Mr. Conybeare remarks, with his usual acumen, that "the reasons of this variation from the proportions of the posterior extremities of quadrupeds in general, are the same which lead to a similar diminution of the analogous parts in Seals, and their total disappearance in the cetacea, namely, the necessity of placing the centre of the organs of motion, when acting laterally, before the centre of gravity. For the same reason, the wings of birds are placed in the fore part of their body, and the centre of the moving forces given to ships by their sails, and to steam-boats by their paddles, is similarly placed. The great organ of motion in fishes, the tail, is indeed posteriorly placed, but this by its mode of action generates a *vis a tergo*, which impels the animal straight forwards, and does not therefore operate under the same conditions with organs laterally applied." G. T. V. 5, p. 579.

I shall conclude this detailed review of the peculiarities of one of the most curious, as well as the most ancient, among the many genera of extinct reptiles presented to us by Geology, with a few remarks on the final causes of those deviations from the normal structure of its proper type, the Lizard; under which the Ichthyosaurus combines in itself the additional characters of the fish, the Whale, and Ornithorhynchus. As the form of vertebræ by which it is associated with the class of fishes, seems to have been