

The prodigious number, variety, and beauty, of extinct Chambered shells, which prevail throughout the Transition and Secondary strata, render it imperative that we should seek for evidence in living nature, of the character and habits of the creatures by which they were formed, and of the office they held in the ancient economy of the animal world. Such evidence we may expect to find in those inhabitants of the present sea, whose shells most nearly resemble the extinct fossils under consideration, namely, in the existing *Nautilus Pompilius*, (See Pl. 31, Fig. 1), and *Spirula*, (Pl. 44, Figs. 1, 2).\*

ginal simplicity of structure; a structure which remains fundamentally the same in the *Nautilus Pompilius* of our existing seas, as it was in the earliest fossil species that we find in the Transition strata. Meantime the cognate family of Ammonites, whose shells were more elaborately constructed than those of Nautili, commenced their existence at the same early period with them in the Transition strata, and became extinct at the termination of the Secondary formations. Other examples of later creations of genera and species, followed by their periodical and total extinction, before, or at the same time with the cessation of the Ammonites, are afforded by those cognate Multilocular shells, namely, the Hamite, Turrilite, Scaphite, Baculite, and Belemnite, respecting each of which I shall presently notice a few particulars.

\* I omit to mention the more familiar shell of the Argonauta or Paper Nautilus, because, not being a chambered species, it does not apply so directly to my present subject; and also, because doubts still exist whether the *Sepia* found within this shell be really the constructor of it, or a parasitic intruder into a shell formed by some other animal not yet discovered. Mr. Broderip, Mr. Gray, and Mr. G. Sowerby, are of opinion, that this shell is constructed by an animal allied to *Carinaria*.