

- Fig. 5. *Gorgonocephalus pourtalesii*, Lym.,  $\frac{1}{1}^0$ . Horizontal cross-cut of the end of an ovarial lobe, showing its wall, and the egg clusters, each of which is surrounded by a membrane.
- „ 6. *Euryale aspera*, Lmk.,  $\frac{3}{1}$ . Vertical cross-cut of the disk, passing near one arm, on the right; and about through the centre of an interbrachial space, on the left. Above is the digestive cavity with its radiating membranous partitions, and a much expanded genital opening (*no*) on each side. Below are the mouth angles, cut through, and teeth (*d''*); partial ring canal (*δ, f*); corresponding to the inner perihæmal, and which connects the inner ends of the ovarial pouches; second mouth tentacle, above which is the first (*r''*); radial shields cut through (*l, l*).
- „ 7. „ „  $\frac{7}{1}^5$ . Vertical section of skin from roof of disk. It seems uniform and somewhat fibrous, except the lowest granular layer, which may, and should be the egg or spermatozoon bearing tissue. The upper dark band is the pigment layer.
- „ 8. „ „  $\frac{7}{1}^0$ . Some cells from the lowest granular layer of fig. 7, after long immersion in alcohol.
- „ 9. „ „  $\frac{3}{1}^0$ . Bit of lime network from the wall of an ovarial pouch.

## PLATE XLVI.

(For further observations, see the description of the genera and species referred to.)

- Fig. 1. *Ophiocreas ædipus*, Lym., ♂,  $\frac{4}{1}$ . Base of an arm and outer margin of disk, with the skin slit on one side and folded back, exposing the right, double-lobed spermary (*δ, δ*) connected within with a spermatie bursa or pouch, which empties outwardly by a genital opening (*no*). Above is the digestive cavity (*St*).
- „ 2. *Astrocnida isidis*, Lym., ♀,  $\frac{3}{1}$ . [Exp. U. S. str. "Blake."] Vertical cross-cut passing through a part of the disk, and somewhat on one side of the median line of an arm, showing the less complex *Astrophyton* character of the internal arrangement; folds of the digestive cavity (*St'*) which has no points of attachment on its under side; the ovaries (*δ*) or egg-clusters lying in the