

PLATE XXXV.

Figs. 1-10. *Leptoclinum tonga*, n. sp.

Figs. 11-14. *Leptoclinum albidum*, var. *grande*, nov.

ad. Adhering process of test.
br. Branchial aperture.
l.s. Lower surface of colony.

sp. Calcareous spicule in test.
sph. Sphincter.
t.c. Test cell.

t.m. Test matrix.
tn. tn'. Tentacles.

- Fig. 1. Colony of *Leptoclinum tonga*; natural size.
- Fig. 2. Part of a section, showing the anterior end of an Ascidiozoid cut vertically; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 3. Part of a section of the lower surface of the colony, showing the adhering prolongations of test; magnified (S., 1 inch).
- Fig. 4. Spicules from the test; highly magnified (S., $\frac{1}{8}$ inch).
- Fig. 5. Small part of a section of the test, after decalcification in hydrochloric acid, stained in aniline blue; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 6. Small part of a section of the test, after decalcification in a solution of carbon dioxide for eighteen hours, stained in aniline blue; highly magnified (S., $\frac{1}{4}$ inch). 1 indicates the boundary of the vacuole, and 2 the membrane of the spicule.
- Fig. 7. Small part of a section of the test, after partial decalcification in hydrochloric acid, stained in eosine; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 8. A spicule teased out and stained with aniline blue; highly magnified (Z., $\frac{1}{12}$).
- Fig. 9. Another spicule similarly treated; highly magnified (Z., $\frac{1}{12}$).
- Fig. 10. Small part of a section of the test, after decalcification in a solution of carbon dioxide for twenty-four hours, stained in aniline blue; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 11. Colony of *Leptoclinum albidum*, var. *grande*; natural size.
- Fig. 12. Part of the surface of *Leptoclinum albidum*, var. *grande*; magnified (S., 1 inch).
- Fig. 13. The branchial aperture of an Ascidiozoid of *Leptoclinum albidum*, var. *grande*; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 14. Spicules from the test of *Leptoclinum albidum*, var. *grande*; highly magnified (S., $\frac{1}{8}$ inch).