

*Gorgonocephalus australis*, Lym.

*Astrophyton australe*, VII., Contrib. to Nat. Hist. of Kerguelen Island, by J. H. Kidder, vol. ii. p. 74, 1876.

Tasmania; 7 fathoms.

*Gorgonocephalus chilensis*, Lym.

*Astrophyton chilense*, Phil., Wieg. Archiv, p. 268, 1858.

Chili.

*Gorgonocephalus mucronatus*, Lym.

*Astrophyton mucronatum*, Lym., Bull. Mus. Comp. Zool., vol. i., part 10, p. 348, 1869.

Florida; 120 to 125 fathoms.

*Euryale*.

*Euryale*, Lmk., Hist. Anim. sans Vert., vol. ii., 1816.

Disk re-enteringly curved in the interbrachial spaces, and, together with the arms, covered by thick skin. Arms pretty wide at their base and branching by a series of numerous forks having between them shafts which grow suddenly shorter towards the extremities.<sup>1</sup> Radial shields long, bar-like, and in one piece, and extending nearly to centre of disk, so as to form more or less elevated radiating ribs. Entire interbrachial space below covered by stout plates soldered together. A vertical row of stout teeth, like those of Ophiurans, but no mouth papillæ, nor tooth papillæ. No proper arm spines, but the outer branches have peg-like tentacle scales which are continued nearly to the base of the arm. There are small, simple under arm plates similar to those among Ophiurans. Side arm plates at end of arms like long, free flaps, bearing hooks (tentacle scales): further in they are small and cling close to the arm, and rise scarcely above its under surface. Upper arm plates represented by a double line of small pieces, which support two large spines standing on the upper surface of the arm. Two genital opening at outer corners of each interbrachial space.

A section of a *Euryale* (Pl. XLV. fig. 6) shows the aspect of a non-gravid individual, the pouches of whose digestive cavity are nearly empty, instead of being stuffed with the clotted substance mentioned under *Gorgonocephalus*. Above is seen the digestive cavity, which, on the right and left, passes into pouches; and partitions, forming similar pouches, may be seen on the farther side of the centre. Above the lateral pouches are the radial shields (*l,l*) cut through. On the extreme right and left are greatly dilated genital openings (*n,o*), which lead directly into the body cavity; and this, passing under and outside the digestive cavity, is connected, about the mouth, by the perihæmal canal, a cross cut of which appears at *df*. A section of the disk skin, above the body cavity, (fig. 7) exhibited a uniform, tough, slightly fibrous composition, with a thin lining

<sup>1</sup> For the mode of branching, see T. Lyman, Proc. Bost. Soc. Nat. Hist., vol. xix., March 1877.