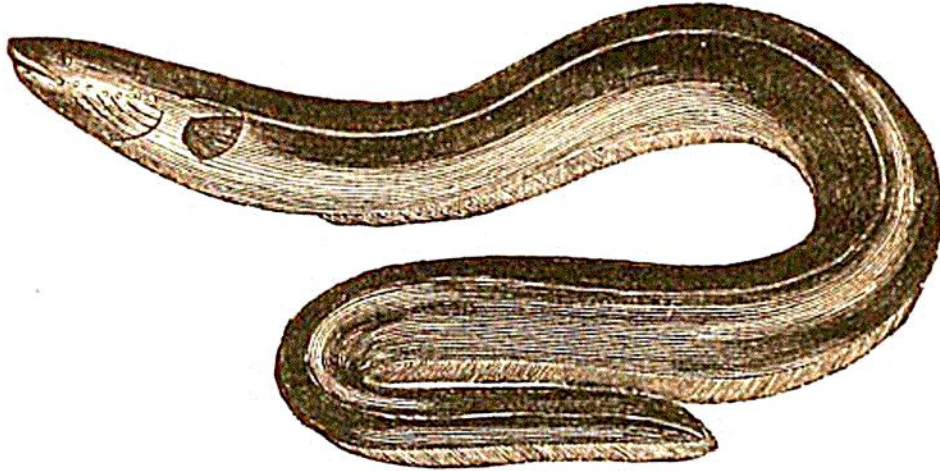


most of the *rays*, they can by this weapon kill the small fishes that come within the sphere of their action, or benumb the large ones; if they are in danger of attack from any voracious fish, they can disable him by invisible blows, more to be dreaded than the teeth of the shark itself.

Fig. 106.



Gymnotus electricus.

The *Gymnotus*, or electric eel, is a still more tremendous assailant, both of the inhabitants of its own element and even of large quadrupeds, and of man himself if he puts himself in its way. Its force is said to be *ten* times greater than that of the torpedo. This animal is a native of South America. In the immense plains of the Llanos, in the province of Caraccas, is a city called Calabozo, in the vicinity of which these eels abound in small streams, inso-much that a road formerly much frequented was abandoned on account of them, it being necessary to cross a rivulet in which many mules were annually lost in consequence of their attack. They are also extremely common in every pond from the equator to the 9th degree of north latitude.

Contrary to what takes place in the torpedo, the electric organs of the *Gymnotus* are placed under the *tail*, in a place removed from the vital ones. It has *four* of these organs, two large and two small, which occupy a third of the whole fish: each of the larger organs extends from the abdomen