

PLATE XXXIV.

Figs. 1-5. *Didemnum savignii*, n. sp.

Figs. 6, 7. *Didemnum* (?) *inerme*, n. sp.

Figs. 8-13. *Leptoclinum speciosum*, var. *asperum*, nov.

Fig. 14. *Leptoclinum annectens*, n. sp.

bl. Bladder cell.
br. Branchial aperture.
cn. Endostyle.
i. Intestine.
m.f. Muscle fibres.
o. Ovum.

æ. Œsophagus.
p.c. Mass of pigment cells.
r. Rectum.
sg. Stigmata of branchial sac.
sp. Calcareous spicule in test.
st. Stomach.

t.c. Test cells.
th. Thorax.
t.m. Test matrix.
tr. Transverse vessel of branchial sac.
v.ap. Vascular appendage.
v.d. Vas deferens.

- Fig. 1. Colony of *Didemnum savignii*; natural size.
- Fig. 2. Ascidiozoid of *Didemnum savignii*, seen from right side; magnified (S., 1 inch).
- Fig. 3. Part of section of test of *Didemnum savignii*; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 4. Three spicules from test of *Didemnum savignii*, showing different forms; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 5. Part of branchial sac of *Didemnum savignii*; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 6. Colony of *Didemnum inerme*; natural size.
- Fig. 7. Section of test of *Didemnum inerme*; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 8. Large colony of *Leptoclinum speciosum*, var. *asperum*; natural size.
- Fig. 9. Vertical section of colony of *Leptoclinum speciosum*, var. *asperum*, showing the arrangement of the spicules in the test and the structure of the Ascidiozooids, &c.; magnified (S., 1 inch).
- Fig. 10. Section of superficial layer of colony of *Leptoclinum speciosum*, var. *asperum*, showing structure of test and arrangement of spicules; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 11. Diagrammatic optical section of spicule from test of *Leptoclinum speciosum*, var. *asperum*; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 12. Diagram of wedge-shaped element of spicule; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 13. Circle of tentacles of *Leptoclinum speciosum*, var. *asperum*; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 14. Colony of *Leptoclinum annectens*; natural size.