

A still more important use of the lobes formed by the transverse plates both of *N. Sypho* and *N. Zic Zac*, may be found in the strength which they impart to the sides of the external shell (see Pl. 43, Figs. 1, 2, 3, 4.), underpropping their flattest and weakest part, so as to resist pressure more effectually than if the transverse plates had been curved simply, as in *N. Pompilius*. One cause which rendered some such compensation necessary, may be found in the breadth of the intervals between each transverse plate; the weakness resulting from this distance, being compensated by the introduction of a single lobe, acting on the same principle as the more numerous and complex lobes in the genus *Ammonite*.

The *N. Sypho* and *N. Zic Zac* seem, therefore, to form *Links* between the two great genera of *Nautilus* and *Ammonite*, in which an intermediate system of mechanical contrivances is borrowed, as it were, from the mechanics of the *Ammonite*, and applied to the *Nautilus*. The adoption of lobes, analogous to the lobes of the *Ammonite*, compensating the disadvantages, that would otherwise have followed from the marginal position of the siphuncle in these two species, and the distances of their transverse plates.*

* In some of the most early forms of *Ammonites* which we find in the Transition strata, e. g. *A. Henslowi*, *A. Striatus*, and *A. Sphericus*, Pl. 40, Figs. 1, 2, and 3,) the lobes were few, and nearly of the same form as the single lobe of the *Nautilus Sypho*,