

five rows of teeth; the median row consists of very large elliptical teeth; those of the lateral rows are much smaller and arranged alternately. The peculiar structure of the teeth of this genus, so admirably elucidated by Professor Owen,* is finely displayed in this fossil. The ample, deep, and simple pulp-cavity is seen in several teeth where the crown of dentine has been worn off, filled with a pure white calcareous spar; one of these cavities is marked *a*. The dentine is extremely dense, consisting of very minute calcigerous tubes, and passes into an external layer of enamel.

The fishes of the genus *Gyrodus*, have the body large, flat, and elevated; the dorsal and anal fins very long; and the tail forked, with equal elongated lobes. The scales are laterally connected by strong processes, as in *Lepidotus*. Other genera of the lepidoid family occur in the Oolite; as for example, *Microdon*, thus named from the smallness of its very numerous flat angular teeth, arranged in many rows; and *Placodus*, in which the teeth are few and of great size.†

In all these fishes, the obvious construction of the dental organs, is that of an apparatus for the comminution of hard bodies, as crustaceans, testaceous mollusks, and food of a similar kind.

* Odontography, p. 72.

† Ibid. pl. 43, fig. 1, and pl. 30, fig. 2.