so abundant in some of the Secondary deposits, and in numerous instances are the only vestiges of extinct species and genera, that they possess great geological interest; they are distinguished by the term *Ichthyodorulites* (*fossil dorsal-rays of fish*), under which head they will hereafter be described (see *Lign.* 127.). The first ray in the dorsal fin of some fishes, is protected in front by a double row of enamelled scales, and these often occur in a fossil state (see *Lign.* 132, fig. 5.).

TEETH OF FISHES.—Of all the durable parts of animals which occur in the mineral kingdom, the teeth of fishes present by far the most numerous, varied, and striking modifications of form, structure, composition, mode of arrangement, and attachment; and yet these dental organs, separately considered, do not in many instances, either in their structure or mode of implantation, afford characters by which the natural affinities of the original can be satisfactorily ascertained; and without the aid of other parts of the skeleton, it is often impossible to determine whether an unknown form of tooth belonged to an animal of the class of Fishes or of Reptiles. Although the modifications of form are almost innumerable, they are referable to four principal types; namely, the conical, the flattened, the prismatic, and the cylindrical.*

---

* The beautiful and highly philosophical work of Professor Owen, "ODONTOGRAPHY," should be consulted by those who