

I. FOSSIL CETACEA.*—The *Cetaceans*, although generally termed fishes, are as perfect air-breathing, vertebrated animals, as the terrestrial mammalia, and, like them, give suck to their young. Instead of fore-feet or arms, they have a pair of fins, or paddles, but are destitute of hinder extremities, the place of the latter organs being supplied by a powerful cartilaginous horizontal fin, appended to the tail. The Cetaceans, therefore, differ in this respect from the fossil marine reptiles, the *Ichthyosaurus* and *Plesiosaurus* (see p. 708.), which have two pairs of paddles. This order, as is well known, comprises the most colossal forms of animal existence,—the Whales. Some are herbivorous, others carnivorous; many have powerful teeth; others are edentulous, the jaw being covered with a series of plates of the substance familiarly known by the name of *whale-bone*.

The fossil remains of Cetaceans have, for the most part, been observed in alluvial silt, and beds of drift, in valleys still traversed by rivers; but many examples have been discovered in elevated sea-beaches, proving that, although, geologically speaking, these beds are of modern origin, yet great changes in the relative level of the land and sea must have taken place, since these remains were imbedded. Thus, on the banks of the river Forth,

* *Cetacea*. An order of aquatic mammalia, comprising the Whales, Dugongs, Porpoises, Dolphins.