

PLATE VIII.

Figs. 1-10. *Salpa democratica-mucronata*.

Figs. 11-15. *Salpa nitida*, n. sp.

<p><i>ap.</i> Lateral appendage of nerve ganglion.  <i>at.</i> Atrial aperture.  <i>at.m.</i> Atrial muscles.  <i>bl.</i> Bladder cells.  <i>br.</i> Branchial aperture.  <i>br.m.</i> Branchial muscles.  <i>d.l.</i> Dorsal lamina.</p>	<p><i>d.t.</i> Dorsal tubercle.  <i>ec.</i> Ectoderm.  <i>en.</i> Endostyle.  <i>m.</i> Mantle.            1-7. Muscle bands.  <i>m.b.</i> Small muscle bands.  <i>n.</i> Nerves.  <i>n.g.</i> Nerve ganglion.  <i>op.</i> Pigmented optic (?) organ.</p>	<p><i>p.p.</i> Peripharyngeal bands.  <i>s.o.</i> Sense organ.  <i>sp.</i> Spines on test.  <i>t.</i> Test.  <i>t.c.</i> Test cells.  <i>t.m.</i> Test matrix.  <i>t.p.</i> Process of the test.  <i>visc.</i> Visceral mass.</p>
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- Fig. 1. Part of *Salpa democratica-mucronata*, solitary form; from South Atlantic, March 3-5, 1876, showing the very long tuberculated process (S. 1).
- Fig. 2. Posterior end of young specimen of *Salpa democratica-mucronata*, solitary form; South Atlantic, February 12, 1876, showing the short processes (S. 1).
- Fig. 3. One of the sucker-like processes of the mantle of last, seen in optical section (S. 1).
- Fig. 4. Posterior end of *Salpa democratica-mucronata*, aggregated form; seen from dorsal surface; Bass Strait, April 2, 1874 (S. 1).
- Fig. 5. Part of test of *Salpa democratica-mucronata*, solitary form; showing the minute spines (S.  $\frac{1}{8}$ ).
- Fig. 6. Process from the body of a young specimen of *Salpa democratica-mucronata*, solitary form; South Atlantic, February 12, 1876, showing the ectoderm, and the migration of cells into the test (S.  $\frac{1}{8}$ ).
- Fig. 7. Some of the ectoderm cells; more highly magnified (Z.  $\frac{1}{12}$ ).
- Fig. 8. Cells, in a young embryo of *Salpa democratica-mucronata*, which will later become muscle fibres (S.  $\frac{1}{4}$ ).
- Fig. 9. Muscle band in a somewhat older embryo (S.  $\frac{1}{4}$ ).
- Fig. 10. Same; more highly magnified (S.  $\frac{1}{8}$ ).
- Fig. 11. Part of a muscle band from *Salpa nitida* (S.  $\frac{1}{8}$ ).
- Fig. 12. Small part of a muscle fibre of same; more highly magnified (Z.  $\frac{1}{12}$ ).
- Fig. 13. Dissection of *Salpa nitida*, from the Pacific, March 16, 1875, showing the arrangement of the muscles and other organs (S. 1).
- Fig. 14. Anterior dorsal part of last, enlarged (S. 1).
- Fig. 15. Dorsal tubercle, nerve ganglion, &c., of last; more highly magnified (S.  $\frac{1}{8}$ ).