

Account of some Experiments on the Torpedo electricus, at La Rochelle.
 By John T. Todd, Esq. Communicated by Sir Everard Home, Bart.
 V.P.R.S. Read December 5, 1816. [*Phil. Trans.* 1817, p. 32.]

Having upon a former occasion submitted to the Royal Society some experiments and observations on the *Torpedo electricus*, the author is now induced to offer a continuation of his researches; and in the present communication describes a series of experiments undertaken with a view of ascertaining whether that animal possesses any power either of exciting the electrical organs, or of interrupting their action independent of the large system of nerves, by which they are directly supplied. The commencement only of this investigation is now submitted to the Society, the author having been deterred from its completion by untoward circumstances.

His experiments were performed immediately after the fish was taken, and while it was vivacious and active. When the lateral cartilages and all their appertaining muscles were divided, the shocks seemed as potent as before such operation. Neither were the powers of the electrical organ sensibly diminished by removing its superior surface, nor by making a deep vertical incision into it. Even when one half of each electrical organ was removed, the power of giving shocks was retained by the remainder.

These experiments were performed on two torpedos; the one eight, and the other eighteen inches in length. The results were in all main points similar; but the smaller fish became, as might have been expected, most speedily exhausted.

In a third torpedo, between nine and ten inches long, an incision was made round the circumference of both organs, so as to leave no attachment between them and the animal, except by the nerves; but the power of giving shocks was not impaired by this operation. The author remarks that the nerves supplying the electrical organs of the torpedo arise exclusively from the medulla oblongata, notwithstanding the long course which some of them take before they reach the organs.

The torpedo called by the lower orders in France *la Tremble*, is abundantly taken between the mouths of the Seine and the Garonne, and forms an article of food among the poorer inhabitants; who, however, carefully avoid the electric organs, which they consider as noxious.

A Description of a Process, by which Corn tainted with Must may be completely purified. By Charles Hatchett, Esq. F.R.S. In a Letter addressed to the Right Honourable Sir Joseph Banks, Bart. G.C.B. P.R.S. &c. &c. Read December 5, 1816. [*Phil. Trans.* 1817, p. 36.]

The great loss formerly experienced by the mustiness of imported grain, led the author, some years ago, to the means now described of removing the taint, and which he conceives may be advantageously