

PLATE XXXVI.

Figs. 1-8. *Leptoclinum speciosum*, n. sp.

Fig. 9. *Leptoclinum speciosum*, var. *asperum*, nov.

<p><i>bl.</i> Bladder cell. <i>br.</i> Branchial aperture. <i>cl.</i> Cloacal aperture. <i>en.</i> Endostyle. <i>l.v.</i> Fine longitudinal vessels of branchial sac.</p>	<p><i>m.b.</i> Muscle band in mantle. <i>r.</i> Rectum. <i>sp.</i> Calcareous spicule in test. <i>st.</i> Stomach. <i>t.k.</i> Terminal bulb on vessel in test.</p>	<p><i>t.m.</i> Test matrix. <i>t.v.</i> Spermatic vesicles. <i>v.</i> Vessel in test. <i>v.d.</i> Vas deferens.</p>
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Fig. 1. Large colony of *Leptoclinum speciosum*; natural size.

Fig. 2. Part of the upper surface of *Leptoclinum speciosum*; slightly enlarged.

Fig. 3. Vertical section through a thickened part of a colony of *Leptoclinum speciosum*, showing Ascidiozooids; magnified (S., 1 inch, reduced).

Fig. 4. Part of a section through the middle of the test of *Leptoclinum speciosum*; highly magnified (S., $\frac{1}{4}$ inch).

Fig. 5. Surface view of part of ectoderm of *Leptoclinum speciosum*; highly magnified (S., $\frac{1}{4}$ inch, enlarged).

Fig. 6. Part of the mantle of *Leptoclinum speciosum*; highly magnified (S., $\frac{1}{4}$ inch).

Fig. 7. Section through the testis and vas deferens of *Leptoclinum speciosum*; highly magnified (S., $\frac{1}{4}$ inch).

Fig. 8. Part of a vertical section through the colony of *Leptoclinum speciosum*, showing structure of the Ascidiozooids, &c.; magnified (S., 1 inch).

Fig. 9. Four colonies of *Leptoclinum speciosum*, var. *asperum*; natural size.