

to the Nautilus Sypho will be found in the subjoined note.*

As the place of the siphon in this species is upon the internal margin of the transverse plates (Pl. 43, Fig. 2, b^1 , b^2 , b^3 .) it had less power than the more central siphuncle of the Nautilus to attach the mantle of the animal to the bottom of the outer chamber. For this defect we find a

* The transverse plates, (Pl. 43, Fig. 1, a. a^1 . a^2 .), present a peculiarity of structure in the prolongation of the *collar*, or siphuncular aperture entirely across the area of the air chambers, so that the whole series of transverse plates are connected in one continuous spiral chain. This union is effected by the enlargement and elongation of the collar for the passage of the siphuncle into the form of a long and broad funnel, the point of which, b. fits closely into the neck of the funnel next beneath it, c. whilst its inner margin, resting upon the arch of the subjacent whorl of the shell, transfers to this arch a portion of the external pressure upon the transverse plates, thereby adding to their strength.

As this structure renders it impossible for the flexible siphuncle to expand itself into the area of the air chambers, as in other Nautili and in Ammonites, the diameter of each funnel is made large enough to allow space within it for the distension of the siphuncle, by a sufficient quantity of fluid to cause the animal to sink.

At each articulation of the funnels, the diameter of the siphuncle is contracted, as the siphuncles of Ammonites and Nautili are contracted at their passage through the collars of their transverse plates.

Another point in the organization of the siphuncle is illustrated by this shell, namely, the existence of a soft calcareous sheath, (Pl. 43, Fig. 1, b. c. d.), analogous to that of the *N. Pompilius*, (Pl. 31, Fig. 1, a. b. c. d.), between each shelly funnel and the membranous pipe or siphuncle enclosed within it. At Pl. 43, Fig. 1, b, we have a section of this sheath folding round the