

# NATURE'S CAMOUFLAGE

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AN ELAND BULL LOOKING LIKE THE ROCKS AGAINST WHICH HE IS STANDING.

A COUPLE of years ago the word "camouflaging" was practically unknown, even with the B.E.F. Now it is merely awaiting a new edition of the dictionary to take its place formally in the English language; and as a peg to hang a joke on, what would our comedians do without it? The exact meaning of the word is a little vague, but it is a slang French expression meaning obscured by smoke, and so comes to be used for disguise of anything connected with military operations. It is rather like our use of the expression throwing dust in anyone's eyes with a view to concealing the truth and deceiving them.

The French were the first to recognise the value in war of disguising appliances, movements, etc., and to make a special study of it. Their best artists were turned on to invent colour

schemes and scene painting for special military purposes. In 1915 I was fortunate enough to be sent to see over the first camouflage school in a certain well known town somewhere in France. There I was shown round by a corporal whose name is famous in Parisian art circles. He pointed out other artistic celebrities among the staff there. Their work consisted in experimenting and designing disguises of all sorts.

Extraordinary ingenuity was shown in some of the devices

employed, but an account of them would not pass the Censor, even after the lapse of time. One of the chief features was the painting of guns, roads, wagons, shelters, etc., in protective patterns to make them look like anything but what they were. The study of Nature is one of the chief bases of the methods employed. Nature is full of wonderful examples of protective colouration, and the general principles can be utilised in war in much the same way as Nature utilises them in wild life.

There are three principal ways in which concealment may be gained: (1) By completely hiding an object; (2) screening it by placing something between the object and the eye of the enemy; (3) by confusing his mind. This can be done in various ways, such as by painting the object in such a way as to break up the outlines and form false ones. All these methods are to be

found in Nature. The first one is common enough among the smaller animals, but is unusual among the larger ones. Take the African antelopes and other large mammals. A few are bush dwellers, and these dash into dense cover when alarmed. They include the bongos, bushbuck, sitatunga and a good many of the smaller sorts, duikers, etc. The others generally make for the bush when alarmed, but not with a view to lying low in it, but merely to get out of sight



A FEW STRAGGLING BRANCHES COMPLETELY HIDE A RHINOCEROS.

quickly, their main object being to put as great a distance as possible between themselves and their enemy. Lions and leopards will hide up, but given good notice of the approach of danger, they generally prefer distance to cover. In fact, practically all the larger animals rely on their senses for warning of danger rather than any form of concealment.

The second and third methods are very largely used, but by Nature on behalf of them rather than intentionally or knowingly by them. Screening is a great protection to them. A thin bush which appears to offer no obstacle at all will sometimes render an animal quite unnoticeable. On page 377 is an illustration of a rhinoceros. He has a few straight branches in front of him which hide about as much of him as the harness does of a horse. Yet he is rendered most indistinct, and but for the sun shining full on his back, he would be practically invisible.

But the method represented most commonly in Nature is the third. The insect and reptile world abounds in instances of this. The leaf butterfly and the stick insect are familiar to most people, and the carpeted pattern of many snakes. Among the big game of Africa some very startling effects are got. The most gaudy and conspicuous of animals sometimes become difficult to see.

There is probably no more gaily marked animal in Africa than the reticulated or northern giraffe. The broad, white network separating blotches of brilliant chestnut red makes it a conspicuous object from a great distance away. One of these photographs shows a giraffe in the open. It would seem a hopeless task to hide such an animal. But on the right of the picture is a big bull, simply lost and merged into the tree before which it is standing. It is almost invisible, even though it is standing on the near side of it. The white network seems especially made to resemble the sunlight streaks in the foliage. It is curious that although the giraffe is so well concealed, I am convinced that its presence there was a pure accident.



A BIG BULL GIRAFFE MERGED INTO A TREE.



IMPALA, IN SPITE OF THEIR BRIGHT COLOURING, ALMOST INVISIBLE.

and that it had no idea that it was less conspicuous in that position than in the open. It seems incredible that an animal should have such advantages and be totally unconscious of them.

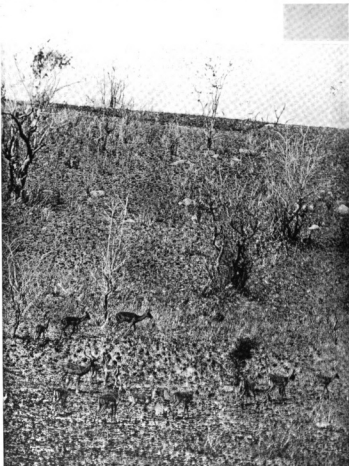
One of Nature's favourite camouflage schemes is counter-shading. The light falling on an animal's back while the underside is in shadow naturally makes great contrast. To prevent their being unduly noticeable, most animals are much lighter underneath than on the back. The impala is one of the brightest of antelopes. The red-chestnut coat is so glossy that it is most conspicuous when these animals stand in the sun. The brilliantly coloured back is then lighted up too brightly for the counter-shading to take effect. But when standing in the shade the deeper shadow underneath equalises the difference between back and belly and gives a flat tone all over. On page 378 is a herd of impala; they are right out in the open, away from any sort of cover, and in spite of their bright colouring they are almost invisible. So also is the small herd seen among the rocks and in an African gully. Their bodies are merged into their immediate background and are practically indistinguishable from it. Both of these photographs were taken on a dull day.

In another illustration an eland bull is seen looking just like the rocks behind. One might deduce from that that the eland is a rock-loving creature. As a matter of fact, the eland is a denizen of thin bush and plain. This seems to suggest that much of Nature's camouflage schemes is designed for general purposes; that though a beast may appear to be adapted by its colour to live inconspicuously in some special environment, it will often be found that its colour is quite suitable to an entirely different one.

Probably the most successful form of concealment, provided no very conspicuous colouring is involved, is immobility. Most animals and some birds make use of it. Even the gaudy cock pheasant can efface itself amidst the autumn leaves. Most travellers in Equatorial Africa have mistaken a sleeping rhinoceros for an ant-heap. The mutual discovery of the mistake has often produced a small freight with excitement. And another provision of Nature calculated to render such a mistake easier is that the rhinoceros is addicted to a matutinal mud-bath, from which he emerges the colour of the local soil and consequently of the surrounding ant-heaps. So in one part of the country rhinoceroses are red and in another part white, according to the colour of the soil of that part. Pigs and elephants also love a mud-bath. So it is not at all unusual for travellers on their first safari to report new races of red rhinoceroses and white elephants. Nothing is easier than to pass an elephant by, especially when it is suspicious. Huge as elephants are, their forms are so confused with the trees and shadows that they are unnoticeable. When they are undisturbed their constantly swinging ears and whisking tails catch the eye at once, but once their suspicions are aroused they stand

absolutely motionless and in deadly silence. If you can hide an elephant you can hide anything, even a tank! In our Cambrai push, the success was said to be largely the result of the wonderful way in which our tanks were camouflaged while the necessary preparations were being made. It must have taxed the skill of our staff to have successfully concealed such monsters in the open plains of Picardy. They certainly had one advantage over the elephant, that a resting tank has no temptation to flap its ears nor otherwise diverge from immobility, and has therefore nothing but its complexion to look after.

Elephant and buffalo when resting stand or lie in such a confused heap that it is most difficult to make out which body belongs to which animal. One can get quite close to a



THIRTEEN IMPALA PHOTOGRAPHED IN AN AFRICAN GULLY.

herd of elephants and, after a prolonged inspection, suddenly discover that what one thought was an elephant's body is an elephant's leg very much closer than one imagined or wished.

It would seem to be impossible to fail to shoot an elephant in a vital spot from, say, 150 yds. away, but in practice it is often the case that one does not know which way the elephant is facing at that distance. All one sees is stretches of grey skin, more often than not shut in by bush of various density, but cutting the whole up into unrecognisable sections. The same with buffalo; I have, during the unregenerate days when I was armed with a rifle instead of a camera, followed a small herd of a dozen buffalo for miles, getting close to them every time they stopped and been unable to spot the bull.