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ILLUSTRATED

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Lye, chloride of lime or blue vitriol water, crude carbolic acid, or any kind of disinfectant may be used.

Keep flies away from the kitchen. Keep flies out of the dining-room and away from the sick, especially from those ill with contagious diseases.

Screen all food. Apply this rule not only to food prepared at home, but to foodstuffs offered for sale, and especially fruits, salads, and all other things which do not require to be cooked.

Prevent consumptives from expectorating where flies can feed upon it.

#### HOW TO KILL FLIES

To clear rooms of flies carbolic acid may be used as follows: Heat a shovel or any similar article and drop thereon 20 drops of carbolic acid. The vapor kills the flies.

A cheap and perfectly reliable fly poison, one which is not dangerous to

human life, is bichromate of potash in solution. Dissolve one dram, which can be bought at any drug-store, in two ounces of water, and add a little sugar. Put some of this solution in shallow dishes and distribute them about the house.

Sticky fly-paper, traps, and liquid poisons are among the things to use in killing flies, but the latest, cheapest, and best is a solution of formalin or formaldehyde in water. A spoonful of this liquid put into a quarter of a pint of water and exposed in the room will be enough to kill all the flies.

To quickly clear the room where there are many flies, burn pyrethrum powder in the room. This stupefies the flies, when they may be swept up and burned.

If there are flies in the dining-room of your hotel, restaurant, or boarding-house, complain to the proprietor that the premises are not clean.

## CAMERA ADVENTURES IN THE AFRICAN WILDS

*Photographs by A. Radclyffe Dugmore. Copyright, 1910, by Doubleday, Page & Co.*

**T**O stand before a charging rhinoceros, holding a fifteen-pound camera, and to wait deliberately until the beast is only a few feet away before releasing the shutter, knowing all the while that only an unerring bullet from his companion can turn aside the leviathan and save the photographer from being tossed 15 yards, is surely as great a test of physical and moral courage as any soldier would like to undergo. The volume which contains Mr Dugmore's photographs of wild game in Africa and also his experiences in obtaining these photographs, is one of the most thrilling, inspiring, and instructive books published in many years.\*

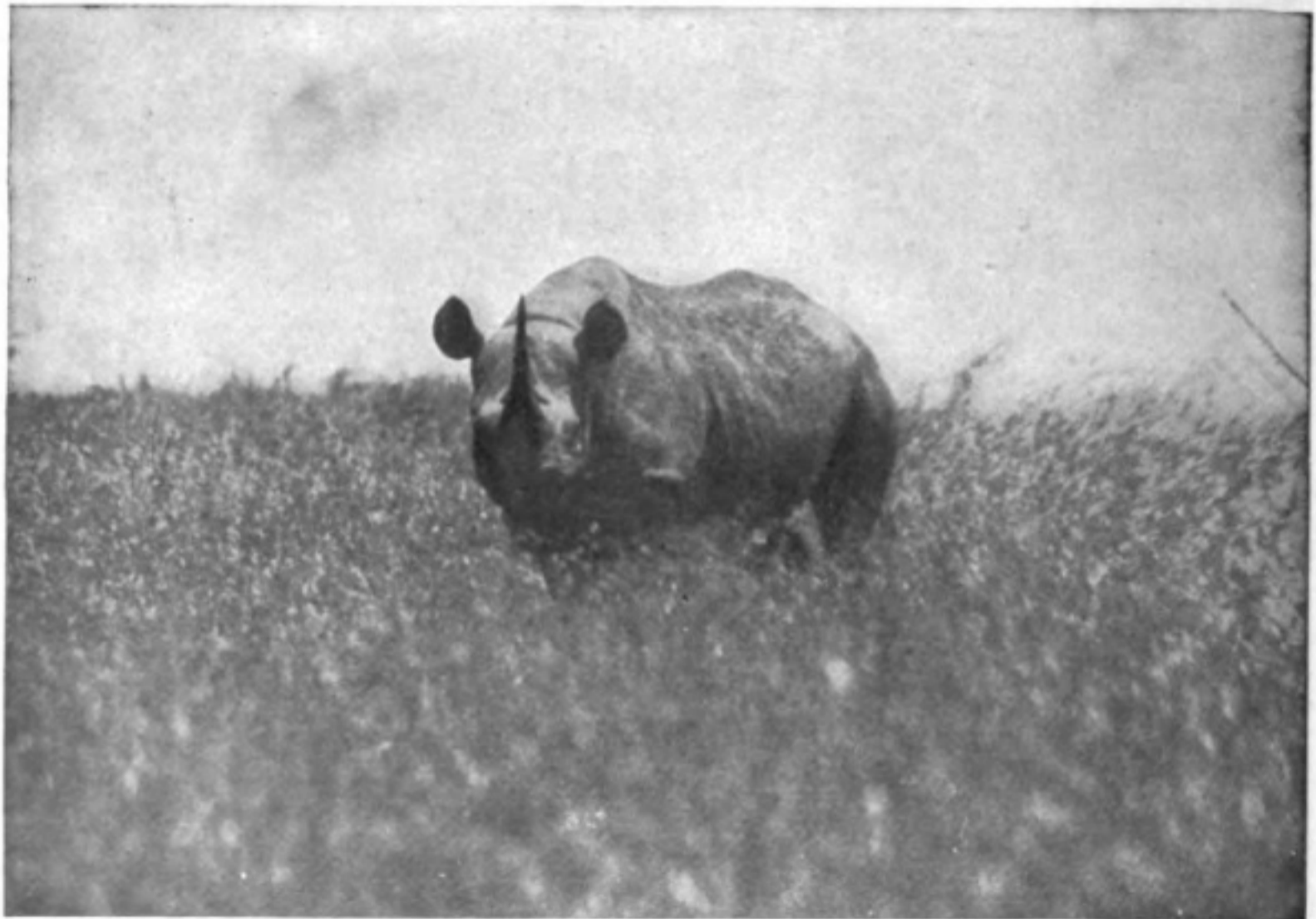
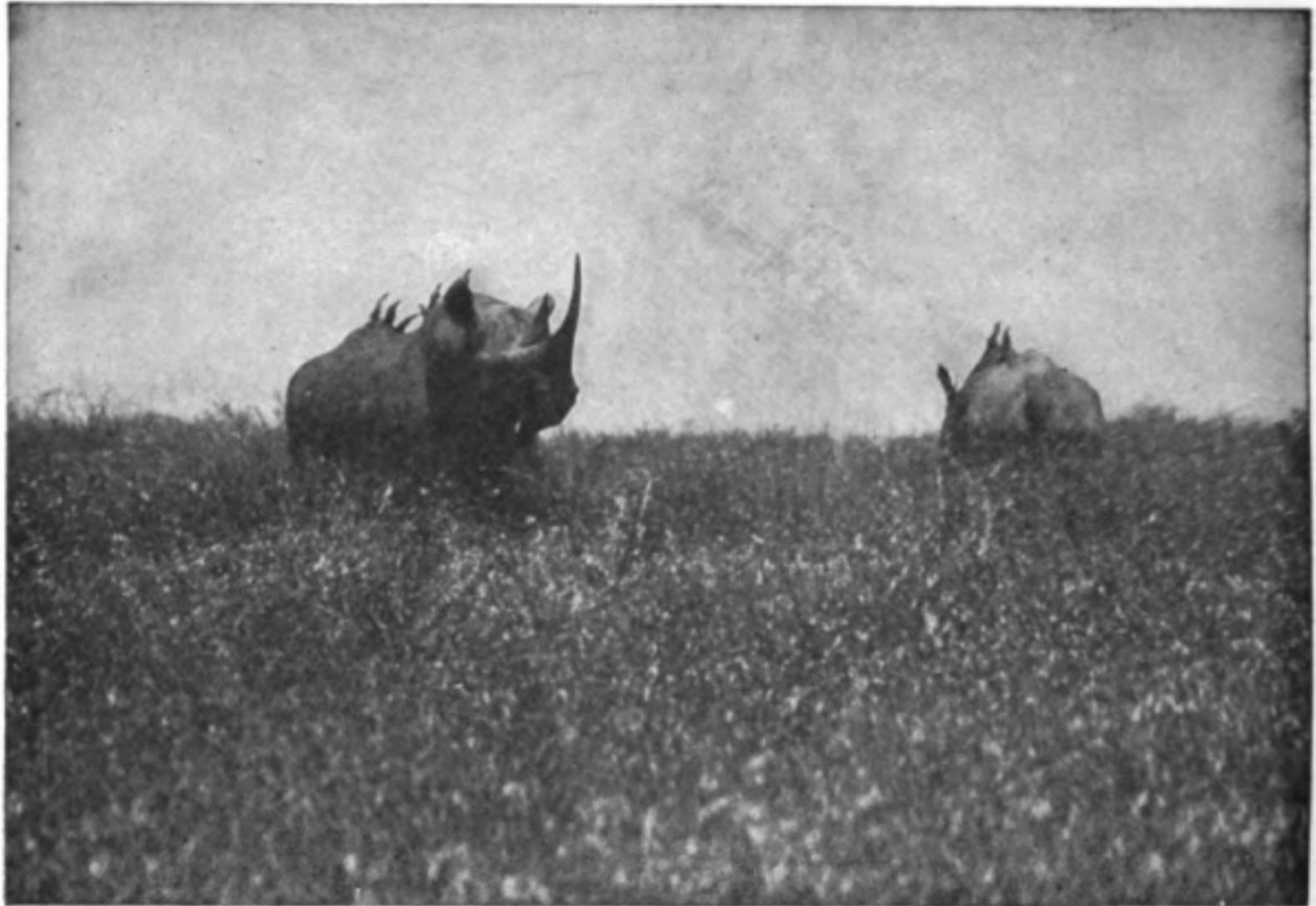
Through the courtesy of Messrs Doubleday, Page & Company, the NATIONAL GEOGRAPHIC MAGAZINE is able to reprint

\* "Camera Adventures in the African Wilds." A. Radclyffe Dugmore, pp. 250, with 140 photos from life. 8½ x 11 inches. Doubleday, Page & Co., 1910. \$6.00.

eleven of the one hundred and forty remarkable photographs given to the public by Mr Dugmore. The photographs are far more wonderful and beautiful than those by the German, C. G. Schillings, which excited so much enthusiasm several years ago, and which were described and illustrated in this magazine in August, 1907.

Readers will probably find an interesting debate in the question whether photographing rhinos or photographing lions by flashlight is the more nerve-racking occupation.

Mr Dugmore secured his flashlights of lions in the following manner: He built a small hut of branches, open on one side. Outside the hut he arranged the flashlight and three cameras focused on a dead carcass, a zebra or hartebeest, a few feet away. At night he took his position in the hut and waited for the lions to appear.



#### RHINOS FEEDING

Note the birds on their backs. These birds eat the ticks, which infest the beasts. They also act as sentinels, by their fluttering warning their companions of approaching enemies

THE LOWER PICTURE IS OF ONE OF THE SAME PAIR IN THE ACT OF CHARGING

The horn is about 24 inches long, and is composed of hair or bristles closely pressed. A rhinoceros' horn's only value is as a trophy, though some are sent to China, where they are pulverized and sold for medicinal purposes.



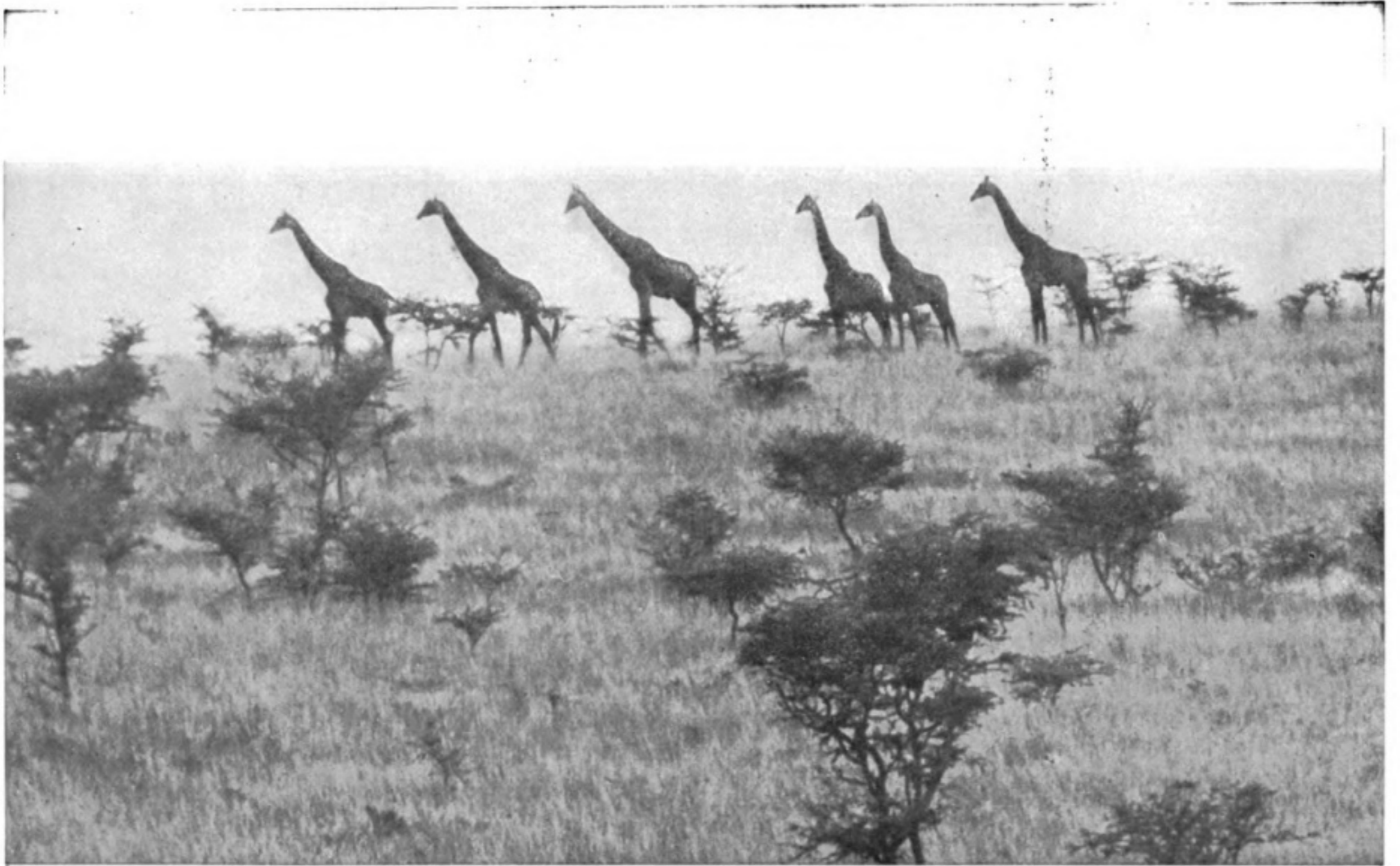
RHINOCEROS PHOTOGRAPHED AT A DISTANCE OF FIFTEEN YARDS WHEN ACTUALLY  
CHARGING THE AUTHOR AND HIS COMPANION

As soon as the exposure was made a well-placed shot from Mr. Dugmore's companion turned  
the charging beast



COKE'S HARTEBEEST: THIS PICTURE WILL GIVE SOME IDEA OF THE ABUNDANCE OF THE GAME IN INLAND BRITISH EAST AFRICA  
LARGE HERD OF COKE'S HARTEBEEST ON THEIR WAY TO WATER

The people of Nairobi, a fair-sized town and headquarters of the railroad and government, have been compelled to build a double row of fencing around the town in order to keep out the great herds of game. The fence is, however, often broken and a zebra or hartebeest galloping through the streets is a common sight.



HERD OF GIRAFFE PHOTOGRAPHED AT A DISTANCE OF ABOUT 375 YARDS WITH THE TELEPHOTO (ENLARGED)



IMMATURE HIPPOPOTAMUS AND A CROCODILE

The birds seen on the animals' backs eat the parasites—leeches and others—which infest the coarse skin (telephoto made on the Tana River)

"For about two hours I had been straining both eyes and ears, when suddenly, to my astonishment, a huge lion appeared. He was standing close to the zebra when I first discovered him, and I could not understand how he could possibly have come without being seen or heard. Yet there he stood, the king of beasts, the most feared animal in Africa, not twelve yards away."

The lions weigh on an average over five hundred pounds each, and yet their approach was so silent and stealthy that Dugmore always failed to detect their coming until the tearing of flesh and breaking of bones of the bait proclaimed their arrival.

By pressing the electric button the flash was then fired, but the lions would only retreat for one hundred or two hundred yards, where they would make the night hideous with their roaring. It was then the pleasant duty of the photographer to emerge from the protection of his hut, reload his three cameras and the flashlight apparatus, while the chorus of the lions continued. On one night Mr Dugmore secured photographs of twelve different lions.

Mr Dugmore speaks most enthusiastically of the wise precautions taken by the British government to prevent the extinction of game. In addition to the regulations forbidding the shooting of game along the railways, the authorities have set aside about 10,000 square miles as a reserve in which no shooting is allowed. The abundance of game in the free-zone is simply extraordinary.

"We could see countless herds of animals," hartebeest and gazelles, zebra, elands, etc. "Our excitement reached its highest pitch when we discovered a large giraffe standing complacently, scarcely one hundred and fifty yards from the snorting train. How different the huge creature looked in his natural state from those we had seen in zoos or menageries! How different the deep, rich coloring and the dark, well-defined markings from the faded coat of the beast in captivity! This splendid animal, towering above the small trees, after watching

us for a few seconds, ambled away to what he considered a safe distance."

The most unpopular of all the animals in British East Africa, says Mr Dugmore, are the zebras.

"They looked like painted ponies with their strongly defined black stripes, and were beautiful beyond words. It is curious how they appeal to the new arrival, while, if you speak to the settler of the zebra as being even worthy of notice, he smiles sadly, and commences a torrent of abuse against what he considers one of the worst pests of the country. They would like to see them wiped off the face of the earth, and the handsome creatures are killed in great numbers to be used as food for the native workmen, or even for the dogs. And yet they can scarcely be said to be decreasing except in very restricted areas.

"The cause for this common dislike of the zebra is his objectionable habit of disregarding fences. A herd will stampede, and ten or twenty panels of a barbed wire fence are down like a flash, and then, as likely as not, they will wheel round and repeat the operation at another point. In places where fences are measurable by miles, it is of the most importance that they should be kept in a good state of repair. The destruction of a few panels may mean immense damage to crops, and perhaps the loss of valuable ostriches; hence the settlers' lack of love for the cantankerous, though beautiful, zebra.

"So far no practical use for the animal has been discovered. They are not easily tamed and, generally speaking, are extremely bad-tempered, so that they are most difficult to break or handle, and it is almost certain that they are not worth the trouble, owing to their lack of stamina. Contrary to popular opinion, they are not very fast, and have no staying power."

The huge and clumsy hippo conceals in its immense mouth teeth which sometimes attain a length of over five feet, and yet this gigantic pig eats only grass.

"The beast is frequently shot for its ivory, which is quite valuable. Then,





A GROUP OF BUFFALO RESTING AMONG DENSE BRUSH

This telephoto was made when the sun was very low and the wind blowing with such vigor that a time exposure was impossible, hence the blackness of the shadows, where the buffalo can scarcely be detected



A LIONESS ABOUT TO COMMENCE HER DINNER: THE HARTEBEEEST HAD BEEN KILLED BY LIONS DURING THE PREVIOUS NIGHT

This flashlight was made when the animal was ten yards from the author



THE SAME LION AS SHOWN ON THE OPPOSITE PAGE, BUT PHOTOGRAPHED FROM A DIFFERENT POSITION

Zebra is the favorite meat of the lion



FLASHLIGHT PICTURE OF THE KING OF BEASTS

At the moment the photograph was made the lion was twelve yards from the author and his companion, who were on the ground beneath some thorn bush

too, their meat is probably more appreciated than that of any other African animal, the immense quantities of fat being greatly relished.

"Agriculture and the hippopotamus do not go hand in hand, as a single hippopotamus will in one night destroy acres of crops; consequently the animals are not much loved by either the native or European farmers.

"The hippopotamus is usually a nocturnal feeder. He spends most of the day in the water, though he may be frequently seen on rocks or sand bars enjoying his sun-bath. As evening approaches he becomes restless, and usually soon after the sun sets he begins to think of dinner. At this time the herd separates, each individual going, I believe, to his own favorite feeding-ground. Whether they feed every night I am not quite sure, for I have noticed certain individuals keeping to a pool all night, while it is not at all an uncommon thing to see them at night asleep on sand bars.

"Certain landing places are used regularly and, judging from the way the banks are worn down and rocks polished, it would seem as though these places have served for many centuries. How far they will go from their day pool is hard to say, but there is every reason to believe that they will sometimes travel ten or fifteen miles or more before landing. Then when they are ashore they will often go a long way before finding the necessary supply of the grass which forms their food.

"It is scarcely credible that such large beasts (for a full-grown bull will probably weigh over three tons) can find enough nourishment in grass, but of course in proportion to their size they do not require nearly as much food as animals of more nervous temperament and active habits of life."

In addition to the lions, rhinos, hippos, and giraffes, most interesting are Mr Dugmore's photographs and descriptions of the filthy spotted hyena, of hartebeests, tiny dik-dik, elands, warthogs, gazelles, oryx, impala, waterbuck, Grevy's zebra, vultures, marabou storks,

and other animals, and of the extravagant vegetation.

Several entertaining chapters are devoted to an account of the little-known country around Meru and the native dances.

"The women do most of the heavy work, and it is no uncommon thing to see a girl of perhaps twelve or thirteen carrying a seventy or eighty pound load of firewood on her back, with a bag of corn or a huge gourd of water on the top of it. These are hung by a strap from the head, which is usually clean-shaven. In front, more often than not, hangs a baby, which complacently sucks at its mother's breast as she walks along. The father marches in front, carrying no more than his spear and knob stick, his body smeared with a sickening mess of red earth and grease.

"The costume of the men is usually a red blanket or a brown cotton cloth hung from one shoulder, while the neck, wrists, arms, ankles, and below the knees are decorated with beautiful little beaded bands of wire. Frequently they dispense with covering of any kind. The women wear a short skirt of leather with or without bead work. It is fastened below the breasts and parts in front, so as to leave the knees free.

"Heavy wire ornaments are usually wound around the legs, arms, and neck, and sometimes immense waistbands or beads and cowries are worn. Ear ornaments are used by both sexes, the women preferring clusters of large beaded rings, or heavy wire. In both cases the lobe of the ear is cut and stretched enormously by means of wooden or bone discs.

"It is curious that the women have the head clean-shaven, or nearly so, while the men do their hair, or wool, in most fanciful ways, usually filling the fine braids with a mixture of their favorite red earth and grease. The people are chiefly agriculturists, their live stock consisting almost entirely of goats, sheep, and poultry. The sheep are rather small, and are the fat-tailed variety; the poultry are also small, and lay eggs not much larger than those of the bantam."