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2053

DUPLICATE

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202A

THE ROTIFERA ;

OR

WHEEL-ANIMALCULES.

BY

C. T. HUDSON, LL.D. CANTAB.

ASSISTED BY

P. H. GOSSE, F.R.S.

WITH ILLUSTRATIONS.

IN TWO VOLUMES.

PLATES.



LONDON :

LONGMANS, GREEN, AND CO.

1886.

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Those viewless beings,
Whose mansion is the smallest particle
Of the impassive atmosphere,
Enjoy and live like man:
And the minutest throb,
That through their frame diffuses
The slightest, faintest motion,
Is fixed, and indispensable,
As the majestic laws
That rule yon rolling orbs.

SHELLEY.

Qui curiosus postulat totum suæ
Patere menti, ferre qui non sufficit
Mediocritatis conscientiam suæ,
Judex iniquus, æstimator est malus
Suique naturæque; nam rerum parens,
Libanda tantum quæ venit mortalibus,
Nos scire pauca, multa mirari jubet.

GROTIUS.



2053 II

EXPLANATION OF THE LETTERING OF THE PLATES.

<i>c</i>	.	Corona									
<i>l</i>	.	Lobe of do.									
<i>sp</i>	.	Styligerous prominence .	.	.	.	.	.	.	.	.
<i>ch</i>	.	Chin									
<i>cc</i>	.	Ciliated cup									
<i>h</i>	.	Hook									
<i>hp</i>	.	Horny processes									
<i>f</i>	.	Foot									
<i>t</i>	.	Toe									
<i>cw</i>	.	Ciliary wreath									
<i>pw</i>	.	Principal wreath									
<i>sw</i>	.	Secondary wreath									
<i>tr</i>	.	Taster									
<i>v</i>	.	Vestibule									
<i>bf</i>	.	Buccal funnel									
<i>lp</i>	.	Lips									
<i>t</i>	.	Tube from lips to crop									
<i>ep</i>	.	Crop									
<i>mx</i>	.	Mastax									
<i>ti</i>	.	Trophi { <i>ms</i> . . malleus { <i>mm</i> . . manubrium or { <i>is</i> . . incus { <i>us</i> . . uncus Jaws { <i>is</i> . . incus { <i>rs</i> . . ramus { <i>fm</i> . . fulerum									Nutritive system.
<i>ce</i>	.	Oesophagus									
<i>s</i>	.	Stomach									
<i>i</i>	.	Intestine									
<i>r</i>	.	Rectum									
<i>cl</i>	.	Cloaca									
<i>sg</i>	.	Salivary gland									
<i>gg</i>	.	Gastric gland									
<i>fg</i>	.	Foot gland									
<i>lc</i>	.	Lateral canal									
<i>vt</i>	.	Vibratile tag									
<i>ev</i>	.	Contractile vesicle									
<i>oy</i>	.	Ovary									
<i>g</i>	.	Germ									
<i>om</i>	.	Ovum									
<i>ot</i>	.	Oviduct									
<i>p</i>	.	Penis									
<i>ss</i>	.	Sperm-sac									
<i>lm</i>	.	Longitudinal muscle									
<i>tm</i>	.	Transverse muscle									
<i>gn</i>	.	Ganglion									
<i>e</i>	.	Eye									
<i>a</i>	.	Dorsal antenna									
<i>a'</i>	.	Lateral antenna									
<i>ts</i>	.	Tactile style									
<i>n</i>	.	Nerve thread									

EXPLANATION OF PLATE A.

*** In all cases throughout the plates, both the plain and coloured, the figures that have the initial H attached to them have been drawn from life by Dr. Hudson, and those with the initial G, also from life, by Mr. Gosse.*

BRACHIONUS RUBENS and the details of its structure.

1. Dorsal view	H	9. Malleus, as in nature	G
2. Ventral view; upper half	H	10. Incus, side view	G
3. Lorica and muscles; dorsal view . . .	H	11. Ganglion and eye	H
4. " " ventral view	H	12. Extremity of foot	H
5. Side view	H	13. Male; penis withdrawn (after Dr. Cohn)	
6. Mastax and trophi; dorsal view . . .	G	14. Male; penis extruded (after Dr. Cohn)	
7. Trophi; ventral view	G	15. Dorsal antenna	H
8. Malleus expanded by pressure	G	16. Ephippial egg (after Dr. Cohn)	

In all the above figures the letters signify as follows:—

<i>sp</i>	stylicherous prominence	<i>cl</i>	cloaca
<i>f</i>	foot	<i>sg</i>	salivary gland
<i>t</i>	toe	<i>gg</i>	gastric gland
<i>cw</i>	ciliary wreath	<i>fg</i>	foot gland
<i>bf</i>	buccal funnel	<i>lc</i>	lateral canal
<i>lp</i>	lips	<i>vt</i>	vibratile tag
<i>mx</i>	mastax	<i>cv</i>	contractile vesicle
<i>ti</i>	trophi	<i>oy</i>	ovary
<i>ms</i>	malleus	<i>g</i>	germ
<i>us</i>	uncus	<i>om</i>	ovum
<i>mm</i>	manubrium	<i>p</i>	penis
<i>is</i>	incus	<i>ss</i>	sperm sac
<i>rs</i>	ramus	<i>lm</i>	longitudinal muscle
<i>fm</i>	fulerum	<i>gn</i>	ganglion
<i>oe</i>	oesophagus	<i>e</i>	eye
<i>s</i>	stomach	<i>a</i>	dorsal antenna
<i>i</i>	intestine	<i>a'</i>	lateral antenna
<i>r</i>	rectum	<i>ts</i>	tactile style

Fig. 5

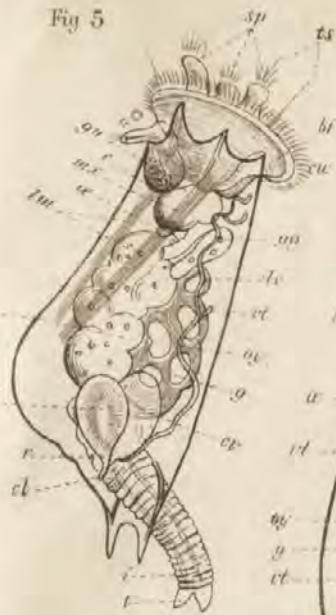


Fig. 1

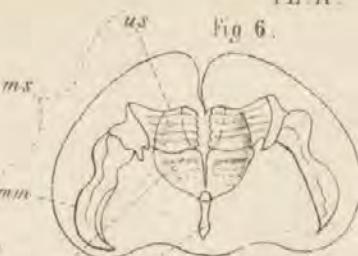
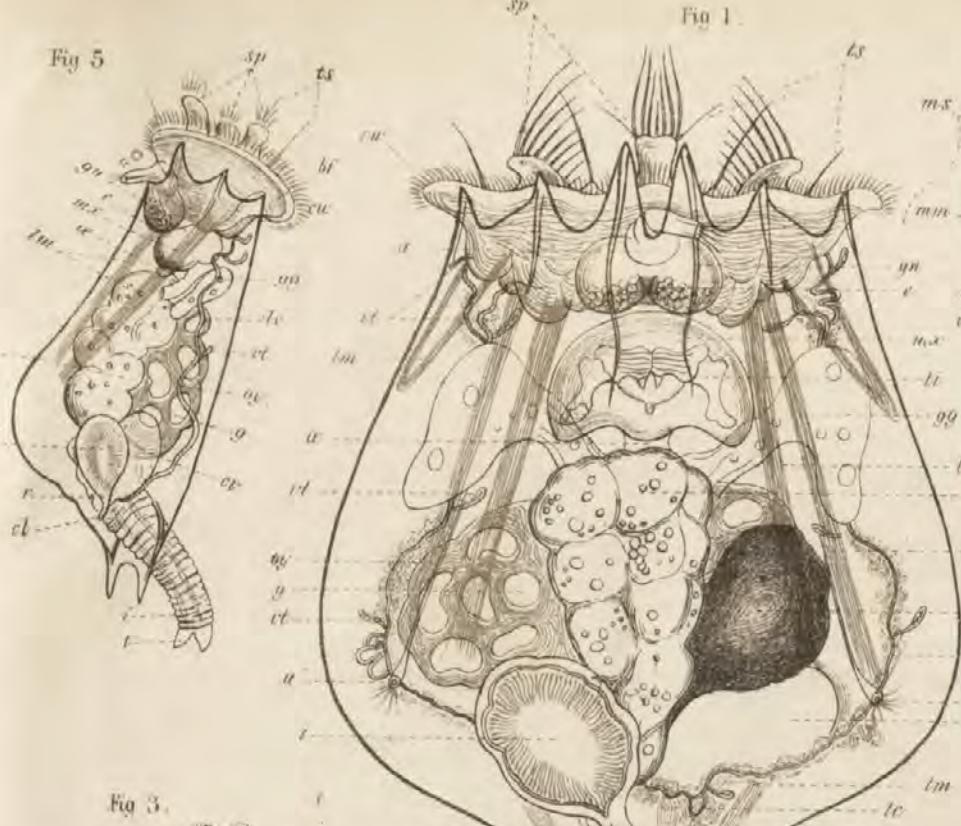


Fig. 3

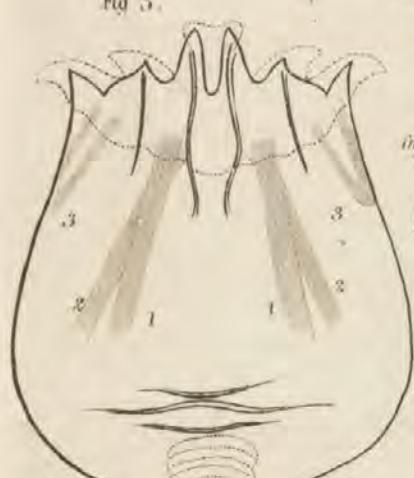
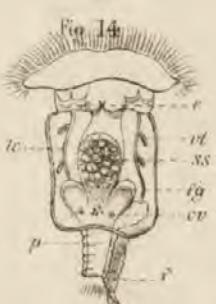
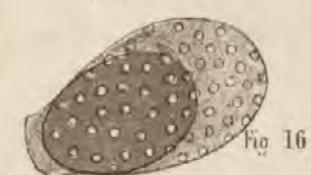
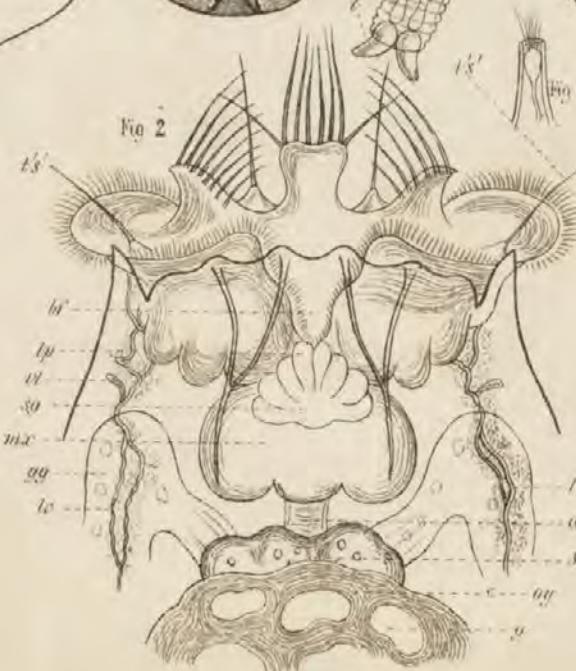


Fig. 12



EXPLANATION OF PLATE B.

1. <i>Melicerta ringens</i>	· · · · · · · ·	Leuwenhook, 1703-1705
2. Trochal disc of <i>Melicerta ringens</i> , from above	· · · · · · · ·	
3. <i>Limnias ceratophylli</i>	· · · · · · · ·	
4. Trochal disc of <i>Limnias ceratophylli</i> , from above	· · · · · · · ·	
5. Rotifer or <i>Philodina</i>	· · · · · · · ·	Baster, 1759
6. <i>Synchaeta Baltica</i>	· · · · · · · ·	
7. Rotifer <i>macrurus</i>	· · · · · · · ·	
8. <i>Brachionus Bakeri</i>	· · · · · · · ·	Baker, 1753
9. <i>Philodina</i> or Rotifer	· · · · · · · ·	
10. <i>Euchlanis</i>	· · · · · · · ·	
11. <i>Triarthra</i>	· · · · · · · ·	
12. <i>Actinurus Neptunius</i>	· · · · · · · ·	Eichhorn, 1775
13. <i>Megalotrocha</i>	· · · · · · · ·	
14. <i>Stephanoceros Eichhornii</i>	· · · · · · · ·	
15, 16. <i>Floscularia ornata</i>	· · · · · · · ·	
17. <i>Brachionus pala</i>	· · · · · · · ·	Joblot, 1718
18. <i>Philodina</i> or Rotifer	· · · · · · · ·	
19. <i>Lacinularia socialis</i>	· · · · · · · ·	Brady, 1755
20. <i>Stephanops cirratus</i>	· · · · · · · ·	
21. <i>Brachionus Bakeri</i>	· · · · · · · ·	
22. <i>Pterodina patina</i>	· · · · · · · ·	
23. <i>Salpina</i>	· · · · · · · ·	
24. <i>Euchlanis</i>	· · · · · · · ·	
25. <i>Dinocharis pocillum</i>	· · · · · · · ·	Müller, 1776-1786
26. <i>Mastigocerca carinata</i>	· · · · · · · ·	
27. <i>Notommata tigris</i>	· · · · · · · ·	
28, 29. <i>Hydatina senta</i>	· · · · · · · ·	
30. <i>Notommata longiseta</i>	· · · · · · · ·	
31, 32. <i>Lacinularia socialis</i>	· · · · · · · ·	
33. <i>Notommata aurita</i>	· · · · · · · ·	
34. <i>Anuræa striata</i>	· · · · · · · ·	



PLATE C.

Showing the Coronæ, Trophi, and Feet of some of the principal Families of the ROTIFERA.¹

Order I. RHIZOTA.

Floseculariadæ	Fig. I. Flosecularia campanulata.
"	" Stephanoceros Eichhornii.
Melicertadæ	Fig. II. Melicerta ringens.

Order II. BDELLOOIDA.

Philodinadæ	Fig. III. Rotifer citrinus.
Adinetadæ	Fig. IV. Adineta vaga.

Order III. PLOIMA.

Sub-order IL-LORICATA.

Asplanchnadæ	Fig. V. Asplanchna Ebbesbornii.
Synchætadæ	" Synchæta mordax.
Hydatinadæ	" Hydatina senta.

Sub-order LORICATA.

Division I.

Euchlanidæ	Fig. VI. Euchlanis deflexa.
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Division II.

Pterodinadæ	Fig. VI. Pterodina patina.
Brachionidæ	" Brachionus urceolaris.

Order IV. SCIRTOPODA.

Pedalionidæ	Fig. VII. Pedalion mirum.
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¹ See pages 30, 31, 32.

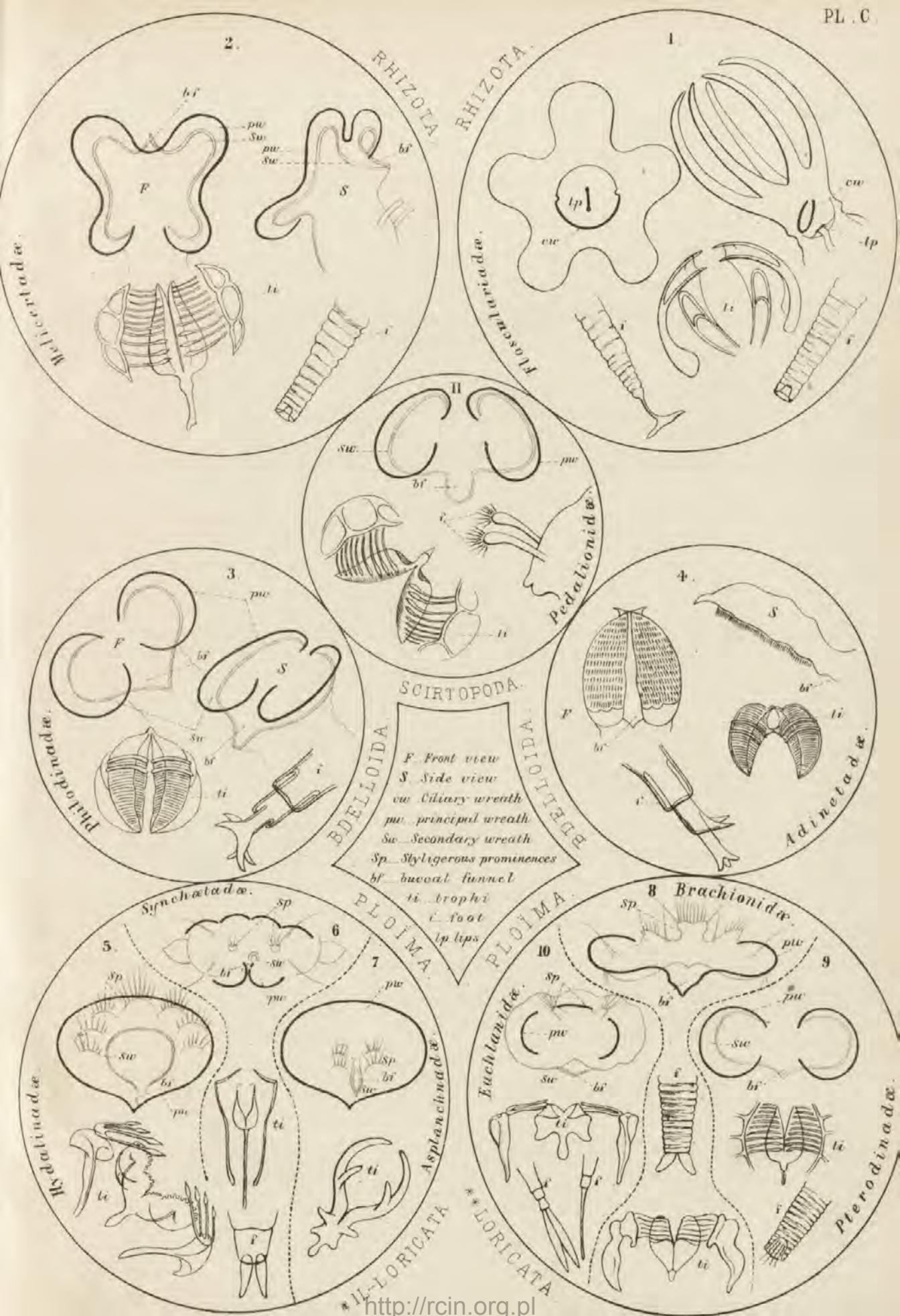


PLATE D.

1. <i>Flosecularia campanulata</i>	.	with everted tube (after Dr. Moxon)								H
2. <i>Flosecularia Cyclops</i>	.	ventral view . . . . .	.	.	.	.	.	.	.
3. <i>Acyclus inquietus</i>	.	side view . . . . .	.	.	.	.	.	.	.
3a. " "	.	head, ventral view . . . . .	.	.	.	.	.	.	.	} after Prof. Leidy.
3b. " "	.	head, closed, side view . . . . .	.	.	.	.	.	.	.
4. <i>Apsilus lentiformis</i>	.	dorsal view . . . . .	.	.	.	.	.	.	.
4a. " "	.	ventral view, contracted . . . . .	.	.	.	.	.	.	.
4b. " "	.	nervous ganglion, lateral canals, and vibratile tags . . . . .	.	.	.	.	.	.	.	} after El. Metsch- nikoff
4c. " "	.	trophi . . . . .	.	.	.	.	.	.	.
4d. " "	.	young female, dorsal view . . . . .	.	.	.	.	.	.	.
4e. " "	.	male, dorsal view . . . . .	.	.	.	.	.	.	.
4f. " "	.	hind extremity of male . . . . .	.	.	.	.	.	.	.
5. <i>Apsilus bipera</i>	.	ventral view . . . . .	.	.	.	.	.	.	.
5a. " "	.	head, dorsal view, showing ciliary wreath . . . . .	.	.	.	.	.	.	.	} after Miss Foulke
6. <i>Melicerta conifera</i>	.	male coming out of tube . . . . .	.	.	.	.	.	.	.
6a. " "	.	male, side view . . . . .	.	.	.	.	.	.	.	G
7. <i>Limnias ceratophylli</i>	.	male . . . . .	.	.	.	.	.	.	.	G
8. <i>Oecistes velatus</i>	.	side view; corona expanded . . . . .	.	.	.	.	.	.	.	G
8a. " "	.	side view; corona contracted . . . . .	.	.	.	.	.	.	.	G
8b. " "	.	corona, side view, showing thickenings . . . . .	.	.	.	.	.	.	.	G
8c. " "	.	foot and sucker . . . . .	.	.	.	.	.	.	.	G
8d. " "	.	cloaca, and surrounding parts . . . . .	.	.	.	.	.	.	.	G
8e. " "	.	mastax, front view . . . . .	.	.	.	.	.	.	.	G
8f. " "	.	mastax, side view . . . . .	.	.	.	.	.	.	.	G
9. <i>Megalotrocha alboflavicans</i>	.	young female . . . . .	.	.	.	.	.	.	.	G
9a. " "	.	young male (?) . . . . .	.	.	.	.	.	.	.	G
10. <i>Conochilus volvox</i>	.	male, dorsal view (after Dr. Cohn)	.	.	.	.	.	.	.
11. <i>Trochosphaera æquatorialis</i>	.	female, side view (after Prof. C. Semper)	.	.	.	.	.	.	.

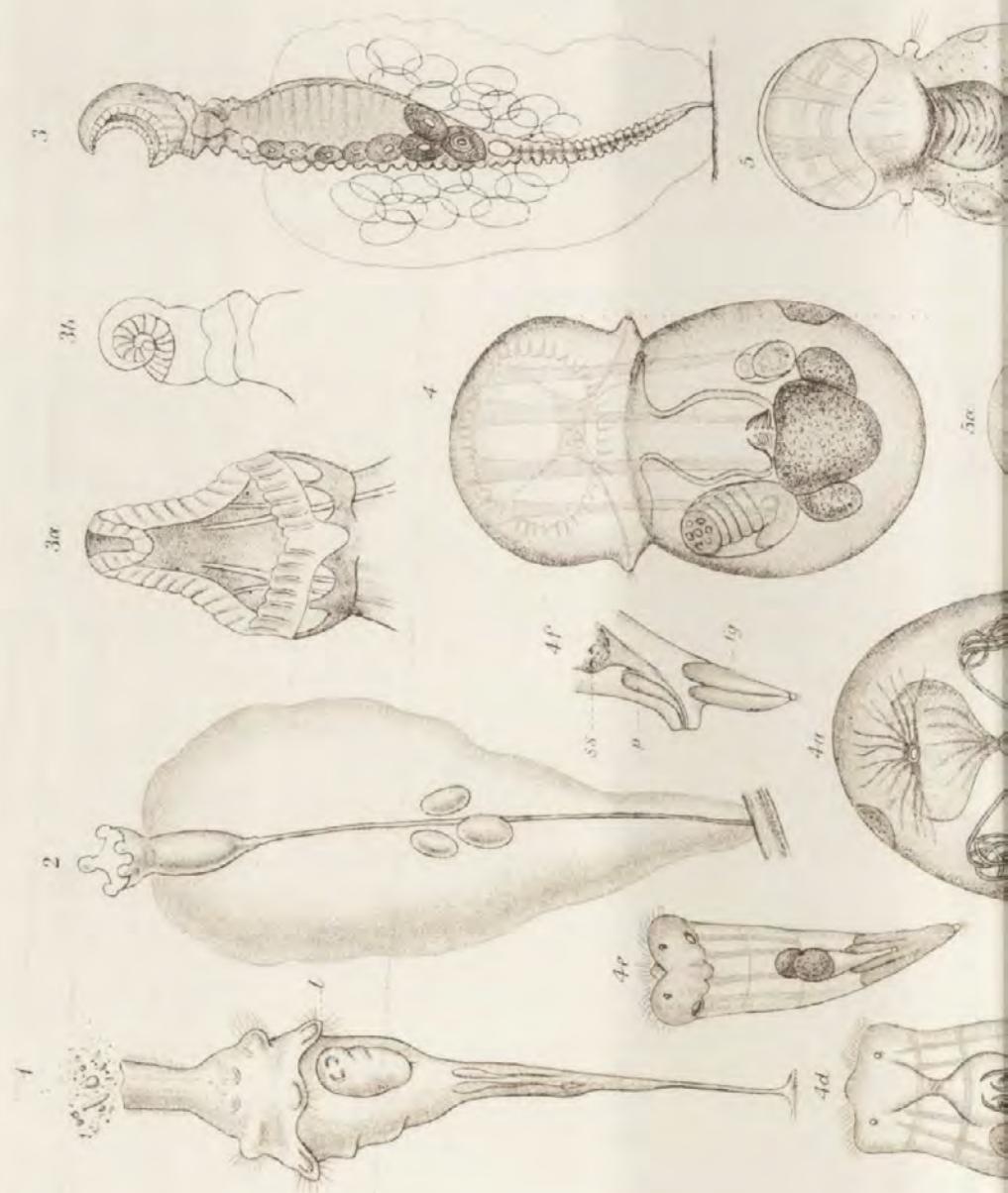
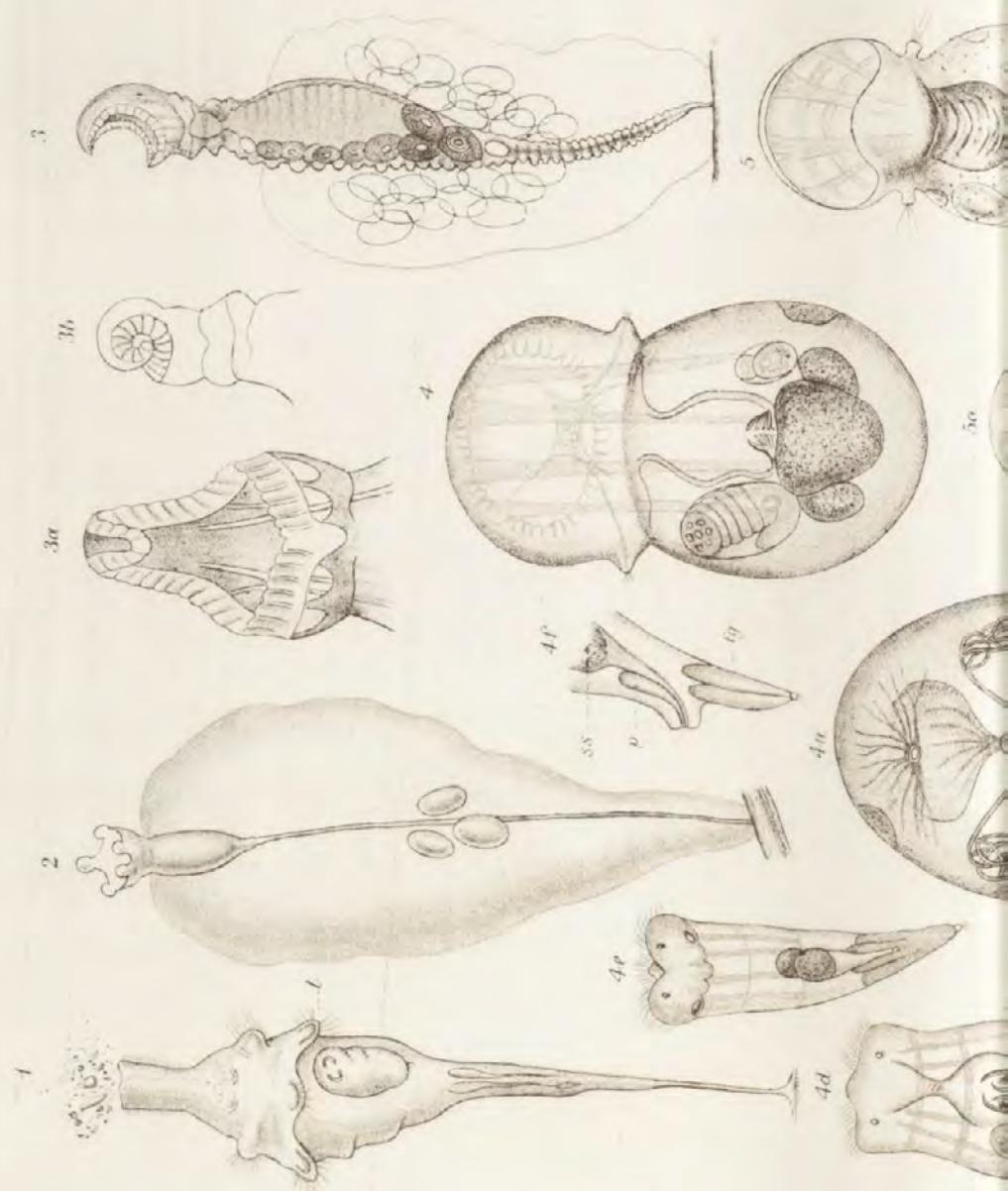




FIG. 3 C. THIDON
 FIG. 9 PHILIPSON

1. LACUNULARIA CAMPANULATA 2. FLOSCULARIA CYCLOPS 3. ACYCLUS INQUIETUS 4. AFSITUS TENTIFORMIS 5. APSILUS BIPLERA.
 6. MELICERTA CONIFERA 7. LIMNIAS CERATOPHYLLI 8. ECISTES VELATUS 9. MEGALOTROCHA ALBOFLAVICANS
 10. CONOCHILUS VOLVOX 11. TROCHOSPHERA AEQUATORIALIS

Hannart Imp.



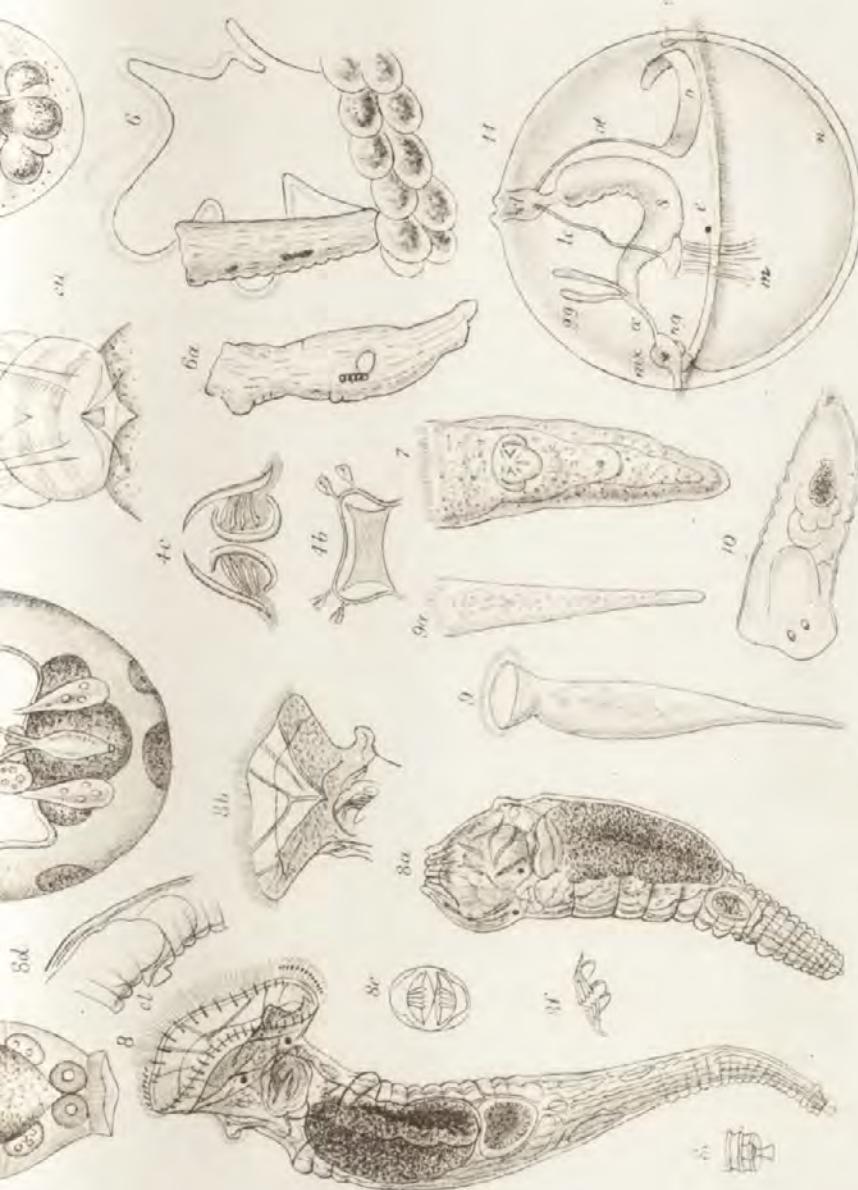


Fig. 2. O. Thümler's
O. & P. H. Gossae } acervatae

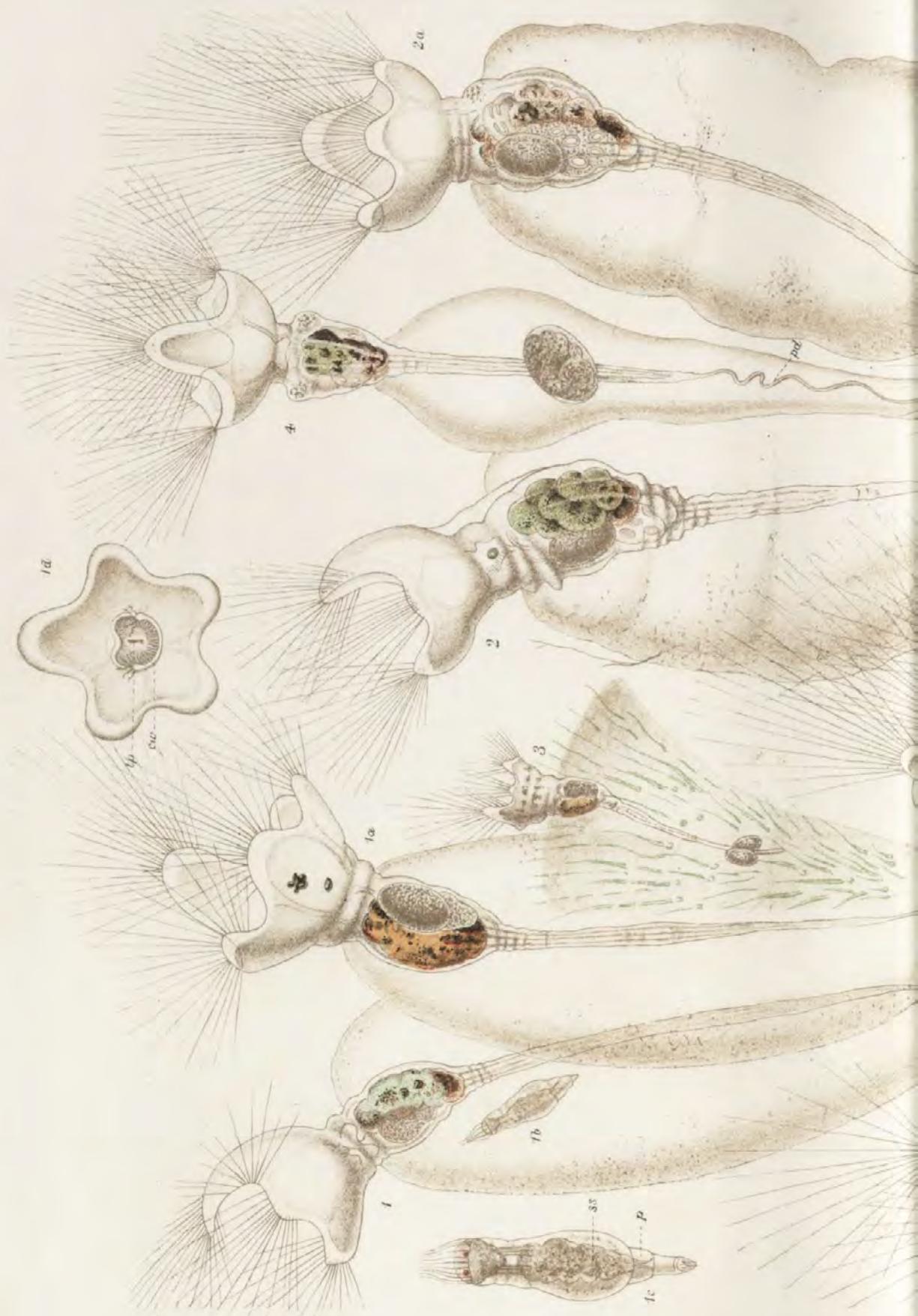
1. LUSULAHIA CAMPANULATA. 2. FLOSCULARIA CYCLOPS. 3. ACYCLUS INQUIETUS. 4. APSIUS INTIFORMIS. 5. APSILUS BIPERA
6. MELICERTA CONIFERA. 7. LINNIAS CERATOPHYLLI. 8. ECISTES VELATUS. 9. MEGALOTROCHA ALBOFLAVICANS
10. CONOCYLUS VOLVOX. 11. TROCHOSPHERA EQUATORIALIS.

Hannak imp.

PLATE I.

* * In all cases throughout the plates, where the sex is not mentioned, the animal is a female.

1.	<i>Floscularia campanulata</i>	.	.	.	.	.	.	side view	.	.	.	.	H
1a.	"	"	.	.	.	.	.	obliquely ventral	.	.	.	.	H
1b.	"	"	.	.	.	.	.	male, same scale as 1	.	.	.	.	H
1c.	"	"	.	.	.	.	.	male, enlarged	.	.	.	.	H
1d.	"	"	.	.	.	.	.	female, trochal disc from above	.	.	.	.	H
2.	<i>Floscularia ambigua</i>	.	.	.	.	.	.	side view	.	.	.	.	H
2a.	"	"	.	.	.	.	.	obliquely ventral	.	.	.	.	H
3.	<i>Floscularia algicola</i>	.	.	.	.	.	.	side view	.	.	.	.	H
4.	<i>Floscularia longicaudata</i>	.	.	.	.	.	.	dorsal view	.	.	.	.	H
5.	<i>Floscularia coronetta</i>	.	.	.	.	.	.	side view	.	.	.	.	H
5a.	"	"	(after Cubitt)	.	.	.	.	trochal disc, from above	.	.	.	.
6.	<i>Floscularia Cyclops</i>	.	.	.	.	.	.	side view	.	.	.	.	H
7.	<i>Floscularia cornuta</i>	.	.	.	.	.	.	side view	.	.	.	.	H
8.	<i>Floscularia regalis</i>	.	.	.	.	.	.	side view	.	.	.	.	H
8a.	"	"	.	.	.	.	.	dorsal view	.	.	.	.	H
9.	<i>Floscularia ornata</i>	.	.	.	.	.	.	obliquely dorsal	.	.	.	.	H
9a.	"	"	trophi	.	.	.	.	side view	.	.	.	.	G
9b.	"	"	"	.	.	.	.	obliquely from above	.	.	.	.	G
9c.	"	"	young female just hatched	.	.	.	.	.	.	.	.	.	G
9d.	"	"	the same a little older	.	.	.	.	.	.	.	.	.	G





E. M. Hansen ad nov del.

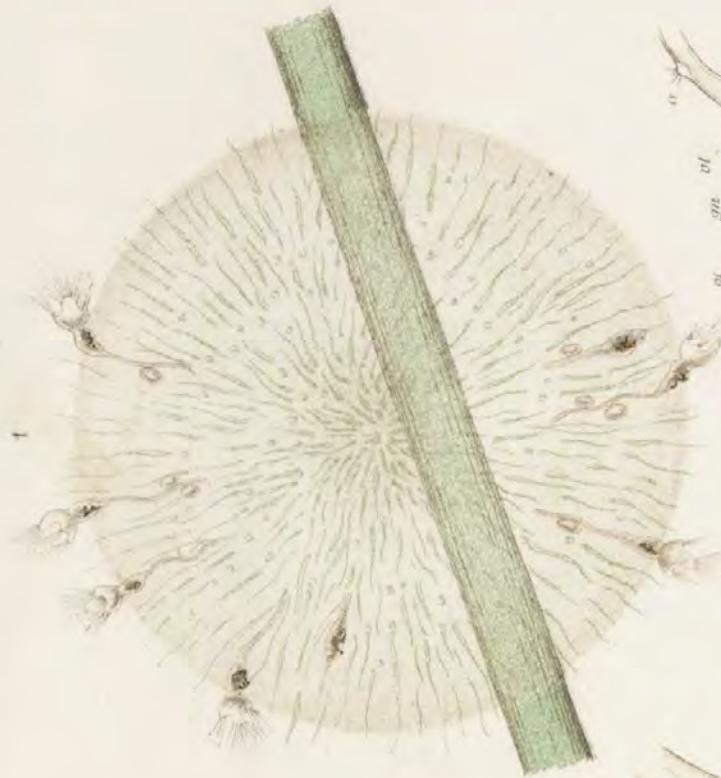
FLÖSSCULARIA.

Hannart imp.

1. *F. CAMPANULATA*. 2. *F. AMBIGUA*. 3. *F. FALGIOLA*. 4. *F. FLONGICAUDA*.
5. *F. CORONETTA*. 6. *F. CYCLOPS*. 7. *F. CORNUTA*. 8. *F. REGALIS*. 9. *F. ORNATA*

PLATE II.

1.	<i>Floscularia algicola</i>	.	.	.	a cluster.	.	.	.	.	H
1a.	"	.	.	.	side view of head	.	.	.	.	H
1b.	"	.	.	.	dorsal view of head	.	.	.	.	H
2.	<i>Floscularia coronetta</i>	.	.	.	dorsal view of head	.	.	.	.	H
3.	<i>Floscularia campanulata</i> (? <i>ambigua</i>)				diagram after Dr. Moxon					
4.	Diagram of a Floscule	.	.	.	.	.	.	.	.	H
5.	<i>Floscularia Hoodii</i>	.	.	.	side view	.	.	.	.	H
5a.	"	.	.	.	ventral view	.	.	.	.	H
6.	<i>Floscularia trilobata</i>	.	.	.	dorsal view	.	.	.	.	H
6a.	"	.	.	.	ventral view	.	.	.	.	H



5b

FILОСCILARIA.

1. F. AMBIGUA MINOR. 2. F. CORONETA. 3. F. CAMPANULATA (?). 4. DIAGRAM OF A FLOSCULE.
5. F. HOODI. 6. F. TRILOBATA.

PLATE III.

1.	<i>Flosecularia mira</i>	.	seen obliquely from above	.	.	.	.	H
2.	<i>Flosecularia mutabilis</i>	.	side view; swimming	.	.	.	.	H
2a.	"	"	side view; at rest	.	.	.	.	H
2b.	"	"	young female, ventral view	.	.	.	.	H
2c.	"	"	young male, side view	.	.	.	.	H
3.	<i>Flosecularia calva</i>	.	side view	.	.	.	.	H
3a.	"	"	young female, dorsal view (after Mr. J. Hood)	.	.	.	.	H
3b.	"	"	young male, side view (after Mr. J. Hood)	.	.	.	.	H



Hannart imp.

FLOSCULARIA.

1.F.MIRA. 2.F.MUTABILIS. 3.F.CALVA. 4.F.E.DENTATA.

C.T.Hudson ad viv del

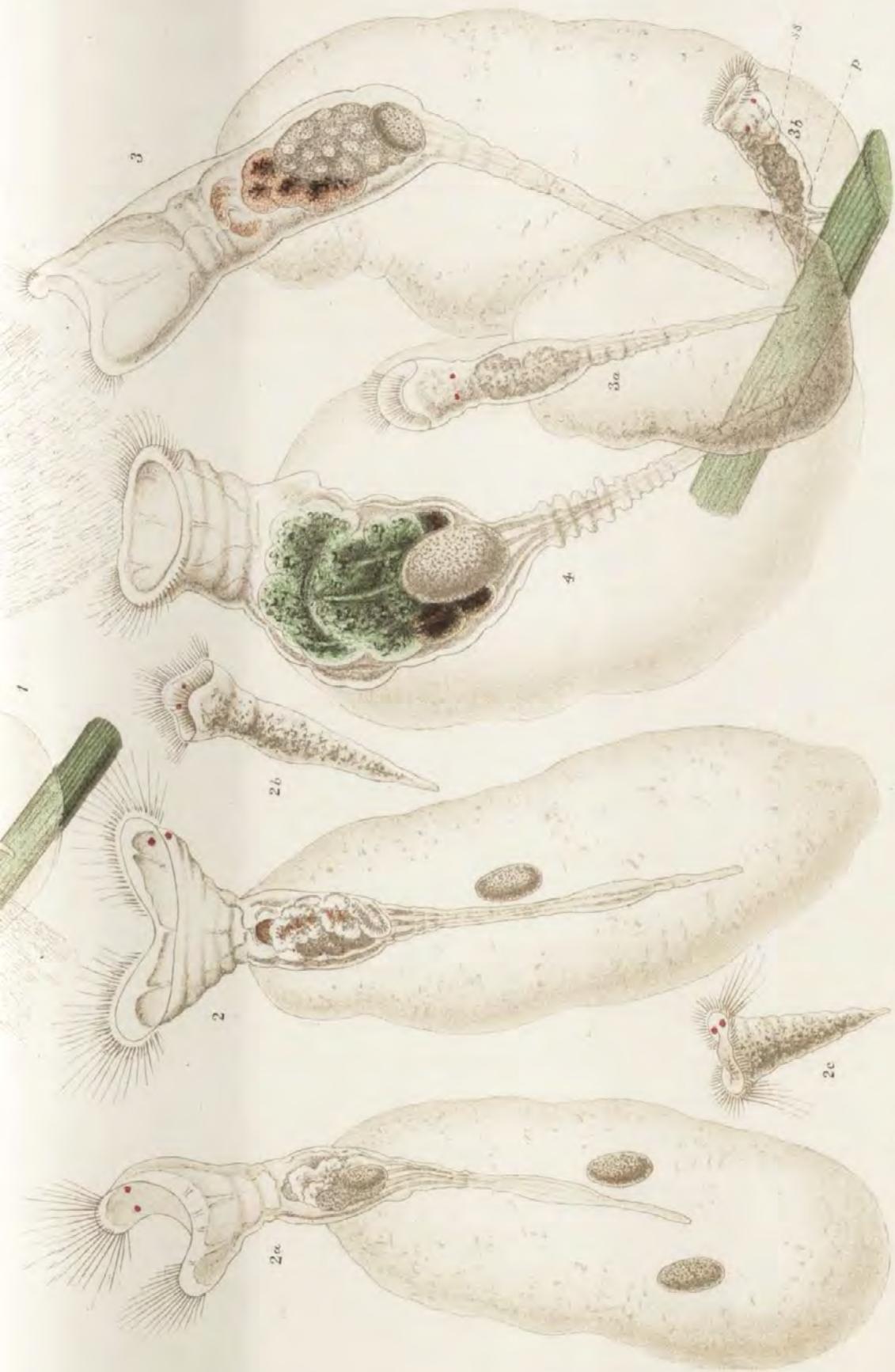
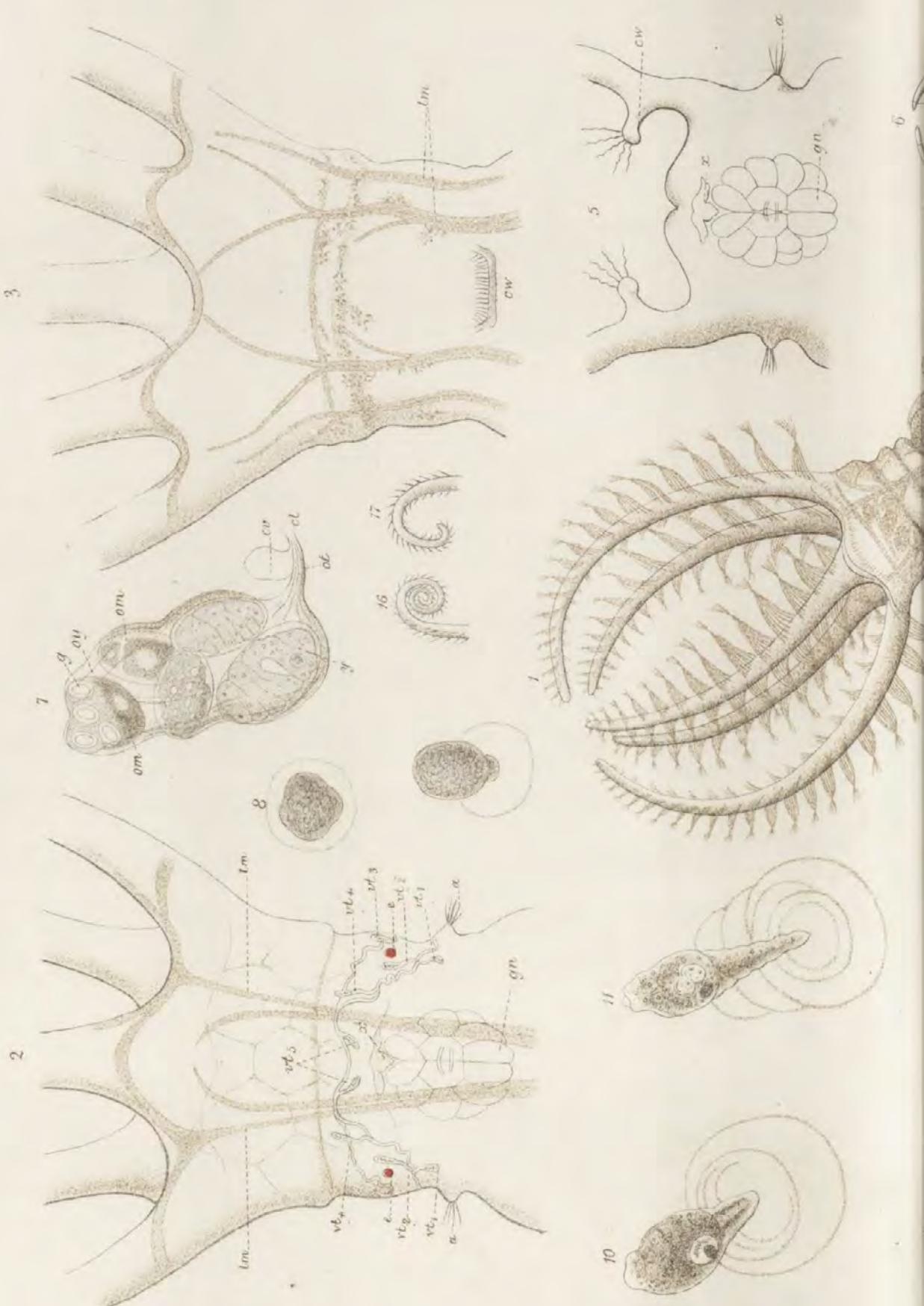


PLATE IV.

1. Stephanoceros Eichhornii, side view	H
8. Young female just hatched, adhering to the glass cover head downwards	G
9 & 10. the same a little later	G
11, 12, & 13. 3, 8, and 11 hours after being hatched	G
14 & 15. 18 and 36 hours after being hatched	G

Details of Stephanoceros Eichhornii.

2. Head, dorsal view	H
3. " ventral view	H
4. " side view	H
5. " seen dorsally in the plane passing through the knobs of the ciliary wreath	H
6. Trophi	H
7. Ovary (after Dr. Leydig)	
16. A budding tentacle (after Mr. Rossiter)	
17. The same a little more developed (after Mr. Rossiter)	



STEPHANOCEROS
SEICHORNII

Hannart imp.

Figs 1 to 5 C.T.Hudson } and viv del.
Figs 6 to 15 P.H.Gosse

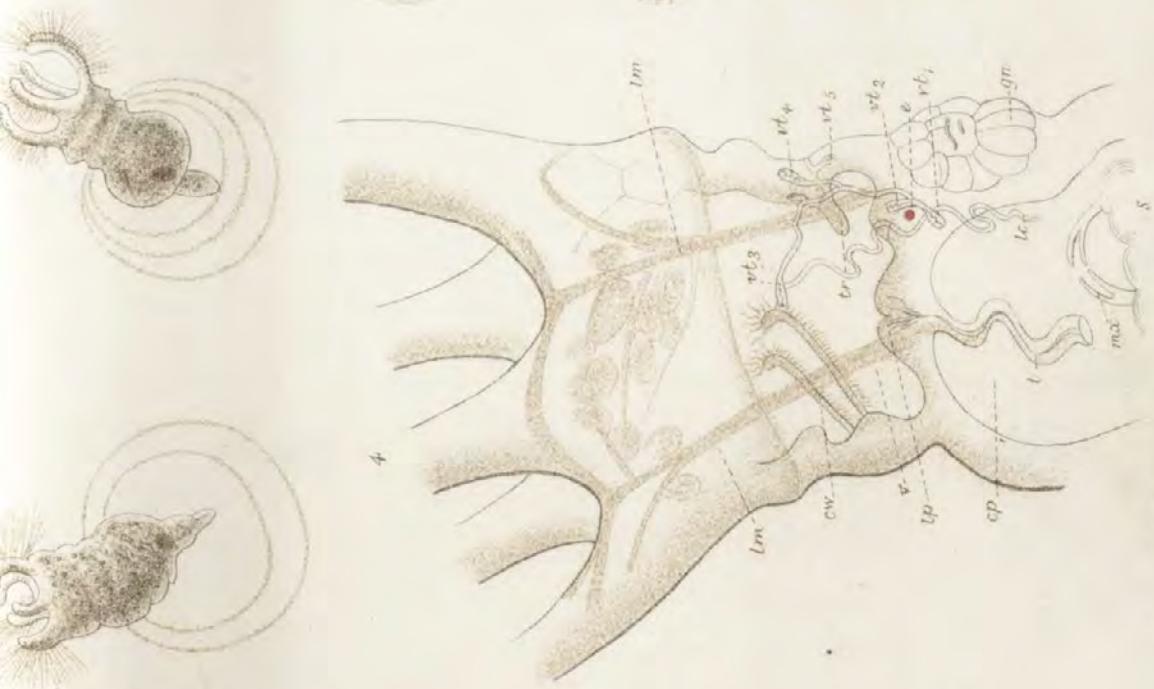
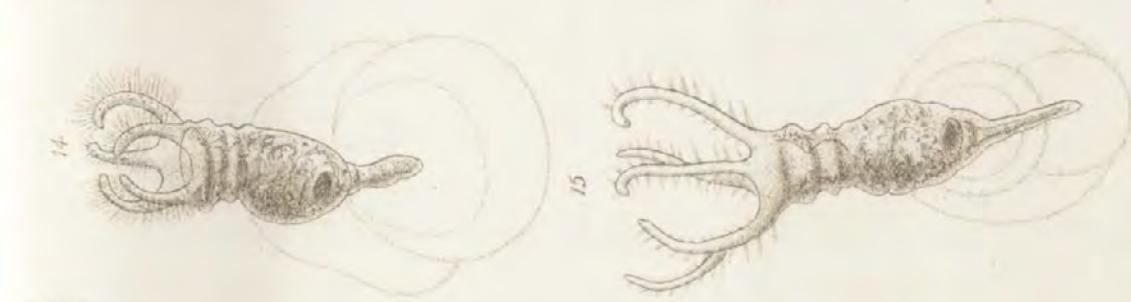
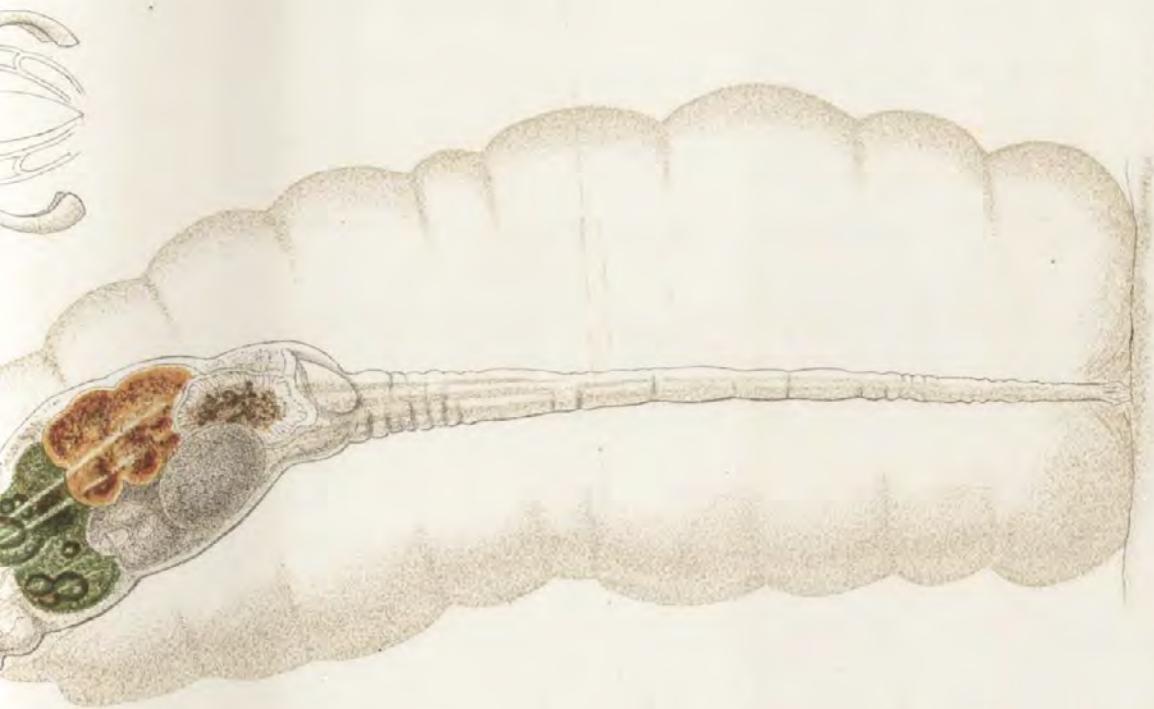
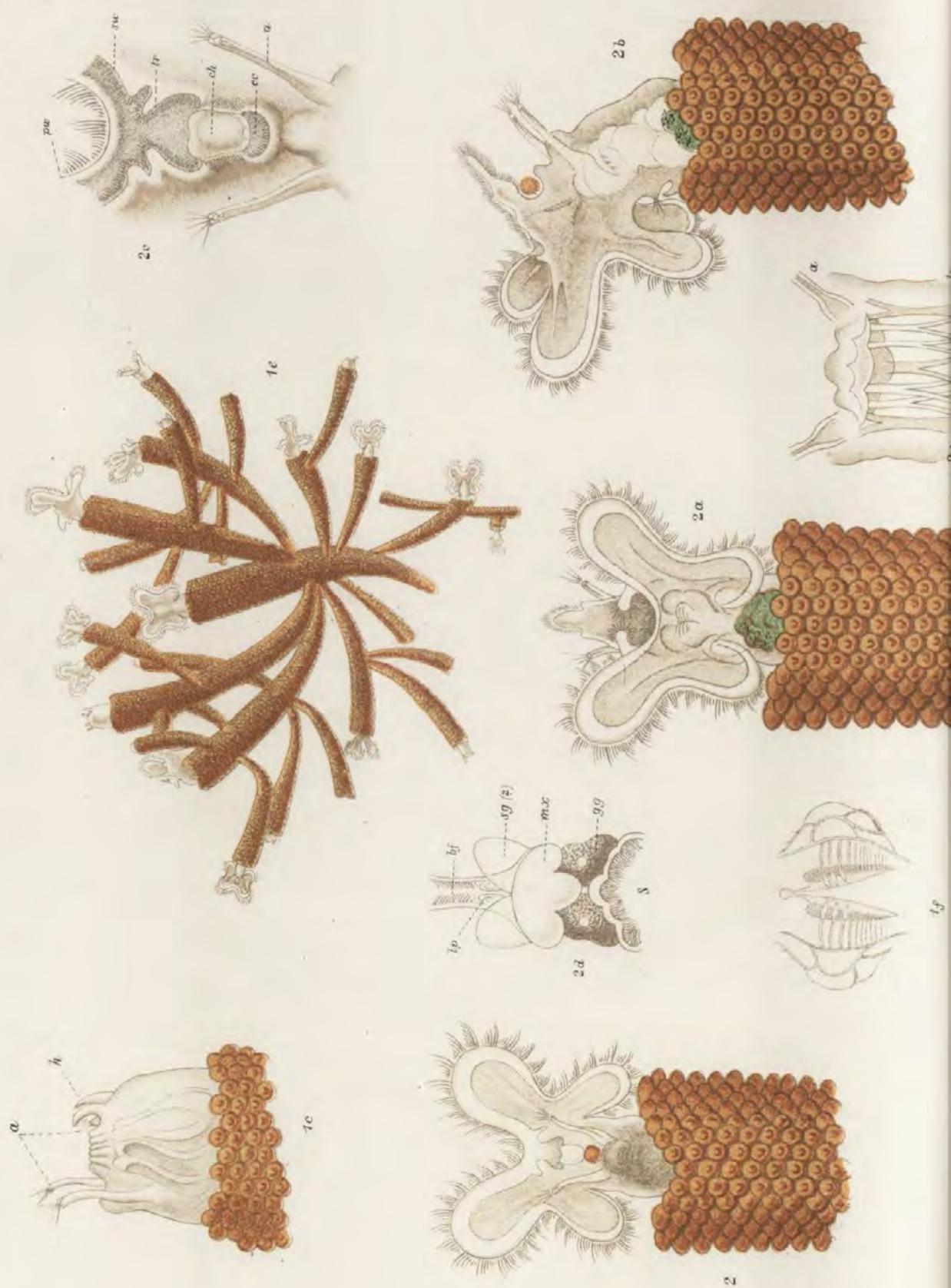


PLATE V.

1.	<i>Melicerta ringens</i>	.	.	.	ventral view	.	.	.	.	.	H
1a.	"	"	.	.	side view	.	.	.	.	.	H
1b.	"	"	.	.	partially retracted, side view	.	.	.	.	.	H
1c.	"	"	.	.	upper part of 1b, enlarged	.	.	.	.	.	H
1d.	"	"	.	.	young female, side view	.	.	.	.	.	H
1e.	"	"	.	.	cluster	.	.	.	.	.	H
1f.	"	"	.	.	trophi	.	.	.	.	.	H
2.	<i>Melicerta conifera</i>	.	.	.	ventral view	.	.	.	.	.	H
2a.	"	"	.	.	dorsal view	.	.	.	.	.	H
2b.	"	"	.	.	side view	.	.	.	.	.	H
2c.	"	"	.	.	details of head, ventral view	.	.	.	.	.	H
2d.	"	"	.	.	details of body, ventral view	.	.	.	.	.	H
2e.	"	"	.	.	longitudinal muscles to chin and neck	.	.	.	.	.	H
3.	<i>Melicerta tubicolaria</i>	.	.	.	ventral view	.	.	.	.	.	H
3a.	"	"	.	.	side view	.	.	.	.	.	H
3b.	"	"	.	.	young female, dorsal view	.	.	.	.	.	H
3c.	"	"	.	.	young male, side view	.	.	.	.	.	H
4.	Diagram of a <i>Melicerta</i>	.	.	.	.	.	.	.	.	.	H



Hannart imp.

4. DIAGRAM OF *A. MELICERTA*

MELLICERITA.

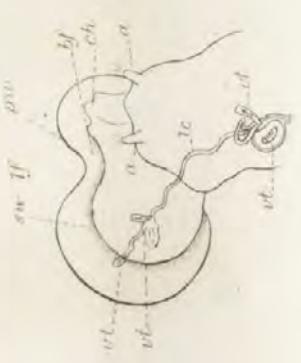
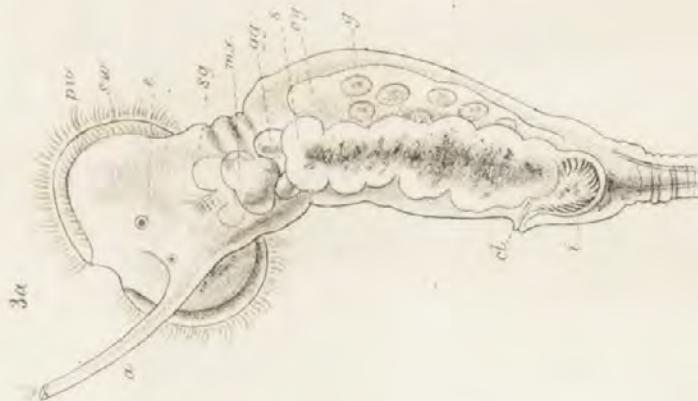
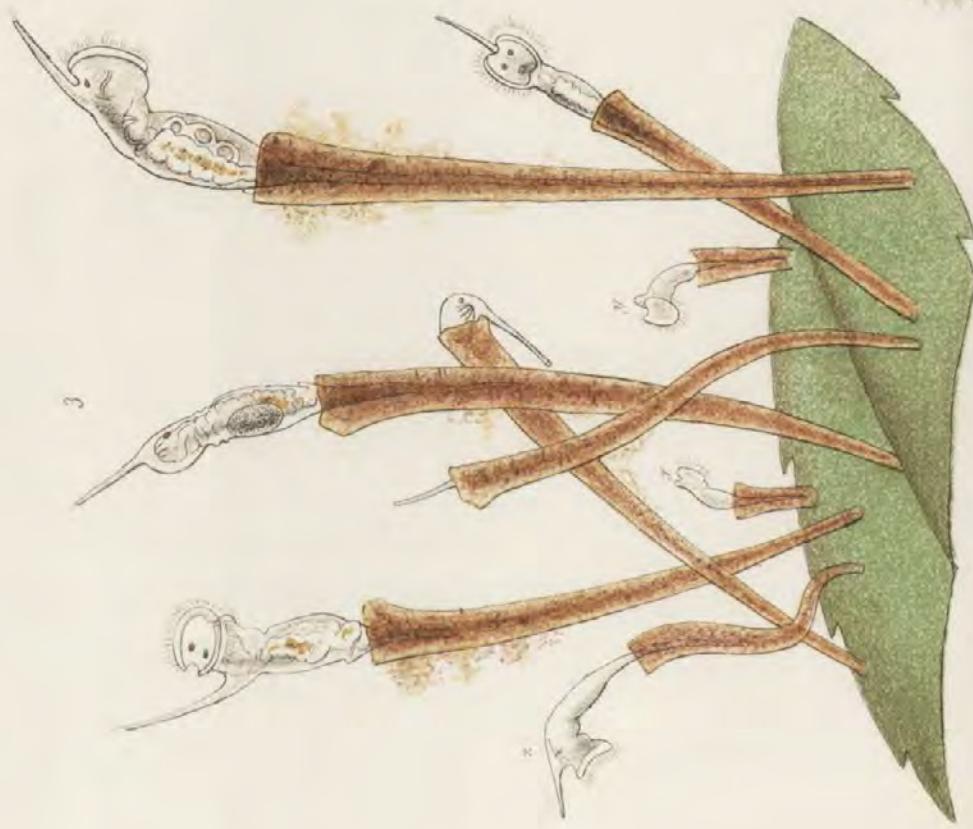
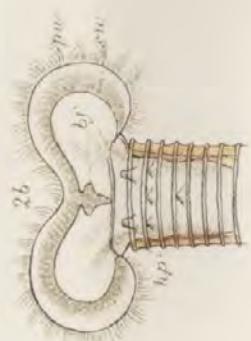
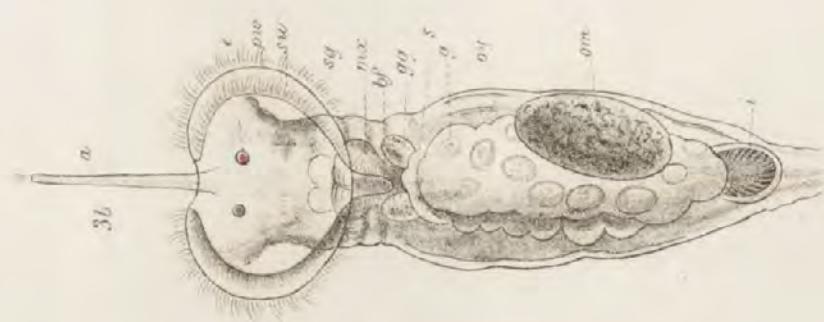
1. *M. RINGENS*. 2. *M. CONIFERA*. 3. *M. TUBICOLARIA*.

T. Hudson ad vvv. del.



PLATE VI.

1. <i>Limnias ceratophylli</i>	. ventral view	H
1a. , " .	. side view; corona contracted	H
1b. " " .	. side view; corona expanded	H
1c. " " .	. a cluster of tubes	H
1d. " " .	. head, side view; z edge of chitinous plate	after Judge Bedwell
1e. " " .	. buccal funnel, mastax and oesophagus	G
1f. " " .	. head and neck; ventral view showing vascular system	H
1g. " " .	. young female, dorsal view	H
2. <i>Limnias annulatus</i>	. ventral view	
2a. " " .	. side view; retracted	
2b. " " .	. head; dorsal view	
2c. " " .	. head; seen from above	
2d. " " .	. head; corona contracted	
3. <i>Cephalosiphon Limnias</i>	. group: x , y , z successive stages of growth	H
3a. " " .	. dorsal view	H
3b. " " .	. ventral view	H



Hartman, 1900

LIMNIAS; CEPHALOSIPHON.

I. L. CERATOPHYLLI, 2. L. ANNULATUS, 3. C. LIMNIAS

Figures 223, G. Thudorow | ad nat. size
Pl. 11, Fig. 2

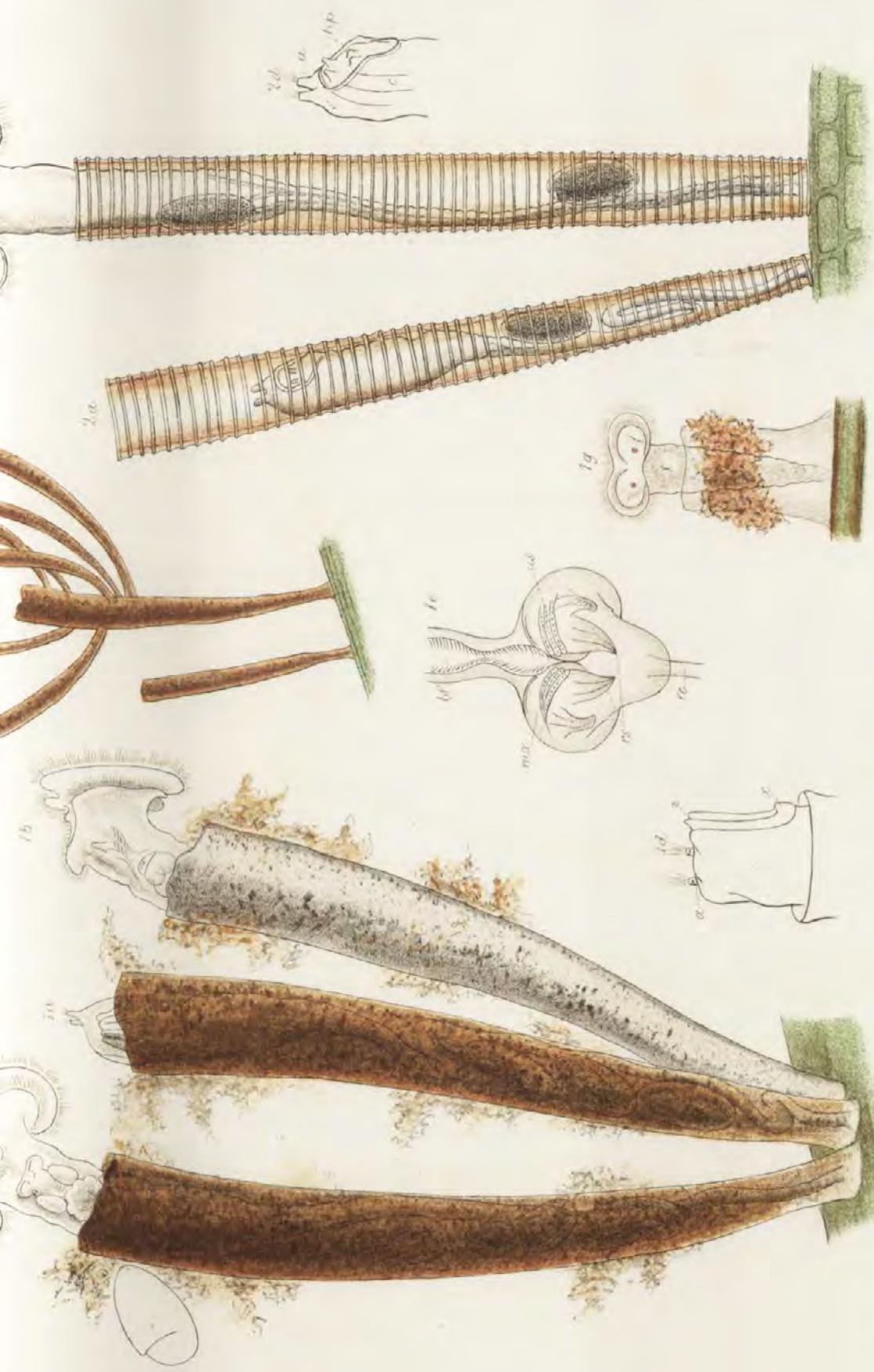
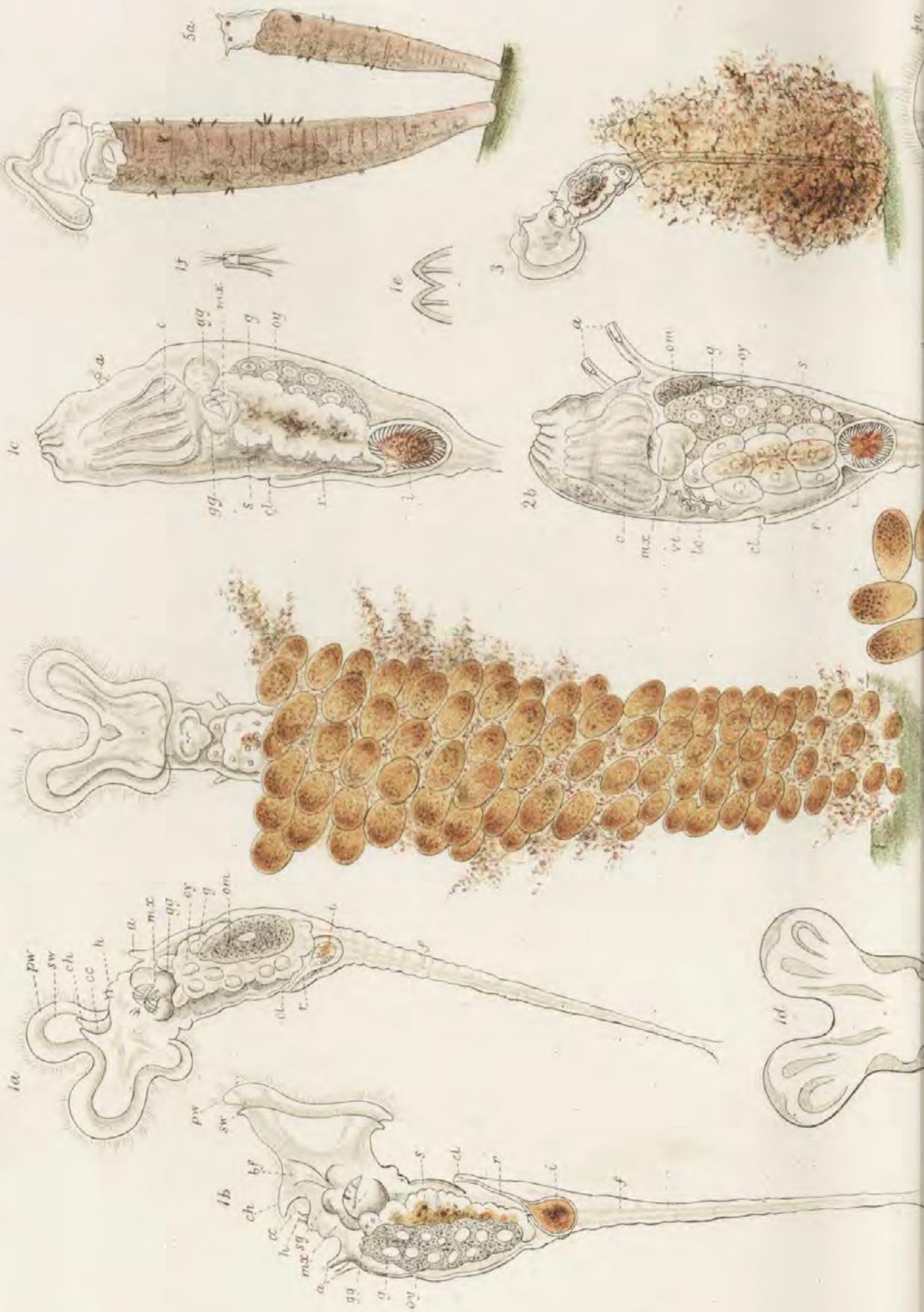


PLATE VII.

1. <i>Melicerta Janus</i>	.	dorsal view	.	.	.	.	.	.	.	H
1a.	"	obliquely ventral view	.	.	.	.	.	.	.	H
1b.	"	side view; corona expanded	.	.	.	.	.	.	.	H
1c.	"	side view; corona contracted	.	.	.	.	.	.	.	H
1d.	"	corona, showing thickened portions	.	.	.	.	.	.	.	H
1e.	"	cleft extremity of chin	.	.	.	.	.	.	.	H
1f.	"	a ventral antenna	.	.	.	.	.	.	.	H
2. <i>Œcistes pilula</i>	.	obliquely ventral view	.	.	.	.	.	.	.	H
2a.	"	obliquely dorsal view	.	.	.	.	.	.	.	H
2b.	"	side view; corona contracted	.	.	.	.	.	.	.	H
2c.	"	young female; dorsal view	.	.	.	.	.	.	.	H
2d.	"	ring of pellets from the tube	.	.	.	.	.	.	.	H
3. <i>Œcistes crystallinus</i>	.	obliquely ventral view	.	.	.	.	.	.	.	H
4. <i>Œcistes umbella</i>	.	dorsal view	.	.	.	.	.	.	.	H
4a.	"	obliquely ventral view	.	.	.	.	.	.	.	H
5. <i>Œcistes intermedius</i>	.	adult; side view	.	.	.	.	.	.	.
5a.	"	young; dorsal view; corona	} after Mr. H. Davis contracted	.	.	.	.	.	.
6. <i>Œcistes longicornis</i>	.	side view		.	.	.	.	.	.	H



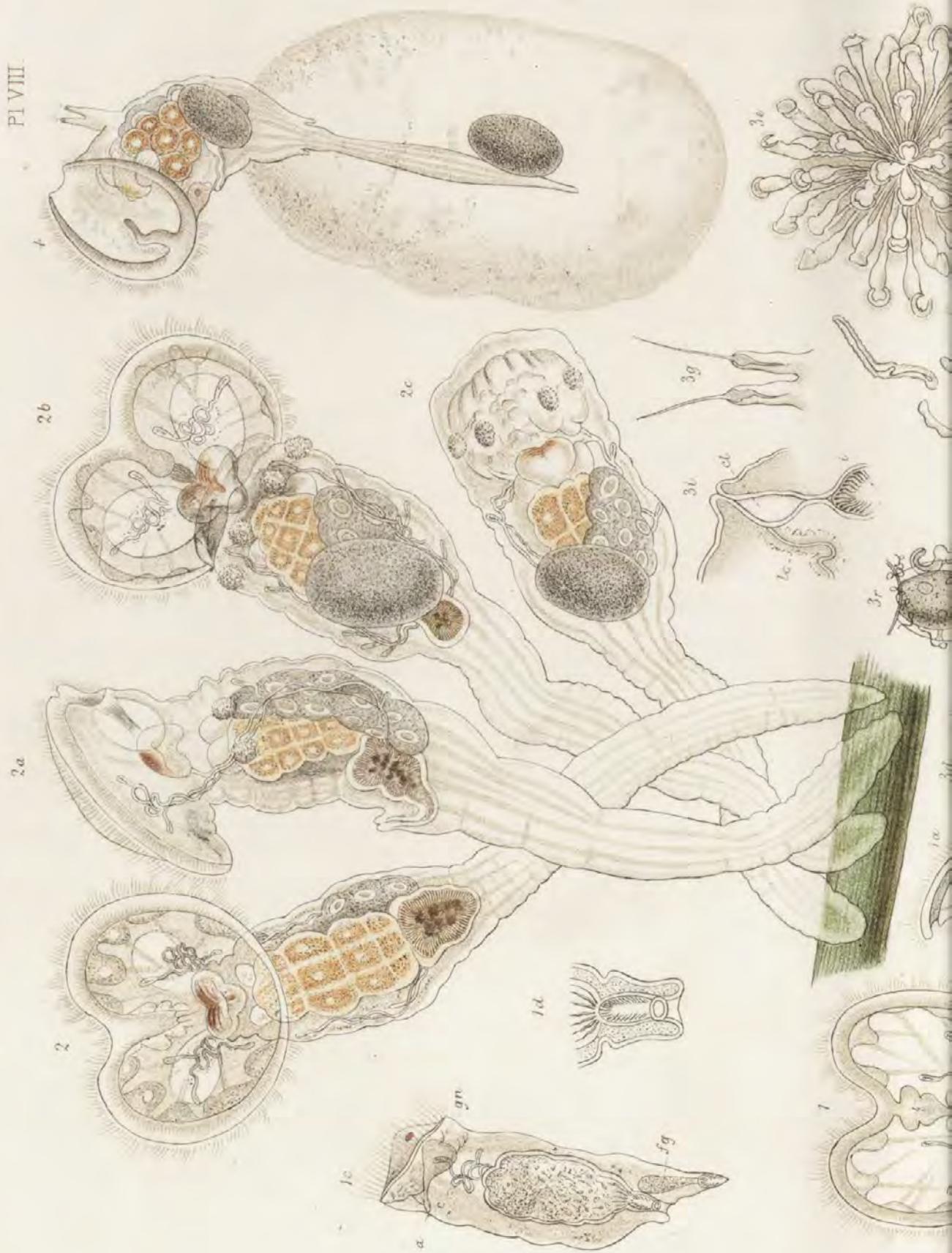
Hannart. imp.

MELICERTA; DECISTES
1. M. JANUS 2. E. FILULA 3. E. CRYSTALLINUS 4. E. UMBELLA 5. E. INTERMEDIUS 6. E. LONGICORNIS

J. Hudson ad. v. del.

PLATE VIII.

1.	<i>Lacinularia socialis</i>	.	dorsal view	.	.	.	.	.	.	H
1a.	"	"	side view	.	.	.	.	.	.	H
1b.	"	"	group	.	.	.	.	.	.	H
1c.	"	"	male; side view	.	.	.	.	.	.	H
1d.	"	"	penis	.	.	.	.	.	.	H
2.	<i>Megalotrocha alboflavicans</i>	.	dorsal view	.	.	.	.	.	.	H
2a.	"	"	side view	.	.	.	.	.	.	H
2b.	"	"	ventral view; corona expanded	.	.	.	.	.	.	H
2c.	"	"	ventral view; corona contracted	.	.	.	.	.	.	H
3.	<i>Conochilus volvox</i>	.	side view	.	.	.	.	.	.	H
3a.	"	"	ventral view	.	.	.	.	.	.	H
3b.	"	"	dorsal view	.	.	.	.	.	.	H
3c.	"	"	obliquely ventral view	.	.	.	.	.	.	H
3d.	"	"	male; side view	.	.	.	.	.	.	H
3e.	"	"	cluster	.	.	.	.	.	.	H
3f.	"	"	cloacal opening	.	.	.	.	.	.	H
3g.	"	"	antennæ	.	.	.	.	.	.	H
3h.	"	"	eye	.	.	.	.	.	.	H
3i.	"	"	showing junction of lateral canal and cloaca	.	.	.	.	.	.	H
3k, 3l, 3m, 3n.	"	"	successive stages of ephippial egg	.	.	.	.	.	.	H
3p.	"	"	male in egg	.	.	.	.	.	.	H
3q.	"	"	spermatozoa	.	.	.	.	.	.	} after Dr. Cohn
3r.	"	"	spermatozoa attached to ovum.	.	.	.	.	.	.
4.	<i>Conochilus dossuarius</i>	.	obliquely dorsal view	.	.	.	.	.	.	H

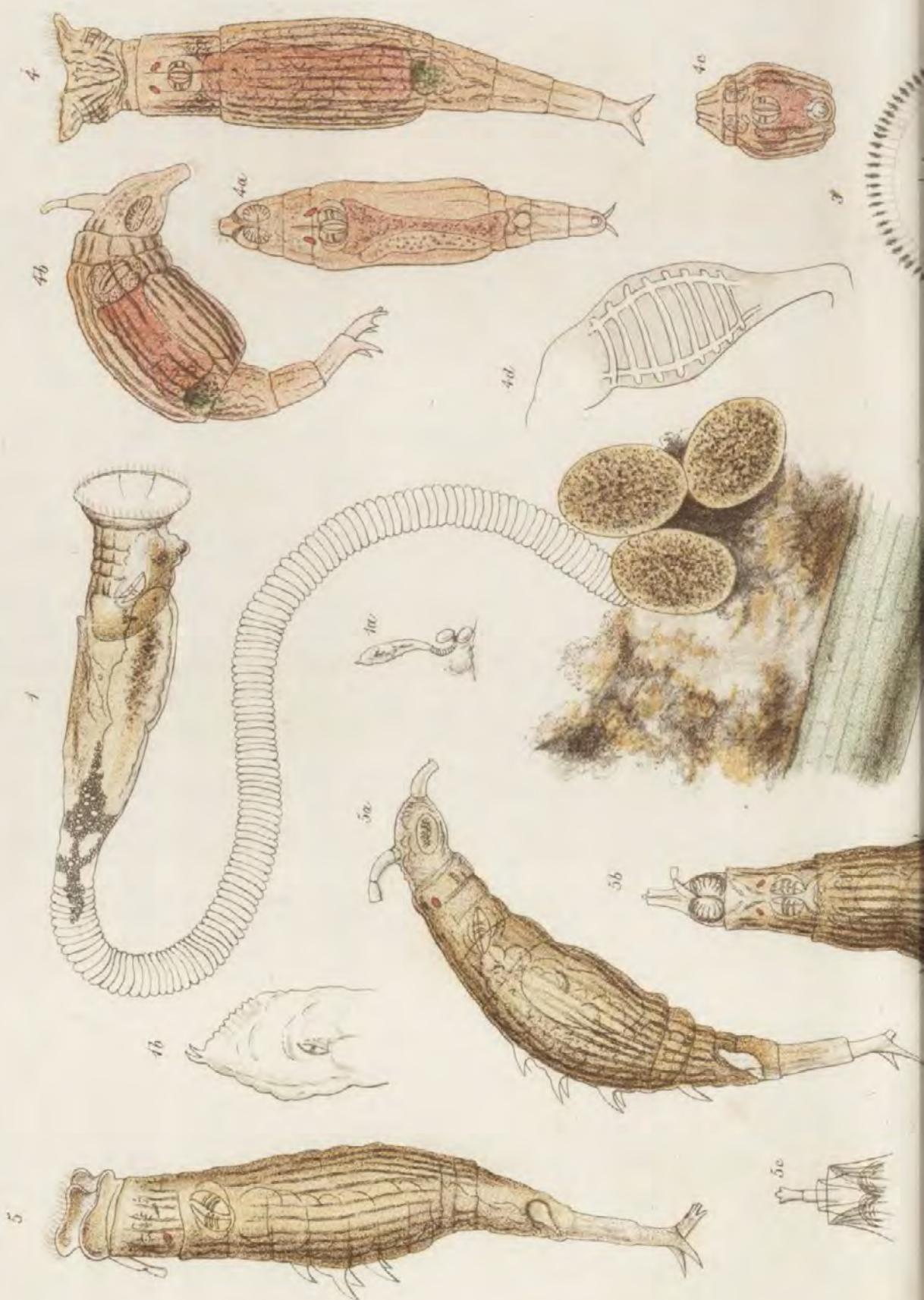


LACINULARIA; MEGALOTROCHEA; CONCHILIA.
II SOCIALIS 2 M. ALBOFLAVICANS 3 C VOLVOX 4 C DOSSUARIUS



PLATE IX.

1. <i>Oecistes serpentinus</i>	.	side view . . . . .	.	G
1a. " "	.	side view, contracted (on a smaller scale)	.	G
1b. " "	.	head; showing the hooks . . . .	.	G
2. <i>Oecistes brachiatus</i>	.	dorsal view . . . . .	.	G
2a. " "	.	upper portion, expanded; side view . .	.	G
2b. " "	.	upper portion, contracted . . . .	.	G
2c. " "	.	extremity of an antenna . . . .	.	G
2d. " "	.	extremity of foot, showing peduncle . .	.	G
3. <i>Oecistes Stygis</i>	.	dorsal view . . . . .	.	G
4. <i>Philodina roseola</i>	.	dorsal view; corona expanded . . . .	.	G
4a. " "	.	dorsal view; corona contracted . . . .	.	G
4b. " "	.	side view . . . . .	.	G
4c. " "	.	dorsal view; contracted into a ball . .	.	G
4d. " "	.	transverse muscles shown under pressure .	.	G
5. <i>Philodina aculeata</i>	.	side view; corona expanded . . . .	.	G
5a. " "	.	side view; corona contracted . . . .	.	G
5b. " "	.	dorsal view; hiding the foot . . . .	.	G
5c. " "	.	column partly retracted; and antenna . .	.	G
5d. " "	.	dorsal view in outline; showing the spines .	.	G
6. <i>Philodina citrina</i>	.	dorsal view . . . . .	.	G
7. <i>Philodina megalotrocha</i>	.	dorsal view . . . . .	.	G
7a. " "	.	side view . . . . .	.	G
7b. " "	.	dorsal view; contracted . . . . .	.	G



Hannart inv.

DECISTES; PHILDINA.

1. ♂ SERPENTINUS 2 ♀ BRACHIATUS 3 ♀ STYGIS
4. PROSEOLA 5 ♀ ACULEATA 6. PCITRINA 7. P.MEGALOTROCHA

Prinseps ad vir. del.

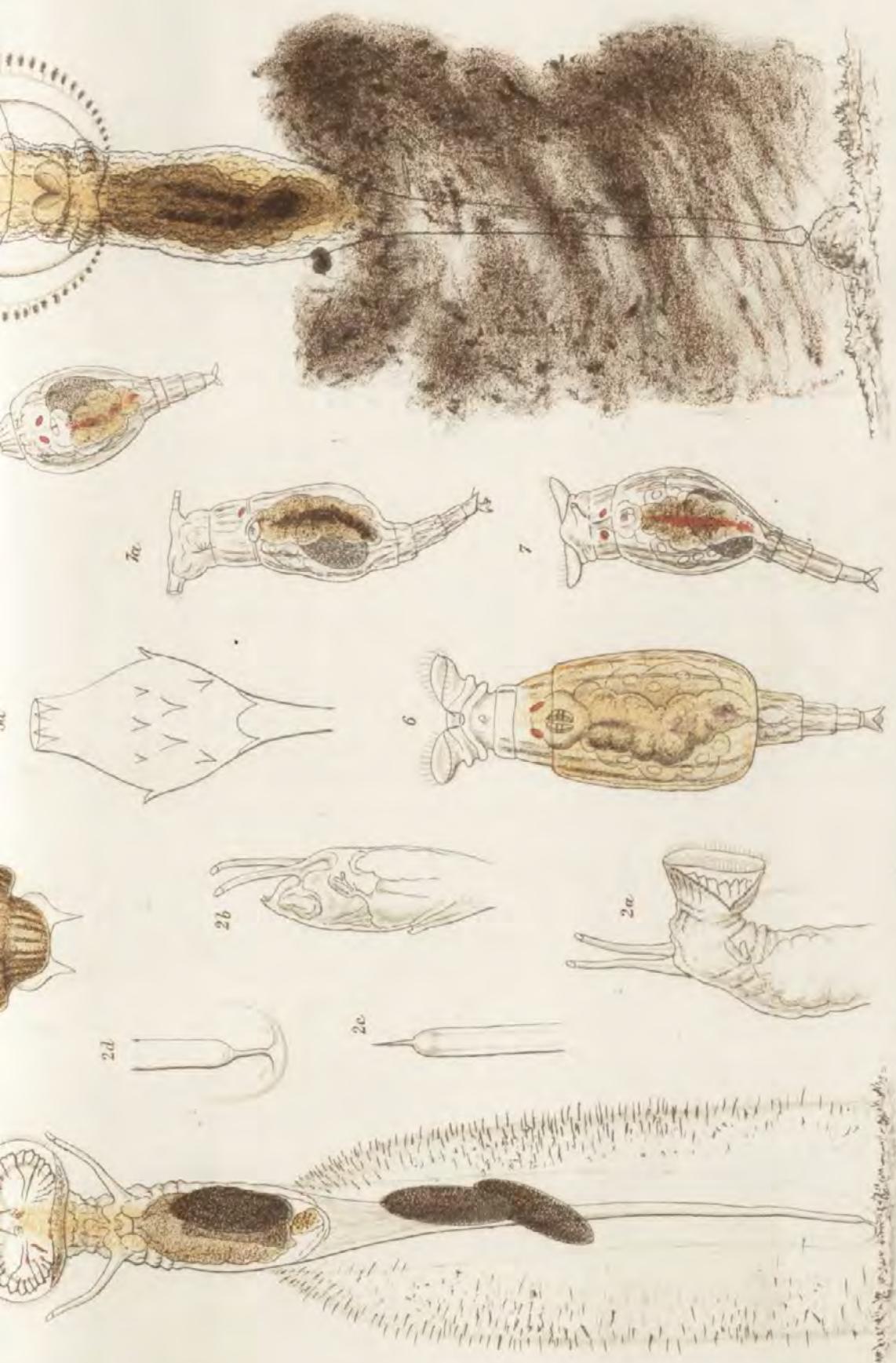
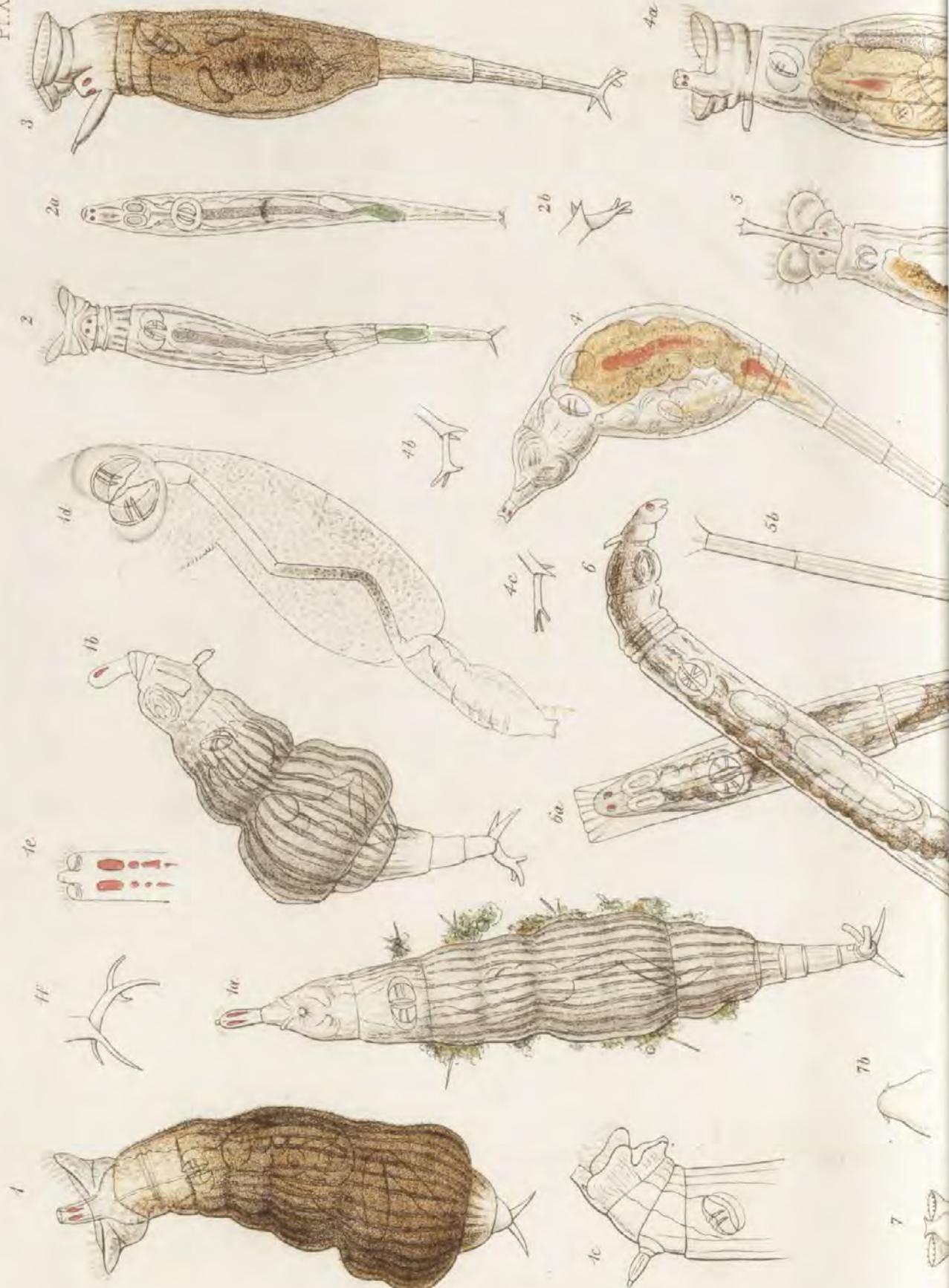


PLATE X.

1. Rotifer tardus	dorsal view; corona expanded	G
1a. " " . . .	dorsal view; corona contracted	G
1b. " " . . .	side view	G
1c. " " . . .	head; side view; corona expanding	G
1d. " " . . .	mastax and alimentary canal (under pressure)	G
1e. " " . . .	column with the eye spots broken up	G
1f. " " . . .	spurs and toes	G
2. Rotifer vulgaris	dorsal view; corona expanded	G
2a. " " . . .	dorsal view; corona contracted	G
2b. " " . . .	spurs and toes	G
3. Rotifer hapticus	side view	G
4. Rotifer macrurus	dorsal view; corona contracted	G
4a. " " . . .	obliquely dorsal view; corona expanded	G
4b, 4c. " " . . .	spurs and toes	G
5. Rotifer megaceros	dorsal view	G
5a. " " . . .	side view	G
5b. " " . . .	dorsal antenna	G
6. Actinurus Neptunius	side view, extended	G
6a. " " . . .	dorsal view, contracted	G
7. Callidina bihamata	dorsal view	G
7a. " " . . .	side view	G
7b. " " . . .	column and hooks, dorsal view	G
7c. " " . . .	column and hooks, ventral view	G
8. Callidina bidens	dorsal view; corona expanded	G
8a. " " . . .	dorsal view; corona contracted	G
8b. " " . . .	dorsal view, retracted	G
9. Callidina parasitica	dorsal view; corona contracted	G
9a. " " . . .	dorsal view, retracted	G
9b. " " . . .	head, dorsal view; corona expanded	G
9c. " " . . .	trophi	G
9d. " " . . .	penultimate joint and spurs	G
10. Adineta vaga	ventral view	H
10a. " " . . .	head, side view (after Mr. H. Davis)	H
10b. " " . . .	ovary, lateral canals, and vibratile tags	H
10c. " " . . .	trophi	H





Figs 1 to 9. PHOTOS OF ad. vulg.

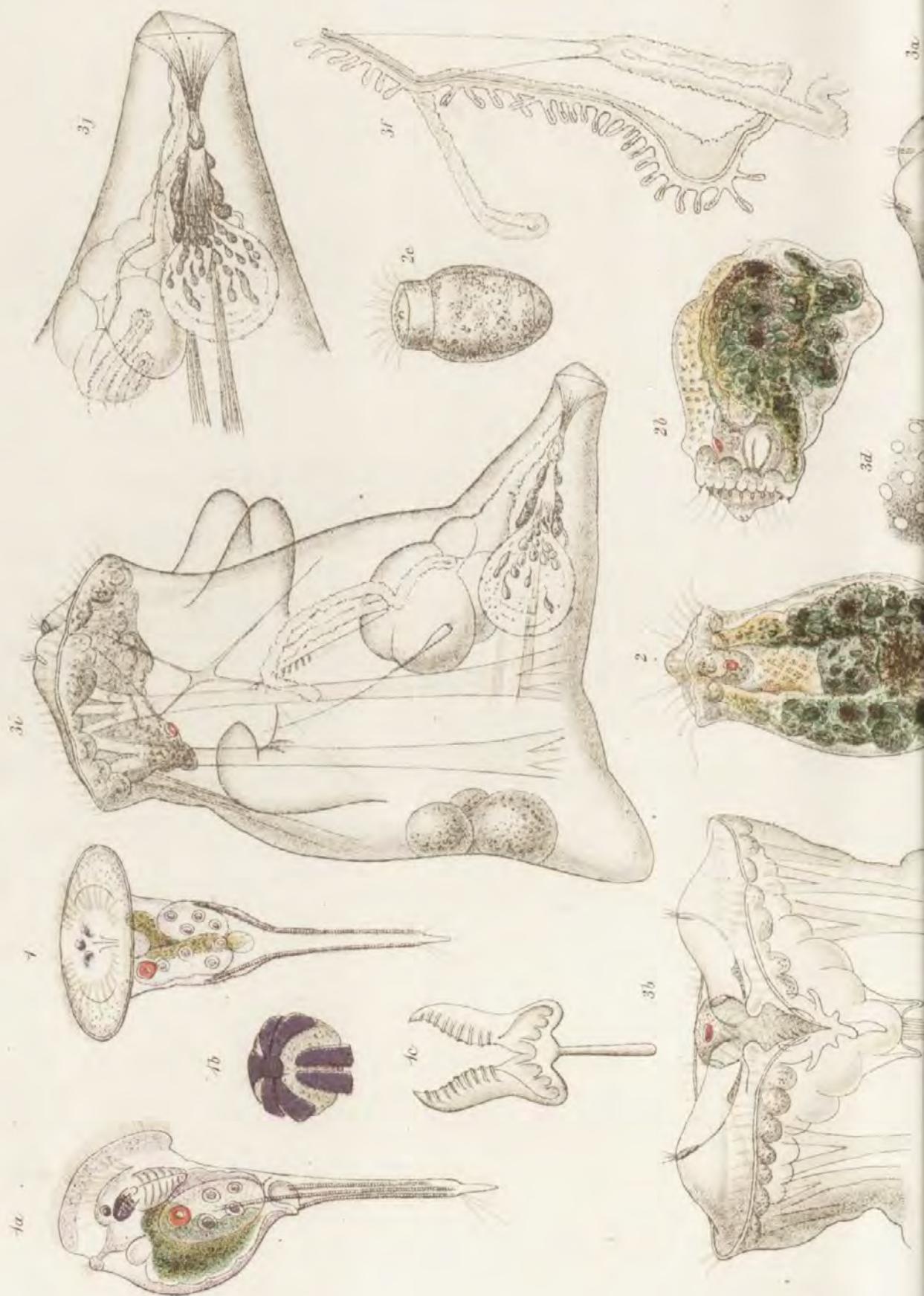
Habitat: sea

KOTIFER; ACTINURUS; CALIDINA; ADINETA.

1. R. TARDUS 2. R. VULGARIS 3. R. HAPTICUS 4. R. MACRURUS 5. R. MEGACEROS
6. A. NEPTUNIUS 7. C. ETHEMATA 8. C. BIDENS 9. C. PARASITICA 10. A. VAGA

PLATE XI.

1.	<i>Microcodon clavus</i>	.	ventral view	} after Dr. Grenacher	
1a.	"	"	side view		H
1b.	"	"	eye, pigment-plates, nervous ganglion		H
1c.	"	"	trophi		H
2.	<i>Sacculus viridis</i>	.	dorsal view		H
2a.	"	"	ventral view		H
2b.	"	"	side view		H
2c.	"	"	male		G
3.	<i>Asplanchna Ebbesbornii</i>	.	dorsal view		H
3a.	"	"	side view		H
3b.	"	"	head; ventral view		H
3c.	"	"	esophagus, stomach, gastric glands and ducts . .		H
3d.	"	"	top of gastric gland, and duct		H
3e.	"	"	trophi, with extensor and retractor muscles . .		H
3f.	"	"	lateral canal and vibratile tags; male		H
3g.	"	"	bend in lateral canal, with imbedded glands (?) .		H
3h.	"	"	central portion of ovary; two ova forming		H
3i.	"	"	male; side view		H
3j.	"	"	male; penis, sperm-sac, and contractile vesicle .		H
3k.	"	"	spermatozoa		H
3l.	"	"	rocket-headed, lateral antenna		H



Harnave imp.

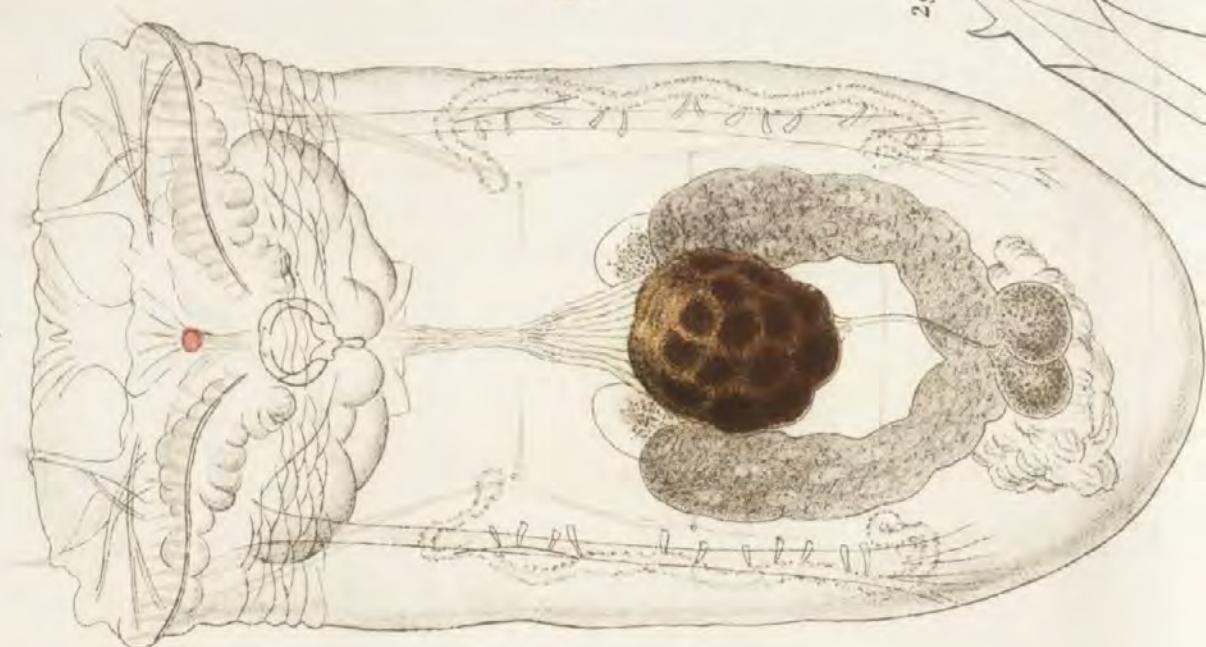
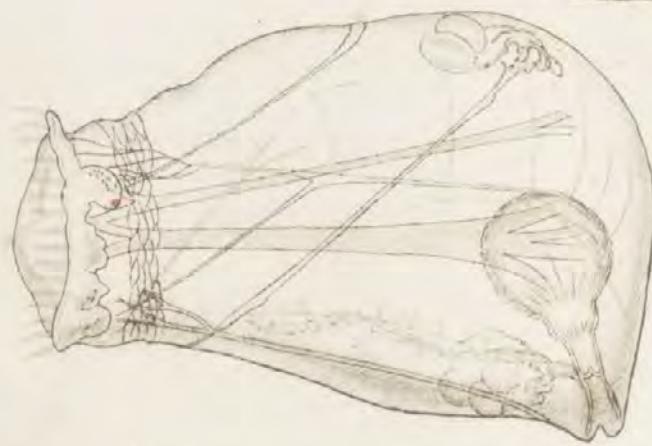
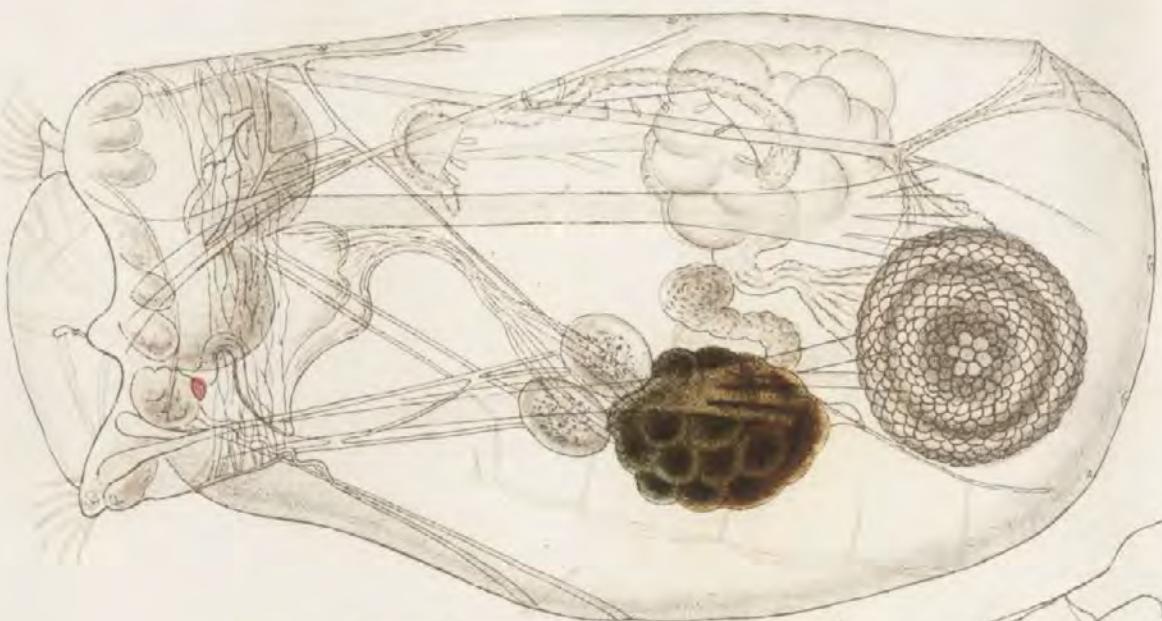
MICROCODON; SACCELLUS; ASPLANCHNA.
1 M. CLAVUS. 2 S. VIRIDIS. 3 ABBESBORNII.

Figs 2 & 2b, 3 C. J. Hudson ad viv. del.
Fig. 2c. F. H. Gossé



PLATE XII.

1.	<i>Asplanchna Brightwellii</i>	.	ventral view	.	.	.	.	.	.	G
1a.	"	"	side view	.	.	.	.	.	.	G
1b.	"	"	trophi	.	.	.	.	.	.	(after Mr. J. Dalrymple)
1c.	"	"	male; side view	.	.	.	.	.	.	G
1d.	"	"	penis and sperm-sac	.	.	.	.	.	.	(after Mr. J. Dalrymple)
2.	<i>Asplanchna priodonta</i>	.	dorsal view	.	.	.	.	.	.	G
2a.	"	"	side view	.	.	.	.	.	.	G
2b.	"	"	head, from above	.	.	.	.	.	.	G
2c.	"	"	male; side view	.	.	.	.	.	.	H
2d.	"	"	male; brain, eye, nerve-threads	.	.	.	.	.	.	H
2e.	"	"	male; dorsal antenna	.	.	.	.	.	.	H
2f.	"	"	trophi open	.	.	.	.	.	.	G
2g.	"	"	trophi closed, from above	.	.	.	.	.	.	G
2h.	"	"	trophi closed, side view	.	.	.	.	.	.	G



A. SPLANCHNICA

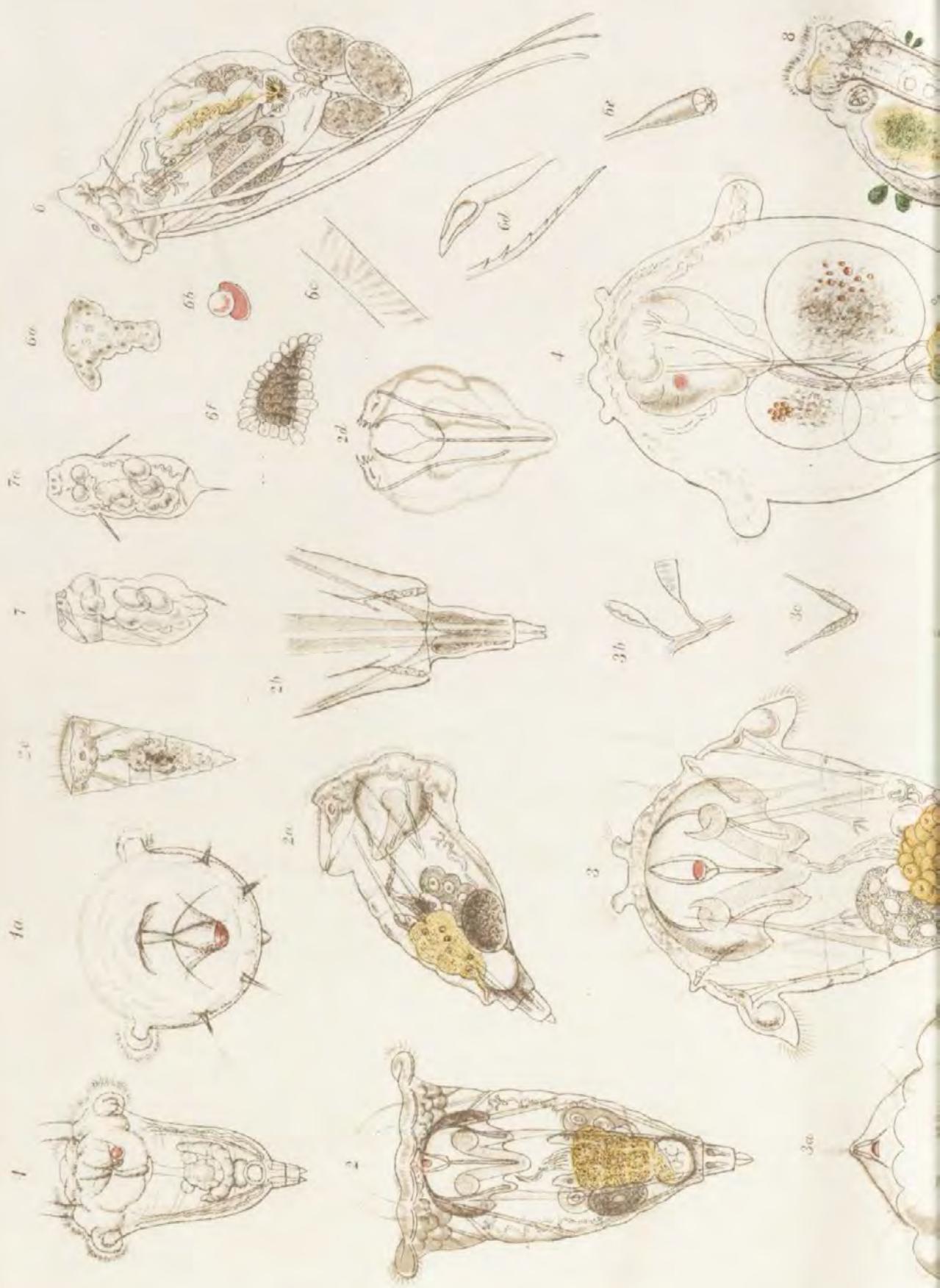
1. A. BRIGHTWELLII, 2. A. PRIODONTA

Figs 1.a,k, 2-2b, 2f-2h, PHGosse, ad viv. ad.

2c-2e, C.T.Hudson

PLATE XIII.

1.	<i>Synchæta Baltica</i>	.	dorsal view	.	.	.	.	.	.	G
1a.	"	.	front view	.	.	.	.	.	.	G
2.	<i>Synchæta tremula</i>	.	dorsal view	.	.	.	.	.	.	H
2a.	"	.	side view	.	.	.	.	.	.	H
2b.	"	.	hind extremity, with antennæ	.	.	.	.	.	.	H
2c.	"	.	male	.	.	.	.	.	.	H
2d.	"	.	mastax	.	.	.	.	.	.	G
3.	<i>Synchæta pectinata</i>	.	dorsal view	.	.	.	.	.	.	H
3a.	"	.	front view	.	.	.	.	.	.	H
3b.	"	.	lateral canal and vibratile tags	.	.	.	.	.	.	H
3c.	"	.	dorsal antennæ	.	.	.	.	.	.	H
4.	<i>Synchæta oblonga</i>	.	dorsal view	.	.	.	.	.	.	G
5.	<i>Polyarthra platyptera</i>	.	dorsal view	.	.	.	.	.	.	H
5a.	"	.	side view	.	.	.	.	.	.	H
5b.	"	.	the same, with male eggs	.	.	.	.	.	.	G
5c.	"	.	mastax and œsophagus	.	.	.	.	.	.	G
5d.	"	.	plume	.	.	.	.	.	.	G
5e.	"	.	the same; the tip enlarged	.	.	.	.	.	.	G
5f.	"	.	mastax; side view	.	.	.	.	.	.	G
5g.	"	.	mastax; ventral view	.	.	.	.	.	.	G
5h.	"	.	males	.	.	.	.	.	.	G
6.	<i>Triarthra longiseta</i>	.	side view	.	.	.	.	.	.	H
6a.	"	.	gastric gland	.	.	.	.	.	.	H
6b.	"	.	eye and pigment	.	.	.	.	.	.	H
6c.	"	.	striated muscle	.	.	.	.	.	.	H
6d.	"	.	extremities of spine	.	.	.	.	.	.	H
6e.	"	.	side antenna	.	.	.	.	.	.	H
6f.	"	.	ephippial egg	.	.	.	.	.	.	H
7.	<i>Triarthra breviseta</i>	.	side view	.	.	.	.	.	.	G
7a.	"	.	dorsal view	.	.	.	.	.	.	G
8.	<i>Triarthra mystacina</i>	.	obliquely ventral view	.	.	.	.	.	.	G
9.	<i>Pteroessa surda</i>	.	empty lorica; side view	.	.	.	.	.	.	G
9a.	"	.	the same; dorsal view (?)	.	.	.	.	.	.	G
9b.	"	.	the same; ventral view (?)	.	.	.	.	.	.	G
10.	<i>Pedetes saltator</i>	.	dorsal view	.	.	.	.	.	.	G
10a.	"	.	side view	.	.	.	.	.	.	G



SYNCHETAE; POLYARTHERA; TRIARTHERA; PTEROESSA; PEDETES.

Hautier, 1890

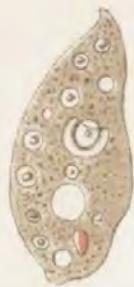
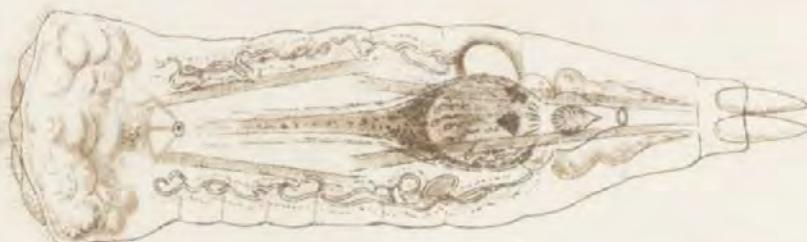
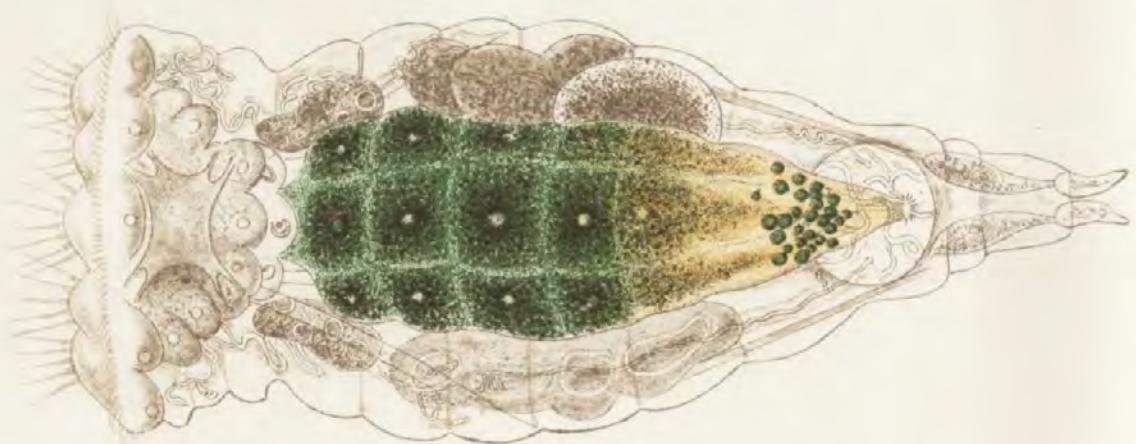
1. S. BALTICA. 2. S. TREMULA. 3. S. PECTINATA. 4. S. OBLONGA. 5. P. PLATYPTERA. 6. T. LONGISETA. 7. T. BREVISETA. 8. T. MYSTACINA. 9. P.T. SURDA. 10. P.D. SALTATOR.

Figs 7 to 20, 30, 31, 5, 5a, 6, 6f, ^{Fig. 10}_{Fig. 10} (Hautier) ^{at viv. vel.}
P. H. Gmelin



PLATE XIV.

1.	<i>Hydatina senta</i>	.	dorsal view	.	.	.	.	.	.	H
1a.	"	"	ventral view (young specimen)	.	.	.	.	.	.	H
1b.	"	"	side view	.	.	.	.	.	.	H
1c.	"	"	ideal section of head	.	.	.	.	.	.	H
1d.	"	"	hind extremity, showing muscles	.	.	.	.	.	.	H
1e.	"	"	trophi	.	.	.	.	.	.	H
1f.	"	"	dead specimen, showing muscles	.	.	.	.	.	.	H
1g.	"	"	antenna	.	.	.	.	.	.	H
1h.	"	"	internal parasites	.	.	.	.	.	.	H
1k.	"	"	one of the same under pressure	.	.	.	.	.	.	H
1l.	"	"	globular body from a parasite	.	.	.	.	.	.	H
1m.	"	"	female with internal fungus	.	.	.	.	.	.	H
1n.	"	"	male; dorsal view	.	.	.	.	.	.	H
2.	<i>Rhinops vitrea</i>	.	ventral view	.	.	.	.	.	.	H
2a.	"	"	side view	.	.	.	.	.	.	H
2b.	"	"	mastax	.	.	.	.	.	.	H
2c.	"	"	proboscis, with eyes, ganglion, and nerve threads	.	.	.	.	.	.	H
2d.	"	"	muscles	.	.	.	.	.	.	H

*h**rk**in**rh**h*

Hannart imp

HYDATINAE RHINOPPS.

I. H. SENTA. 2. R. VITREA.

C. THUDSON ad viv. del.

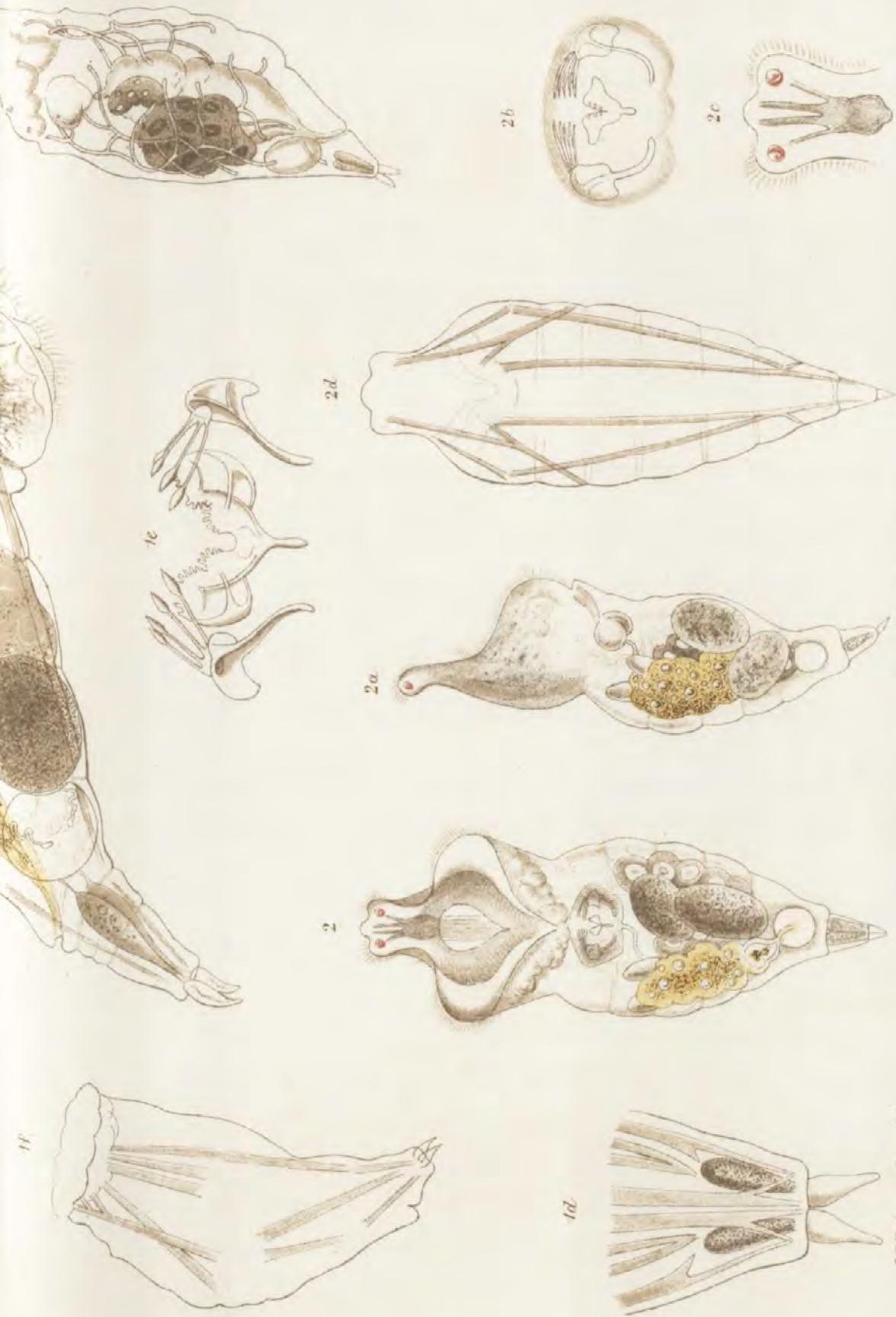
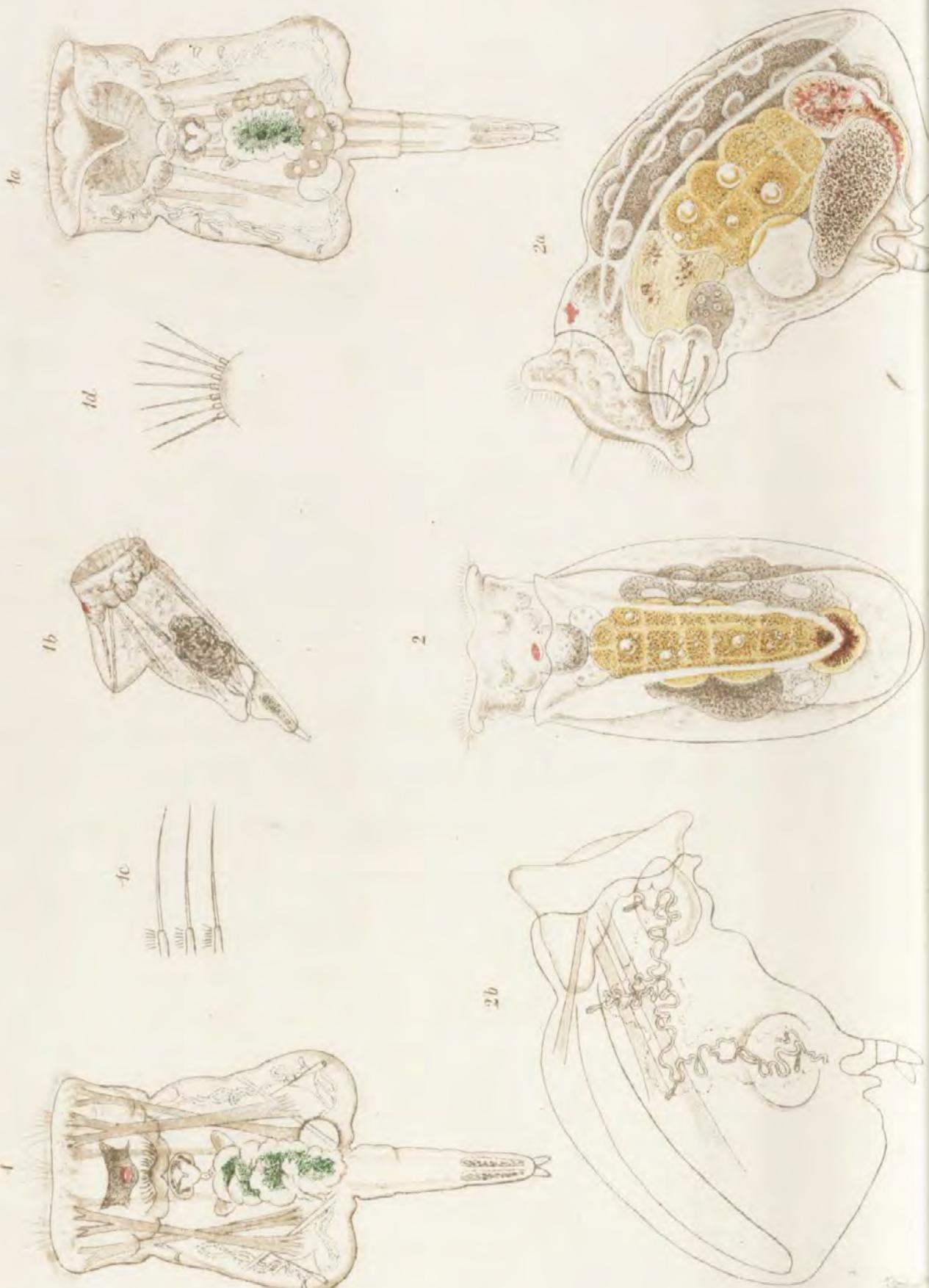


PLATE XV.

1. Notops Brachionus .	dorsal view	H
1a. " " .	side view	H
1b. " " .	male; side view	H
1c. " " .	setæ above the buccal funnel	H
1d. " " .	setæ on a frontal prominence	H
2. Notops hyptopus .	dorsal view	H
2a. " " .	side view	H
2b. " " .	the same, showing vascular system	H
2c. " " .	mastax	H
3. Notops clavulatus .	ventral view	G
3a. " " .	side view	G

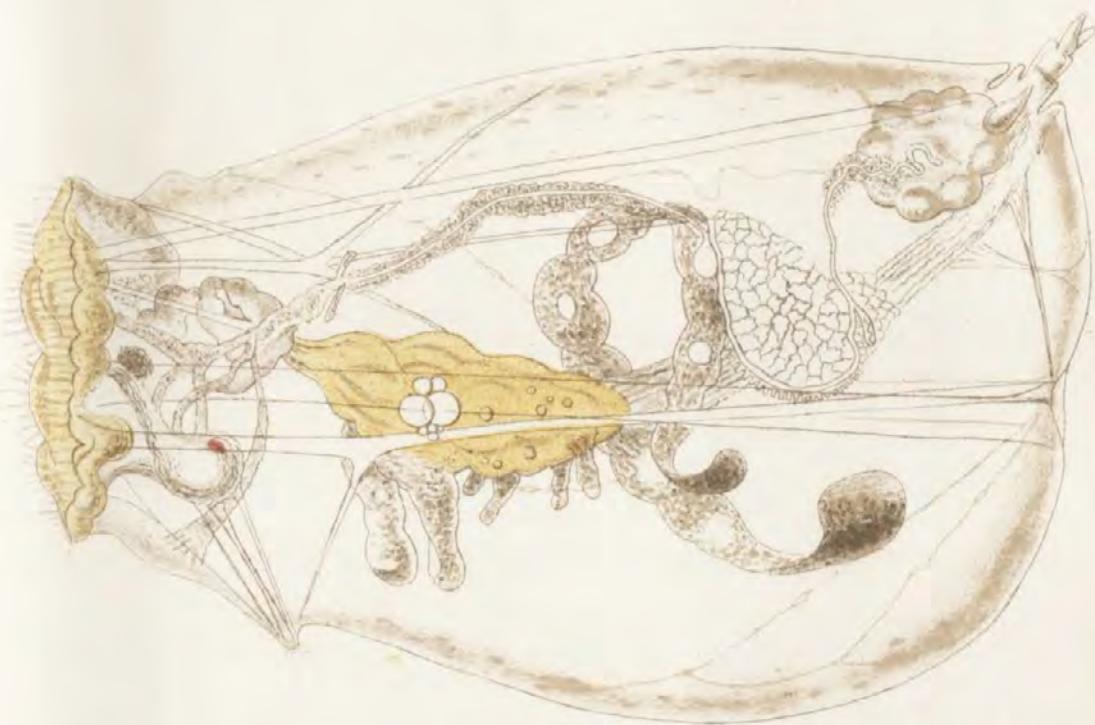


Hannart imp

N O T O P S .

1. N. BRACHIONUS. 2. N. HYPTOPUS. 3. N. CLAVULATUS.

Eos 1,2, C.T.Hudson } aff. viride.
" 3, P.H.Gosse



2c

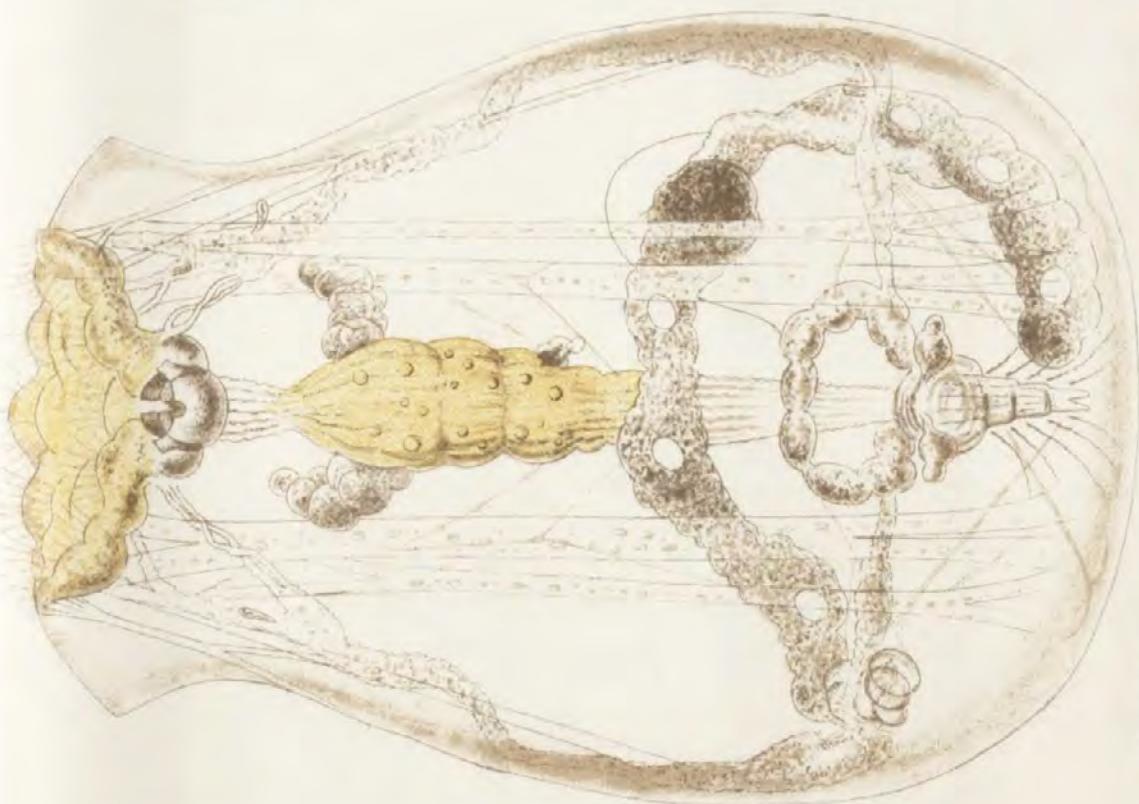


PLATE XVI.

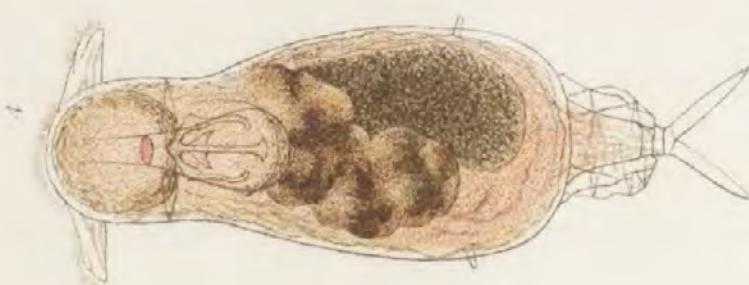
1. Copeus labiatus	dorsal view	G
1a. " "	edges of lip	G
2. Copeus spicatus	dorsal view	G
2a, 2b. " "	side views of head	G
3. Copeus Cerberus	dorsal view	G
3a. " "	side view	G
4. Copeus pachyurus	dorsal view	G
4a. " "	transverse section	G
4b. " "	head, showing buccal orifice	G
5. Copeus caudatus	dorsal view	G
5a. " "	side view	G
5b. " "	mastax and trophi	G
5c. " "	occipital antenna	G
5d. " "	hind dorsal tentacle	G
6. Notommata collaris (?)	dorsal view	H
6a. " "	side view	H



6.



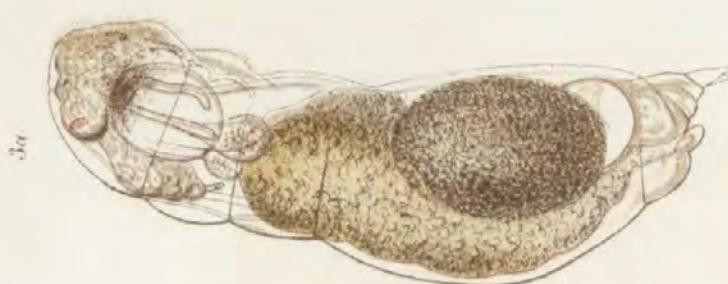
5b



4.



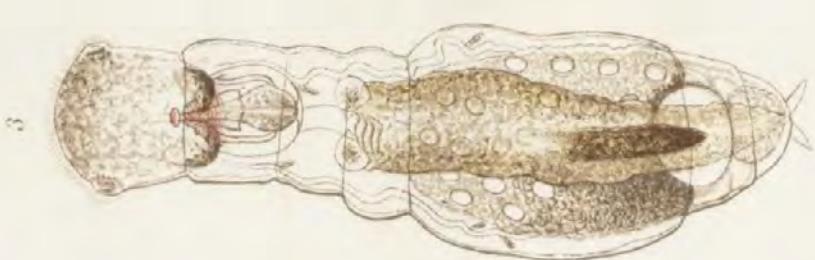
5c



3a



5d



3.



4x

Hannart nro.

COPPESS; NOTOMMATA.

1. C. LABIATUS. 2. C. SPICATUS. 3. C. CERBERUS. 4. C. PACHYURUS.
5. C. GAUDATUS. 6. N. COLLARIS.

Figs. 1 to 5. P.H. Gosse
n. C. T. Hudson



PLATE XVII.

1. Notommata brachyota	dorsal view	G
1a. " " . . .	side view	G
1b. " " . . .	end of brain, with eye; side view	G
2. Notommata saccigera	dorsal view	G
2a. " " . . .	side view	G
3. Notommata ansata	dorsal view	G
3a. " " . . .	side view	G
4. Notommata tripus	dorsal view	G
4a. " " . . .	side view (smaller scale)	G
4b. " " . . .	head, showing auricles	G
4c. " " . . .	trophi	G
5. Notommata pilarius	dorsal view	G
5a. " " . . .	side view	G
5b. " " . . .	transverse section	G
6. Notommata aurita	dorsal view	G
6a. " " . . .	side view	G
6b. " " . . .	central lobe of brain, with eye	G
7. Notommata cyrtopus	dorsal view	G
7a. " " . . .	side view	G
7b. " " . . .	trophi	G
8. Notommata tuba	dorsal view	G
9. Notommata lacinulata	dorsal view	G
9a. " " . . .	side view	G
9b. " " . . .	trophi, ventral view	G
9c. " " . . .	trophi, side view	G
10. Eosphora aurita	dorsal view	G
10a. " " . . .	side view	G
11. Taphrocampa Saundersiae	dorsal view	G
11a. " " . . .	side view	G
11b. " " . . .	transverse section	G
12. Taphrocampa annulosa	dorsal view	G
12a. " " . . .	side view	G
12b. " " . . .	transverse section	G
12c. " " . . .	trophi, side view	G
12d. " " . . .	trophi, ventral view	G
12e. " " . . .	tail (var.)	G
13. Albertia intrusor	ventral view	G
13a. " " . . .	side view	G
13b. " " . . .	trophi, ventral view	G
14. Albertia naiadis	side view (after Mr. E. C. Bousfield)	



2053



NOTOMMATA; EOSPHORA; TAPHEROCAMPA; ALBERTIA.

1. N. BRACHYOTA 2. N. SACCICERA 3. N. ANGATA 4. N. TRIPUS 5. N. PILARIUS 6. N. CYRTOPIUS 8. N. TUBA
9. N. LACINULATA 10. N. AURITA 11. N. SAUNDERSIE 12. N. TANNULOSA 13. N. INTRUSOR 14. N. NAIDIS

PLATE XVIII.

1.	<i>Notommata forcipata</i>	.	dorsal view	.	.	.	.	.	G
1a.	"	.	side view	.	.	.	.	.	G
1b.	"	.	toes	.	.	.	.	.	G
2.	<i>Notommata naias</i>	.	ventral view	.	.	.	.	.	G
2a.	"	.	head; dorsal view	.	.	.	.	.	G
2b.	"	.	mastax and trophi	.	.	.	.	.	G
3.	<i>Pleurotrocha constricta</i>	.	dorsal view	.	.	.	.	.	G
3a.	"	.	side view	.	.	.	.	.	G
3b.	"	.	head; ventral view	.	.	.	.	.	G
3c.	"	.	foot and toes	.	.	.	.	.	G
4.	<i>Pleurotrocha leptura</i>	.	dorsal view	.	.	.	.	.	G
4a.	"	.	side view	.	.	.	.	.	G
5.	<i>Pleurotrocha gibba</i>	.	dorsal view	.	.	.	.	.	G
5a.	"	.	side view	.	.	.	.	.	G
6.	<i>Proales decipiens</i>	.	dorsal view	.	.	.	.	.	G
6a.	"	.	side view	.	.	.	.	.	G
7.	<i>Proales sordida</i>	.	dorsal view	.	.	.	.	.	G
7a, 7b.	"	.	side views	.	.	.	.	.	G
7c.	"	.	trophi	.	.	.	.	.	G
8.	<i>Proales gibba</i>	.	side view	.	.	.	.	.	G
9.	<i>Proales petromyzon</i>	.	ventral view	.	.	.	.	.	G
9a.	"	.	side view; extended	.	.	.	.	.	G
9b.	"	.	side view; contracted	.	.	.	.	.	G
9c.	"	.	head, side view; enlarged	.	.	.	.	.	G
9d.	"	.	eye	.	.	.	.	.	G
10.	<i>Proales tigridia</i>	.	dorsal view	.	.	.	.	.	G
10a.	"	.	side view	.	.	.	.	.	G
11.	<i>Proales parasita</i>	.	side view	.	.	.	.	.	G
11a.	"	.	mastax and trophi	.	.	.	.	.	G
12.	<i>Distemma labiatum</i>	.	dorsal view	.	.	.	.	.	G
12a.	"	.	side view	.	.	.	.	.	G
13.	<i>Distemma Collinsi</i>	.	side view	.	.	.	.	.	G
14.	<i>Triophthalmus dorsualis</i> (?)	.	dorsal view	.	.	.	.	.	G
14a.	"	.	side view	.	.	.	.	.	G
15.	<i>Furcularia æqualis</i>	.	dorsal view	.	.	.	.	.	G
15a.	"	.	side view	.	.	.	.	.	G
16.	<i>Furcularia longisetata</i>	.	dorsal view	.	.	.	.	.	G
16a.	"	.	side view	.	.	.	.	.	G
17.	<i>Proales felis</i>	.	dorsal view	.	.	.	.	.	G
17a.	"	.	side view	.	.	.	.	.	G
17b.	"	.	trophi	.	.	.	.	.	G



Habicht 1877

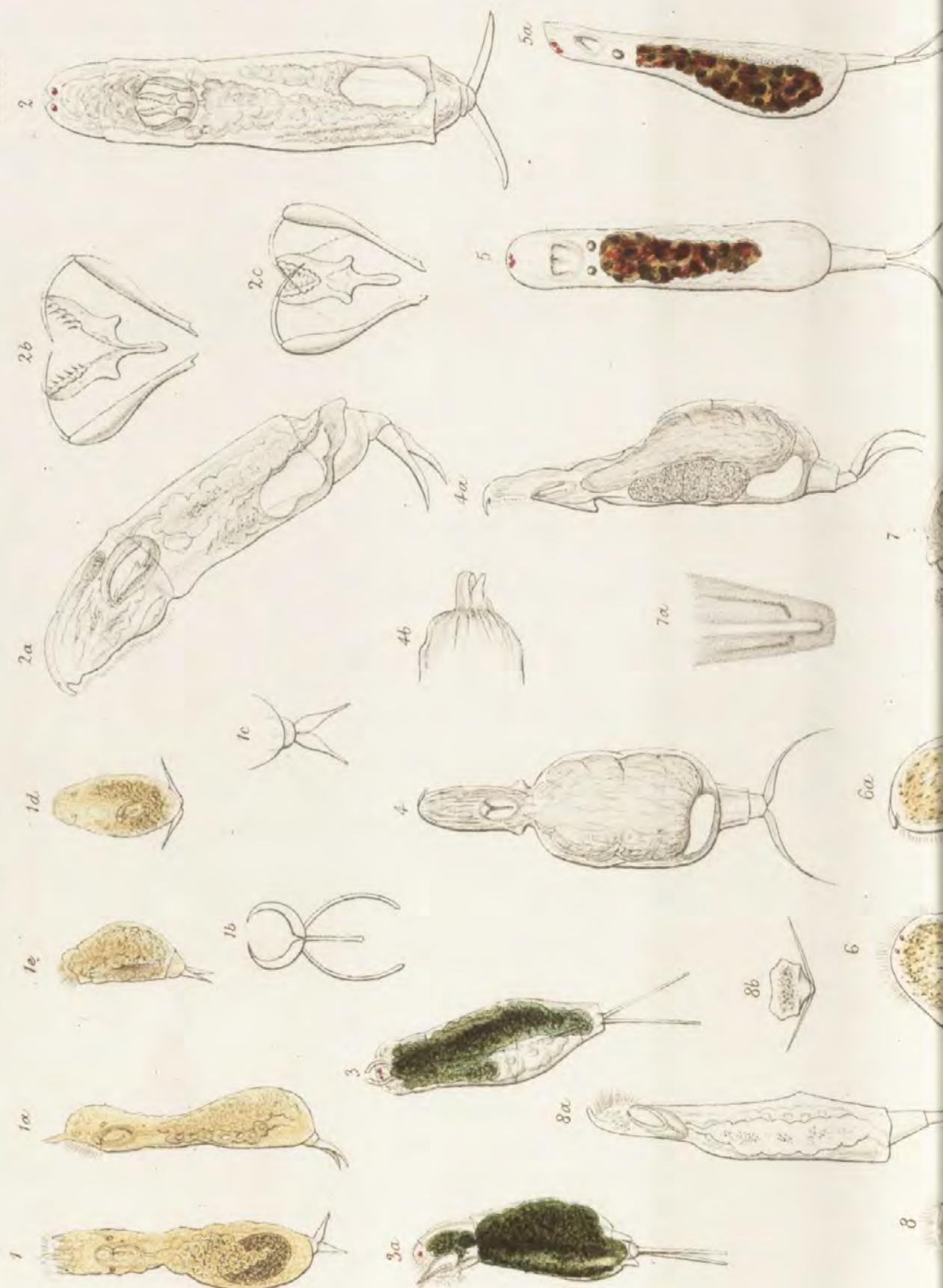
NOTOCHEMATA, FILEUROTIROCHA, PRODALES, DISSEMIA, TRIOPHTHALMUS (2), FURCULARIA.

IN FORCIATA 2 N NAJAS. 3. PL CONSTRICTA 4. PL LEPTURA 5. PL GIBBA 6. PR DECIPiens. 7. PR SORDIDA. 8. PR GIBBA. 9. PR. PETROMYZON 10. PR. TIGRIDIA 11. PR. PARASITA 12 D LABIATUM. 13. D. COLLINSI 14. T. DORSUALIS. 15. F. EQUALIS. 16. F. LONGISETA. 17. PR. FEELIS



PLATE XIX.

1. <i>Distemma raptor</i>	.	dorsal view	G
1a. " "	.	side view	G
1b. " "	.	trophi	G
1c. " "	.	foot and toes	G
1d. " "	.	contracted; dorsal view	G
1e. " "	.	" side view	G
2. <i>Diglena forcipata</i>	.	dorsal view	G
2a. " "	.	side view	G
2b. " "	.	trophi, expanded	G
2c. " "	.	trophi, shut	G
3. <i>Diglena biraphis</i>	.	dorsal view	G
3a. " "	.	side view	G
4. <i>Diglena circinator</i>	.	dorsal view	G
4a. " "	.	side view	G
4b. " "	.	fore parts, in contraction	G
5. <i>Diglena clastopis</i>	.	dorsal view	G
5a. " "	.	side view	G
6. <i>Diglena grandis</i>	.	dorsal view	G
6a. " "	.	side view	G
7. <i>Diglena gibber</i>	.	side view	G
8. <i>Diglena caudata</i>	.	dorsal view	G
9. <i>Diglena giraffa</i>	.	side view	G
9a. " "	.	head, dorsal view	G
10. <i>Diglena catellina</i>	.	dorsal view	G
10a. " "	.	side view	G
11. <i>Diglena permollis</i>	.	dorsal view	G
12. <i>Furcularia micropus</i>	.	dorsal view	G
12a. " "	.	side view	G
13. <i>Furcularia gibba</i>	.	side view	G
13a. " "	.	mastax and trophi, obliquely ventral view	G
13b. " "	.	trophi, expanded	G
13c. " "	.	trophi, shut	G
14. <i>Furcularia gracilis</i>	.	dorsal view	G
14a. " "	.	side view	G
15. <i>Furcularia marina</i>	.	side view	G
15a. " "	.	protruded trophi, and antenna	G
15b. " "	.	trophi	G



- Danner: 1904.
- DISSTEMMA, DIGLENIA; FUCCULARIA.
1. DIS. RAPTOR. 2. DIG. FORCIPATA. 3. DIG. CLASTOPIS. 4. DIG. CIRCUATOR. 5. DIG. CLASTOPIS. 6. DIG. GRANDIS. 7. DIG. GIBBER.
 8. DIG. CAUDATA. 9. DIG. GIRAFFA. 10. DIG. CATELLINA. 11. DIG. PERMOLLIS. 12. F. MILROPIUS. 13. F. GIBBA. 14. F. GRAULIS. 15. F. MARINA.
- Pl. 10. See ad viv. id.



PLATE XX.

1. Furcularia forficula	dorsal view	.	.	.	.	G
1a. " "	side view	.	.	.	.	G
1b. " "	toe	.	.	.	.	G
2. Furcularia Boltoni	dorsal view	.	.	.	.	G
2a. " "	side view	.	.	.	.	G
3. Furcularia ensifera	dorsal view	.	.	.	.	G
3a. " "	side view	.	.	.	.	G
4. Furcularia cæca	dorsal view	.	.	.	.	G
4a. " "	side view	.	.	.	.	G
5. Mastigocerca bicornis.	dorsal view	.	.	.	.	G
5a. " "	side view	.	.	.	.	G
5b. " "	muscles	.	.	.	.	G
6. Mastigocerca stylata	side view	.	.	.	.	G
6a. " "	mastax and trophi	.	.	.	.	G
6b. " "	muscles	.	.	.	.	G
7. Mastigocerca carinata	side view	.	.	.	.	G
7a. " "	insertion of toe	.	.	.	.	G
8. Mastigocerca elongata	side view	.	.	.	.	G
9. Mastigocerca rattus	dorsal view	.	.	.	.	G
9a. " "	side view	.	.	.	.	G
10. Mastigocerca lophoessa	side view	.	.	.	.	G
10a. " "	empty lorica	.	.	.	.	G
11. Mastigocerca scipio	side view	.	.	.	.	G
12. Mastigocerca macera	side view; dead	.	.	.	.	G
13. Rattulus tigris	side view	.	.	.	.	G
13a. " "	mastax and trophi	.	.	.	.	G
13b, 13c. " "	foot and toes	.	.	.	.	G
14. Rattulus cimolius	dorsal view	.	.	.	.	G
14a. " "	side view	.	.	.	.	G
14b, 14c. " "	mastax and trophi	.	.	.	.	G
15. Rattulus sejunctipes	dorsal view	.	.	.	.	G
15a. " "	side view	.	.	.	.	G
16. Rattulus calyptus	side view	.	.	.	.	G
17. Rattulus helminthoides	obliquely ventral view	.	.	.	.	G
17a. " "	side view	.	.	.	.	G
18, 18a. Cœlopus porcellus	side views	.	.	.	.	G
18b. " "	front of lorica	.	.	.	.	G
18c. " "	transverse muscles; and toes, apart	.	.	.	.	G
18d. " "	toes, one within the other	.	.	.	.	G
19. Cœlopus tenuior	dorsal view	.	.	.	.	G
19a. " "	side view	.	.	.	.	G
20. Cœlopus minutus	dorsal view	.	.	.	.	G
20a. " "	side view	.	.	.	.	G
21. Cœlopus brachyurus	side view	.	.	.	.	G
22. Cœlopus cavia	side view	.	.	.	.	G



FURCULARIA; MASTIGOCERCA; RATTULUS; CŒLOFUS.

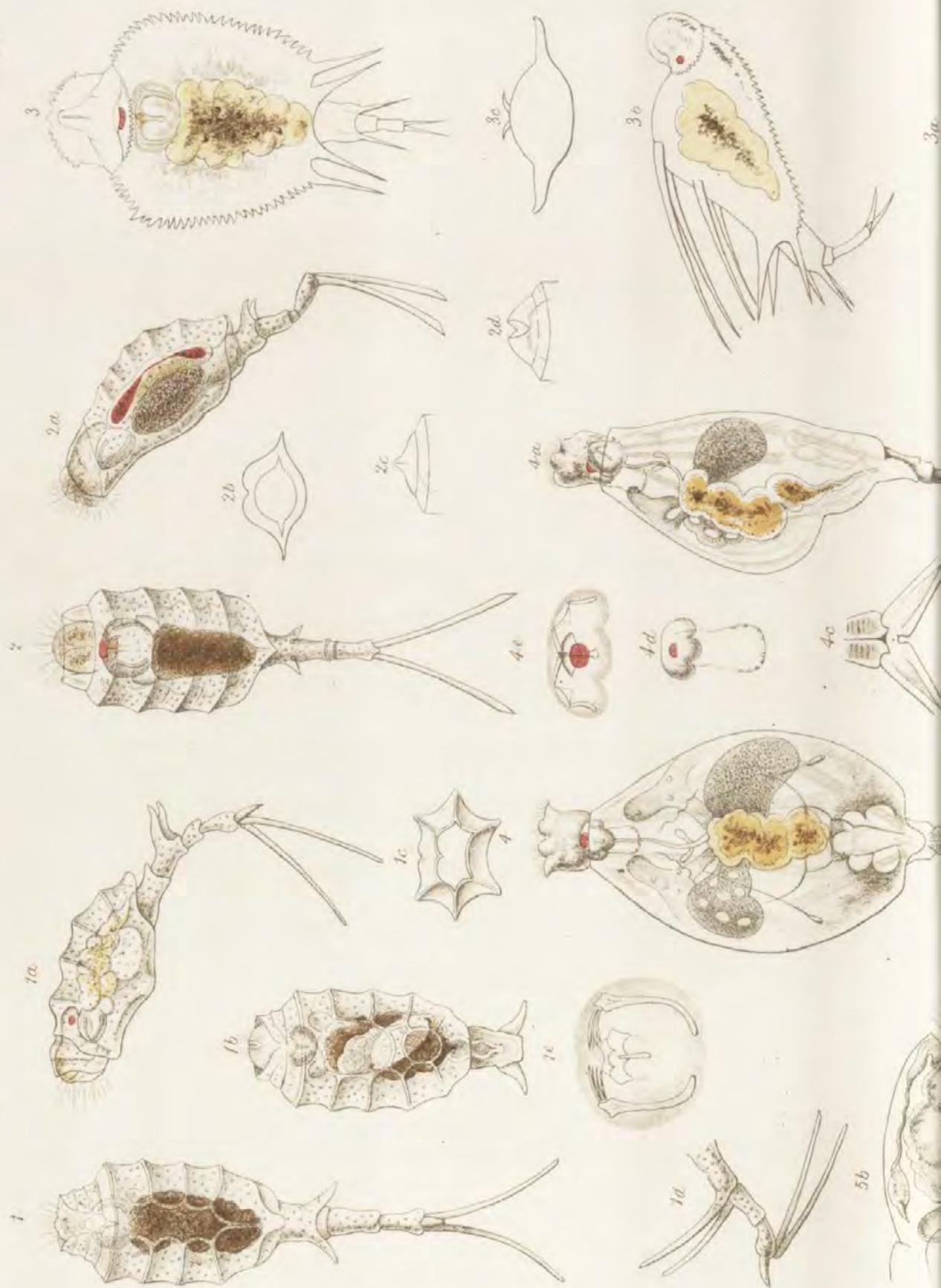
- 1 F. FORCICULA 2 E. BOLTONI 3 F. ENSIFERA 4. F. DECA 5. M. BICORNIS 6. M. STYLIATA 7. M. ELONGATA 8. M. RATTUS 10. M. LOPHOESSA 11. M. MACERA 12. M. SUPPIO 13. R. TIGRIS 14. R. DIMOLIS 15. R. SEJUNCTIPES 16. R. EALYPTUS 17. R. HELMINTHOIDES 18. C. PORCELLUS 19. C. TENIUS 20. C. MINUTUS 21. C. BRACHYXIRUS 22. C. TAYA.

PH. Gossé, ad vivide.



PLATE XXI.

1.	Dinocharis pocillum	.	dorsal view	.	.	.	.	.	.	H
1a.	"	"	side view	.	.	.	.	.	.	H
1b.	"	"	ventral view	.	.	.	.	.	.	H
1c.	"	"	transverse section	.	.	.	.	.	.	H
1d.	"	"	variety; foot	.	.	.	.	.	.	H
1e.	"	"	trophi	.	.	.	.	.	.	G
2.	Dinocharis tetractis	.	dorsal view	.	.	.	.	.	.	G
2a.	"	"	side view	.	.	.	.	.	.	G
2b.	"	"	transverse section	.	.	.	.	.	.	G
2c.	"	"	head; cap closed	.	.	.	.	.	.	G
2d.	"	"	head; cap open	.	.	.	.	.	.	G
3.	Dinocharis Collinsii	.	dorsal view, the armature omitted	.	.	.	.	.	.	G
3a.	"	"	dorsal view, showing spines	.	.	.	.	.	.	G
3b.	"	"	side view	.	.	.	.	.	.	G
3c.	"	"	transverse section	.	.	.	.	.	.	G
4.	Scaridium eudactylotum	.	dorsal view	.	.	.	.	.	.	H
4a.	"	"	side view	.	.	.	.	.	.	H
4b.	"	"	ventral view	.	.	.	.	.	.	H
4c.	"	"	junction of foot and toes	.	.	.	.	.	.	H
4d.	"	"	mastax and brain	.	.	.	.	.	.	H
4e.	"	"	mastax, trophi, and eye	.	.	.	.	.	.	G
5.	Scaridium longicaudum	.	dorsal view	.	.	.	.	.	.	G
5a.	"	"	side view	.	.	.	.	.	.	G
5b.	"	"	head, showing mastax, trophi, and eye	.	.	.	.	.	.	G
6.	Stephanops muticus	.	dorsal view	.	.	.	.	.	.	G
6a.	"	"	side view	.	.	.	.	.	.	G
7.	Stephanops lamellaris	.	dorsal view	.	.	.	.	.	.	G
7a.	"	"	side view	.	.	.	.	.	.	G
8.	Stephanops unisetatus	.	dorsal view	.	.	.	.	.	.	G
8a.	"	"	side view	.	.	.	.	.	.	G
9.	Stephanops chlæna	.	dorsal view	.	.	.	.	.	.	G
9a.	"	"	side view	.	.	.	.	.	.	G



DINOCHLARIS; SCARIDIUM; STEPHANOPS.

1. D. POCILUM 2. D. TTRACTIS 3. D. COLLINSI 4. SCLEUDACTYLOTUM,
5. SC. LONGICAUDUM, 6. ST. MUTICUS, 7. ST. LAMELLARIS, 8. ST. UNISETATUS, 9. ST. CHLENA.

Figs. 1, 2, 4, 5, 6, 7, 8, 9, L. T. Hudson
and Fig. 3, J. A. V. Gmelin
entom. Ph. fasc.



PLATE XXII.

1. <i>Salpina mucronata</i>	.	dorsal view	.	.	.	.	.	G
1a. " "	.	side view	.	.	.	.	.	G
1b. " "	.	lorica, oblique view	.	.	.	.	.	G
2. <i>Salpina spinigera</i>	.	dorsal view	.	.	.	.	.	G
2a. " "	.	side view	.	.	.	.	.	G
2b. " "	.	transverse section, dorsal half	.	.	.	.	.	G
3. <i>Salpina mutica</i>	.	dorsal view	.	.	.	.	.	G
3a. " "	.	side view	.	.	.	.	.	G
4. <i>Salpina brevispina</i>	.	side view	.	.	.	.	.	G
4a. " "	.	lorica, dorsal view	.	.	.	.	.	G
4b. " "	.	lorica, side view	.	.	.	.	.	G
5. <i>Salpina eustala</i>	.	dorsal view	.	.	.	.	.	G
5a. " "	.	side view	.	.	.	.	.	G
6. <i>Salpina macracantha</i>	.	dorsal view	.	.	.	.	.	G
6a. " "	.	side view	.	.	.	.	.	G
6b. " "	.	trophi, side view	.	.	.	.	.	G
7. <i>Salpina sulcata</i>	.	dorsal view	.	.	.	.	.	G
7a. " "	.	side view	.	.	.	.	.	G
7b. " "	.	rear view	.	.	.	.	.	G
8. <i>Diplax compressa</i>	.	side view	.	.	.	.	.	G
8a. " "	.	dorsal view	.	.	.	.	.	G
8b. " "	.	transverse section	.	.	.	.	.	G
9. <i>Diplax trigona</i>	.	dorsal view	.	.	.	.	.	G
9a. " "	.	side view	.	.	.	.	.	G
9b. " "	.	transverse section	.	.	.	.	.	G
10. <i>Diaschiza semiaperta</i>	.	side view	.	.	.	.	.	G
10a. " "	.	lorica, dorsal view	.	.	.	.	.	G
10b. " "	.	head and eye	.	.	.	.	.	G
10c. " "	.	trophi	.	.	.	.	.	G
11. <i>Diaschiza paeta</i>	.	side view	.	.	.	.	.	G
11a. " "	.	dorsal view	.	.	.	.	.	G
12. <i>Diaschiza valga</i>	.	dorsal view	.	.	.	.	.	G
12a. " "	.	side view	.	.	.	.	.	G
13. <i>Diaschiza exigua</i>	.	dorsal view	.	.	.	.	.	G
13a. " "	.	side view	.	.	.	.	.	G
14. <i>Diaschiza tenuior</i>	.	dorsal view	.	.	.	.	.	G
14a. " "	.	side view	.	.	.	.	.	G
15. <i>Diaschiza Hoodii</i>	.	dorsal view	.	.	.	.	.	G
15a. " "	.	side view	.	.	.	.	.	G

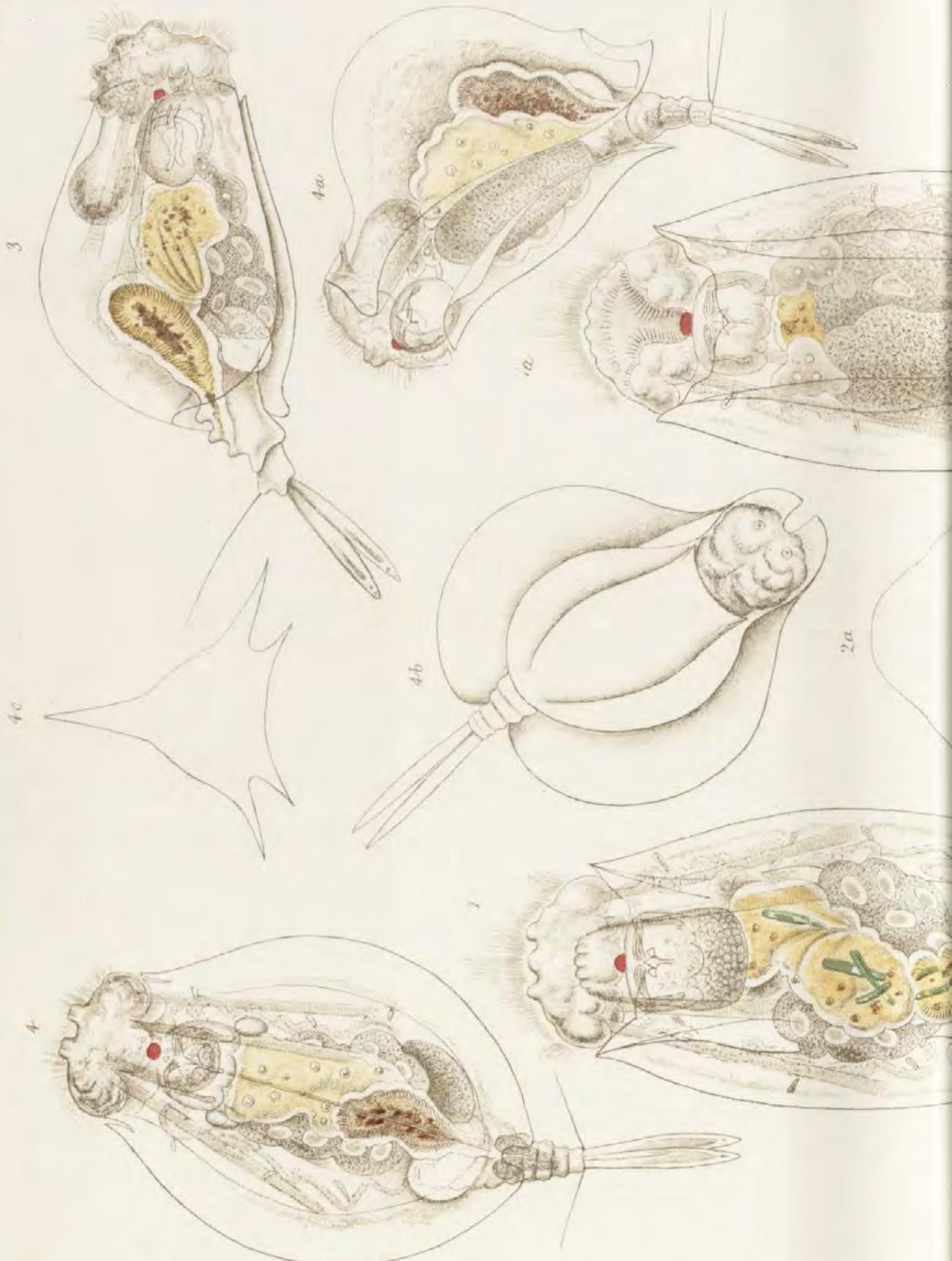


SALPINÆ; DIPLAX; DIASCHIZA.

1 S. MUCRONATA 2. S. SPINIGERA 3. S. MUTICA 4. S. BREVISPINA 5. S. EUSTALA 6. S. MACRACANTHA;
7. S. SULCATA 8. DIP. COMPRESSA 9. DIP. TRIGONA 10. DIA. SEMIAPERITA 11. DIA. PÆTA 12. DIA. VALGA.
13. DIA. TENUIFORMIS 14. DIA. TENUIFORMIS 15. DIA. TENUIFORMIS

PLATE XXIII.

1. <i>Euchlanis lyra</i>	.	.	dorsal view	.	.	.	.	.	.	H
1a.	"	.	ventral view	.	.	.	.	.	.	H
1b.	"	.	foot, and contained vessels	.	.	.	.	.	.	H
2. <i>Euchlanis pyriformis</i>	.	.	ventral view	.	.	.	.	.	.	H
2a.	"	.	transverse section	.	.	.	.	.	.	H
2b.	"	.	front-edges of lorica	.	.	.	.	.	.	H
3. <i>Euchlanis uniseta</i> (?)	.	.	side view	.	.	.	.	.	.	H
4. <i>Euchlanis triquetra</i>	.	.	dorsal view	.	.	.	.	.	.	H
4a.	"	.	side view	.	.	.	.	.	.	H
4b.	"	.	ventral view of lorica	.	.	.	.	.	.	H
4c.	"	.	transverse section	.	.	.	.	.	.	H
5. <i>Euchlanis dilatata</i>	.	.	ventral view: a, edge of dorsal plate; b, edge of the flange of ventral plate; c, edge of the portion connecting the dorsal and ventral plates, and at right-angles to both	.	.	.	.	.	.	H
5a.	"	.	dorsal front-edge of lorica	.	.	.	.	.	.	H
5b.	"	.	ventral front-edge of lorica	.	.	.	.	.	.	H
6. <i>Euchlanis macrura</i>	.	.	dorsal view	.	.	.	.	.	.	H



1 E LYRA, 2 E PYRIFORMIS, 3 E UNISETA, 4 E TRIQUETRA, 5 E DILATATA, 6 E MACRURA

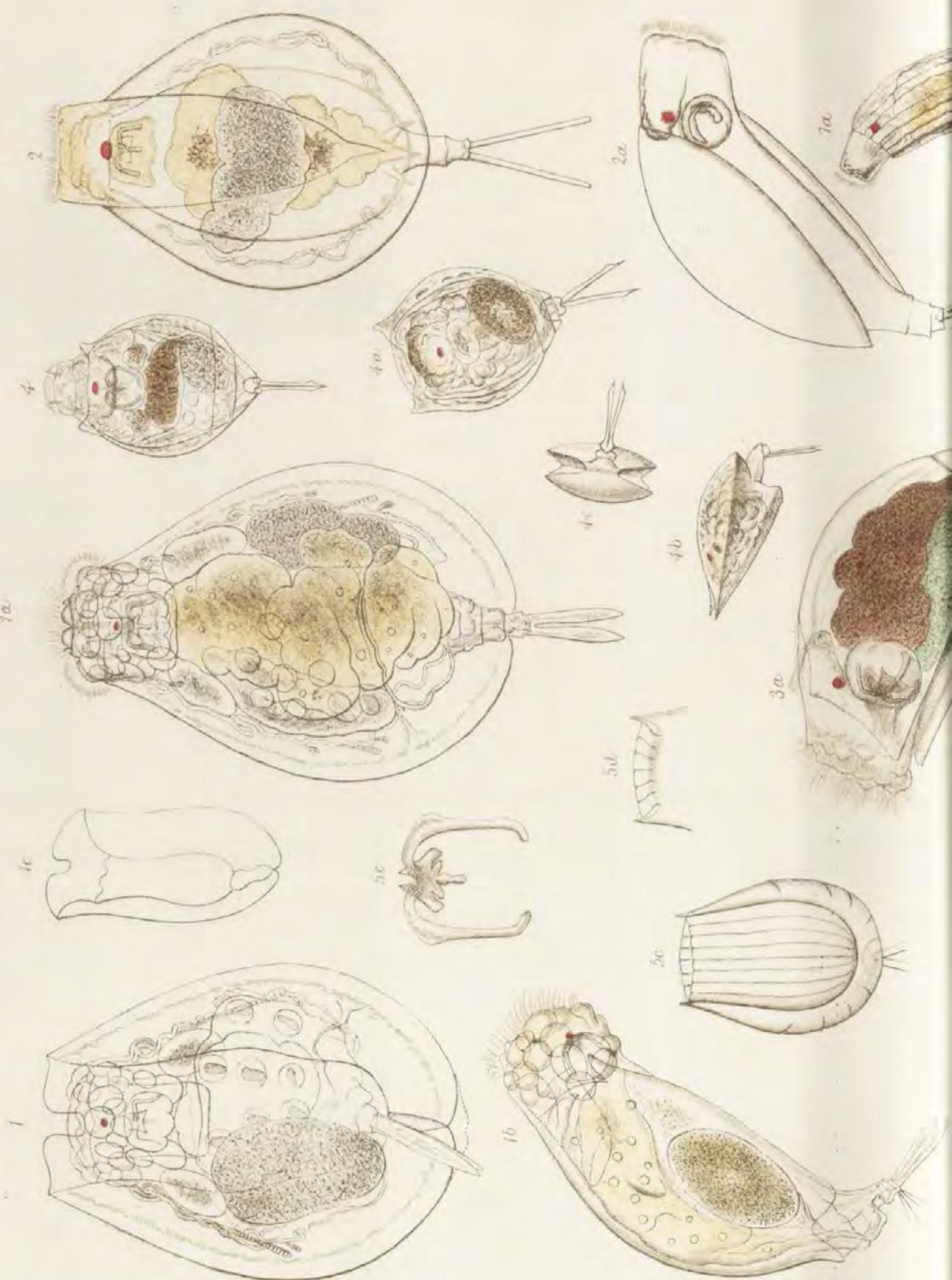
EUCHILANIS.

C. T. Hudson ad vivum del.



PLATE XXIV.

1.	Euchlanis deflexa	.	ventral view	.	.	.	.	.	G
1a.	"	"	dorsal view	.	.	.	.	.	G
1b.	"	"	side view	.	.	.	.	.	G
1c.	"	"	empty lorica, ventral view	.	.	.	.	.	H
2.	Diplois propatula	.	dorsal view	.	.	.	.	.	G
2a.	"	"	side view	.	.	.	.	.	G
3.	Diplois Daviesiae	.	dorsal view	.	.	.	.	.	G
3a.	"	"	side view	.	.	.	.	.	G
3b.	"	"	transverse section	.	.	.	.	.	G
3c.	"	"	hind end of lorica, dorsal view	.	.	.	.	.	G
3d.	"	"	trophi	.	.	.	.	.	G
4.	Cathypna luna	.	dorsal view, head extended	.	.	.	.	.	G
4a.	"	"	dorsal view, head retracted	.	.	.	.	.	G
4b.	"	"	side view, head retracted	.	.	.	.	.	G
4c.	"	"	rear view	.	.	.	.	.	G
5.	Cathypna sulcata	.	dorsal view	.	.	.	.	.	G
5a.	"	"	side view, head retracted	.	.	.	.	.	G
5b.	"	"	side view, head extended	.	.	.	.	.	G
5c.	"	"	lorica, ventral view	.	.	.	.	.	G
5d.	"	"	edge of lorica	.	.	.	.	.	G
6.	Cathypna rusticula	.	dorsal view	.	.	.	.	.	G
6a.	"	"	side view	.	.	.	.	.	G
6b.	"	"	rear view	.	.	.	.	.	G
7.	Distyla flexilis	.	dorsal view	.	.	.	.	.	G
7a.	"	"	side view	.	.	.	.	.	G
8.	Distyla Gissensis	.	dorsal view	.	.	.	.	.	G
8a.	"	"	side view	.	.	.	.	.	G



Hannart imp.

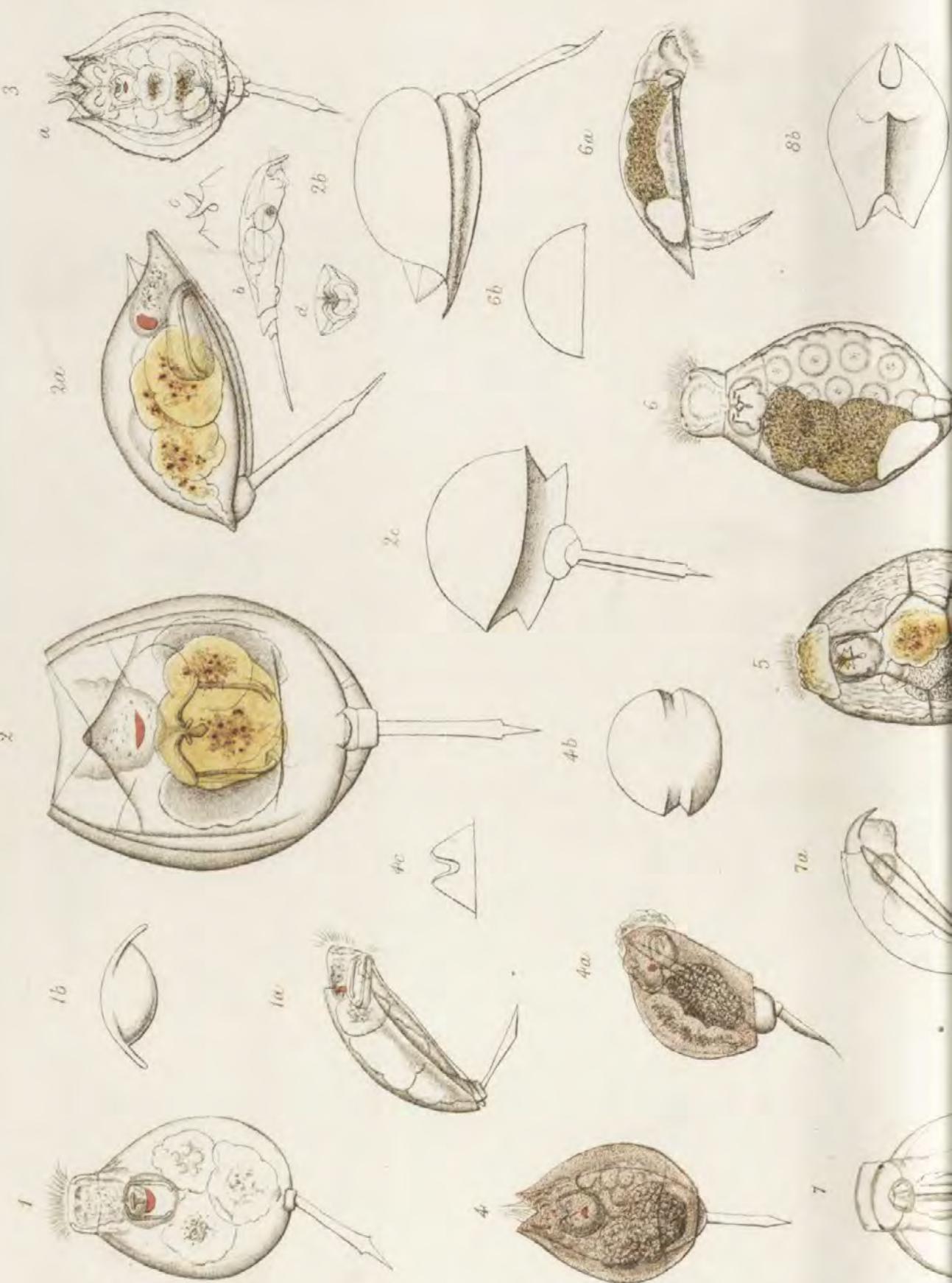
EUCHLANIS; DIPLOIS; CATHYNA; DISTYLIA.

1 E DEPLEXA. 2 DIP PROPATULA. 3 DIP LUNA. 5 C SULCATA. 6 C RUSTICULA.
7 DIS FLEXILIS. 8 DIS GISSENSIS.

Fig. 1 T. H. Hansen, ad nat.
the rest P. H. Gosse, ad inv. } del.

PLATE XXV.

1.	Monostyla cornuta	.	dorsal view	.	.	.	.	.	G
1a.	"	.	side view	.	.	.	.	.	G
1b.	"	.	transverse section	.	.	.	.	.	G
2.	Monostyla lunaris	.	dorsal view	.	.	.	.	.	G
2a, 2b.	"	.	side view	.	.	.	.	.	G
2c.	"	.	rear view	.	.	.	.	.	G
3.	Monostyla quadridentata	.	dorsal view	.	.	.	.	.	G
4.	Monostyla bulla	.	dorsal view	.	.	.	.	.	G
4a.	"	.	side view	.	.	.	.	.	G
4b.	"	.	rear view	.	.	.	.	.	G
4c.	"	.	front of lorica	.	.	.	.	.	G
5.	Monostyla Lordii	.	dorsal view	.	.	.	.	.	G
6.	Metopidia lepadella	.	dorsal view	.	.	.	.	.	G
6a.	"	.	side view	.	.	.	.	.	G
6b.	"	.	transverse section	.	.	.	.	.	G
7.	Metopidia triptera	.	dorsal view	.	.	.	.	.	G
7a.	"	.	side view	.	.	.	.	.	G
7b.	"	.	front view	.	.	.	.	.	G
8.	Metopidia oxysternon	.	ventral view	.	.	.	.	.	G
8a.	"	.	side view	.	.	.	.	.	G
8b.	"	.	lorica; ventral view	.	.	.	.	.	G
8c.	"	.	lorica; dorsal view	.	.	.	.	.	G
8d.	"	.	transverse section	.	.	.	.	.	G
8e.	"	.	head; side view	.	.	.	.	.	G
8f.	"	.	trophi	.	.	.	.	.	G
8g.	"	.	pectoral notch of lorica	.	.	.	.	.	G
8h.	"	.	hind end of ventral plate, showing orifice for the foot	.	.	.	.	.	G
9.	Metopidia acuminata	.	dorsal view	.	.	.	.	.	G
9a.	"	.	side view	.	.	.	.	.	G
9b.	"	.	lorica; ventral view	.	.	.	.	.	G
9c.	"	.	transverse section	.	.	.	.	.	G
10.	Metopidia rhomboides	.	dorsal view	.	.	.	.	.	G
10a.	"	.	side view	.	.	.	.	.	G
10b.	"	.	transverse section	.	.	.	.	.	G
11.	Metopidia solidus	.	dorsal view	.	.	.	.	.	G
11a.	"	.	ventral view, head retracted	.	.	.	.	.	G
11b.	"	.	side view	.	.	.	.	.	G
11c.	"	.	rear view	.	.	.	.	.	G
11d.	"	.	front of lorica	.	.	.	.	.	G
11e.	"	.	hind end of lorica	.	.	.	.	.	G
11f.	"	.	stomach	.	.	.	.	.	G
12.	Colurus dactylotus	.	dorsal view	.	.	.	.	.	G
12a.	"	.	side view	.	.	.	.	.	G
13.	Colurus pedatus	.	side view	.	.	.	.	.	G
13a.	"	.	foot and toes	.	.	.	.	.	G



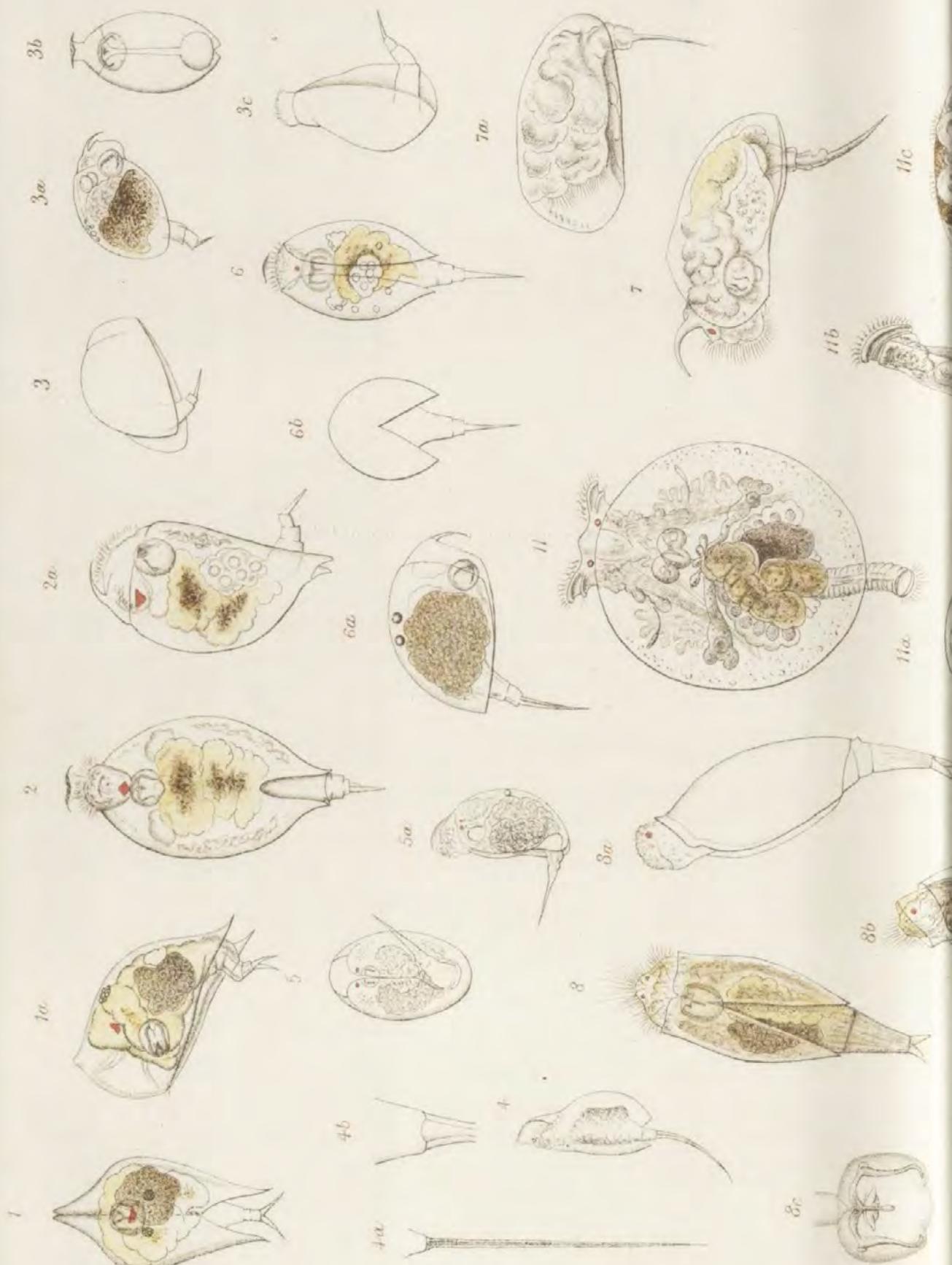
MÖNDESTYLA; COLURELLS.

1. M. CORNUATA 2. M. LUNARIS. 3. M. QUADRIDENTATA. 4. M. LEPADELLA. 5. M. MILDII. 6. M. OXYSTERNON. 7. M. TRIPTERA. 8. M. RHOMBOIDES. 9. M. SOLIDUS. 10. M. ACUMINATA. 11. M. DACTYLOTUS. 12. M. G. FEDATUS.



PLATE XXVI.

1. <i>Colurus deflexus</i>	.	dorsal view	.	.	.	.	G
1a. " "	.	side view, head retracted	.	.	.	.	G
2. <i>Colurus bicuspis</i>	.	dorsal view	.	.	.	.	G
2a. " "	.	side view	.	.	.	.	G
3. <i>Colurus obtusus</i>	.	side view, head retracted	.	.	.	.	G
3a. " "	.	side view, head protruded	.	.	.	.	G
3b. " "	.	ventral view	.	.	.	.	G
3c. " "	.	obliquely ventral view	.	.	.	.	G
4. <i>Colurus cœlopinus</i>	.	side view	.	.	.	.	G
4a. " "	.	extremity of foot, and toe	.	.	.	.	G
4b. " "	.	junction of foot and toe	.	.	.	.	G
5. <i>Colurus amblytelus</i>	.	ventral view	.	.	.	.	G
5a. " "	.	side view	.	.	.	.	G
6. <i>Colurus caudatus</i>	.	ventral view	.	.	.	.	G
6a. " "	.	side view	.	.	.	.	G
6b. " "	.	rear view	.	.	.	.	G
7. <i>Monura colurus</i>	.	side view, head protruded	.	.	.	.	G
7a. " "	.	side view, head retracted	.	.	.	.	G
8. <i>Mytilia Tavina</i>	.	ventral view	.	.	.	.	G
8a. " "	.	side view, head and foot protruded	.	.	.	.	G
8b. " "	.	side view, head and foot retracted	.	.	.	.	G
8c. " "	.	trophi	.	.	.	.	G
9. <i>Cochleare staphylinus</i>	.	dorsal view	.	.	.	.	G
9a. " "	.	side view	.	.	.	.	G
10. <i>Cochleare turbo</i>	.	dorsal view	.	.	.	.	G
10a. " "	.	side view	.	.	.	.	G
11. <i>Pterodina patina</i>	.	dorsal view	.	.	.	.	H
11a. " "	.	ventral view, head retracted	.	.	.	.	H
11b. " "	.	side view	.	.	.	.	H
11c. " "	.	front view	.	.	.	.	H
12. <i>Pterodina patina</i> (a variety)	.	dorsal view	.	.	.	.	H
12a. " "	.	ventral view, head and foot retracted	.	.	.	.	H
13. <i>Pterodina valvata</i>	.	ventral view	.	.	.	.	H
13a. " "	.	dorsal view, lorica folded	.	.	.	.	H
14. <i>Pterodina clypeata</i>	.	dorsal view	.	.	.	.	G
14a. " "	.	dorsal view, head retracted	.	.	.	.	G
15. <i>Pterodina mucronata</i>	.	dorsal view	.	.	.	.	G
15a. " "	.	ventral view, lorica	.	.	.	.	G
16. <i>Pterodina truncata</i>	.	ventral view	.	.	.	.	G
17. <i>Pterodina elliptica</i>	.	lorica, ventral view	.	.	.	.	H



COLURUS, MONURA, MYTILIA, COTYLLEARE, PTERODIMA.
1. C. DEPLEXUS 2. C. BICUSPIDATUS 3. C. OBTUSUS 4. C. CUDOFINUS 5. C. CAMBLYTELUS 6. C. CAUDATUS
7. MON COLURUS 8. MY. LAVINA 9. COCH. STAPHYLINUS 10. COCH. TURBO 11. P. PATINA 12. P. ELLIPTICA
13. P. VALVATA 14. P. CLYPEATA 15. P. MUCRONATA 16. P. TRUNCATA 17. P. ELLIPTICA.

Illustratione ad vocem
Herrn Dr. F. E. Müller

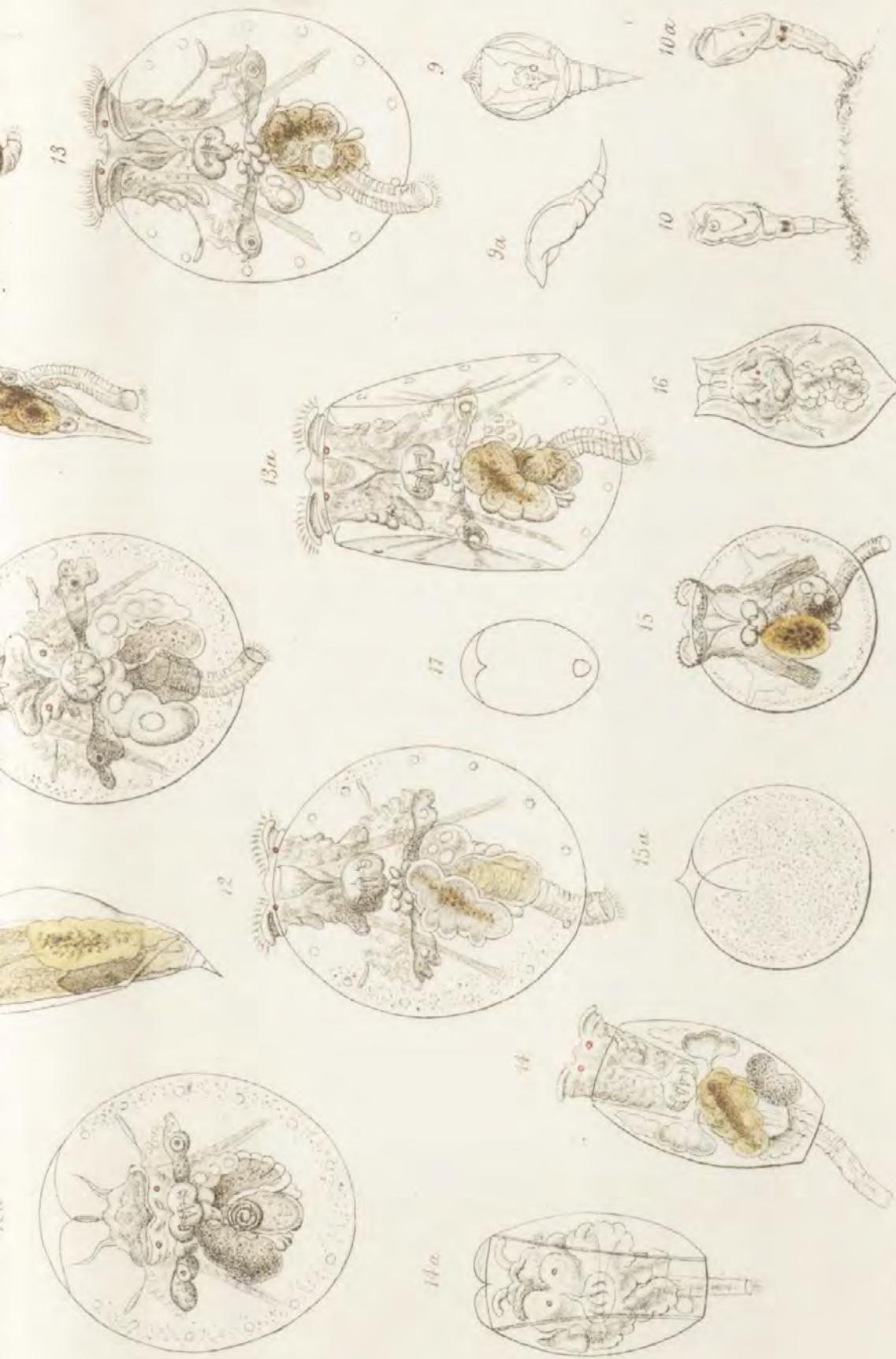
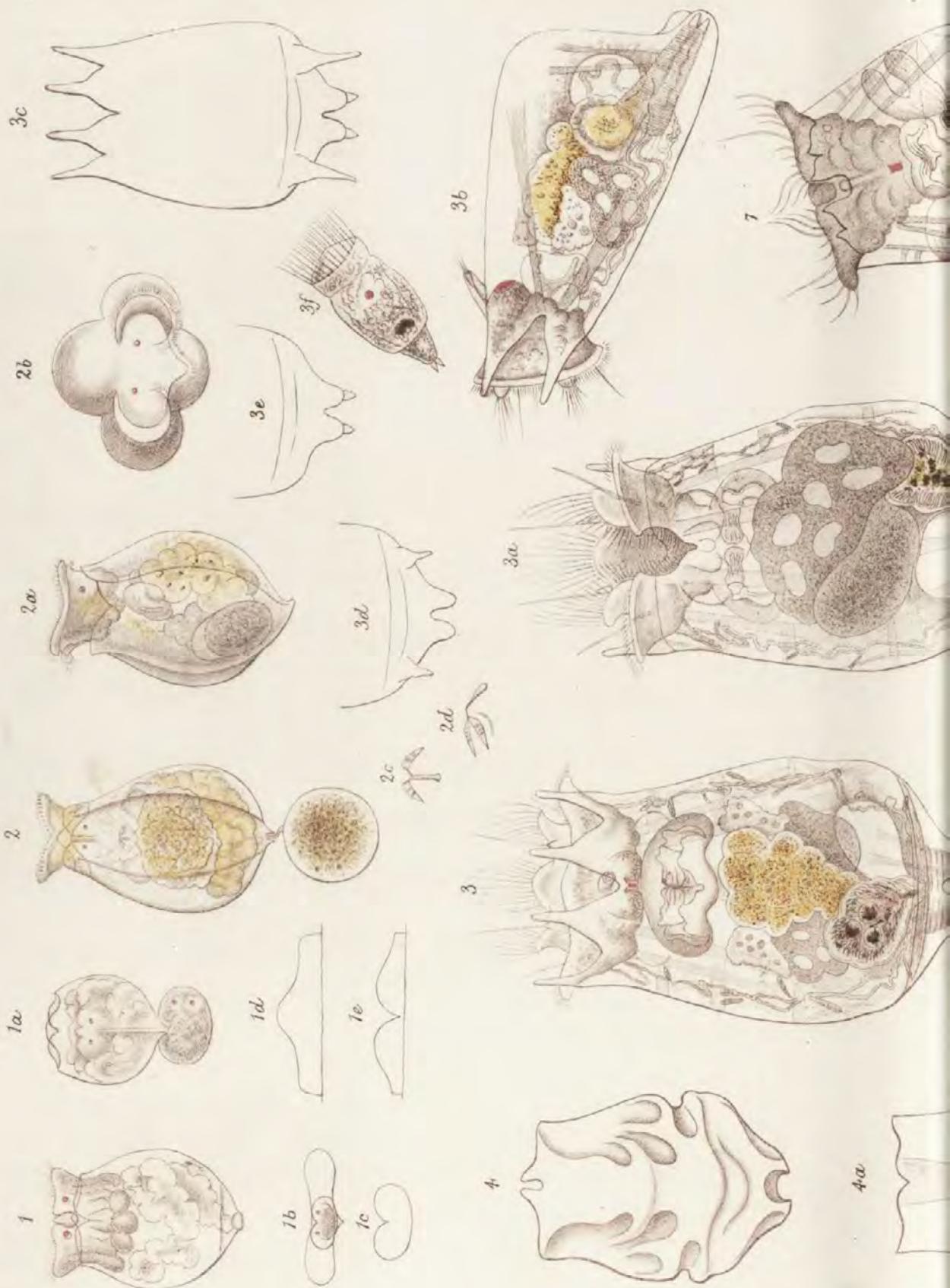


PLATE XXVII.

1. <i>Pompholyx complanata</i>	.	dorsal view, extended	G
1a. " "	.	dorsal view, retracted	G
1b. " "	.	front view	G
1c. " "	.	outline of corona	G
1d, 1e. " "	.	occipital and pectoral edges of lorica	G
2. <i>Pompholyx sulcata</i>	.	dorsal view	G
2a. " "	.	side view	H
2b. " "	.	front view	H
2c, 2d. " "	.	trophi	G
3. <i>Brachionus pala</i>	.	dorsal view	H
3a. " "	.	ventral view	H
3b. " "	.	side view	H
3c, 3d, 3e. " "	.	loricæ of three varieties	H
3f. " "	.	male	G
4. <i>Brachionus angularis</i>	.	lorica, dorsal view	H
4a. " "	.	lorica, ventral view	H
5. <i>Brachionus rubens</i>	.	dorsal view, extended	G
5a. " "	.	dorsal view, retracted	G
5b. " "	.	hind end of lorica	G
5c. " "	.	end of foot	G
5d. " "	.	brain and eye	H
6. <i>Brachionus urceolaris</i>	.	dorsal view	G
6a. " "	.	male	G
7. <i>Brachionus Mülleri</i>	.	dorsal view	G
7a. " "	.	extremities of lorica	G
7b. " "	.	male	G
7c. " "	.	penis and foot	G
7d. " "	.	spermatozoa	G
8. <i>Brachionus Bakeri</i>	.	dorsal view	G
8a. " "	.	male	G





Hanhart, imp.

POMPHOLYX; BRACHIONUS.

2a, 2b, 3a, 4, 4a, 5a, C. T. Hudson &
P. H. Gosse ad viv. det.
The Royal
Microscopical Society.

1 P. COMPLANATA 2 P. SULCATA 3 B. PALA 4 B. ANGULARIS 5 B. RUBENS 6 B. URCEOOLARIS
7 B. MÜLLERI 8 B. BAKERI

PLATE XXVIII.

1.	<i>Eretmia tetrathrix</i>	.	dorsal view	.	.	.	.	.	.	.	G
2.	<i>Eretmia trithrix</i>	.	side view	.	.	.	.	.	.	.	G
3.	<i>Brachionus pala</i>	.	variety; dorsal view	.	.	.	.	.	.	.	H
3a.	"	"	variety; ventral view	.	.	.	.	.	.	.	G
3b.	"	"	male, side view	.	.	.	.	.	.	.	G
3c.	"	"	male, dorsal view	.	.	.	.	.	.	.	G
3d.	"	"	female egg	.	.	.	.	.	.	.	G
4.	<i>Brachionus Dorcas</i>	.	dorsal view	.	.	.	.	.	.	.	G
4a.	"	"	side view	.	.	.	.	.	.	.	G
4b.	"	"	male, dorsal view	.	.	.	.	.	.	.	G
4c.	"	"	male, side view	.	.	.	.	.	.	.	G
4d.	"	"	vibratile tag	.	.	.	.	.	.	.	G
5.	<i>Noteus quadricornis</i>	.	dorsal view; to show viscera	.	.	.	.	.	.	.	H
5a.	"	"	lorica, dorsal view	.	.	.	.	.	.	.	H
6.	<i>Notholea longispina</i>	.	lorica, obliquely dorsal view	.	.	.	.	.	.	.	H
6a.	"	"	lorica, side view	.	.	.	.	.	.	.	H
6b.	"	"	trunk, dorsal view	.	.	.	.	.	.	.	H
6c.	"	"	trunk, ventral view	.	.	.	.	.	.	.	H
6d.	"	"	top of lorica, ventral view; to show movable flap	.	.	.	.	.	.	.	H





3, 5, 5a, 6 to 6d. C.T. Hudson } and vividae
the rest. P.H. Gosse.

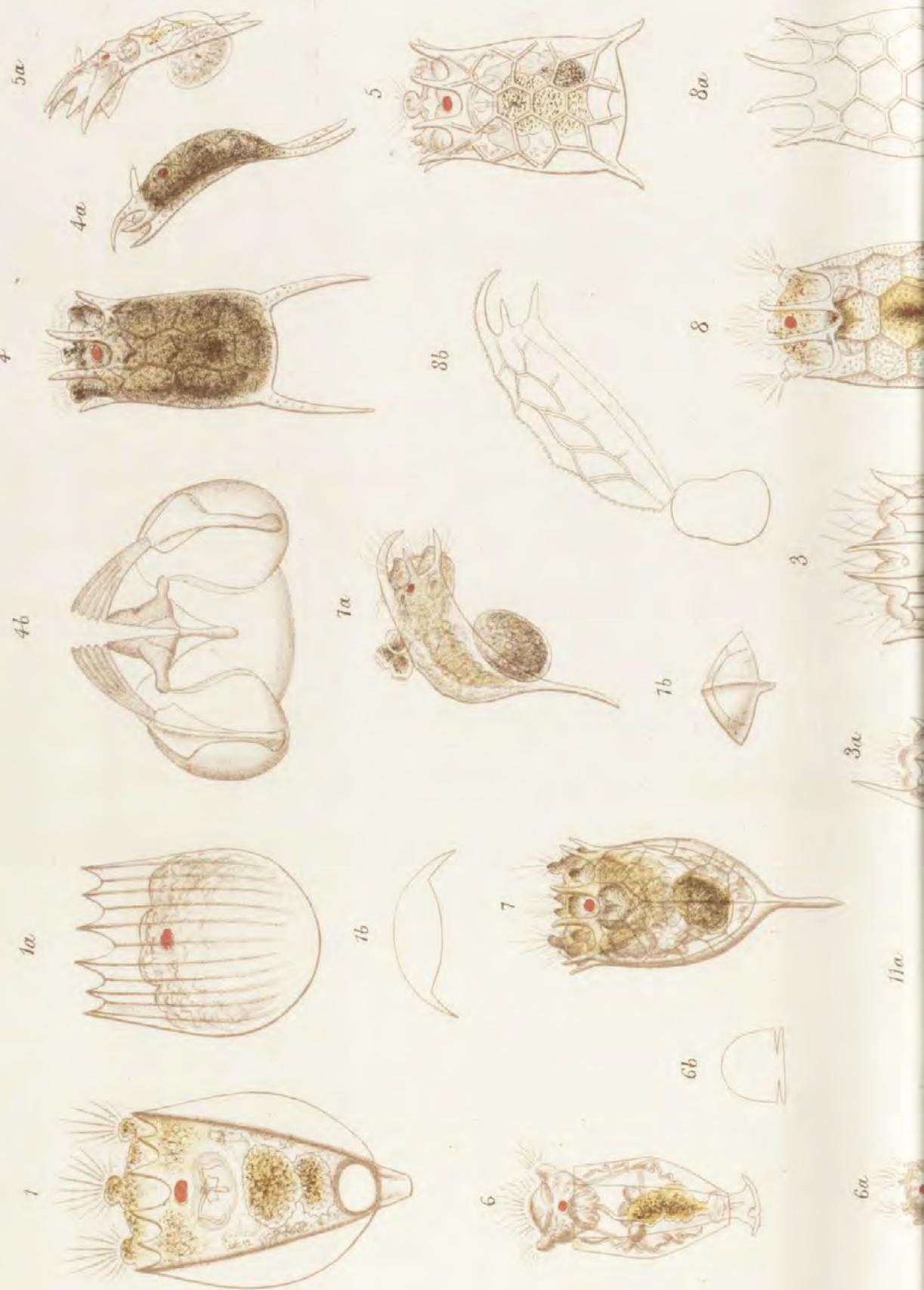
BRACHIONUS; NOTTESS; JERETMIA; NOTHODOLCA.

Hannart imp.

TETRASTRIX 2 E TRITHRIX 3 B. PALA(?) 4 B. DORCAS 5 NOT. QUADRICORNIS. 6 NOTH LONGISPINANA

PLATE XXIX.

1. <i>Notholca scapha</i>	.	dorsal view, extended	.	.	.	.	.	G
1a.	"	dorsal view, retracted	.	.	.	.	.	G
1b.	"	transverse section	.	.	.	.	.	G
2. <i>Notholca thalassia</i>	.	dorsal view	.	.	.	.	.	G
2a.	"	lorica, dorsal view	.	.	.	.	.	G
2b.	"	lorica, side view	.	.	.	.	.	G
2c.	"	lorica, pectoral edge	.	.	.	.	.	G
2d.	"	trophi	.	.	.	.	.	G
3. <i>Notholca acuminata</i>	.	dorsal view	.	.	.	.	.	G
3a.	"	side view	.	.	.	.	.	G
4. <i>Anuræa aculeata</i>	.	dorsal view	.	.	.	.	.	G
4a.	"	side view	.	.	.	.	.	G
4b.	"	mastax and trophi	.	.	.	.	.	G
5. <i>Anuræa brevispina</i>	.	dorsal view	.	.	.	.	.	G
5a.	"	side view	.	.	.	.	.	G
6. <i>Anuræa hypelasma</i>	.	dorsal view	.	.	.	.	.	G
6a.	"	ventral view, with eggs attached	.	.	.	.	.	G
6b.	"	transverse section	.	.	.	.	.	G
7. <i>Anuræa cochlearis</i>	.	dorsal view	.	.	.	.	.	G
7a.	"	side view	.	.	.	.	.	G
7b.	"	rear view	.	.	.	.	.	G
8. <i>Anuræa serrulata</i>	.	dorsal view	.	.	.	.	.	G
8a.	"	lorica, dorsal view	.	.	.	.	.	G
8b.	"	lorica, side view	.	.	.	.	.	G
9. <i>Anuræa curvicornis</i>	.	lorica, dorsal view	.	.	.	.	.	G
9a.	"	lorica, side view	.	.	.	.	.	G
10. <i>Anuræa tecta</i>	.	dorsal view	.	.	.	.	.	G
10a.	"	lorica, side view	.	.	.	.	.	G
10b.	"	rear view	.	.	.	.	.	G
11. <i>Eretmia cubeutes</i>	.	lorica, dorsal view	.	.	.	.	.	G
11a.	"	lorica, side view	.	.	.	.	.	G
12. <i>Eretmia pentathrix</i>	.	lorica, dorsal view	.	.	.	.	.	G





PH. Götsche. Inv. del.

NÖTTEHÖLCA, ANURÆA, ERETTMIA.

Habicht. Inv.

PLATE XXX.

1.	<i>Pedalion mirum</i>	.	side view	H
1a.	"	"	dorsal view	H
1b.	"	"	front view	H
1c.	"	"	side view (side limbs removed) showing viscera	H
1d.	"	"	dorsal view, showing muscles	H
			α , dorsal limb { 1, depressors 2, elevators}	
			β , inner lateral limb { 3, depressors 4, elevators}	
			γ , outer lateral limb { 5, depressors 6, elevators}	
			δ , ventral limb { 7, depressors 8, elevators}	
			The ventral depressors (5, 5), of the outer lateral limbs, meet a similar dorsal pair on the mid-dorsal and mid-ventral surfaces; and the four together encircle the body. There is a similar encircling set of four (1, 1) belonging to the dorsal limb.	
1e.	"	"	ventral view, showing muscles	H
			9, ventral longitudinal muscles for retracting head	
1f.	"	"	side view, showing muscles	H
			10, dorsal longitudinal muscles for retracting head	
			11, right depressor of dorsal antenna	
			12, circular muscles of the neck	
			13, right depressor of chin	
1g.	"	"	male, dorsal view	H
1h.	"	"	male, side view	H
2.	<i>Hexarthra polyptera</i>	.	dorsal view	(after Dr. Schmarda)
3.	<i>Oecistes ptygura</i>	.	head, dorsal view, showing hooks	H
4.	<i>Seison Grubei</i>	.	female, retracted; side view	
4a.	"	"	male, extended; side view	(after Dr. Claus)
4b.	"	"	trophi	
5.	<i>Drilophaga bucephalus</i>	.	side view; attached to <i>Lumbriculus</i> {	(after Prof. Vejdovský)
6.	<i>Balatro calvus</i>	.	ventral view	(after M. Ed. Claparède)
7.	<i>Copeus spicatus</i>	.	side view	H
8.	<i>Brachionus Mülleri</i>	.	ventral view	H
9.	<i>Brachionus angularis</i>	.	dorsal view	H
9a.	"	"	aperture for lateral antenna	H





Hannart imp.

1859.

BRAUCIUS.

BRACHIOUS.

BAL. CALVUS.

ANGULARIS.

BR. MULLERI.

SPICATUS.

PITYURA.

GRUBEI.

BUFFHALUS.

MIRUM.

POLYPTERA.

Figures 3, 7, 8, 11 from de
la Fuente's 'Icones Entomologicae'.

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**THE
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