

## PLATE XXXVI.

(All the figures, except 19, are from very young specimens. For further remarks on this plate, see generic description of *Gorgonocephalus*.)

- Fig. 1.  $\frac{1}{1}^{\circ}$ . *Gorgonocephalus agassizii*, Lym. A very young individual, having a disk little more than 2 mm. in diameter, seen from below. In the inner portion of the right lower interbrachial space there should be a small pimple,—the madreporic shield, or plate. All other plates of the lower surface are concealed by the skin, though those of the back are distinct. There is, as yet, but one full fork to the arm, and the beginning of a second. Curved tentacle scales are continued quite to the base of the arm. The fewness of the forks and their distance from the disk bring to mind *Trichaster*.
- „ 2.  $\frac{2}{1}^{\circ}$ . Two mouth angles and the beginning of an arm of a very young specimen, dried; side mouth shields (*b*).
- „ 3.  $\frac{2}{1}^{\circ}$ . The same specimen seen from above, with the base of an arm. On the back of the disk may be seen the primary plates (*g*) with lines of granules between them; and scales along the edge of the disk and on the upper side of the arm.
- „ 4.  $\frac{7}{1}^{\circ}$ . Tip of arm of a young specimen. The side arm-plates (*i*) are already formed, and the hooks.
- „ 5.  $\frac{7}{1}^{\circ}$ . The same, from above, with two additional joints. The side arm plates (*i*) still occupy the whole surface; but, on the central line, a small scale, homologous with the upper arm plate, is just forming. Later, it adds to itself many similar scales. (See fig. 15.)
- „ 6.  $\frac{4}{1}^{\circ}$ . Lower surface of an arm near tip of a twig, showing the side arm plates, bearing their hooks. This and the other figures of arm joints represent preparations dried to show the details of the plates.
- „ 7.  $\frac{4}{1}^{\circ}$ . Upper surface of a joint from near the tip of a twig, showing the side arm plates, and, between them, thin irregular scales, the homologues of an upper arm plate.
- „ 8.  $\frac{4}{1}^{\circ}$ . A side arm plate in profile, near the tip of a twig, bearing its hooks.
- „ 9.  $\frac{4}{1}^{\circ}$ . A side arm plate, in profile, near the tip of a twig, showing some grains near its edge; also a simple hook, which will later be mounted on a grain.
- „ 10.  $\frac{1}{1}^{\circ}$ . Two joints in profile, somewhat further in than fig. 9. The arm has already risen considerably above the side arm plates (*i*) which bear, on their outer edge, tentacle hooks or scales (*q*) and, above, two grain hooks; while on the body of the arm are three more grain hooks.
- „ 11.  $\frac{1}{1}^{\circ}$ . Arm joint in profile, two forks from the tip, and more developed than in fig. 10. The tentacle hooks (*q*) have grown thick; and the grain hooks have left the side arm plate (*i*), and stand only on the arm grains.