by a peculiar organ called the rattle, or prolonged into a sharpened point. There are four species, all peculiar to America. These are often confounded, even by systematic writers ; and it is by no means easy to apply the general at­tributes assigned by travellers to the proper species, which no doubt differ from each other.

It seems ascertained, however, that the bite of all these reptiles is extremely dangerous, the slightest prick of their envenomed fangs, in any part of the body well supplied with blood-vessels, being sufficient to kill almost any animal. Laurenti says, that a person bitten by a Crotalus experiences a swelling of the entire body, the tongue becomes prodi­giously inflamed, an unextinguishable thirst takes place, the edges of the wound become gangrened, and the unfor­tunate victim dies in frightful agony in five or six minutes. Different experiments made in Carolina by Captain Hall, are related in the Philosophical Transactions. A rattle­snake, four feet long, was fastened to a stake, and being made to bite three dogs, the first died in less than a quarter of a minute ; the second, in convulsions, in about two hours ; the third in about three hours. Four days after this, an­other dog was bitten by the same snake, and died in half a minute ; and then a second received the murderous fangs, and died in four minutes. A common black snake, about three feet long, and very vigorous, was next procured. The reptiles bit each other,—the black snake dying in eight mi­nutes, the rattle-snake not seeming in any way affected by its wound. Proceeding upon the supposition that “ none but itself could be its parallel,” it was then made to inflict a bite on its own body, and this suicidal deceit was followed by the hoped-for consequence,—it died in less than twelve minutes. The story is probably well known to all, though not credited by so many, of a disagreeable kind of an heir­loom which once existed in an American family. A man had been bitten through his boots by a rattle-snake, and died. The boots afterwards descended into the successive possession of two other persons, and killed them both,—an envenomed fang having remained sticking in the leather. As usual, we have contradictory accounts of the effects of corresponding causes. We know that an Englishman who was unfortunately bitten by a rattle-snake at Rouen, in 1827, expired in eight hours; yet in the April of that same year, at a meeting of the Academy of Sciences in Paris, Professor Bosc declared that he had *seen* more than thirty persons who had been bitten by rattle-snakes, not one of whom had died. According to Kalm, even the largest animals, such as horses and oxen, die almost instant­ly. Dogs longer resist this fatal action. Most animals ex­hibit an instinctive horror on nearing one of these death­dealing creatures. “ I have often,” says M. Bosc, “ amused myself by trying to force my horse and dog to approach one of these animals. But they would sooner have allowed themselves to be knocked down upon the spot than have come near them.” Yet Mr Audubon informs us that the mocking-bird of America, so strong and overpowering is the instinct of parental love, docs not hesitate to attack the rattle-snake when it approaches too near its nest,—that it will strike it on the head, pick out its eyes, and eventually put it to death.

The so-called *rattle* of these reptiles consists of a series of hollow, vertically flattened, scaly pieces, of which the posterior portion of one fits into the anterior portion of that which follows. They are thus mechanically and some­what loosely connected together, without being actually joined, so that when shaken they make a rattling or rustling noise, resembling that produced by rumpled parchment. When young there is at first but a single horny portion at the end of the tail, and attached to the last caudal verte­

bra. Another is formed on the renewal of the skin, push­ing its predecessor onwards, so that the first joint, which is closed at the end, continues to be the terminal one. M. Bosc is of opinion that an additional joint is formed every year, and that if the parts in question were not so often broken off accidentally, we might thus determine the age of each individual. They are, however, extremely fragile ; and M. Palisot de Beauvois informs us, that he frequently found these rattles lying detached, in the course of his travels in the United States.@@1 Their amount sometimes exceeds thirty, but usually ranges from one to thirteen. Some say that the noise may be heard at the distance of a hundred feet, while Bosc and others allege that it is scarcely audible beyond some twelve or fifteen paces. We shall now briefly notice the different species, the names of which, as already hinted, have been frequently transposed by naturalists.

*Crotalus horridus* inhabits South America, and is known to the Portuguese by the name of *Carcavela.* Its muzzle is covered by three or four pairs of plates. The scales, which are lozenge-shaped, and surmounted by a cutting keel, are disposed in twenty-nine ranges. Abdominal plates 145, sub-caudal twenty-five. The colour of the upper parts is yellowish brown, relieved upon the back by a range of broad, lozenge-shaped spots. This species measures from four to six feet in length, and, dwelling in a sultry clime, continues in a state of activity throughout the year. Some singular peculiarities in its manners are narrated by natu­ralists. For example, M. Palisot de Beauvois states, that during one of his journeys he observed a rattle-snake lying on the path, and approached it as quietly as possible. When he was about to strike it, it sprung its rattle, opened its mouth very widely, and received into its throat five young ones, each as thick as a goose’s quill. After ten minutes’ time, believing itself to be out of danger, it opened its mouth, and allowed the exit of the young, which, however, re-en­tered on a fresh alarm. This curious fact has been testi­fied (if not confirmed) by another French gentleman, M. Guillemart.

*Crotalus durissus* (Plate CCCCXLHI. figs. 6 and 10) is a more northern species than the preceding, and to it we may refer the numerous observations which have been made by travellers and tourists on the rattle-snakes of North Ame­rica. It seems to inhabit from the southern side of the Great Lakes as far as Mexico and California, extending westwards to the foot of the Rocky Mountains, but not oc­curring to the north of the river St Lawrence. It has only one or two pair of plates upon the muzzle, and the keel upon the scales is less developed ; the eyes are smaller, the tints deeper, the spots frequently assume the form of bands, and the tail is black. Abdominal plates 170, sub-caudal twenty-two. As this species dwells in districts subjected during winter to the influence of rigorous cold, it creeps in autumn into covered places, or, hiding itself beneath masses of sphagnum, falls into a state of lethargic repose. An in­dividual killed by M. Bosc, and which did not measure more than four feet in length, was found to have a hare in its in­terior. Its usual food consists of rats, squirrels, and other small Rodentia. This serpent, commonly called the striped rattle-snake, is said to traverse rivers, and even lakes, by inflating its body like a bladder. “ The largest rattle-snake,” says Catesby, alluding to one or other of these species, “which I ever saw, was about eight feet in length, and weighing between eight and nine pounds. This monster was sliding into the house of Colonel Blake of Carolina, and had cer­tainly taken up his abode there undisturbed, had not the domestic animals alarmed the family with their repeated outcries ; the hogs, dogs, and poultry united in their hatred to him, showing the greatest consternation, by erecting their

@@@, Latreille, *Reptiles,* vi. 73.