

Besides the two species of Forskål, Péron and LeSueur refer three others to the genus *Cephea*: 1, *C. polychroma* *Pér.* and *LeS.*; 2, *C. ocellata* *Pér.* and *LeS.*; and 3, *C. fusca* *Pér.* and *LeS.* An attentive comparison of the descriptions of these species shows the first to be a *Cotylorhiza*, the *Cassiopea borbonica* *Delle Ch.*, or *Rhizostoma borbonica* *Esch.*; the second a genuine *Cephea*, allied to *C. octostyla*; and the third a *Polyrhiza*, allied to *P. Cephea*. Lamarck has added nothing to this genus, but simply copied Péron and LeSueur. The *Cephea capensis* *Q.* and *G.*, *Zool. Uran.*, p. 568, is, very likely, a genuine *Rhizostoma*, while the *Cephea mosaica* *Q.* and *G.* (*Rhizostoma mosaica* *Esch.*) constitutes a distinct genus, which I have called *Catostylus*. To these must be added the following new genera.

*Diplopilus* *Ag.* In the figure of *Polyrhiza Cephea*, published by Forskål, the summit of the umbrella is depressed, and evidently injured. In the centre of the depression there appear singular bodies which could not be understood by reference to any known *Medusa*. Among the drawings of *Discophoræ* made during the U. S. Exploring Expedition by J. P. Couchouy, Esq., there is, however, one representing an *Acaleph* of the same family, which explains this puzzle. From the centre of the umbrella arises a cupola, occupying about one third of the whole diameter, made up of large conical tubercles, and standing out prominently from the upper part of the disk. This dome corresponds, in extent, to the central cavity, and is the part sunk in the figure of Forskål. From its outline arise eight simple radiating tubes, which reach the base of the eight eyes. In each of the segments thus circumscribed arise ten or twelve simple chymiferous tubes, which anastomose in arches at some distance, and then, doubling their number, radiate in a straight course for twice the distance, towards the margin, where they anastomose again, and, increasing further in number, reach the margin in a network of anastomoses. The margin of the disk is divided, in each segment, into eight pointed lobes. The actinostome consists of four broad arms, with numerous fringes and many slender tentacles along their whole margin. Each flat arm is broadly furcate at its extremity.