

PLATE 35. V. I. p. 339.

Cast of the interior of the Shell of *Ammonites obtusus* from Lyme. Fragments of the shell remain near *b.* and *e.*

One object of this Plate and of many of the figures at Pl. 37. is to shew the manner in which the external shell is fortified by Ribs and Flutings, (PP. 340. 341.) and further supported by the edges of the internal transverse plates, that form the air chambers. See V. I. p. 348, Note. (Original.)

PLATE 36. V. I. p. 338. Note.

Longitudinal section of another shell of *Ammonites obtusus* from the Lias at Lyme Regis. (Original.)

The greater part of the outer chamber, and the entire cavities of the air chambers are filled with calcareous spar, and the Siphuncle, (preserved in a carbonaceous state,) is seen passing along the entire dorsal margin to the commencement of the outer chamber. See V. I. p. 351, Note.

Von Buch has found evidence to shew that the membranous siphuncle of *Ammonites* was continued to a considerable distance along the outer chamber, beyond the last or largest transverse Plate. This discovery accords with the analogies afforded by the membranous neck of the siphon of the *N. Pompilius*, which is continued along the outer chamber from the last transverse Plate to the Pericardium. See Pl. 34. *g.**

Gizzard, the lateral pressure of these two organs on the neck of the Siphuncle would tend to close it with a force exactly counterbalancing the external pressure on the Pericardium.

* As the body of the animals that inhabited the *Ammonites* was more elongated than that of those inhabiting the shells of *Nautili*, in consequence of the smaller Diameter of their outer Chamber, the place of their Heart was probably more distant from the last transverse Plate, than that of the Heart of *Nautili*; and the membranous Siphon connected with the Pericardium consequently longer.