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THE

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OF

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MICROSCOPICAL SCIENCE.

EDITED BY

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Fellow of Exeter College, Oxford, and Jodrell Professor of Zoology in University College, London;

WITH THE CO-OPERATION OF

E. KLEIN, M.D., F.R.S.,

Joint-Lecturer on General Anatomy and Physiology in the Medical School of St. Bartholomew's Hospital, London.

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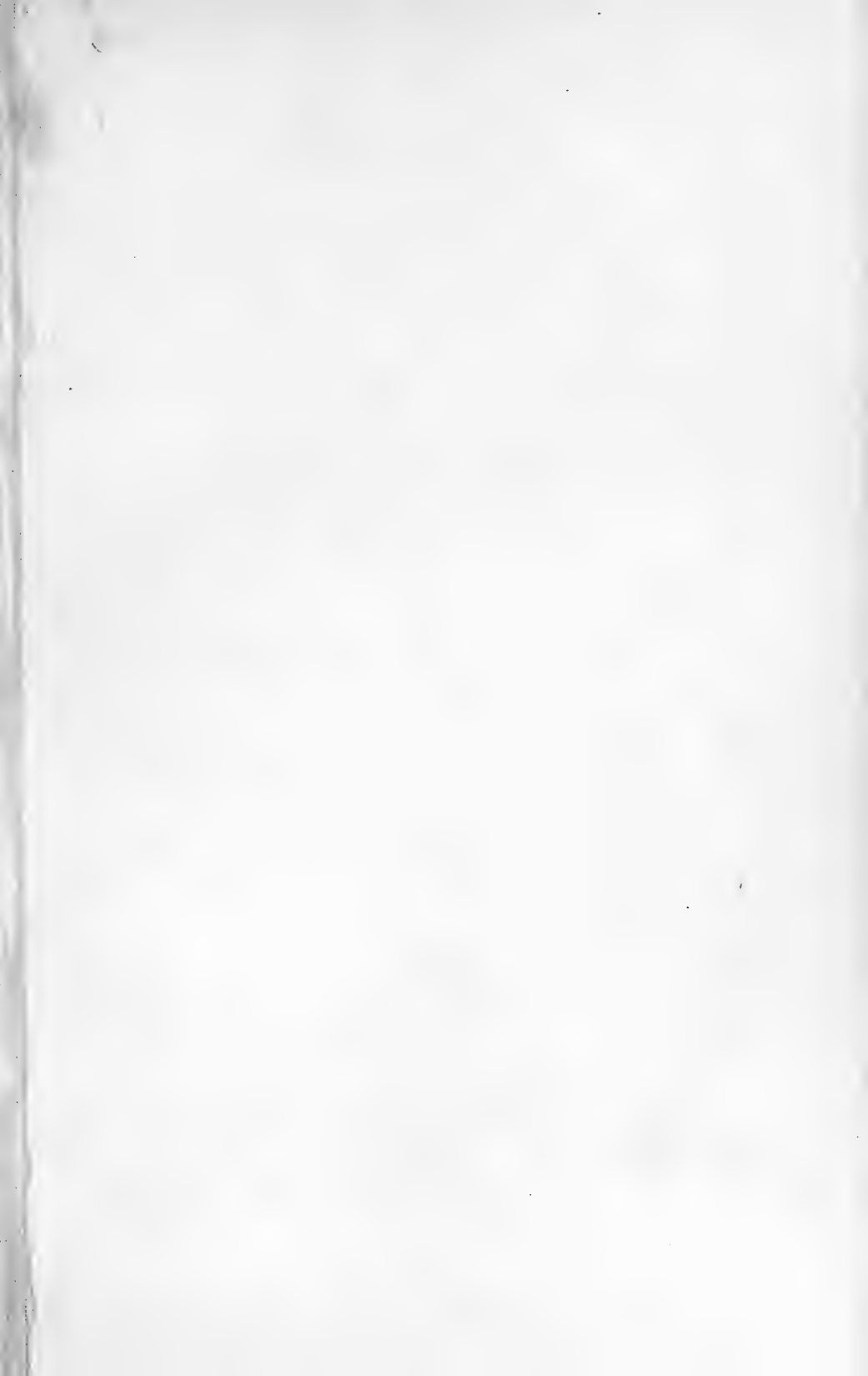
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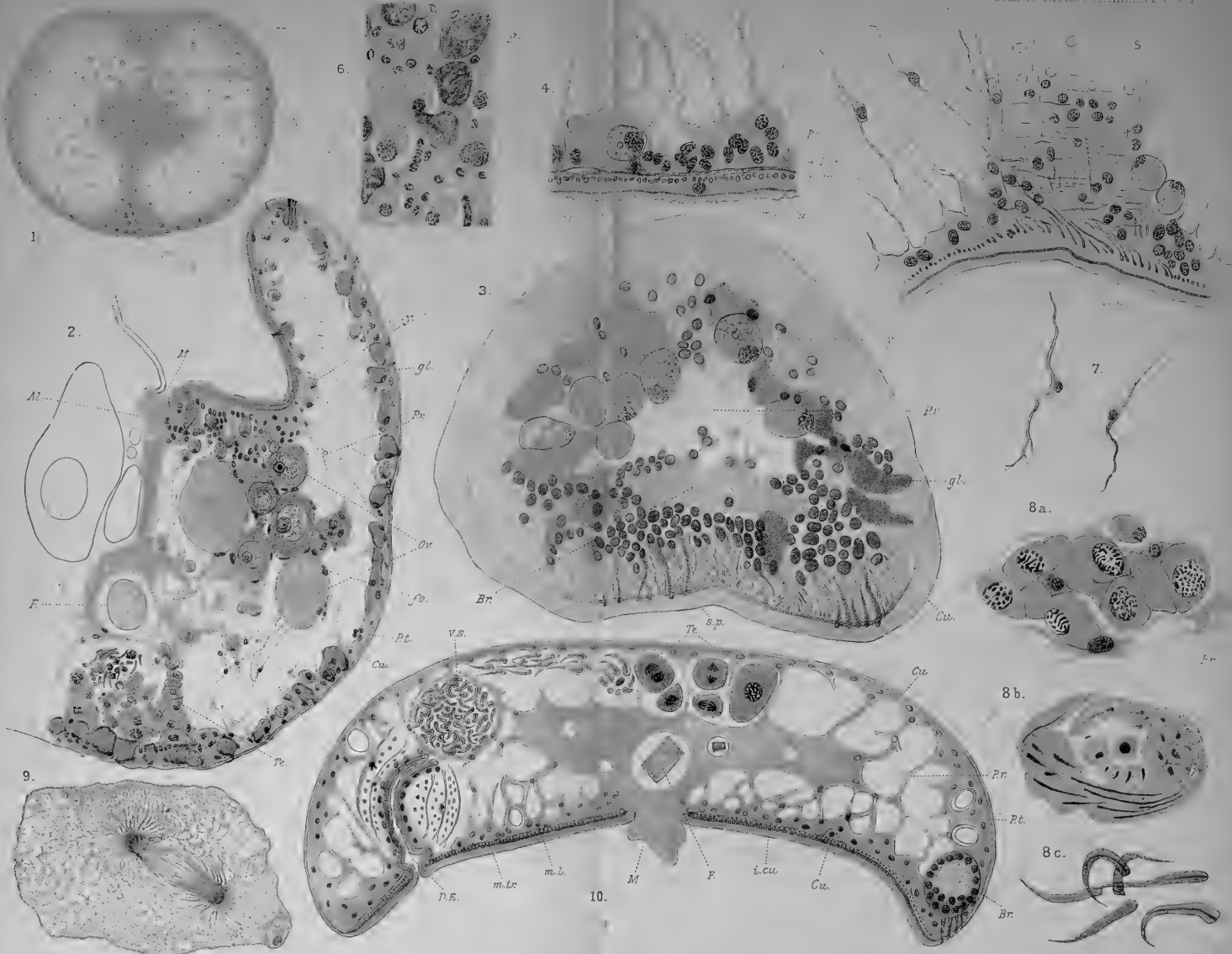
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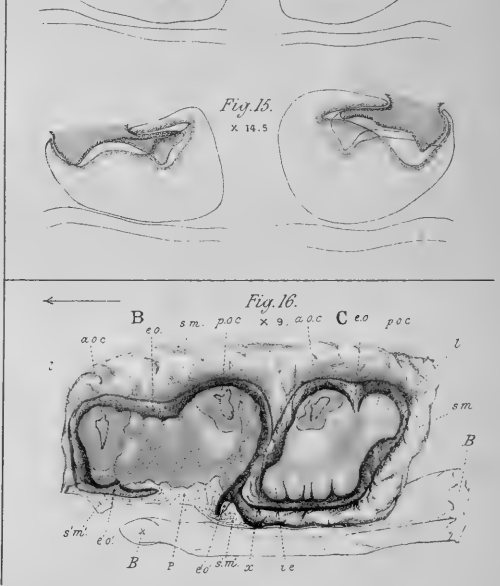
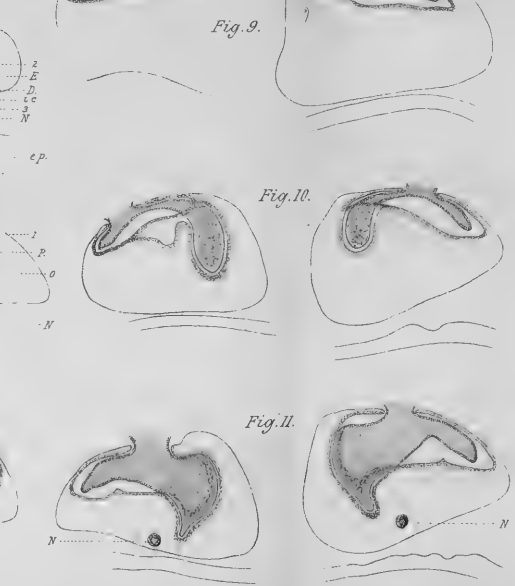
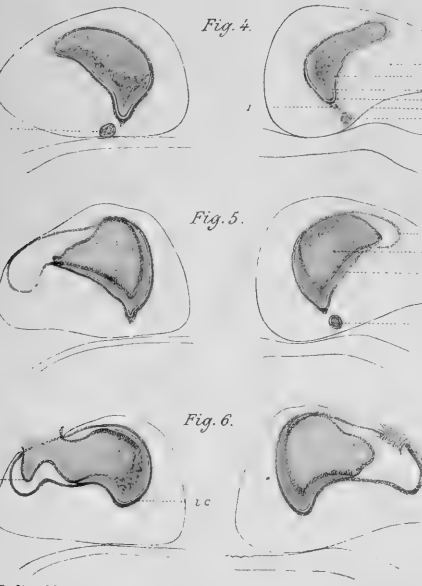
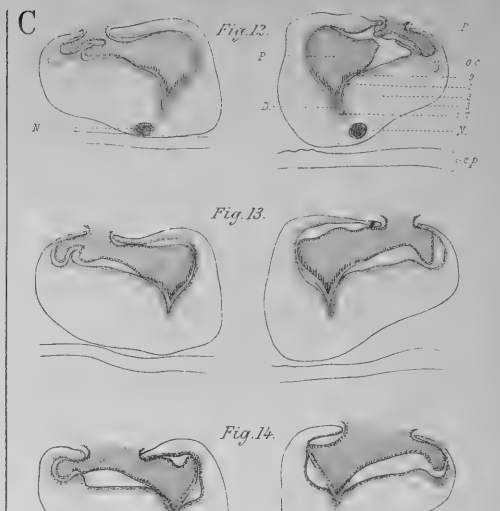
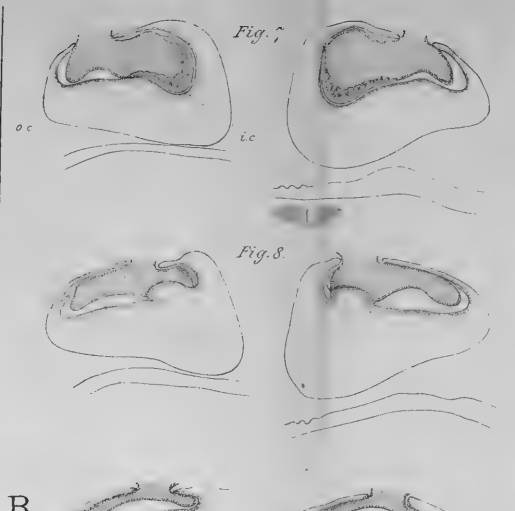
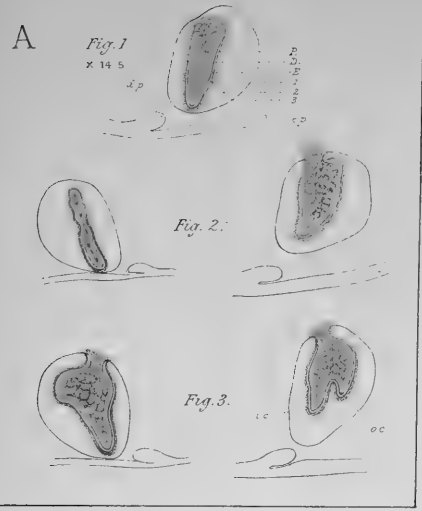
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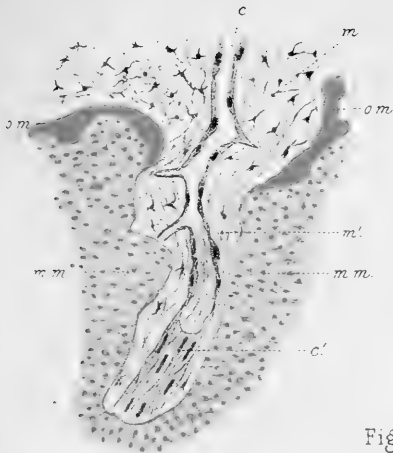


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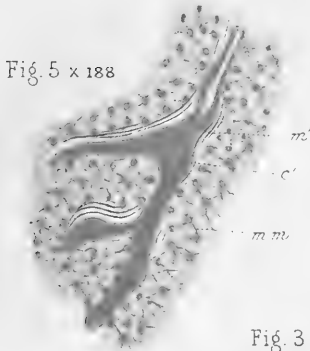


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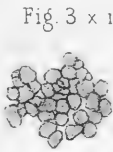


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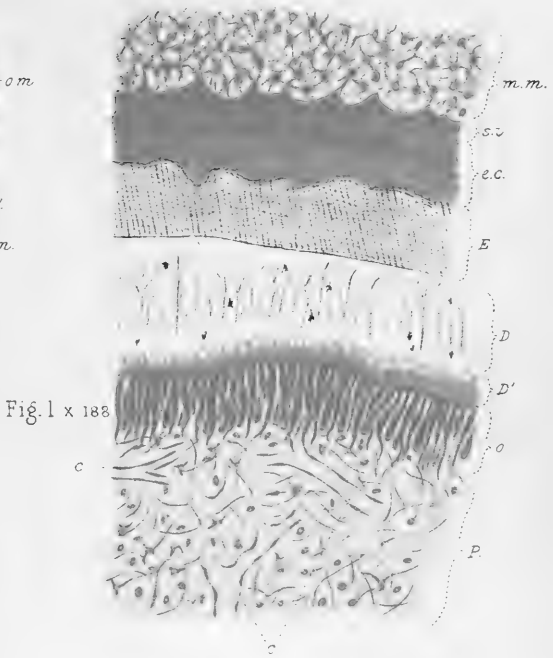
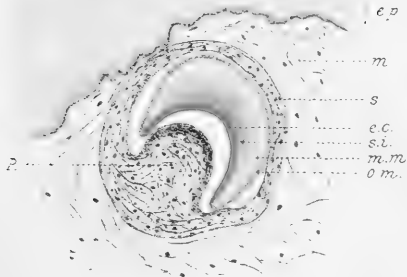


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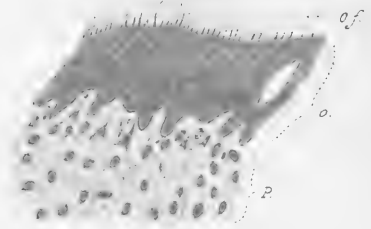
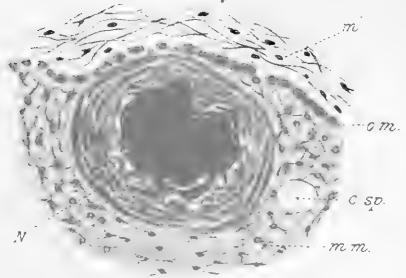


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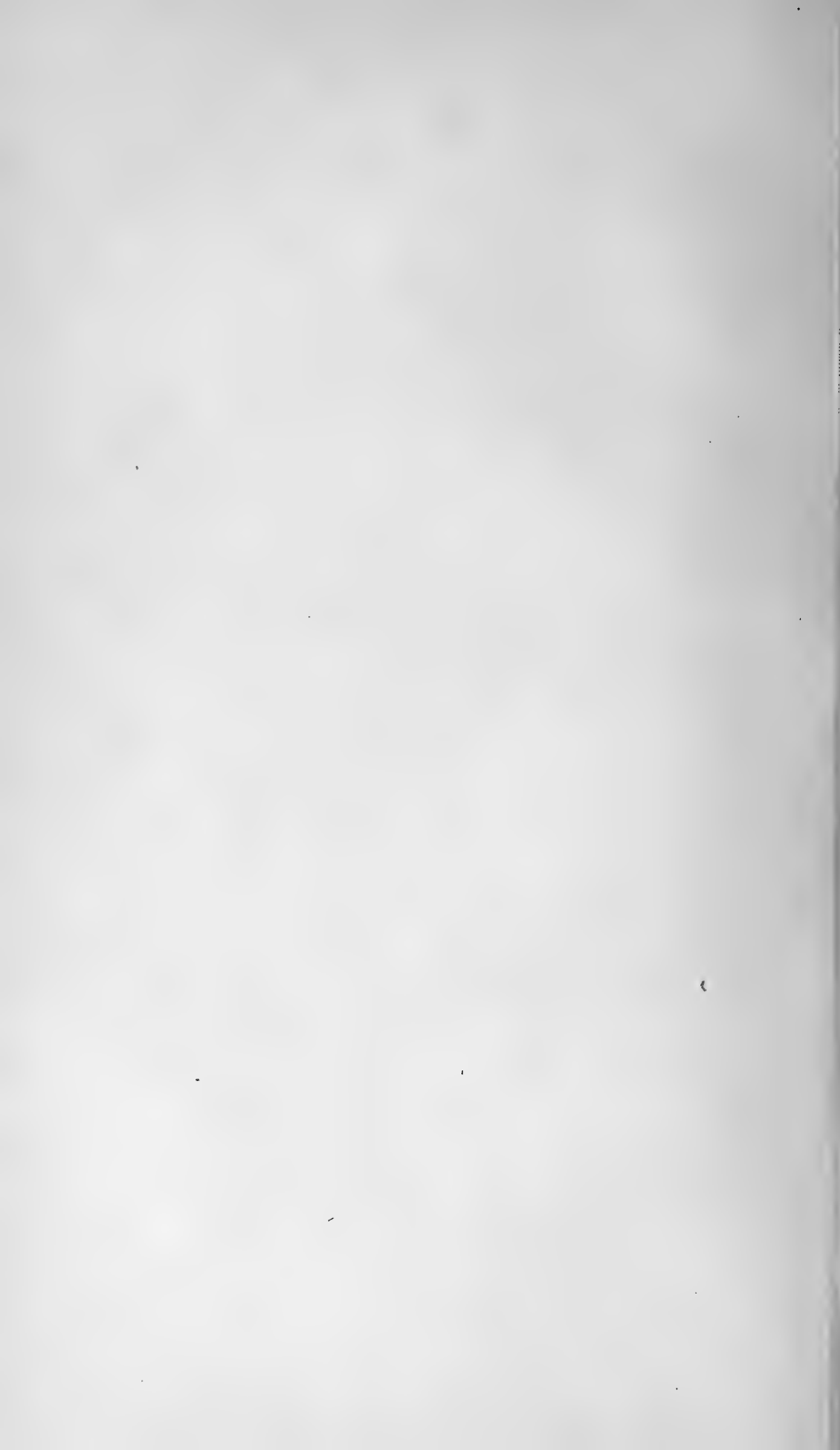




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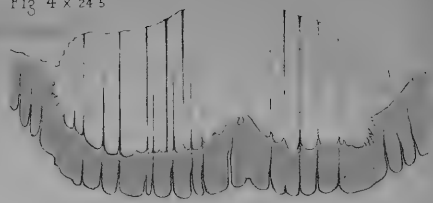


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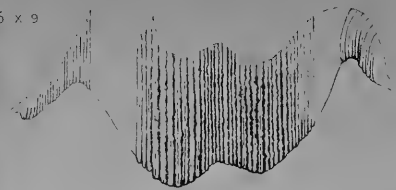


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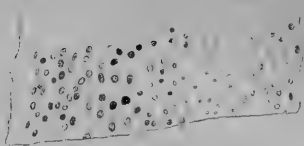


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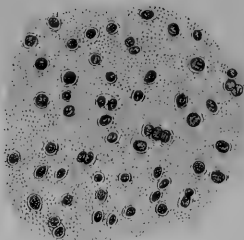


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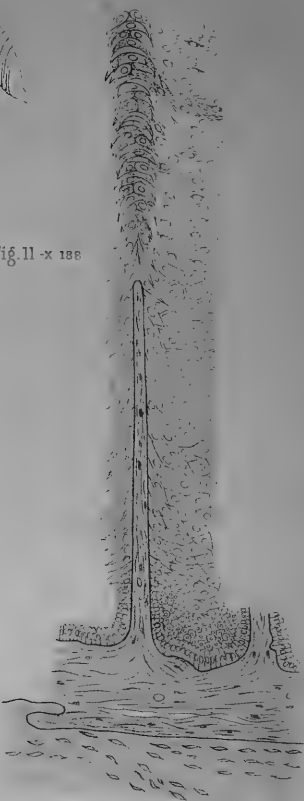


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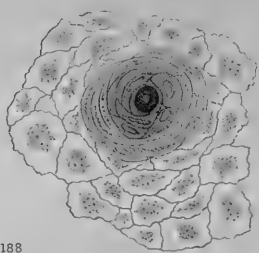


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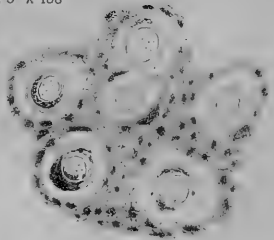


Fig. 3 n.s.



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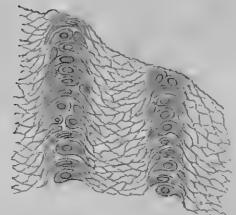


Fig. 13 x 50



Fig. 12 x 405



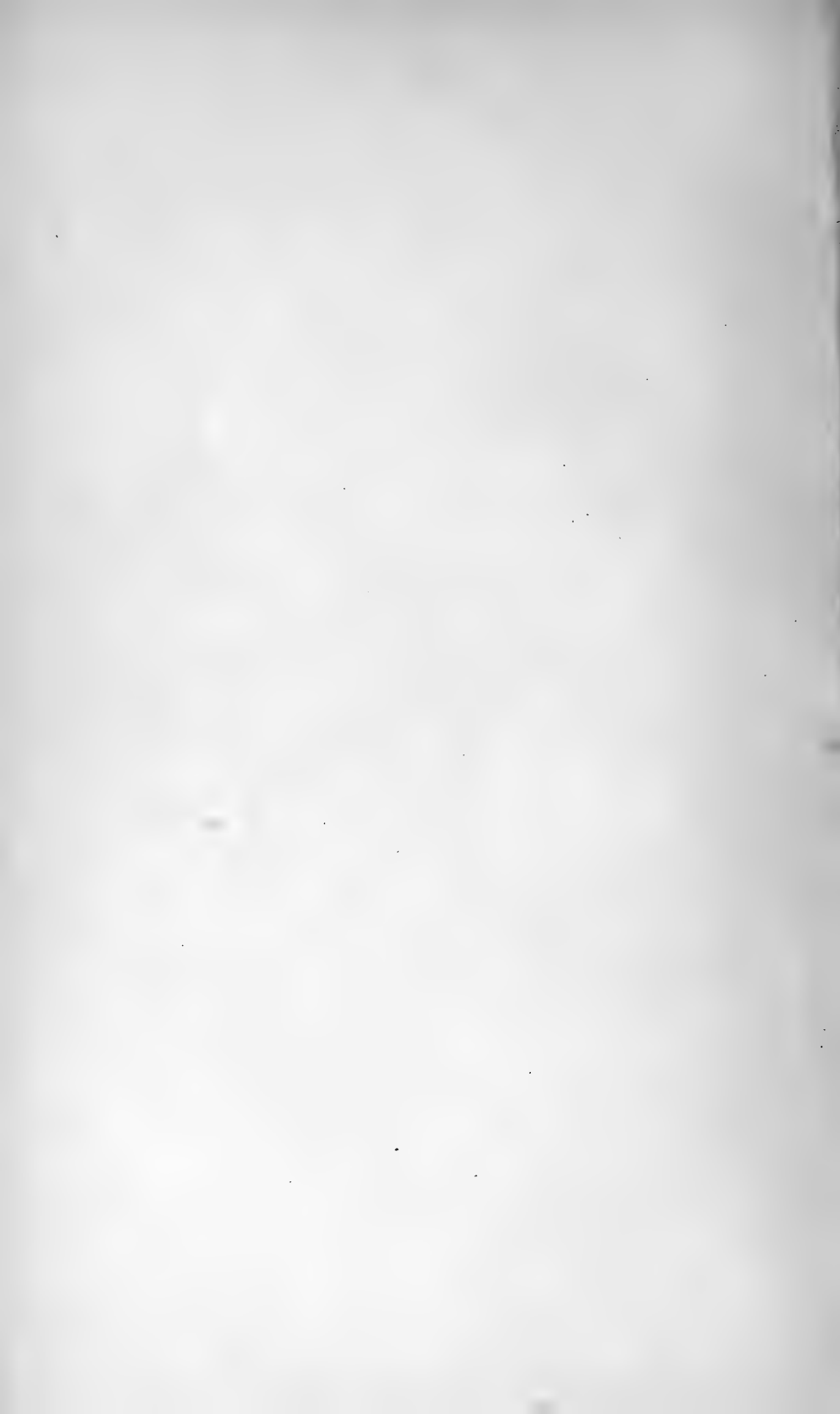


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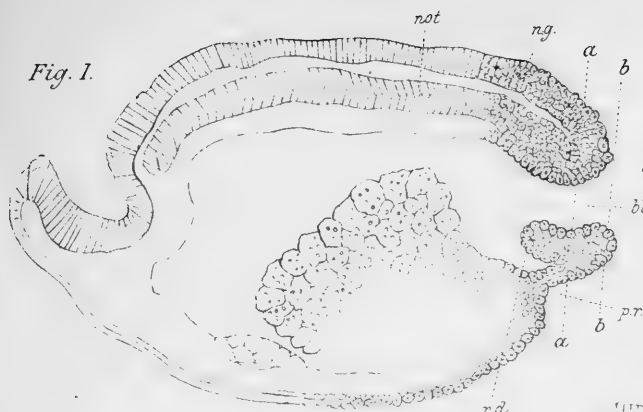


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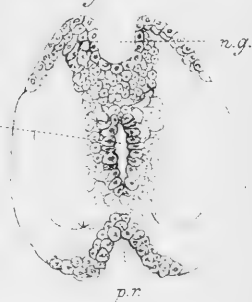


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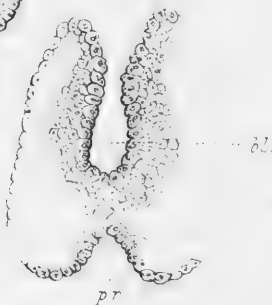


Fig. 4.



Fig. 5.



Fig. 3.



Fig. 1.



PETROMYZON

Fig. 2.



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Fig. 5.



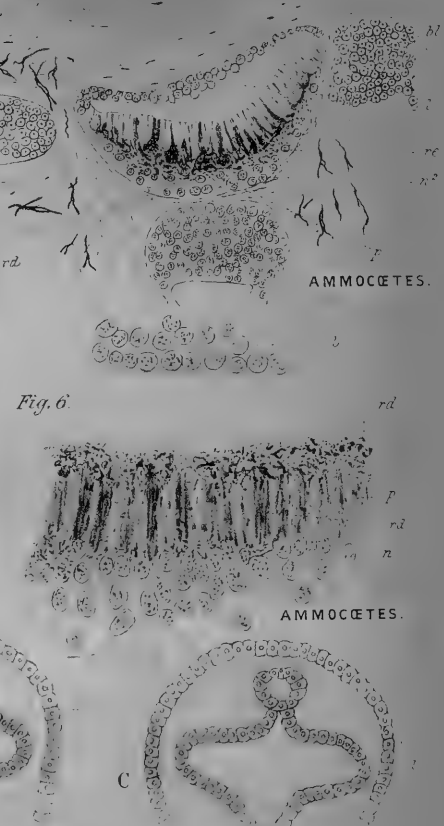
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Fig. 4.



AMMOCETES.

Fig. 6.



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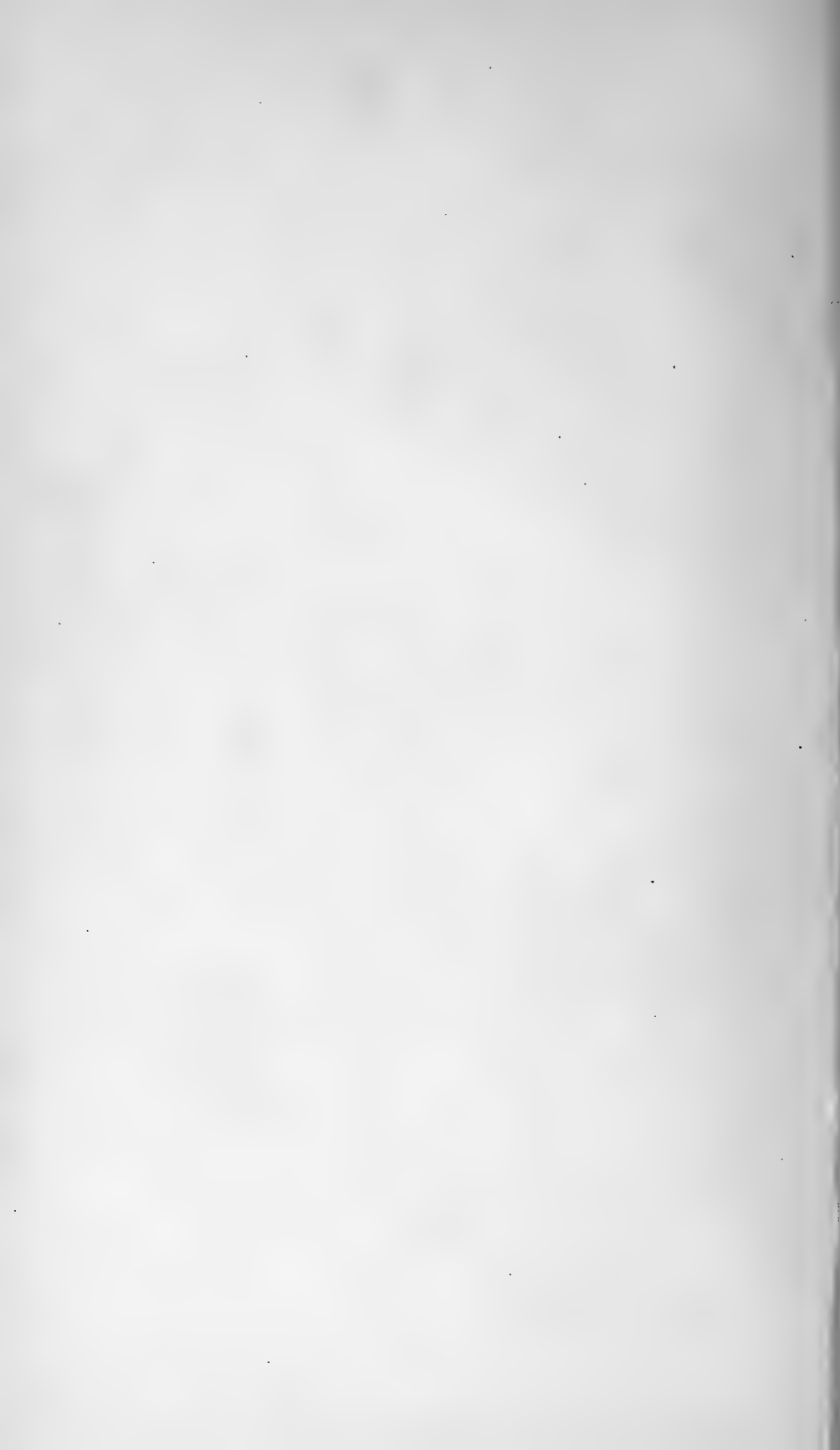
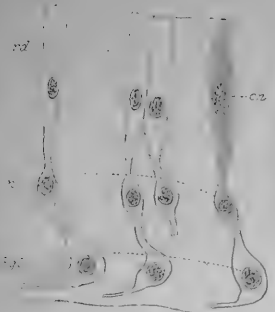




Fig. 7.



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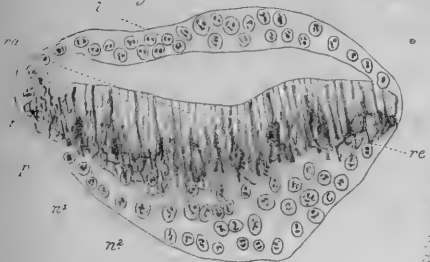
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Fig. 9.



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Fig. 10.



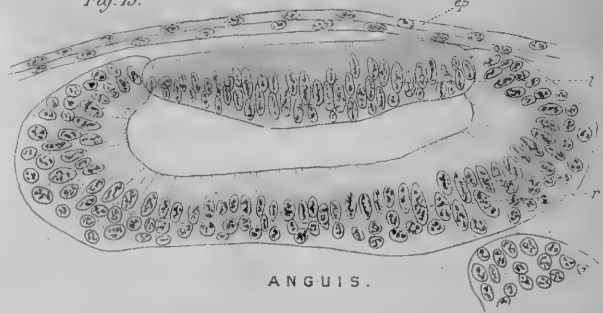
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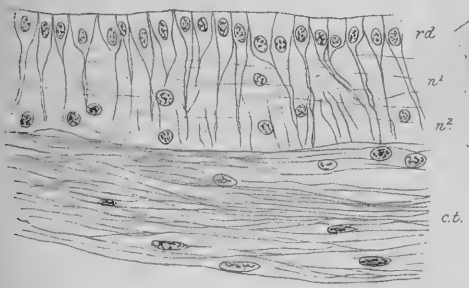
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Fig. 13.



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Fig. 11.



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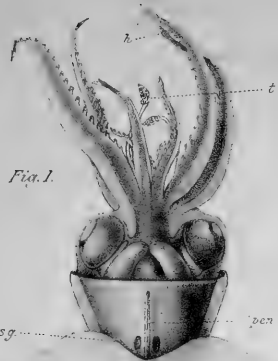


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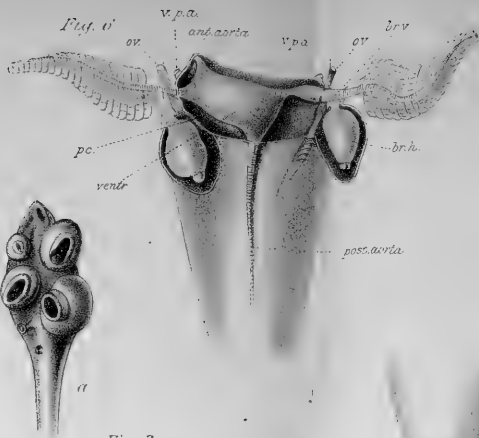


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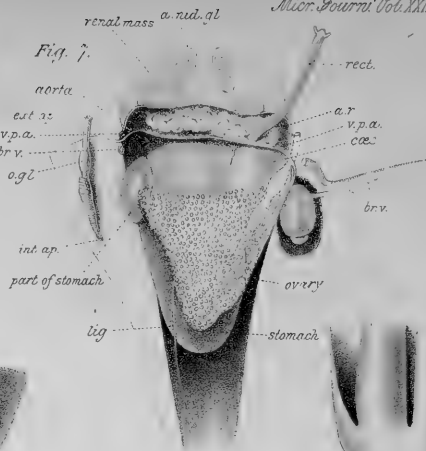


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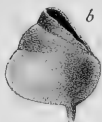


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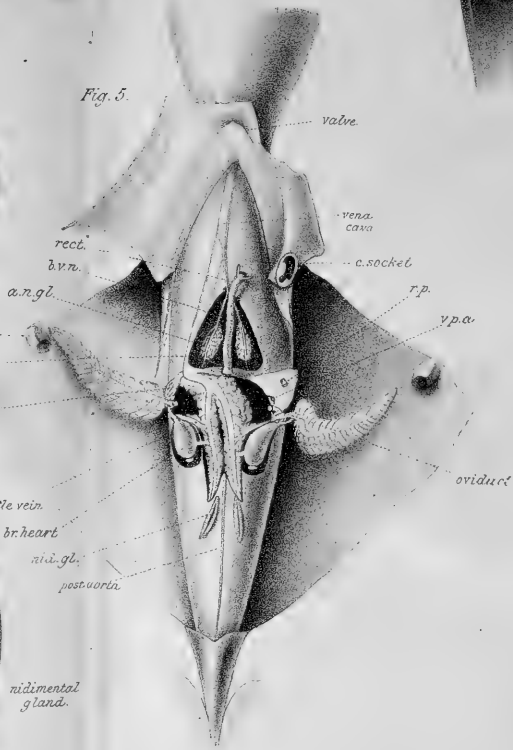
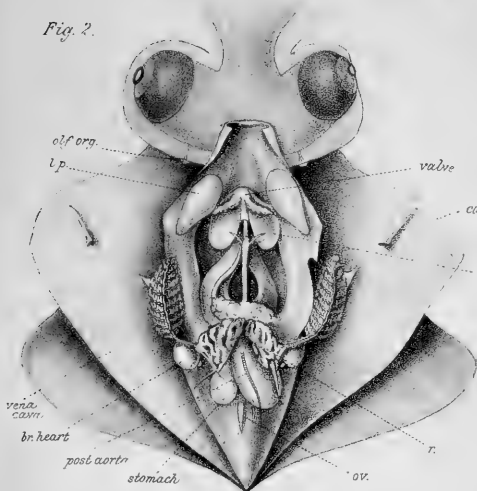
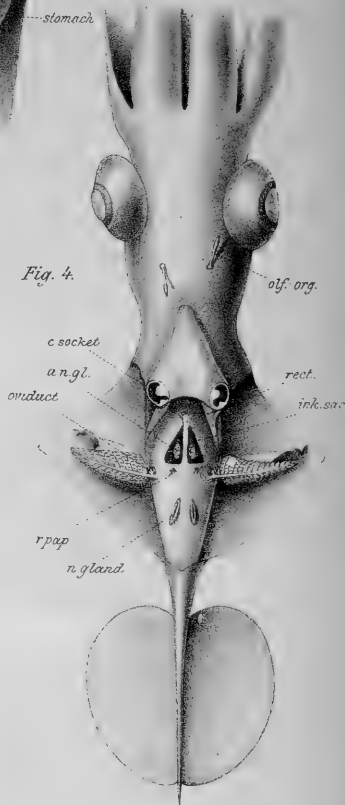


Fig. 4.



F. E. Weiss del.

Fig^s 1-3, *VÉRANIA SICULA*.

Fig. 8.



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Fig^s 4-8, *CHIROTEUTHIS VERANYI*.

F. Huth, Lith^r Edin^r.

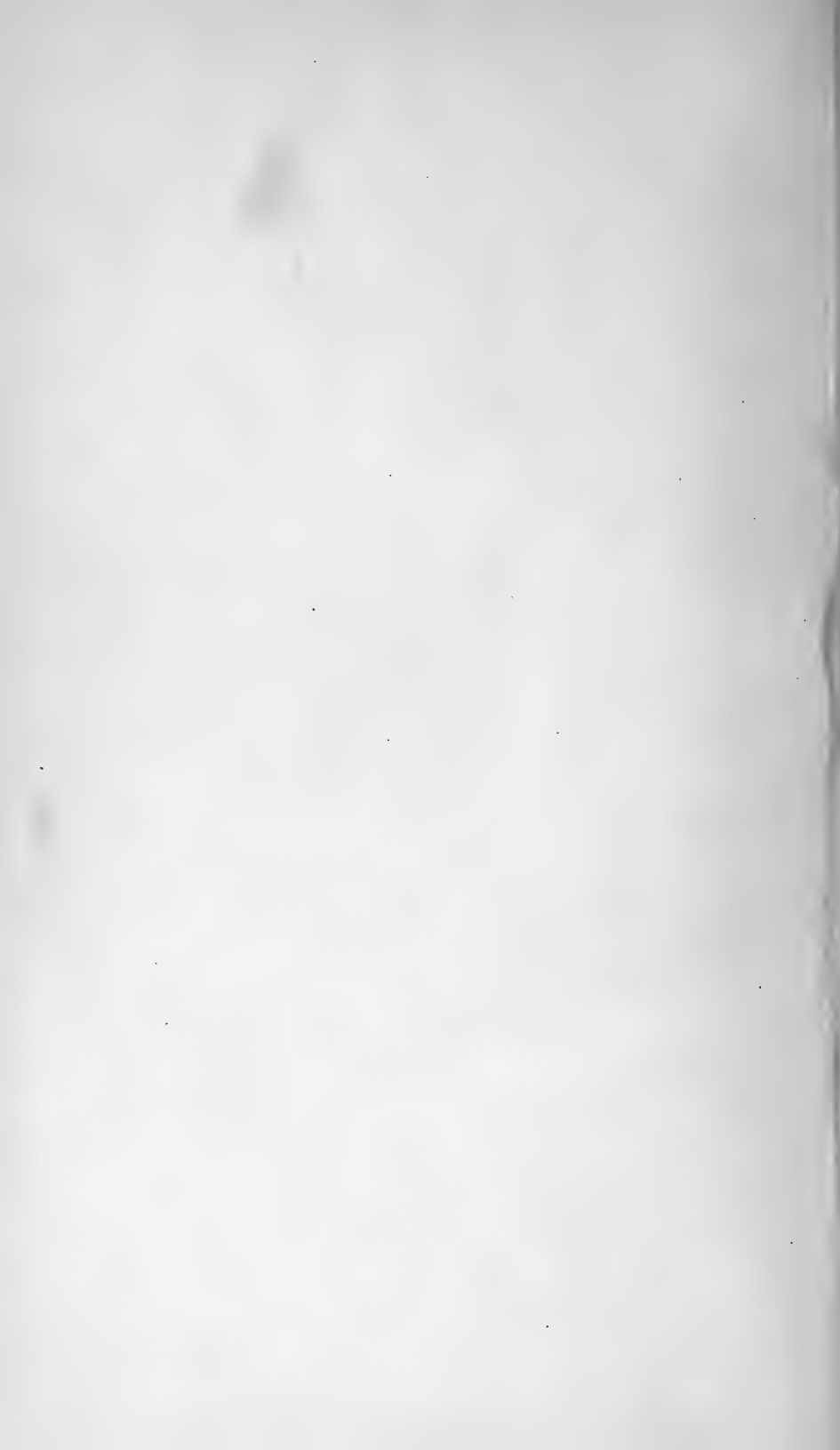


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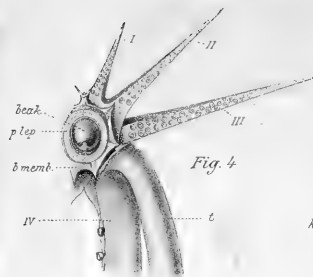


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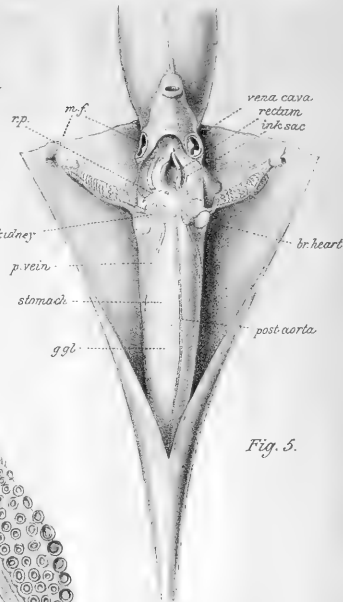


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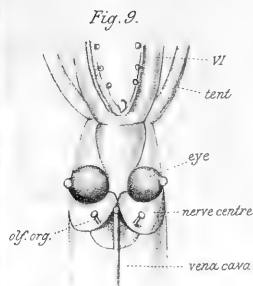


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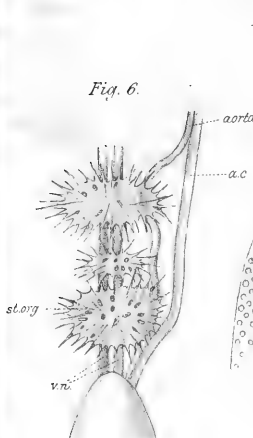


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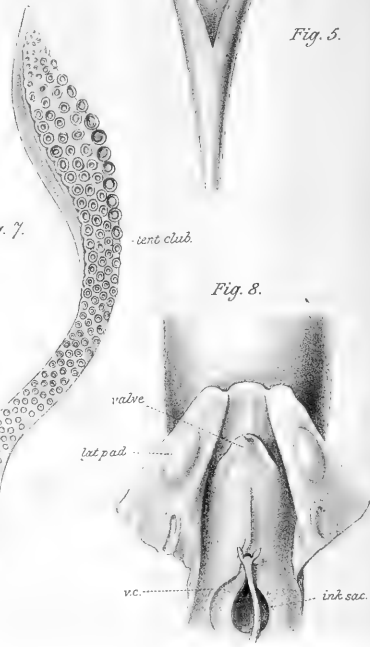


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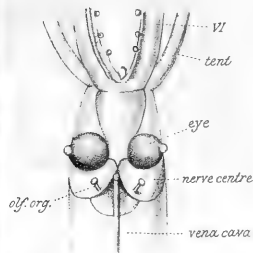




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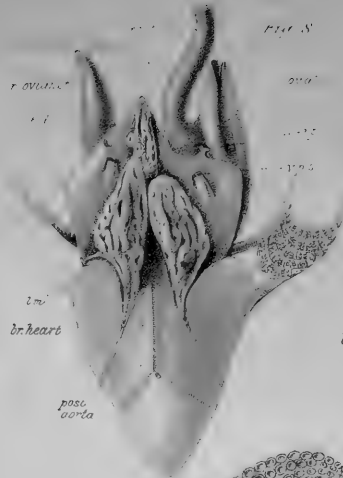


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Fig. 3.



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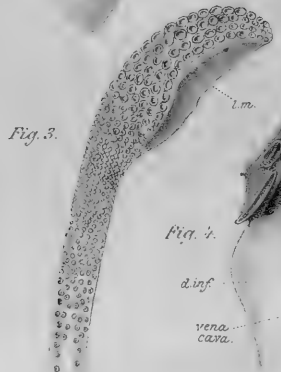


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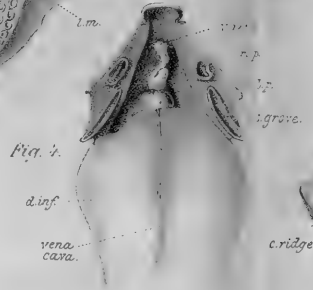


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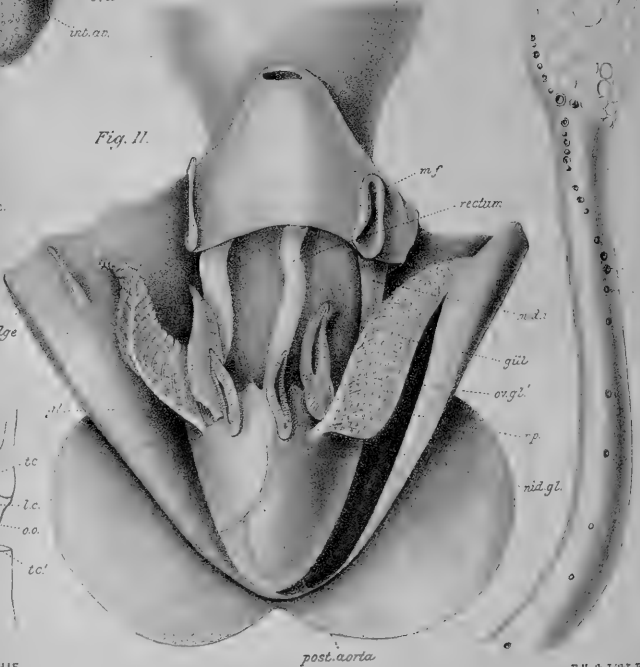


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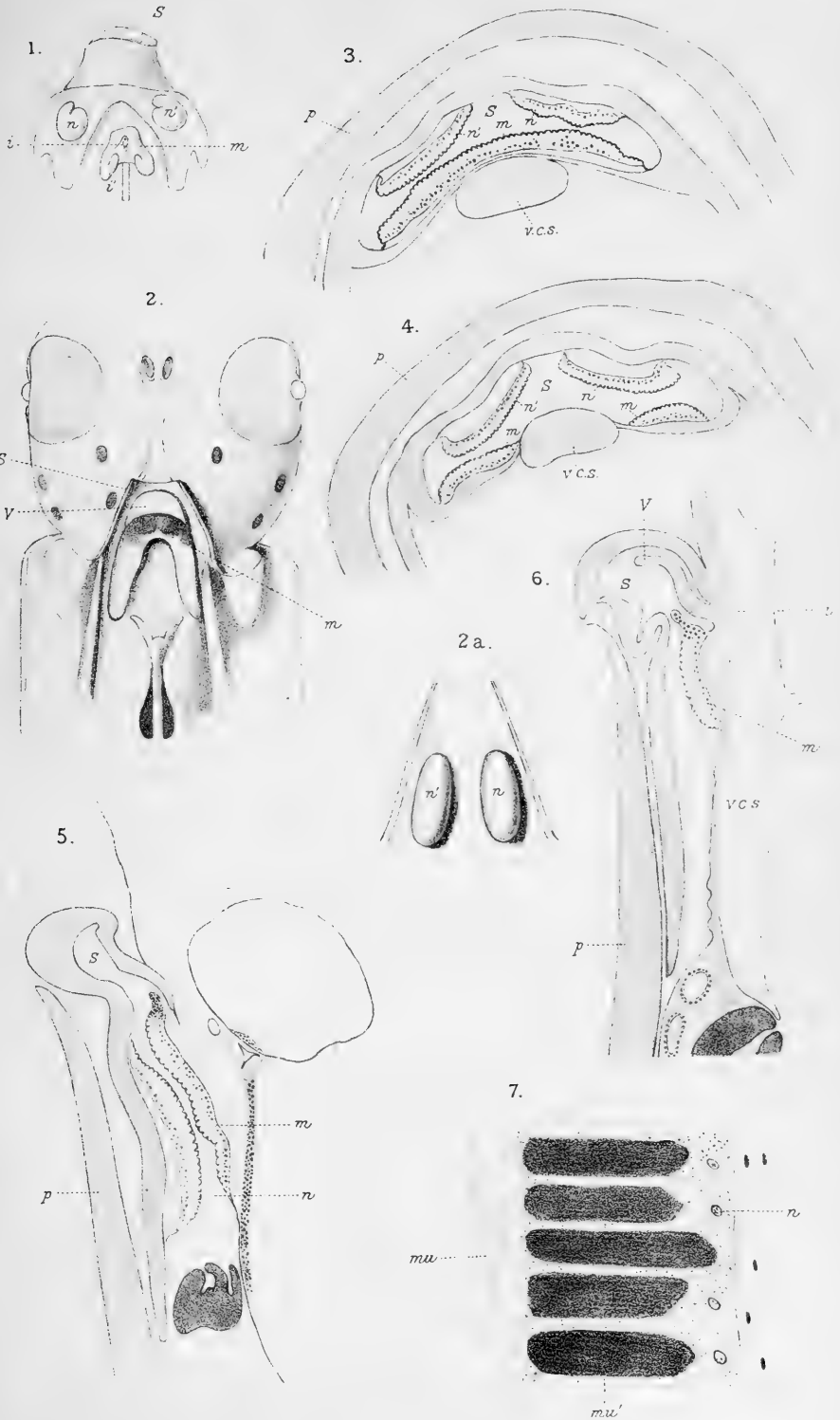
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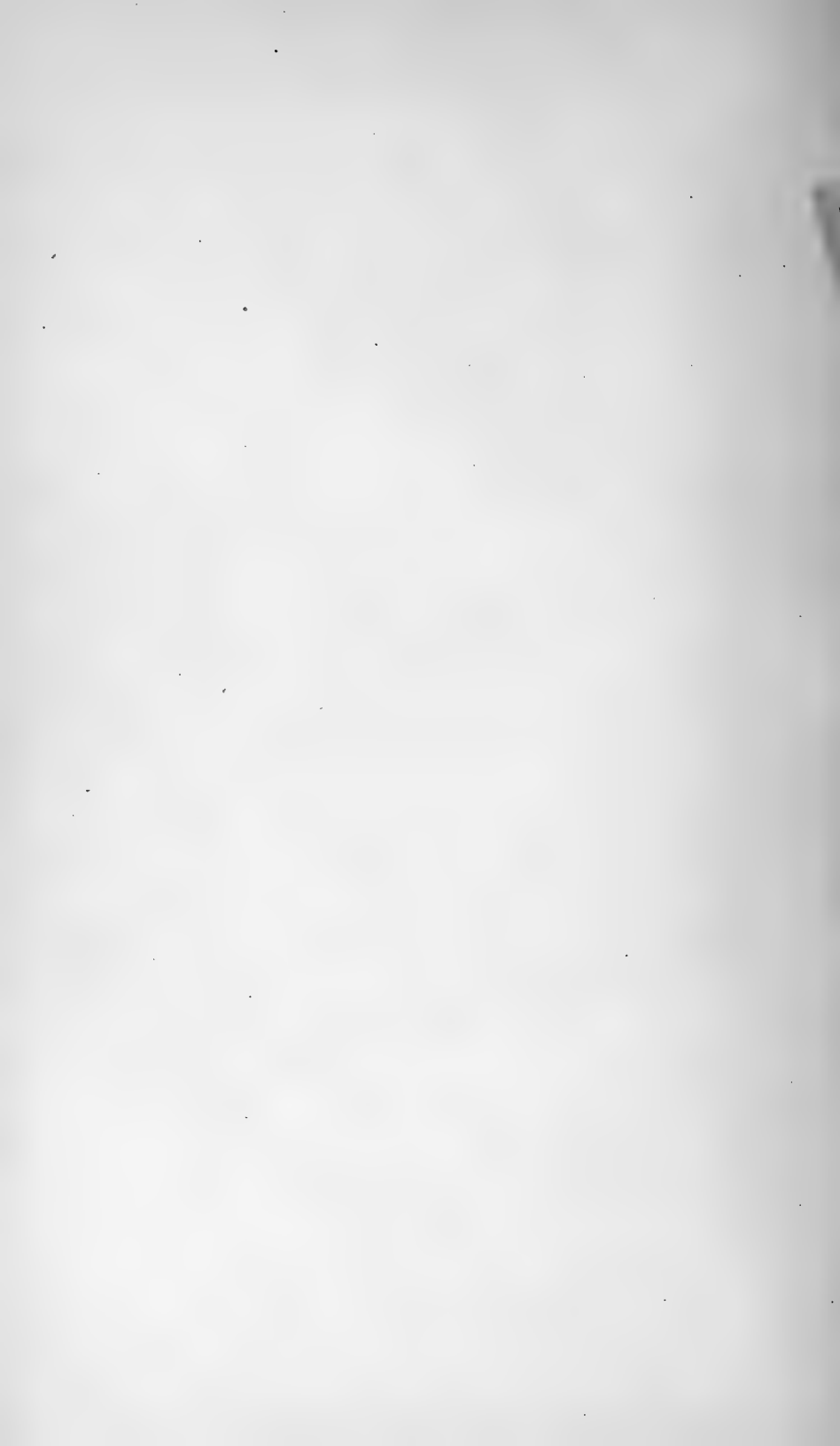
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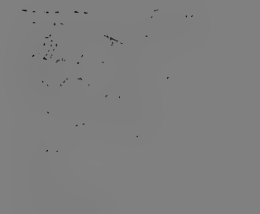
THYSANOTEUTHIS.

Fig^s 8-12, HISTIOTEUTHIS RUPPELLI.

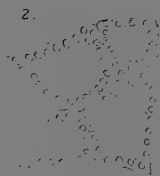
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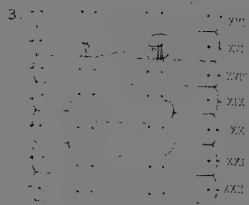




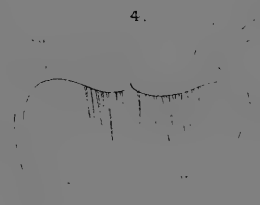
1.



2.



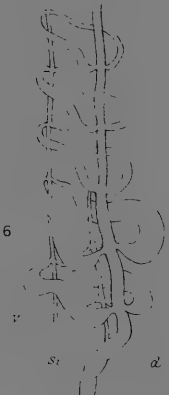
3.



4.



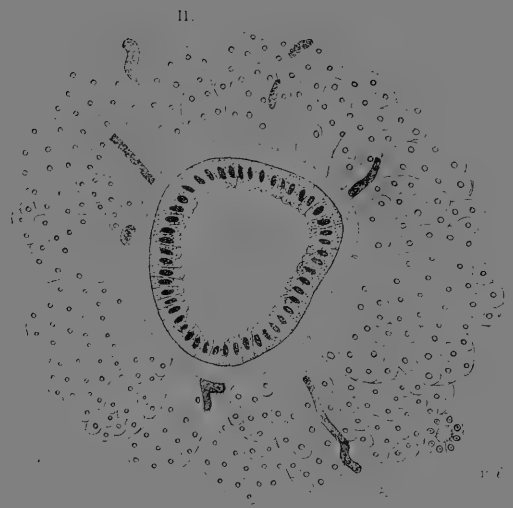
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6.



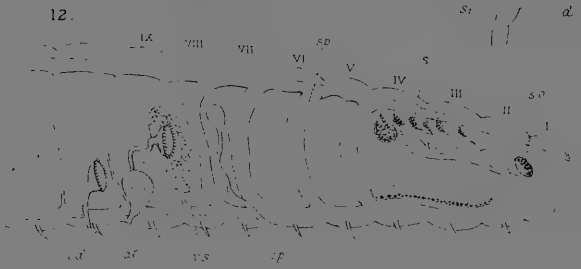
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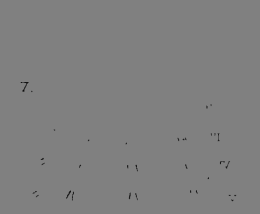
11.



10.



12.



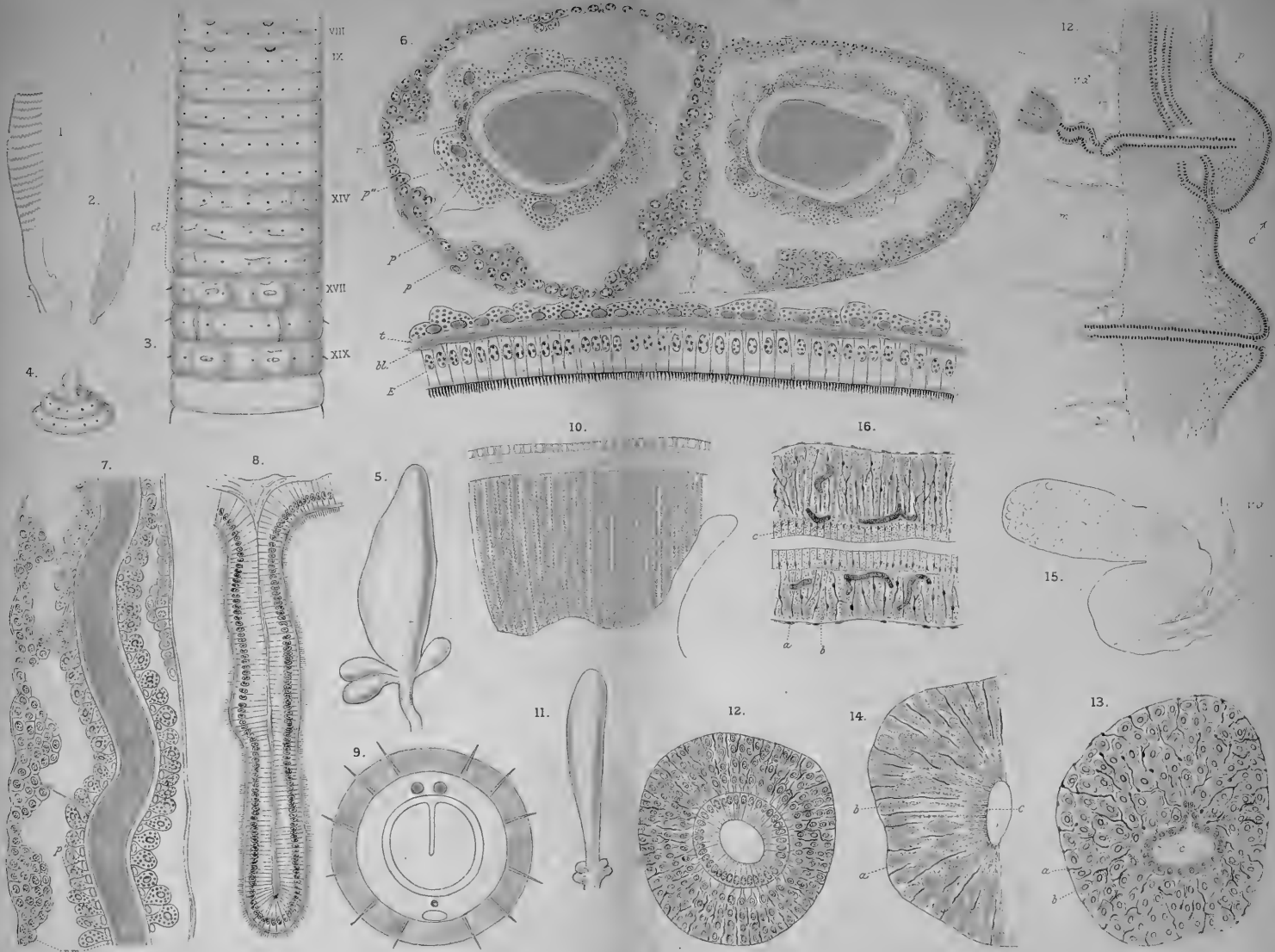
8.



9.



13.



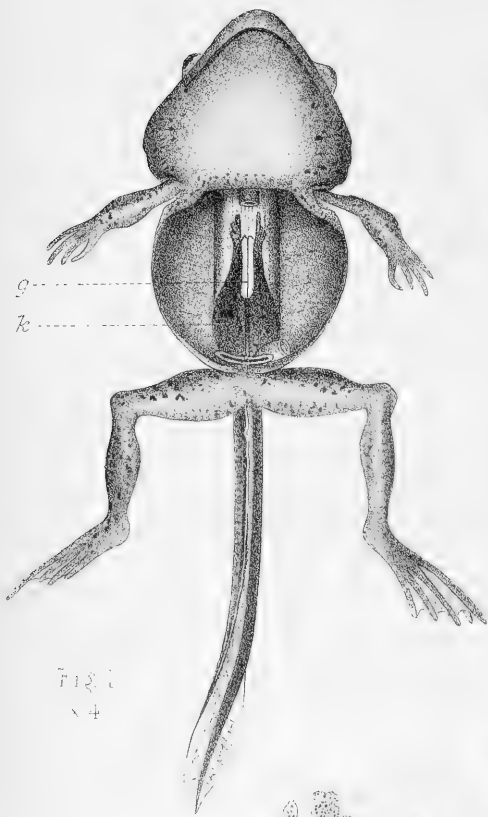


Fig. 1
x 4

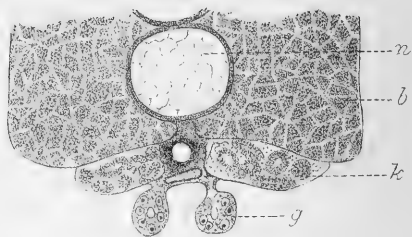


Fig. 5
x 50

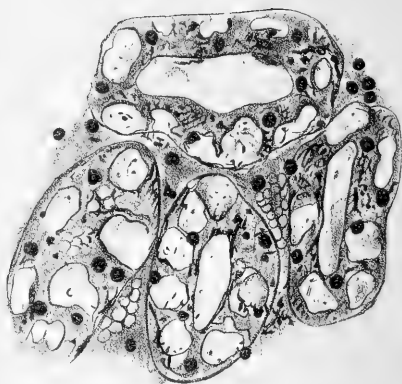


Fig. 4
x 350

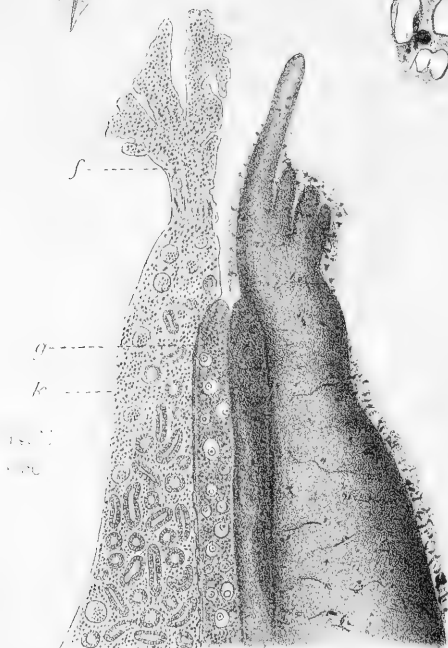


Fig. 2
x 100

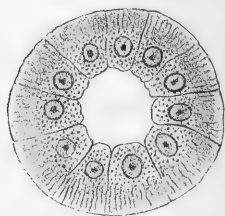


Fig. 3
x 250

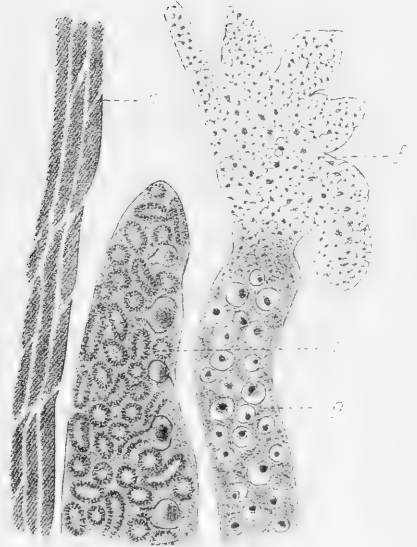


FIG. 7.
x60

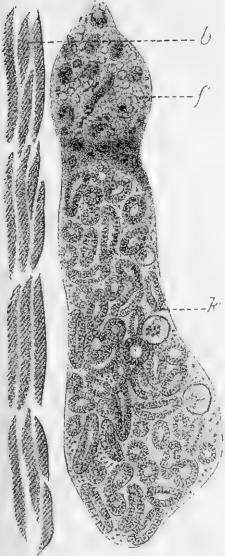


FIG. 8.
x60

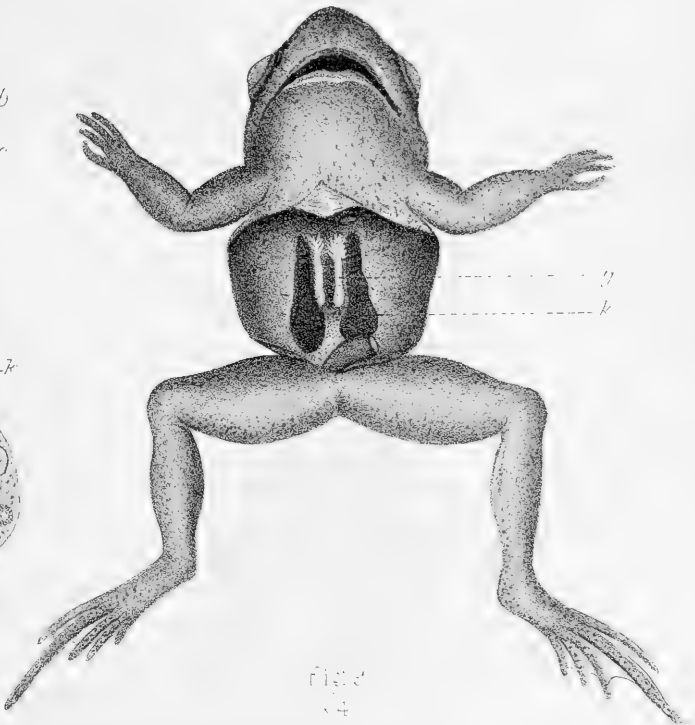


FIG. 9.
x4

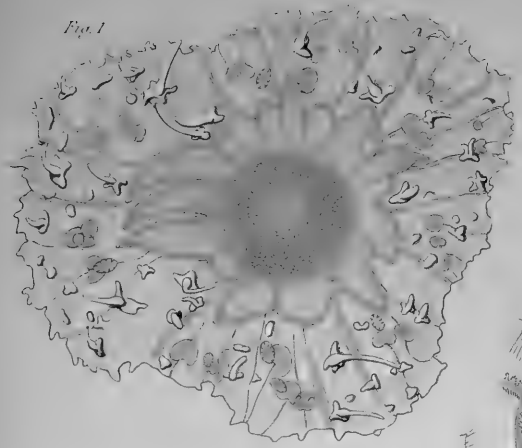


Fig. 1

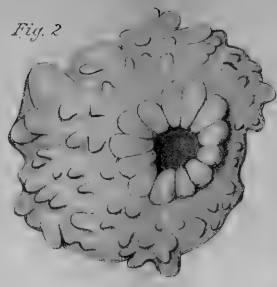


Fig. 2



Fig. 3

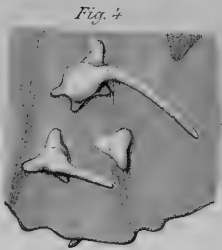


Fig. 4

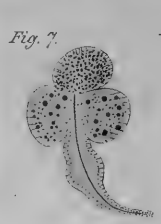


Fig. 7



Fig. 8

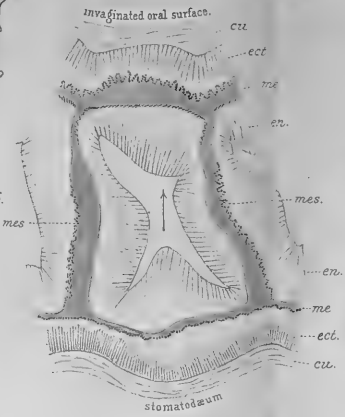


Fig. 5

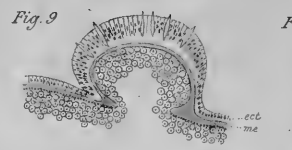


Fig. 9

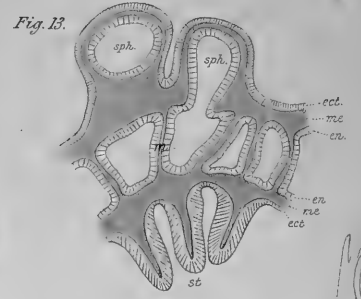


Fig. 13

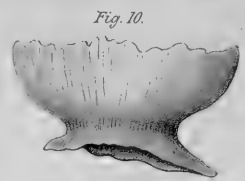


Fig. 10

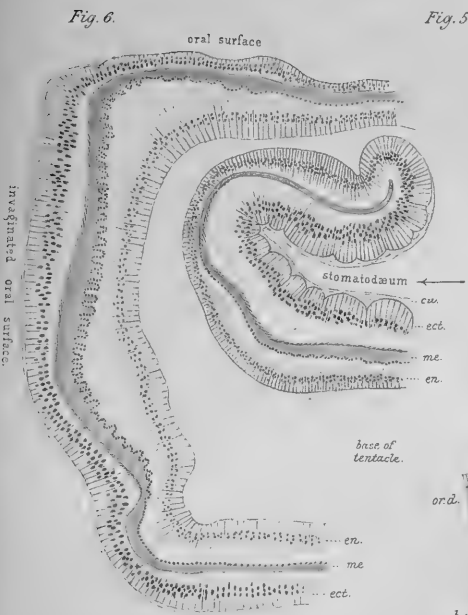


Fig. 6

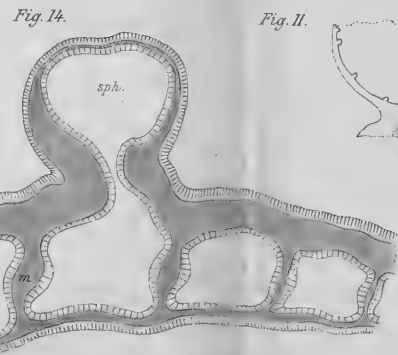


Fig. 14



Fig. 11

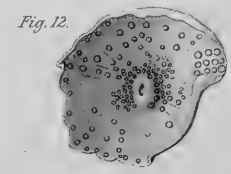


Fig. 12

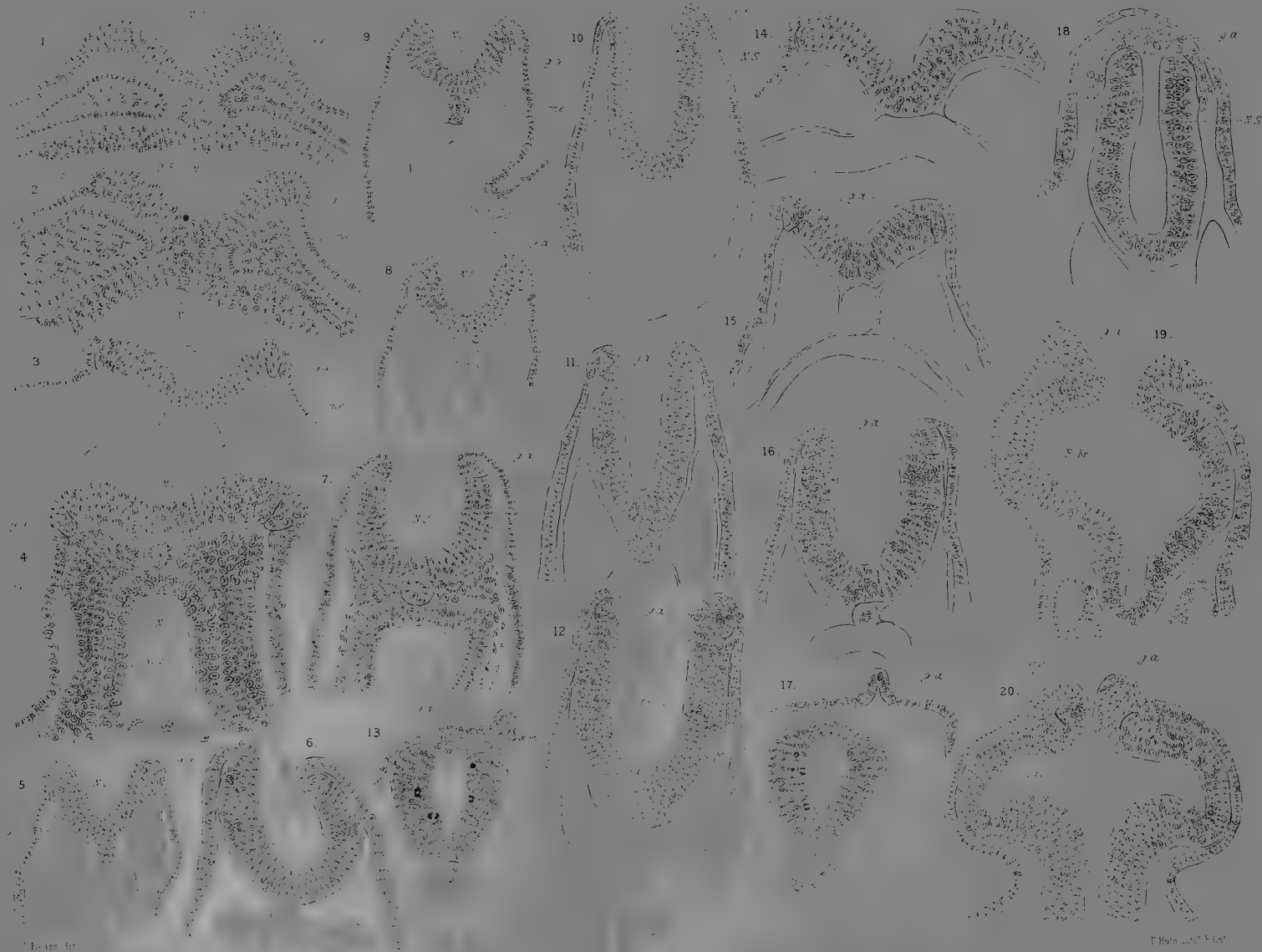


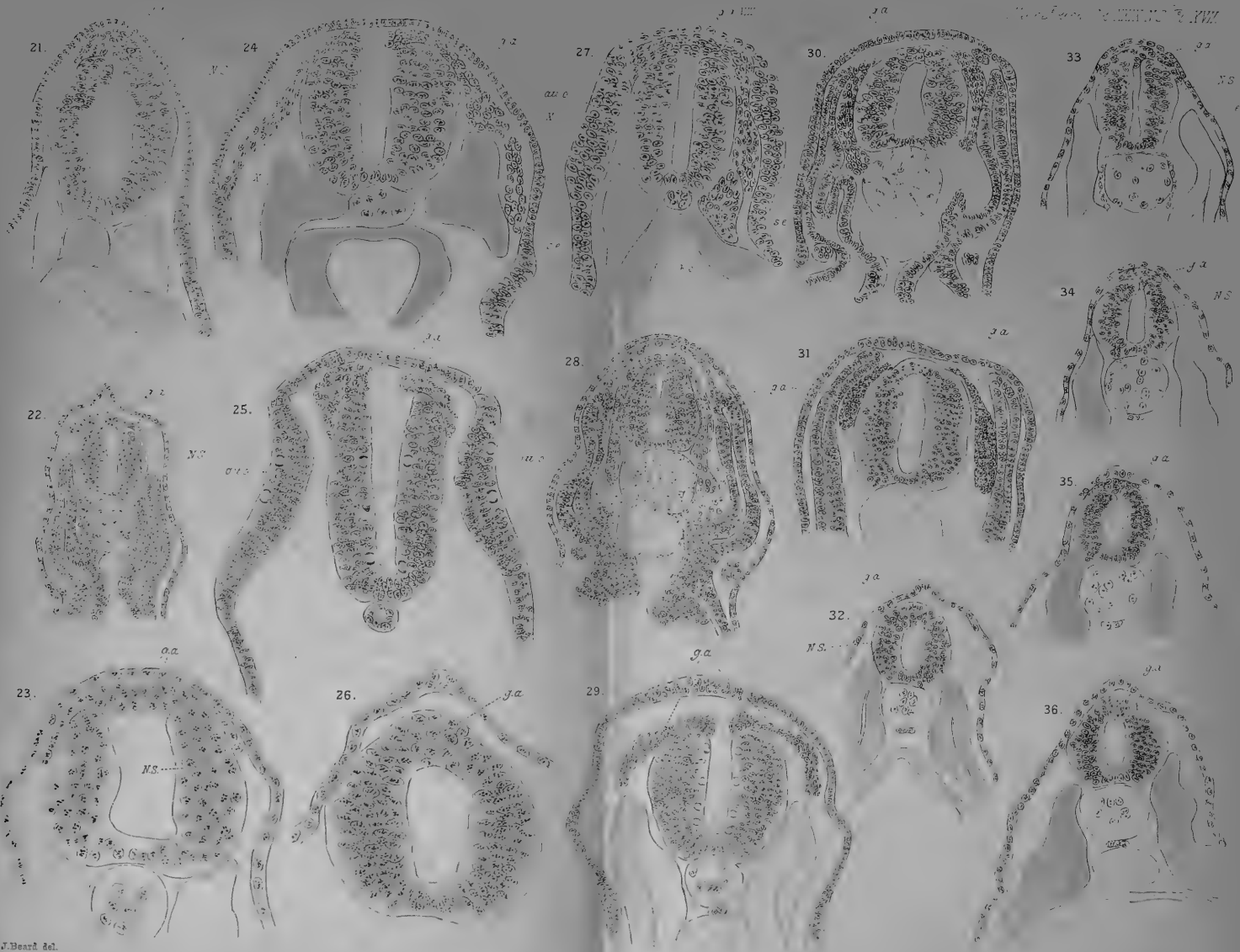
Fig. 15



Fig. 16









J. Deard del.

Figs 37-45 ELASMOBRANCHII.

Figs 46-51 CHICK.

F. Moth, Lith. Edin.



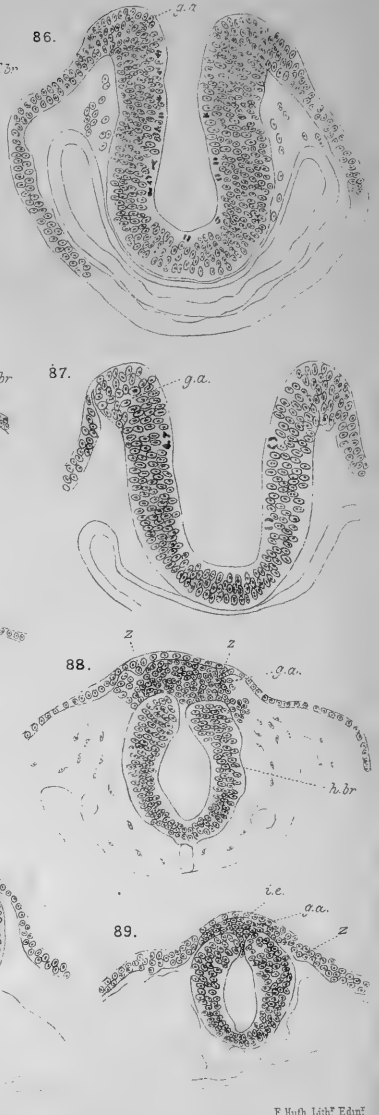
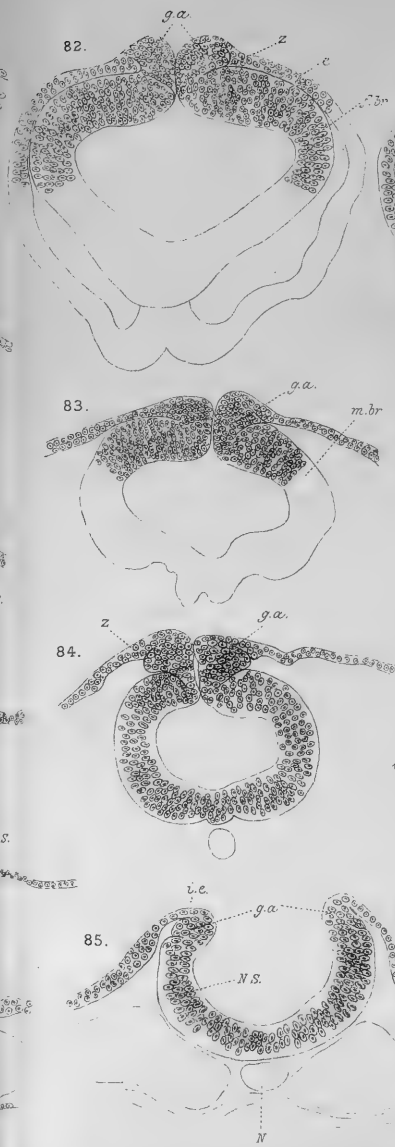
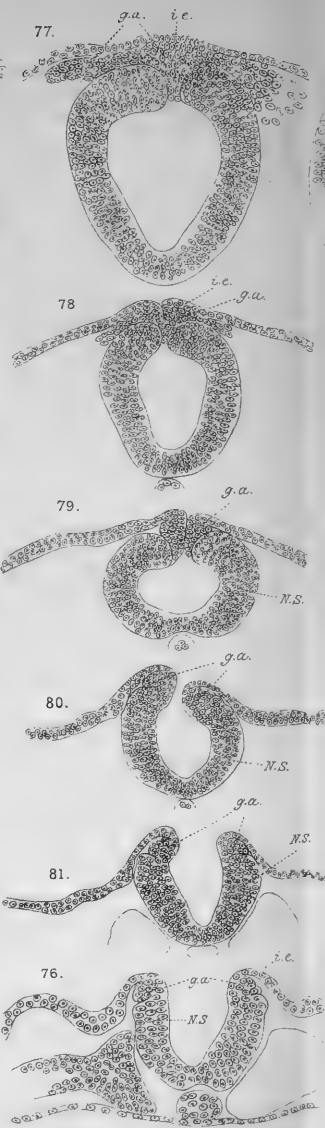
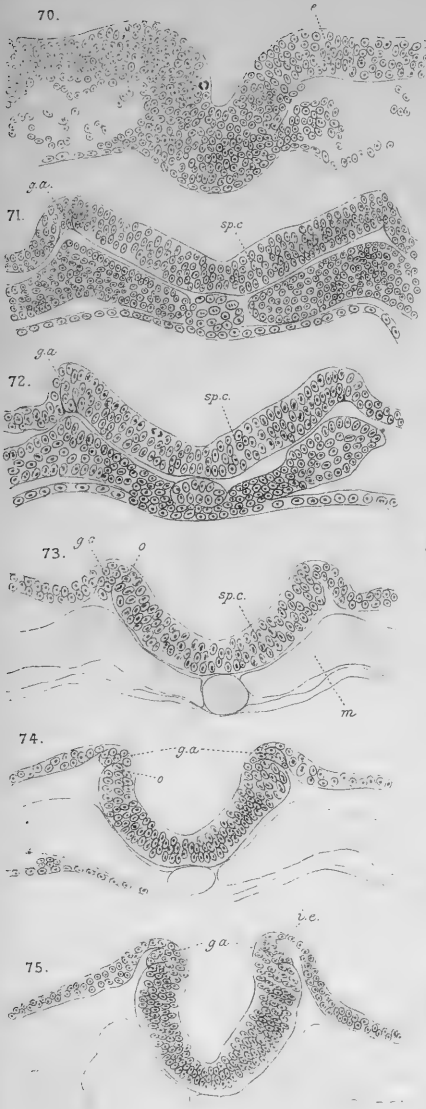
J. Beard del.

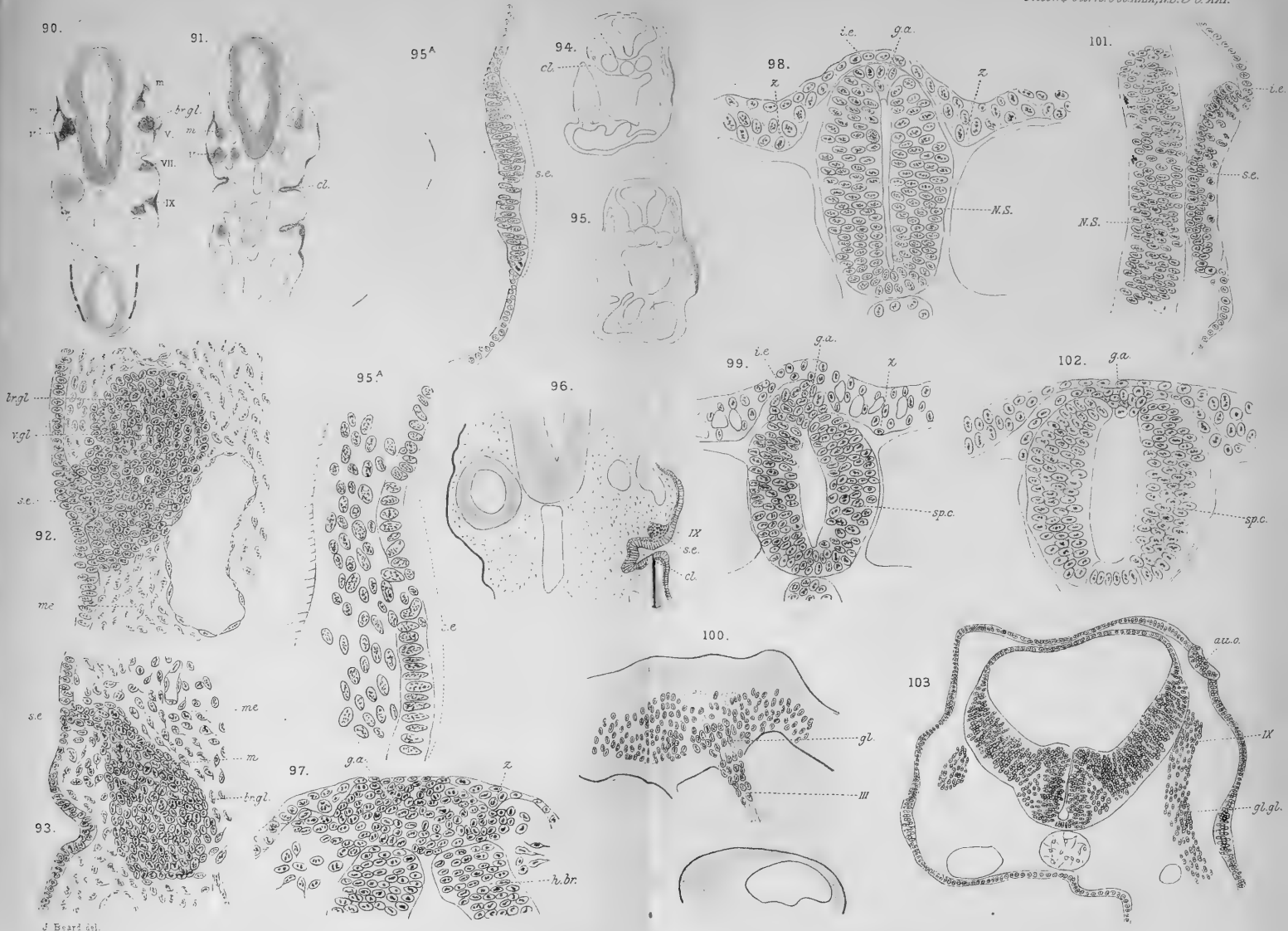
Fig^s 52-54, 56-61 ELASMOBRANCHII.

Fig^s 55, 62, 63, 65-69 CHICK.

Fig. 64 LOPADORYNCHUS.

F. Huth, Lith. Edin.





J. Beard del.

Figs 90-93, 96-99, 102 CHICK. Figs 94-95^A, 103 T. OCELLATA. Figs 100, 101 LACUTA.

F. Huth, Lith. Edin.

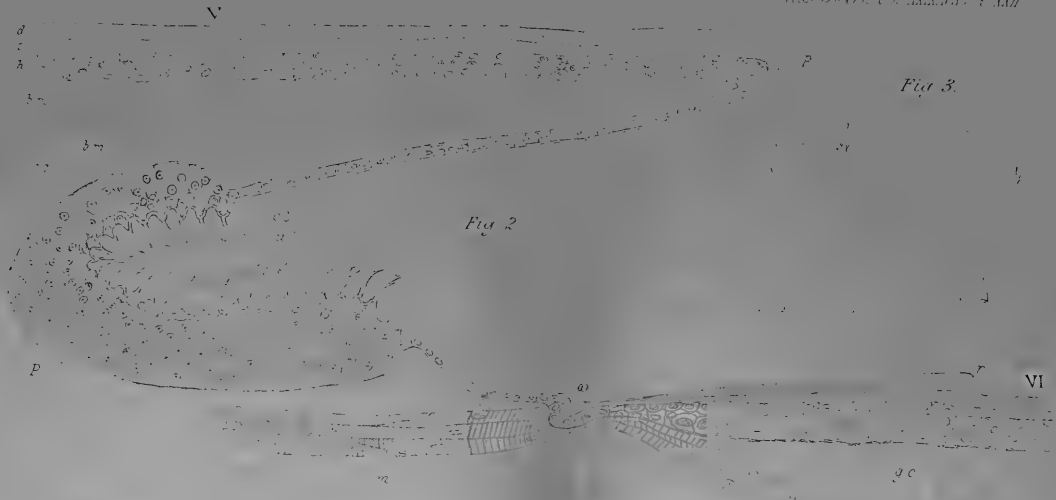


Fig. 1.

Fig. 5.

Fig. 6.

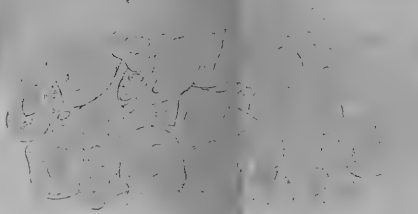
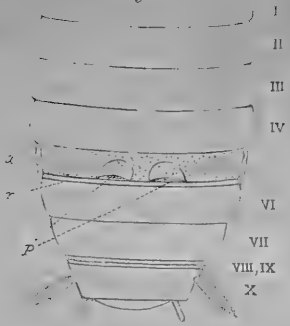


Fig. 4.

Fig. 7.

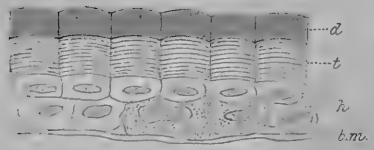




Fig. 1.

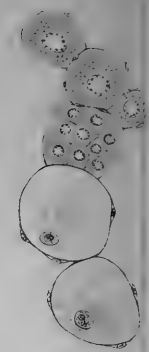


Fig. 4.

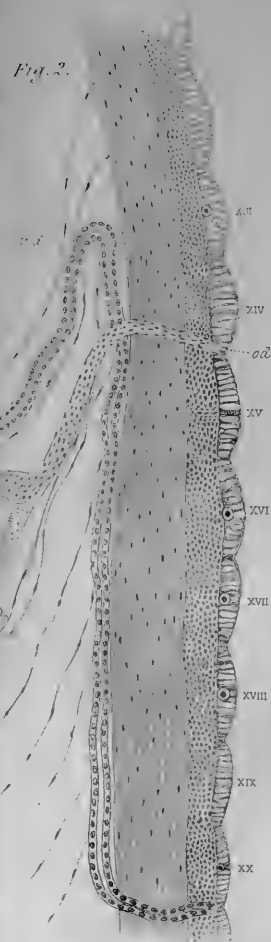


Fig. 2.

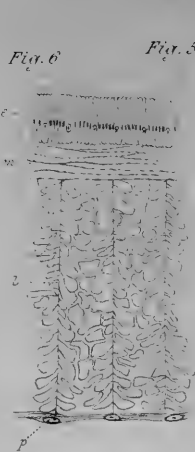


Fig. 6.



Fig. 5.

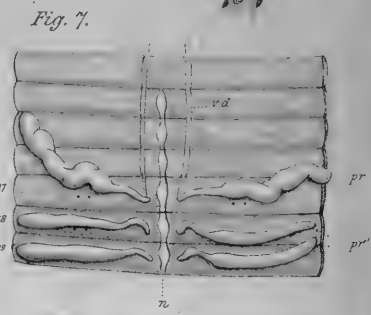


Fig. 7.

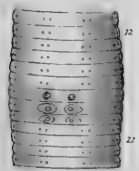


Fig. 8.



Fig. 9.

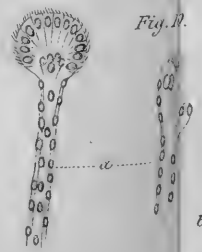


Fig. 10.



Fig. 11.



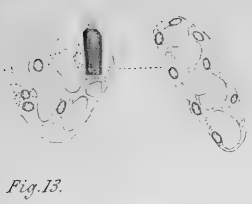


Fig. 13.



Fig. 14.

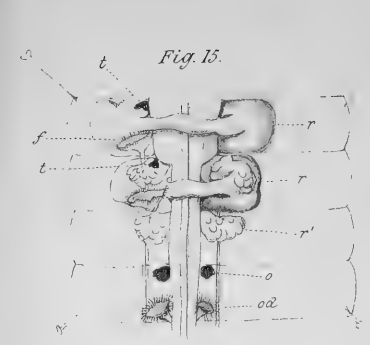


Fig. 15.

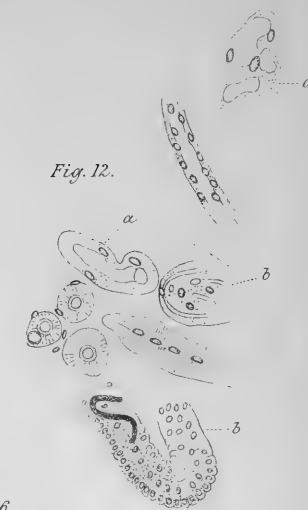


Fig. 12.

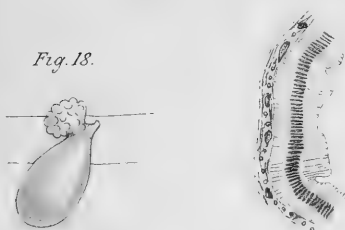


Fig. 18.

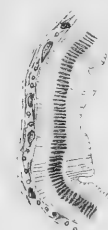


Fig. 19.

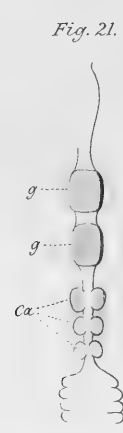


Fig. 21.

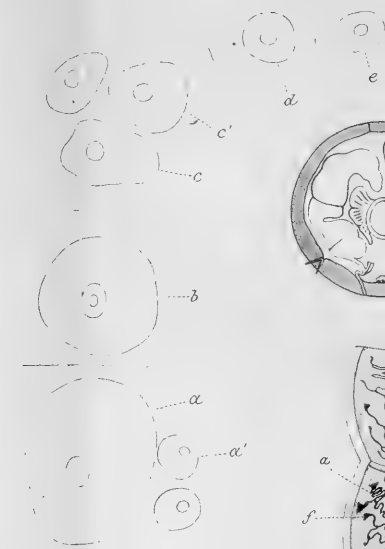


Fig. 22.

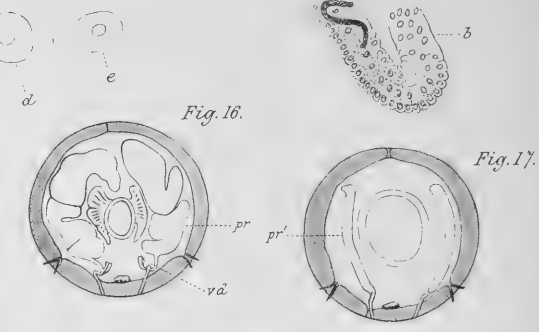


Fig. 16.

Fig. 17.

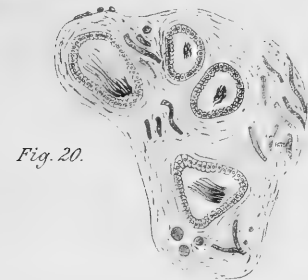


Fig. 20.

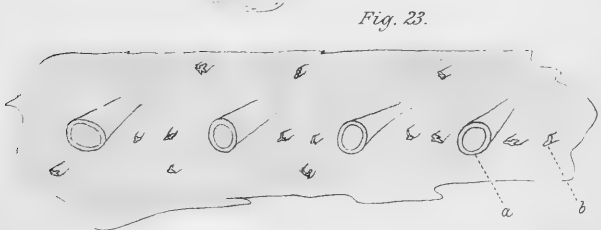


Fig. 23.

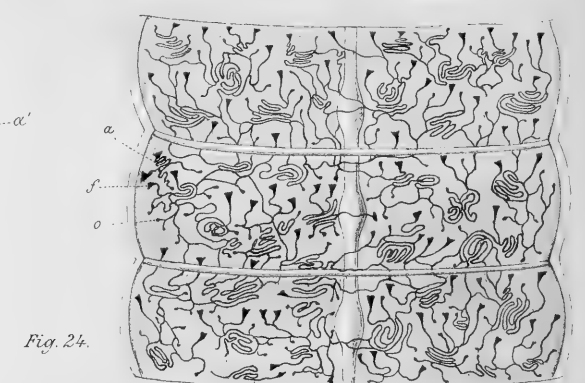


Fig. 24.



Fig. 1

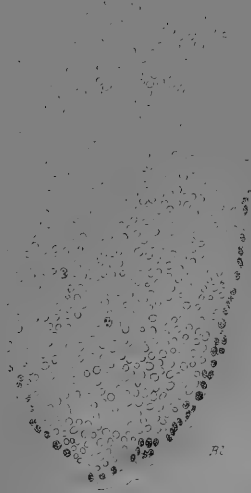


Fig. 2

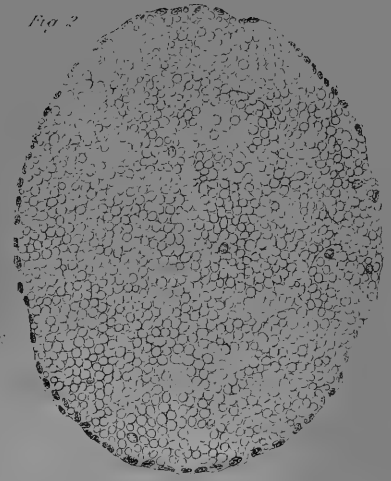


Fig. 4

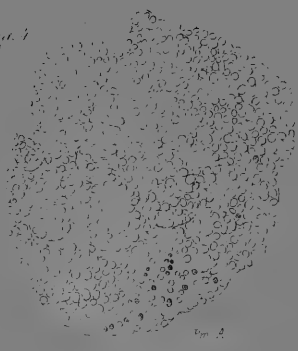


Fig. 3

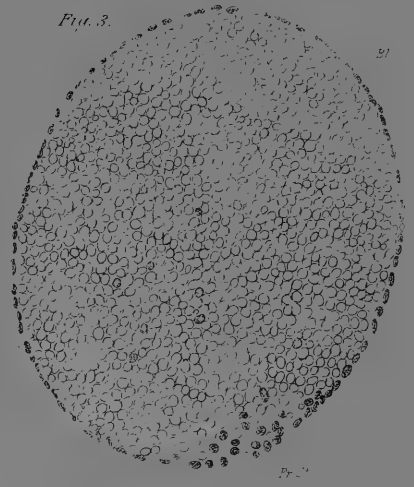


Fig. 3a

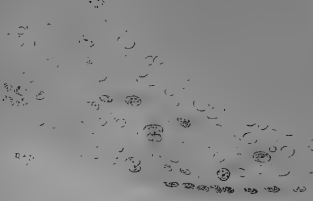


Fig. 5

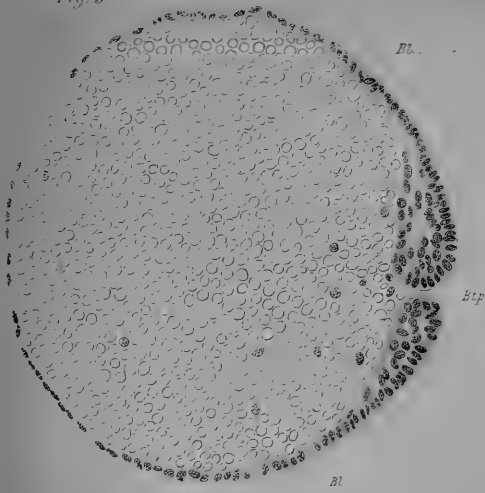


Fig. 6

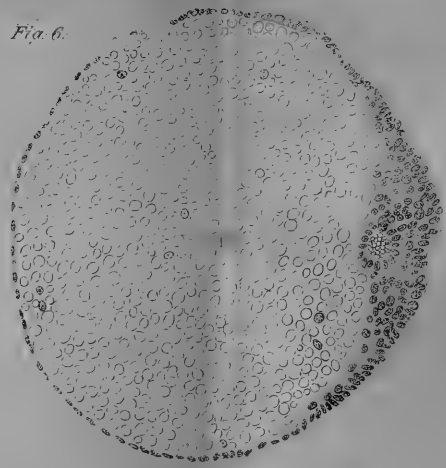
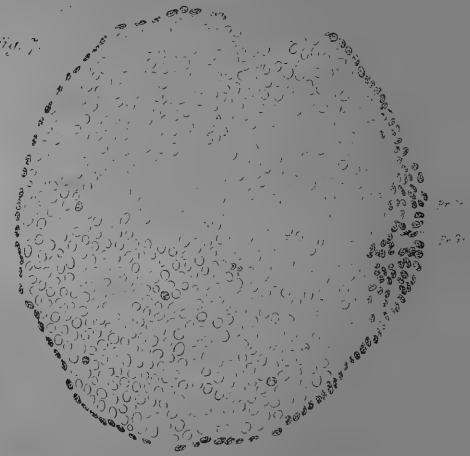


Fig. 7



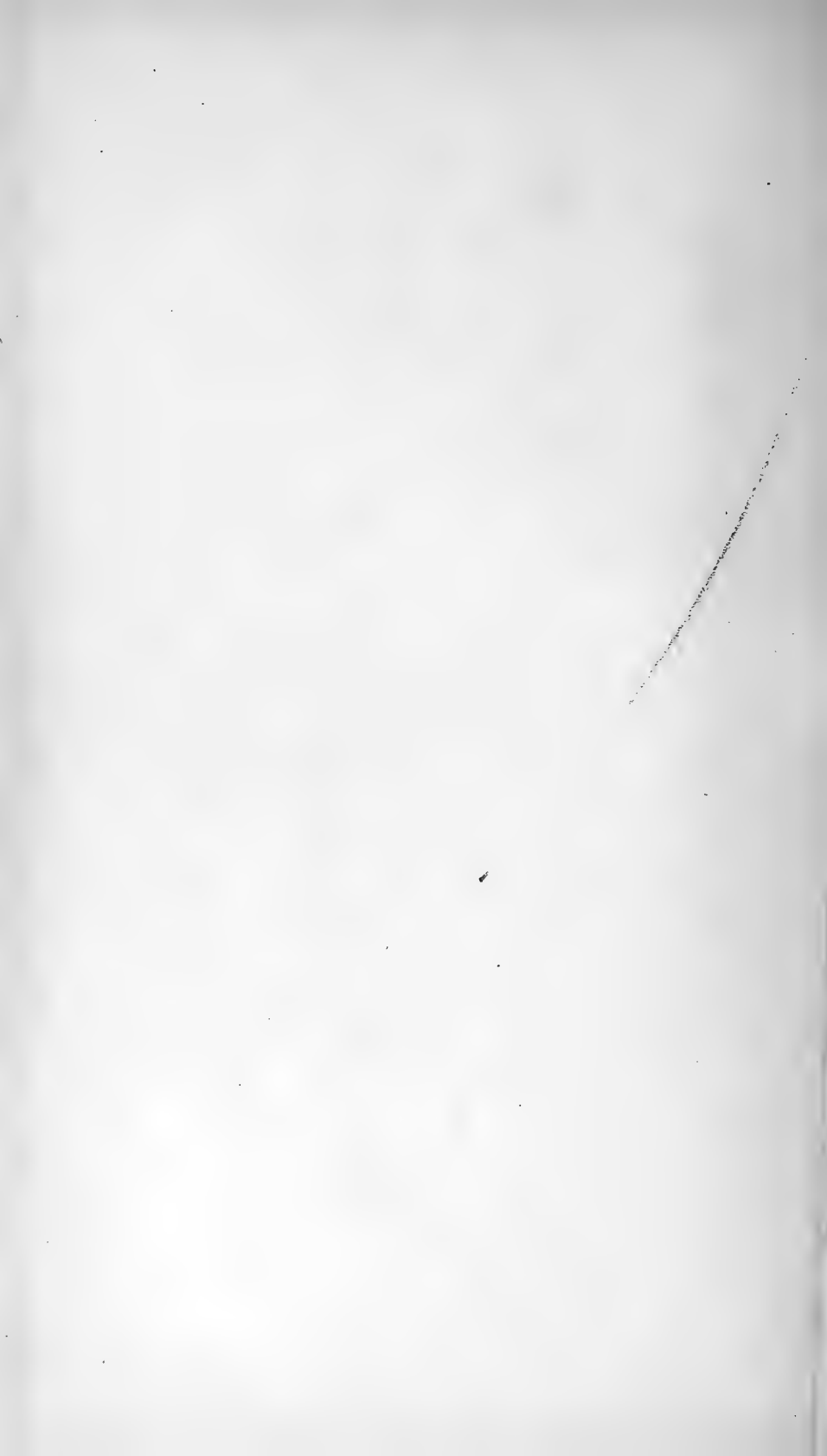


Fig. 8.

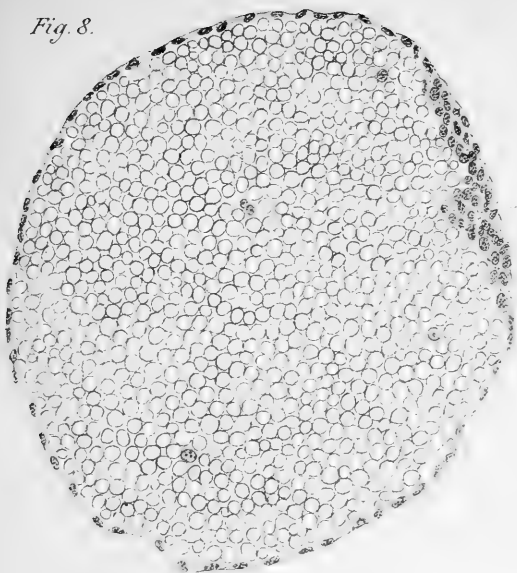


Fig. 9.



Fig. 10.



Fig. 11.



Fig. 1.

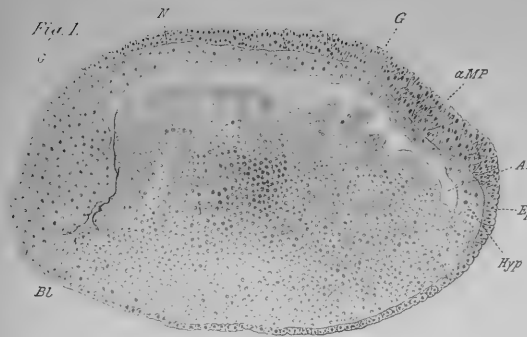


Fig. 4.C.

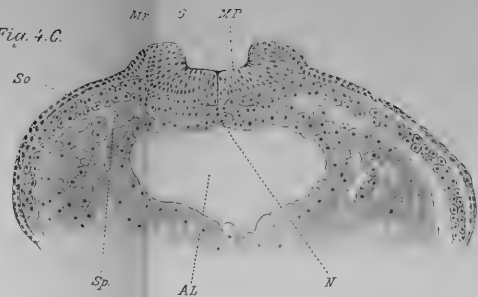


Fig. 8.C.

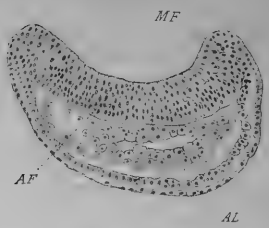


Fig. 2.A.

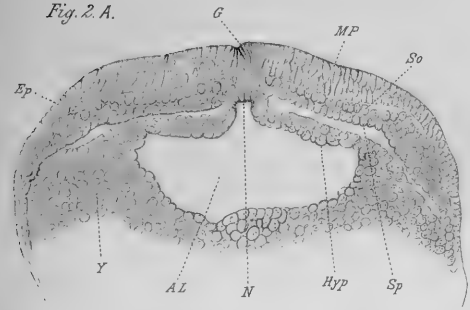


Fig. 6.A.

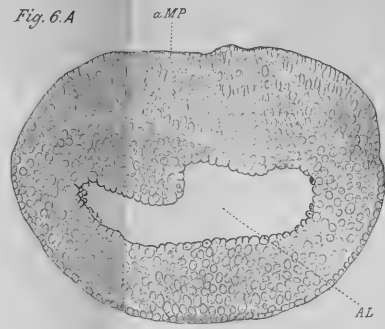


Fig. 5.D.

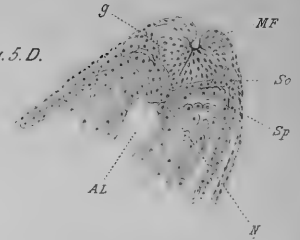


Fig. 10.D.

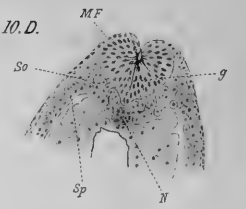


Fig. 3.B.

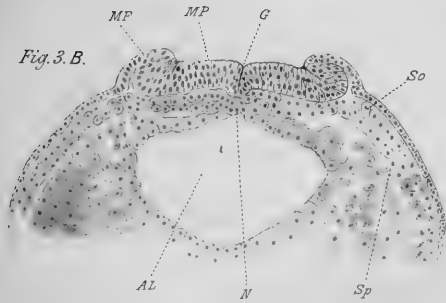


Fig. 7.B.

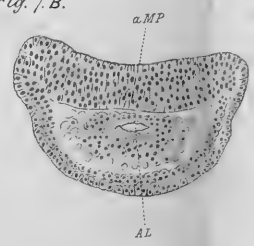


Fig. 11.

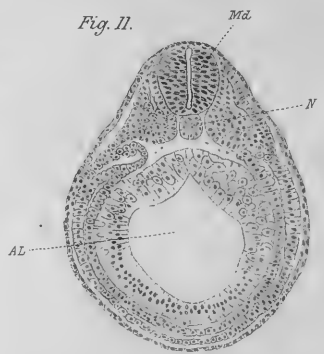


Fig. 9.D.

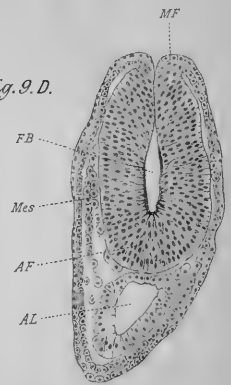


Fig. 12. E.

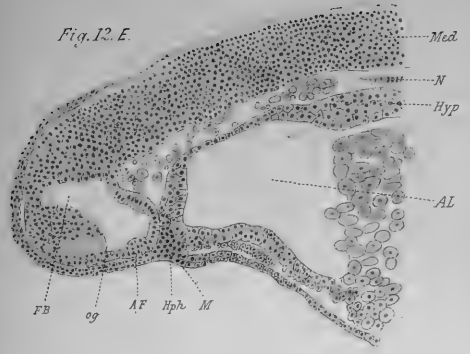


Fig. 14. F.

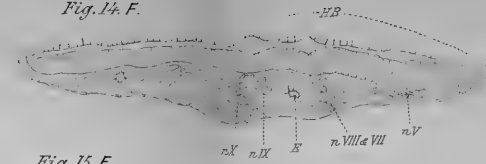


Fig. 19.

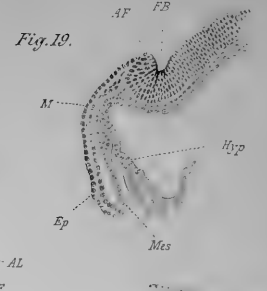


Fig. 15. F.



Fig. 20.

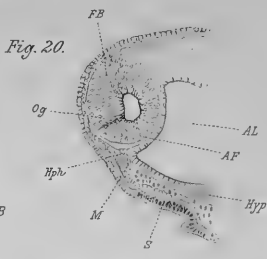


Fig. 21.



Fig. 13. F.

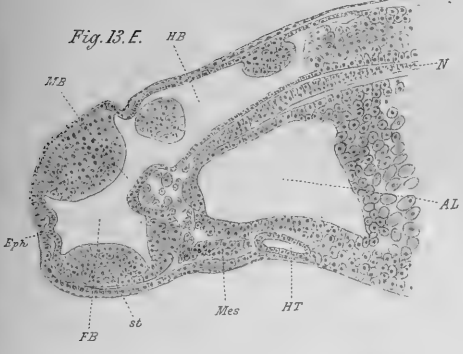


Fig. 16. F.

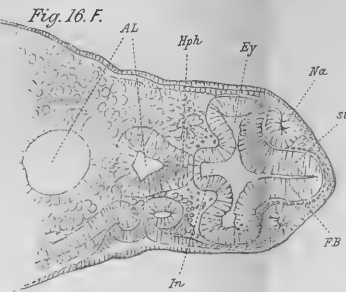


Fig. 22.

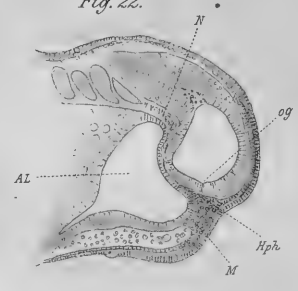


Fig. 23.

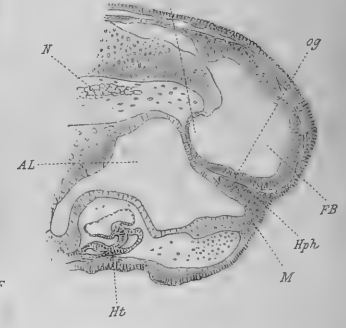


Fig. 17. G.

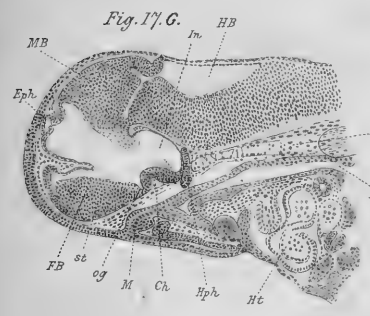


Fig. 18.

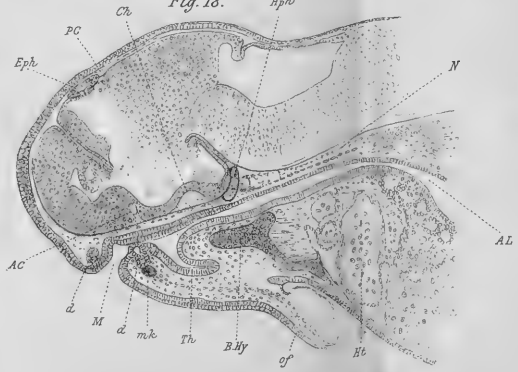


Fig. 24. G.

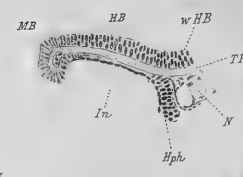
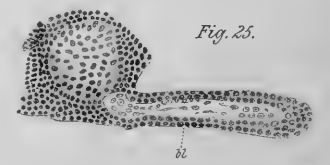


Fig. 25.



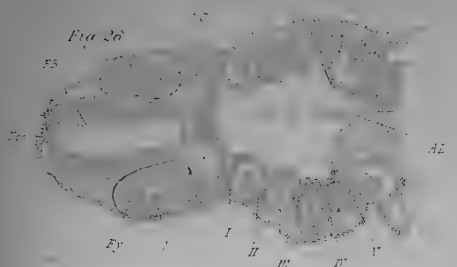


Fig. 26.

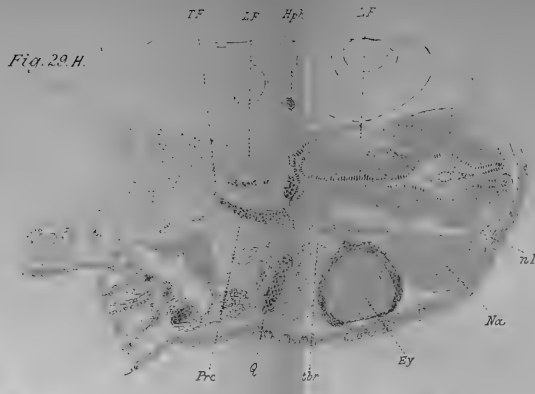


Fig. 29 H.

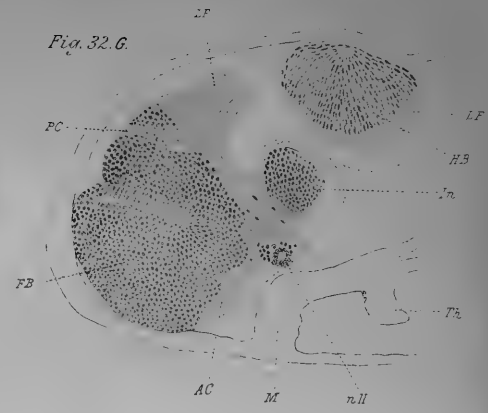


Fig. 32 G.

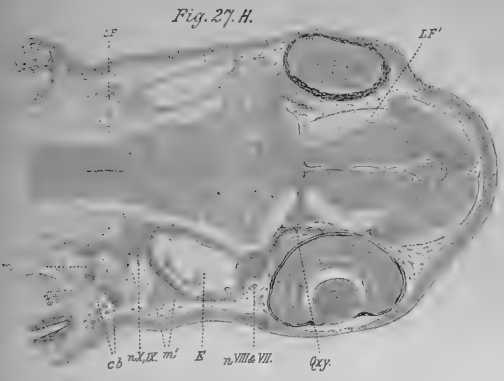


Fig. 27 H.

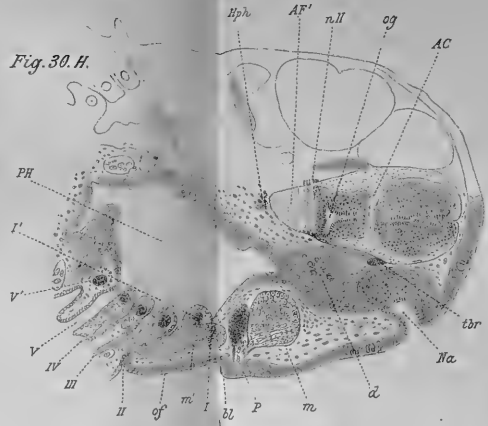


Fig. 30 H.

Fig. 33.

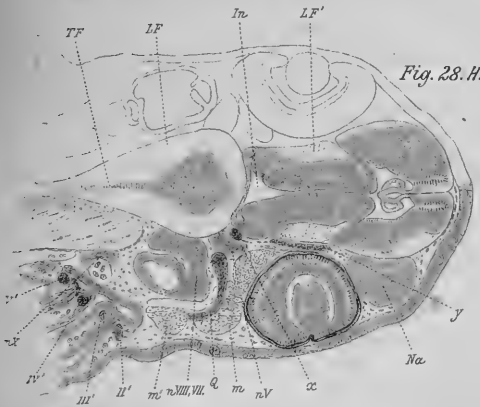
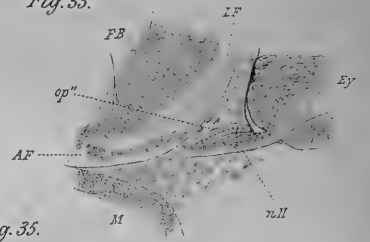


Fig. 28 H.

Fig. 35.

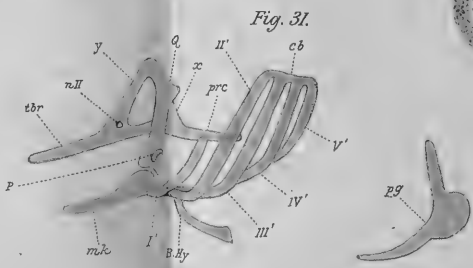
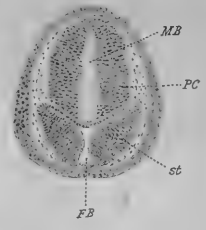
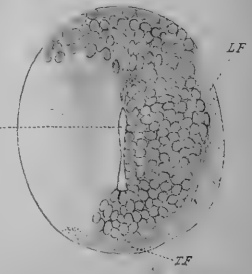


Fig. 31.

Fig. 34.



Corr del.



Fig. 2.

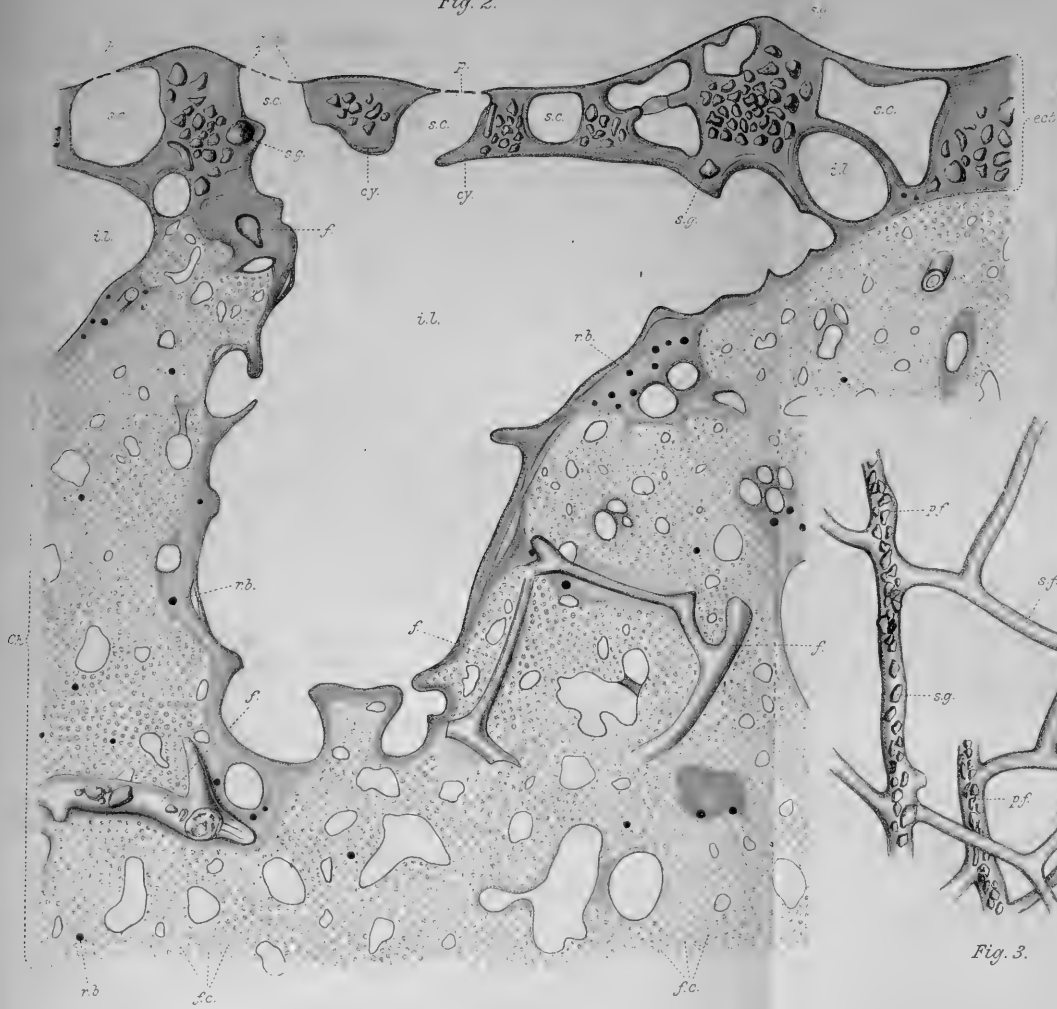
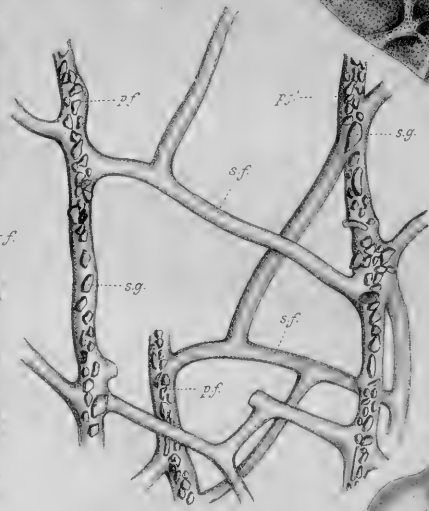


Fig. 1.



Fig. 3.



Arthur Dendy del.



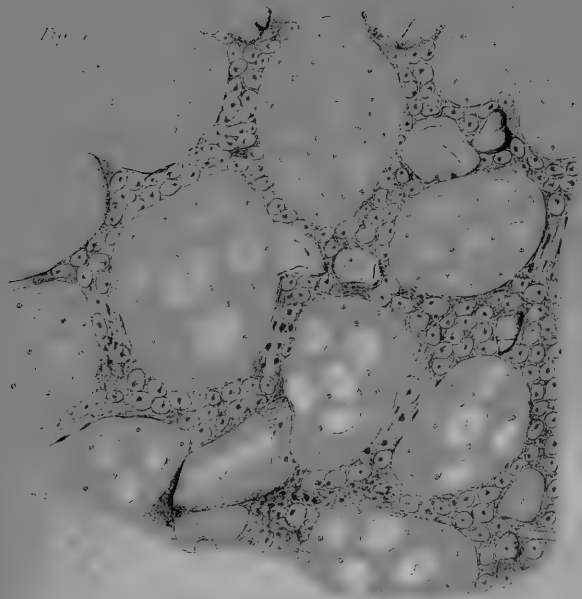


Fig. 4

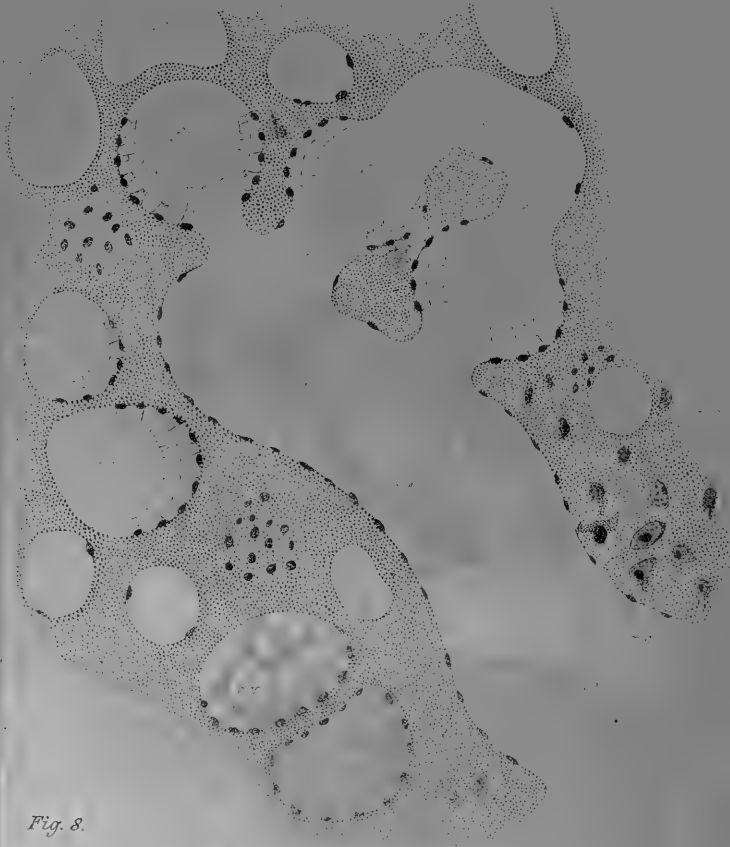


Fig. 6



Fig. 5

c.c.

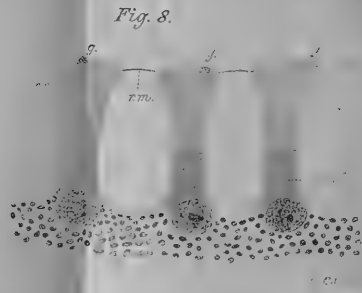


Fig. 8

f.m.

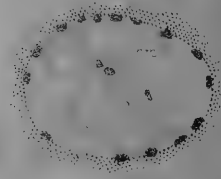


Fig. 7

Fig. 9.

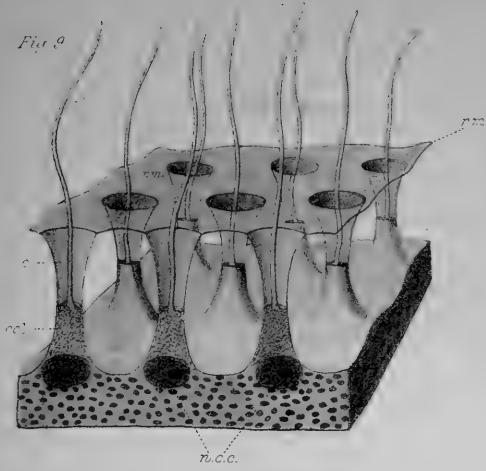


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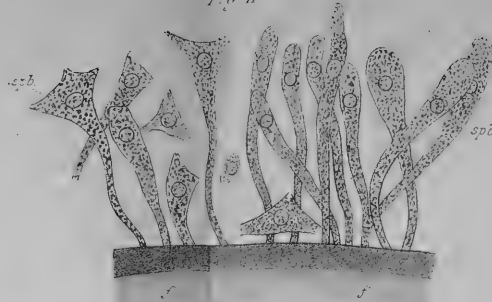


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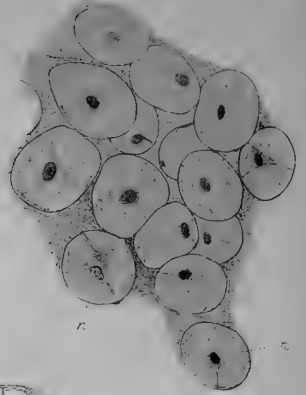


Fig. 14.

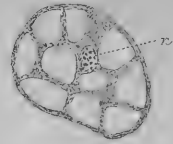


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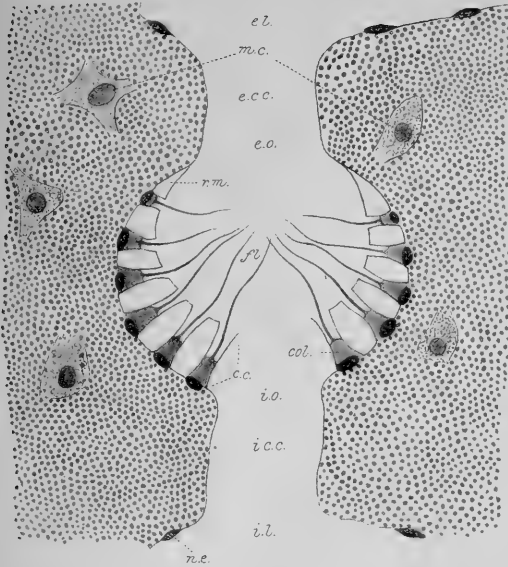


Fig. 12.



Fig. 15.



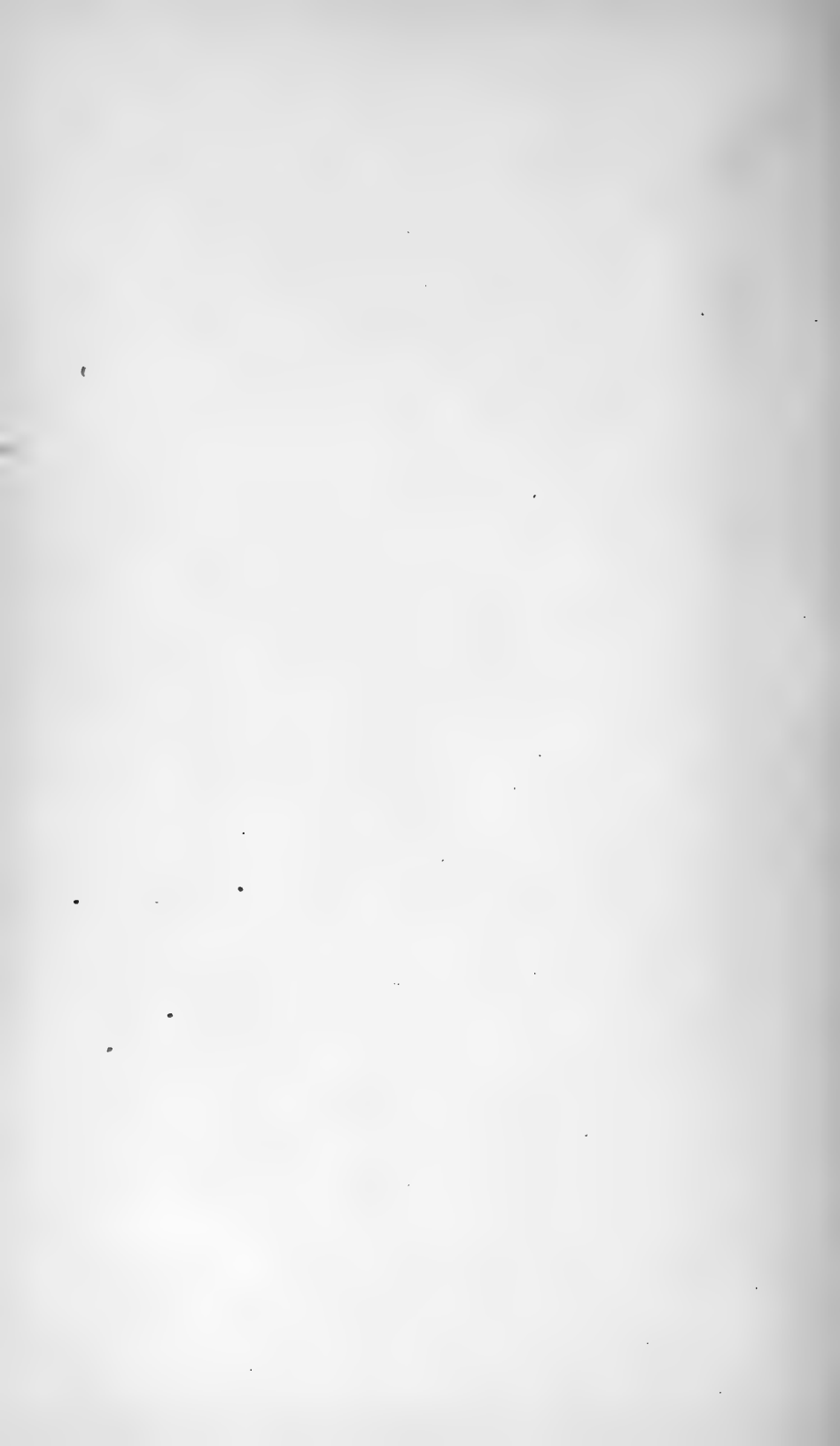


Fig. 23.

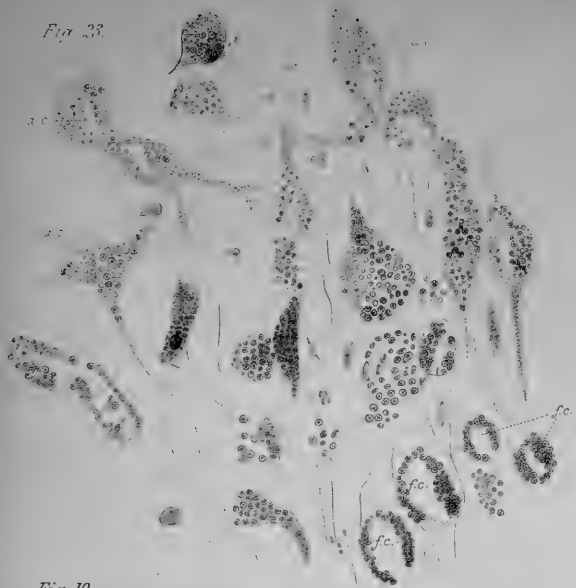
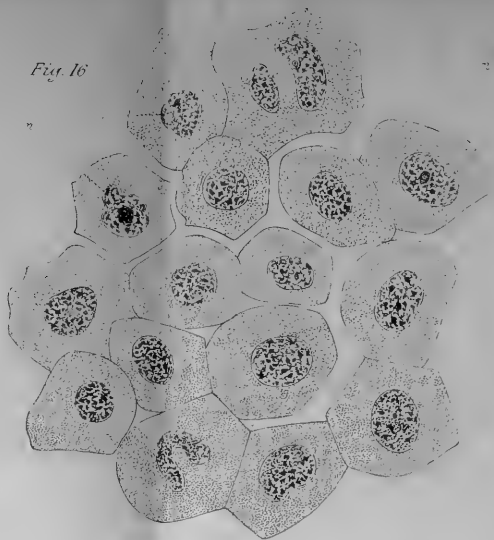


Fig. 16.



Planchon, 1874, p. 100, fig. 111

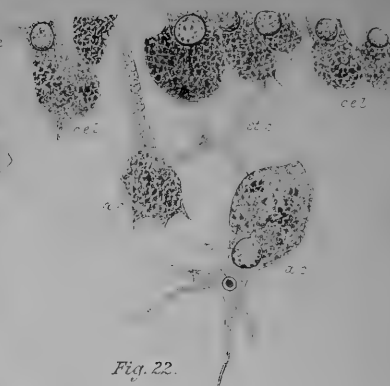


Fig. 22.

Fig. 19.



Arthur Dendy del.

Fig. 17.

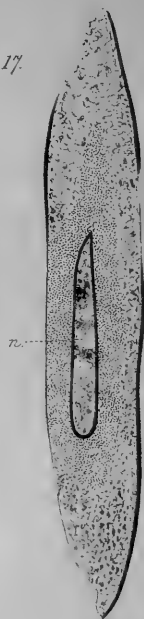


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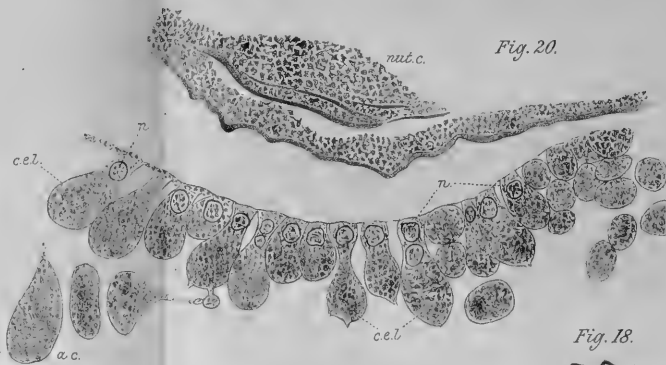
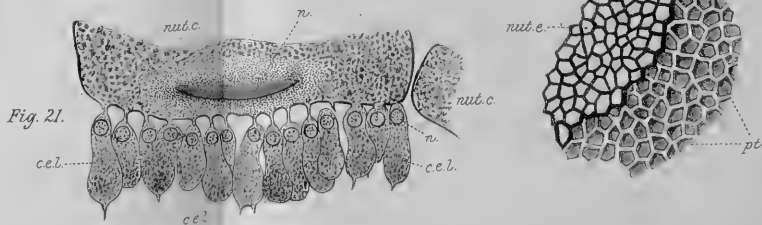


Fig. 18.

Fig. 21.



F. Huth, Lith. Edin.

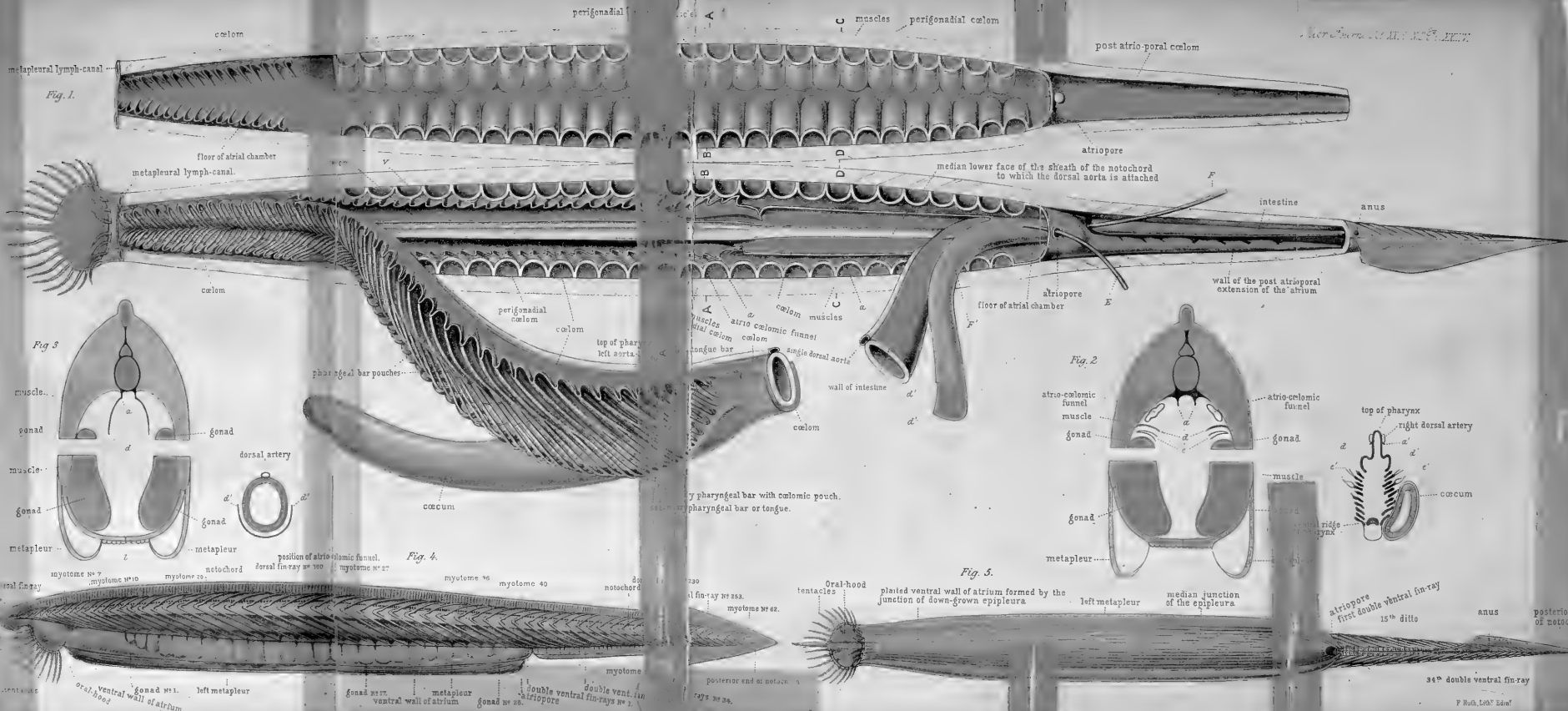


Fig. 1.

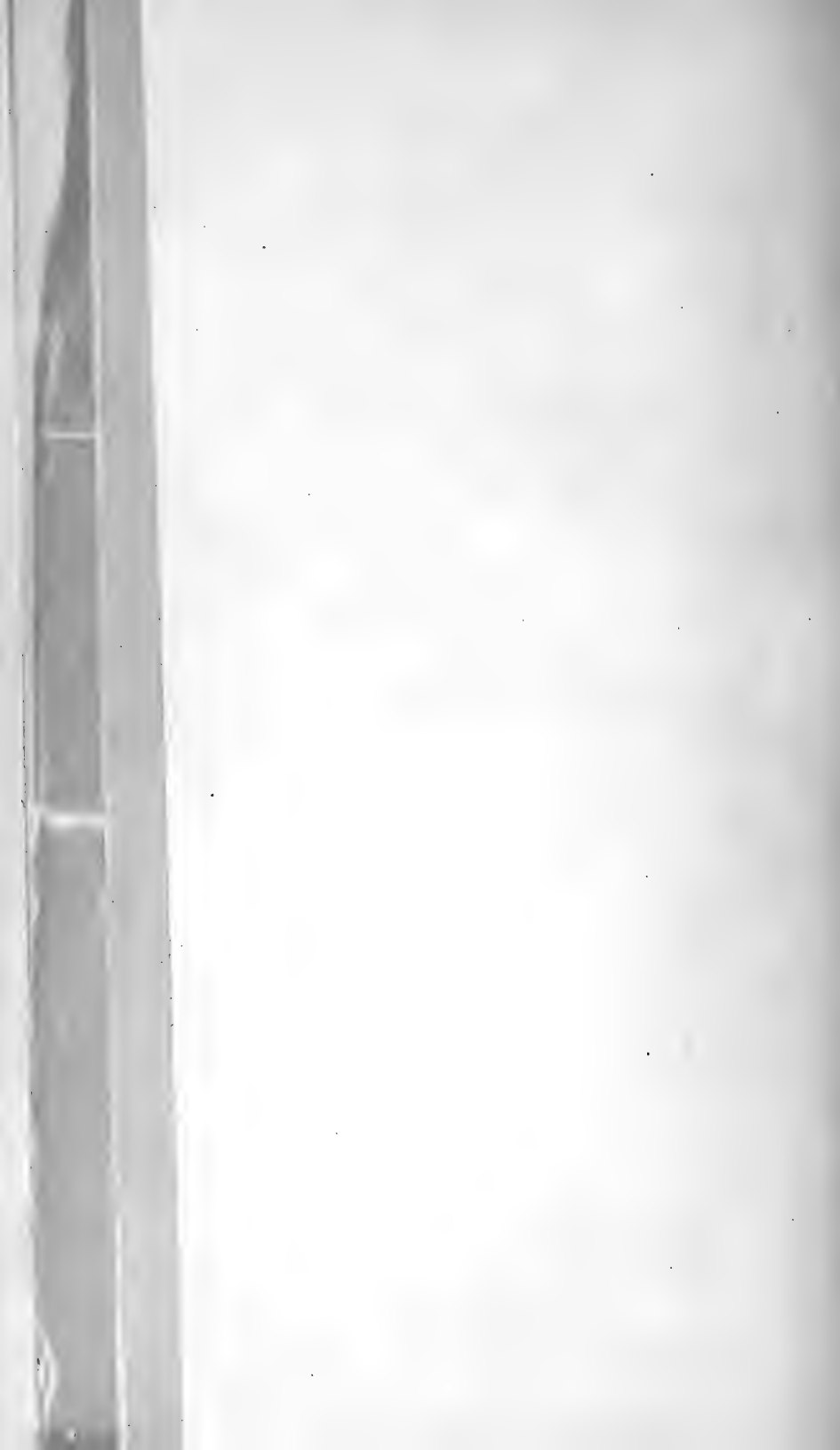
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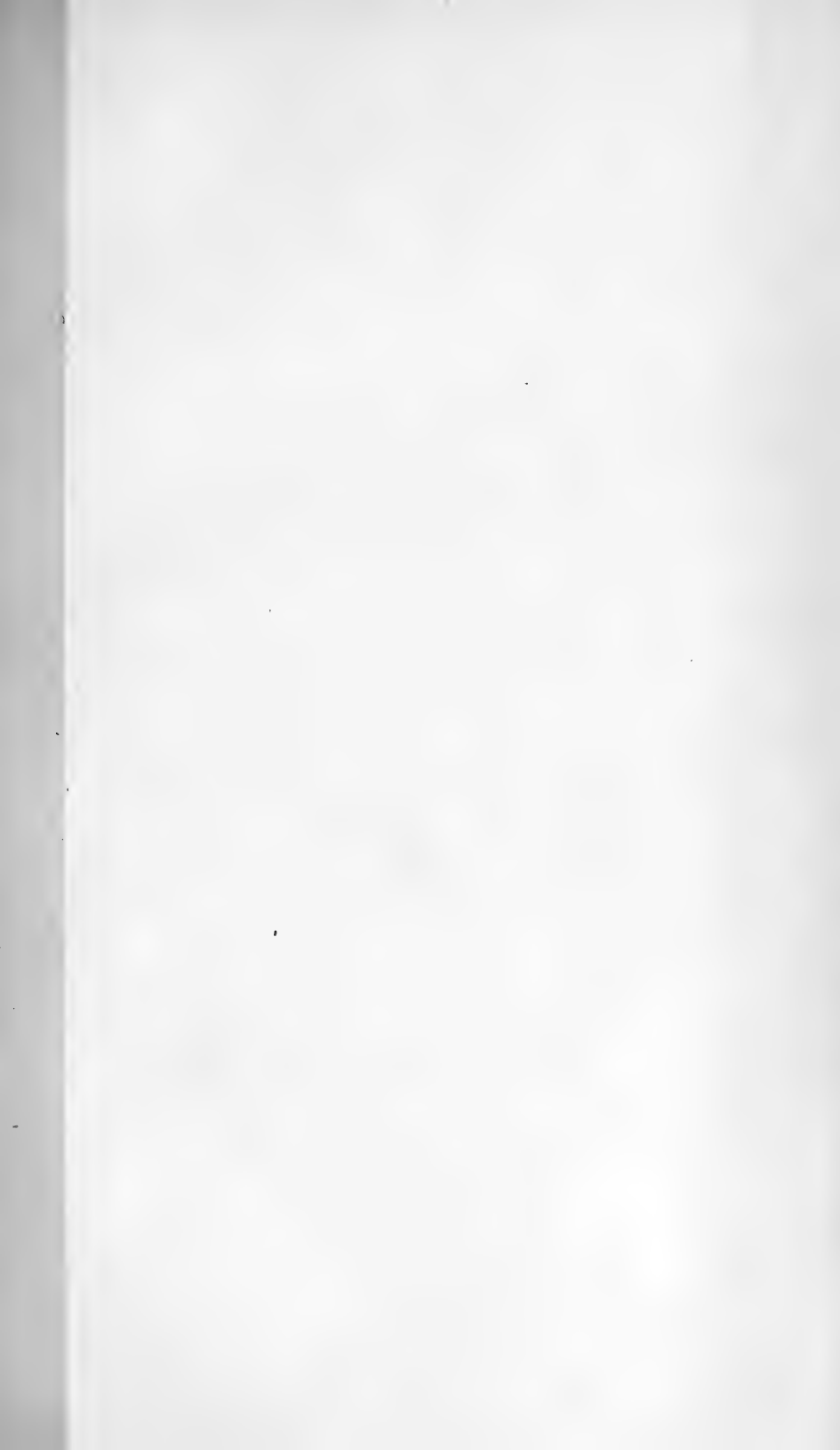
Fig. 3.

Fig. 4.

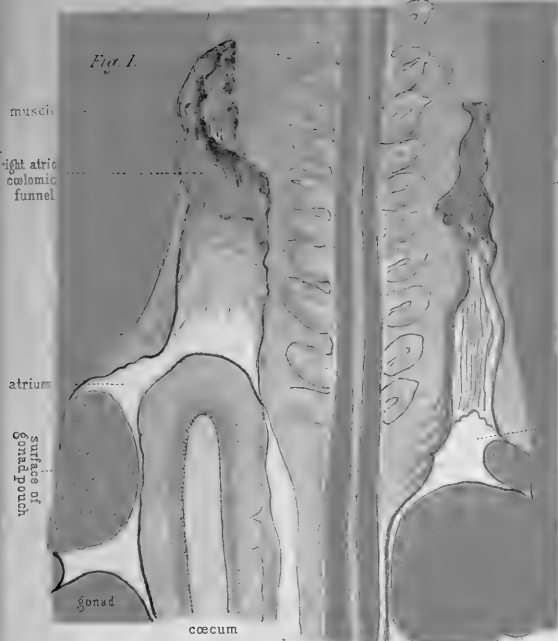
Fig. 5.

Handwritten text at the top right of the page.





pharynx



muscle

right atrio-coelomic funnel

muscle

right atrio-coelomic funnel

atrium

surface of gonad pouch

gonad

cœcum

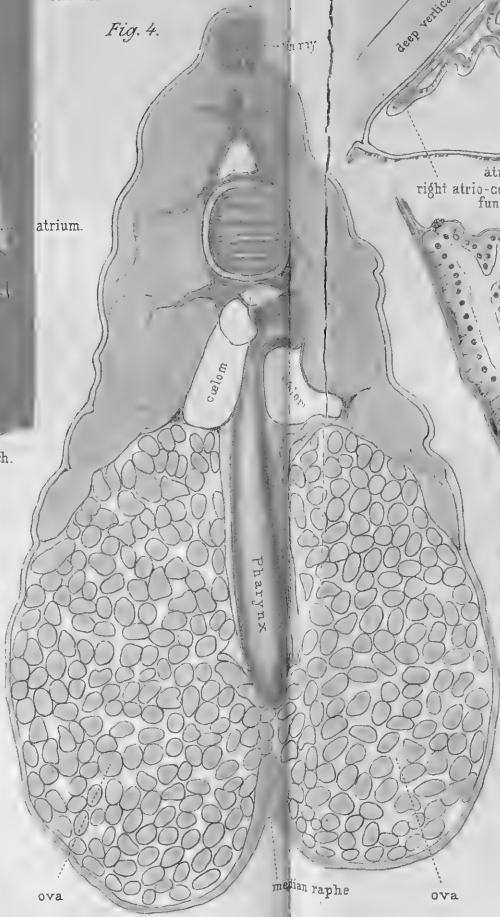
dorsal groove of pharynx.

gonad pouch.

left atrio-coelomic funnel.

Fig. 4.

atrium



cœlum

pharynx

median raphe

ova

ova

pharynx

Fig. 2.

longitudinal muscle

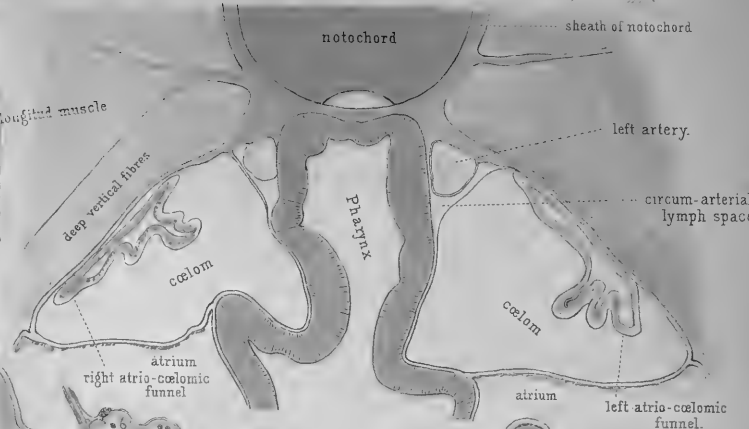
deep vertical fibres

cœlum

atrium right atrio-coelomic funnel

Fig. 6.

Fig. 6'



notochord

sheath of notochord

left artery.

circum-arterial lymph space

cœlum

atrium

left atrio-coelomic funnel.

fin ray

Fig. 3.

conn. tiss. nucleus

artifact space

ventral muscle

gonad

metapleural lymph space

atrium

plated ventral wall.

artifact space

nerve chord

notochord

deep vertical musc. fibres

long musc fibres

right artery

cœlum

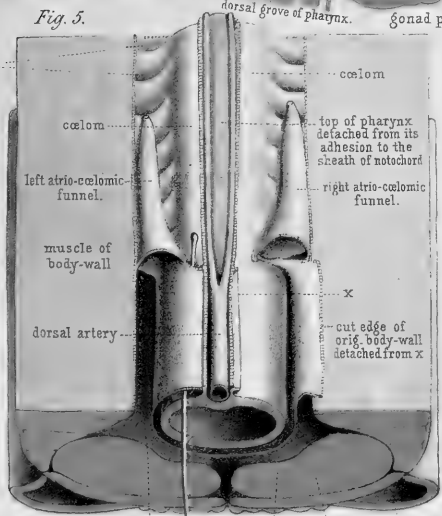
atrio-coelomic funnel

cœcum

atrium

Fig. 5.

openings of coelomic pouches of pharyngeal bars.



cœlum

cœlum

left atrio-coelomic funnel.

muscle of body-wall

dorsal artery

top of pharynx detached from its adhesion to the sheath of notochord

right atrio-coelomic funnel.

x

cut edge of orig. body-wall detached from x

atrium

atrium

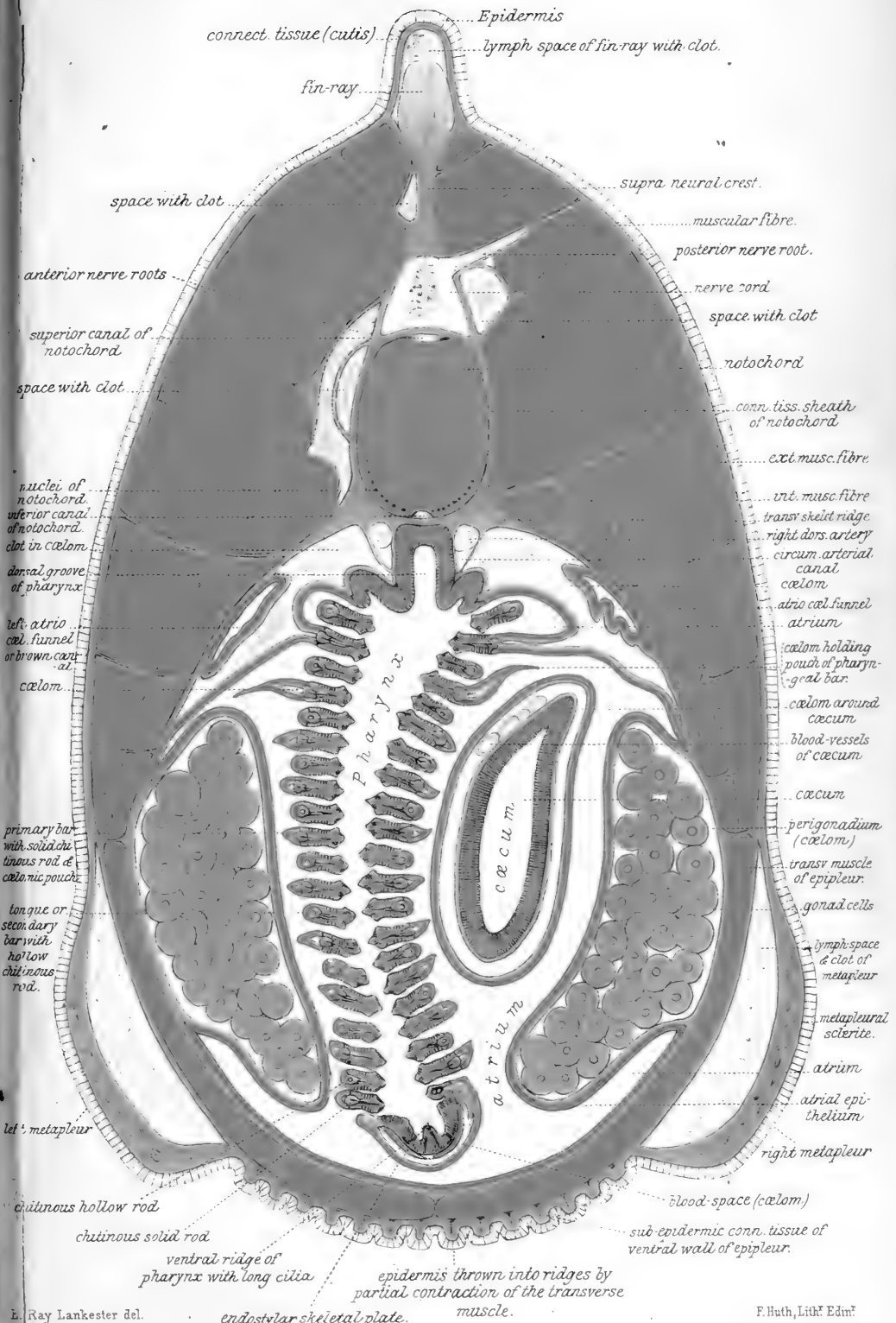
gonad

metapleur

E Ray Lankester del.

F. Huth, Lith. Edin'





Epidermis
 connect. tissue (cutis)
 lymph space of fin-ray with clot.
 fin-ray

space with clot
 supra neural crest
 muscular fibre
 posterior nerve root
 nerve cord

anterior nerve roots
 superior canal of notochord
 space with clot
 notochord
 conn. tiss. sheath of notochord

nuclei of notochord
 inferior canal of notochord
 clot in coelom
 dorsal groove of pharynx
 int. musc. fibre
 transv. skelet. ridge
 right dors. artery
 circum. arterial canal
 coelom
 atrio. cel. funnel
 atrium

left atrio. cel. funnel or brown canal
 coelom
 caelom holding pouch of pharyngeal bar
 caelom around caecum
 blood-vessels of caecum
 caecum

primary bar with solid chitinous rod & coelomic pouch
 Pharynx
 caecum
 perigonadium (coelom)
 transv. muscle of epipleur.
 gonad cells

longue or secondary bar with hollow chitinous rod.
 lymph space & clot of metapleur
 metapleural sclerite
 atrium
 atrial epithelium

left metapleur
 atrium
 right metapleur
 blood-space (coelom)
 sub-epidermic conn. tissue of ventral wall of epipleur.

chitinous hollow rod
 chitinous solid rod
 ventral ridge of pharynx with long cilia
 epidermis thrown into ridges by partial contraction of the transverse muscle.
 endostylar skeletal plate.

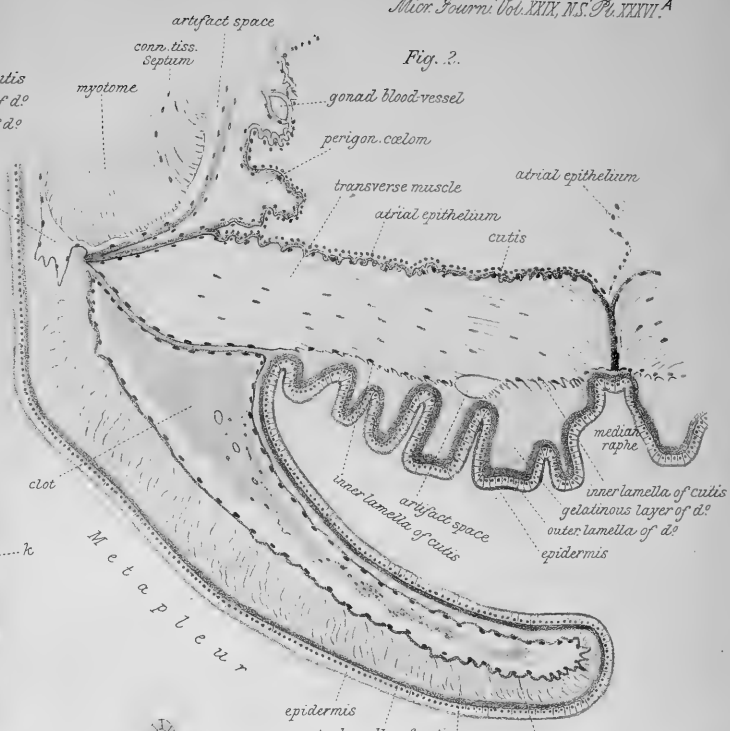
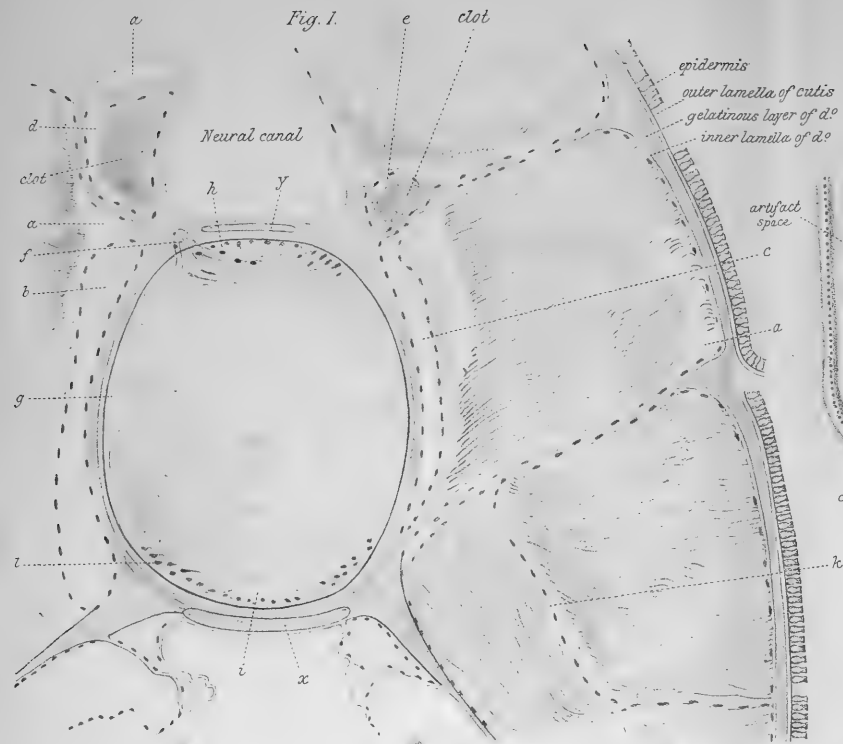
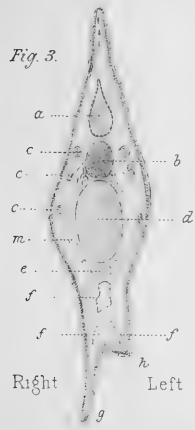
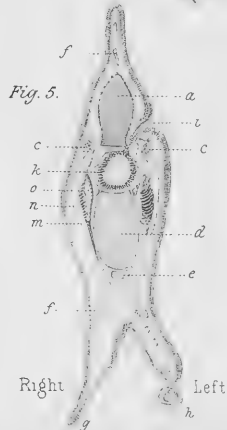


Fig. 3.



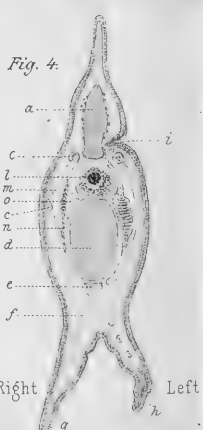
Right Left

Fig. 5.



Right Left

Fig. 4.



Right Left

Fig. 7.

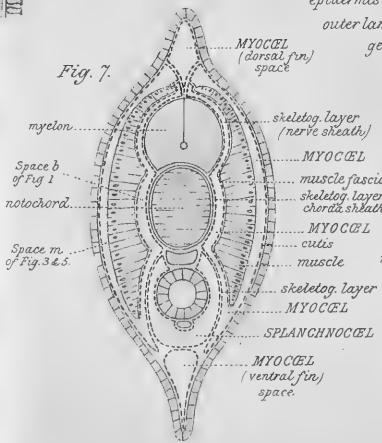
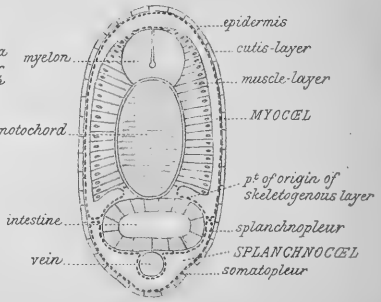
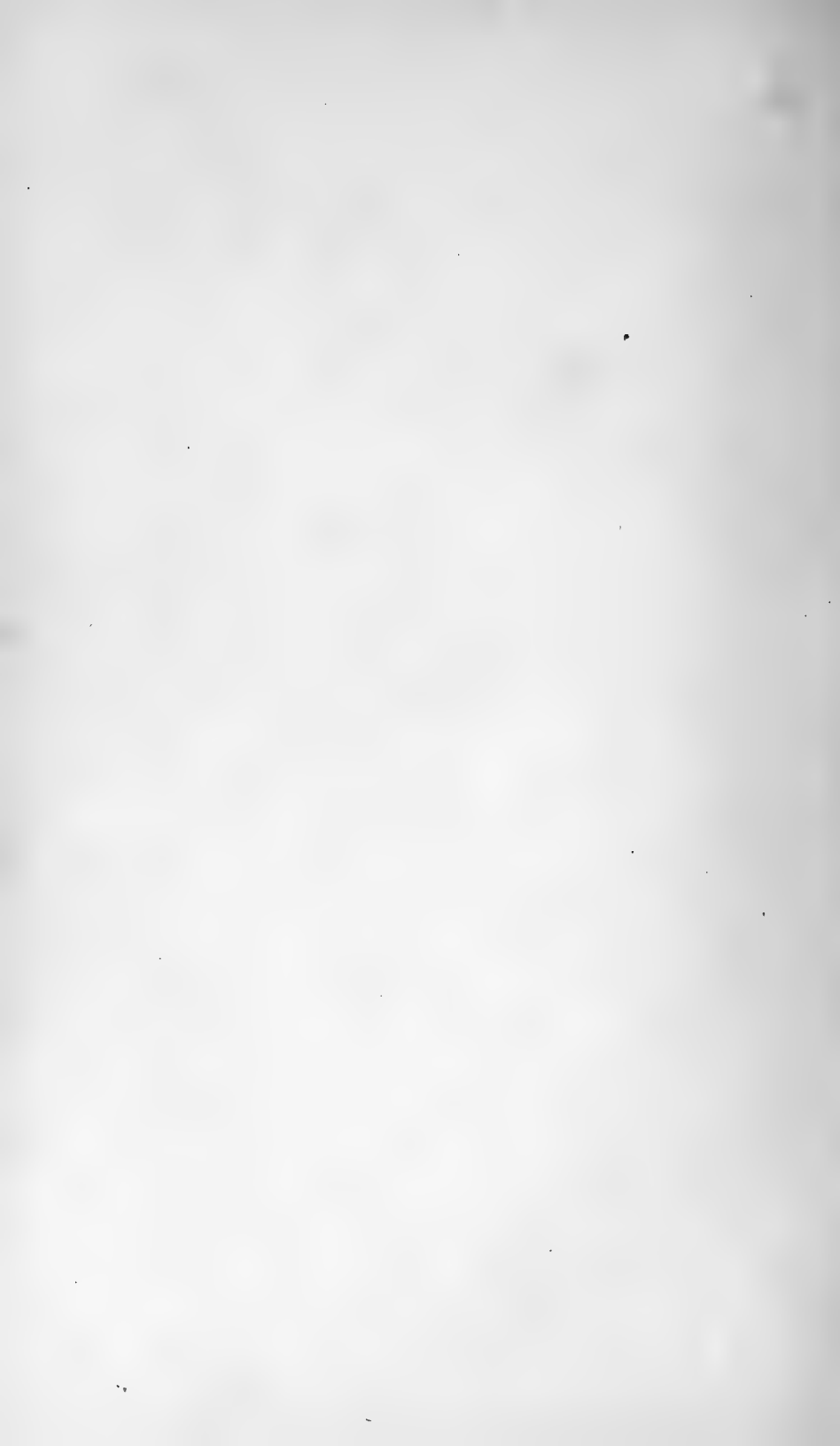
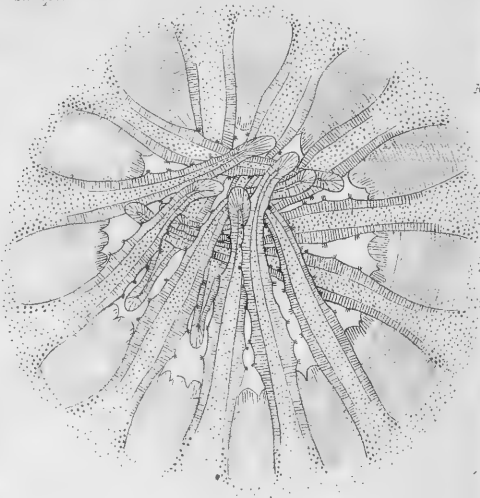
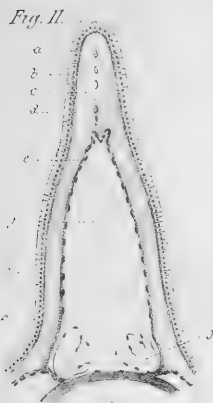
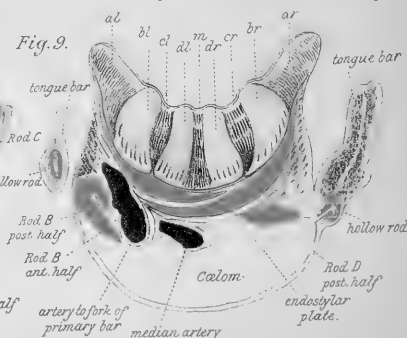
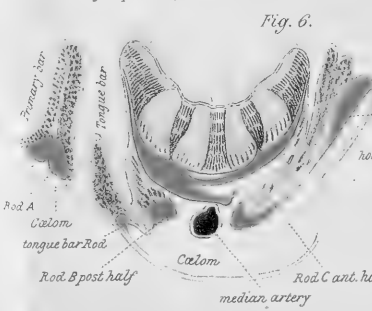
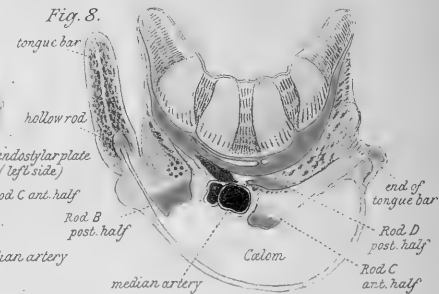
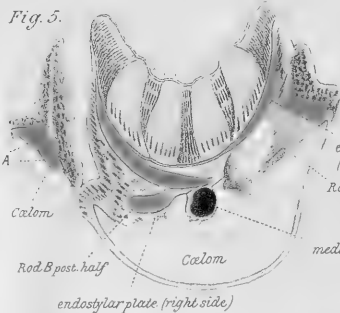
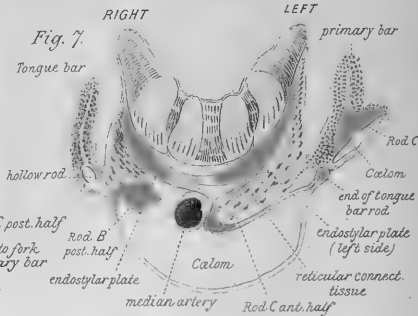
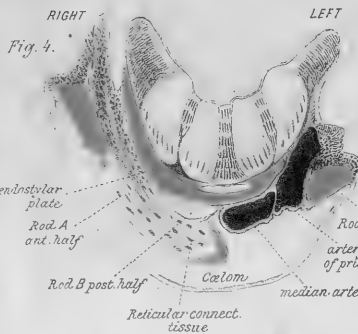
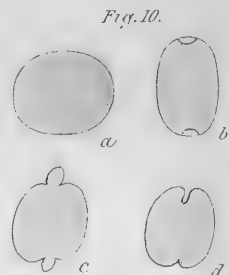
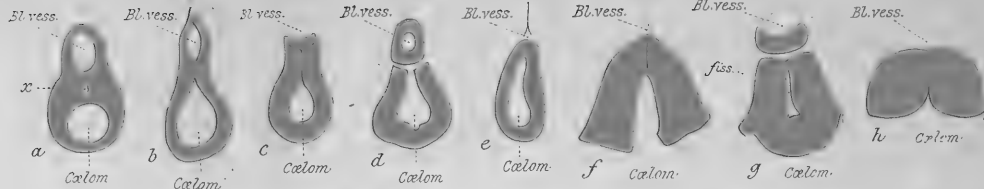
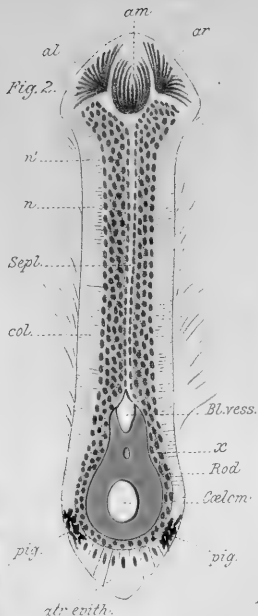
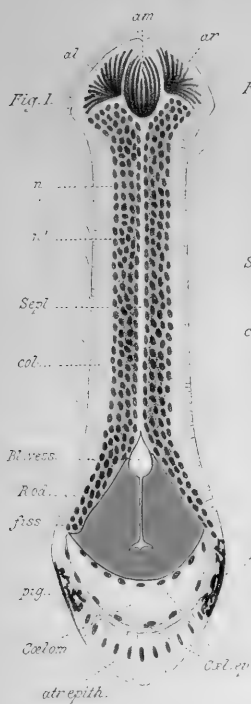
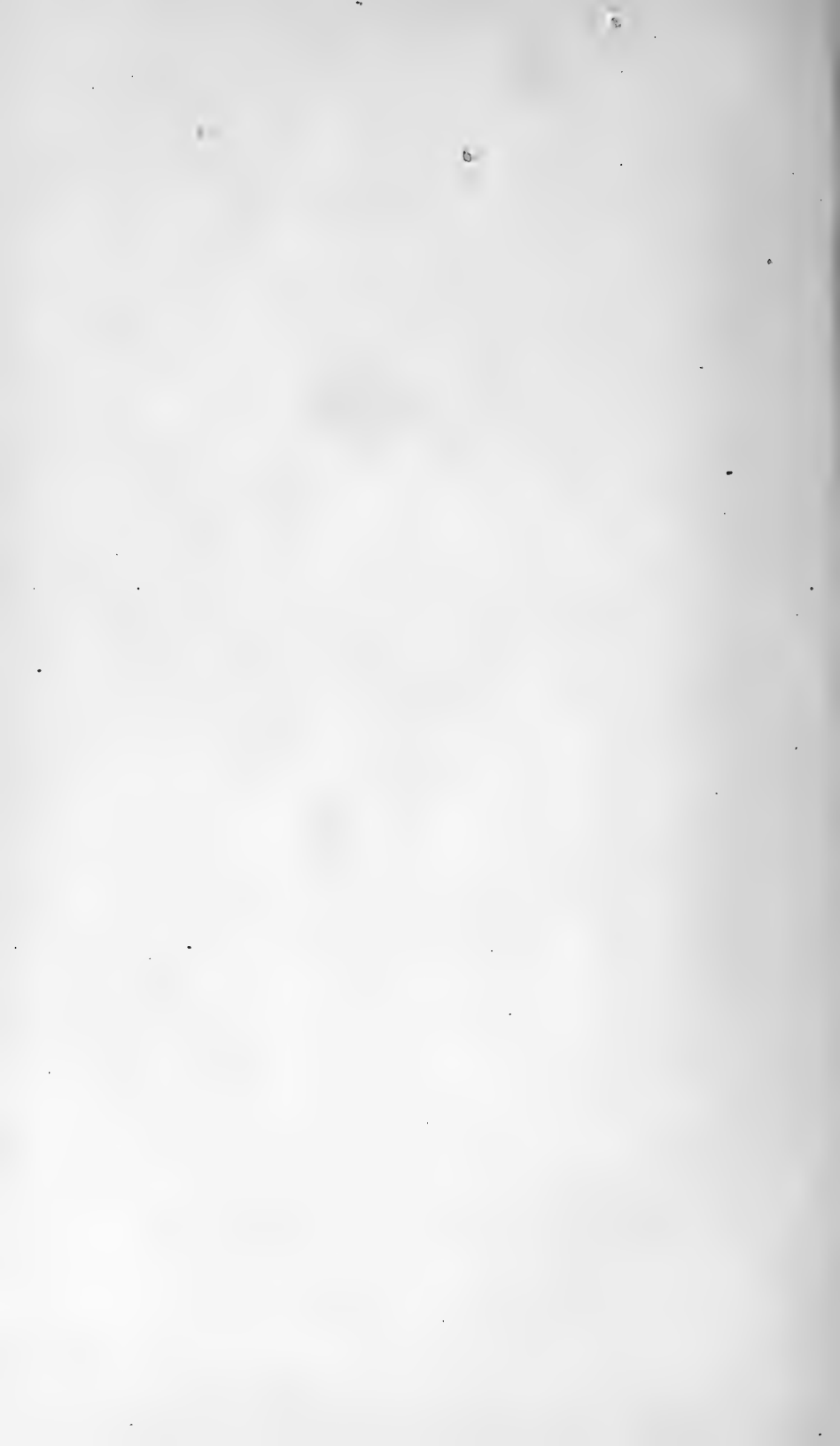


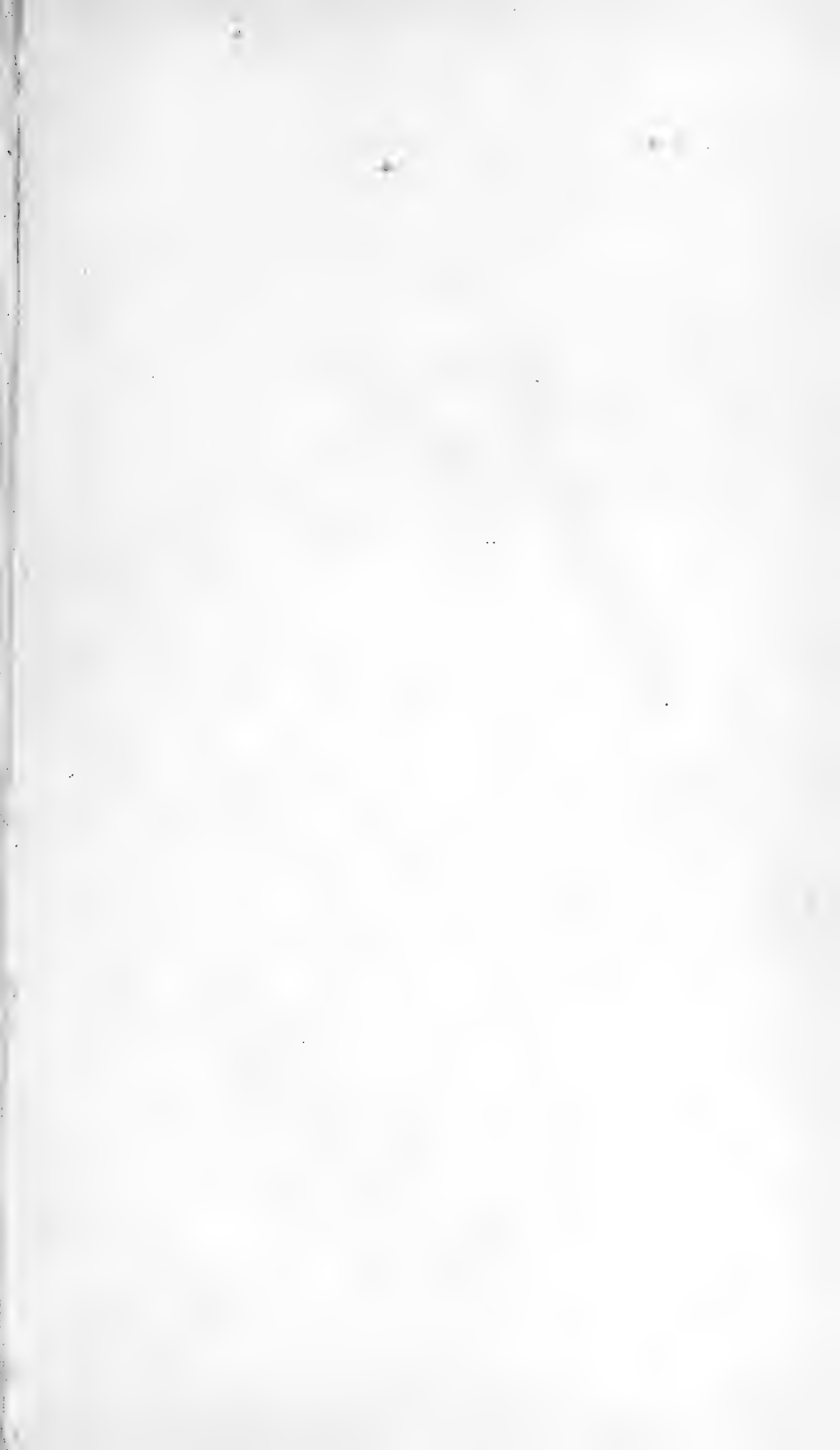
Fig. 6.

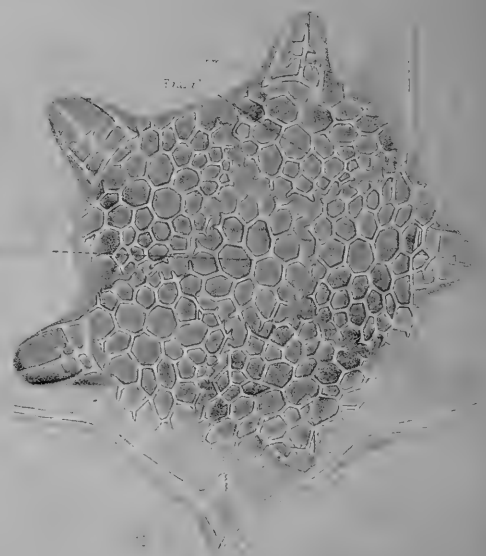
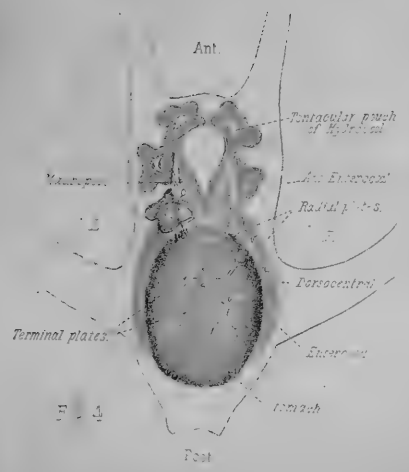
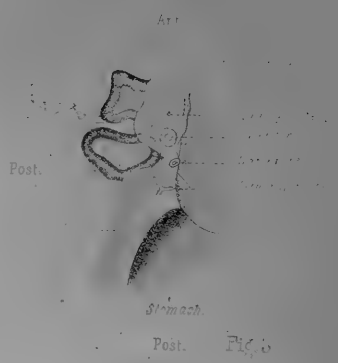
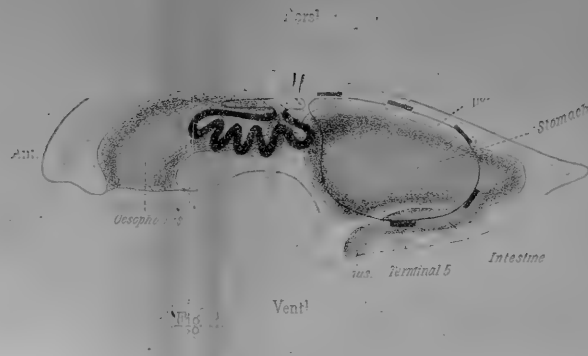
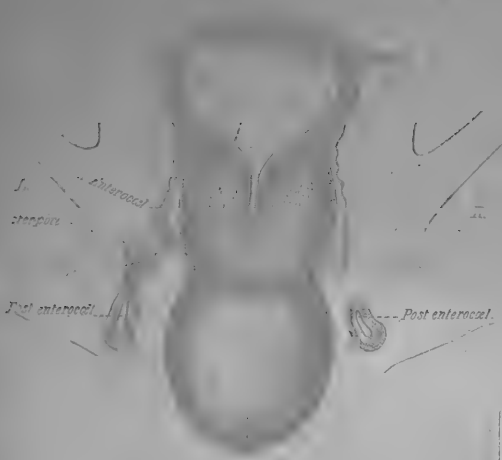


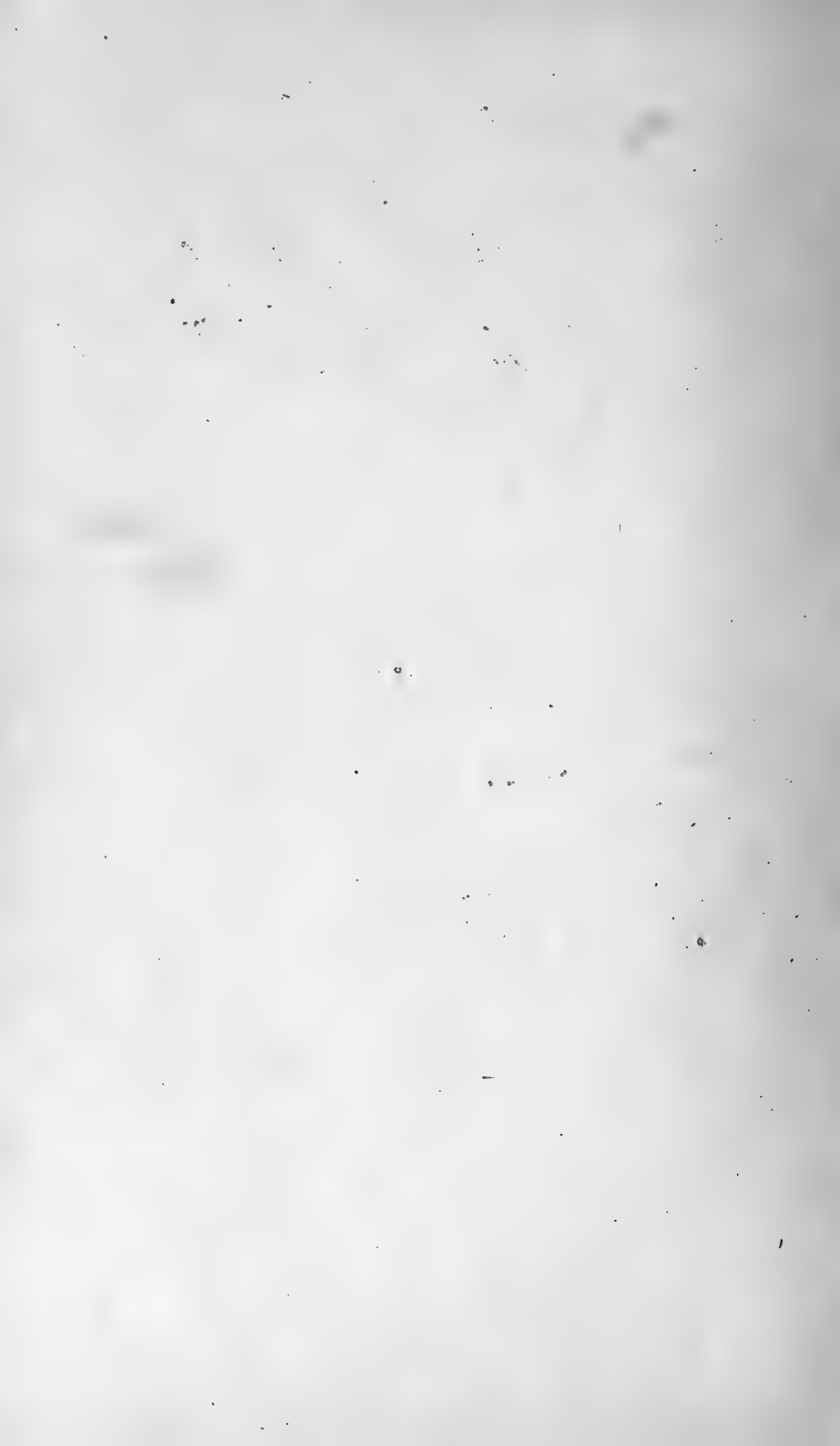


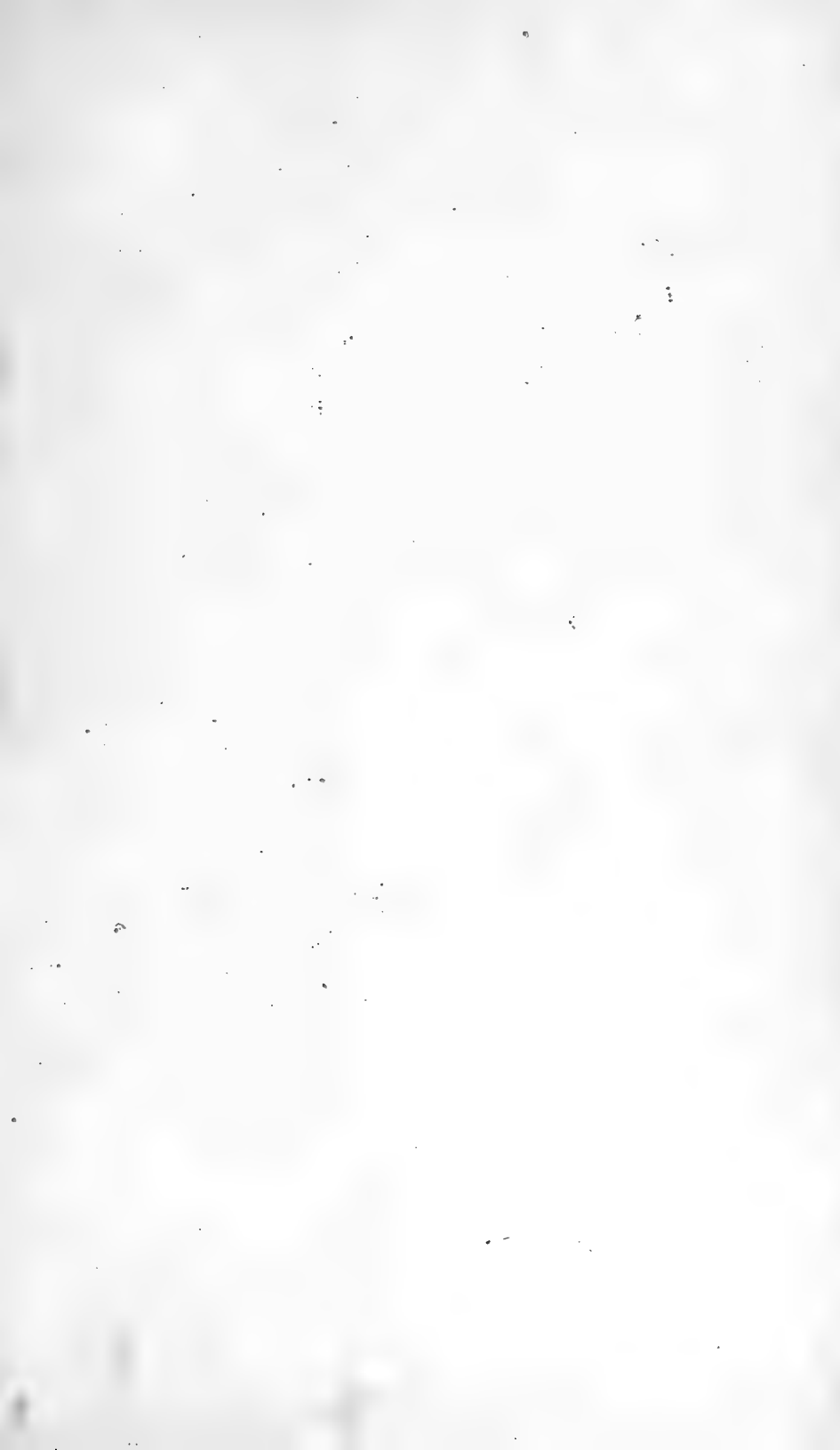


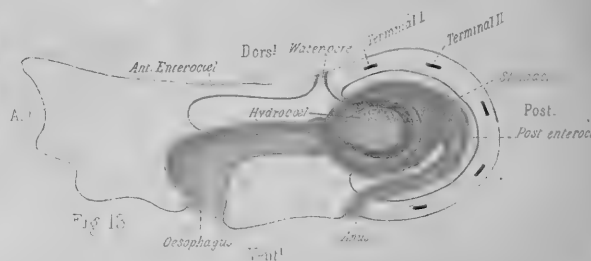
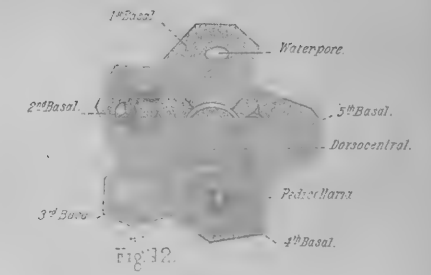
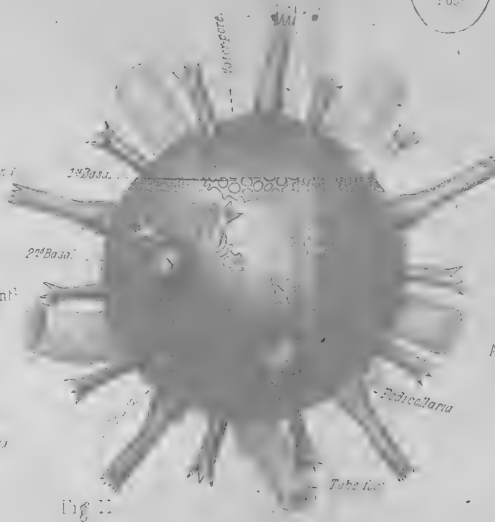
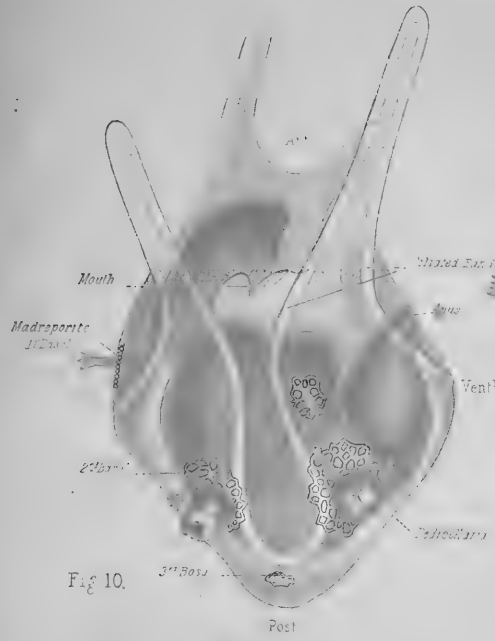
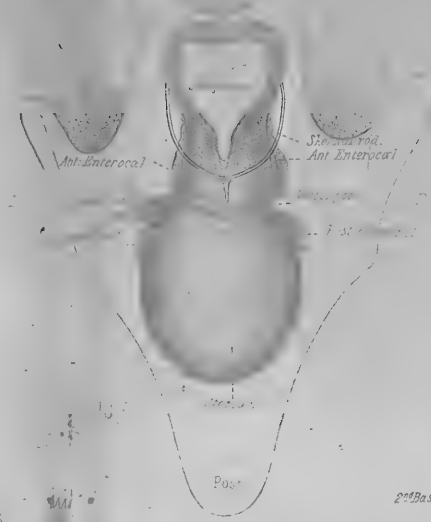
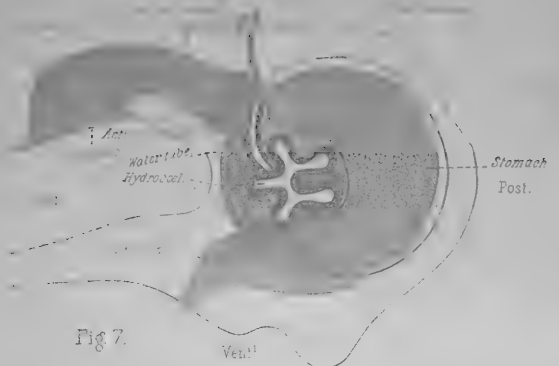














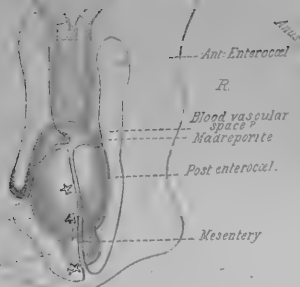


Fig. 14. Post. Ant.

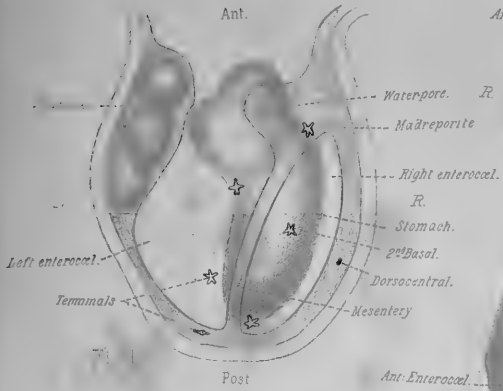


Fig. 15



Fig. 16.

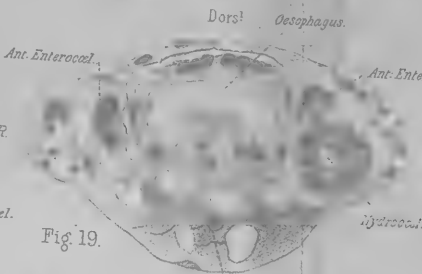


Fig. 17.

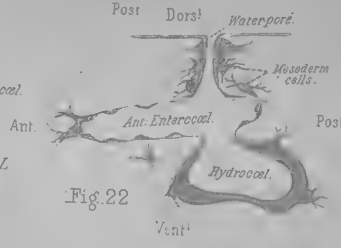


Fig. 18.

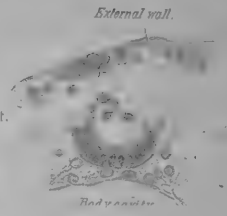


Fig. 19.



Fig. 20.

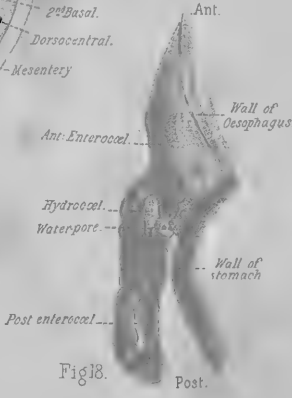


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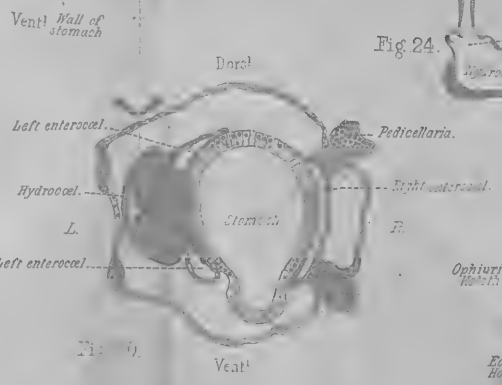


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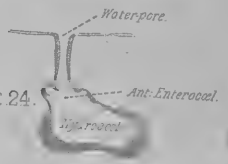


Fig. 23.

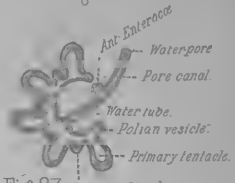


Fig. 24. Longitudinal

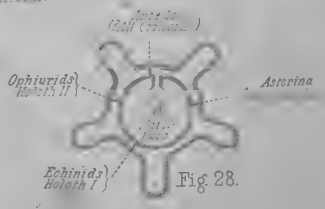


Fig. 25.

Ant-Enterocoel. Madreporite. Fig. 23.

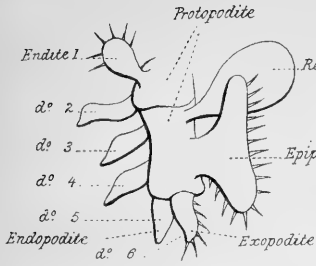


Fig. 1. Apus.

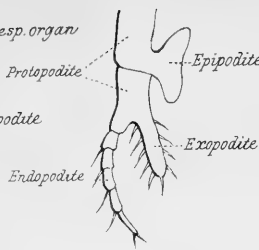


Fig. 2. Nebalia.

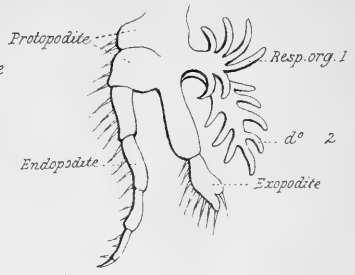


Fig. 3. Thysanopoda.

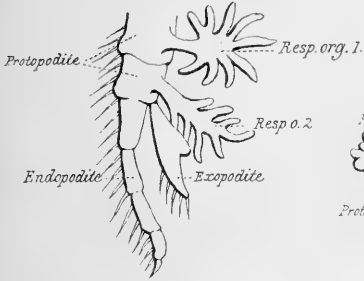


Fig. 4. Nematoscelis.

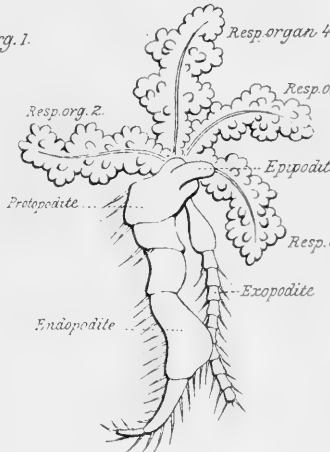


Fig. 5. Gnathopausia.

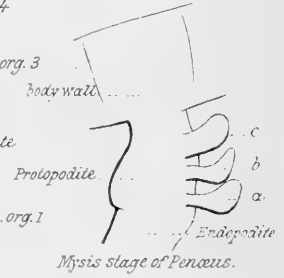


Fig. 6. Penæus Larva.

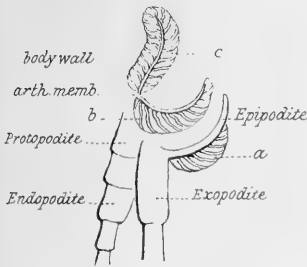


Fig. 7. Calliaxis Larva.

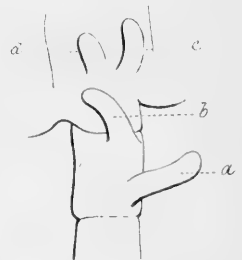


Fig. 8. Acanthocaris Larva.

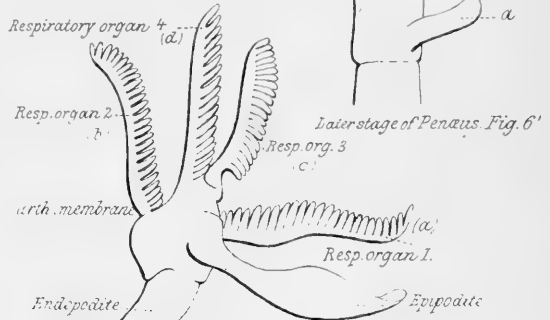


Fig. 9. Homarus

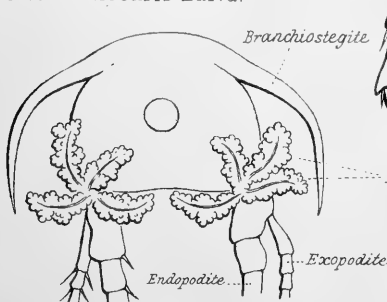


Fig. 10. Gnathopausia.

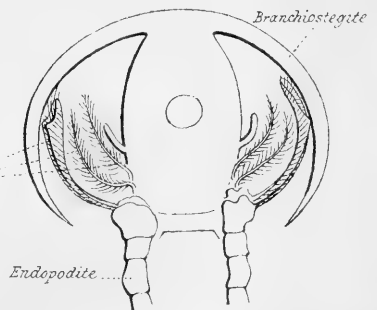


Fig. 11. Astacus





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