grooved, nor reticulated. They are generally flat or slightly convex, and of a square or oblong form, with a smooth surface, which has the appearance of fine sand, from being uniformly covered with minute pores. This is produced by the structure of the crown of the tooth, which, like that of the Cestracion, is formed of very small vertical tubes; the base is osseous, and as large as the crown. The forms of two species are shown in *Lign.* 128, fig. 2, and Pl. VI. fig. 1[a]. A magnified vertical section of the crown, displaying the medullary canals, and radiating calcigerous tubes, is represented Pl. VI. fig. 1[b], and a transverse section, fig. 1[c]; they are thin slices of a tooth, *P. porosus*, from Black Rock, near Bristol, viewed by transmitted light.

There are several kinds of fossil teeth which possess the same structure as those of Psammodus, but differ in their external characters; these are referred to other genera by M. Agassiz. Thus ORODUS, *Lign.* 128, fig. 3, comprises those elongated teeth in which the centre of the crown forms an obtuse transverse cone, traversed by a ridge from which oblique furrows diverge transversely towards the circumference.

CERATODUS (*horn-tooth*) EMARGINATUS. *Lign.* 131, fig. 1.—Very curious dental organs, possessing the same structure as the teeth of Psammodus, are found in the Lias and Oolite; they consist of consolidated plates instead of separate teeth; there was probably but one plate on each side the jaws. The upper margin