

next day and the day after, another each day; and all will be different species. Quadrupeds or snakes are seldom seen, but lizards are everywhere one met with; and sometimes you get tortoises, tree-togs, &c. Insects, like birds, do not turn up in swarms of one species; for instance, you take a dozen longicorns one day, and they are sure to be of eight or ten distinct species. One year of daily work is scarcely sufficient to get the majority of species in a district of two miles' circuit.

"Such is the scene of my present labours; and all the rest of the Amazon is similar, though less rich; the river Tapajos alone differing, being a mountainous country. Having thus my work at hand, I will tell you how I proceed. My house is in the centre of the town, but even thus only a few minutes' walk from the edge of the forest. I keep an old and a young servant, on whom I rely for getting eatables and preparing my meals, so as to leave me unembarrassed to devote all my thoughts to my work. Between nine and ten a.m. I prepare for the woods; a coloured shirt, pair of trousers, pair of common boots, and an old felt hat, are all my clothing; over my left shoulder slings my double-barrelled gun, loaded, one with No. 10, one with No. 4 shot. In my right hand I take my net, on my left side is suspended a leathern bag with two pockets, one for my insect-box, the other for powder and two sorts of shot; on my right side hangs my "game-bag," an ornamental affair, with red leather trappings and thongs to hang lizards, snakes, frogs, or large birds. One small pocket in this bag contains my caps; another, papers for wrapping up the delicate birds; others for wads, cotton, box of powdered plaster; and a box with damped cork for the Micro-Lepidoptera; to my shirt is pinned my pin-cushion, with six sizes of pins. A few minutes after entering the edge of the forest, I arrive in the heart of the wilderness; before me nothing but forest for hundreds of miles. Many butterflies are found on the skirts of the forest; in the midst of numbers flitting about, I soon distinguish the one I want—often a new one—*Erycinide*, *Heperia*, *Taenla*, or what not. *Coleoptera* you see nothing fine of at first; a few minute *Halticæ* on the leaves, or small *Curculios*, or *Eumolpi*. When you come to the neighborhood of a newly-fallen tree, is soon enough to hunt closely for them; not only wood-eating species, but all kinds seem to congregate there; *Agras* and *Lebias* in the folded leaves, grand *Cassideæ*, and *Erotyli*, *Rutelæ*, or *Melolonthids*, *Gymnetis*, &c.; often a *Ctenostoma* running along some slender twig. It requires a certain kind of weather for *Coleoptera*, and some days all seem to be absent at once.

"Whilst I am about these things, I often hear the noise of birds above—pretty tanagers, or what not. You cannot see the colours of red, cobalt-blue, or beryl-green, when they are up in the trees; and it takes months of experience to know your bird. I have sometimes shot at small, obscure-looking birds up the trees, and when they have fallen, have been dazzled by their exquisite beauty.

"I walk about a mile straight ahead, lingering in rich spots, and diverging often. It is generally near two p.m. when I reach home, thoroughly tired. I get dinner, lie in hammock a while reading, then commence preparing my captives, &c.; this generally takes me till five p.m. In the evening I take tea, write and read, but generally in bed by nine."

Africa is the land of wild beasts. The grandest forms of the terrestrial creation have their habitation in that continent. The elephant, the hippopotamus; several different sorts of rhinoceros, the zebra, the quagga, the gnu; multitudes of antelopes, some of them of colossal dimensions; the buffalo; the gorilla, the chimpanzee, the mandril, and other baboons and monkeys; the lion, the panther, the leopard;—these are only the more prominent of the quadrupeds which roam the plains and woods of Africa.

It is highly probable that an animal of ancient renown, and one in which England has (or ought to have) a peculiar interest, resides in the region just indicated. I refer to one of the supporters of Britain's shield, the famed Unicorn. We may not, to be sure, find him exactly what the heraldic artists delight to represent him—a sort of mongrel between a deer and a horse, with cloven hoofs, a tuft-tipped tail, and a horn spirally twisted to a point; but there may be the original of the traditional portrait of which this is the gradually corrupted copy.

Dr. Andrew Smith, an able and sober zoologist, who has investigated with much enterprise and success the zoology of South Africa, has collected a good deal of information about a one-horned animal which is yet unknown to Europeans, and which appears to occupy an intermediate rank between the massive rhinoceros and the lighter form of the horse. Cavassi, cited by Labat, heard of such a beast in Congo under the name of *Abada*; and Ruppel mentions it as commonly spoken of in Kordofan, where it is called *Nillekma*, and sometimes *Arase*—that is *unicorn*. Mr. Freeman, the excellent missionary whose name is so intimately connected with Madagascar, received the most particular accounts of the creature from an intelligent native of a region lying northward from Mozambique. According to this witness, an animal called the *Ndzoodzoo* is by no means rare in Makooa. It

is about the size of a horse, extremely fleet and strong. A single horn projects from its forehead from two feet to two and a-half feet in length. This is said to be flexible when the animal is asleep, and can be curled up at pleasure, like an elephant's proboscis; but it becomes stiff and hard under the excitement of rage. It is extremely fierce, invariably attacking a man whenever it discerns him. The device adopted by the natives to escape from its fury, is to climb a thick and tall tree out of sight. If the enraged animal ceases to see his enemy, he presently gallops away; but, if he catches sight of the fugitive in a tree, he instantly commences an attack on the tree with his frontal horn, boring and ripping it till he brings it down, when the wretched man is presently goaded to death. If the tree is not very bulky, the perseverance of the creature usually succeeds in overturning it. His fury spends itself in goring and mangleing the carcass, as he never attempts to devour it. The female is altogether without a horn.

Almost as little known as the heart of Africa are the depths of ocean. The eye penetrates in the clear crystalline sea a few fathoms down, and beholds mailed and glittering forms flitting by; the dredge gathers its scrapings; divers plunge out of sight, and bring up pearls; and the sounding-lead goes down, down, down, hundreds of fathoms, and when it comes up, we gaze with eager eyes to see what adheres to the tallow "arming;" the tiny shells, the frustules of diatoms, even the atoms of coral sand,—curious to learn what is at the bottom of the deep. But, after all, it is much like the brick which the Greek fool carried about as a sample of the house he had to let.

Who can penetrate into the depths of the ocean to trace the arrowy course of the mailed and glittering beings that shoot along like animated beams of light? Who can follow them to their rocky beds and coral caverns? The wandering mariners see with interested curiosity the flying-fishes leaping in flocks from the water, and the eager bonito rushing after them in swift pursuit; but who can tell what the flying-fish is doing when not pursued, or how the bonito is engaged when the prey is not before him? How many pleasing traits of conjugal or parental attachment the waves of the fathomless sea may conceal, we know not: what ingenious devices for self-protection; what structures for the concealment of eggs or offspring; what arts of attack and defence; what manoeuvrings and stratagems; what varied exhibitions of sagacity, for thought, and care; what singular developments of instinct;—who shall tell?

The aquarium has, indeed, already enlarged our acquaintance with the curious creatures that inhabit the waters; and not a few examples of those habits and instincts that constitute animal *biography*, have by this means been brought to light. Much more will doubtless be learned by the same instrumentality; but there will still remain secrets which the aquarium will be powerless to resolve. From its very nature it can deal only with the small, and those which are content with little liberty; for the multitude of large, unwieldy, swift-finned races, which shoot athwart the deep, and for the countless hosts of tiny things, to whose organisation even the confinement of a vessel is speedy death, we must find some other device before we can cultivate acquaintance with them.

It is true, we can put together a goodly number of individual objects, which various accidents have from time to time revealed to us from the depths, and form them into an imaginary picture. Schleiden has done this, and a lovely delineation he has made. You have only to gaze on it to admire it: I would not abate your admiration; I admire it too;—but remember, after all, it is but a fancy sketch of the unknown; it is only "founded on fact."

"We dive," he observes, "into the liquid crystal of the Indian Ocean, and it opens to us the most wondrous enchantments of the fairy tales of our childhood's dreams. The strangely branching thickets bear living flowers. Dense masses of *Meandrinæ* and *Astrææ* contrast with the leafy, cup-shaped expansions of the *Explanarias*, the variously-ramified *Madrepores*, which are now spread out like fingers, now rise in trunk-like branches, and now display the most elegant array of interlacing branches. The colouring surpasses everything: vivid green alternates with brown or yellow; rich tints of purple, from pale red brown to the deepest blue. Brilliant rosy, yellow, or peach-coloured *Nullipores* overgrow the decaying masses, and are themselves interwoven with the pearl-coloured plates of the *Retipores*, resembling the most delicate ivory carvings. Close by, wave the yellow and lilac fans, perforated like trellis-work, of the *Gorgonias*. The clear sand of the bottom is covered with the thousand strange forms and tints of the sea-urchins, and star-fishes. The leaf-like *Flustras* and *Escharas* adhere like mosses and lichens to the branches of the corals; the yellow, green, and purple-striped *Limpets* cling like monstrous cochineal insects upon their trunks. Like gigantic cactus-blossoms, sparkling in the most ardent colours, the *Sea-anemones* expand their crowns of tentacles upon the broken rocks, or more modestly embellish the bottom, looking like beds of variegated *ranunculuses*. Around