

PLATE XLV.

Goodsiria coccinea, Cunningham.

<i>a.</i> Anus.	<i>l.v.</i> Fine longitudinal vessels of bran-	<i>st.</i> Stomach.
<i>at.</i> Atrial aperture.	chial sac.	<i>t.k.</i> Terminal bulb on vessel in test.
<i>br.</i> Branchial aperture.	<i>m.</i> Mantle.	<i>t.m.</i> Test matrix.
<i>b.v.</i> Blood-vessel.	<i>mes.</i> Mesoderm.	<i>tr.</i> Transverse vessel of branchial sac.
<i>ec.</i> Ectoderm.	<i>o.</i> Ovum.	<i>tr'.</i> Smaller transverse vessel of bran-
<i>en.</i> Endostyle.	<i>o.d.</i> Oviduct.	chial sac.
<i>end.</i> Endoderm.	<i>œ.</i> Œsophagus.	<i>t.v.</i> Spermatic vesicles.
<i>i.</i> Intestine.	<i>p.br.c.</i> Peribranchial cavity.	<i>v.</i> Vessel in test.
<i>i.l.</i> Internal longitudinal bar of bran-	<i>r.</i> Rectum.	<i>v.d.</i> Vas deferens.
chial sac.	<i>sg.</i> Stigmata of branchial sac.	

- Fig. 1. Part of large colony of *Goodsiria coccinea*; natural size.
- Fig. 2. Several small colonies of *Goodsiria coccinea*; natural size.
- Fig. 3. Anterior end of Ascidiozoid, showing apertures; enlarged.
- Fig. 4. Part of test of *Goodsiria coccinea*, showing vessels; magnified (S., 1 inch).
- Fig. 5. Part of branchial sac of *Goodsiria coccinea*, seen from interior; magnified (S., 1 inch).
- Fig. 6. Part of branchial sac of young Ascidiozoid, seen from interior; magnified (S., 1 inch).
- Fig. 7. Part of branchial sac of adult Ascidiozoid, seen from interior; magnified (S., 1 inch).
- Fig. 8. Small part of branchial sac, seen from the interior; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 9. Vascular appendage attached to posterior end of Ascidiozoid; magnified (S., 1 inch).
- Fig. 10. Transverse section of vascular appendage in test; magnified (S., 1 inch).
- Fig. 11. Small part of transverse section of vascular appendage; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 12. Origin of vascular appendage from posterior end of Ascidiozoid; magnified (S., 1 inch).
- Fig. 13. Section through mantle and polycarps of *Goodsiria coccinea*; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 14. Polycarp of *Goodsiria coccinea*, dissected out; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 15. Endocarp of *Goodsiria coccinea*, detached from mantle; magnified (S., 1 inch).
- Fig. 16. Transverse section through endostyle and neighbouring structures; highly magnified (S., $\frac{1}{4}$ inch).
- Fig. 17. Alimentary canal of *Goodsiria coccinea*; enlarged.
- Fig. 18. Section across stomach of *Goodsiria coccinea*, showing folds in the interior; magnified (S., 1 inch).
- Fig. 19. Stomach of another Ascidiozoid of *Goodsiria coccinea*, showing the cæcum; enlarged.