

resist the pressure of deep water, M. Von Buch has suggested a further use of the lobes thus formed around the base of the outer chamber, as affording points of attachment to the mantle of the animal, whereby it was enabled to fix itself more steadily within its shell. The arrangement of these lobes varies in every species of Ammonite, and he has proposed to found on these variations, the specific character of all the shells of this great family.*

* The most decided distinction between Ammonites and Nautili, is founded on the place of the siphon. In the Ammonite, this organ is always on the *back* of the shell, and never so in the Nautilus. Many other distinctions emanate from this leading difference; the animal of the Nautilus having its pipe usually fixed near the *middle*, (See Pl. 31, Fig. 1), or towards the *ventral margin* (Pl. 32, Fig. 2, and Pl. 42, Fig. 1.) of the transverse plates, is thereby attached to the bottom of the external chamber, which is generally concave, and without any jagged termination, or sinuous flexure, of its margin. As the siphon in Ammonites is comparatively small, and always placed on the *dorsal margin* (Pl. 36, d. and Pl. 39, d.), it would have less power than the siphuncle of Nautili to keep the mantle in its place at the bottom of the shell; another kind of support was therefore supplied by a number of depressions along the margin of the transverse plate, forming a series of lobes at the junction of this plate with the internal surface of the shell.

The innermost of these, or ventral lobe, is placed on the inner margin of the shell (Pl. 39, V.); opposite to this, and on the external margin, is placed the dorsal lobe (D), embracing the siphon and divided by it into two divergent arms. Beneath the dorsal lobe are placed the superior lateral lobes (L), one on each side of the shell; and still lower, the inferior lateral lobe (l), next above the ventral lobe.

The separations between these lobes form seats, or saddles,