

space on each side. Below is the arm bone, with its under (*h*) and side arm plates (*i*) bearing the spines. On either side passes up the genital opening (*no*) into the bursa with its folded wall which closely follows the pleated digestive cavity (*St, St*), with its thick (hepatic, or epithelial?) layer. One little lobe (*St'*) is pushed into the bursa and cut by the section. The wall of the bursa is a thin continuation of the disk wall; hence its tendency to calcify. In this species it has fine scales of lime in its substance. In the bursal folds lies a young (*Y*); and two embryos (*Y'*) are seen in side pouches. To the right of the upper arm of the young may be seen a section of a tip of another arm, bent round in a fold of the bursa; genital plate (*o*); tentacle (*r*); radial shields cut through (*l, l*).

Fig. 9. *Ophiacantha vivipara*, Ljn., ♀, $\frac{3}{1}^{\circ}$. Liver-like cells from the very thick wall of the digestive cavity. This layer seems to be the one spoken of by Ludwig as epithelial.

PLATE XLVII.

- Fig. 1. *Astrophyton exiguum*, Agas., $\frac{2}{1}$. Disk from above, with two arms.
- „ 2. *Ophioglypha hexactis*, E. A. Smith, ♀, $\frac{4}{1}$. Disk with its roof removed and seen from above. Above the digestive cavity (*St, St*), which is ruptured in the middle, lie the genital bursæ ($\delta\delta$), near which may be seen four young ones in several stages of growth. Each is contained in a translucent membranous sac, which is ruptured over the largest.
- „ 3. *Ophiocoma scolopendrina*, Agas., ♂, $\frac{3}{1}$. Vertical section of the disk passing through one arm (*Am*) and the opposite interbrachial space: digestive cavity (*St*), whose upper wall adheres to the roof of the disk; jaw (*c*); section of mouth frame (*f*); genital plate (*o*); genital bursa (δ); convoluted spermaries (δ', δ'').
- „ 4. *Ophiothrix longipeda*, Müll. & Tr., ♀, $\frac{3}{1}$. Vertical section of the disk passing through one arm (*Am*) and the edge of the opposite interbrachial space, including a slice of an arm (*Am*). The spaces over and beside the arms