

PLATE XLV.

Porpita fungia, n. sp. (p. 67).

- Fig. 1. Vertical meridional section through the corm. *p*, Pneumatocyst; *ph*, its central chamber; *pk*, concentric ring-chambers; *p*¹, tubercles of the upper surface; *p*², thickened chitinous layers of the upper wall; *p*³, septa between the ring-chambers; *p*⁴, under surface of a high radial fold; *pe*, stigmata; *uh*, hepatic vessels of the centradenia; *un*, its renal vessels; *uu*, limbus umbrellæ; *t*, tentacles; *gs*, gonostyles; *so*, their mouth; *g*, gonophores; *st*, tabula gastrobasalis; *sm*, stomach of the central siphon; *sf*, its basal fissures (ostia of the radial canals); *sr*, proboscis; *ss*, mouth.
- Fig. 2. A portion of the exumbrella; highly magnified. *ue*, The radial folds; *ce*, pallial canals; *pe*, radial rows of stigmata.
- Fig. 3. Basal view of the centradenia, isolated by maceration. *un*, The white annular kidney; *sh*, the brown liver; *si*, central star composed of hepatic vessels; *sx*, basal insertions of the sexual siphons; *cr*, radial canals.
- Fig. 4. Basal view of the central siphon, the walls of which are highly contracted and the octolobate mouth widely opened. In the fundus of the stomach are visible eight pairs of fissures (*sf*), the gastral openings of sixteen radial canals. *sw*, Radial folds; *sl*, thickened labial margin of the mouth.
- Fig. 5. A radial segment of the pneumatocyst (*pf*) of another *Porpita* (*umbella*). The upper surface of the float exhibits numerous radial rows of stigmata (*pe*) in the back of prominent ridges. *pk*, Concentric ring-chambers; *ph*, central chamber.
- Fig. 6. A small portion of the centradenia in horizontal section; highly magnified. *sa*, Central siphon; *sw*, radial folds of its inside; *d*, entoderm; *e*, exoderm; *m*, muscles; *st*, lamina gastrobasalis; *pt*, tracheæ; *kb*, cnidoblasts; *ka*, auroblasts (air-secreting cells).
- Fig. 7. A small portion of the kidney (*un*), in horizontal section; highly magnified. Characters as in fig. 6. *cm*, Hepatic vessels.
- Fig. 8. A small portion of the kidney (*un*) and a sexual siphon (*sx*) in vertical section. Characters as in figs. 6, 7. *e*¹, Exoderm of the subumbrella; *e*², inner apophyses of it, piercing the fulcrum (*z*); *e*³, air-secreting exoderm. Some tracheæ (*pt*) pierce the fulcrum and pass into the exoderm of the sexual siphon (*sx*).