

main, or body cavity; mouth sphincter (*du*) just outside which is the inner perihæmal canal; spinous papillæ of the mouth (*d*); second mouth tentacle (*r''*), above which is the first; mouth frame cut through (*f*); lower arm canal (*t*); an arm bone (*w'*).

- Fig. 3. *Ophiura elaps* (?), Ltk., ♂, ♀. [Exp. U. S. str. "Blake."] Vertical cross-cut beside an arm showing the whole of a spermatocyst (*Bu*), with the fold of its membrane (*Bu'*) which runs upward over the arm; genital lobes (*δ*) hanging in the bursa; the same cut through (*δ'*); inner perihæmal canal (*fc*); position of the outer and inner genital openings (*no, no*, with arrows); parts of side arm plates cut through (*i*); adductor muscle (*rm*) between the genital plate (*o*) and the radial shield (*l*); outer blood ring (*lb*); folds of the digestive cavity (*St*).
- „ 4. *Ophiocamax*, sp. nov., ♀, 1/4. [Exp. U. S. str. "Blake."] Vertical cross-cut of the upper portion of an ovarial bursa (*Bu*) whose wall is plated with lime scales. Above is an embryo (*δ'*), cut through and lying in a pocket (ovarial tube?) whose wall also has minute lime scales. The bursa clings closely to the wall of the digestive cavity (*St*); section of head of genital plate (*O*.)
- „ 5. *Amphiura incana*, Lym., ♂, 1/9. Vertical cross-cut through a portion of the disk, cutting off one arm, and passing beside another; spermatocyst (*δ*); convoluted genital lobes (*δ, δ', δ''*); arm (*am*); Polian vesicle (*po*); an arm bone from the outer side (*w'*); the wrinkled digestive cavity (*St*), with its (epithelial?) wall.
- „ 6. *Ophiopholis aculeata*, Gray, 5/1. Disk seen diagonally from below, with two arms and one interbrachial space cut away to show the typical Ophiuran digestive cavity, a bag (*St*) attached to the disk-roof by slender threads (*Sm*), many of which are made fast to the radial shields (*l*).
- „ 7. *Ophiacantha vivipara*, Ljn., 5/1. View from within of a vertical cross-cut through two arms (*Am*) close to the edge of the disk, showing the marginal portions of the digestive cavity (*St, St*) almost filled by a thick, wrinkled (epithelial?) layer. Of the bursæ, two (*δδ*) appear as simple folds or cracks, while the third (*δ'*) has little lobes, doubtless ovarial tubes, connected with it.
- „ 8. „ „ „ ♀, 5/1. Vertical cross-cut at a right angle to the arm, a little inside the edge of the disk seen from within, showing a section of one arm with its brachial space and a portion of an interbrachial