

PLATE 33. V. I. pp. 326, 327. Note.

Longitudinal Section of *Nautilus Striatus*, from the Lias at Whitby, in the collection of Mrs. Murchison. The interior of the Chambers is filled exclusively with calcareous spar, and that of the Siphuncle with Lias. (Original.)

- a. The Siphuncle: the union of the siphuncular calcareous sheaths, with the aperture or collar of each transverse Plate, is so closely fitted, that no fluid could have passed between them into the air chambers.
- b. One of the transverse Plates forming the Air chambers.
- c. White calcareous spar, filling the middle region *only* of the air chambers.
- d. Stratified zones of dark coloured calcareous spar, deposited in equal thickness on both sides of the transverse plates, and also on the inside of the shell, and around the calcareous sheath of the siphuncle.*
- e. Portion of the external shell, shewing a laminated structure.

PLATE 34. V. I. p. 329. Note.

Drawing of the animal of the *Nautilus Pompilius*, prepared at my request by Mr. Owen, to shew the manner in which the siphuncle terminates in the Pericardium. (Original.)

* The successive zones of this dark Spar shew that the Lime composing it was introduced by slow and gradual infiltrations into the cavity of the air chambers. Hence it follows that no communication existed between the Siphuncle and these chambers, at the time, when this Pipe was filled with the fluid mud, that has formed a cast of Lias within it. As the fractures across the Siphuncle in the 2nd and 3rd chambers are filled only with spar, of the same kind as that within these Chambers, these fractures could not have existed, when the Mud of the Lias formation entered the Siphuncle, without admitting it also into the chambers adjacent to them.