

Mr. De la Beche has shewn that the mineral condition of the outer chamber of many Ammonites, from the Lias at Lyme Regis, proves that the entire body was contained within it; and that these animals were suddenly destroyed and buried in the earthy sediment of which the lias is composed, before their bodies had either undergone decay, or been devoured by the crustaceous Carnivora with which the bottom of the sea then abounded.*

As all these shells served the double office of affording protection, and acting as floats, it was necessary that they should be thin, or they would have been too heavy to rise to the surface: it was not less necessary that they should be strong, to resist pressure at the bottom of the sea; and accordingly we find them fitted for this double function, by the disposition of their ma-

Armatus, A. Sowerbii,) affords a strong argument against the theory of their having been internal shells. These spines which have an obvious use for protection, if placed externally, would seem to have been useless, and perhaps noxious in an internal position, and are without example in any internal structure with which we are acquainted.

* In the Ammonites in question, the outer extremity of the first great chamber in which the body of the animal was contained, is filled with stone only to a small depth, (see Pl. 36, from a. to b.); the remainder of this chamber from b. to c., is occupied by brown calcareous spar, which has been ascertained by Dr. Prout to owe its colour to the presence of animal matter, whilst the internal air chambers and siphuncle are filled with pure white spar. The extent of the brown calcareous spar, therefore, in the outer chamber, represents the space which was