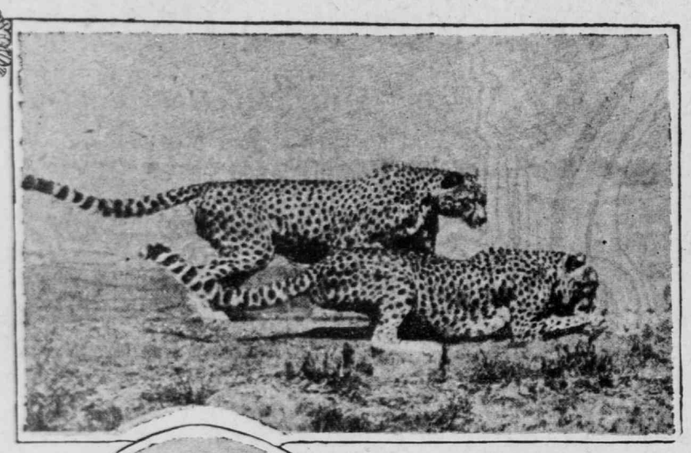
WILD ANIMALS FOLLOWED TO THEIR LAIRS by THE CAMERA.



CHEETAH

PHOTO BY OTTOMAR ANSCHUTZ

PHOTO BY OTTOMAR ANSCHUTZ

BABOON THINKING

ALGERIAN LIONESS PHOTO BY REISER

BEARS SEARCHING FOR HONEY

PHOTO BY OTTOMAR ANSCHUTZ

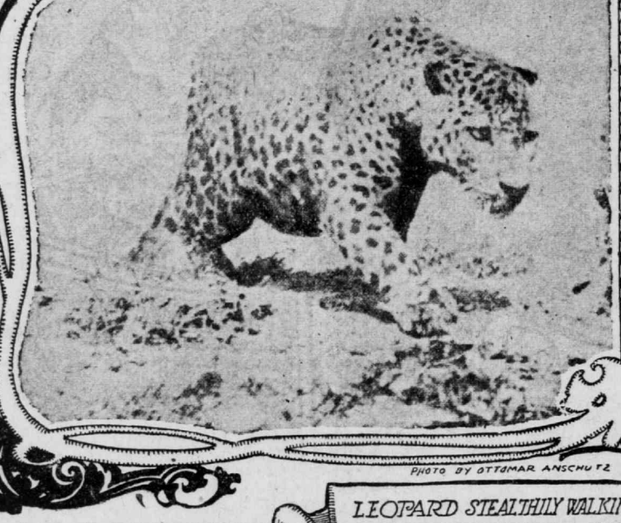


PHOTO BY OTTOMAR ANSCHUTZ

LEOPARD STEALTHILY WALKING

THE STARTLED KANGAROO

BY OTTOMAR ANSCHUTZ

THERE is now in course of publication one of the most remarkable works ever undertaken in natural history. It differs from standard publications of the kind in the fact that its primary interest depends upon its illustrations, which are reproductions of photographs of wild animals made in their native haunts.

Hitherto works on natural history, no matter how elaborate or costly, have in the main been illustrated by "fake" pictures—that is, illustrations of birds and animals made, not in the forest or jungle, but in the private laboratory of the naturalist. In even the best-known natural history books the creatures there depicted are as stiff and artificial as the stuffed specimens to be seen in museums. Now, however, the camera has at last invaded the jungle and forests, whose inhabitants have been photographed in their homes.

Many men eminent in natural history have contributed to this new work. They include F. C. Selous; R. Lydekker, F. R. S.; W. F. Kirby, F. L. S.; Sir Herbert Maxwell, F. R. S.; F. G. Afialo, F. Z. S.; Louis Wain; W. Saville-Kent, F. Z. S., and Charles J. Cornish, M. A., F. Z. S., who is editor, the publishers being Hutchinson & Co., of Paternoster row, London.

Photographs have been obtained from all parts of the world, including many from the collections of the Duchess of Bedford, F. Z. S.; Lord Delamere, F. Z. S.; Hon. Walter Rothschild; Major Nott, F. Z. S.; Ottomar Anschutz, Dr. R. W. Shufeldt; Lewis Medland, F. Z. S.; Carl Hagenbeck and Charles Reid.

For years the camera has been working in inaccessible parts of the world in preparation for this work—in the Indian jungle, in the islands of the South Seas and in the forests of New Zealand, the photographer patiently waiting week after week, and at great risk to himself, to secure photographs of savage beasts, many of them unconscious of the presence of man.

Mr. Hutchinson, the publisher, says that the idea came to him many years ago, but critics said that it was impossible to photograph wild beasts in their natural haunts. He, however, secured the co-operation of many amateur photographers and is now about to publish the results of their work.

Lord Delamere, for instance, has been two years in the unbeaten tracks of Eastern Central Africa, accompanied by two Europeans and about two hundred natives, taking scores of snapshots. They had many exciting adventures, one of them in the Uganda road. The shikarri who was in the lead discovered a magnificent lion looking round a bush, glaring inquiringly at the party.

Lord Delamere fixed his camera one hundred and fifty yards away and proceeded to focus the man-eater. The lion watched these proceedings with evident amazement, but allowed several photographs to be taken.

Then he strolled leisurely toward the photographer, who promptly decamped. After satisfying his curiosity about the instrument the lion walked leisurely away. Lord Delamere took several snapshots of him as he walked down the road.

On another occasion when they were photographing a huge rhinoceros at short range the animal charged and smashed the camera to matchwood.

The two numbers of the new book already published include remarkable photographs of tigers, lions, cheetahs, pumas, leopards, wildcats, some of them photographed as they were leisurely walking, others while lying down and others when hunting their food.

The literary matter is contributed by authorities. Mr. Selous, for instance, is said to know more about the wild game of Africa, especially lions, than anybody else, and the following article from his pen will be read with much interest:

By F. C. Selous.

WHEN, in the latter half of the seventeenth century Europeans first settled at the Cape of Good Hope, the lion's roar was probably to be heard almost nightly on the slopes of Table Mountain, since a quaint entry in the diary of Van Riebeck, the first Dutch Governor of the Cape, runs thus: "This night the lions roared as if they would take the fort by storm"—the said fort being situated on the site of the city now known as Cape Town.

At that date there can be little doubt that, excepting in the waterless deserts and the dense equatorial forests, lions roamed over the whole of the vast continent of Africa, from Cape Agulhas to the very shore of the Mediterranean Sea; nor was their range very seriously curtailed until the spread of European settlements in North and South Africa and the acquisition of firearms by the aboriginal inhabitants of many parts of the country, during the latter half of the nineteenth century, steadily denuded large areas of all wild game.

As the game vanished the lions disappeared, too; for, although at first they preyed to a large extent on the domestic flocks and herds which gradually replaced the wild denizens of nature, otherwise they would have become so numerous in the sparsely inhabited or altogether uninhabited parts of Africa that they would first have exterminated all the game on which they had been wont to prey and would then have had to starve or to have eaten one another.

But such a state of things has never been known to occur; and whenever Europeans have entered a previously unexplored and uninhabited tract of country in Africa, and have found it teeming with buffaloes, zebras and antelopes, they have always found lions in such districts very plentiful indeed, but never in such numbers as to seriously diminish the abundance of the once uninhabited plains. This practice brought them into conflict with the white colonists or native herdsmen, armed with weapons of precision, before whom they rapidly succumbed.

Increase of Lions.

To-day lions are still to be found wherever game exists in any quantity, and their numbers will be in proportion to those of the wild animals on which they prey.

The indefinite increase of lions must have been checked by some unknown law of game upon which they depended for food.

It is easy to understand that the increase of a herd of herbivorous animals would be regulated by the amount of the food supply available, as well as constantly checked by the attacks of the large carnivora, such as lions, leopards, cheetahs, hyenas and wild dogs; but I have never been able to comprehend what has kept within bounds the inordinate increase of lions and other carnivorous animals in countries where for ages past they have had an abundant food supply, and at the same time, having been almost entirely unmolested by human beings, have had no enemies. Perhaps such a state of things does not exist at the present day, but there are many parts of Africa where such conditions have existed from time immemorial up to within quite recent years.

Since lions were once to be found over the greater portion of the vast continent of Africa it is self evident that these animals are able to accommodate themselves to great variations of climate and surroundings, and I myself have met with them close to the sea, in the hot and sultry coast lands of southeast Africa, on the high plateau of Mashonaland, where at an altitude of 6000 feet above sea level the winter nights are cold and frosty; among the stony hills to the east of the Victoria Falls of the Zambesi, and in the swamps of the Chobi.

In the great reed beds of the latter river a certain number of lions appear to live constantly, preying on buffalos and lechwe antelopes. I often heard them roaring at night in these swamps and I once saw two big male lions wading slowly across an open space between two beds of reeds, in water nearly a foot in depth.

Although there are great individual differences in lions as regards size, general color of coat and, more particularly, in the length, color and profuseness of the mane with which the males are adorned, yet as these differences occur in every part of Africa where lions are met with, and since constant varieties, with one fixed type of mane, living by themselves and not interbreeding with other varieties, do not exist anywhere, modern zoologists are, I think, now agreed that there is only one species of lion, since in any large series of wild lion skins made in any particular district of Africa or Asia every gradation will be found between the finest maned specimens and those which are destitute of any mane at all. Several local races have, however, been recently described by German writers.

In the hot and steaming coast lands of tropical Africa lions usually have short manes, and never, I believe, attain the long, silky black manes sometimes met with on the high plateaux of the interior. However, there is, I believe, no part of Africa where all or even the majority of male lions carry heavy manes, the long hair of which does not, as a rule, cover more than the neck and chest, with a tag of varying length and thickness extending from the back of the neck to between the shoulder-blades.

Lions with very full black manes, covering the whole shoulders, are rare anywhere, but more likely to be encountered on the high plateaux, where the winter nights are extremely cold, than anywhere else. In such cases, in addition to the tufts of hair always found on the elbows and in the armpits of lions with fair-sized manes, there will be large tufts of hair in each flank, just where the thighs join the belly. But I have never yet seen the skin of a lion shot within the last thirty years with the whole belly covered with long, thick hair, as may constantly be observed in lions kept in captivity in the menageries of Europe.

There is, however, some evidence to show that when lions existed on the high plains of the Cape Colony and the Orange River Colony, where the winter nights are much colder than in the countries farther north where lions may still be encountered, certain individuals of the species developed a growth of long hair all over the belly, as well as an extraordinary luxuriance of mane on the neck and shoulders.

From the foregoing remarks it will be seen that wild animals, having as a rule much less luxuriant manes than many examples of their kind to be seen in European menageries, are ordinarily not so majestic and dignified in appearance as many of their caged relatives. On the other hand, the wild lion is a much more alert and active animal than a menagerie specimen, and when in good condition is far better built and more powerful looking, being free from all appearance of lankiness and weakness in the legs, and having strong, well formed hind quarters.

The eyes of the menagerie lion, too, look brown and usually sleepy, while those of the wild animal are yellow and extraordinarily luminous, even after death. When wounded and standing at bay, with head held low between his shoulders, growling hoarsely and with twitching tail, even if he is not near enough to be observed very closely, a lion looks a very savage and dangerous animal; but should he be wounded in such a way as to admit of a near approach—perhaps by a shot that has paralyzed his hind quarters—his flaming eyes will seem to throw out sparks of living fire.

Little Danger in Daytime.

Speaking generally, there is little or no danger in meeting a lion or lions in the daytime. Even in parts of the country where firearms are unknown, and where the natives seldom or never interfere with them, these animals seem to have an instinctive fear of man, and even when encountered at the carcass of an animal freshly killed, and at a time when they may be supposed to be hungry, they will almost invariably retreat before the unwelcome presence, sometimes slowly and sulkily, but in districts where much hunting with firearms has been going on at a very rapid pace.

However, I have known of two cases of Europeans mounted on horseback having been attacked by lions in broad daylight, and Dr. Livingstone mentions a third. In one of the instances which came within my own knowledge a lion sprang at a Boer hunter as he was riding slowly along, carrying an elephant gun in his right hand and followed by a string of natives on foot. The lion attacked from the left side and with its right paw seized my friend from behind by the right side of his face and neck, inflicting deep gashes with its sharp claws, one of which cut right through his cheek and tore out one of his teeth. My friend was pulled from his horse, but clutching the loosely girthed saddle tightly with his knee, it was twisted round under the horse's belly before he fell to the ground. Instead of following up its success the lion, probably scared by the shouting of the Kaffirs, trotted away for a short distance, and then turned and stood looking at the dismounted hunter, who, never having lost his presence of mind, immediately shot it dead with his heavy old muzzle loading elephant gun.

Besides these three instances of Europeans having been attacked in the daytime by lions I have known of a certain number of natives having been killed in broad daylight. Such incidents are, however, by no means every-day occurrences, and, speaking generally, it may be said that the risk of molestation by lions in Africa during the daylight is very small. It is by night that lions roam abroad with stealthy step in search of prey and at such times they are often, when hungry, incredibly bold and daring. I have known them upon several occasions to enter a hunter's camp, and, regardless of fires, to seize oxen and horses and human beings.

During the year following the first occupation of Mashonaland, in 1890, a great deal of damage was done by lions, which could not resist the attractions of the settlers' livestock. For the first few months I kept as accurate account as I could of the number of horses, donkeys, oxen, goats and pigs which were killed by lions, and it soon mounted up to over 200 head. During the same time several white men were also mauled by lions, and one unfortunate man named Teale was dragged from beneath the cart where he was sleeping by the side of a native driver and at once killed and eaten. Several of the horses were killed inside rough shelters serving as stables.

In the following year (1891) over 100 pigs were killed in one night by a single lioness. These pigs were in a series of pens, separated one from another, but all under one low thatched roof. The lioness forced her way in between two poles and apparently was unable, after having satisfied her hunger, to find her way out again, and, becoming angry and frightened, wandered backward and forward through the pens, killing almost all the pigs, each one with a bite at the back of the head or neck. This lioness, which had only eaten portions of two young pigs, made her escape before daylight, but was killed with a set gun the next night by the owner of the pigs.

Old Lions Like Human Diet.

When lions grow old they are always liable to become man-eaters. Finding their strength failing them and being no longer able to hunt and pull down large antelopes or zebras, they are driven by hunger to killing small animals, such as porcupines and even tortoises; or they may visit a native village and catch a goat or kill a child or woman going for water; and, finding a human being a very easy animal to catch and kill, an old lion which has once tasted human flesh will, in all probability, continue to be a man-eater until he is killed.

On this subject, in his "Missionary Travels," Dr. Livingston says: "A man-eater is invariably an old lion, and when he overcomes his fear of man so far as to come to the village for goats the people remark, 'His teeth are worn; he will soon kill men.' They at once acknowledge the necessity of instant action and turn out to kill him." It is the promptness with which measures are taken by the greater part of the natives of Southern Africa to put an end to any lion which may take to eating men that prevents these animals, as a rule, from becoming the formidable pests which man-eating tigers appear to be in parts of India.

But man-eating lions in Africa are not invariably old animals. One which killed thirty-seven human beings in 1887, on the Majili River, to the northwest of the Victoria Falls of the Zambesi, was, when at last killed, found to be an animal in the prime of life, while the celebrated man-eaters of the Tsavo River, in East Africa, were also apparently strong, healthy animals. These two man-eating lions caused such consternation among the Indian workers on the Uganda River Railway that the work of construction was considerably retarded, the helpless coolies refusing to remain any longer in a country where they were liable to be eaten any night by a man-eating lion. Both these lions were at last shot by one of the engineers on the railway (J. H. Patterson), but not before they had killed and devoured twenty-eight Indian coolies and an unknown number of native Africans.

THE MONSTROUS SPIDERS OF COLORADO.

PROFESSOR E. T. LAUGHTON has returned to his home in New York after spending the winter in exploring the mountains near Buena Vista, Colo., and investigating the habits of a species of monster spiders found in the middle Cottonwood Pass, says the Washington Star.

Little definite is known of these spiders, but around them has been gathered a mass of Indian legend and prospectors' yarns that rival those of Munchausen. Many years ago these spiders lived in a cave easily reached by tourists. It was in a valley two miles northeast from Harvard City, then a thriving mining camp eight miles west of Buena Vista.

In 1880, a man named Shultz cut his way into the spiders' den. He did not return, and a week later a searching party found his body partly buried in the spiders' cave under a mass of fallen rock. As it would have required considerable timbering at an expense of several hundred dollars to recover the body, and as the man had no known relatives, it was left undisturbed. Shultz's skeleton is still in the cave, but the spiders have found another home further back in the mountains.

Some of the tales told about these spiders are given in an old letter which has just been found in Buena Vista. It says:

"A short distance out of Buena Vista there is a cave swarming with spiders of immense size, some of them having legs four inches in length and bodies as large as that of a canary bird. The cave was discovered in 1868 and was often visited by pioneers on their way to California, who obtained their webs for use in the place of thread.

"Early and late the cave resounds with a buzzing sound emitted by the spiders as they weave their webs. The webs were tested in 1871 and found to be composed of silk of the finest quality. The skins of the spiders make good gloves, as they are pliable and require no tanning.

"A number were captured and tamed, and manifested great affection for all members of the family. They were far superior to a cat in exterminating rats and mice, following their prey into the holes in the walls and ceilings. One spider, kept as a pet by a Buena Vista lady, used to stay all night at the head of her bed acting as a sentinel."

The cultivation of coco, says a writer in the Scientific American, is at present an inviting agricultural pursuit in Trinidad and parts of Venezuela. The coco tree cannot withstand strong sunshine, and the young plants have to be shaded by banana or plaintain trees, and later, when they attain their growth, by tall trees known as "immortels," or the "mother of the coco." These make a kind of canopy over the entire plantation. The fruit of the coco tree is a pod, resembling a cucumber, and growing on the trunk, or large branches, where it "looks as though it were artifically attached." The seeds are like large, thick Lima beans embedded in pulp. These form the coco beans of commerce. The processes of curing and drying require much attention.