Fig. 50

WILD CAT

Fig. 51

DOMESTIC CAT

Fig. 117

TERNAT BAT

118 *Fig.* *119*

BULL DOG BAT SENEGAL D?

ears; the Horse-shoe Bat, with an odd protuberance round its upper lip, somewhat in the form of a horse-shoe; the Bulldog Bat; the Serotine Bat, &c. The largest we have any account of, is the Rousette, or Ternat Bat. This formidable creature is near four feet broad when the wings are extended, and a foot long from the tip of the nose to the insertion of the tail. It resembles the common bat in the form of its wings, in its manner of flying, and in its internal conformation. It differs from it in its enormous size; in its colour, which is red, like that of a fox; in its head and nose also, which resemble those of that animal, and which have induced some to call it the flying fox: it differs also in the number of its teeth, and in having a claw on the fore-foot, which is wanting in ours. This formidable creature is found only in the ancient continent; particularly in Madagascar, along the coasts of Africa and Malabar, where it is usually seen about the size of a large hen. When they repose, they stick themselves to the tops of the tallest trees, and hang with their heads down-

wards. But when they are in motion, nothing can be more formidable. They are seen in clouds darkening the air, as well by day as by night, destroying the ripe fruits of the country, and sometimes settling upon animals, and even man himself. They devour, indiscriminately, fruits, flesh, and insects, and drink the juice of the palm-tree. They are heard at night in the forests at more than two miles distance, with a horrible din, but at the approach of day they usually begin to retire. Nothing is safe from their depredations: they destroy fowls and domestic animals, unless preserved with the utmost care, and often fasten upon the inhabitants themselves, attack them in the face, and inflict very terrible wounds. In short, as some have already observed, the ancients seem to have taken their ideas of harpies from these fierce and voracious creatures, as they both concur in many parts of the description, being equally deformed, greedy, uncleanly, and cruel.

An animal not so formidable, but still more mischievous than these, is the American

Vampyre. This is less than the former, but more deformed, and still more numerous. It is furnished with a horn like the rhinoceros bat, and its ears are extremely long. The other kinds generally resort to the forest, and the most deserted places; but these come into towns and cities, and after sun-set, when they begin to fly, cover the streets like a canopy. They are the common pest both of men and animals; they effectually destroy the one, and often distress the other. "They are," says Ulloa; "the most expert blood-letters in the world. The inhabitants of those warm latitudes being obliged, by the excessive heats, to leave open the doors and windows of the chambers were they sleep, the vampyres enter, and if they find any part of the body exposed, they never fail to fasten upon it. There they continue to suck the blood; and it often happens that the person dies under the operation. They insinuate their tooth into a vein with all the art of an experienced surgeon, continuing to exhaust the body until they are satiated. I have been assured," continues he, "by persons of

As the Marmot has very short thighs, and the toes of its paws are formed like those of the bear, so it often sits erect, and walks with ease, like that animal, upon its hind feet. With its fore paws it carries its food to its mouth, and eats in an upright posture like the squirrel.

There seems to be a combination of the bear and the rat in the form of the Marmot. Its nose, its lips, and the form of its head, are like those of the hare; it has the hair and claws of the badger, and teeth of the beaver, the whiskers of the cat, the paws of the hare, with a tufted tail and short ears. The colour of its hair on the back is reddish brown. On the belly it is reddish, but softer and shorter. Its voice resembles that of a little dog, when it is played with or caressed; but when it is irritated or frightened, it raises a loud and shrill cry, highly offensive to the ear. The Marmot is a very cleanly animal. In autumn particularly it is loaded with fat, though all the parts of the body are never equally so. The Marmot would be tolerable

Fig. 79

GUINEA PIG

Fig. 80 *Fig. 81*

HEDGE HOG SHREWMOUSE

the world: unable or unwilling to offend, all its precautions are only directed to its own security; and it is armed with a thousand points, to keep off the enemy, but not to invade him. While other creatures trust to their force, their cunning, or their swiftness, this animal, destitute of all, has but one expedient for safety; and from this alone it often finds protection. As soon as it perceives itself attacked, it withdraws all its vulnerable parts, rolls itself into a ball, and presents nothing but its defensive thorns to the enemy; thus, while it attempts to injure no other quadruped, they are eqully incapable of injuring it; like those knights, we have somewhere read of, who were armed in such a manner that they could neither conquer others, nor be themselves overcome.

Such is the usual appearance of the hedgehog upon the approach of any danger. Thus rolled up in a lump, it patiently waits till its enemy passes by, or is fatigued with fruitless attempts to annoy it.

The hedge hog, like most other wild animals, sleeps by day, and ventures out by

THE SWISS SQUIRREL.

The Squirrel of Barbary resembles the palm Squirrel, but there is still reason to believe them separate animals. The Swiss Squirrel lives in the earth, and forms a retreat that water cannot penetrate. It bites unmercifully, and is more like a rat than a Squirrel in his nature.

THE RABBIT.

The hare and the rabbit, though so very nearly resembling each other in form and disposition, are yet distinct kinds, as they refuse to mix with each other. Mr. Buffon bred up several of both kinds in the same place; but from being at first indifferent, they soon became enemies; and their combats were generally continued until one of them was disabled or destroyed,

They breed seven times in a year, and

bring eight young ones each time. Suppose therefore, that this happens regularly, at the end of four years, a couple of rabbits shall see a progeny of almost a million and a half. They most usually bring forth their young in the warren, but always in a hole separate from the male. On these occasions the female digs herself a hole, different from the ordinary one, by being more intricate; at the bottom of which she makes a more ample apartment. This done, she pulls off from her belly a good quantity of her hair, with which she makes a kind of bed for her young. Durring the two first days she never leaves them; and does not stir out but to procure nourishment, which she takes with the utmost despatch; in this manner suckling her young for near six weeks, until they are strong, and able to go abroad themselves. During all this time, the male seldom visits their separate apartment; but when they are grown up, so as to come to the mouth of the hole, he then seems to acknowledge them as his offspring, takes them between his paws, smoothes their skin and licks their

for a long while been infested with Rats, they often seem to disappear of a sudden, and sometimes for a considerable time.

There are many varieties in the Rat species. The white rat, like the white mouse, the white rabbit, and all other animals which are entirely of that colour, has red eyes. The white species, with all its varieties, appears to belong to the temperate climates of the eastern continent, and have been diffused in much greater abundance over hot countries than cold ones. Originally we had no Rats in America; and those which are to be found here in such numbers at this day, are the produce of Rats which accidentally obtained a footing here with the first European settlers. Of these the increase was so great, that the Rat was long considered as the pest of the colonies; where, indeed, it had hardly an enemy to oppose it. The European ships have likewise carried these animals to the East Indies, into all the islands of the Indian Archipelago, as well as into Africa, where they are found in great num-

enemies to man, are never found but near those places where he has fixed his habitation. Numberless ways have been found for destroying them; and Gesner has minutely described the variety of traps by which they are taken. Our Society for the Encouragement of Arts and Manufactures proposed a reward for the most ingenious contrivance for that purpose; and we observed almost every candidate passing off descriptions as inventions of his own. It would have been cruel to detect the plagiarism, or fustrate the humble ambition of those who would be though tthe inventors of a mouse-trap.

THE LONG TAILD FIELD MOUSE

Is smaller than the rat, but larger than the common Mouse, and does not live in houses. It is remarkable for the largeness and prominence of its eyes; it differs likewise both from the rat and the mouse in the colour of its skin, which, while it is tolerably

Fig 72

GRISON

Fig 73

SQUIRREL

Fig. 124

GREAT ANT EATER

125 Fig. 126

SHORT TAILD MANIS LONG TAILD Dº .

THE MANIS.

THE Pangolin and the Phatagin, or the *long and the short tailed Manis*, have no scales under their throat, on the breast, or the belly : the Phatagin, like the other quadrupeds, has hair on all these under parts of the body ; the Pangolin has nothing but a smooth skin without hair.

The scales with which all the other parts of the body of these two animals are clothed and covered, do not stick to the skin ; they are only fixed and inherent to it underneath ; they are moveable, like the prickles of the porcupine. These scales are so large, so hard, and so sharp, that they frighten and discourage all animals of prey ; on collision they will strike fire like flint : it is an offensive armour which wounds while it resists.

The most cruel and the most voracious animals, such as the tiger and the panther, make but useless efforts to devour these armed animals; they tread upon them, roll them; but when they attempt to seize them, they are greivously wounded ; they can neither

convex, and not so close as those of the Phatagin which are armed with three sharp points; on the contrary, the scales of the Pangolin are without points, and uniformly sharp. The Phatagin is hairy upon the belly; and the Pangolin has no hair on that part of his body, but between those scales, which cover his back some thick and long hair issues like the bristles of a hog, which are not found on the back of the Phatagin.

The Pangolin is from six to eight feet in length, including his tail; the tail is very near as long as the body, though it appears shorter when young; the scales are not then so large nor so thick, and of a pale colour, which is deeper when the animal is adult; they acquire such a hardness, that they resist a musket ball. Like the ant eaters, the Pangolin and the Phatagin live chiefly upon ants: they have also a very long tongue, a narrow mouth, and without apparent teeth: their body and their tail are also very long, and the claws of their feet very near of the same length and the same form.

The youth's instructer in
natural history.

QL 706
.2
.Y68
NO.7
Rare Bk
Coll

73169328

YOUTH'S INSTRUCTER

IN

NATURAL HISTORY.