Chalk of Norfolk (Wond. p. 339.). This specimen was submitted to my inspection, many years since, by Mr. Charlesworth, and I then pointed out its analogy to the jaw of the Mosasaurus, indicated by the mode in which the smooth, conical, pointed teeth are anchylosed to, and supported by, osseous bases; and the distinctive character which the trenchant margins and uniform convexity of the teeth presented; and, at the same time, suggested that a reptile so closely allied to the Mosasaurus might have possessed a vertebral column, composed of bones with no appreciable distinctive characters from those of the former; and as no teeth of the Mosasaurus had been found in the English Chalk, the vertebræ which I had ascribed (Geol. S. E. p. 46.) to the Maestricht reptile, might possibly belong to the Norfolk species. 'No solution of the problem has yet been afforded, for no other relics have been discovered. The teeth have a simple pulp-cavity, surrounded by fine dentine, with an external layer of enamel. Professor Owen alludes to the lamellar decomposition of the dentine (Odontography, p. 262.) exhibited by some of these teeth, and observes that, at the base of the crown of a fractured tooth, these lamellæ are shown to be concentrically arranged. Mr. Charlesworth has recently had a section made of a perfect tooth of the Leiodon, and the pulp-cavity was found filled with a solid cone of flint; the silex must, therefore, have permeated the osseous parieties of the tooth.