

CHAPTER EIGHTH.

SIPHONOPHORÆ.

SECTION I.

SIPHONOPHORÆ IN GENERAL.

MODERN zoölogists generally consider the Siphonophoræ as one natural group of Acalephs, which they have subdivided in various ways, into families or tribes. When closely compared, it appears, however, that they differ widely, in a morphological point of view; while the characteristics by which they are held together, are of the most trifling nature, consisting chiefly in the fact that they are free, moving animals, and not attached to the ground. Kölliker has, nevertheless, insisted upon that feature as essential, and on that account called them *Polypi nechalei*. In attempting to classify them, I have kept in view the prominent difference pervading the whole class of Acalephs, in which individuals assume either the characteristics of attached Hydroids or of free Medusæ, with every degree of approximation to one or the other of these extreme forms. In Siphonophoræ the hydroid type is prevalent, but already raised above the ordinary condition of Hydroids, in being free; and the medusoid element is lowered, in so far as most Medusæ, budding from the colonies, are deprived of some of the characteristics of the higher Acalephs. Moreover, hydroids and medusæ, budding from one another, invariably form polymorphous communities, from which various parts are cast off to continue a short, precarious existence, as independent beings. The connection of all these isolated members of the Siphonophoræ, has only recently been traced in a satisfactory manner. Upon the prevalence of the hydroid or medusoid elements, and their various combinations among these Acalephs, aided by what is already known of their development, I venture to subdivide the Siphonophoræ into four sub-orders: the *Porpitæ* of Goldfuss, or *Chondrophoræ* of Chamisso and