- Mastigias Ag. Eight arms, arising from a comparatively narrow actinostome, with a double row of interlocked marginal folds near their base, and a long, simple, terminal appendage.
 - M. Papua Ag. Cephea papua Less., Voy. Coquille Pl. 11, figs.
 2 and 3). Cephea papuensis Griffith, in Cuvier's An. King.
 Pl. 3, fig. 3. Rhizostoma papua Less. Waigion Island (Lesson).
- Himantostoma Ag. Eight slender arms, arising from a wide actinostome, ruffled with marginal folds for their whole length, with the exception of their cuspidate termination. Five slight marginal lobes, in each segment, between two of the eight eyes.
 - H. Sueurii Ag. Very pale reddish purple; margin of the disk and fringes of the arms deeper. — China Sea (W. W. Wood). — From a drawing and notes by W. W. Wood, Esq.
- Catostylus Ag.—Cephea Q. and G. (p. p.).—Rhizostoma Esch. and Less. (p. p.). Judging from the position of the eight arms, near the margin of the disk, the centre of the actinostome must be a widely-spread horizontal floor.
 - C. mosaicus Ag. Cephea mosaica Q. and G., Zool. Uran. Pl. 85, fig. 3. — Rhizostoma mosaica Esch. — Rhizostoma mosaica Less. — New Holland: Port Jackson (Quoy and Gaimard).
 - C. Wilkesii Ag. Large, new species, fourteen inches in diameter, drawn by Mr. J. Drayton during the U. S. Exploring Expedition. It has a general resemblance to C. mosaicus, and the figure before me shows the reticulation of the arms represented by Quoy and Gaimard, to be small bunches of marginal lobes. Slaty colored, rim transparent, with radiating white lines; surface of the disk crenulate, dotted near the margin. — Illiware Lake (J. Drayton).
- Rhacopilus Ag. Four large, pointed lobes, in each segment, between two of the eight eyes. Large actinostome, consisting of four pillars, between which are the large openings leading into the four genital pouches, and from which hang eight large arms, covered with numerous folds of the marginal lobes.
 - R. cyanolobatus Ag.—Rhizostoma cyanolobata Couthony, Manuscript.
 —Whole surface of the disk granulated, bluish white; lobes of the margin deep blue; fringes of the arms edged with crimson.
 Harbor of Rio de Janeiro (Couthouy). From a drawing and notes made by Mr. J. P. Couthouy, during the U. S. Exploring Expedition, under the command of Capt. Charles Wilkes.