are crammed with minute eggs  $(\delta', \delta')$ , which press on the genital bursæ  $(\delta, \delta)$ ; the strongly corrugated digestive cavity (St), whose upper wall clings to the roof of the disk; inter-mouth frame muscle (fm); jaw (c).

Fig. 5 Ophiocamax, sp. nov.  $\mathfrak{P}$ ,  $\S$ . [Exp. of U. S. str. "Blake."] Vertical section of the disk passing through the sides of two arms. On either side is a genital bursa  $(\delta, \delta)$  emptying by the genital opening (no), and making a fold above over the digestive cavity (St), into which hang two more folds  $(\delta, \delta)$  which are cut through. Above the bursæ are pockets  $(\delta', \delta')$  containing embryos just beginning to develop. A larger view of one of these is given in fig. 4, Plate XLVI.; section of second mouth-tentacle (r''); wings of arm bones shaved by the section (w').

## PLATE XLVIII.

Gorgonocephalus verrucosus, Lym. Diagram of the right stem, or half of an arm carried out to its last forks, 3.

The figures indicate the order of forks as counted from the disk. Fork 1 is not seen, as it lies within and under the disk, just beyond whose margin is fork 2 of this right stem.

For observations on the mode of forking among Astrophytons, see Proceedings of the Boston Society of Natural History, vol. xix., March 7, 1877.

This plate is quite a monument of patience on the part of my assistant, Miss Clark. It is no fancy sketch, but a reduction of a large drawing, to make which every fine twig was separately unrolled and measured, so that not only is the number of forkings correct, but also the proportions of the parts.

I take this opportunity to acknowledge the skill and fidelity of my artists, Miss K. Peirson and Mr. L. Trouvelot, shown in the preparation of the original drawings and the plates.