

ingly, the Tamanac Indians call the *gymnotus*, in their expressive language, *arimna*, which means 'something that deprives of motion.'

The sensation caused by the feeble shocks of an electric eel appeared to me analogous to that painful twitching with which I have been seized at each contact of two heterogeneous metals applied to wounds which I had made on my back by means of cantharides. This difference of sensation between the effects of electric fishes and those of a Voltaic battery or a Leyden jar feebly charged has struck every observer; there is, however, nothing in this contrary to the supposition of the identity of electricity and the galvanic action of fishes. The electricity may be the same; but its effects will be variously modified by the disposition of the electrical apparatus, by the intensity of the fluid, by the rapidity of the current, and by the particular mode of action.

In Dutch Guiana, at Demerara for instance, electric eels were formerly employed to cure paralytic affections. At a time when the physicians of Europe had great confidence in the effects of electricity, a surgeon of Essequibo, named Van der Lott, published in Holland a treatise on the medical properties of the *gymnotus*. These electric remedies are practised among the savages of America, as they were among the Greeks. We are told by Scribonius Largus, Galen, and Dioscorides, that torpedos cure the headache and the gout. I did not hear of this mode of treatment in the Spanish colonies which I visited; and I can assert that, after having made experiments during four hours successively with *gymnoti*, M. Bonpland and myself felt, till the next day, a debility in the muscles, a pain in the joints, and a general uneasiness, the effect of a strong irritation of the nervous system.

The *gymnotus* is neither a charged conductor, nor a battery, nor an electromotive apparatus, the shock of which is received every time they are touched with one hand, or when both hands are applied to form a conducting circle between the opposite poles. The electric action of the fish depends entirely on its will; because it does not keep its electric organs always charged, or whether by the secretion of some fluid, or by any other means alike mysterious to us,