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"I dedicate this book to the Maharaja of Nepal in appreciation of his kindness and assistance on the various shoots I have attended."

BEHIND THE LENS IN TIGERLAND

ARTHUR MUSSELWHITE

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BEHIND THE LENS IN TIGERLAND

Introduction

The collection of pictures brought together in this book represent fifteen years' visual study of big game in India. The circumstances under which they were secured are explained in the text. I have added guides to camera exposures, types of film, cameras used, etc.

Woven into the narrative are the experiences of a Photographer in intriguing situations when frequently a moment seemed an eternity. In the following pages I hope the reader will recognise true stories of the many vast forests which stretch over the sub-continent of India.

I have sought to recall certain old battles; the preparation, the expectancy and the sudden sight of your game; of twilight when the sun burns down and the dusk brings back the forest night. If I can recapture for the reader some of the thrills, and a touch of the wonder and magic of the Indian jungle, then my efforts will not have been in vain.



An interesting group including the Maharaja of Nepal, Sir Frederick O'Connor, Mr. Vernay the well-known Naturalist, prominent Nepal Generals, some of the Maharaja's children and the Author with five full-grown tigers found together in one ring in Western Nepal Terai.

The Habits of the Tiger

THE tiger is such a fascinating animal that anything which can be added to the material already published about him is always welcome. This chapter does not pretend to be scientific, but is a brief synopsis of the personal knowledge and experiences of the Author.

Geographical distribution.—Although the tiger is essentially an Indian animal it is found over the greater part of Asia. It is generally believed to have entered India via Nepal and Bhutan: it is still found in the Caucasus, Mongolia, North and South China, the Malay Peninsula, the islands of Java, Sumatra and Bali, and Burma. It is not found in Ceylon, and there is no satisfactory explanation for this although tigers are good swimmers. I have frequently seen them swimming in the big rivers of India. During floods on the Brahmaputra, a tiger exhausted from swimming in the river clambered on a raft; man and beast called a truce in face of the common danger, the tiger keeping to his corner and the men, women and children to the other side. After the waters had subsided and the tiger had recovered from his exhaustion, he returned to the water and swam towards the nearest land.

Tigers often crossed from the mainland to the island of Singapore. How else have they reached the many islands in the Federated Malay States? And yet Ceylon which contains carnivora, elephants and snakes and other wild life common to

India has no tigers although separated from the Indian mainland only by the few miles of water which are known as the Balk Straits.

In India, distribution is fairly widespread. The tiger is found in the swampy marshes of the Sunderbans, in the deltaic part of Bengal, in the Terai forests, the Western Ghats, the forests of Mysore, Travancore, the Orissa States, Bastar, the Central Provinces as well as the States of Surguja, Rewa, Korea and Gwalior.

Derivation of name.—The word "tiger" seems to have been derived from the Iranian tongue which is a pure Aryan language: the word "tighri" meaning "an arrow" is an old Persian word and may be associated with the River Tigris which again, being a fast flowing river, signifies "as swift as a Javelin". The Greeks used the word "tigris" and it seems to be the name common in most languages except in Hindi where it is called "Bagh".

The Sanskrit word is "Vyaghra". The word "Bagh" or "Wagh" is often found in the names of places associated with the tiger, e.g., "Waghheri" which means "Tiger Valley", "Waghholi" or "Waghdoli" which means "the place of tiger", "Hazaribagh" which means "a thousand tigers".

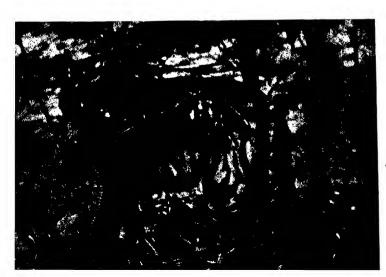
Breeding.—The mating period in Northern India is from September to November. No more fascinating sound can be heard in the Indian jungles than the calling of a tigress to her mate, when the call is answered away in the distance and the "woof" comes nearer and nearer. Pairs of tigers are often found living together, but generally speaking the tiger is a solitary animal.



Five tiger cubs found in one ring.

Exposure: Sunlight. 1 | 100
F 8. No filter.

Tiger cubs will remain with the mother until they are fully grown, which time is usually about two years, provided that game in the area is sufficient to provide for the family.



A wanderer after two years.

Exposure: Enlarged from Cine film taken with 2" telephoto lens. It is said that the tigress will kill off some of her cubs should more than two or three be born. This may be true in a jungle which is scarce of game, but it is not the case where man has refrained from interfering with the balance of nature.

Difference between tiger and lion.—Tigers and lions do not inhabit the same jungles. The lion prefers a more open forest and drier climate, while the tiger is most intolerant of the heat and this may be the reason for its hunting at night. Contrary to general belief, the eyes do not shine in the darkness, but appear to do so by gathered reflected light.

Another reason appears to be that the monkey and the peacock have such a keen eye for the approach of the tiger that its movements would sure to be seen in the daytime.

Whether the lion and tiger have a common origin it is hard to tell, but the skull and skeleton of both animals are so similar that it takes the eye of an expert to tell the difference. Some tigers have the mane of the lion well developed and in the accompanying photograph (page 7) we see a maned tiger found in Central Nepal. Although the lion was widespread over India in the past his choice of habitation is now found only in the Junagadh State in Western India where he is strictly preserved in his last remaining stronghold.

Whereas a tiger will hunt with the utmost secrecy and caution (Forest Officers have lived for years in the forest and never seen a tiger) a lion is bolder. He will expose himself to danger with less regard for his safety than a tiger, who will never come up to his kill without first satisfying himself of the safety of approach.

The late Maharaja of Gwalior released some lions in his state and these were said to have moved to other parts of India.



A maned tiger. The mane shows well beneath the ear; found only in certain parts of Nepal. Exposure: Sunight. 1|100 F 8. No filter.

One was seen near the Kumaon Hills and yet another near Dehri-on-Sone on the Calcutta-Bombay trunk road. It is evident they could not compete with the tiger in his own domain and were either slain because of the destruction wrought in the state or perished in their fight for existence.

The lion is of a sandy colour whereas the tiger has the lighter colours. The tiger is the older animal of the two by reason of the colour and stripes which tend to predominate in the hybrid. The male of the lion-tiger hybrid, known as the Taigon, was bred by the Jam Saheb of Nawanagar State; it lived in the Regent Park Zoo for eight years and looked more tigrene than lion.

The hybrid between tiger and lioness bred in Edinburgh shows more of the tiger; it is now in the Natural History Museum at South Kensington.

Size.—In olden literature tigers measured 12 to 15 feet; while we need not doubt the veracity of the old-time sportsmen, it must be stated that no tiger to-day will very much exceed 10 feet, while tigresses are invariably under 10 feet. The male is heavier in the body with a bulkier head. The accompanying photograph (page 9) shows a tiger 10 feet 2 inches between the pegs, and if the width of the paw is examined it will be seen to be an exceptionally big tiger. It is in fact the largest tiger which the writer has seen personally. Skins when dried can be stretched to practically any desired length, which perhaps accounts for the phenomenal tigers of former days. Tigers are measured at times round the curves, but the strictest way to measure is as mentioned above, viz., between the pegs, i.e., from the tip of the nose to the tip of the tail.

One of the biggest tigers ever shot, showing the enormous neck and girth of the front paw.

Exposure: Flashbulb with synchronised camera. F 4.



The tiger is the embodiment of symmetry and grace; with its powerful jaws it is not only able to seize its prey but also to hold and to kill,



GENL. BAHADUR (left) the first Nepalese Minister in England and GENL. BABER measuring a large man-eater which taped 10 feet 2 inches.

Exposure: Sunlight, 1|100 F 8. No filter. Size is also determined by locale. It will be found that in places where shooting is indiscriminate, tigers do not grow very large. It is doubtful if they are allowed to reach maturity. Where game is plentiful and unharried, tigers will naturally be bulkier, live to a greater age and be more prolific. This may account for the bigger tiger referred to in old shikar stories, where the hunter relied on his bow and arrow and the destruction of game was small by comparison with these days of the modern lethal weapon.

Age.—Tigers if left to die naturally will live from 12 to 15 years. It is when they become incapacitated in old age by loss of teeth and claws that they turn man-eaters, unless they come from a race of man-eaters or where game is scarce.

The Manchurian tiger by reason of the colder climate lives for 20 years or more.

Tigers when confined in captivity seldom exceed the age of eight years. Whereas a young tiger will change its hunting ground frequently, the older a tiger gets the less inclined it is to move away from the district and will contest its domain with all the cunning of mature years.

Ferocity.—It is true that certain districts breed fiercer tigers than others. For instance those in the Morung District of the Eastern Terai, approaching Darjeeling District, are fiercer than those in the West, because cultivation and hunting is depriving them of their natural home. But if a tiger is wounded or cornered it will show the utmost courage and ferocity, fighting to the very last against insuperable odds. The tiger is the Lord of the Indian jungles and every animal of the forest will flee at his approach. Although this is generally true, tigers vary as much in their reactions to circumstances as, shall we say, dogs. I remember a pair of



The old method of hunting with a bow and arrow. Exposure: 1|50 F 4. No filter.

tigers were ringed. The male charged out at the hunters without provocation, while his mate slunk away into the undergrowth eluding the beating elephants and making the most of all available cover. In fact it is generally the rule that the tiger will endeavour to elude his pursuers only demonstrating and showing defiance when his retreat is cut off. A tigress defending her cubs will without exception fight to the last.

The story which follows illustrates the magnificent courage of a tigress and shows the ferocity of the animal in defence of her young.

A JUNGLE EPIC-TIGER v. ELEPHANT.

Wherever men gather and talk of brave deeds, so tales of the hunt, of the ways of wild animals, of hairbreadth escapes, of stirring adventure and peril hold the fascination of young and old in all lands. The following is such a story.

The shikaris had warned us that a particularly dangerous tigress had been discovered some five miles away; she had attacked the shikaris, who went to investigate the kill, as well as every elephant that approached the vicinity. Cubs were suspected and everything pointed to some good sport. Care was necessary in forming the ring, and the point of rendezvous was made at a greater distance than usual from the position of the kill so as not to disturb the tigress. The head shikari was a Nepalese of the finest type (his photograph is shown on page 13). Cool and unpretentious, he handled the 300 elephants and mahouts with the skill of a general. The gentle hush that comes at noon in the forest seemed pregnant with meaning. Birds fitfully flew from tree to tree at our intrusion on their peace, while langur monkeys jumped about muttering and screeching. The ponderous line



The head shikari was a Nepalese of the finest type; cool and unpretentious.

Exposure: 4 p.m. 1|50 F 5.6 with green filter and portrait attachment.



A Nepalese girl. Women all over the world delight in adornment, but one wonders if this nose ring would not cramp the style of her eager lover.

Exposure: As above.

of elephants moved with stealth and precision in two lines bearing away into the forest. After a lapse of about half an hour the director of operations was satisfied that all was set and ready. At a pre-arranged signal the beasts turned inwards, gradually closing in to form the living ring which man had made against the animals of the jungle. I took up a position which enabled me to look down on most of the proceedings, and at a point where I thought the animal might break through. Amongst the fighting elephants was a famous old warrior "Bikram Prasad". It was said that this elephant would attack tiger on sight, but knowing the nervousness of elephants I doubted this unusual statement. "Bikram Prasad" with five or six other fighting elephants went into the ring and within a few minutes had found their quarry. Then out into the open sprang the beast, striped with a firm orange and black. Conscious of danger she turned to cross the ring and break. Cheated of her afternoon siesta, with her ears set back and eves flashing emerald and her curling tail gently lashing the ground she looked the very embodiment of evil-dangerously aroused, as we were to discover, for in a second she charged everything at sight, demoralising mahouts and the elephants sent in after her. She first mauled one or two elephants and up to then had so far given no opportunity for a shot from a rifle. From my point of vantage she prowled round many times and gave me some good opportunities with my telephoto lens. Once or twice I felt she would charge my elephant, but just in the nick of time, her attention was disturbed by the other fighting elephants. "Bikram Prasad" was the only elephant that would approach within real fighting distance, and then we witnessed one of the most remarkable contests in the history of shikar. The tigress. we found, was defending five cubs and was by now thoroughly



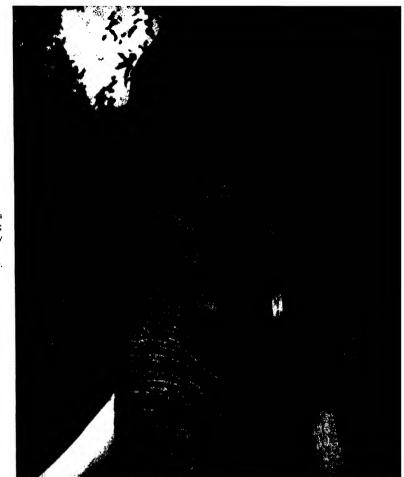
"The point of rendezvous."

Exposure: 1|100 F 4 with

two times filter.

Two lines converge into a V. The method of ringing in the deep forests of Nepal is both clever and ingenious. By this means the animal is encircled and any means of escape is cut off. Here we see the ponderous line of clephants moving with stealth and precision into the forest.

aroused at the interloper. "Bikram Prasad" had a heart as big as himself. He had been previously mauled; was one of the biggest elephants I have seen, and was also not in the best of tempers. The tigress saw him and charged. "Bikram Prasad" also stepped forward, and as the tigress sprang on his head the elephant twisted his trunk round her body and threw her into the air 20 feet high. This is illustrated by pictures taken from the film I made of these breath-taking moments. The fight lasted for perhaps an hour, the mahout doing his utmost to restrain his charge, beating it over the head with his "kukri" to try and control its movements. How he survived this savagery is even now beyond my comprehension. One minute I saw him on the elephant's head, down in the grass as the elephant tried to fix the tigress with his tusks; the next he was holding on grimly with his feet as charge after charge took place. Eventually the tigress attempted to spring on the back of the elephant but "Bikram Prasad" got his heel into her and broke her spine at last. A shot from a rifle put an end to her suffering. Such ferocity and courage against overwhelming odds I have never seen. I had witnessed a conflict rarely seen by man. Afterwards came the excitement of catching the cubs which were some five or six months old. I watched a young boy go after one cub with a blanket in his hand; the cub turned on him with something of the spirit of its mother. Not discouraged the boy threw the blanket over the cub's head and body, and held it until further assistance arrived. Five cubs were caught in a similar manner, and improvised cages were made in camp. These cages were made of really stout trunks, knotted and tied up securely together. Believe it or not (as Mr. Ripley says), one of the cubs during the night gnawed through his place of confinement and escaped, and I hope by now is a full-grown tiger.



ikram Prasad" had a rt as big as himself; had been previously mauled,

posure: Proxar lens. 1|50 F. 8.

Here we see the deep gash that the tiger's claws have torn in the thick hide of the elephant. Elephants suffer great pain from the wounds and sometimes die from the poison of the tiger's claws and teeth. The mahouts usually treat the wound with a special kind of mud to protect it from flies; nature does the rest.

Intelligence.—Tigers are intelligent animals. As evidence of this we can say they have preserved the continuity of their species at a time when other animals have tended to disappear. Of these the lion is a notable example. I have known a panther return to a kill even though it had been disturbed by the light of a torch. It had raced away when disturbed by the light, but returned again within half an hour. On the other hand, once a tiger's suspicions have been aroused he will never return. A deer will approach to enquire anything of a suspicious nature. In fact most animals of the jungle are easily beguiled, but not so the tiger. The tiger will approach its kill with the utmost caution, moving round and round until satisfied that all danger has gone, before coming up to it. Furthermore he will not make a kill if he sees the tethering rope, tied for instance to a young buffalo, is of a suspicious nature and shows that the hand of man has been at work. I have seen a tiger deliberately avoid the guns knowing where the danger is coming from and some man-eaters show a remarkable degree of intelligence in refusing poison baits, not returning to their kill or the vicinity of their last depredations and attacking only when their prey is alone or separated from others of its kind.

A tiger also knows that its power of prolonged pursuit is restricted; it will therefore wait, concealed under cover, and approach its prey stealthily and with caution so as to be certain of securing it.

Combined with this cunning and intelligence are its great powers of endurance and strength. A tiger will cover many miles in his nightly prowls, perhaps 12 to 20 in his search for food. Having made his kill he will have to find water, and will either carry his kill to the vicinity of water, or

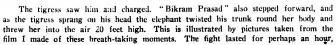


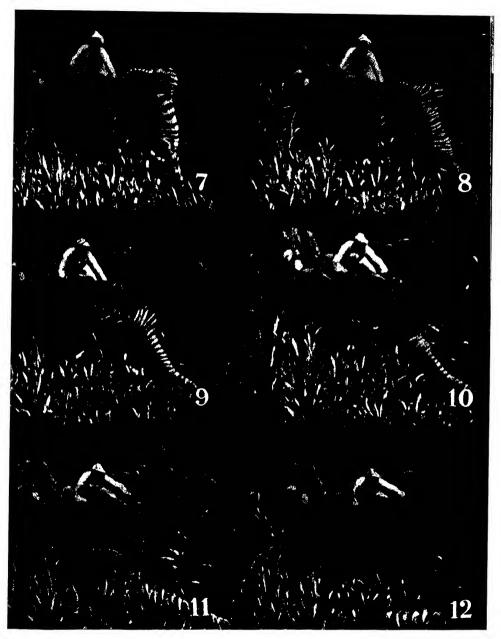
With her ears set back and eyes flashing emerald, her tail gently lashing the ground, she looked the very embodiment of evil.

Taken with telephoto lens from a hide on 1 plate camera

The tiger is perhaps the most handsome of all living animals. Its rich colouring and striped body serve the animal perfectly as camouflage in long grass and deep forests.







the mahout doing his utmost to restrain his charge, beating it over the head with his "kukri" to try and control its movements. How he survived this savagery is even now beyond my comprehension. (See page 16.)

hiding it from the eyes of vultures, he will go and satisfy his thirst and return to lay up somewhere in the neighbourhood drunk with the blood of his victim and anxious to sleep off the effects of his meal.

It is the embodiment of symmetry and grace. With its powerful jaws it is not only able to seize its prey but also to hold and to kill. The middle teeth have sharp cutting edges for tearing away the flesh while the tongue is rough and raspy, enabling the tiger to remove the blood and flesh and yet still keep itself clean. It has a long lithe body of immense strength and is extremely swift and active. With its combined toes and pads it is silent of movement whilst the claws are retractile.

J Man-eaters and cattle-lifters.—A man-eating tiger only turns to man either because he has been wounded and incapacitated from seeking his natural game, or because the game is so depleted that he has no other choice but to kill. In some districts where a tigress has turned man-eater, she may have taught her cubs to kill, and these in turn may breed a group of man-eaters that go on from one generation to another.

There are the cattle-lifters, but a tiger will resort to this only when deprived of deer. It is surprising that so few casualties occur when we consider the risks that are run by unprotected villagers wandering at all seasons through the jungle or occupied in their daily pursuits. The truth is that tiger seldom attack specifically to kill unless driven to it or wounded in a hunt. A tiger will frequently charge with a roar if suddenly disturbed, but it does not intend to charge home if one makes a stand. A shout will sometimes be sufficient to turn it aside and it will dash forward and disappear probably glad to escape danger.



as impossible to reach outside because of the forest and long tiger grass.

surc: Noon. 1|100 F|8 ith light yellow filter.



The cub captured in the jungle photographed in the improvised cage; it gnawed its way out.

Exposure: Enlargement from 16 mm. negative Cine film. Taken at 16 frames with 1" Dalmeyer lens. F 8. I recall an incident when mounted on a female pad elephant I attempted to cross a thick part of the jungle where a tiger had been ringed; it was impossible to reach the howdah from the outside of the ring because of the thick forest and long tiger grass, so we decided to go across the ring. When we had gone half-way the tiger saw us and charged towards us. The danger of being brought down when seated on the pad of a small female elephant is almost certain to end in tragedy, so I urged the mahout to shout at the top of his voice while I yelled as vociferously as possible. The tiger came close to the elephant, but being disturbed by this shouting turned away when we hastily left the inside of the ring to regain the howdahs as best we could.

The following remarkable story of a girl's adventure with a man-eater is worthy of record :

A young Nepalese was betrothed to the lady of his choice. They were walking through the jungle discussing their future life, when the young man's attention was attracted by the appearance of a rare species of bird to which he gave chase for a few yards. On his return he found the girl missing and he was annoyed because he suspected the girl's parents had captured her and taken her back to the village. With this idea in his heart he set forth for the girl's home, with the light of battle in his eyes and a bow and some poisoned arrows tied around his waist. He had not gone very far when he noticed the pug marks of a tiger, and also part of the girl's clothing on a thorn bush. He decided to track the tiger. It was a long chase of a full day into the caves and rocky parts of Nepal. At last he came to a cave which ended his quest. Looking around he found a boulder above the cave, and climbing on top of this he was able to look through a crevice into the cave below. To



Moving with stealth and caution.



Tiger breaking into cover.



A dash for freedom!



The bait being prepared.

Exposure: All four pictures are enlargements from negative Cine film,

The tiger will approach its kill with the utmost caution, moving round and round till satisfied that all danger is gone before coming up to it. For instance, a young buffalo tied to a post shows that the hand of man has been at work. Care in this operation must be done so that the tiger's suspicion must not be aroused.

his horror he saw the tiger playing with the girl (who was still alive) as a cat would with a mouse, and around the cave were lying the remains of what may have been many human skeletons. With his primitive bow and arrow he watched his opportunity and when the tiger presented a suitable shot he fired, not mortally wounding it with his first shot, but from his position of advantage he was able to despatch his adversary within an hour or two. On entering the cave he found the girl quite unharmed, but her hair had turned white and she was completely out of her mind; she is like this to the present day.

I record this story just as it was related to me, and vouched for by a very prominent Nepalese gentleman.

Killing with poisoned arrows.—Some shikaris question whether a tiger can be killed with a poisoned arrow. At one time, the Collector of Puri had brought to him two tiger skins and several leopard skins for the Government reward. They were the result of five weeks' hunting. The aboriginals had killed these with a large crossbow furnished with long arrows with barbed points at the roots on which were tied a spongy substance saturated with a poisonous gum. The effect of the poison takes some hours to work; I have myself found a poisoned arrow in a tiger.

The "marked man-eater".—The Hon. James Best gives a remarkable story of a man-eater. This animal ranged over the Central Provinces around Rewa, Kawardha and Korea. For nearly 12 months fear had gripped the heart of the jungle. The tiger had been marked by a deep wound across the face, the result of a combat with his rival over a tigress; it was by this scar that it was known as the "Marked Man-eater". In a beat which followed, the tiger was

The Gonds in physique are short, dark and wiry, with great powers of endurance. When on Shikar they will walk from 20 to 25 miles, take part in all the excitement of the beat, and return again to camp with never a complaint and as happy and cheerful as children. They live chiefly by hunting with their bows and poisoned arrows and are expert marksmen.

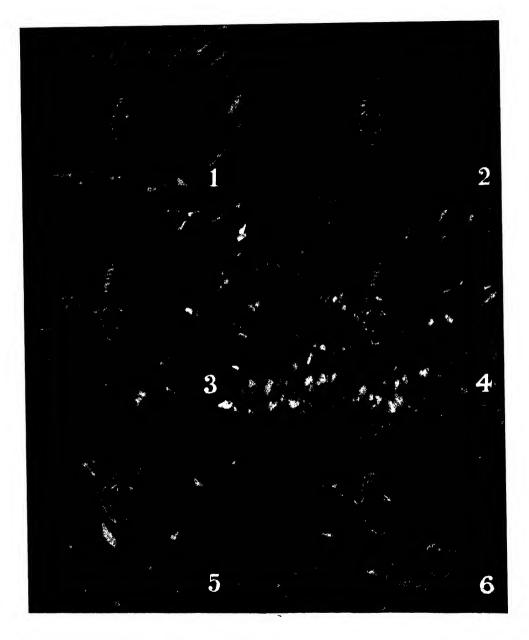
Exposure: 1|100 F 5.6 with green filter in bright sunlight (Rewa State).



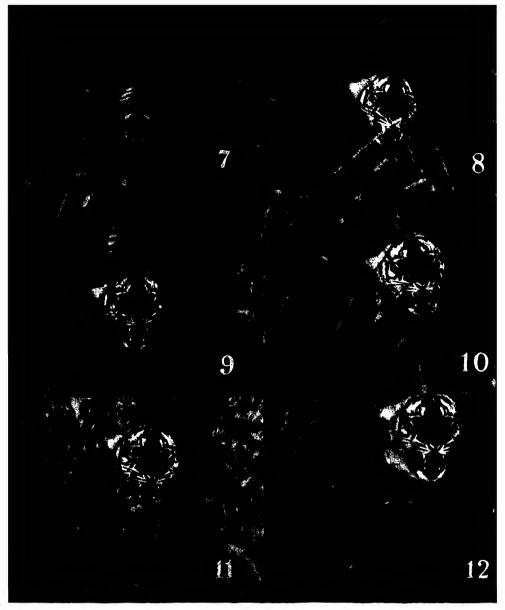


The howdah elephants are usually fine big tuskers trained to withstand the charge of a tiger and from experience have learned to place their safety on the sportsman and his rifle.

Exposure: Taken in dark forest, 1|50 F 4,



"I saw him first at about 50 yards. I think it must have been a glint of sunlight on the lens barrel which attracted his attention for he seemed to pick me out in a flash. I was seated on the elephant with a Nepalese General and a mahout; the only protection we had was the mahout's kukri. As fast as the message could travel from my brain to my hands, I had the camera levelled at the tiger with a full view of him in my eyepiece, and simultaneously pressing the button, I realised that here was the picture of a



Enlarged from Cine negative fils

lifetime. Regardless of the consequences to the Nepalese General, the mahout and myself I knew that I had to get this picture. I confess that I was a little frightened as to what might happen as the tiger came roaring at us with something of the gait of a galloping horse. The tiger landed on the elephant's head and we all came down with a bump. Events happened so quickly that I cannot recall anything else. Here you have a record of what must be a most terrifying experience anyone can have".

wounded; it turned on its slayer and mauled him badly. The shikari was convalescent in England for 12 months, and on his return he learned of the depredations of the tiger—how it had left many families mourning and suffering grief which time alone could heal.

Traffic and pilgrims on the roads had been effectively held up. It had been impossible to clear the fire lines and forest fires raged. Weddings were postponed; family meetings were dropped by mutual consent; no more did cattle roam on their usual grazing grounds, and the mail train between Bombay and Calcutta had once been affected by the tiger taking the signal man. The "slayer" accounted for nearly 100 dead, and this because it was wounded and unable to secure its normal food; it escaped to avenge its wrath on its arch enemy—MAN. Such was the plight of one tiger, and such is nature's retribution when the hand of man interferes with the laws of the jungle.

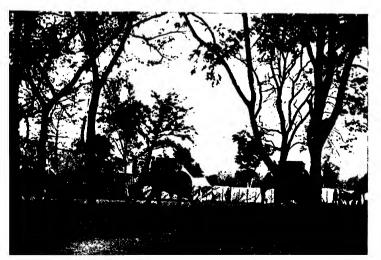
Mr. Best has a sound knowledge of the people of the forest and their ways. This information has been gained as the result of long service and shrewd observation. His books should be read as an insight into the lives of these children of nature. I have heard of cowboys attending their herd of cows and buffaloes. The tiger has come out, but the boys each seated on the back of a buffalo have kept in the centre of the herd; the buffaloes have charged and the tiger has hastily left the vicinity. On another occasion a tiger suddenly sprang from a densely wooded nulla and seized a cow which was grazing within a few yards of a villager attending his cattle. The man shouted in the hope of scaring the tiger, when two domesticated buffaloes which were near the spot and were spectators of the event, charged the tiger



The Maharaja's extensive retinue are given tents.

Exposure: 1|25 F 5.6 with red filter. The red filter is used to bring out the white tents against the blue sky...

The camp is usually pitched on the bank of a river, to afford water for men and animals and consists of as many as from 50 to 100 tents. Together with the retainers and mahouts it is a scene of bustling activity which disturbs the quiet sanctity of the forest.



The Maharaja lives in a house built of logs and mud well up in the trees.

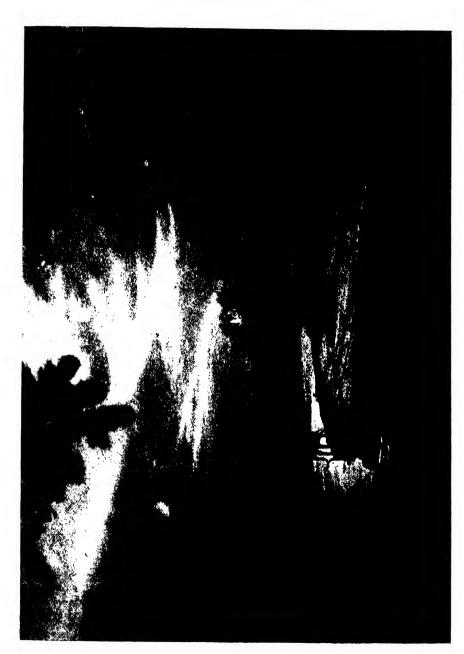
Exposure: 9 a.m. 1|50 F 8 with light yellow filter.

at the top of their speed, knocked it over by the impetus of the charge and followed it as it sprang for safety into a thick bush, thus saving a cow from destruction. A beat was organised but the tiger quickly left the neighbourhood; young buffaloes were tied up to entice the tiger to kill, but having been knocked over and pounded by buffaloes, it declined anything in the shape of buffalo even though it may have been very hungry.

How a tiger charges.—Those who have been charged once would rather not be charged again; those who have watched a charge yearn for a repetition of the hectic moments. The illustration on pages 28 and 29 shows the beginning of a tiger charge. It is taken from a Cine film and shows that the tiger rushes forward in a series of bounds, with all four legs coming together similar to that of a race horse. At the moment a tiger decides to attack it springs into the air like an arrow, and I have seen one reach as high as the head of an elephant, which must have been eight feet from the ground. Allowing for the distance a tiger covers in a leap, about 15 feet, it can be seen that the power to raise its great weight over this distance and height is considerable.

Many writers assert that a tiger will wait and attack only from a distance of 50 feet or more. I suggest that if the occasion demands the tiger will rush and attack its prey from a considerable distance.

How a tiger kills.—There has been much controversy as to how tiger kills. Some writers assert that the method of seizure is by the throat or again by the back of the neck. In each of the 300 to 400 kills I have seen the neck has been lying in the opposite direction to the body, which supports the theory that the head is wrenched round and the neck broken. Here



Exposure : Evening light. 1 25 F 3.5 with rid filter.

When the dawn breaks with all its solemn beauty and the great heasts begin their day's toil.

again I would suggest that the tiger kills according to the circumstances and size of its prey—sometimes by the neck and sometimes by hamstringing if it be a big animal.

Methods of hunting tiger.—In various parts of India the tiger is hunted according to the forest and the means at the disposal of the hunters. In the Central Provinces and South India, beaters and beating elephant, with machans, are used but little is heard of how tigers are hunted in other parts of the world. Although the tiger is pictured in all Chinese art I do not recall any hunting scene neither is there any literature which brings to light information on the subject except one reference where it is said that in Manchuria a sportsman has to crawl after tiger into caves.

HUNTING IN NEPAL.

The camp.—On the invitation of the Maharaja of Nepal I proceeded to the western jungles of the Terai which join the forests of the lower Kumaon hills within the region of Pilibhit.

These shoots are always on a grand scale. A location on the banks of a river is cleared within easy distance of known tiger jungles. The Maharaja's extensive retinue are given tents, the mahouts and elephant camp is apart, while the Maharaja lives in a house made of logs and mud well up in the trees with steps leading to it. This structure was nicknamed by Edward, Prince of Wales, as the "Funk House", and was built in case wild elephants should stampede the camp—a necessity in the earliest days of shikar in this area.

These shoots are dear to the heart of the Nepalese and provide their recreation during the winter months. It is doubtful if hunting on such a grand scale is carried out anywhere else in the world.



noulder to shoulder the great beasts stand firm. *Exposure*: 1|100 F 5.6. *No filter.*

Of all the grand sights of hunting the tiger, nothing can compare with 200 or 300 elephants massed together for the sport of Kings. No other method is possible in the Nepal jungles with its tangled undergrowth and dense vegetation.



The ring extends as far as the eye can sec.

Exposure: 1|100 F 11. No filter.

Lying as these jungles do at the foot of the Himalayas they receive the rain of these mountains and being wet during most months of the year, the forest is thick and impenetrable. is no longer lord in these vast uncivilised lands. The lowliest beggar and the Maharajas—alike intruders—all bow to the majesty of the forest. Men fight for very existence with an invisible enemy--powerless against the irresistible forces of This is the domain of the wild animal, where man is kept at bay by malaria, swamps and tiger grass; during most of the day it is sombre and grey for the sunlight rarely creeps through these masses of tangled growth and heavy foliage. Man uses the elephant to break down the resistance that opposes him; thorns will tear the flesh, the cobra stealthily awaits the unwary step, while lurking is the king of the jungle—the Tiger. If aroused he is willing to meet any odds in defence of his natural home.

Here in this great solitude of nature we can find sanctuary from the ever-increasing strife of civilisation. When the dawn breaks with all its solemn beauty; down on the distant hills comes the cry of the jungle fowl and the sound of the herd astir. This is the jungle, vibrant with life and rich in the bounteousness of nature.

Ringing.—There is "sitting up" in a machan over a kill practised by lovers of the jungle, but of all the grand sights for hunting the tiger, nothing can compare with the assembly of 200 to 300 elephants massed together for the "Sport of Kings", as is the method adopted by the Royal Family of Nepal during the annual shoots especially when Members of the English Royal Family or the Viceroy of India are invited.

The Nepalese are said to have evolved this method in view of the jungle in the Terai, but we find the method was used by



As soon as the tiger is flushed they converge to form a big ring.

Expessive: Bright sun, 1/109 F-8 with two times filter.



When the ring is complete the great beasts turn inwards to make a living barrier of flesh and muscle.

Exposure: Evening light, 1/50 F 3.5,

the Moghul Emperors with Ghungis Khan and Taimur, far back in the days when tiger hunting must have been an even grander sport than it is to-day; when the high velocity rifle was unknown and the tiger was encompassed by sheer force of numbers with bows and arrows and javelins. I think it most likely that the Gurkhas invading Nepal in the twelfth century brought with them this method of hunting from Rajputana from where they originally came.

No other method is possible in the Nepal jungles with its tangled undergrowth and dense vegetation that grows in profusion in what must be the closest and most strictly reserved game forests in the world.

The camp is situated on the bank of a river which provides water for the camp and elephants. Accompanying the busy life under canvas is the shrill trumpeting of the elephants, the chatter of monkeys and the tonk of the barbet. Stretching across the waste of sand is the tortuous stream that meanders down from the lower foothills. I must leave the reader to picture this forest of twilight grandeur, spread as far as the eye can see, where echoes the pheasant's call, the startled cry of the cheetal and the scream of circling eagles—a veritable home of wild beasts backed by that huge wall of ice and snow, infinite, wonderful and untrod—the Himalava mountains. For a typical shoot a young buffalo has been killed in the night, when it has been tethered by a short rope to a stake adjacent to water on forest paths which converge, for the tiger in his nightly prowls keeps to paths and river beds. All that is left of the buffalo is its bloodstains on the sand, the remnants of its food and the broken rope attached to the stake. The tiger having killed, drags the carcass into cover endeavouring to conceal it as a dog would a bone; the shikaris meanwhile decide in which



The shikaris meanwhile decide in which direction the tiger is lying up.

Exposure: 7 a.m. 1|50 F 4.

After the kill has been made, the tiger drags his meal into a neighbouring thicket. It requires great caution and skill to know in which direction the tiger is lying up as on this depends how the ring will be formed.

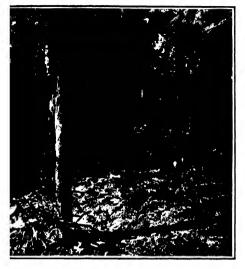
direction the tiger is lying up, gorged and drunk with blood after its heavy meal.

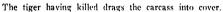
News is hastened back to camp either by a fast-trotting female elephant, by horses or by runners. The elephants are then assembled and are made to enter the jungle one by one, moving alternately to right and left, with an interval of approximately 30 yards between each. The two lines then diverge in the shape of a "V" where it is known the kill has been dragged, one line beating towards the other. As soon as the tiger is flushed they converge to form a big ring. It is an impressive sight to see the long ponderous line moving silently and slowly away into the dark forest. When the ring is complete, the great beasts turn inwards to make a living barrier of flesh and muscle.

Considerable skill is needed not only to keep the mahouts and elephants as quiet as possible but to know how far from the kill it is necessary to form a ring, as it is never certain whether the tiger will lay up in the immediate vicinity of its kill.

Here we see the co-operation of man and beast. Simply by a muttered word and gentle urging of the feet behind the ears, the elephant uses his mighty trunk like a human arm, or with his head mows down trees that cover the line of fire or otherwise make the passage of the howdah impossible. The mahout assists in the operation, using his native weapon—the sharp, heavy "kukri" which cuts through the entwining creepers that hold up the advance.

The ring has been made but only in the open jungle can we observe how far this extends; in thick jungle we are only conscious of those elephants close to us. The head shikari moves rapidly down the line closing up one, retiring another,







Signs of the jungle-where the tiger has passed during the night.

THE TECHNIQUE OF SHIKAR.



The shikari's method of indicating the direction the clephants should make in forming the ring.

drawing the ring closer to cover up the gaps. The elephants then clear the path of jungle in front of them, beating down the grass with their heavy trunks to enable the guns to have an uninterrupted view.

The stage is now set and word is sent to the Maharaja that the ring is complete, and he hastens to his howdah which is placed in the position where it is thought the tiger will most likely break.

Up to a few years ago the guns were posted on the edge of the ring, but as the tiger was usually shot before the writer could obtain any pictures he sought permission to enter the ring behind the beating elephants. With the camera set to the correct stops, distance and film, the howdah moves forward cautiously behind the more agile beating elephants which move to rout out their quarry.

As the elephants push down a tree on top of a tiger he roars and charges round the ring, while the mahouts armed with sticks and stones, pelt him from cover to cover. Frequently the elephants carry honourable scars from this process while mahouts have sometimes paid with their lives for their coolness and daring. The howdah elephants are usually fine big tuskers, trained to remain staunch and firm at the approach of tiger so as to allow the guns a steady aim.

Yet they are so temperamental that on one occasion a herd of young wild pig raced under the feet of a howdah elephant; the elephant took fright and bolted into the forest and smashed the howdah to bits within a few minutes, the furious slashing of the mahout's "kukri" being of no avail on the panic-stricken elephant.



"That wall of ice and snow"—the Himalaya mountains. Taken direct on 12"×10" Isochrome film deep six times filter. Exposure: § second F 16. This illustrates the quality and definition secured by giving a long exposure and stopping down.

Frequently the rich yellow form is lost to view for the space of a few seconds, and again the beating elephants advance closer. The tiger charges out, but he is a wary beast and seems to know where the guns are. All the time the camera is recording the tiger's rushes and movements, but much film is usually wasted in attempts to anticipate the tiger's movement in the long grass. Again and again the tiger is driven out, until a shot rings out as the guns speak the death knell of the tiger.

It often happens that the tiger will break the ring and escape. When this occurs the elephants are hastily assembled and another ring is formed. Curiously enough the tiger will then often seek the densest cover and lie up, believing that as he cannot be seen he is out of danger. It is this trait which in most cases causes death, for few elephants will oppose the determined rush of a tiger when it attempts to break the ring.

I will now relate another incident which shows the coolness of man in contrast to the savage impetuosity of animal.

As before a family of tiger had been ringed. The guns had accounted for all but the mother, she had escaped. Another ring was made, and from a roar I knew she was badly put out. The firing had disturbed her and her children had been shot. Then something happened so quickly that it seemed quicker than thought itself; from some thicket the tigress must have been watching, for within a flash she had cliarged over some open ground and made straight for the Maharaja's howdah with a terrific leap of some 15 feet. But an old elephant "Moti Prasad", known as the Maharaja's guard, had somehow sensed the danger, and with one foot forward interrupted the charge and the tigress landed on his head perilously close to the mahout. The old elephant then swung his huge head and the tigress



"Good news."

Exposure: 1|250 F 4. Increased speed to stop movement of horses.

The scenery varies from the deep shade of the jungle with occasional quiet streams to the open river beds, glaring white and hot in the noonday sun. Horses as well as elephants are used in the exciting work of shikar, as news of the kill is hastily carried to His Highness in camp by horseman.



The stage is now set and the Maharaja hastens in his howdah.

Exposure: Bright sunlight. 1 100 F 5.6 with red filter.

lodged on his ear with her claws, and seemed unlikely to leave go. The mahout hammered away at the tigress with his "kukri" to try and make her drop but with little success. The Maharaja realised that if he fired he would wound either the elephant or the mahout or possibly other elephants in the ring. So with a consummate coolness of mind and eye he levelled his rifle at a point below which the tigress was hanging. He fired and the closeness of the shot made the tigress drop, and saved what seemed to be a nasty situation for both the mahout and the elephant. All this takes time to tell, but the action took place in less than 30 seconds and it reveals considerable presence of mind on the part of the Maharaja Joodha.

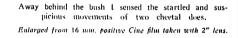
Another story as it is here illustrated is worthy of record.

On another occasion mounted on my elephant I was parading around the ring with my camera in the hope of getting some good shots when I saw my quarry attack two of the fighting elephants and drive them off. I saw him first at about 50 I think it must have been a glint of sunlight on the lens barrel which attracted his attention for he seemed to pick me out in a flash. I was seated on the elephant with a Nepalese General and a mahout; the only protection we had was the mahout's kukri. As fast as the message could travel from my brain to my hands, I had the camera levelled at the tiger with a full view of him in my eye-piece, and simultaneously pressing the button. I realised that here was the picture of a lifetime. Regardless of the consequences to the Nepalese General, the mahout and myself I knew that I had to get this picture. I confess that I was a little frightened as to what might happen as the tiger came roaring at us with something of the gait of a galloping horse. I managed to keep the tiger in the field of vision until it landed on the side of the

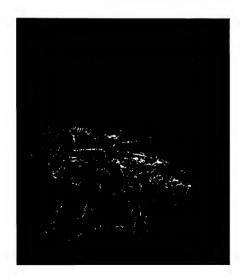


Elephants gaily painted for spring festival.

Exposure: Bright sunlight. 1|50 F 11 with yellow filter.







As the tiger rushes out a great cry goes down the line "Bagh, Bagh". Exposure: Enlarged from 16 mm. Cine film.

howdah; after that things happened so quickly that I cannot record them in detail. I remember going over with a terrific bump as the elephant came down amidst much shouting and considerable shooting. The elephant was badly mauled and it took weeks before it could get the poison of the tiger's claws out of its system. The mahouts treat this mauling with some special kind of mud which is smeared on the wound and the elephant goes through considerable pain and many do not survive the treatment or perhaps more accurately the mauling.

In the pictures on pages 28 and 29 you have a record of what must be a most terrifying experience anyone can have.

CENTRAL INDIA. The scene changes the Gond country. Let me narrate a jungle memory.

It was in the Central Provinces. A tiger had killed—a machan was erected and the Gonds of the District collected to flush the gorged tiger from his jungle lair. With the accompaniment of kerosene tins, drums, conch shells, old pistols and everything which will make the forest ring with hideous noises, the thin black line moved forward.

I waited in the machan some two miles away from the noise. Gradually the sounds became more distinct, and almost a tremor ran down my spine as I peered into the forest glade with my eye intent on the slightest move of game. With my camera all set I tried to anticipate each rustle of movement in the trees that might herald the approach of the quarry.

Away behind a bush I sensed the startled, suspicious movements of a cheetal hind, nervous and with head poised, ready to flash into the deeper sanctuary of the forest. The hind moved off at, a gallop followed by two does—still I waited—seconds seemed hours, when suddenly the "stops" on the right set up



Sunlight and shadow. "Five tigers in one ring."

Fixposure: Sunlight. 1|100

F 8. No filter.

Elephants afford the means of protection for the hunters as well as the means of conveying the bag to camp.



Some members of the "thin black line" demonstrate their bows and arrows; with them is a shikar elephant.

Exposure: 1/100 F 5.6 with two times filter.

a nervous tap, tap, tap.....the animal had moved to the left. The taps were repeated and I knew they had seen the tiger as he moved this way seeking an outlet.

Then I glimpsed the tawny hide, through the grass. I live to a hundred I will not forget the beauty of that crouching figure of the great striped beast. Orange and white ringed with black, as it trod noiselessly, and then paused with its massive head turned, suspicious and nervous of the rising crescendo of drums and cans which insistently impelled him forward. Not for him is the startled rush to safety, but the calm calculating movement conscious of his own power and strength. He moved forward silently, stealthily, with such grace and sinuous movement that it seemed as though his huge body was just gliding along. He stopped expectant, quick to detect any unusual movement, for the forest was his home and he knew it as intimately as any denizen of the jungle. he moved forward, satisfied that there was no danger ahead. As he approached to within 100 yards of the machan I set the motion of the Cine camera running; his startled gaze met mine and eternity melted into a few minutes as he paused to enquire what was this new danger represented by this unusual sound in the forest. At that moment I stopped the camera and realised my error. The tiger retreated the way he came and my chances for future pictures were gone. Had I kept the camera running he would have moved forward past the machan and given me the close-up I so desperately wanted, but the sudden starting and ceasing of the sound of the motion camera had aroused his suspicions, and being suspicious I knew he would never return to the same place.

My companion, who was more concerned with the trophy than the pictures, tried a long shot. As the rifle rang out He moved forward silently, stealthily, with such grace and sinuous movement that it seemed his huge body was just gliding along.

Exposure: Midday. 12" Dallan telephoto lens.





We spurred him on to attack us by throwing sticks and stones.

Taken with a Rolleiflex camera on the back of an elephant.

Exposure: 1|100 F 5.6.

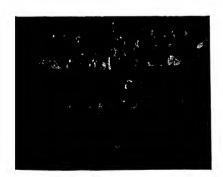
through the forest the tiger bit at his side where the bullet had gone home and savagely gnawed at a tree trunk. He was by now dangerously aroused and we spurred him on to attack us in the machan by throwing sticks and stones, for he was clearly trying to return the way he had come; back on to that defenceless thin black line. Could we lure him towards us? In answer to our frantic shouts and booing the tiger flashed round and demonstrated before the machan. All this while my camera was turning to record the imperishable film to which I had devoted so much thought, patience and tireless energy. A shout went down the line that a wounded tiger had turned back on the line of beaters and the latter hastily took to the trees like so many monkeys. Wounded as he was the tiger still had plenty of fight and we had no recourse but to track him. Fortunately, in this case, he was despatched while seeking cover further in the forest but I realised that my life depended on the coolness and accuracy of my companion. Would that all stories of tracking wounded tigers ended so happily.

Superstitions.—Extraordinary as it may appear, there are undoubtedly some villages whose inhabitants would really be sorry to have the tiger they have known for so many years, and at whose hands they have suffered great losses in the way of cattle, harassed or killed by an European sportsman. There are many reasons for this curious behaviour, such as the common belief amongst many of the jungle inhabitants, that the spirit of the dead tiger will haunt those that have been instrumental in his death; likening him in this respect to the common domestic cat on whose back the goddess, who looks after children, is said to always ride, and the killing of which beast, they assert, calls down the wrath of the goddess on the children of its slayer.



An aboriginal of Central India. They live chiefly by hunting with their bows and poisoned arrows.

Exposure: Sunlight. 1|50 F 3.5 with red filter. The large stop is intended to diffuse the background.



His startled gaze met mine and eternity melted into a few minutes as he paused to enquire what was this new danger.

Exposure: Enlarged from 16 mm. Cine film taken with 2" telephoto lens,

Hunting with bows and arrows is carried out all over India. It requires more skill and courage to face a dangerous animal with this insignificant weapon than with the modern lethal weapon, and incidentally the chances between man and beast are equalised.

Any sportsman, who knows the vernaculars and has much to do with native shikaris, becomes in time conversant with many of their superstitions, legends and beliefs. The jungle folk have a firm belief that the spirit of the victim of a maneating tiger rides about at night on the forehead of its slayer and warns the animal of the approach of danger. Captain Forsyth, whose work took him a great deal among the aboriginal tribes of Central India, gives a very uncanny though interesting story, told him by his shikari, of how a man-eater, returning to his human "kill", was warned of danger by the corpse lifting its hand and pointing towards a tree in which another shikari was hidden, with the intention of shooting him.

A propitiation to the gods.—Dotted over Korea State of Central India one meets the strangely moulded figures shown on page 55. These models represent the spot where a maneater has carried off one of the Gond villagers. The people of the neighbouring villages build up from mud and stone these queer imitations of the tiger, where they come to do "poojah" at the time and place the man-cater has taken his unlawful prey. The worshippers believe that this supplication to the gods of tigers will restrain the man-eater from repeating his awful handiwork. Drenched as they are in the superstitious dread of the tiger these children of Nature are happy and contented as only the simple folk of the vast unspoilt spaces of the earth can be.

It will not be out of place here to recall some of the customs of these people especially now that the Indian villager is so very much in the public eye, and his economic conditions have become the battle-cry of the politicians. It is interesting to recall that the forest tribesmen of India number 18 millions. In the tribesman's philosophy, knowledge, customs, his poverty and



The home of the Gond They have in tiny thatched huts of bamboo plastered with mud.

Liposure 1|50 / 8

To-day the Gonds number about 3,000,000 and are distributed all over the Central Provinces, Rewa State, Surguja State, Korea State and among the lovely hills of Sconi where Kipling's Mowgli hunted with the wolf pack.



In physique they are short dark, wiry with great powers of endurance, with never a complaint but happy and cheerful as children.

Exposure Contact print Bright sunlight 1/25 F 22 Small stop for depth of fo us are short, dark, wiry with great powers of endurance. On shikar I have known them walk for 20 to 25 miles, then take part in all the excitement of the beat and return again to camp with never a complaint but happy and cheerful as children. They are shy, wayward, idle, with truant hearts and timid slow moving minds but they are brave, loyal, humorous, patient, affectionate and like all jungle people triumph over their poverty with a heroic merriness of spirit. The Gonds are not a religious people, their chief deity being "Burra Deo". All their dances and songs are full of the fantasy of the forest and it is only necessary to see the Karma dance to appreciate the nature of these happy people.

In the Gond country the women enjoy a greater freedom and dignity than in other parts of India. The Gond outlook on marriage is striking in that men and women marry one another for love. The "companionate marriage" is common, and the expense and luxury of a marriage ceremony is often omitted. All Gonds are officially married once in their lives, but many girls live with two or three men before they finally settle down, and are usually never actually married to the man whom they finally choose as a life partner. Having chosen him, however, they are faithful, loyal and devoted mothers and lifelong companions and lovers of their men.

The Nepalese.—As most of the incidents related in this book happened in Nepal, it would not be out of place to give some information of these fascinating people.

Nepal is a name to conjure with. It has all the restless magic of a country unknown to the European; with the strange blending of Buddhism and Hinduism without clash or conscious hostility. It is a closed land—closed by the deliberate will of her peoples. Whether it be from piety, suspicion, jealousy,



A Tharu with a mixture of Moghul blood.

"Flowers maketh the man."

Taken with Proxar lens. Exposure: Evening light. 1|25 F 4.

Because of the treacherous malarious swamps of the Terai, few people can inhabit this district all the year round. The Tharus are the only people who by long association have become immune to the malaria of this swampy, treacherous district, but with all the privations they remain a happy and cheerful people, agriculturists at heart.

superstition or mistrust of the European, it is certain that no land is more closed to the white man than Nepal.

Nepal is rich in historical associations for Emperor Asoka set up the five great stupas here in 250 B.C. in commemoration of the birth of Buddha. It has a civilisation which goes back into the distant past and it is said the Chinese borrowed their style of architecture from Kathmandu. Still, with all her ancient and obscure history, the days of Nepal are in front of her, for the significance of this mountain fastness with the military spirit of her people on Indian national life cannot be forgotten. It seems to hover like an eagle, ready for any disintegrating influence that may tend to disrupt the political and national life of India.

Of the people of the country the following may be mentioned:—

The Tharus of the Terai, a people with nothing of the fighting qualities of the Gurkhas, being impoverished and weakened by malaria which is so virulent in this part. The Tharus are the only people who can inhabit this low, swampy region during the whole of the year. It is these people whom we meet on our hunting expeditions, who inhabit the villages and plains beneath the foothills.

The Mewaris.—These are the craftsmen of Nepal. All the time carving of the houses and the gaily painted wedding umbrellas are the work of these people of the valley. There seems to be no record of the origin of these Mewaris.

The Gurkhas are the warrior people and conquerors of Nepal, admired the world over as fine fighters and soldiers. They have shown no shirking of blood or labour in their real friendship for the English; they have fought at the side of the

A Nepalese girl carries her lamp for her prayers.

Exposure: Proxar lens, 1|25 F 5.6. Early morning light to render skin texture and to avoid deep shadows under the eyes and nose.





An attractive maiden unspoiled by any Western influence.

Exposure: As above.

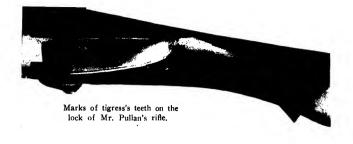
British, free from treaty, obligation or promise of any kind. A significant fact is that the police of India is manned almost entirely by Gurkhas in places where they are most needed.

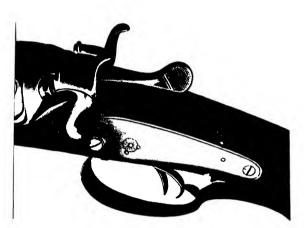
The origin of the Gurkhas is said to have been founded in the twelfth century by the Raja of Chitor. That they were Rajputs and conquered Nepal by infiltration and conquest is borne out by historical reference. It is this warlike quality which gives them such prowess in hunting.

The Nepalese mahout, on the back of his trusty elephant, has frequently been killed in encounters with tiger and wild elephant. No day is too long, no ride too hard and situation too dangerous if these Nepalese are engaged in their favourite sport of hunting the tiger. Unhesitatingly will they venture into places where the guns cannot go and into parts of Nepal where it is so wild that no sportsman has visited there for 30 or 40 years, where the wild beasts hold sway; the greater the risk the keener are these people to follow up their quarry, and so long as the shooting in Nepal is restricted to the Maharaja so long will this Terai remain the finest hunting ground in the world.

Three generations of our Royal Family have shot in the Terai forest. King Edward, when Prince of Wales, in 1876, King George V in 1911 and King Edward VIII as Prince of Wales in 1921. In 1876 King Edward VII as Prince of Wales was the guest of the great Prime Minister Jung Bahadur, uncle of the present Prime Minister. In 1890 Prince Albert Victor was entertained by the then Prime Minister Beer Shum Shere Jung Bahadur, the elder brother of the present Prime Minister.

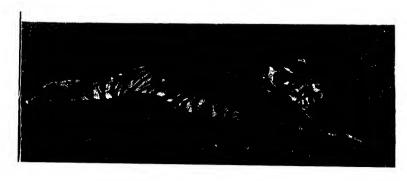
Maharaja Joodha, the present Prime Minister, is at once an enlightened and humane ruler and a keen and daring sportsman. It is his habit to advance on his howdah elephant





Her teeth must have caught the trigger, and both barrels went off.

Mr. Pullan describes in his own words the story of the tigress which grabbed his rifle and chewed his right foot. How he survived one of the most exciting episodes in the history of Shikar should be read on page 64. Few men have been mauled by a tigress and survived. The story goes to show the great value of an elephant trained to withstand the tiger's charge as it is certain that had Mr. Pullan been seated on a reliable elephant, the tragedy would never have occurred.



The tigress which mauled Mr. Pullan. She proved to be most emaciated, having been without food or water for four days.

into the centre of the ring which, after the Nepalese custom, encloses a tiger or tigers with a living circle of elephants. The many photographs were taken from the elephant which kept behind or beside the Maharaja.

SOME TRUE STORIES OF ADVENTURE. Mr. Pullan of Kartick T. E.

Mr. Pullan is the manager of one of the tea gardens in the Dooars. The Dooars is a tract of country which runs along the base of the lower hills of the Himalayas in the northern part of Bengal. The Dooars would correspond to the Terai in Nepal. This area, being humid for the most part of the year, is well suited to the cultivation of the tea bush and big estates run into the extensive jungles which stretch into Bhutan, Assam and, with some breaks, into Upper Burma and places unknown and unexplored. This country is ideal for the tiger, as the forest is very thick with numerous streams flowing through it the whole year round.

Kartick Tea Estate is on the borders of Bengal, Bhutan and Assam within a few miles of the Raidak Forest Reserve.

News had been brought to Mr. Pullan of a tigress which had been wounded by some unknown person on an Indian tea garden—Turturi Tea Estate. It was known that Mr. Pullan had the use of elephants and his reputation as a shikari, as well as Vice-President of the local Shooting and Fishing Club, favoured him as the most suitable man to deal with a dangerous situation. Let me give the story in Mr. Pullan's own words:—

"I learned that the tigress had mauled one coolie (he having since died of the wounds). With two forest elephants by name 'Rupkali' and 'Pawanpyari' I went to investigate what was to me an interesting situation. I was mounted on

Rounding a boulder they came across the tiger stretched out dead.

Exposure: 1|25 F 4.



'Rupkali' while the other elephant carried my car driver who was unarmed. On arrival at the spot a bush was pointed out to me where the tigress was known to be. The tigress was not found where we expected her but after a search of about half an hour the tigress announced her presence in a patch of scrub iungle, by low growling. Both elephants took fright and the tigress charged straight at the elephant on which I was seated. It is not easy to recall precisely what happened, but the elephant fell either through putting its foot in a hole or in turning to ward off the attack of the tigress. The mahout and my servant fell off, with myself in between, right on to the tigress which immediately grabbed my rifle; the marks of her teeth show on the lock. Her teeth must have caught the trigger and both barrels went off. At the time I thought I had fired the rifle myself. My left leg was badly chewed up and the right foot still shows the fang marks. The elephant in its anxiety to get away trampled on my right arm fracturing it in two places. In the meantime the mahout had climbed a tree, and the servant had run away.

The mahout then made signs to me to move away which I did, crawling in the direction he indicated. Why the tigress allowed me to get away is hard to explain as she was standing close by snarling at me. I rather suspect the recoil had so upset her that she was stunned, and at the moment was unable to do much more damage, as a piece of her tooth was afterwards found in the stock of the rifle.

The elephant 'Pawanpyari' was brought up and I was lifted on to the pad. The mahout was rescued from his perch in the tree several hours later. I was rushed to Jalpaiguri hospital where I was treated. After many months, including two amputations and leave at home, I have now an artificial limb but am able to get about my work and feel no effects of this most exciting adventure. The mahout who was responsible for my rescue was awarded the medal of the Order of the British Empire and a Rs. 100 reward."

And now to conclude the story. Mr. Hart of Buxar Division together with two more Europeans went out the following day and surrounded the bush where the tigress was lying up; with a few random shots the tigress again came out to charge her aggressors but this time her opponents were fully prepared and a timely bullet put an end to her agony. She proved to be most emaciated, having been for four days without food or water while she had a paw that had been smashed to pulp with a shot gun, and which was crawling with maggots.

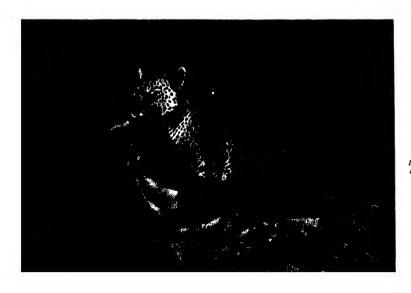
THE STORY OF A MAN SHOT BY A TIGER.

Another curious jungle story is of a man who was shot by a tiger. A party had gone out to shoot from two machans. A tiger appeared and one of the party got in a shot, but to his dismay he only wounded the tiger. Foolishly enough he left the machan and set after the animal contrary to his friends' advice. His friends waited for him for about half an hour and in the distance they heard a shot; they waited for some time but as nothing happened they left the machan and decided to investigate by going in the direction where they had heard the shot. Rounding a boulder they came across the tiger stretched out dead, and to their surprise they found their friend in a very bad condition lying close to the tiger but apparently not mauled

In the faint light we were able to see the lithe form of a panther.

Enlarged from reversal 16 mm.
Cine film with the aid of a Commercial camera specially made for the purpose.





Panther making a kill.

Exposure: Flashbulb wit synchronised camera. F 5.6

—one side of the man's body seemed to have been blown off. He was immediately taken to hospital in a semi-conscious condition and on his death-bed he gasped: "The tiger shot me". Reconstructing the scene of the accident it seems the tiger was waiting round the boulder and as the man appeared it sprang at him. Finding no time to fire his rifle he jammed the butt down the tiger's mouth but the tiger, in clawing, had released the trigger and had blown off the man's side; at the same moment the tiger died from previous wounds.

STORY OF A MAN SAVED, BY A TIGER, FROM DROWNING

Another strange story comes from the Sunderbans and is of a man who was saved, by a tiger, from drowning.

Two brothers were conducting some diving operations in the Sunderbans; one of them was seated in a small boat with his diving apparatus on but without the air pipe; he felt an impact which knocked him into the water. He realised that unless he could remove the helmet he would drown. ling in vain he felt himself pulled through the water and bumped on the shore. To his surprise he heard a rumbling sound close to his ear and this turned out to be the angry roars of a tiger. The animal had seen him sitting in the boat, regarding him as a possible dinner, knocked him into the water, saved his life from drowning by dragging him ashore and then proceeded to try and make a meal of him, but the heavy rubber of the diving suit was too much even for the jaws of a tiger. In rolling the man over the tiger growled in anger and must have realised that it had got hold of a "tough old bird". The brother saw from the ship what had happened, fired a shot which scared the tiger away and our friend was released.



The great carnivora seeking their meat from God.

Enlarged from reversal
16 mm. Cine film taken
with a 4" telephoto lens
from a hide.



Sambur does at a salt lick.

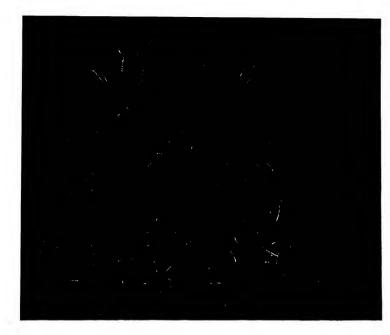
Exposure: As above.

A FIGHT BETWEEN A PANTHER AND A HYENA, KOREA STATE.

News was received of a panther and a goat was tied up as a bait. The machan overlooked a stream and the forest. It was one of those lovely crisp Indian nights when the crickets ring out their pæans of praise. The forest was rustling with the varied life of the Indian jungle on the move; the moon being clear and full, creeping over an adjacent hill throwing eerie shadows through the foliage, lending an ethereal touch to the magic scene. Breathlessly we waited for what seemed hours, not daring to move a muscle or flick an evelid. The frogs continued their croakings, and away in the distance we heard the startled cry of cheetal conscious of some lurking danger. Without any warning there seemed to be a rush beneath the machan—the goat was silent apparently terrified at the nearness of danger. In the faint light we were able to see the lithe form of a panther attacking a hyena which had come to rob its dinner. Frequent skirmishes followed in and around the goat, and sustained our interest for perhaps half an hour. When all seemed still there was the usual rush and choking noise from the goat which showed the panther had made a kill.

The illustration given on page 67 shows the panther making the kill. How the picture was made is described in the last chapter on photography.

Waiting for a minute to enable the panther to get the taste of blood, a torch was switched on. Contrary to usual practice, the panther was away at one bound giving no chance for a rifle shot. Panther will usually look into the light and this moment of indiscretion usually means their death. I think the panther must have been very nervous at the closeness of the hyena, or it is likely it may have seen us go into the machan.



I heard the tiger coming through the narkal grass and presently it broke cover at a fast slouch.

Exposure: 1|250 F 4.

The powers of camouflage are very well illustrated on this page. Combined with the tiger's stealth of movement, he relies on these two factors to enable him to secure his prey. The tiger's powers of scent have been rightly questioned, as it is doubtful if any animal could survive if the tiger had all three senses equally developed.



THE TIGER THAT CLIMBED A TREE.

This adventure of Mr. E. A. Smythe is quoted from the *Pioneer* of 30th June, 1926.

"An adventure that in several aspects is believed to be unique and is certainly one of the most exciting in the annals of big game hunting in India, happened to my wife and myself on the last day of 1925.

As a prelude to the story it may be of interest to relate the general theory of tiger beating as practised in the submontane forests of the United Provinces, with two or three elephants and a few stops.

When a tiger has killed and dragged the carcass into the heavy cover in the beat, the chances are that he will lie up during the day and can be beaten out at leisure. The whole art of the beat lies in anticipating his most probable line of retreat, and by the judicious use of stops on either side to bring the tiger to a single machan placed on the natural line of retreat. This particular beat is situated in one of the most famous death traps in the province where, to my knowledge, over 30 tigers have met their doom. The left side is naturally protected by a bare stony stream which no tiger would willingly cross and where stops are superfluous. The right side is, however, a well-wooded slope at the foot of which a line of stops is necessary to prevent the tiger slinking off into the hills.

A tiger lying up near his kill when disturbed by the approach of elephants either slinks off through the thick undergrowth in the direction of the first machan or, if he goes off towards the kill, is faced with a line of stops who turn him back towards the beat and the elephants drive him slowly and inexorably to his doom. This is the famous Reali Beat of the Jaulasal Shooting Block.



An elephant chariot four-in-hand, Exposure: 4 p.m. 1/100 F 4 with green filter.

Let the reader imagine himself on a brilliant cold weather morning in that glorious country where the first rampart of the Himalayas without warning leaps out of the great alluvial plain of Northern India to form a broken medley of ridges and foothills cut by deep ravines and boulder torrents. Here in the subtropical vegetation, with trees festooned with orchids and entwined with gigantic creepers the Samburs swarm in their natural habitat and nightly the boulder beds, paths and firelines are patrolled by the great carnivora seeking their meat from God.

Let us join in the spirit at the forest bungalow a few miles away, when the news arrives that a tiger has killed and dragged into the Reali Beat and all is bustle and excitement, collecting the stops, elephants, rifles and the inevitable rope ladder for my wife. We started off and when still a quarter of a mile away, we dismounted from the elephants and made a long detour silently in single file on foot, to get to the top of the beat without disturbing the tiger. We arrived at the

spot, hot and dishevelled from the rough scramble; I fixed up two machans, my own in front and my wife's about 40 yards to the right and behind me thus avoiding the risk of ricochets. My wife's machan was in the first fork of a tall tree, 14 feet from the ground, the tree being four to five feet in girth. Just in front of my machan was a patch of heavy narkal grass about 25 yards in diameter and there was a good deal of grass and undergrowth all round.

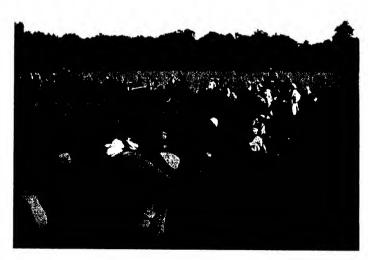
Soon after, the beat started and I heard a 'stop' clapping and the tiger roared twice. About three minutes later I heard the tiger coming through the narkal grass and presently it broke cover at a fast slouch. My weapon was a H, V, 404 Jeffry Magazine rifle with which I have killed several tigers. I had four cartridges in the magazine and chamber and several more loose on the machan. As the tiger broke cover I fired and missed whereupon it rushed back into the narkal. Presently the beat came up to the narkal and almost simultaneously the tiger broke cover again, this time at a full gallop and with a terrific roar. I fired at it going away on my left and again missed. The beast went by my wife's machan at a gallop about 30 yards from her and as soon as it had passed her she fired and hit about six inches or so above the heart and iust below the spine. This stopped its progress and it rolled over roaring.

Here the incredible part of the story begins. The tiger, mad with rage, turned round, saw my wife in the machan and made for her, climbing the tree for all the world like a huge domestic cat with its forearms almost encircling the tree-trunk. Up it went vertically under her machan and as I turned round hurriedly, I knocked the loose cartridges out of my machan to the ground. As things were I had no



An elephant fording the Bhagmati. This picture illustrates how the huge bulk of an elephant is submerged when swimming.

Exposure: Bright sun, 1/100 F 5.6 with filter.



The beaters took the form of a semi-circle of elephants.

Exposure: 1|100 F 11. No filter.

option but to take the risk of hitting my wife. I fired at the brute when it was half-way up the tree but only grazed it. As I looked down to work the bolt and reload I found I had one cartridge left and looking up again I saw my wife standing up in the machan with the muzzle of her rifle in the tiger's mouth—his teeth marks are 8 inches up the barrel—and it was holding on to the edge of the machan with his forepaws and chin. In this position she pulled the trigger—and had a misfire! The reader must realise that at least two-thirds of the tiger's weight was now on the machan which made it rock violently from the tiger's efforts to get on to it. The next moment I saw my wife lose her balance and topple over backwards on the side away from the tiger. Now let my wife tell her part of the story."

Mrs. Smythe says :--

" When I fired the tiger turned and saw me, and immediately dashed forward with a tremendous roar towards my tree. I thought he was galloping past but suddenly realised that he was climbing up, and I had just time enough to stand up on the machan before his great striped face and paws appeared over the edge while blood and hot breath came up to me with each roar. I pushed the barrel into its mouth and pulled the trigger but the rifle would not go off. It was then that I really did feel helpless, and did not know what to do. We had a regular tussle with the rifle and then I saw its paw come through the bottom of the machan and in stepping back to avoid it I must have stepped over the edge of the machan for I felt myself falling. I thought I was falling into the jaws of the tiger and it flashed through my mind 'surely I am not to be killed like this'. I never felt my impact with the ground and the next thing I knew was that I was running through grass and fallen trees, wondering when the tiger would jump on me. I arrived at my husband's tree almost simultaneously with the mahout, Bisharat Ali, who had rushed up his elephant regardless of the wounded tiger or anything else, and I hastily mounted and cleared off into safety, unhurt, except for a sprained wrist and some scratches and bruises from the fall."



The Maharaja of Nepal giving presents to his subjects during his tours.

This is the conclusion as told by Mr. Smythe :--

"The beast did not seem to notice my wife's disappearance, and as I again aimed at him I saw him still clawing and biting through with the machan strings torn to shreds. I fired my last available cartridge and by the mercy of heaven the bullet went true. It took the tiger in the heart and it crashed over

backwards on to the ground immediately below the machan, where he lay hidden from view in the grass.

It was a nice male nine feet three inches in length with two bullets in it—one between the heart and the spine, and one in the heart."

THE TRAGIC ADVENTURE OF SERGEANT ADAMS.

In 1933 H. E. Sir John Anderson, Governor of Bengal, went to the Rydak Forest Reserve some 30 miles from Kartick Tea Estate where the incident of Mr. Pullan and the wounded tigress (related in a previous chapter) took place.

It was on the 11th February that the Military Secretary, Colonel Butler, shot a tiger. On the following day there was a kill at Tiamari Ghat. During the beat that ensued, Sir John, who was in a machan, wounded a tigress which returned into the beat.

In these forests the jungle is so thick that only elephants can be used, so that the beaters took the form of a semi-circle of elephants with stops on either side of the machan to prevent the tiger breaking through away from the guns.

Mr. Saviour, the Conservator of Forests, and Sergeant Adams were on the same elephant in the line of beaters. Without warning, the tigress charged their elephant, which, although a big tusker, was mauled on the left knee and the tigress then got hold of the trunk. This maddened and terrified the elephant and it knelt down on its front legs in an effort to crush the beast. In doing so Sergeant Adams was thrown off and there followed a fight between man and beast. The tigress mauled the right arm which Adams had used in an attempt to defend himself and was dragged about 50 feet into some long grass. At this stage the guns came up on other

Others I have seen charge and trample tiger with their tusks and feet, as shown in the illustration.

Exposure: Enlargement from 16 mm. negative Cine film. Taken with 2" Dalmeyer lens, at 32 frames F 5.6.



In their natural habitat the tiger and elephant usually avoid each other, both conscious of the other's strength. In parts of Orissa where tiger and elephant inhabit the same jungle it is possible to approach tiger without unduly disturbing him, but generally the elephant is a timid animal.



The tiger resented this intrusion into his private domain and went straight for the two elephants which had ventured too close.

Exposure: Enlargement from 16 ym. negative Cine film. Taken with 1" Dalmeyer lens, at 32 frames F 5.6.

elephants and about 27 rounds were fired in an effort to scare the tigress away. This proved of no avail until Adams was able to get at his revolver with his left hand and fired at point blank range. He fired five shots which eventually made the tigress desist and ultimately causing its death. The tigress taped eight feet three inches.

Sergeant Adams was taken to Rydak Tea Estate and given first aid and thence to Calcutta where he expired five days after the event on the 17th February.

Sergeant Adams was on the Governor's Staff as personal guard to His Excellency.

ELEPHANTS.

As the elephant is so commonly associated with the tiger, in describing the one it is hardly possible to avoid a comparison with the other. The elephant has interested mankind from the earliest times. Most Indian potentates have their stable of elephants and no procession, whether it be the great religious processions or an Indian wedding, is complete without the elephant with its gorgeous trappings of scarlet and gold. The picture on page 73 shows an elephant four-in-hand from the Maharaja of Darbhanga's stable; in this unique chariot T. E. The Viceroy and Lady Willingdon rode accompanied by the Maharaja.

The question has often arisen as to the intelligence of an elephant. Is it higher than that of a dog or a horse? Let us consider a dog.

Have you seen a dog's earnest look with its eyes full of human meaning? That watchfulness which attaches itself to the master for better or for worse. A dog will defend its



At six months the baby elephant stands about three feet high. Exposure: Bright sunlight. 1|50 F 8 with green filter.



Exposure: Bright sunlight. 1|250 F 5.6. Speed of shutter to arrest movement.



master without being compelled to protect him. A dog shares his master's life in the fields, tends the sheep, retrieves the game and at the end of the day returns at the heel to the home and becomes a member of his master's household.

On the contrary an elephant would never volunteer his services in defence of his master. He must be trained to obey by word and action. He will never willingly perform any action unless specially ordered to do so by a superior will. In all this I am not unmindful of the debt of gratitude I owe to this great beast. He has carried me many weary miles through the forests, through tortuous swift flowing streams uncomplainingly and willingly.

As I look at the gnarled trunks of the age old trees, the tenuous creepers which form his sustenance, I think of this grand beast as essentially part of the forest. To the end of time he will still be there with ears flapping in the shade of the forest, pursuing life in tranquillity, harming neither man nor beast and yet as powerful in strength and size to ward off the most active aggressor.

Temperament in elephants varies as much as in human beings. I have seen some timorous and excited at the approach of carnivora; they have stood on the bank crying and screaming, completely out of control. Others I have seen charge and trample tiger with their tusks and feet. (Picture of elephant with head down in the grass, see page 79). Others yet again will stand staunch and firm obeying the word and touch of the mahout, and confident of the huntsmen on their backs to protect them from harm.

The following stories are given so as to show the behaviours of elephants.



The fighting elephant is sent in to move out the quarry.

Exposure: 1|100 F 4. Generous exposure should be given for heavy foliage.

The Maharaja Joodha, the present Prime Minister, is at once an enlightened and humane ruler, a keen and daring sportsman. Many photographs were taken from the elephant which kept behind or beside the Maharaja. During the Nepal shoots he has entertained members of our British Royal Family and the Viceroy.



Method of conveyance on a pad elephant, showing the mahout carrying the rifle.

The pad elephant is fitted with a leather pad to take the rider and a man stands on the animal's back urging it forward.

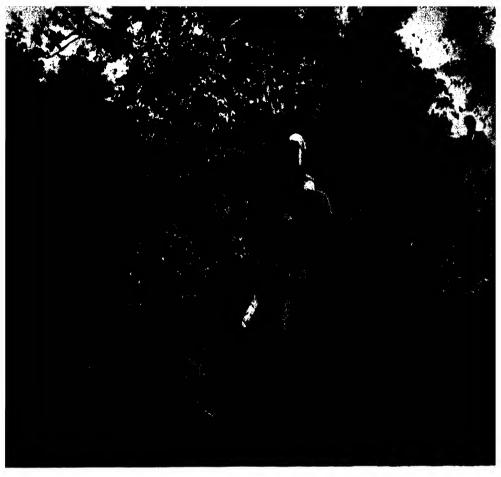
Exposure: 1|50 F 8. Taken against the light; more exposure necessary.

THE TIGER THAT CHARGED AN ELEPHANT.

A tiger had been ringed and the fighting elephants had gone in to rouse their prey. Neither mahouts nor animals enjoyed beating out the dense cover, especially as the tiger did not seem to slink away. I decided to take up my position overlooking the covert. The beating elephants were urged forward by the mahout. As they crashed through the unyielding mass of thorn and branches the sound resembled that of a fire rushing through a cane brake. This sound was enlivened by the sudden, nervous squeals, loud trumpets and deep roars accompanied with all the numerous sounds produced by elephants when in a high state of nervous excitement. I felt the tiger must be very close.

The elephants' excitement increased as they pressed forward through the high waving grass wherein lurked the danger they all dreaded; sometimes two or three twisted round while several turned tail and bolted in the opposite direction. The tiger resented this intrusion into his private domain and went straight for two elephants which had ventured too close. (The picture shows the elephants as they turned and retreated with the tiger breaking back into cover, see page 79). The tiger was by now thoroughly aroused—he turned and spotted my elephant.

In the howdah at the back was a Nepælese gentleman of the Ruling Family whose courage and help at all times had been inestimable. He shouted to the Maharaja to cover us with his rifle but it was too late. On came the tiger like a flash; I shall never forget the beauty and yet the evil of that figure, the embodiment of grace and power, with every muscle vibrant and rippling under the tawny rich brown and



We found a deep gash in the elephant's trunk.

white body—the eyes flashing as with a hidden fire as though poured from a ladle of moulten gold.

In a flash the tiger had selected the favourite spot for attack—the upper portion of the trunk which is most exposed. With cruel teeth and outstretched claws it landed on the elephant's head and endeavoured to pull down the animal, not so much by actual weight but by the pain inflicted on this most delicate part of the elephant.

The mahout raised his kukri to ward off his uninvited guest, while the elephant came to the ground. In all this confusion and excitement it is difficult to reconstruct what happened except that I had kept the charging tiger directly in the viewfinder of my camera until the terrific impact had sent everything hurtling in the howdah, but luckily doing no damage to the camera.

I must have come down with all my weight on the Nepalese General behind me and no doubt we presented a ludicrous sight. How long the tiger remained on the elephant I cannot say, neither can I tell how the elephant or mahout dislodged it, all I do know is that when we had recovered we found a deep gash in the elephant's trunk which caused intense pain and it took about two months to get the poison out of the elephant's system.

Elephants are used for many purposes in shikar. There is the fighting elephant sent in to move out the quarry. He is usually a stout-hearted tusker trained to approach the vicinity of the carnivora. His job is a thankless one and it takes a very brave mahout to go unarmed on the back of an elephant into the thick jungle and face an enraged tiger. In the efforts of the mahout to urge the beast forward he uses his sharp kukri in the tender spot behind the ear; I have seen this particular spot running with blood when the mahout has, in urging his mount forward, used the kukri too heavily.

Next we have the female pad elephant. This is usually a young animal capable of trotting 10 to 12 miles an hour. She is fitted with a leather pad to take the rider and a man stands on the animal's back urging it forward by means of a pronged instrument which he, every now and then, digs into the back

The howdah is a contrivance in the shape of a cage with seats and this is tied to the back of an elephant.

Exposure: 9 a.m. 1|50 F.



The shikar elephants used for the ring.

Exposure: Sunlight, 1|100 F 5.6 with yellow filter.

of the elephant to keep it moving fast. These animals are used for quick conveyance.

We next have the howdah elephant. The howdah is a contrivance in the shape of a cage with seats and this is tied to the back of an elephant. A shooting howdah may take two or three persons and gives the shikari a point of vantage. These howdah elephants are trained to stand firm at a tiger charge and the animals learn to put full confidence in the guns on their back knowing that the sportsman will stop the tiger before it can do any harm to the elephant. To bring an elephant to this stage requires long and careful training but once an elephant is mauled it is unsuited for a shikar elephant any longer. The mauled elephant is naturally nervous of tiger and the danger comes when it may become unmanageable and rush off into the forest, smashing its howdah by overhanging branches and causing injury to the occupants.

Then there is the shikar elephant used for the ring. These animals are in the progressive stage when they are taught to get used to the presence of tiger and I have seen timid animals standing on the bank, whining and crying like babies at the approach of tiger or panther.

Elephants will tell you of the approach of tiger by their sense of smell and will curl up their trunks like a battering ram. They do this because the trunk is the most sensitive part of an elephant and thus it is out of harm's way.

AN ELEPHANT FIGHT.

For several nights the peace of the camp had been disturbed by the intrusion of a lonely tusker. He must have been an outcast from the herd, as he had an unenviable reputation in the district.

With a cruel wrench the "rogue" broke the tusk of our elephant. The picture shows scars received in a fight with a tiger—the story has been told in another chapter.

Exposure: 1|50 F 8.



He fell into the pit where he was found early next morning.

Exposure: 9 a.m. 1|50 F 4.

Returning to camp one evening we heard, in the distance, squeals and roars as if a contest of wild animals was being staged in the forest. We hastened in the direction of this noise and came upon an elephant lying on the ground. The mahout told us that he had been attacked by the "rogue" while returning to camp with the night's food. The tusker had charged the female and it was only when she lay as if dead did he leave her alone; the mahout had hastily climbed a tree.

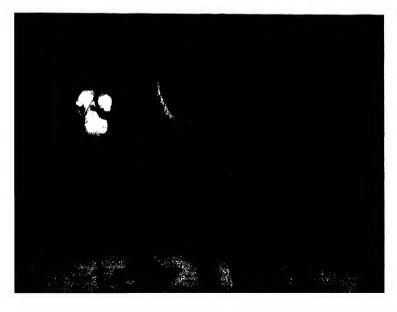
When we went up to the elephant, which was not badly hurt, she gave a pitiful cry as much as to say: "What have I done to deserve this treatment". We were to hear more of the "rogue".

The following morning news reached us that the rogue elephant was in the vicinity. With the strongest fighting elephants duly assembled, the mahouts confident with their long spears and myself all set with cameras and a speedy elephant, we set forth to give battle.

About a mile or two from camp we saw his huge form under a tree; he was flapping his ears to keep off the flies and pulling the tenderest leaves from the highest branches. We made our way towards him, making most of the sparse jungle for cover and having the advantage of the wind blowing towards us. The rogue elephant was suspicious of men in the vicinity and was always on the alert. He spied us as we came up a nullah, and like a phantom his huge bulk glided away into the forest. Then followed a strenuous chase in our effort to capture him. Along beds of dried rivers, through thick tortuous creepers which impeded our advance, past thorns that tore the flesh, we pressed forward, making every effort to get near enough to worry him with the spears.



Ropes were thrown over him and we managed to get a loop round his legs. Exposure: Enlarged from 16 mm. Cine film.



Here people are privileged to see numbers of elephants driven into stockades.

Enlarged from 16 mm, reversal Cinc film taken with 1" lens. The elephant realised we could not be easily outstripped and when he was confronted by a steep bank he turned on his pursuers. As he came near enough the mahouts made appropriate use of their weapons. Goaded by the cruel thrusts of the spears the "rogue" rushed into one of our tuskers.

The impact was terrific as these two huge mountains of flesh hurled defiance at each other. The "rogue" was fitter than the domestic beast, as indeed most wild animals are. With their tusks locked together and with heads and bodies swaying, the climax soon came. With a cruel wrench the "rogue" broke the tusk of our elephant; elated by his success the wild beast trumpeted in triumph and made off into the forest still lord of his domain. (The picture on page 89 shows the tusk broken at the root.) When the photograph was taken it was difficult to approach the animal because of the pain it was in.

That same night the "rogue" came into the camp to make love to a female elephant, having scared the mahouts away on his approach. His reckless passion, however, proved to be his undoing as will be seen from our plans of his capture.

The female thus honoured was tied some distance from the camp in the direction that the "rogue" was known to come. Between her and the forest line of approach a deep pit was dug, the top of which was concealed from view by a covering of leaves and twigs. The "rogue" came as usual to keep his tryst. He fell into the pit where he was found next morning making desperate efforts to get out. Fortune had still further favoured us for it had rained during the night, thus causing the sides of the pit to be too slippery to allow of any escape. This stroke of luck was all the more helpful as the "rogue" was a huge beast, and the pit had not really been dug deep enough.



Exposure: Evening light. 1150 F 3.5. (Taken in the Rydak Forest, B. Dooars.)

Great shouts of joy go up as the leading elephant is seen carrying the valued trophy.

The fierce glint in his eye and the furious slashing of his trunk as we came near, warned us he was not in too good a temper. Ropes were thrown over and we managed to get a loop round his legs. Two of the strongest tuskers were pressed into service, and with their aid we brought him out of the pit after making certain that he was quite secure. Hemmed in between the two tuskers, the wild beast was dragged unwillingly to camp.

The domestic animals proved something of a problem as the mahouts were unable to restrain them from fighting with the "rogue". The wild animal was thereupon hastily tied to a stout tree. In a few months he was well versed in the ways of man and became a willing slave as all good captured elephants should ultimately be.

Keddahs.—Elephants are captured in their wild state in Assam and Southern India, the Keddahs of Mysore being famous as show spots. Here people are privileged to see numbers of elephants driven into stockades, tied and trained.

Now that the elephant is not so widely used for transport and therefore not so much in demand, these Keddahs are becoming less frequent and the animals are left in peace in their wild state.

Elephants have not been caught in Africa in the same way as they are captured in India. Whether the African creature is wilder and more difficult to tame is hard to say, but in the Belgian Congo the Belgian Government have started to catch and train the elephants. It would be interesting to know how far this experiment, started by King Leopold of the Belgians, has succeeded.

Size.—Elephants are the largest animals in the world. It is said that solitary wild males sometimes attain a height of ten feet, although the average is about seven feet five inches. The baby elephant suckles from his mother from teats which are found in the front part of the stomach, between the front legs, and not between the rear legs as in other animals. At six months the baby elephant stands about three feet high.

On one occasion in camp in the Rydak Forest the shikar elephants were herded together, when one daring young swain



Elephants dragging heavy timber or piling teak and sal logs.

made advances towards the lady of his choice. A disgruntled old tusker resented the intrusion of this upstart and, without warning, he rushed into the younger elephant and bowled him clean over with a straight left which would have done credit to a champion boxer.

The blow caught the elephant and sent him sprawling on the ground throwing the mahout and rider. Only when the younger elephant lay as if dead did the old tusker leave him alone. Deep wounds were subsequently found in the stomach, but after careful attention, our friend lived to do many more years of work but was hereafter more discreet in his attentions to the opposite sex.

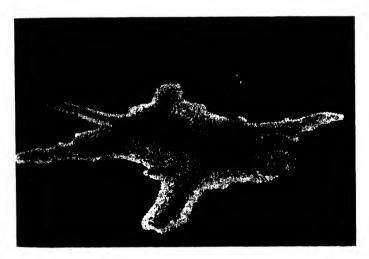
Character.—Although he is a docile animal it must not be forgotten that the elephant is a wild creature, content to roam and normally suffering no restraint from the hand of man. In their wild state elephants usually sleep during the daytime as they are impatient of the glare and sun and come out at dusk when they wander and feed at night, content to find the tender bamboo shoots they love so well.

Age.—Elephants which have been given heavy work such as long marches across country, dragging heavy timber or piling teak and sal logs live to about 80 years whereas elephants in their wild state live to a grand old age sometimes 100 years or more. The age can be told by the upper border of the ear, which is folded over except in young elephants. As the animal grows older, the size and appearance of this fold becomes the means of gauging the age of the animal. In the African elephant the ears are much larger, which makes it appear bigger and more forbidding as it approaches from the front. As the elephant reaches an age of between 14



The white leopard found in the jungles of the Maharaja of Dumraon.

Reproduced from colour film.



The leopard was six years old and measured six feet six inches between the pegs.

Reproduced from colour film.

to 20 years this important fold begins to show. The height of an elephant is usually found to be twice the circumference of the forefoot.

Musth.—This is a term which is used when male elephants are attacked by periodical fits of sexual excitement. The

indication that "musth" is approaching is shown by a secretion from the ducts above the eyes. Stories are told of rogue elephants doing considerable damage to man and crops. This sometimes happens when the animal goes "musth", and of course occurs with tame male elephants as well. The exact significance of these periodical fits is not understood as male elephants are willing to mate at any time. When elephants go "musth" they will attack man or other elephants. These fits seem to occur about the same time each year in fully grown animals. Tuskless males are always easier to deal with. The period of gestation for female calves is 18 months, while for males it is two years. Like most wild animals the elephant has a strong maternal instinct and will grieve over calves that die.

Patience and independence.—How independent and patient an elephant can be will be seen from the following story:—

A tusker had been taken into the bazaar when a boy offered the animal some sugar-cane. As the elephant put out its trunk the boy withdrew the sugar-cane. This was repeated five or six times till the animal refused to put out his trunk any more. The boy then approached nearer to try and tempt the animal when it suddenly shot its trunk forward, snatched the sugar-cane from the boy's hand and gave him a whack with his trunk which knocked the boy senseless. Finally it threw the sugar-cane away.

Elephant language.—As will be seen the words used with elephants are generally colloquial Hindi words and whilst this cannot be called a language the elephant obviously understands the spoken word clearly. It would be interesting to know if an elephant in a zoo in Europe has to learn the words



"Stripes" being carried home on the back of an elephant.

Exposure: 1|100 F 5.6 with light filter.

It is interesting to compare the coloration of the white tiger with the markings of the ordinary tiger. It will be noticed that the lines shown in the bottom illustration are very faint when compared to the deeper colouring of the normal animal shown above. The white tiger can be seen in the Museum at Calcutta.



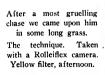
of command in English, or if the keeper has first to learn the words the elephant has learnt after its capture.

The following are the words used :--

Hindi words used to command elephants.

	Kneel downBight (Beit).
	Step across
	StopDhut.
	Lower fore part of body to permit man to dismountJoog.
	Kneel with hind legs onlyKool beit.
••	SmashMar doob.
	Get up or go on
	Break an overhead branchUpoor dale.
	BackPechoo.
	Lie downTere.

Conveying the bag.—At the end of an exciting day when man and beast are eager for the comfort of camp, we must not forget that the game has to be taken with us. For this purpose our trophies are carried on the backs of the hunting elephants. The mahouts sing their songs, the hunters fight their battles over again as they relate incidents of the day's chase, the faster elephants stage an Elephant Derby and the numerous camp followers can be seen in the distance pouring to the point of rendezvous eager and full of congratulations for the returning hunters. Great shouts of joy go up as the leading elephant is seen carrying the valued trophy.



Exposure: 1|100 F 5.6.



Twenty or thirty years ago these handsome beasts used to roam unmolested throughout many parts of India. There now remain only a few solitary animals. In Nepal one herd is left. A few herds may still be found in Assam, but it will probably not be long before this courageous and strong beast will be no more.



He fell at last fighting to the end.

Exposure: As above.

As the glare of day imperceptibly leads us into the mellowed night of songs and camp fires, we give our gratitude to the noble beast—the elephant—which has made all this sport possible.

Coloration of animals.—How did the animals get their spots, stripes and other coloration—obviously by a long period of adaptation to environment. The spotted types are more common than the stripes. The following are some of the animals that have the spotted skins:—

The cheetal, the chevrotain, the young of the red deer, the swamp deer, the hog deer and the roe deer; the chamois, the Virginian deer, the Malayan tapir and some seals. A few animals have stripes of which the following are some:—The tiger, the zebra, the giraffe and the striped hyena.

Animals which live out in the open usually take on the coloration of either the sandy or rocky environment in which they live. The lion is of a sandy colour with bright coloured skin because it lives in open sand spaces. It is very difficult to distinguish a tiger in long grass on account of its deceptive coloration. We have learnt something of the value of camouflage in modern warfare.

It is interesting to note that the tiger skin assumes a lighter colour in the more open grassland whereas it becomes deeper in the heavier forest it inhabits. In old age the orange brown becomes a pale yellow.

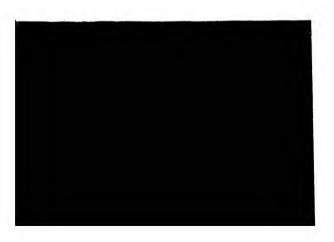
white tiger.—The picture on page 99 is of a white tiger shot by the Maharaja of Gidhaur in the Lechuar jungles of Bihar. There is another preserved white tiger in the palace at Ambikapur in the Surguia State.



A Chinkara doe at a salt lick.

Taken from a hide, and enlarged from 16 mm. Cine film.

Why cannot India have a big National Park like the Yellowstone Park in America or the Kruger National Park in Africa where these graceful and harmless animals would have seen in their natural habitat?



A Nilghai bull.

Exposure: As above.

Several white tigers have been found in Rewa and at the head of the Nerbada River where many generations have flourished.

It is said that the white tiger is a freak of nature. My impression, when looking at the stuffed animal, is that they are not freaks of nature but a throwback from the white Manchurian tiger. In the white specimen that I have seen the hair is longer and gives the impression of an animal with a coat suited to northern climes. The ground is of a creamy white and the black stripes stand out boldly against the lighter background.

It is significant that these so-called freaks of nature have been found within the same area. I have never heard of white tigers in any other district.

White leopard.—Shot by Mr. Boris Lissanevitch at 15 miles from Sarsaran in the Maharaja Bahadur of Dumraon's jungle in February 1940. This is the only known specimen in existence. When shot the eyes were sky blue—there was no trace of pink in the eyes—and the tail shows just a suggestion of the original leopard. The animal is white at the sides and cream towards the centre with pale brown spots. One other specimen was supposed to have been shot about 30 years ago. It is likely that a similar specimen was shot in the same jungle three years ago by a police officer but no skin is in existence; if it be so, it may have been either the male of this species which incidentally is a female, or one from the same litter. The leopard shown in the picture was six years old and measured six feet six inches between the pegs. It is believed this is not an albino but a pure freak of nature.

It is said there is a skin in existence which has the combined spots and stripes which clearly goes to show that it must have



A young tiger cub which gave the photographer many valuable pictures.

Taken from a hide and enlarged from 16 mm.

Cine film.

A National Park would not only make India a great centre of attraction for tourists thus bringing money into the country, but such a sanctuary would also bring money for the Exchequer by the issue of licences for photographers and entrance fees to the reserves.



Two young panthers gambolling and playing in the warm winter sunshine.

Exposure: As above.

been a cross between a leopard and a tiger; this hitherto unknown fact has been disputed.

White elephant.—There is a popular belief that when a white elephant leads a marriage or procession this is certain to bring fortune to the owners. Just why the phrase "A white elephant" has come to signify "a doubtful proposition" is difficult to understand in view of this age-old superstition of the lucky significance of the white elephant in India.

"Svet Hasti" is the property of the Maharaja of Tripura and being such a valuable animal, every care is taken to guard it from harm. In the picture on page 81 the white elephant is seen walking down the main street of Agartola, the capital of Tripura State. Accompanying the animal is a guard with a spear as well as his own mahout and it is roped to another elephant of a prude docile nature.

The skin is of a dirty creamy colour in contrast to the grey of a normal elephant. The eyes are pink which clearly proves that it is a true albino. The animal was caught in the forest of Tripura which borders on Assam and Burma.

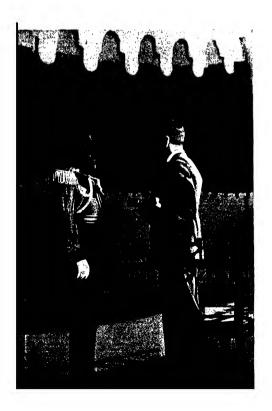
Freaks of nature may also be found among other animals. In the Zoological Gardens of Mysore there are about a dozen perfect specimens of albino black buck. They are snow white in colour in comparison with the dirty white of the wild species found in the United Provinces. In the same gardens are albino antelope, a large number of albino spotted deer and fallow deer. Whether or not these have been bred in the gardens I cannot say but it is most extraordinary so many albino animals should be found in one zoo.

As the albino is so rare it is eagerly sought after by sportsmen who seek to add these to their collection of valuable



Trophies of the chase.

Exposure: Flashlamp with flash-powder F 11.



The Author with Maharaja Joodha Shum Shere Jung discussing the prospect of the next camp.

trophies. It is for this reason that albino types are so seldom found in their wild state; were they able to perpetuate their species there is no doubt that we would find many strange colourings in wild animals.

Scientists tell us that in human beings, albino skins are of a pale colour because they have been denied the pigment in the skin which protects them from the ultra-violet rays. The eyes are pink and it is said that the human albino is impatient of glare and strong light.

Amongst birds, the Calcutta Zoo has an albino crow and an albino mynah, both are of a creamy white colour; I have also seen an albino Java sparrow of a pure white. As to whether these birds are able to see in strong sunlight I am unable to say.

Wild buffalo.—Wild buffalo, in its wild state, is about as rare as the rhinoceros. Herds have been disseminated by disease which they have contracted in their associations with domesticated animals.

Twenty to thirty years ago herds of these handsome beasts used to roam unmolested in the Kathiawar District of East Bihar. There now remain only a few solitary animals as the area in which they roamed has been given over to the cultivator. In Nepal only one herd is left and a few herds may still be found in Assam but it will probably not be long before this courageous and strong beast will be no more.

Many sportsmen say that the wild buffalo is the most dangerous of all wild animals because it will turn back on its tracks and waylay its pursuer. Certain it is that this animal is a most formidable adversary for I have seen it, with head lowered, charge an elephant and knock it over; this was a solitary male which had been turned out of the herd.

The wild buffalo is a very much heavier beast than the domesticated animal. It has a huge girth of neck, a more ponderous and heavier body and a bigger spread of horns.

I shall now describe a typical wild buffalo hunt in the Nepal Terai :—

Shikaris had been sent out for days to locate the herd. It was during the winter season when the ground was hard and tracking difficult but at last the trackers brought back definite information. With light hearts the party set off after their quarry. After some 15 miles of hard riding we came to the locality where the herd was last sighted. It was now dusk. By careful manœuvring we managed to get the herd to windward of us. With stealthy approach the Maharaja of Nepal came within 1,000 yards of the herd, but the wily beasts sensed danger and made off never to be seen again. Such an opportunity comes rarely and we returned despondent to camp.

After some days news was brought of a lone bull and we made after him in haste. The going was hard but we came upon him on the edge of the forest. He had got amongst a herd of domesticated animals; the herdsman had fled and the wild buffalo had driven out all the domestic bulls; this made him impatient of interference but certainly promised some good sport. From a point of vantage the Maharaja fired, being careful to avoid hitting any of the domestic animals, but the tough hide of the buffalo turned the bullet and served only to infuriate him. With lowered head and snorting with rage he turned to charge his adversary; with thundering hoofs, his massive bulk of bone and muscle came pounding towards the

Maharaja's elephant but a quick timely shot in the shoulder brought him to his knees within a few paces of the elephant. He rose again, turned and sought cover behind a mound and after another shot he made off into the forest. He led us a long chase for nearly two hours; detours were made by other elephants to attempt to cut off his line of retreat and after a most gruelling chase we came upon him in some long grass. He was badly wounded but still showed plenty of fight and again and again sent the elephants scurrying in all directions. He fell at last fighting gamely to the end, having taken 18 shots on his body. He was a magnificent animal with a fine spread of horns; when examined later it was found the base of the horns was a crawling mass of maggots. He had obviously been fighting for the mastery of the herd and had received a wound which, as said above, was crawling in maggots.

Conservation of game.—The writer has witnessed the destruction of numerous wild animals. His small voice has been like a whisper in the wilderness, and he therefore takes this further opportunity of suggesting a way of mitigating the destruction of game thus saving wild life from extermination.

Why cannot India have a big National Park like the Yellowstone Park in America or the Kruger National Park in Africa where all animals would have sanctity from the everdestructive firearms of the so-called "sportsmen" and the depredations of Indian cultivators? It would not only make India a great centre of attraction for tourists thus bringing money into the country, but such a sanctuary would also bring revenue to the Exchequer by the issue of licences for photographers and entrance fees to the reserves. It should not be difficult to make motorable roads through the greater part of it, and I can see that such an enterprise would be of lasting benefit to India. It would help in the preservation of fast disappearing species, it would beautify the countryside and bring some financial return.

It may be said there are game reserves in India, but these are not sanctuaries for wild animals; licences are issued and shooting is carried on.

In one reserve forest in Bengal five tigers are allowed on one licence. This defeats the object of the reserve, for if the tigers are shot, deer and pig become numerous and play on the adjacent cultivation. The horns of the deer become smaller when there are too many hinds and cultivators know very well that wild pig can be a veritable menace—a much greater menace than the tiger which kills only for his immediate needs.

All over India we see herds of half-starved cattle. emaciated, and miserable looking—the outcast and maimed of the herd. These are usually the old animals and have been neglected by the owner because the true Hindu will not take the life of the sacred cow, and so these wretched animals consume valuable fodder. What if the tiger does carry off some of these beasts? He is doing a service to everybody, for it is rare for a tiger to secure a valuable cow or bull, because the villager is much too careful of his best cattle. He gives them the best pasturage, takes them wherever he goes and tends them as if they were his own children. We see the results of this grazing of quite useless cattle. The hillsides are denuded of young shoots and trees, which would in time provide valuable timber; with no roots or trees to hold the hillside the monsoon rains sweep over this open country converting what should be rich forest land into dry sandy wastes. It is because of this deforestation that many of the rivers of Bengal and other provinces have changed their course. The tragedy of this is observed in the denuded countryside in the western parts of Bengal, which at one time were thriving and populous.

Propaganda and legislation.—There are other ways of conserving wild life. One is by propaganda and another by legislation.

Propaganda would, however, be expensive and of doubtful value in a land like India. Legislation may help but in the first days of self-government there is little hope that the Congress Ministries will legislate for wild life.

In one part of Bihar, notably at Kursela, the Local Government have influenced the landlord to destroy the last remaining stronghold of wild buffalo to make room for cultivation. Within recent years shoots have been organised to slaughter these handsome beasts, and they have been reduced from herds of thousands to just one or two solitary animals.

I once heard of a Ruling Prince who erected telephone wires to his camp over a big area so as to give him news of herds of black buck. He was thus able to slaughter hundreds of these animals within a few days and, I suppose, was applauded as a grand "sportsman".

Some writers attribute the diminution of game chiefly to the Indian cultivator with his small firearm. I cannot agree to this. I remember remarking to an Indian ruler that he might give the game a rest for a number of years in his domain to which he replied: "If I do not shoot, the tiger and other animals will roam over the border into neighbouring states where the rulers will secure the sport". And so the vicious circle goes on!

One Maharaja is said to have shot over 1,000 tigers and other rulers of Indian States have in their lives shot 800, 600 and 100 tigers respectively. This does not include other game; so indiscreet and ruthless slaughter continues unchecked.

In British India it could be minimised, as I have said, by legislation, but the problem of Indian States is not so easily solved.

Is it necessary to continue this cruel extermination? The cheetal has disappeared from the forests of Bengal. Sambur is scarce. Tiger is now extinct in districts where half a century ago it was abundant. No longer does the rhinoceros roam the country as far north as the Punjab and down south to the Sunderbans of Bengal. The black buck which wandered over the north-west Punjab in herds is now only occasionally seen. Railways and other facilities for travel together with the greatly improved firearms in the hands of so-called "sportsmen" are guilty of much, but generally it is the white man's ruthless hand that commits the greatest sin.

Wild animals feel for their young acutely. I once knew of a tigress whose cubs had been shot; she roamed the hillside for weeks in the vicinity of our camp, just calling and growling for her cubs all night long. She refused all bait, and it was easy to imagine her grief. I have seen a panther with her intestines shot away still trying to defend her cubs.

Man considers himself higher than beast. In fact, however, when he stoops to this shameful slaughter he is lower than any of the beasts of the field.

And so I plead for the excitement, not of the rifle, but the thrill and interest of the bloodless hunting of wild creatures with a camera. The pleasure to be derived in waiting for animals in a hide, and studying these lovely creatures when they are unhurried and unmolested and seeing good pictures is something entirely unknown to those who shoot only with a rifle.

Some may say there is no sport in photographing wild game, but the man with only a camera runs a much greater risk. Then again there is the pleasure these pictures give in later years to hundreds of people who can never hope to see these animals in their natural state. The pictures I have secured, with the limited means at my disposal, fall short of what I still hope to get and I still live for the day when I shall be able to secure a picture in slow motion of a tiger making a kill, or of the numerous animals of the jungle coming in their turn to a salt lake and giving me the chance of securing films and pictures.

In support of the argument of the conservation of game, it is sometimes contended that sportsmen are the best protectors of wild life; that they shoot only the big heads and older animals, restricting themselves to only one or two tigers. The weakness of this theory, however, lies in the fact that sportsmen are in excess of the game available. Furthermore, if there is any real intention to conserve wild life there is no use in stopping half-way and allowing only the privileged ones to do the shooting. I have yet to meet the sportsman who will strictly shoot only what he is permitted to. If another fine head comes his way the chances are a hundred to one that he will go for it, if time and other circumstances are favourable.

National Parks.—What spirit has led to the creation of National Parks in other countries? They are born of public opinion. How can this be fostered in India? By education, by publicity, by frequent appeals to the public conscience, through books, magazines, films or lectures.

A great deal has been written on this subject but Indian opinion is not yet aroused. The Government might be aroused to this vital problem by legislation which would—

- 1. Make the sale or transaction of any part of game animal, alive or dead, an illegal offence.
- 2. Provide severe penalties for any kind of poaching.
- 3. Treat the existing game reserves as National Game Parks and prohibit any kind of netting or taking of wild life in any form.
- 4. Remove the existing classification of tiger as vermin.
- 5. Completely forbid shooting from cars or with spot lights.
- 6. Compel villagers to return their guns to the authorities at certain seasons. These guns must be used only for protection, and the barrels of the guns should be made to the prescribed length.

Canada, Australia, New Zealand, South Africa, Switzerland, Italy, Spain and Sweden all have National Parks. Belgium has the Park Nationale Albert which has increased the game tenfold in four years. These countries, with less facilities than India, lead the way and will guide us in information, procedure and scientific game-keeping. Some of the illustrious nobility of Nepal might, with advantage to themselves and their country, turn Bikna Thori into a National Park.

It is said that just as nature abhors a vacuum so she detests a crowd; that disease will step in where animals are crowded together. Experience in other countries does not prove this and nature has her own way of counter-balancing this danger. If this were so wild life would have ceased to exist before firearms were discovered.

Wishful thinking will do nothing for this vital and urgent problem. Let the ministers for forests and the responsible Government officials take an interest in a project which will be of lasting benefit to their nation.

Nepal has dealt with the rhino poachers in its own way and practically stopped the practice. Why cannot India adopt similar methods of game protection?

Let us take another point of view. There is both anticipation and exultation in getting your game, but think of the noble life that has been sacrificed just for a few hours of artificial pleasure and excitement. The animal to whom nature has bestowed so noble a life has roamed these grand solitudes for many years, and but for the "sportsman" might have roamed them for many more, now lies bleeding and quivering before the "shikari", deprived of its relatively harmless existence to gratify the passion for sport of usually a young man on the threshold of life and in other matters full of high ideals and enthusiasm.

Nor is the animal given a fair chance. It is rarely faced boldly on the ground and very infrequently killed in open fight. Probably it had never even seen its enemy nor had it been given a chance of retaliation. Baits, kills, and trackers from whom escape is as impossible as from bloodhounds, have been urged in pursuit and the most powerful weapons which science could

place in the hands of a sportsman have been used for its destruction.

Can the "sportsman" congratulate himself on his achievement? The forest around is indescribably grand. No sounds but those of nature fall on the ear; the trees are of immense proportion and in their huge stems and branches cling several varieties of ferns and orchids. The tree-trunks are mossgrown and weather-beaten, and the undergrowth consists of ferns up to the shoulders. Truly an animal must have a noble nature and one is entitled almost to believe that he delights in the wild places he inhabits, as much for their beauty as for the safety afforded him. He wanders from stream to hill, rubs his antlers or tough hide against the mighty forest giants and lives contentedly fearing only his arch enemy—Man. What a blood-thirsty creature the self-constituted lord of creation is!

In F. W. Champion's book "With a Camera in Tigerland" he gives a good story of the few occasions he used a rifle. Incidentally, this book contains the author's patience and skill as well as a fine example of the value of the camera over the gun. Here is Mr. Champion's own story:—

"Perhaps the best opportunity I ever had of making a picture of a good sambur stag occurred in this very same nullah on a previous occasion, and was on a day when I was out looking for meat for my camp followers. In the cold weather in these jungles, there is a heavy mist which persists for an hour or so in the morning before it is dissipated by the rising sun. I was going along on Balmati just as the mist was clearing when, turning a sharp corner, we came face to face with the finest sambur stag I have ever seen in the flesh. He was walking slowly towards us along the dry river bed, and the clearing mist

outlined his magnificent antlers and splendid mane in such a way as to make a picture such as one dreams of but never expects to meet in reality.

There he stood, Captain and Leader and Lord of the Herd. Cursing my luck at being without a camera, and feeling a callous murderer, I fired at him but only succeeded in inflicting a crippling wound. There is nothing I detest more than to leave a wounded animal to die a lingering and miserable death. As I had promised to bring in some meat I followed up and pumped the whole of the remaining cartridges into him, until at last he fell over terribly crippled but still far from dead. Here was a dreadful quandary. I had no more cartridges. My camp was three miles away and lying in front of me was my poor victim kicking violently, in his agony, and from time to time giving vent to the most heart-rending screams that it has ever been my misfortune to hear.

We attempted to approach him with a knife, but my mahout narrowly escaped a broken leg from a desperate lunge with those splendid horns, and I was ultimately compelled to run back to camp for some more cartridges in order to put the poor beast out of his misery. Those awful screams, and the sight of that magnificent creature struggling from the wounds I had inflicted upon him, haunt me to this day and I am afraid will continue to do so every time I see a big sambur. It has, however, taught me a lesson, and never again will I shoot big game unless I am absolutely forced to do so ".

There was once a wretch who, despairing of other claims to notice, thought to achieve a name by destroying the most beautiful building on earth. This is the mind of the headhunting sportsman. The nobler the thing which he destroys the greater the deed, the greater his pleasure and the greater he considers his claims to fame.

Mr. Champion continues: "True it is I was not seeking a record head on the occasion, and true it is that there is much in big game hunting that tends to bring out some of the qualities in man. But I cannot forget a definition which is so true that long ago I ceased to obtain any pleasure from shooting no matter how fine the bag and so for the last five years I have given it up entirely—beyond what I am reluctantly forced to do to provide myself and my camp followers with meat.

Many others are following the same road, and it is devoutly to be hoped that hunting with the camera will ultimately largely replace that kind of hunting—however great its charms—which made its appeal to earlier generations".

I am grateful to Mr. Champion for expressing the feelings which I feel so intensely myself.

FILMING BIG GAME WITH A CINE CAMERA.

Filming wild animals in their natural state demands infinite patience, tact, perseverance, jungle craft, technical knowledge of your medium and last but not least, a very generous amount of luck. To go out and shoot an animal at long range is not very difficult, but to stalk the animal, to get within reasonable distance for a photograph and to get the animal in a good light and keep it in the field of view is by no means an easy task. When the writer first attempted this work, the animals just flashed away, or the tiger had so unsettled the nerves that to keep the camera steady was out of the question. All these things may happen to you so let us see how we can overcome them.

Location.—We must first consider in what part of India the film is to be taken. If in the Central Provinces or South India, a machan would suggest itself; if in the thicker forest of the Terai one must go on an elephant.

Most of the pictures in this book is accompanied by data as to how it was secured, and may thus guide your own efforts. You may wish to take pictures by flashlight from a hide, or you may be fortunate in having the game beaten towards you. Let us consider the various points.

Cine pictures from the back of an elephant are not usually satisfactory. The movement of the animal makes the camera move and in the result the subject is shaky on the screen. How can we overcome this problem? The animals are usually so fast in their movements that it is very hard to record them.

Frames per second.—If we speed up the motor, and take 32 frames instead of the usual 16 frames, the motion is slowed down and we get pictures on the screen moving at half their normal speed. It then becomes possible to see the animals on the screen. This applies only for the flash of a deer, or the charge of a panther or tiger, or the hurried retreat of an elephant. If the movement is moderately fast then 24 frames per second will suffice. This is the "talkie" speed and will give you very smooth, natural results.

The advantage of the increased speed of film is that any movement in the camera is lessened and becomes tolerable to the vision when projected.

Stops.—It follows that if we have doubled the speed of the film as it is moving through the camera the exposure is halved so that we must open one stop more. Let me make a simpler

illustration: If your stop is F 8 at the normal 16 frames and you wish to use 32 frames the stop to be used will be the next larger, viz., F 5.6, which gives you twice the amount of light.

Use of meters.—In all work in the jungle when light varies considerably, one of the many types of meters should be used. The money you will save by the film which you have avoided wasting will more than pay for the cost of the meter. It will ensure your getting those valuable pictures which cannot be replaced. It is essential that you learn how to use your meter by practising with it frequently under all conditions in the same way as you have learnt how to use your camera as a whole.

Equipment.—Much depends on whether you already have a camera or whether you intend to purchase one. But whatever you do, get the very best you can afford because the work is so exacting that you will require all the help you can get from your apparatus. Let me describe the idea of outfit:—

Type of camera.—The motor should be of the geared type so that risk of jamming the film from constant jolting is avoided. Remember that life in the jungle is very hard on cameras and apparatus; jolting on elephant back or a slow bullock cart or climbing trees and machans all demand that your apparatus be of robust construction. If the magazine type of cameraloading can be secured, this is the easiest to use, and the chances of jamming in the gate are small.

Lenses.—The turret head model combining three lenses easily brought into position, is all that can be used effectively. A 1" lens for general use, a 2" for bringing your subject moderately close and the 4" for use only on distant subjects and under ideal conditions, when the camera can be given a firm

support. Wide angle lens and others of a bigger magnification are unnecessary. This matter of the use of lenses can be crystallised in one's mind by comparing the lenses with firearms. If you are shooting directly in front of your gun you want as much game as possible, and therefore use a shot gun, i.e., your 1" lens. If your target is a distant deer, which you are unable to approach, you use another type of gun—a high powered rifle, i.e., the telephoto lens, the 2" and 4" lenses.

Tripod for telephoto lenses.—With a shot gun you can blaze into the middle of a nearby flight of duck and drop a few of them no matter how much wobble there may be in your hands. But if you use the same technique when hunting distant deer with a rifle you will never get any heads, as the effect of the wobble increases with the distance of your target. Always use your camera from some steady support when using anything beyond the 1" lens. The tripod I have had made is a stick tripod with the head to hold the camera; the base of the stick is in the form of a spike which is jabbed into the ground to keep the tripod firm. This is the most convenient for use in the jungle. The three-legged tripod is too unwieldy to take into the forest.

View-finders.—When will manufacturers use their own cameras under various conditions so as to discover the defects in their apparatus? To screw up your eye, look through a small hole and train your camera on a fast moving object, which usually comes at unexpected moments, is asking you to do the impossible.

The open type of view-finder, which enables the eye to follow the object, is much more satisfactory. Moreover one should be able to follow any fast-moving object with both eyes

open. Go out into the street and practise on a motor car. Practice should be carried out first without film and then with film. A little trouble taken now will more than repay the photographer later on.

Type of film to use.—We have the choice of the reversal and the negative-positive film. The reversal is more popular and more widely used, but it is fair to point out the advantage of the negative-positive process, which is the film used in standard size work.

Negative-positive film.—In the negative-positive film it is possible to cut out the unwanted and wasted film when a clear positive without numerous joins will be obtained. Various titles such as compound printing are easier to produce. This compound printing gives the title on a moving background which is always an attractive title and gives that professional touch. In the negative-positive film the grain is more pronounced, but not sufficiently to be offensive. It also has another very distinct advantage in that enlargements can be made direct from the negative, and very good results are obtainable as will be seen from the illustrations in this book.

Reversal film.—As its name implies the negative image is reversed in a separate bath during processing, and the film comes to you as a positive. The reversal process is favoured by big companies, perhaps because it makes for simplicity to the user. It has the disadvantage, however, of increased cost plus the numerous joins which are bound to break if the film is shown very often.

Filters.—Why do we use filters? Because no film has yet been produced, panchromatic or otherwise, which will render in

their proper monochromatic values the scene we photograph. If we take a sky with clouds without the use of a filter the results will never be as full of that photographic quality we seek as if we had used a filter. To describe each of the filters necessary for all subjects would be too tedious for the general reader. Perhaps two or three are all that are necessary—a vellow, a green and a red. With a red filter haze is lifted and your pictures become crisp and clear as if there was no visible haze. By halving the exposure the effect is one of moonlight; the sky is dark, trees and foliage stand out in silhouette against clouds touched with silvery light, houses appear ghostly, just as on a moonlight night. But suppose you do not want all this moonlight effect but just beauty and detail in the landscape with crisp, clear sky and clouds, then slip on a vellow filter and make an exposure allowance of a stop or two which depends on the film and the filter

Without a filter your pictures will look mere black and white home movie scenes, whereas with a filter you will obtain that beauty which you have so often enjoyed on the professional screen. Inconspicuous and easy to use, a colour filter is obviously one of the things that no alert cameraman will do without.

Continuity and scenario.—Between its first and last scenes every movie should tell a complete and interesting story. It should not record a succession of shots of different subjects, but rather a succession of sequences of different subjects. No movie film ever happened by accident. Some forethought must inevitably be lavished upon it. But let us see what this thing called "continuity" will do for us in making good film.

Let us call the film "A Day's Shikar".

Abbreviations: L.S.=Long shot, M.S.=Mid shot, C.U.=Close-up.

Scene I.

- 1. M.S. The flap of the tent opens and out walks our hero—the "Saheb".
- 2. C.U. Looking round at the sky our principal character considers the prospect of a clear day; he calls the bearer.
- 3. C.U. Bearer shouting: "Accha hazur ata hai".
 - C.U. Kettle boiling and being poured into teapot.
- 4. M.S. Master having his tea.
- 5. A man running towards the camera or horses racing over a river or an elephant hurrying along (taken at half speed with small stop will enliven the movement on the screen) rushing up excitedly to the Saheb with news of a kill.
- 6. The scene in the forest. A peg with a little uneaten grass and a drag with the carcass of the tiger's kill. (This to be taken when opportunity arises.)
- 7. L.S. coming into C.U. The party moves to the scene of the shoot. (The camera is on the ground sighted in the direction the party will pass. As they approach the motor is set running. The elephants loom up over the camera. Elephants are sensitive and will try and avoid this unusual contrivance—the camera.)

Scene II.

DISSOLVE INTO

- 1. L.S. Line of elephants crossing a river, one sucking water into its trunk and throwing the water over its back.
- 2. C.U. The head shikari directing the movement of the elephants with his stick or hand.
- 3. M.S. The elephants diverging into two lines in the forest.

OR

We may have a line of beaters, in which case close-ups can be taken of the hands on a tom-tom or the rattling of a kerosene tin proceeded by the blowing of a whistle to indicate the start or the old muzzle-loading gun being fired into the air to start the line moving. Once the hunt gets going numerous titbits will present themselves to a keen observer.

- 4. M.S. The mahout throwing sticks into the ring.
 - C.U. The mahout with hands cupped as if booing the game. The iron spike jabbing the elephant's head as it is impelled forward.
 - M.S. Trees being broken down to clear the line of fire.
- 5. C.U. Loading the rifle. Pulling back safety catch.

 The hands shading the eyes and searching the jungle.
- 6. L.S. The animal breaks cover.

- 7. M.S. Firing. (Taken at some other time as it is impossible to take the shikari as well as the animal.)
- 8. L.S. Animal trying to break cover again.
- 9. M.S. The final shot by the shikari.
- 10. M.S. Inspecting and measuring the animal.
- 11. C.U. The trophy.
- 12. M.S. The "bag" being tied and dragged on to the elephant's back, car or lorry.

A fade-out of the line of elephants or car moving away from the camera round the bend of the road.

Scene III.

Perhaps one of your friends in the party is a confirmed pipe smoker in which case any close-up might be taken of him puffing a pipe. Let us take it like this:—

First hands only filling the pipe, pressing down the tobacco with the fingers. Striking a match, sucking the flame into the bowl, the first few puffs of smoke being blown away and finally our friend smoking contentedly by the camp fire. The first shots are brief—a few seconds—your last shot say 15 seconds with a fade-out.

The foregoing gives an idea of continuity which helps to keep your story moving. Do not just take the members of your party looking into the camera. Get them reading the newspapers, studying maps, cleaning rifles, smoking cigarettes, pouring out whisky.

In my scenario I have presumed the party are out for shooting only, as this is most usual, but if you are out for real animal pictures, which will not show the animals in pain or anger, then your line of attack will naturally be different and limited to whatever shots you are lucky enough to secure.

Taking the scenario I have given as an example, the continuity is ready-made. Yet all too often the essential part is overlooked. The eagerness with which you anticipated the event, the routes you carefully traced on maps, the hustle and bustle of final preparations, the moment of departure and the journey to the scene of the camp—surely scenes of these activities should be the beginning of your film.

As the crime movie of the professional screen builds up to a climax by presenting the various suspects and clues, so also the shikar film depicts the events which lead up to its big moment. Be on the alert for any material which will lend itself to your scheme, and you will see and enjoy many more sights and sites than if you were just waiting for things to happen. Conclude your film with a lovely sunset scene (taken with a red filter to give greater contrast) and do not forget the perfect peace of an hour by the log fire (taken in the fading light, with some magnesium ribbon skilfully hidden) on your deck chair by the tent under a canopy of graceful branches and slowly drifting clouds. All these will be appreciated with increased relish in the years to come.

Here is another scenario which readers may care to follow:—

Scene I.

- 1. C.U. Wheel of car revolving. (This is a simple subject to take. Run the car down to any service station, jack it up, slip into top gear, take the upper portion of the wheel, then gently rock the car to stimulate road-sway.) This dissolved into the car driving into camp from the distance and gradually coming closer.
- 2. L.S. Waving of friends welcoming you to camp.
- 3. C.U. Shaking of hands to show cordiality.
- 4. M.S. Taking guns out of car, unpacking, etc.

Scene II.

- 1. L.S. Camp scenes.
- 2. M.S. Tents being pitched.
- 3. C.U. Eggs sizzling in the pan.
- 4. C.U. Winding film into camera or cleaning rifle with pull-through.
- 5. Personalities can follow, preferably head and shoulders pictures taken in the soft evening or morning light. Always avoid the midday sun which gives those heavy shadows under the eyes and another heavy shadow under the nose, apart from the discomfort to your subject.

- 6. L.S. Moving away to the scene of the shoot.
- 7. M.S. The bait being tied up.
- 8. M.S. The kill. Following this a host of subjects can be included with as many close-ups as it is possible to get.
- 9. C.U. Elephants' feet moving up to the camera.

 (Always allow the object to move out of your view-finder.) Do not try to follow it round.
- 10. Final shot. The elephants or hunters walking into the sunset with a fade-out.

Numerous scripts and ideas will occur as the situation arises, but it is well to have in one's mind beforehand what one proposes to do otherwise a rambling, disconnected effort will result and will take a lot of unravelling in the editing and titligafterwards.

Records.—Keep a record of your shots either in the form of a diary with subject, stop, filter and other memoranda. One way is to enclose this in the box when the film is despatched for processing, or write in bold type the information in a book and with your camera take a few frames of the number on the page. When the film is projected the number will show and you can then refer to your own records. A constant check on exposures and filters will enable you to see your mistakes at once, and you will store up this knowledge for future occasions so that the quality of your pictures must improve.

Enlargements.—As many of the pictures in this book are made from Cine film it is worth nothing how they were made. The film was taken on 16 mm. negative film and enlarged direct in an enlarger made for enlarging miniature films.