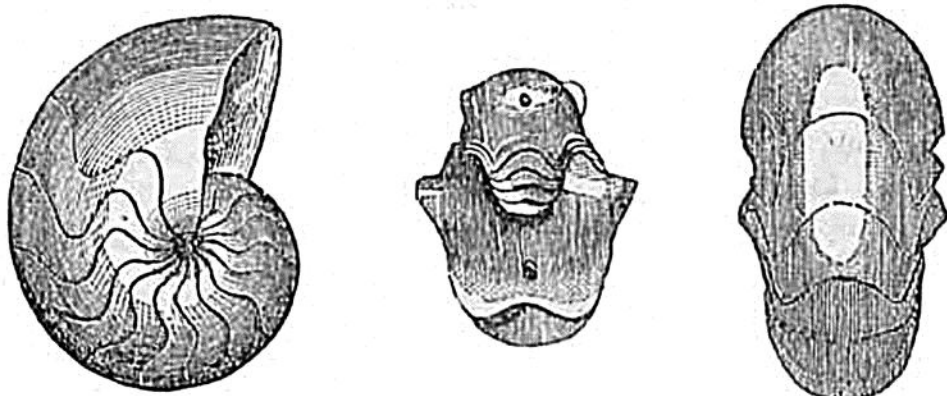


Fig. 249.

*Nautilus Danicus*, Schl.—Faxoe, Denmark.

The claws and entire skull of a small crab, *Brachyurus rugosus* (Schlottheim), are scattered through the Faxoe stone, reminding us of similar crustaceans inclosed in the rocks of modern coral reefs. Some small portions of this coralline formation consist of white earthy chalk; it is therefore clear that this substance must have been produced simultaneously; a fact of some importance, as bearing on the theory of the origin of white chalk; for the decomposition of such corals as we see at Faxoe is capable, we know, of forming white mud, undistinguishable from chalk, and which we may suppose to have been dispersed far and wide through the ocean, in which such reefs as that of Faxoe grew.

*White chalk* (see Tab. p. 236, *et seq.*).—The highest beds of chalk in England and France consist of a pure, white, calcareous mass, usually too soft for a building-stone, but sometimes passing into a more solid state. It consists, almost purely, of carbonate of lime; the stratification is often obscure, except where rendered distinct by interstratified layers of flint, a few inches thick, occasionally in continuous beds, but oftener in nodules, and recurring at intervals from 2 to 4 feet distant from each other.

This upper chalk is usually succeeded, in the descending order, by a great mass of white chalk without flints, below which comes the chalk marl, in which there is a slight admixture of argillaceous matter. The united thickness of the three divisions in the south of England equals, in some places, 1000 feet.

The annexed section (fig. 250) will show the manner in which the white chalk extends from England into France, covered by the tertiary strata described in former chapters, and reposing on lower cretaceous beds.

