

From this passage, it might be thought that I was deceived with regard to the animal represented by Seba, tab. 37. fig. 2. However, I have said precisely the same thing with M. Vosmaër; for I expressed myself in the following words: 'The animal called *tamandua*, *myrmecophage d'Amerique*, by Seba, tom. i. p. 60. tab. 37. fig. 2. has no resemblance to any of the three of which we are here treating.' Now, the three American animals which I mentioned, were the great, middle, and least ant-eaters. What M. Vosmaër remarks, therefore, contradicts nothing I have advanced; which amounts to this, that these three animals are peculiar to America, and not to be found in the Old Continent. This language is so precise, that M. Vosmaër can have nothing to oppose to it. If the *myrmecophagus* of Seba, tab. 37. fig. 2. is found in Africa, it only proves that Seba was deceived when he calls it the American *myrmecophagus*, but can have no effect upon what I have advanced, and still persist in maintaining, that the three ant-eaters are found in America, and not in Africa.

The SHORT TAILED*, and the LONG TAILED MANIS†.

THESE animals are commonly known by the name of *scaly lizards*. We have rejected this denomination, 1. because it is compounded; 2. because it is ambiguous, and is applied

* The back, sides, and upper part of the tail of these animals, are covered with large strong scales. The mouth is small, and the tongue long. They have no teeth.

The short tailed scaly lizard has the back, sides, and legs, covered with blunt scales, and bristles between each. There are five toes on each foot, and the tail is not longer than the body. The ears are not unlike the human. The chin, belly, and inside of the legs are hairy; Pennant's *Synops. of Rept.* p. 329.

The Indians of the south of Asia call this animal *pangolin*, or *paenguling*. The French who live in the East Indies call it *lézard écailleux*, and *diablot de Java*. *Paenguling*, according to Seba, signifies, in the language of Java, *an animal which rolls itself up like a ball*.

Lacertus laticus squamosus; *Bentli Java*, p. 60.
Lezard Ecaille; *Mém. pour servir à l'Hist. des Animaux*, part III. p. 87.

Armadillos squamatus major Ceylanicus, seu *Diabolus Tayvanicus dictus*; *Seba*, tom. i. p. 88. tab. 53. 54. *Klein Rept.* p. 47.

Pholidotus pedibus anticis et posticis pentadactylis, *squamis subrotundis*; *Brisson. Rept.* p. 18.

Manis pedibus pentadactylis; *Lin. Syst. Nat.* p. 52.

† The long tailed scaly lizard has a slender nose, which, with the head, is smooth. The body, legs, and tail are guard-

plied to both species; 3. because it is improper, these animals being not only of a different species, but of a different class from the lizards, which are oviparous reptiles; instead of which, the animals under consideration are viviparous quadrupeds*.

All lizards are entirely covered with a smooth skin, variegated with spots which resemble scales. But the short and long tailed manis have no scales on the throat, breast, and belly. The long tailed manis, like other quadrupeds, has hair on all the inferior parts of the body; and the short tailed manis has, on these parts, a smooth skin only, without hair. The scales which cover the other parts of both these animals adhere not entirely to the skin, but are strongly fixed by their under part only. Like the quills

ed by long, sharp pointed, striated scales. The throat and belly are covered with hair. The legs are short. There are four claws on each foot, one of which is very small. The tail tapers a little, but ends blunt. The length, from nose to tail, is fourteen inches and a half, and that of the tail is three feet four inches and a half; *Pennant's Synops. of Quad.* p. 328.

The Indian name of this animal is *phatagin*, or *phatagen*.

Lacertus squamulosus peregrinus; *Clyff's Exotic.* p. 374.

Scaly lizard; *Grew's Rarities*, p. 46.

Lacerta Indica Yvonne congener; *Aldrov. de Quad. Digt. Vivipar.* p. 667.

Philodotus pedibus anticis tetradactylis, *squamis macronatis*, *cauda longissima*; *Briss. Quad.* p. 19. *Note*, Both of these animals have five toes, or rather five claws, on each foot.

Manis tetradactylia; *Linn. Syst. Nat.* p. 53.

* The author adopts the East Indian names, *panzulin*, and *phatagen*.

of

of the porcupine, they are moveable, and are elevated or depressed, according to the will of the animals. When irritated, they erect their scales, and particularly when they roll themselves up like a ball. These scales are so large, hard, and poignant, that they repel every animal of prey. They form an armour which wounds as well as resists. The most cruel and famished creatures, as the tiger, panther, &c. endeavour in vain to devour these animals. They trample upon, and toss them about; but, whenever they attempt to seize them, they receive very dangerous and painful wounds. No animal of prey is able to face, crush, or suffocate them, although it loads them with its whole weight. The fox is afraid of the hedge-hog when rolled up; but he forces it to extend, by trampling on it with his feet. As soon as the head appears, he seizes it by the snout, and thus accomplishes his purpose. But, of all animals, without excepting the porcupine, the armour of the manis is the most offensive. When these animals contract their bodies, and present their armour, they brave the fury of all their enemies. Besides, when rolled up, these animals assume not, like the hedge-hog, a globular figure: Their body, in contracting, takes the form of a clue; but their long thick tail remains without, and serves as a ring or belt to the body. This exterior part, by which it would appear the animals might be seized, defends itself; for it is furnished,

furnished, both above and below, with scales as hard and sharp as those which cover the body; and, as it is convex above and flat below, and has nearly the figure of a half pyramid, the angular sides are covered with sharp erected scales; so that the tail seems to be still more carefully defended than the body, the inferior parts of which are deprived of scales.

The short tailed manis is larger than the long tailed kind. His fore feet are covered with scales to their extremity; but the feet of the long tailed species, and even a part of the fore legs, are covered with hair only. The scales of the former are larger, thicker, more convex, and less chamfered than those of the latter, which are armed with three sharp points, while those of the short tailed manis are not pointed, but uniformly sharp. The long tailed manis has hair on the inferior parts of the body: The short tailed kind has no hair under the body; but, between the scales which cover the back, there are some hairs as thick and long as hogs bristles, which are wanting in the long tailed species. These are all the essential distinctions that we have observed by examining the stuffed skins of both these animals, which differ so much from all other quadrupeds, that they have been regarded as a kind of monsters. The differences we have pointed out, being general and constant, authorize us to conclude the short and long tailed manis to be distinct species. We recognised these

these relations and differences, not only by inspecting three subjects, but likewise by perusing all the remarks of travellers and naturalists.

The short tailed manis, when full grown, is from six to eight feet long, including the tail, which is nearly the length of the body, but appears to be proportionally shorter while the animal is young; the scales are also smaller and thinner, and of a paler colour; but, in the adult animal, their colour becomes deeper, and they acquire such a degree of hardness as to resist a musket ball. The long tailed manis, as formerly remarked, is much less than the short tailed species. Both of them have some relation to the great and middle ant-eaters; for they feed upon ants, have very long tongues, a narrow mouth, without any apparent teeth, very long bodies and tails, feet and toes nearly of the same size and figure, though different in number, both species of manis having five toes to each foot, while the ant-eaters have only four on the fore feet. The latter are covered with hair, and the former with scales; neither are they natives of the same Continent. The ant-eaters are found only in America, and the two species of manis in the East Indies and Africa, where they are called *guogelo* * by the negroes, who eat the flesh of these animals,

* We find in the woods a quadruped which the negroes call *guogelo*. From the neck, to the extremity of the tail, it is covered with sharp scales, resembling the leaves of the arbutus. They are close, and so thick and strong as to defend

animals, which they reckon delicate and wholesome, and use their scales for several purposes. In fine, these creatures have nothing disgusting about them but their figure. They are gentle and innocent, feeding only on insects. They run slowly, and cannot escape from a man, but by concealing themselves in holes of rocks, or in those they dig in the earth, where the females bring forth their young. They are two extraordinary species, not numerous, and very useless. The oddness of their form seems to be intended to constitute the last shade between the figure of quadrupeds and that of reptiles.

it against the claws and teeth of the most rapacious animals. It is perpetually chased, and easily overtaken, by the tigers and leopards. But, as its claws and mouth would be a feeble defence against the dreadful tusks and talons of these animals, Nature has taught it to roll itself up like a ball, by folding its tail under the belly, and contracting its body in such a manner as to present on all sides the sharp points of its scales. The tiger or leopard, when they turn the creature too rudely with their paws, receive such wounds as oblige them to retire. The negroes kill it with batons, sell the skin to the whites, and eat the flesh, which they say is white and delicate. Its tongue is exorbitantly long, and covered with a viscid liquor. It goes in quest of ants' nests, and the haunts of insects; extends its tongue, which it either pushes into their holes, or lays it flat upon the places where they pass. These insects, attracted by the colour, quickly run toward the tongue, remain entangled in the viscid liquor; and, when the tongue is properly loaded with them, the animal retracts it, and devours them. This creature is not mischievous. He never attacks any person, but, provided he can find a sufficient quantity of ants, is perfectly contented. The largest of this species that has been observed, is eight feet long, comprehending the tail, which is four feet; *Voyage de Desmarchais, tom. i. p. 200.*

Plate CLIII.



SHORT-TAILED MANTIS.

Plate CLIV.



LONG TAILED MANTIS.