EXPLANATION OF THE PLATES.

The figures were copied from my pencil drawings with the exception of Plates II. and VII., which I drew on stone from the specimens.

Plates I., III.-VI., VIII.-XIII., XVI., XIX., XX., XXII., XXVI., XXXII.-XXXVII., XXXIX.-XLII., and XLIX. were lithographed and printed by Dobb & Co., Liverpool; while plates XIV., XV., XVII., XVIII., XXI., XXIII.-XXV., XXVII.-XXXI., XXXVIII., and XLIII.-XLVIII. were lithographed and printed by Mr. F. Huth, Edinburgh.

It should be stated that some of the anatomical figures (e.g., some of those representing the structure of the Ascidiozooids, and some of the branchial sacs) are "combination figures," formed of portions drawn from several different specimens and pieced together.

The following powers were used in drawing the figures for the plates :-

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S. 1 = Swift's 1 inch objective, magnifying about 50 diameters.
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S. $\frac{1}{4} =$, $\frac{1}{4}$, , 230 ,

S. $\frac{1}{6} =$,, $\frac{1}{6}$,, , 330 ,, Z. $\frac{1}{12} = \text{Zeiss'} \frac{1}{12}$ objective (oil immersion), magnifying about 950 diameters.

LIST OF THE ABBREVIATIONS.

a.		Anus.	br.f.	•	Longitudinal folds in branchial sac.
ab, abd.		Abdomen of Ascidiozooid.	br.l.		Branchial lobe.
ad..		Adhering appendage.	br.n.		Nerves arising from branchial end of
ap..		Appendage from body of Ascidiozooid.			ganglion.
at	•	Atrial aperture.	br.s.		Branchial sac.
at.l.		Atrial languet.	b.v.		Blood-vessel.
at.n.		Nerves arising from atrial end of ganglion.	cæ		Cæcum of stomach.
$\alpha t.tn.$		Atrial tentacles.	c.d.		Connective duct in the branchial sac.
b.c		Blood-corpuscles.	cl		Cloacal aperture.
<i>bl.</i> .		Bladder cells in test.	d.l		Dorsal lamina.
<i>br</i>		Branchial aperture.	d.t		Dorsal tubercle.