

Pl. 27, Figs. 11, 12, 13, 14, represent teeth of the largest Sauroid Fishes yet discovered, equaling in size the teeth of the largest Crocodiles: they occur in the lower region of the Coal formation near Edinburgh, and are referred by M. Agassiz to a new genus, *Megalichthys*. Pl. 27, Fig. 9, and Pl. 27<sup>a</sup>, Fig. 4, are fragments of jaws, containing many smaller teeth of the same kind. The external form of all these teeth is nearly conical, and within them is a conical cavity, like that within the teeth of many Saurians; their base is fluted, like the base of the teeth of the *Ichthyosaurus*. Their prodigious size shows the magnitude which Fishes of this family attained at a period so early as that of the Coal formation:\* their structure coincides

\* We owe the discovery of these very curious teeth, and much valuable information on the Geology of the neighbourhood of Edinburgh, to the zeal and discernment of Dr. Hibbert, in the spring of 1834. The limestone in which these Fishes occur lies near the bottom of the Coal formation, and is loaded with *Coprolites*, derived apparently from predaceous Fishes. It is abundantly charged also with ferns, and other plants of the coal formation; and with the crustaceous remains of *Cypris*, a genus known only as an inhabitant of fresh water. These circumstances, and the absence of Corals and *Encrinites*, and of all species of marine shells, render it probable that this deposit was formed in a freshwater lake, or estuary. It has been recognized in various and distant places, at the bottom of the carboniferous strata near Edinburgh.

In the Transactions of the Royal Society of Edinburgh, Vol. XIII. Dr. Hibbert has published a most interesting description of the recent discoveries made in the limestone of Burdie House,