heat. There were hippo both in the bay and in the river. All night long we could hear

whole it has not much diminished, some species have actually increased, and none is in danger of immediate extinction, unless it be the white rhinoceros. During the last decade, for instance, the buffalo have been recovering their lost ground throughout the Lado, Uganda, and British East Africa, having multiplied many times over. During the same period, in the same region, the elephant have not greatly diminished in aggregate numbers, although the number of bulls carrying big ivory has been very



Male square-nosed rhino, shot by Kermit Roosevelt.
From a photograph by Edmund Heller.

them splashing, snorting, and grunting; they were very noisy, sometimes uttering a strange, long-drawn bellow, a little like the exhaust of a giant steam-pipe, once or twice whinnying or neighing; but usually making a succession of grunts, or bubbling squeals through the nostrils. The long grass was traversed in all directions by elephant trails, and there was much fresh sign of the huge beasts—their dung, and the wrecked trees on which they had been feeding; and there was sign of buffalo also. In middle Africa, thanks to wise legislation, and to the very limited size of the areas open to true settlement, there has been no such reckless, wholesale slaughter of big game as that which had brought the once wonderful big game fauna of South Africa to the verge of extinction. In certain small areas of middle Africa, of course, it has gone; but as a

much reduced; indeed the reproductive capacity of the herds has probably been very little impaired, the energies of the hunters having been almost exclusively directed to the killing of the bulls with tusks weighing over thirty pounds apiece; and the really big tuskers, which are most eagerly sought after, are almost always past their prime, and no longer associate with the herd.

But this does not apply to the great beast which was the object of our coming to the Lado, the square-mouthed or, as it is sometimes miscalled, the white, rhinoceros. Africa is a huge continent, and many species of the big mammals inhabiting it are spread over a vast surface; and some of them offer strange problems for inquiry in the discontinuity of their distribution. The most extraordinary instance of this discontinuity

is that offered by the distribution of the square-mouthed rhinoceros. It is almost as if our bison had never been known within historic times except in Texas and Ecuador.

This great rhinoceros was formerly plentiful in South Africa south of the Zambesi, where it has been completely exterminated except for a score or so of individuals on a game reserve. North of the Zambesi it was and is utterly unknown, save that during the last ten years it has been found to exist in several localities on the left bank of the Upper Nile, close to the river, and covering a north and south extension of about two hundred miles. Even in this narrow ribbon of territory the square-mouthed rhinoceros is found only in certain localities, and although there has not hitherto been much slaughter of the mighty beast, it would certainly be well if all killing of it were prohibited until careful inquiry has been made as to its numbers and exact distribution. It is a curious animal, on the average distinctly larger than, and utterly different from, the ordinary African rhinoceros. The spinal processes of the dorsal vertebrae are so developed as to make a very prominent hump over the withers, while forward of this is a still higher and more prominent fleshy hump on the neck. The huge, misshapen head differs in all respects as widely from the head of the common or so-called black rhinoceros as the head of a moose differs from that of a wapiti.

The morning after making camp we started on a rhinoceros hunt. At this time

in this neighborhood, the rhinoceros seemed to spend the heat of the day in sleep, and to feed in the morning and evening, and perhaps throughout the night; and to drink



Cow squared-nosed rhino of the Lado, shot by Mr. Roosevelt.
From a photograph by Edmund Heller.



Rhino of the usual type with prehensile lip, shot in the Sotik by Mr. Roosevelt.
(The differences of the two types are shown in the above photographs.)

From a photograph by Koruit Roosevelt.

in the evening and morning, usually at some bay or inlet of the river. In the morning they walked away from the water for an hour or two, until they came to a place which suited them for the day's sleep. Unlike the ordinary rhinoceros, the square-mouthed rhinoceros feeds exclusively on

grass. Its dung is very different; we only occasionally saw it deposited in heaps, according to the custom of its more common cousin. The big, sluggish beast seems fond of nosing the ant-hills of red earth, both with its horn and with its square muzzle; it may be that it licks them for some saline substance. It is apparently of less solitary nature than the prehensile-lipped rhino, frequently going in parties of four or five or half a dozen individuals.

We did not get an early start. Hour after hour we plodded on, under the burning sun,

saw rather dimly through the long grass a big gray bulk, near the foot of the tree; it was a rhinoceros lying asleep on its side, looking like an enormous pig. It heard something and raised itself on its forelegs, in a sitting posture, the big ears thrown forward. I fired for the chest, and the heavy Holland bullet knocked it clean off its feet. Squealing loudly it rose again, but it was clearly done for, and it never got ten yards from where it had been lying.

At the shot four other rhino rose. One bolted to the right, two others ran to



Veldt pool, rhino camp.

From a photograph by Edmund Heller.

through the tall, tangled grass, which was often higher than our heads. Continually we crossed the trails of elephant and more rarely of rhinoceros, but the hard, sunbaked earth and stiff, tinder-dry long grass made it a matter of extreme difficulty to tell if a trail was fresh, or to follow it. Finally, Kermit and his gun-bearer, Kassitura, discovered some unquestionably fresh footprints which those of us who were in front had passed over. Immediately we took the trail, Kongoni and Kassitura acting as trackers, while Kermit and I followed at their heels. Once or twice the two trackers were puzzled, but they were never entirely at fault; and after half an hour Kassitura suddenly pointed toward a thorn-tree about sixty yards off. Mounting a low ant-hill I

the left. Firing through the grass Kermit wounded a bull and followed it for a long distance, but could not overtake it; ten days later,* however, he found the carcass, and saved the skull and horns. Meanwhile I killed a calf, which was needed for the Museum; the rhino I had already shot was a full-grown cow, doubtless the calf's mother. As the rhino rose I was struck by their likeness to the picture of the white rhino in Cornwallis Harris's folio of the big game of South Africa seventy years ago. They were totally different in look from the common rhino, seeming to stand higher and to be shorter in proportion to their height, while the hump and the huge, ungainly, square-

*Kermit on this occasion was using the double-barrelled rifle which had been most kindly lent him for the trip by Mr. John Jay White, of New York.



From a photograph, copyright by Kermit Roosevelt.

The cow and calf under the tree after being disturbed by the click of the camera.—Page 277.

mouthed head added to the dissimilarity. The common rhino is in color a very dark slate gray; these were a rather lighter slate gray; but this was probably a mere individual peculiarity, for the best observers say that they are of the same hue. The muzzle is broad and square, and the upper lip without a vestige of the curved, prehensile development which makes the upper lip of a common rhino look like the hook of a turtle's beak. The stomachs contained nothing

with tents, food, and water, and Heller cared for the skins on the spot, taking thirty-six hours for the job. The second night he was visited by a party of lions, which were after the rhinoceros meat and came within fifteen feet of the tents.

On the same night that Heller was visited by the lions we had to fight fire in the main camp. At noon we noticed two fires come toward us, and could soon hear their roaring. The tall, thick grass was like tinder;



From a photograph, copyright by Kermit Roosevelt.

The calf, which was old enough to shift for itself, refused to leave the body.—Page 277.

ing but grass; it is a grazing, not a browsing animal.

There were some white egrets—not, as is usually the case with both rhinos and elephants, the cow heron, but the slender, black-legged, yellow-toed egret—on the rhinos, and the bodies and heads of both the cow and calf looked as though they had been splashed with streaks of whitewash. One of the egrets returned after the shooting and perched on the dead body of the calf.

The heat was intense, and our gun-bearers at once began skinning the animals, lest they should spoil; and that afternoon Cunningham and Heller came out from camp

and if we let the fires reach camp we were certain to lose everything we had. So Loring, Mearns, Kermit, and I, who were in camp, got out the porters and cut a lane around our tents and goods; and then started a back fire, section after section, from the other side of this lane. We kept every one ready, with branches and wet gunny-sacks, and lit each section in turn, so that we could readily beat out the flames at any point where they threatened. The air was still, and soon after nightfall our back fire had burnt fifty or a hundred yards away from camp, and the danger was practically over. Shortly afterward one of the

fires against which we were guarding came over a low hill crest into view, beyond the line of our back fire. It was a fine sight to see the long lines of leaping, wavering flames advance toward one another. An hour or two passed before they met, half a mile from camp. Wherever they came together there

splendid to see the line of flames, leaping fifty feet into the air as they worked across the serried masses of tall papyrus. When they came toward the water they kindled the surface of the bay into a ruddy glare, while above them the crimson smoke clouds drifted slowly to leeward. The fire did not



Mr. Roosevelt with kob, shot at rhino camp.

From a photograph by Kermit Roosevelt.

would be a moment's spurt of roaring, crackling fire, and then it would vanish, leaving at that point a blank in the circle of flame. Gradually the blanks in the lines extended, until the fire thus burnt itself out, and darkness succeeded the bright red glare.

The fires continued to burn in our neighborhood for a couple of days. Finally one evening the great beds of papyrus across the bay caught fire. After nightfall it was

die out until toward morning; and then, behind it, we heard the grand booming chorus of a party of lions. They were full fed, and roaring as they went to their day beds; each would utter a succession of roars which grew louder and louder until they fairly thundered, and then died gradually away, until they ended in a succession of sighs and grunts.

As the fires burned to and fro across the country birds of many kinds came to the



Our back fire meeting the main fire.
From a photograph by J. Allen Living.

edge of the flames to pick up the insects which were driven out. There were marabou storks, kites, hawks, ground hornbills, and flocks of beautiful egrets and cow herons, which stalked sedately through the grass, and now and then turned a small tree nearly white by all perching in it. The little bank swallows came in myriads; ex-



Rhino camp, Lado Enclave.
From a photograph by Edmund Heller.

actly the same, by the way, as our familiar home friends, for the bank swallow is the most widely distributed of all birds. The most conspicuous attendants of the fires, however, were the bee-eaters, the largest and handsomest we had yet seen, their plumage every shade of blended red and rose, varied with brilliant blue and green. The fires seemed to bother the bigger animals hardly at all. The game did not shift their haunts, or do more than move in quite

fly, and one or two of us were bitten, but, seemingly, the fly were not infected, although at this very time eight men were dying of sleeping sickness at Wadelai where we had stopped. There were also some ordinary tsetse fly, which caused us uneasiness about our mule. We had brought four little mules through Uganda, riding them occasionally on safari; and had taken one across into the Lado, while the other three, with the bulk of the porters, marched



From a photograph, copyright by Kermit Roosevelt.

One remained standing, but the other deliberately sat down upon its haunches like a dog.—Page 280

leisurely fashion out of the line of advance of the flames. I saw two oribi which had found a patch of short grass that split the fire, feeding thereon, entirely undisturbed, although the flames were crackling by some fifty yards on each side of them. Even the mice and shrews did not suffer much, probably because they went into holes. Shrews, by the way, were very plentiful, and Loring trapped four kinds, two of them new. It was always a surprise to me to find these tiny shrews swarming in Equatorial Africa just as they swarm in Arctic America.

In a little patch of country not far from this camp there were a few sleeping-sickness

on the opposite bank of the Nile from Koba, and were to join us at Nimule.

It was Kermit's turn for the next rhino; and by good luck it was a bull, giving us a complete group of bull, cow, and calf for the National Museum. We got it as we had gotten our first two. Marching through likely country—burnt, this time—we came across the tracks of three rhino, two big and one small, and followed them through the black ashes. It was an intricate and difficult piece of tracking, for the trail wound hither and thither and was criss-crossed by others; but Kongoni and Kassitura gradually untangled the maze, found where the



From a photograph, copyright by Kermit Roosevelt.

When alarmed they failed to make out where the danger lay — Page 279.



From a photograph, copyright by Kermit Roosevelt.

Same two rhinos photographed in another position.

beasts had drunk at a small pool that morning, and then led us to where they were lying asleep under some thorn-trees. It was about eleven o'clock. As the bull rose Kermir gave him a fatal shot with his beloved Winchester. He galloped full speed toward us, not charging, but in a mad panic of terror and bewilderment; and with a bullet from the Holland I brought him down in his tracks only a few yards away. The cow went off at a gallop. The

very much bigger than the common prehensile-lipped African rhinoceros, and as carrying much longer horns. But the square-mouthed rhinos we saw and killed in the Lado did not differ from the common kind in size and horn development as much as we had been led to expect; although on an average they were undoubtedly larger, and with bigger horns, yet there was in both respects overlapping, the bigger prehensile-lipped rhinos equal-



Marabous and vultures. The undertakers.
From a photograph by J. Alden Loring.

calf, a big creature, half grown, hung about for some time, and came up quite close, but was finally frightened away by shouting and hand-clapping. Some cow herons were round these rhino; and the head and body of the bull looked as if it had been splashed with whitewash.

It was an old bull, with a short, stubby, worn-down horn. It was probably no heavier than a big ordinary rhino bull such as we had shot on the Sotik, and its horns were no larger, and the front and rear ones were of the same proportions relatively to each other. But the misshapen head was much larger, and the height seemed greater because of the curious hump. This fleshy hump is not over the high dorsal vertebrae, but just forward of them, on the neck itself, and has no connection with the spinal column. The square-mouthed rhinoceros of South Africa is always described as being

ling or surpassing the smaller individuals of the other kind. The huge, square-muzzled head, and the hump, gave the Lado rhino an utterly different look, however, and its habits are also in some important respects different. Our gunbearers were all East Africans, who had never before been in the Lado. They had been very sceptical when told that the rhinos were different from those they knew, remarking that "all rhinos were the same"; and the first sight of the spoor merely confirmed them in their belief; but they at once recognized the dung as being different; and when the first animal was down they examined it eagerly and proclaimed it as a rhinoceros with a hump, like their own native cattle, and with the mouth of a hippopotamus.

On the way to camp, after the death of this bull rhino, I shot a waterbuck bull with finer horns than any I had yet obtained.



Monitor lizard robbing the crocodile's nest—Page 252

From photographs by J. Alden Lottig.

Herds of waterbuck and of kob stared tamely at me as I walked along; whereas a little party of hartebeest were wild and shy. On other occasions I have seen this conduct exactly reversed, the hartebeest being tame, and the waterbuck and kob shy. Heller, as usual, came out and camped by this rhino, to handle the skin and skeleton. In the middle of the night a leopard got caught in one of his small steel traps, which he had set out with a light drag. The beast made a terrific row and went off with the trap and drag. It was only caught by one toe; a hyena similarly caught would have wrenched itself loose; but the leopard, though a far braver and more dangerous

beast, has less fortitude under pain than a hyena. Heller tracked it up in the morning, and shot it as, hampered by the trap and drag, it charged the porters.

On the ashes of the fresh burn the footprints of the game showed almost as distinctly as on snow. One morning we saw where a herd of elephant, cows and calves, had come down the night before to drink at a big bay of the Nile, three or four miles north of our camp. Numerous hippo tracks showed that during the darkness these beasts wandered freely a mile or two inland. They often wandered back of our camp at night. Always beside these night trails we found withered remnants of water cabbage

and other aquatic plants which they had carried inland with them; I suppose accidentally on their backs. On several occasions where we could only make out scrapes on the ground the hippo trails puzzled us, being so far inland that we thought they might be those of rhinos, until we would come on some patch of ashes or of soft soil where we could trace the four toe marks. The rhino has but three toes, the one in the middle being very big; it belongs, with the tapir and horse, to the group of ungulates which tends to develop one digit of each foot at the expense of all the others; a group which in a long-past geological age was the predominant ungulate group of the world. The hippo, on the contrary, belongs with such cloven-hoofed creatures as the cow and pig, in the group of ungulates which has developed equally two main digits in each foot; a group much more numerously represented than the other in the world of to-day.

As the hippos grew familiar with the camp they became bolder and more venturesome after nightfall. They grunted and brayed to one another throughout the night, splashed and wallowed among the reeds, and came close to the tents during their dry-land rambles in the darkness. One night, in addition to the hippo chorus, we heard the roaring of lions and the trumpeting of elephants. We were indeed in the heart of the African wilderness.

Early in the morning after this concert we started for a day's rhino hunt, Heller and Cuninghame having just finished the preparation, and transport to camp, of the skin of Kermit's bull. Loring, who had not hitherto seen either elephant or rhino alive, went with us; and by good luck he saw both.

A couple of miles from camp we were crossing a wide, flat, swampy valley in which the coarse grass grew as tall as our heads. Here and there were kob, which leaped up on the ant-hills to get a clear view of us. Suddenly our attention was attracted by the movements of a big flock of cow herons in front of us, and then watching sharply we caught a glimpse of some elephants, about four hundred yards off. We now climbed an ant-hill ourselves, and inspected the elephants, to see if among them were any big-tusked bulls. There were no bulls, however; the little herd consisted of five cows and four calves, which were

marching across a patch of burnt ground ahead of us, accompanied by about fifty white cow herons. We stood where we were until they had passed; we did not wish to get too close, lest they might charge us and force us to shoot in self-defence. They walked in unhurried confidence, and yet were watchful, continually cocking their ears and raising and curling their trunks. One dropped behind and looked fixedly in our direction, probably having heard us talking; then with head aloft and tail stiffly erect it hastened after the others, presenting an absurd likeness to a baboon. The four calves played friskily about, especially a very comical little pink fellow which accompanied the leading cow. Meanwhile a few of the white herons rode on their backs, but most of the flock stalked sedately alongside through the burnt grass, catching the grasshoppers which were disturbed by the great feet. When, however, the herd reached the tall grass all the herons flew up and perched on the backs and heads of their friends; even the pink calf carried one. Half a mile inside the edge of the tall grass the elephants stopped for the day beside a clump of bushes; and there they stood, the white birds clustered on their dark bodies. At the time we could distinctly hear the Doctor's shot-gun, as he collected birds near camp; the reports did not disturb the elephants, and when we walked on we left them standing unconcernedly in the grass.

A couple of hours later, as we followed an elephant path, we came to where it was crossed by the spoor of two rhino. Our gunbearers took up the trail, over the burnt ground, while Kermit and I followed immediately behind them. The trail wound about, and was not always easy to disentangle, but after a mile or two we saw the beasts. They were standing among bushes and patches of rank, unburned grass; it was just ten o'clock, and they were evidently preparing to lie down for the day. As they stood they kept twitching their big ears; both rhino and elephant are perpetually annoyed, as are most game, by biting flies, large and small. We got up very close, Kermit with his camera and I with the heavy rifle. Too little is known of these northern square-mouthed rhino for us to be sure that they were not lingering slowly toward extinction; and, lest this should be

the case, we were not willing to kill any merely for trophies; while, on the other hand, we deemed it really important to get good groups for the National Museum in Washington and the American Museum in New York, and a head for the National Collection of Heads and Horns which was started by Mr. Hornaday, the director of the Bronx Zoological Park. Moreover Kermit and Loring desired to get some photos of the animals while they were alive.

Things did not go well this time, however. The rhinos saw us before either Kermit or Loring could get a good picture. As they wheeled I fired hastily into the chest of one, but not quite in the middle, and away they dashed—for they do not seem as truculent as the common rhino. We followed them. After an hour the trails separated; Cuninghame went on one, but failed to overtake the animal, and we did not see him until we reached camp late that afternoon.

Meanwhile our own gunbearers followed the bloody spoor of the rhino I had hit, Kermit and I close behind, and Loring with us. The rhino had gone straight off at a gallop, and the trail offered little difficulty, so we walked fast. A couple of hours passed. The sun was now high and the heat intense as we walked over the burned ground. The scattered trees bore such scanty foliage as to cast hardly any shade. The rhino galloped strongly and without faltering; but there was a good deal of blood on the trail. At last, after we had gone seven or eight miles, Kiboko the skinner, who was acting as my gunbearer, pointed toward a small thorn-tree; and beside it I saw the rhino standing with drooping head. It had been fatally hit, and if undisturbed would probably never have moved from where it was standing; and we finished it off forthwith. It was a cow, and before dying it ran round and round in a circle, in the manner of the common rhino.

Loring stayed to superintend the skinning and bringing in of the head and feet, and slabs of hide. Meanwhile Kermit and I, with our gunbearers, went off with a "shenzi," a wild native who had just come in with the news that he knew where another rhino was lying, a few miles away. While bound thither we passed numbers of oribi, and went close to a herd of waterbuck which stared at us with stupid tameness; a

single bartebeest was with them. When we reached the spot there was the rhino, sure enough, under a little tree, sleeping on his belly, his legs doubled up, and his head flat on the ground. Unfortunately the grass was long, so that it was almost impossible to photograph him. However, Kermit tried to get his picture from an anti-hill fifty yards distant, and then, Kermit with his camera and I with my rifle, we walked up to within about twenty yards. At this point we halted, and on the instant the rhino jumped to his feet with surprising agility and trotted a few yards out from under the tree. It was a huge bull, with a fair horn; much the biggest bull we had yet seen; and with head up and action high, the sun glinting on his slate hide and bringing out his enormous bulk, he was indeed a fine sight. I waited a moment for Kermit to snap him. Unfortunately the waving grass spoiled the picture. Then I fired right and left into his body, behind the shoulders, and down he went. In color he seemed of exactly the same shade as the common rhino, but he was taller and heavier, being six feet high. He carried a stout horn, a little over two feet long; the girth at the base was very great.

Leaving the gunbearers (with all our water) to skin the mighty beast, Kermit and I started for camp; and as we were rather late Kermit struck out at a great pace in front, while I followed on the little ambling mule. On our way in we passed the elephants, still standing where we had left them in the morning, with the white cow herons flying and walking around and over them. Heller and Cuninghame at once went out to camp by the skin and take care of it, and to bring back the skeleton. We had been out about eleven hours without food; we were very dirty from the ashes on the burnt ground; we had triumphed; and we were thoroughly happy as we took our baths and ate our hearty dinner.

It was amusing to look at our three naturalists and compare them with the conventional pictures of men of science and learning—especially men of science and learning in the wilderness—drawn by the novelists a century ago. Nowadays the field naturalist—who is usually at all points superior to the mere closet naturalist—follows a profession as full of hazard and interest as that of the explorer or of the big-

game hunter in the remote wilderness. He penetrates to all the out-of-the-way nooks and corners of the earth; he is schooled to the performance of very hard work, to the endurance of fatigue and hardship, to encountering all kinds of risks, and to grappling with every conceivable emergency. In consequence he is exceedingly competent, resourceful, and self-reliant, and the man of all others to trust in a tight place.

Around this camp there were no ravens or crows; but multitudes of kites, almost as tame as sparrows, circled among the tents, uttering their wailing cries, and lit on the little trees near by or waddled about on the ground near the cook fires. Numerous vultures, many marabou storks, and a single fish eagle, came to the carcasses set for them outside the camp by Loring; and he took pictures of them. The handsome fish eagle looked altogether out of place among the foul carrion-feeding throng; on the ground the vultures made way for him respectfully enough, but they resented his presence, and now and then two or three would unite to mob him while on the wing.

We wished for another cow rhino, so as to have a bull and a cow both for the National Museum at Washington, and for the American Museum in New York; and Kermit was to shoot this. Accordingly he and I started off early one morning with Grogan—a man of about twenty-five, a good hunter and a capital fellow, with whom by this time we were great friends. It was much like our other hunts. We tramped through high grass across a big, swampy plain or broad valley between low rises of ground, until, on the opposite side, we struck a by-this-time familiar landmark, two tall royal palms, the only ones for some miles around. Here we turned into a broad elephant and rhinoceros path, worn deep and smooth by the generations of huge feet that had tramped it; for it led from the dry inland to a favorite drinking place on the Nile. Along this we walked until Kassitura made out the trail of two rhino crossing it at right angles. They were evidently feeding and seeking a noonday resting place; in this country the square-mouthed rhinoceros live on the grassy flats, sparsely covered with small thorn-trees, and only go into the high reeds on their way to drink. With Kassitura and Kongoni in the lead we followed the fresh trail for a mile or so,

until we saw our quarry. The stupid beasts had smelt us, but were trotting to and fro in a state of indecision and excitement, tails twisting and ears cocked, uncertain what to do. At first we thought they were a bull and a small cow; but they proved to be a big cow with good horns, and a calf which was nearly full grown. The wind and sun were both exactly wrong, so Kermit could not take any photos; and accordingly he shot the cow behind the shoulder. Away both animals went, Kermit tearing along behind, while Grogan and I followed. After a sharp run of a mile and a half Kermit overtook them, and brought down the cow. The younger one then trotted threateningly toward him. He let it get within ten yards, trying to scare it; as it kept coming on, and could of course easily kill him, he then fired into its face, to one side, so as to avoid inflicting a serious injury, and, turning, off it went at a gallop. When I came up the cow had raised itself on its forelegs, and he was taking its picture. It had been wallowing, and its whole body was covered with dry caked mud. It was exactly the color of the common rhino, but a little larger than any cow of the latter that we had killed. We at once sent for Heller—who had been working without intermission since we struck the Lado, and liked it—and waited by the body until he appeared, in mid-afternoon.

Here in the Lado we were in a wild, uninhabited country, and for meat we depended entirely on our rifles; nor was there any difficulty in obtaining all we needed. We only shot for meat, or for Museum specimens—all the Museum specimens being used for food too—and as the naturalists were as busy as they well could be, we found that, except when we were after rhinoceros, it was not necessary to hunt for more than half a day or thereabouts. On one of these hunts, on which he shot a couple of buck, Kermit also killed a monitor lizard, and a crocodile ten feet long; it was a female, and contained fifty-two eggs, which, when scrambled, we ate and found good.

The morning after Kermit killed his cow rhino he and Grogan went off for the day to see if they could not get some live rhino photos. Cuninghame started to join Heller at the temporary camp which we had made beside the dead rhino, in order to help him

with the skin and skeletons. Mearns and Loring were busy with birds, small beasts, and photographs. So, as we were out of fresh meat, I walked away from camp to get some, followed by my gunbearers, the little mule with its well-meaning and utterly ignorant shenzi sais, and a dozen porters.

We first went along the river brink to look for crocodiles. In most places the bank was high and steep. Wherever it was broken there was a drinking place, with leading down to it trails deeply rutted in the soil by the herds of giant game that had travelled them for untold years. At this point the Nile was miles wide, and was divided into curving channels which here and there spread into lake-like expanses of still water. Along the edges of the river and between the winding channels and lagoons grew vast water-fields of papyrus, their sheets and bands of dark green breaking the burnished silver of the sunlit waters. Beyond the further bank rose steep, sharply peaked hills. The tricolored fish eagles, striking to the eye because of their snow-white heads and breasts, screamed continually, a wild eerie sound. Cormorants and snake birds were perched on trees overhanging the water, and flew away, or plunged like stones into the stream, as I approached; herons of many kinds rose from the marshy edges of the bays and inlets; wattled and spur-winged plovers circled overhead; and I saw a party of hippopotami in a shallow on the other side of the nearest channel, their lazy bulks raised above water as they basked asleep in the sun. The semi-diurnal slate-and-yellow bats flitted from one scantily leaved tree to another, as I disturbed them. At the foot of a steep bluff, several yards from the water, a crocodile lay. I broke its neck with a soft-nosed bullet from the little Springfield; for the plated skin of a crocodile offers no resistance to a modern rifle. We dragged the ugly man-eater up the bank, and sent one of the porters back to camp to bring out enough men to carry the brute in bodily. It was a female, containing thirty eggs. We did not find any crocodile's nest; but near camp, in digging a hole for the disposal of refuse, we came on a clutch of a dozen eggs of the monitor lizard. They were in sandy loam, two feet and a half beneath the surface, without the vestige of a burrow leading to them. When exposed to the sun, unlike

the crocodile's eggs, they soon burst. Evidently the young are hatched in the cool earth and dig their way out.

We continued our walk and soon came on some kob. At two hundred yards I got a fine buck, though he went a quarter of a mile. Then, at a hundred and fifty yards, I dropped a straw-colored Nile hartebeest. Sending in the kob and hartebeest used up all our porters but two, and I mounted the little mule and turned toward camp, having been out three hours. Soon Gouvimali pointed out a big bustard, marching away through the grass a hundred yards off. I dismounted, shot him through the base of the neck, and remounted. Then Kongoni pointed out, some distance ahead, a bushbuck ram, of the harnessed kind found in this part of the Nile Valley. Hastily dismounting, and stealing rapidly from ant-heap to ant-heap, until I was not much over a hundred yards from him, I gave him a fatal shot; but the bullet was placed a little too far back, and he could still go a considerable distance. So far I had been shooting well; now, pride had a fall. Immediately after the shot a difficulty arose in the rear between the mule and the shenzi sais; they parted company, and the mule joined the shooting party in front, at a gallop. The bushbuck, which had halted with its head down, started off and trotted after it, while the mule pursued an uncertain course between us; and I don't know which it annoyed most. I emptied my magazine twice, and partly a third time, before I finally killed the buck and scared the mule so that it started for camp. The bushbuck in this part of the Nile Valley did not live in dense forest, like those of East Africa, but among the scattered bushes and acacias. Those that I shot in the Lado had in their stomachs leaves, twig tips, and pods; one that Kermit shot, a fine buck, had been eating grass also. On the Uasin Gishu, in addition to leaves and a little grass, they had been feeding on the wild olives.

Our porters were not as a rule by any means the equals of those we had in East Africa, and we had some trouble because, as we did not know their names and faces, those who wished to shirk would go off in the bushes while their more willing comrades would be told off for the needed work. So Cuninghame determined to make each readily identifiable; and one day I found

him sitting, in Rhadamanthus mood, at his table before his tent, while all the porters filed by, each in turn being decorated with a tag, conspicuously numbered, which was hung round his neck—the tags, by the way, being Smithsonian label cards, contributed by Dr. Mearns.

At last Kermit succeeded in getting some good white rhino pictures. He was out with his gunbearers and Grogan. They had hunted steadily for nearly two days without seeing a rhino; then Kermit made out a big cow with a calf lying under a large tree, on a bare plain of short grass. Accompanied by Grogan, and by a gunbearer carrying his rifle, while he himself carried his "naturalist's graphlex" camera, he got up to within fifty or sixty yards of the dull-witted beasts, and spent an hour cautiously manoeuvring and taking photos. He got several photos of the cow and calf lying under the tree. Then something, probably the click of the camera, rendered them uneasy and they stood up. Soon the calf lay down again, while the cow continued standing on the other side of the tree, her head held down, the muzzle almost touching the ground, according to the custom of this species. After taking one or two more pictures Kermit edged in, so as to get better ones. Gradually the cow grew alarmed. She raised her head, as these animals always do when interested or excited, twisted her tail into a tight knot, and walked out from under the tree, followed by the calf; she and the calf stood stern to stern for a few seconds, and Kermit took another photo. By this time the cow had become both puzzled and irritated. Even with her dim eyes she could make out the men and the camera, and once or twice she threatened a charge, but thought better of it. Then she began to move off; but suddenly wheeled and charged, this time bent on mischief. She came on at a slashing trot, gradually increasing her pace, the huge, square lips shaking from side to side. Hoping that she would turn Kermit shouted loudly and waited before firing until she was only ten yards off. Then, with the Winchester, he put a bullet in between her neck and shoulder, a mortal wound. She halted and half wheeled, and Grogan gave her right and left, Kermit putting in a couple of additional bullets as she went off. A couple of hundred yards away she fell, rose again,

staggered, fell again, and died. The calf, which was old enough to shift for itself, refused to leave the body, although Kermit and Grogan pelted it with sticks and clods. Finally a shot through the flesh of the buttocks sent it off in frantic haste. Kermit had only killed the cow because it was absolutely necessary in order to avoid an accident, and he was sorry for the necessity; but I was not, for it was a very fine specimen, with the front horn thirty-one inches long; being longer than any other we had gotten. The second horn was compressed laterally, exactly as with many black rhinos (although it is sometimes stated that this does not occur in the case of the white rhino). We preserved the head-skin and skull, for the National Museum.

The flesh of this rhino, especially the hump, proved excellent. It is a singular thing that scientific writers seem almost to have overlooked, and never lay any stress upon, the existence of this neck hump. It is on the neck, forward of the long dorsal vertebra, and is very conspicuous in the living animal; and I am inclined to think that some inches of the exceptional height measurements attributed to South African white rhinos may be due to measuring to the top of this hump. I am also puzzled by what seems to be the great inferiority in horn development of these square-mouthed rhinos of the Lado to the square-mouthed or white rhinos of South Africa (and, by the way, I may mention that on the whole these Lado rhinos certainly looked lighter colored, when we came across them standing in the open, than did their prehensile-lipped East African brethren). We saw between thirty and forty square-mouthed rhinos in the Lado, and Kermit's cow had much the longest horn of any of them; and while they averaged much better horns than the black rhinos we had seen in East Africa, between one and two hundred in number, there were any number of exceptions on both sides. There are recorded measurements of white rhino horns from South Africa double as long as our longest from the Lado. Now this is, scientifically, a fact of some importance, but it is of no consequence whatever when compared with the question as to what, if any, the difference is between the average horns; and this last fact is very difficult to ascertain, largely because of the foolish obsession for "record"

heads which seems to completely absorb so many hunters who write. What we need at the moment is more information about the average South African heads. There are to be found among most kinds of horn-bearing animals individuals with horns of wholly exceptional size, just as among all nations there are individuals of wholly exceptional height. But a comparison of these wholly exceptional horns, although it has a certain value, is, scientifically, much like a comparison of the giants of different nations. A good head is of course better than a poor one; and a special effort to secure an exceptional head is sportsmanlike and proper. But to let the desire for "record" heads, to the exclusion of all else, become a craze, is absurd. The making of such a collection is in itself not only proper but meritorious; all I object to is the loss of all sense of proportion in connection therewith. It is just as with philately, or heraldry, or collecting the signatures of famous men. The study of stamps, or of coats of arms, or the collecting of autographs, is an entirely legitimate amusement, and may be more than a mere amusement; it is only when the student or collector allows himself utterly to misestimate the importance of his pursuit that it becomes ridiculous.

Cuninghame, Grogan, Heller, Kermit, and I now went off on a week's safari inland, travelling as light as possible. The first day's march brought us to the kraal of a local chief named Sururu. There were a few banana trees, and patches of scrawny cultivation, round the little cluster of huts, ringed with a thorn fence, through which led a low door; and the natives owned goats and chickens. Sururu himself wore a white sheet of cotton as a toga, and he owned a red fez and a pair of baggy blue breeches, which last he generally carried over his shoulder. His people were very scantily clad indeed, and a few of them, both men and women, wore absolutely nothing except a string of blue beads around the waist or neck. Their ears had not been pierced and stretched like so many East African savages, but their lower lips were pierced for wooden ornaments and quills. They brought us eggs and chickens, which we paid for with American cloth; this cloth, and some umbrellas, constituting our stock of trade goods, or gift goods, for the Nile.

The following day Sururu himself led us to our next camp, only a couple of hours away. It was a dry country of harsh grass, everywhere covered by a sparse growth of euphorbias and stunted thorns, which were never in sufficient numbers to make a forest, each little, well-nigh leafless tree, standing a dozen rods or so distant from its nearest fellow. Most of the grass had been burnt, and fires were still raging. Our camp was by a beautiful pond, covered with white and lilac water-lilies. We pitched our two tents on a bluff, under some large acacias that cast real shade. It was between two and three degrees north of the equator. The moon, the hot January moon of the midtropics, was at the full, and the nights were very lovely; the little sheet of water glimmered in the moon rays, and round about the dry landscape shone with a strange, spectral light.

Near the pond, just before camping, I shot a couple of young waterbuck bulls for food, and while we were pitching the tents a small herd of elephants—cows, young bulls, and calves—seemingly disturbed by a grass fire which was burning a little way off, came up within four hundred yards of us. At first we mistook one large cow for a bull, and running quickly from bush to bush, diagonally to its course, I got within sixty yards, and watched it pass at a quick shuffling walk, lifting and curling its trunk. The blindness of both elephant and rhino has never been sufficiently emphasized in books. Near camp was the bloody, broken skeleton of a young wart-hog boar, killed by a lion the previous night. There were a number of lions in the neighborhood, and they roared at intervals all night long. Next morning, after Grogan and I had started from camp, when the sun had been up an hour, we heard one roar loudly less than a mile away. Running toward the place we tried to find the lion; but nearby a small river ran through beds of reeds, and the fires had left many patches of tall, yellow, half-burned grass, so that it had ample cover, and our search was fruitless.

Near the pond were green parrots and brilliant wood hoopoes, rollers, and sun-birds; and buck of the ordinary kinds drank at it. A dyker which I shot for the table had been feeding on grass tips and on the stems and leaves of a small, low-growing plant.

After giving up the quest for the lion Grogan and I, with our gunbearers, spent the day walking over the great dry flats of burnt grass land and sparse, withered forest. The heat grew intense as the sun rose higher and higher. Hour after hour we plodded on across vast level stretches, or up or down inclines so slight as hardly to be noticeable. The black dust of the burn rose in puffs beneath our feet; and now and then we saw dust devils, violent little whirlwinds, which darted right and left, raising to a height of many feet gray funnels of ashes and withered leaves. In places the coarse grass had half resisted the flames, and rose above our heads. Here and there bleached skulls of elephant and rhino, long dead, showed white against the charred surface of the soil. Everywhere, crossing and recrossing one another, were game trails, some slightly marked, others broad and hard, and beaten deep into the soil by the feet of the giant creatures that had trodden them for ages. The elephants had been the chief road makers; but the rhinoceros had travelled their trails, and also buffalo and buck.

There were elephant about, but only cows and calves, and an occasional bull with very small tusks. Of rhinoceros, all square-mouthed, we saw nine, none carrying horns which made them worth shooting. The first one I saw was in long grass. My attention was attracted by a row of white objects moving at some speed through the top of the grass. It took a second look before I made out that they were cow herons perched on the back of a rhino. This proved to be a bull, which joined a cow and a calf. None had decent horns, and we plodded on. Soon we came to the trail of two others, and after a couple of miles' tracking Kongoni pointed to two gray bulks lying down under a tree. I walked cautiously to within thirty yards. They heard something, and up rose the two pig-like blinking creatures, who gradually became aware of my presence, and retreated a few steps at a time, dull curiosity continually overcoming an uneasiness which never grew into fear. Tossing their stumpy-horned heads, and twisting their tails into tight knots, they ambled briskly from side to side, and were ten minutes in getting to a distance of a hundred yards. Then our shenzi guide mentioned that there were other

rhinos close by, and we walked off to inspect them. In three hundred yards we came on them, a cow and a well-grown calf. Sixty yards from them was an ant-hill with little trees on it. From this we looked at them until some sound or other must have made them uneasy, for up they got. The young one seemed to have rather keener suspicions, although no more sense, than its mother, and after a while grew so restless that it persuaded the cow to go off with it. But the still air gave no hint of our whereabouts, and they walked straight toward us. I did not wish to have to shoot one, and so when they were within thirty yards we raised a shout and away they cantered, heads tossing and tails twisting.

Three hours later we saw another cow and calf. By this time it was half-past three in the afternoon, and the two animals had risen from their noonday rest and were grazing busily, the great clumsy heads sweeping the ground. Watching them forty yards off it was some time before the cow raised her head high enough for me to see that her horns were not good. Then they became suspicious, and the cow stood motionless for several minutes, her head held low. We moved quietly back, and at last they either dimly saw us, or heard us, and stood looking toward us, their big ears cocked forward. At this moment we stumbled on a rhino skull, bleached, but in such good preservation that we knew Heller would like it; and we loaded it on the porters that had followed us. All the time we were thus engaged the two rhinos, only a hundred yards off, were intently gazing in our direction, with foolish and bewildered solemnity; and there we left them, survivors from a long vanished world, standing alone in the parched desolation of the wilderness.

On another day Kermit saw ten rhino, none with more than ordinary horns. Five of them were in one party, and were much agitated by the approach of the men; they ran to and fro, their tails twisted into the usual pig-like curl, and from sheer nervous stupidity bade fair at one time to force the hunters to fire in self-defence. Finally, however, they all ran off. In the case of a couple of others a curious incident happened. When alarmed they failed to make out where the danger lay, and after running away a short distance they returned to a

bush near by to look about. One remained standing, but the other deliberately sat down upon its haunches like a dog, staring ahead, Kermit meanwhile being busy with his camera. Two or three times I saw rhino, when roused from sleep, thus sit up on their haunches and look around before rising on all four legs; but this was the only time that any of us saw a rhino which was already standing assume such a position. No other kind of heavy game has this habit; and indeed, so far as I know, only one other hoofed animal, the white goat of the northern Rocky Mountains. In the case of the white goat, however, the attitude is far more often assumed, and in more extreme form; it is one of the characteristic traits of the queer goat-antelope, so many of whose ways and looks are peculiar to itself alone.

From the lily pond camp we went back to our camp outside Sururu's village. This was a very pleasant camp because while there, although the heat was intense in the daytime, the nights were cool and there were no mosquitoes. During our stay in the Lado it was generally necessary to wear head nets and gloves in the evenings and to go to bed at once after dinner, and then to lie under the mosquito bar with practically nothing on through the long hot night, sleeping or contentedly listening to the humming of the baffled myriads outside the net. At the Sururu camp, however, we could sit at a table in front of the tents, after supper—or dinner, whichever one chose to call it—and read by lamplight, in the still, cool, pleasant air; or walk up and down the hard, smooth elephant path which led by the tents, looking at the large red moon just risen, as it hung low over the horizon, or later, when, white and clear, it rode high in the heavens and flooded the land with its radiance.

There was a swamp close by, and we went through this the first afternoon in search of buffalo. We found plenty of sign; but the close-growing reeds were ten feet high, and even along the winding buffalo trails by which alone they could be penetrated it was impossible to see a dozen paces ahead. Inside the reeds it was nearly impossible to get to the buffalo, or at least to be sure to kill only a bull, which was all I wanted; and at this time when the moon was just past the full, these particular buffalo only came out into the open to feed at

night, or very early in the morning and late in the evening. But Sururu said that there were other buffalo which lived away from the reeds, among the thorn-trees on the grassy flats and low hills; and he volunteered to bring me information about them on the morrow. Sure enough, shortly before eleven next morning, he turned up with the news that he had found a solitary bull only about five miles away. Grogan and I at once started back with him, accompanied by our gunbearers. The country was just such as that in which we had hitherto found our rhinos; and there was fresh sign of rhino as well as buffalo. The thorny, scantily leaved trees were perhaps a little closer together than in most places, and there were a good many half-burned patches of tall grass. We passed a couple of ponds which must have been permanent, as water-lilies were growing in them; at one a buffalo had been drinking. It was half-past twelve when we reached the place where Sururu had seen the bull. We then advanced with the utmost caution, as the wind was shifty, and although the cover was thin, it yet rendered it difficult to see a hundred yards in advance. At last we made out the bull, on his feet and feeding, although it was high noon. He was stern toward us, and while we were stealing toward him a puff of wind gave him our scent. At once he whipped around, gazed at us for a moment with outstretched head, and galloped off. I could not get a shot through the bushes, and after him we ran, Kongoni leading, with me at his heels. It was hot work running, for at this time the thermometer registered 102° in the shade. Fortunately the bull had little fear of man, and being curious, and rather truculent, he halted two or three times to look round. Finally, after we had run a mile and a half, he halted once too often, and I got a shot at him at eighty yards. The heavy bullet went home; I fired twice again as rapidly as possible, and the bull never moved from where he had stood. He was an old bull, as big as an East African buffalo bull; but his worn horns were smaller and rather different. This had rendered Kongoni uncertain whether he might not be a cow; and when we came up to the body he exclaimed with delight that it was a "duck" —Kongoni's invariable method of pronouncing "buck," the term he used to de-



Kermit's first giant eland cow, shot on the Kenjaf trip.

scribe anything male, from a lion or an elephant to a bustard or a crocodile: "cow" being his expression for the female of these and all other creatures. As Gouvimali came running up to shake hands, his face wreathed in smiles, he exclaimed "G-o-o-d-e morning"; a phrase which he had picked up under the impression that it was a species of congratulation.

As always when I have killed buffalo I was struck by the massive bulk of the great bull as he lay in death, and by the evident and tremendous muscular power of his big-boned frame. He looked what he was, a formidable beast. Thirty porters had to be sent out to bring to camp the head, hide, and meat. We found, by the way, that his meat made excellent soup, his kidneys a good stew, while his tongue was delicious.

Next morning Kermit and I with the bulk of the safari walked back to our main camp, on the Nile, leaving Cuninghame and Heller where they were for a day, to take care of the buffalo skin. Each of us struck off across the country by himself, with his gunbearers. After walking five or six miles I saw a big rhino-three-quarters of a mile off. At this point the country was

flat, the acacias very thinly scattered, and the grass completely burnt off, the green young blades sprouting; and there was no difficulty in making out, at the distance we did, the vast gray bulk of the rhino as it stood inertly under a tree. Drawing nearer we saw that it had a good horn, although not as good as Kermit's best; and approaching quietly to within forty yards I shot the beast.

At the main camp we found that Mearns had made a fine collection of birds in our absence; while Loring had taken a variety of excellent photos, of marabou, vultures, and kites feeding, and, above all, of a monitor lizard plundering the nest of a crocodile. The monitors were quite plentiful near camp. They are amphibious, carnivorous lizards of large size; they frequent the banks of the river, running well on the land, and sometimes even climbing trees, but taking to the water when alarmed. They feed on mice and rats, other lizards, eggs, and fish; the stomachs of those we caught generally contained fish, for they are expert swimmers. One morning Loring surprised a monitor which had just uncovered some crocodile eggs on a small sandy beach. The eggs, about thirty in number, were buried

in rather shallow fashion, so that the monitor readily uncovered them. The monitor had one of the eggs transversely in its mouth and, head erect, was marching off with it. As soon as it saw Loring it dropped the egg and scuttled into the reeds. In a few minutes it returned, took another egg, and

ran up a slanting tree which overhung the river, and dropped into the water like a snake bird.

There was always something interesting to do or to see at this camp. One afternoon I spent in the boat. The papyrus along the channel rose like a forest, thirty feet high,



Mr. Roosevelt with the *Belontiopsis rex* or whale-billed stork at Lake No.
From a photograph by Kermit Roosevelt.

walked off into the bushes, where it broke the shell, swallowed the yolk, and at once returned to the nest for another egg. Loring took me out to see the feat repeated, replenishing the rifled nest with eggs taken from a crocodile the Doctor had shot; and I was delighted to watch, from our hiding place, the big lizard as he cautiously approached, seized an egg, and then retired to cover with his booty. Kermit came on a monitor plundering a crocodile's nest at the top of a steep bank, while, funnily enough, a large crocodile lay asleep at the foot of the bank only a few yards distant. As soon as it saw Kermit the monitor dropped the egg it was carrying,

the close-growing stems knit together by vines. As we drifted down, the green wall was continually broken by openings, through which side streams from the great river rushed, swirling and winding, down narrow lanes and under low archways, into the dim mysterious heart of the vast reed beds, where dwelt bird and reptile and water beast. In a shallow bay we came on two hippo cows with their calves, and a dozen crocodiles. I shot one of the latter—as I always do, when I get a chance—and it turned over and over, lashing with its tail as it sank. A half-grown hippo came up close by the boat and leaped nearly clear of the water; and in another place I saw a



Troops at Mongalla.

From a photograph by Edmund Heller.



Bari at Mongalla.

From a photograph by Edmund Heller.

mother hippo swimming, with the young one resting half on its back.

Another day Kermit came on some black and white Colobus monkeys. Those we had shot east of the Rift Valley had long mantles, and more white than black in their coloring; west of the Rift Valley they had less white and less of the very long hair; and here on the Nile the change had gone

wandered. Moreover, instead of living in the tall timber, and never going on the ground except for a few yards, as in East Africa, here on the Nile they sought to escape danger by flight over the ground, in the scrub. Kermit found some in a grove of fairly big acacias, but they instantly dropped to the earth and galloped off among the dry, scattered bushes and small thorn-



American Mission, Sobat River.
From a photograph by Edmund Heller.

still further in the same direction. On the west coast this kind of monkey is said to be entirely black. But we were not prepared for the complete change in habits. In East Africa the Colobus monkeys kept to the dense cool mountain forests, dwelt in the tops of the big trees, and rarely descended to the ground. Here, on the Nile, they lived in exactly such country as that affected by the smaller greenish-yellow monkeys, which we found along the Guaso Nyero for instance; country into which the East African Colobus never by any chance

trees. Kermit also shot a twelve-foot crocodile in which he found the remains of a big heron.

One morning we saw from camp a herd of elephants in a piece of unburned swamp. It was a mile and a half away in a straight line, although we had to walk three miles to get there. There were between forty and fifty of them, a few big cows with calves, the rest half-grown and three-quarters-grown animals. Over a hundred white herons accompanied them. From an ant-hill to leeward we watched them standing by a mud



Shiluk dance at the American Mission.
From a photograph by Kermit Roosevelt.

hole in the swamp; evidently they now and then got a whiff from our camp, for they were continually lifting and curling their trunks. To see if by any chance there was a bull among them we moved them out of the swamp by shouting; the wind blew hard and as they moved they evidently smelled the camp strongly, for all their trunks went into the air; and off they went at a rapid pace, half of the herons riding on them, while the others hovered over and alongside, like a white cloud. Two days later the same herd again made its appearance.

Spur-winged plover were nesting near camp, and evidently distrusted the carrion feeders, for they attacked and drove off every kite or vulture that crossed what they considered the prohibited zone. They also harassed the marabous, but with more circumspection; for the big storks were short-tempered, and rather daunted the spur-wings by the way they opened their enormous beaks at them. The fish eagles fed exclusively on fish, as far as we could tell, and there were piles of fish bones and heads under their favorite perches.

Once I saw one plunge into the water, but it failed to catch anything. Another time, suddenly, and seemingly in mere mischief, one attacked a purple heron which was standing on a mud bank. The eagle swooped down from a tree and knocked over the heron; and when the astonished heron struggled to its feet and attempted to fly off, the eagle made another swoop and this time knocked it into the water. The heron then edged into the papyrus, and the eagle paid it no further attention.

In this camp we had to watch the white ants, which strove to devour everything. They are nocturnal, and work in the daytime only under the tunnels of earth which they build over the surface of the box, or whatever else it is, that they are devouring; they eat out everything, leaving this outside shell of earth. We also saw a long column of the dreaded driver ants. These are carnivorous; I have seen both red and black species; they kill every living thing in their path, and I have known them at night drive all the men in a camp out into the jungle to fight the mosquitoes unprotected until day-light. On another occasion, where



Mr. Roosevelt on his camel.
From a photograph by Kermit Roosevelt.

a steamboat was moored close to a bank, and an ant column entered the boat after nightfall, and kept complete possession of it for forty-eight hours. Fires, and boiling water, offer the only effectual means of resistance. The bees are at times as formidable; when their nests are disturbed they will attack every one in sight, driving all the crew of a boat overboard or scattering a safari, and not infrequently killing men and beasts of burden that are unable to reach some place of safety.

The last afternoon, when the flotilla had called to take us farther on our journey, we shot about a dozen buck, to give the porters and sailors a feast, which they had amply earned. All the meat did not get into camp until after dark—one of the sailors, unfortunately, falling out of a tree and breaking his neck on the way in—and it was picturesque to see the rows of big antelope—hartebeest, kob, waterbuck—stretched in front of the flaring fires, and the dark faces of the waiting negroes, each deputized by some particular group of gunbearers, porters, or sailors to bring back its share.

Next morning we embarked, and steamed and drifted down

the Nile; ourselves, our men, our belongings, and the spoils of the chase all huddled together under the torrid sun. Two or three times we grounded on sand bars; but no damage was done, and in twenty-six hours we reached Nimule. We were no longer in healthy East Africa. Kermit and I had been in robust health throughout the time we were in Uganda and the Lado; but all the

other white men of the party had suffered more or less from dysentery, fever, and



Slain Pasha, from the roof of the Khalifa's Palace, shows how he made his escape from Omdurman.
From a photograph by Kermit Roosevelt.

sun prostration while in the Lado; some of the gunbearers had been down with fever, one of them dying while we were in Uganda; and four of the porters who had marched from Koba to Nimule had died of dysentery—they were burying one when we arrived.

At Nimule we were as usual greeted with hospitable heartiness by the English officials, as well as by two or three elephant hunters. One of the latter, three days before, had been charged by an unwounded bull elephant. He fired both barrels into it as it came on, but it charged home, knocked him down, killed his gunbearer, and made its escape into the forest. In the forlorn little graveyard at the station were the graves of two white men who had been killed by elephants. One of them, named Stoney, had been caught by a wounded bull, which stamped the life out of him and then literally dismembered him, tearing his arms from his body. In the African wilderness, when a man dies, his companion usually brings in something to show that he is dead, or some remnant of whatever it is that has destroyed him; the sailors whose companion was killed by falling out of the tree near our Lado camp, for instance, brought in the dead branch which had broken under his weight; and Stoney's gunbearer marched back to Nimule carrying an arm of his dead master, and deposited his grewsome burden in the office of the district commissioner.

On February 17th the long line of our laden safari left Nimule on its ten days' march to Gondokoro. We went through a barren and thirsty land. Our first camp was by a shallow, running river, with a shaded pool in which we bathed. After that we never came on running water, merely on dry watercourses with pools here and there, some of the pools being crowded with fish. Tall half-burnt grass, and scattered, well-nigh leafless thorn scrub covered the monotonous landscape, although we



Belieniceps rex in the garden of the palace at Khartoum.
From a photograph by Kermit Roosevelt.

could generally find some fairly leafy tree near which to pitch the tents. The heat was great; more than once the thermometer at noon rose to 112° in the shade—not real shade, however, but in a stiling tent, or beneath a tree the foliage of which let through at least a third of the sun rays. The fiery heat of the ground so burnt and crippled the feet of the porters that we had to start each day's march very early.

At quarter of three in the morning the whistle blew; we dressed and breakfasted while the tents were taken down and the loads adjusted. Then off we strode, through the hot starlit night, our backs to the Southern Cross and our faces toward the Great Bear; for we were marching northward and homeward. The drum throbbed and muttered as we walked, on and on, along the dim trail. At last the stars began to pale, the gray east changed to opal and amber and amethyst, the red splendor of the sunrise flooded the world, and to the heat of the night succeeded the more merciless heat of the day. Higher and higher rose the sun. The sweat streamed down our faces, and the bodies of the black men glistened like oiled iron. We might halt early in the forenoon, or we might have to march until noon, according to the distance from waterhole to waterhole.

Occasionally in the afternoons, and once

when we halted for a day to rest the porters, Kermit and I would kill buck for the table—hartebeest, reedbuck, and oribi. I also killed a big red ground monkey, with baboon-like habits; we had first seen the species on the Uasin Gishu, and had tried in vain to get it, for it was wary, never sought safety in trees, and showed both speed and endurance in running. Kermit killed a bull and a cow roan antelope. These so-called horse antelope are fine beasts, light roan in color, with high withers, rather short curved horns, huge ears, and bold face markings. Usually we found them shy, but occasionally very tame. They are the most truculent and dangerous of all antelope; this bull, when seemingly on the point of death, rose like a flash when Kermit approached and charged him full tilt; Kermit had to fire from

the hip, luckily breaking the animal's neck.

At Gondokoro we met the boat which the Sirdar, Major General Sir Reginald Wingate, had sent to take us down the Nile to Khartoum; for he, and all the Soudan officials—including especially Colonel Asser, Colonel Owen, Slatin Pasha, and Butler Bey—treated us with a courtesy for which I cannot too strongly express my appreciation. In the boat we were to have met an old friend and fellow countryman, Leigh Hunt; to our great regret he could not meet us, but he insisted on treating us as his guests, and on our way down the Nile

we felt as if we were on the most comfortable kind of yachting trip; and everything was done for us by Captain Middleton, the Scotch engineer in charge.

Nor was our debt only to British officials and to American friends. At Gondokoro

I was met by M. Ranquet, the Belgian Commandant of the Lado district, and both he and M. Massart, the Chef de Poste at Redjaf, were kindness itself, and aided us in every way.

On the last day of February we started down the Nile, slipping easily along on the rapid current, which wound and twisted through stretches of reeds and marsh grass and papyrus. We halted at the attractive station of Lado for a good-by breakfast with our kind Belgian friends, and that evening we dined at Mongalla with Colonel Owen, the Chief of the

southernmost section of the Soudan. I was greatly interested in the Egyptian and Soudanese soldiers, and their service medals. Many of these medals showed that their owners had been in a dozen campaigns; some of the native officers and men (and also the Reis or native captain of our boat, by the way) had served in the battles which broke forever the Mahdi's cruel power; two or three had been with Gordon. They were a fine-looking set; and their obvious self-respect was a good thing to see. That same afternoon I witnessed a native dance, and was



Arab Sheiks who came in from the deserts far west of Khartoum to report on the French trouble.

From a photograph by Kermit Roosevelt.

struck by the lack of men of middle age; all the tribes who were touched by the blight of the Mahdist tyranny, with its accompaniments of unspeakable horror, suffered such slaughter of the then young men that the loss has left its mark to this day. The English when they destroyed Mahdism rendered a great service to humanity; and their rule in the Soudan has been astoundingly successful and beneficial from every stand-point.*

We steamed onward down the Nile; sometimes tying up to the bank at nightfall, sometimes steaming steadily through the night. We reached the Sud, the vast papyrus marsh once so formidable a barrier to all who would journey along the river; and sunrise and sunset were beautiful over the endless, melancholy stretches of water reeds. In the Sud the only tree seen was the water-loving ambatch, light as cork. Occasionally we saw hippos and crocodiles and a few water birds; and now and then passed native villages: the tall, lean men and women stark naked, and their bodies daubed with mud, grease, and ashes to keep off the mosquitoes.

We stopped at the mouth of the Sobat to visit the American Mission, and were most warmly and hospitably received by the missionaries, and were genuinely impressed by the faithful work they are doing, under such great difficulties and with such cheerfulness and courage. The Medical Mission was especially interesting. It formed an important part of the mission work; and not only were the natives round about treated, but those from far away also came in numbers. At the time of our visit there were about thirty patients, taking courses of treatment, who had come from distances varying from twenty-five miles to a hundred and fifty.

We steamed steadily down the Nile. Where the great river bent to the east we would sit in the shade on the forward deck during the late afternoon and look down the long glistening water-street in front of us, with its fringe of reed

bed and marshy grassland and papyrus swamp, and the slightly higher dry land on which grew acacias and scattered palms. Along the river banks and inland were villages of Shilluks and other tribes, mostly cattle owners; some showing slight traces of improvement, others utter savages, tall, naked men, bearing bows and arrows.

Our Egyptian and Nubian crew recalled to my mind the crew of the dahabiah on which as a boy I had gone up the Egyptian Nile thirty-seven years before; especially when some piece of work was being done by the crew as they chanted in grunting chorus "Ya allah, ul allah." As we went down the Nile we kept seeing more and more of the birds which I remembered, one species after another appearing; familiar cow herons, crocodile plover, noisy spurwing plover, black and white kingfishers, hoopoes, green bee-eaters, black and white chats, desert larks, and trumpeter bullfinches.

At night we sat on deck and watched the stars and the dark, lonely river. The swimming crocodiles and plunging hippos made whirls and wakes of feeble light that glimmered for a moment against the black water. The unseen birds of the marsh and the night called to one another in strange voices. Often there were grass fires, burning, leaping lines of red, the lurid glare in the sky above them making even more sombre the surrounding gloom.

As we steamed northward down the long stretch of the Nile which ends at Khartoum, the wind blew in our faces, day after day, hard and steadily. Narrow reed beds bordered the shore; there were grass flats and groves of acacias and palms, and farther down reaches of sandy desert. The health of our companions who had been suffering from fever and dysentery gradually improved; but the case of champagne, which we had first opened at Gondokoro, was of real service, for two members of the party were at times so sick that their situation was critical.

We reached Khartoum on the afternoon of March 14th, 1910, and Kermit and I parted from our comrades of the trip with real regret; during the year we spent together there had not been a jar, and my respect and liking for them had grown

*The despotism of Mahdist rule was so revolting, so vilely cruel and hideous, that the worst despotism by men of European blood in recent times seems a model of humanity by comparison; and yet there were nominal "anti-militarists" and self-styled "apostles of peace" who did their feeble best to prevent the destruction of this infamy.

