

gallop if closely pursued. It is said that the white rhinoceros cannot travel with a broken hind leg, and this may be the case, but the writer has seen a black rhinoceros cow, with her leg broken above the knee, go at a pace that kept himself and his gun-carrier at a sharp run for over a mile to keep up with her; both beasts, however, will travel for over two miles without a halt with a broken shoulder. They are difficult to stop when charging, for, owing to the shortness of their legs, there is little chance of putting a bullet into the chest, especially if the grass is at all long. In the case of the white rhinoceros, the spine can be reached at the junction of the neck and shoulder, as he carries his head very low; but the black holds it high and jauntily. The square-mouthed species does not scatter its dung about, as is the custom of the prehensile-lipped, nor does it frequently revisit



G. S. Gilchrist 1897

WHITE RHINOCEROS.

Measurements—Av. height at shoulder, 66 in.; av. front horn meas., 36 in.; max. front horn meas., 56½ in.

these spots. It falls quickly to a bullet through the heart or both lungs, usually falling on its side, and not on its knees, as the other rhinoceros almost invariably does. The shot for the neck should be about 3 or 4 inches lower than in the case of the black rhinoceros.

**Weapon and Ammunition**—I have found a Metford rifle of .461 bore, carrying a 540 or 570 gr. hardened projectile, excellent for the rhinoceros, but these beasts take a lot of stopping at times, so that, although this is a perfect weapon for a head or neck shot when the beast is quiescent, something heavier is required for a quickly moving or especially a charging beast. I consider a good 12-bore double rifle, with 6 or 7 drams of powder and a hardened conical projectile of 2¼ oz., quite heavy enough to account for any rhinoceros, and have done my best work with this handy weapon.

By far the most certain method of bagging

rhinoceroses, and a much more sportsman-like and satisfactory one than watching for their return to their drinking places, is to be up at dawn, and walk up-wind along the course of any river at which they are accustomed to drink, and about a mile from it; water must be carried, and as soon as the spoor is cut the beast can be followed up. Even if disturbed once or twice, he will not go more than about two miles before halting again, when he will usually offer a broadside shot; but, if hunted about much, he is apt to become very petulant. If, on following a beast up, it is found that he has retreated into long grass or reeds, the hunter should post himself near the spot at which the rhinoceros entered the cover, a little to one side, and of course below wind, while the native attendants can be sent round in a wide circle above wind. The rhinoceros will soon move, and though there is a chance of his charging up-wind, he is far more likely to make his way out of the cover at the spot where he entered it, giving the hunter an easy shot. If possible, the latter should reserve his fire till the rhinoceros is broadside or a little past him. If the rhinoceros runs dead away from the rifle, unless the weapon be a heavy one, it is best to let him go, and follow up again leisurely, when he will surely be found again inside of two miles, probably halting under a tree, listening intently, and standing broadside at right angles to his spoor.

F. VAUGHAN KIRBY.

**SOMALILAND**—The common two-horned "black" rhinoceros (*R. bicornis*), which is very widely distributed over Africa, and seems to be in no immediate danger of becoming extinct, exists in moderate numbers, though nowhere so plentifully as in Equatorial Africa, in suitable country in parts of the Somali plateau, in the bush-covered wilderness of Ogaden, on the Webbe Shabeyli river, and in the Galla country beyond. So far, however, as the hinterland of the North Somali Coast has been up to the present explored, it has not been found to exist much nearer to the sea than a hundred and fifty to two hundred miles. Rhinoceroses may come nearer to the coast in the country to the east towards Cape Guardafui, but that portion of the horn of Africa has yet to be opened up.

This animal, although morose in disposition and sometimes capable of charging without provocation, to the confusion of caravans, when its hiding place is incautiously approached, does not seem to be gifted with great intelligence; having poor eye-sight, though keen powers of scent, it is not a difficult animal for the hunter to work up to if the wind is right. But in the course of a long hunt this condition of success cannot always be secured, and when the tracks lead down wind it is a very common experience to put up the same animal two or three times



before a shot can be obtained. The well-known warning snorts, followed by a crashing through the bushes, are heard in front, and then, if unwounded, the game will not travel for more than a mile or two before stopping again; so the sportsman, by sticking to the track, may get another chance.

In the course of a march with the caravan, fresh rhinoceros tracks of the night before are



BLACK OR TWO-HORNED RHINOCEROS.

*Measurements—Av. height at shoulder, 60 in.; av. front horn meas., 20 in.; max. horn meas., 47½ in.*

sometimes seen crossing the path, and, if it is early in the day, they may be worth following. But a more systematic way of hunting them is to go in the early morning, on foot, of course, as the ground is generally too broken for riding, accompanied by a couple of hunters, a guide, and a tiffin carrier—or perhaps a camel, for the head and shields of a rhinoceros make a full load—and examine the pools in the river beds. Rhinoceroses spend a good deal of the night wandering up and down the river channels, drinking or wallowing in every pool; and in the soft mud the huge footsteps are very easily detected next morning. They travel a great deal, the jungles used by them as feeding grounds by day being often many miles from the favourite wallowing pools which are visited at night.

The fresh tracks of a good bull having been found—those of a cow or young one would generally be of little interest to the sportsman—they are not difficult to follow, the hard toes, at least, leaving a well-defined mark. The trail, after emerging from the last pool visited, will strike away from the river at right angles, and lead straight through the bush to the distant feeding ground. The great tracks are made still plainer by furrows, about a yard long and six inches deep, looking like the work of a plough, for it is the habit of the rhinoceros to kick and root up the ground as he travels. The trail, leading up the thorny bush-choked ravines and broken ground which form the approaches

to the river-beds, involves a great deal of walking, and with the sun rising higher and getting hotter every moment it is tiring work. The trail will probably after some time begin to wind about a good deal among thorn trees festooned with creepers, forming fantastic bowers of vegetation; here and there it will become a maze of tracks in one place, difficult to unravel, where the rhinoceros has lingered to feed about. By about eleven o'clock he will probably have stopped feeding and halted to rest, and will, if approached up the wind, be first seen standing dozing under a thorn bush or lying down. There is in Africa a bird whose special mission it is to attach itself to the rhinoceros, clinging to or hopping about over the great body, feeding upon the parasites which infest the skin. It is the bird called Shimbir-Loh, which in Somali Land attacks the sore backs of camels, enlarging the wounds by digging in its beak.

If the privacy of the rhinoceros is intruded upon, the rhinoceros-birds rise screaming from its back and warn it of danger. In the absence of these birds, and with the wind favourable, there should be no difficulty in creeping up to within fifty yards or less of the game and putting in an immediately fatal shot in front of and somewhat below the ear. If only wounded, the rhino will, if it does not charge, rush snorting away and probably go for a considerable distance, making for some well-known sanctuary, probably the thickest and most thorny bush. In Somali Land that called the "Billeil" is the worst; once the clothes are caught in this, only time and patience will get one clear.

His probable course when next discovered, after a mile or two of further tracking, will be to stand broadside on and listen, preparatory to charging, and this may be a good opportunity for putting in a steady shot. If he does charge, the horn and muzzle will probably protect his forehead and chest, so he is difficult to stop. The overpowering size and speed of the rhinoceros, and the impenetrable walls of crooked "billeil" thorns, which catch the clothes and among which there is little elbow room, make the charge a somewhat dangerous experience. But the rush is blindly made, and is heralded by quick successive snorts, more like the puffs of a locomotive than anything else, which give full warning, and, if the bush is not too thick and the hunter can keep cool, by dodging a few yards to one side, and then remaining perfectly still, he may get a good opportunity for a shoulder shot as the rhino passes.

It has come within the writer's experience to be charged by two rhinos at once, but one followed straight behind the other. The one in front was allowed to pass on and the second one was knocked over by a shoulder shot as it passed.

The writer has tried, with some success, watching over water in the dry season, forming a "zeriba" with an opening commanding the



pool. The construction of such a shelter is of importance, because a rhino will charge through brushwood easily; the writer has a lively recollection of part of a night spent in a flimsy zeriba in close proximity to a wounded rhino, whose breathing could be heard distinctly through the screen of thorns. A strong thorn tree should be chosen, with a thick stem, which should form the back of the shelter. The overhanging branches may be pulled down in front and at the sides as a screen, and it is an advantage to have it so situated that the ground falls away steeply in front to the pool.

Rhinoceroses go at a great pace, and it requires a good horse to overtake one. Sir Samuel Baker, in his *Nile Tributaries of Abyssinia*, gives a graphic description of a rhinoceros hunt in which he took part, he and his companions, who were Arab elephant-hunters, being mounted and armed with swords.

Somalis kill the rhinoceros with the Midgan bow and poisoned arrows. The hide is valuable for shields, as many as from fifteen to twenty being cut from the skin of a single bull. It is also made into whips, and Abyssinians make the horns into cups, about which there is a superstition that any poison placed therein is neutralised. The flesh is fairly eatable and makes good soup.

As the track may have to be followed for hours, by the time the hide has been removed—which is done in large slabs, these having been previously marked out on the body—and the return journey to camp accomplished, it may be already sunset; so it is advisable, when starting on such a hunt, to take an attendant with water and food, and, if it is intended to bring in the head and shields, a camel should also accompany the party. A good plan, after killing one or more rhinos, if water can be found not far off, is to send for the caravan and camp by the carcasses, when they can be cut up at leisure. Among Somalis, who, about food, are even more fastidious than other Mohammedan races, most of the meat is wasted.

A good pair of horns will measure about 20 inches for the front and 6 for the back horn. The skin of the head is very difficult to remove without damage at the point where it fits over the lumps which form the support to the horns. The horns themselves come off in one piece with the skin.

Authorities on the subject seem to agree that there is little in the colour of the so-called "black" rhinoceros to distinguish it from the "white." The natural colour is a dark brownish-grey, and over this is generally superimposed the colour of the last mud pool in which the beast has bathed.

The most suitable weapons for this sport are perhaps a Lee-Metford rifle with the ordinary military bullet, used in conjunction with a double 8-bore "Paradox" gun, the Lee-Metford

being excellent for a quiet head shot if backed up by the larger weapon when the animal is on the move. The writer does not advise attacking this animal with the small-bore alone. The chest and shoulder are good places to aim at under ordinary circumstances when the animal is moving. The writer has used together a double 4-bore rifle firing 14 drs. of powder and a spherical bullet, and an 8-bore "Paradox" gun firing 10 drs. and a conical steel-core bullet, and prefers the latter, being quite as effective, more accurate, lighter to carry, and handier to use. Some writers, however, have depended entirely on much smaller and lighter weapons with successful results.

H. G. C. SWAYNE.

INDIA—In British India there are three varieties of rhinoceros. In the Sunderbund is found the lesser only. In Assam and the Dooars are *R. indicus* and also the lesser (*R. sondaicus*). In Burma there are certainly two, if not three varieties. I know the lesser is found as well as the two-horned, and it is reported that the larger also exists, but of that I am not sure. The two-horned variety, of which I only killed one, extends from Chittagong southwards, and is also found in Sumatra, Java, and some of the larger islands. Its skin is as smooth as a buffalo's, but in habits and customs it much resembles the other species of the family. A curious variety of this rhinoceros was secured by Captain Hood and is now, I believe, in the Zoological Gardens. Its ears are somewhat tessellated. The larger rhinoceros has only one horn,



INDIAN RHINOCEROS.

Measurements—Av. height at shoulder, 69 in.; av. horn meas., 15 in.; max. horn meas., 24 in.

seldom eighteen inches long, generally a good deal less. This so-called horn is but a conglomeration of hairs, and is liable to be detached either through injury or disease, when another grows in its place. The skin is very thick, with a deep fold at the setting on the head, another