

The genera into which these shells are distributed are founded upon the form, and mode in which the shell is coiled; the character of the partitions or septa, and the situation of the siphuncle. A little reflection will enable the student to understand the principles of this classification. The essential character of all the shells of this class, is to have an external chamber larger than the inner, and which contains the body of the animal; to be divided internally into different compartments, by partitions; and to have a pipe or tube extending from the outer open chamber to the innermost cell. They are divided into two groups or families.

1. THE NAUTILIDÆ (*Bd.* plate 31.): in these the septa are smooth, or but slightly undulated, and the siphon is either in the centre of the disk of the cells, or situated towards the inner margin or turn of the spire.

2. THE AMMONIDÆ (*Bd.* plates 35—42.): in these the septa are more or less waved, and their margins foliated or crenated, that is, indented; and the siphon is situated either on the margin or towards the back.

Of the Nautilidæ three genera require our attention, namely, *Nautilus*, properly so called; *Orthoceras* (*straight-horn*), in which the shell, instead of being involuted or coiled up, is straight; and *Cyrtoceras* (*curved-horn*), which may be described as an orthoceras gently curved.