In the Chalk, as well as in many other calcareous deposits, the shells of the Nautili, Ammonites, &c. are very rarely preserved; even the internal septa are dissolved, and the stony casts moulded in the cells, very often remain distinct, and readily separate. An entire series, from the innermost cell to the outer chamber, may sometimes be obtained; forming, as it were, a dissected model of the internal structure.* The beaks or mandibles are occasionally found fossil (*Lign.* 105, fig. 1.).

The ORTHOCERAS, *Lign.* 106.—The shells of this genus may be described as Nautili uncoiled, and extended in a straight line. They are straight, elongated, chambered shells, with smooth and gently undulated septa, concave towards the opening or upper part, and having the siphon central, or not far removed from the centre. It is supposed that the small extremity is bent or curved in some species. The *Orthoceratites* more especially belong to the ancient Secondary strata. They first appear in the Carboniferous, and abound in the Devonian and Silurian. They vary in size from a few inches to several feet in length, and eight or nine inches in diameter; and in form, from a slender elongated cone, to a short, massy, almost cordiform figure, with a nearly circular base. Some examples

* Bd. pl. 42, fig. 1: see also plates 31 to 43, for illustrations of Nautilites.