

the body on each side of the massive flattened head. The current, it appears, passes perpendicularly from the underside of the body to the back or *vice versa*. The dorsal side, according to Packard's account, is positive, the ventral side negative, and the discharges are wholly under the control of the fish. In the Irish specimen referred to above this control was unfortunately so strong, not to say stubborn, that the creature refused to give any exhibition of its powers, though every inducement, persuasive and otherwise, was given to it to do so. M. de Quatrefages has recorded the variability of the Torpedo's electric potency, in some examples it is very feeble but in others it is so great as to be dangerous to man and quite fatal to birds and small animals. Repeated discharges weaken its power; but Professor Owen found that under the influence of strychnine the discharges become more powerful. They are accompanied by sounds perceptible by the phonograph. Thus a weak discharge provokes a short croaking sound, but a prolonged discharge of three or four seconds duration is marked by a somewhat lengthened groan. Ordinary muscular contractions, as is well known, are attended by faint sounds like the distant rumbling of carriage wheels.

The two common Skates, *Raia batis* and *R. clavata* it has been found possess curious organs in the tail which Babuchin styled pseudo-electric. There is every ground for speaking of them, however, as truly electrical. They are, it is true, diminutive, and Prof. Burdon-Sanderson's researches ten years ago showed that their discharges were very feeble, but it is possible that they are either simply rudimentary and progressive in condition or degenerate and retrogressive, and thus differ from those of the Torpedo rather in degree of development than in kind. Into the vigorous discussion on this matter, participated in by the Duke of Argyll, Prof. J. C. Ewart and others in the columns of *Nature*, it is not necessary to enter here. Certainly the huge specimen of a skate, eight or nine feet across the "wings," which it fell to my lot to examine on one occasion, six years ago, possessed electrical organs resembling small corn-cobs situated on each side of the tail. No