EXPLANATION OF PLATE 32.

a double keel-shaped indented process, enlarging from its apex backwards.* (Original.)

PLATE 32. V. I. p. 323.

- Fig. 1. Pat of the petrified shell, and casts of the interior of some of the chambers, of a Nautilus hexagonus, from Marcham, Berks. This fossil exhibits at its smaller End, from *d*. to *b*., a series of casts of the Air chambers, from which the external shell has been removed. The cavity of each chamber is filled with a disc of pure calcareous spar, representing the exact form of the chamber into which it had been infiltrated. In the larger portion of this fossil, the petrified shell retains its natural place, and exhibits fine wavy lines of growth forming minute Ribs across its surface. (Original.)
- Fig. 2. Fractured shell of N. hexagonus, from the Calcareous grit of Marcham. The chambers are lined with calcareous spar, and a circular plate of the same spar is crystallized around the siphon. The interior of the siphon is filled with a cast of Calcareous grit, similar to that which forms the rock from which the shell was taken. See V. I. p. 326.+ (Original.)

• Although the resemblances between these fossil beaks, and that of the animal inhabiting the N. Pompilius, are such as to leave no doubt that Rhyncholites are derived from some kind or other of Cephalopod, yet, as they are found insulated in strata of Muschel kalk and Lias, wherein there occur also the remains of Sepiæ that had no external shells, we have not yet sufficient evidence to enable us to distinguish between the Rhyncholites derived from naked Sepiæ, and those from Cephalopods that were connected with chambered shells. I possess a specimen of a fossil Nautilus from the Lias at Lyme Regis, in which the external open chamber contains a Rhyncholite.

+ This fossil exhibits the Siphuncle in its proper place, passing