

food on which they are respectively destined to feed, so we may conclude, from the resemblance of the fossil beaks, or Rhyncholites, (Pl. 31, Fig. 5—11), to the calcareous portions of the beak of the Cephalopod, inhabiting the *N. Pompilius*, that many of these Rhyncholites were the beaks of the cephalopodous inhabitants of the fossil shells with which they are associated; and that these Cephalopods performed the same office in restraining excessive increase among the Crustaceous and Testaceous inhabitants of the bottom of the Transition and Secondary seas, that is now discharged by the living Nautili, in conjunction with the carnivorous Trachelipods.*

Assuming, therefore, on the evidence of these analogies, that the inhabitants of the shells of the fossil Nautili and Ammonites were Cephalopods, of similar habits to those of the animal which constructs the shell of the *N. Pompilius*, we shall next endeavour to illustrate, by the organization and habits of the living Nautilus, the manner in which these fossil shells were adapted to the use of creatures, that sometimes moved and fed at the bottom of deep seas, and at other times rose and floated upon the surface.

The Nautili (see Pl. 31. Fig. 1. and Pl. 32. Figs. 1. 2.) constitute a natural genus of spiral discoidal shells, divided internally into a series

* See p. 250.