

PLATES

(drawn by the authors; Figg. 85, 86, 137, 138 by Mr. J. PRIJS and
Figg. 107, 146, 152 by Mr. K. C. HANAU).

PLATE I.

- Fig. 1. *Doramasia pictoides* nov. spec. (Cat. 42 B.A.). 4 \times . Lateral view. *brgon* = bud, probably future bract and gonophore.
- Fig. 2. *Ceratocymba asymmetrica* nov. spec. (Cat. 91 Q.). 11 \times . Ventral view of a bract; for the explanation of the letters see text p. 11. *phyl.* = phyllocyst.
- Fig. 3. *Ceratocymba asymmetrica* nov. spec. (Cat. 91 Q.). 10 \times . Dorsal view of the same; *phyl.* = phyllocyst.
- Fig. 4. *Ceratocymba asymmetrica* nov. spec. (Cat. 128 F.). 8 \times . Left lateral view of a bract; *phyl.* = phyllocyst.
- Fig. 5. *Ceratocymba asymmetrica* nov. spec. (Cat. 77 C.). 22 $\frac{1}{2}$ \times . Left lateral view of a gonocalyx.
- Fig. 6. *Clausophyes galacta* nov. gen. nov. spec. (Cat. 157 B.). 4 \times . Left lateral view of the (superior or inferior?) nectophore.
- Fig. 7. Ventral view of the same. 5 \times . The dotted line indicates the original shape of the left antero-lateral tooth.
- Fig. 8. Ventral view of the (?) somatocyst of the same. 28 \times .
- Fig. 9. *Chuniphyes multidentata* nov. gen. nov. spec. Right latero-ventral view of the superior nectophore (Cat. 44 F.J.). 4 \times . For the explanation of the letters see text p. 13.
- Fig. 10. Dorsal view of the superior nectophore of the same. 2 \times .
- Fig. 11. Ventral view of the superior nectophore of the same. 4 \times .

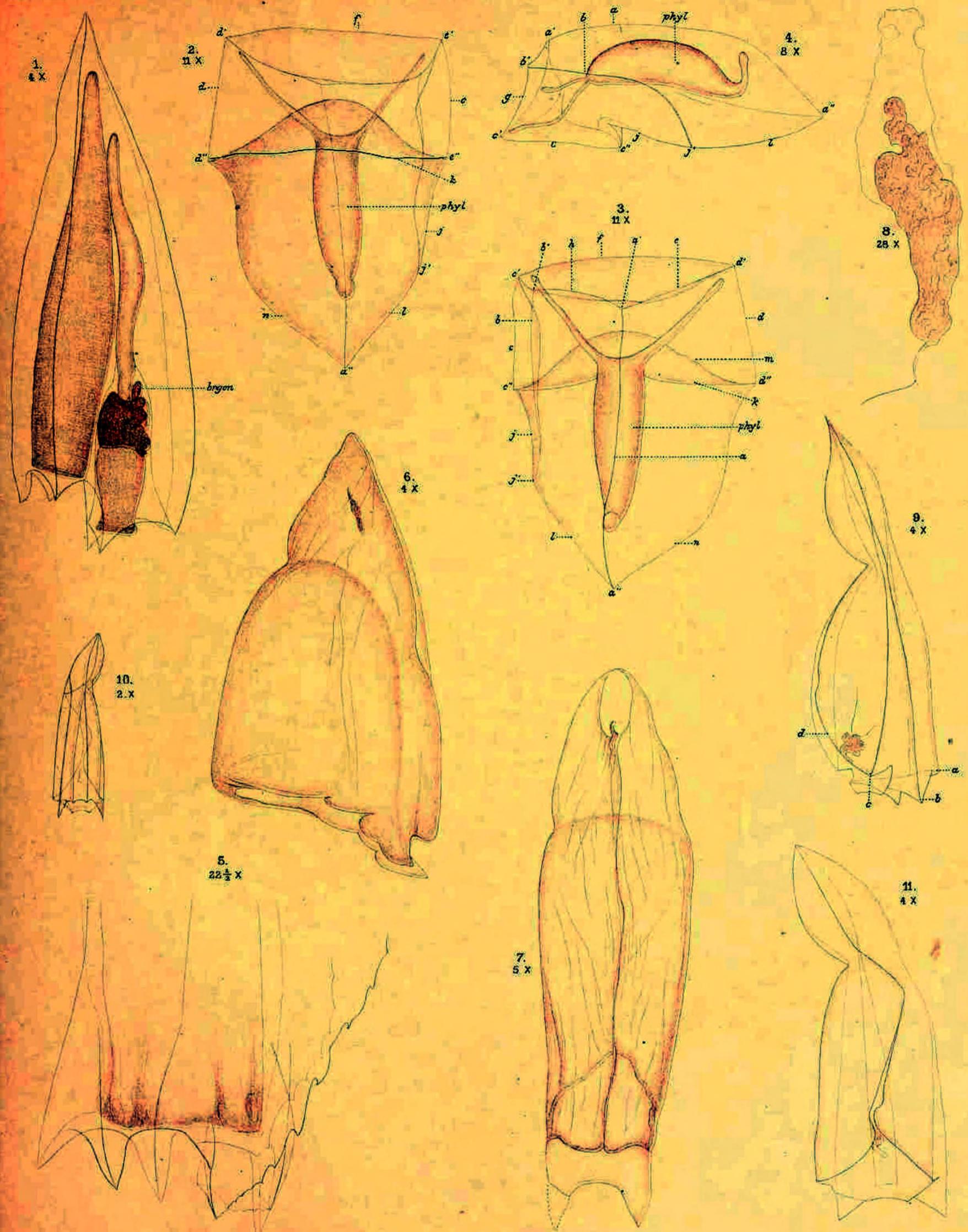


PLATE II.

- Fig. 12. *Chuniphyes multidentata* nov. gen. nov. spec. (Cat. 44 F.J.). Enlarged view of the (?) somatocyst and stem. $28 \times$. *a.c.* anterior, *r.c.* right lateral, *l.c.* left lateral branch of the (?) somatocyst. *st.* stem.
- Fig. 13. *Chuniphyes multidentata* nov. gen. nov. spec. Dorsal view of the inferior nectophore. $2 \times$.
- Fig. 14. Right lateral view of the same. $2 \times$.
- Fig. 15. Right latero-ventral view of the same. $2 \times$.
- Fig. 16. ? *Lilyopsis diphyses* Vogt. (Cat. 156). $2 \times$. Nectophore.
- Fig. 17. *Abyla pentagona* Q. et G. (Cat. 58 D.I.). $18\frac{1}{2} \times$. Dorsal view of a superior nectophore.
- Fig. 18. Ventral view of the same. $13 \times$.
- Fig. 19. Right lateral, somewhat ventral view of the same. $13 \times$.
- Fig. 20. *Abyla pentagona* Q. et G. (Cat. 122 E.). Apical view of an inferior nectophore. $11 \times$.
- Fig. 21. *Aglaisma cuboides* Lkt. (Cat. 119 D.). Complete. $20 \times$.

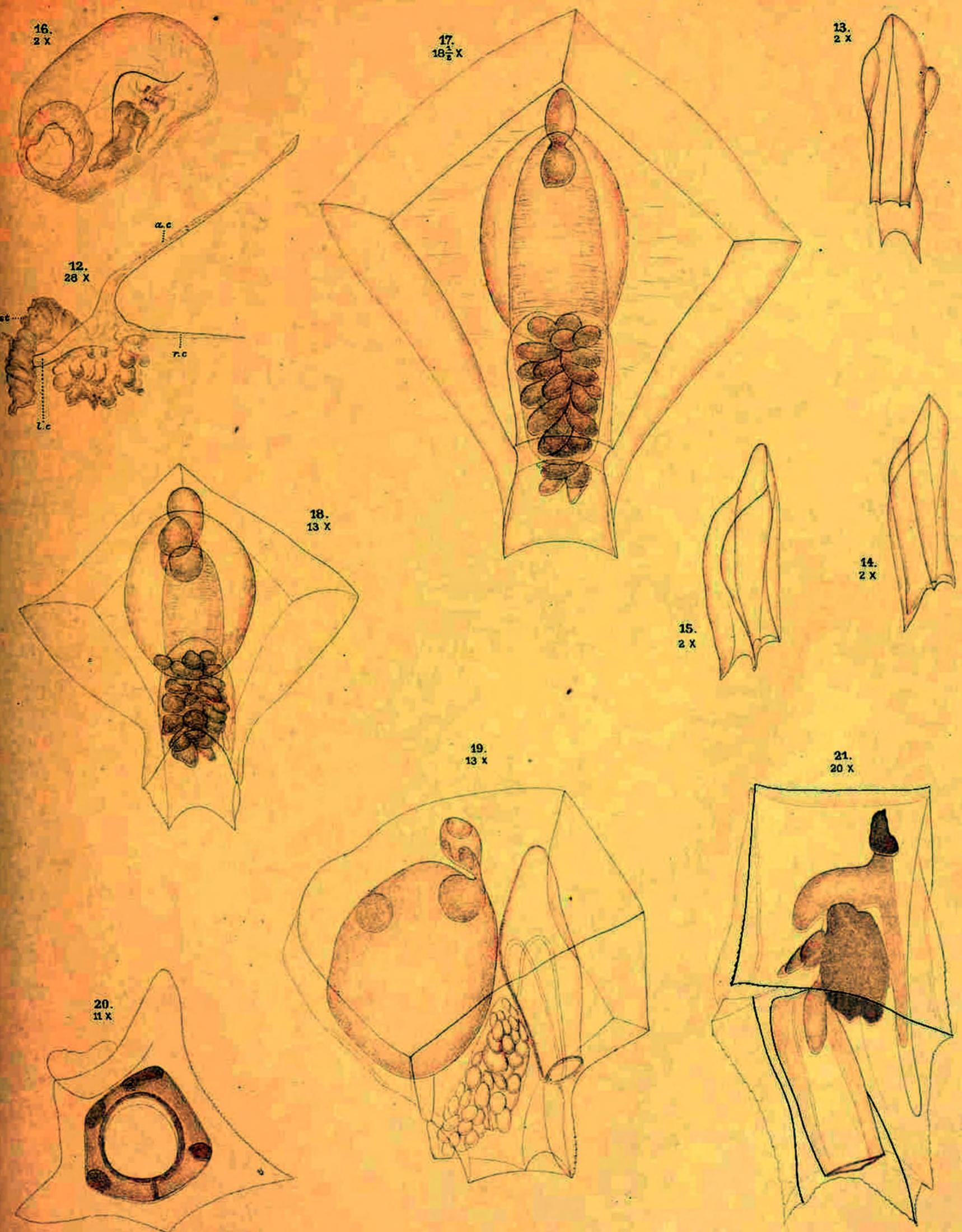


PLATE III.

- Fig. 22. *Abylopsis quincunx* Ch. (Cat. 122 E.I.). 15 \times . Left lateral view.
Fig. 23. Right lateral view of the same. 15 \times .
Fig. 24. *Abylopsis quincunx* Ch. (Cat. 126 D.I.). 14 \times . Dorsal view of a superior nectophore.
Fig. 25. Ventral view of the same. 14 \times .
Fig. 26. Right lateral view of the same. 14 \times .
Fig. 27. *Abylopsis quincunx* Ch. (Cat. 122 E.). 11 \times . Basal view of an inferior nectophore.
Fig. 28. *Aglaismooides Eschscholtzii* Huxl. (Cat. 97 D.). 15 \times . Dorsal view of the bract.
Fig. 29. Ventral view of the same. 10 \times .
Fig. 30. Left lateral view of the same. 10 \times .
Fig. 31. Dorsal, somewhat basal view of the same. 10 \times .

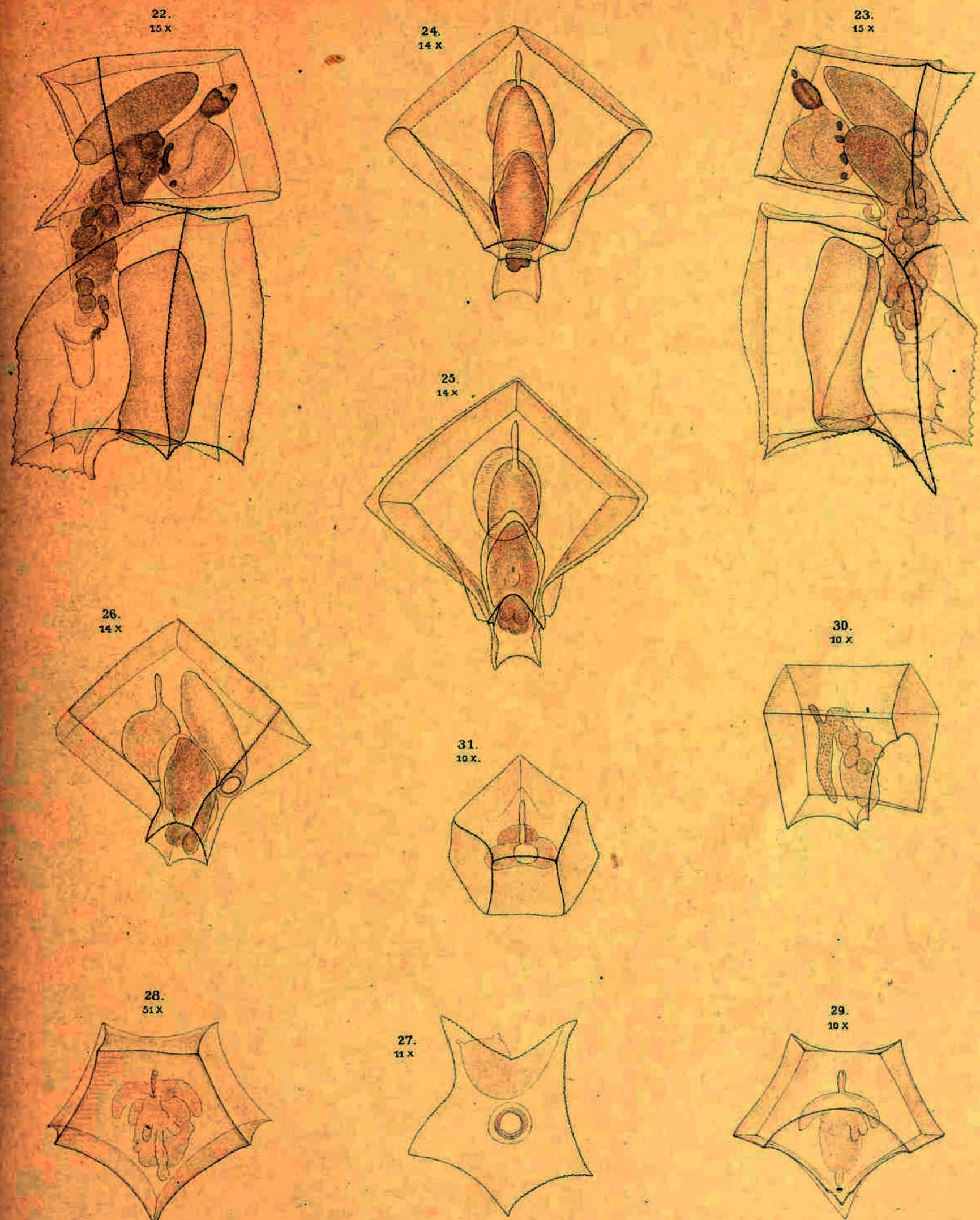


PLATE IV.

- Fig. 32. *Abyla bassensis* Huxl. (Cat. 25 V.C.I.). 10 \times . Complete.
Fig. 33. *Sphenoides australis* Huxl. (Cat. 122 H.). 12 $\frac{1}{2}$ \times . Bract.
Fig. 34. *Abyla trigona* Q. et G. (Cat. 77 B.). 18 \times . Dorsal view of a superior nectophore.
Fig. 35. Ventral view of the same. 15 \times .
Fig. 36. *Abyla trigona* Q. et G. (Cat. 138 D.). 13,4 \times . Right lateral view of a superior nectophore.
Fig. 37a. *Amphiroa alata* Les. (Cat. 168 C.). 8 \times . Left lateral view of the bract.
Fig. 37b. Ventral view of the same. 8 \times .
Fig. 38. Lateral view of a ♂ gonocalyx of the same. 13 \times .

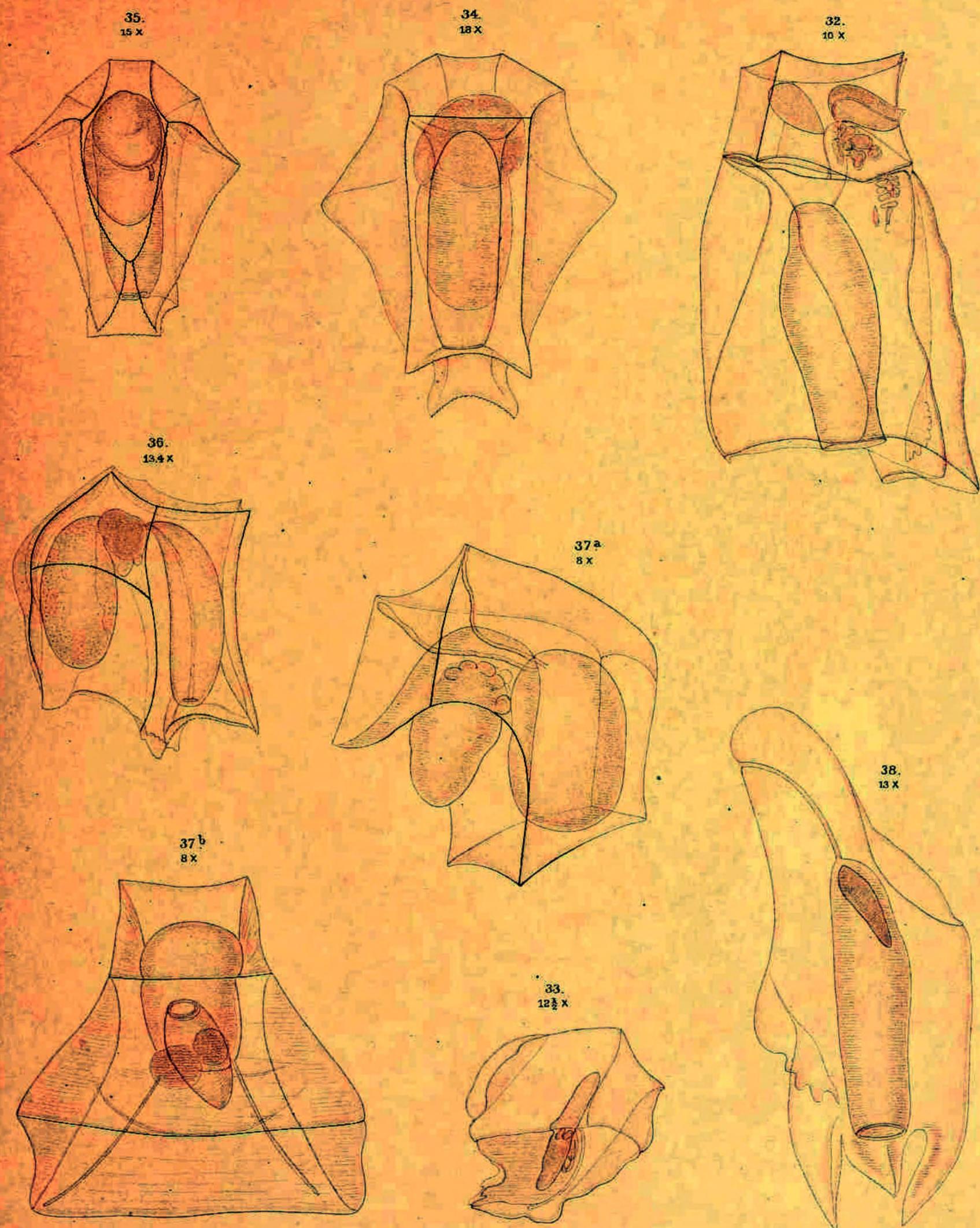


PLATE V.

Fig. 39. *Abyla Haeckeli* nov. spec. (Cat. 91 P.). Dorsal view of the superior nectophore. 12,4 \times .

Fig. 40. Ventral view of the same. 12,4 \times .

Fig. 41. Right lateral view of the same, showing also the apical facets. 12,4 \times .

Fig. 42. *Abyla Leuckarti* Huxl. (Cat. 80 E.). Dorsal view of the superior nectophore. 7 \times .

Fig. 43. Ventral view of the same. 7 \times .

Fig. 44. Left lateral view of the same. 7 \times .

s. = siphon, *som.* = somatocyst, *n.sac.* = nectosac.

Fig. 45. Apical view of the same. 7 \times .

Fig. 46. Basal view of the same. 7 \times .

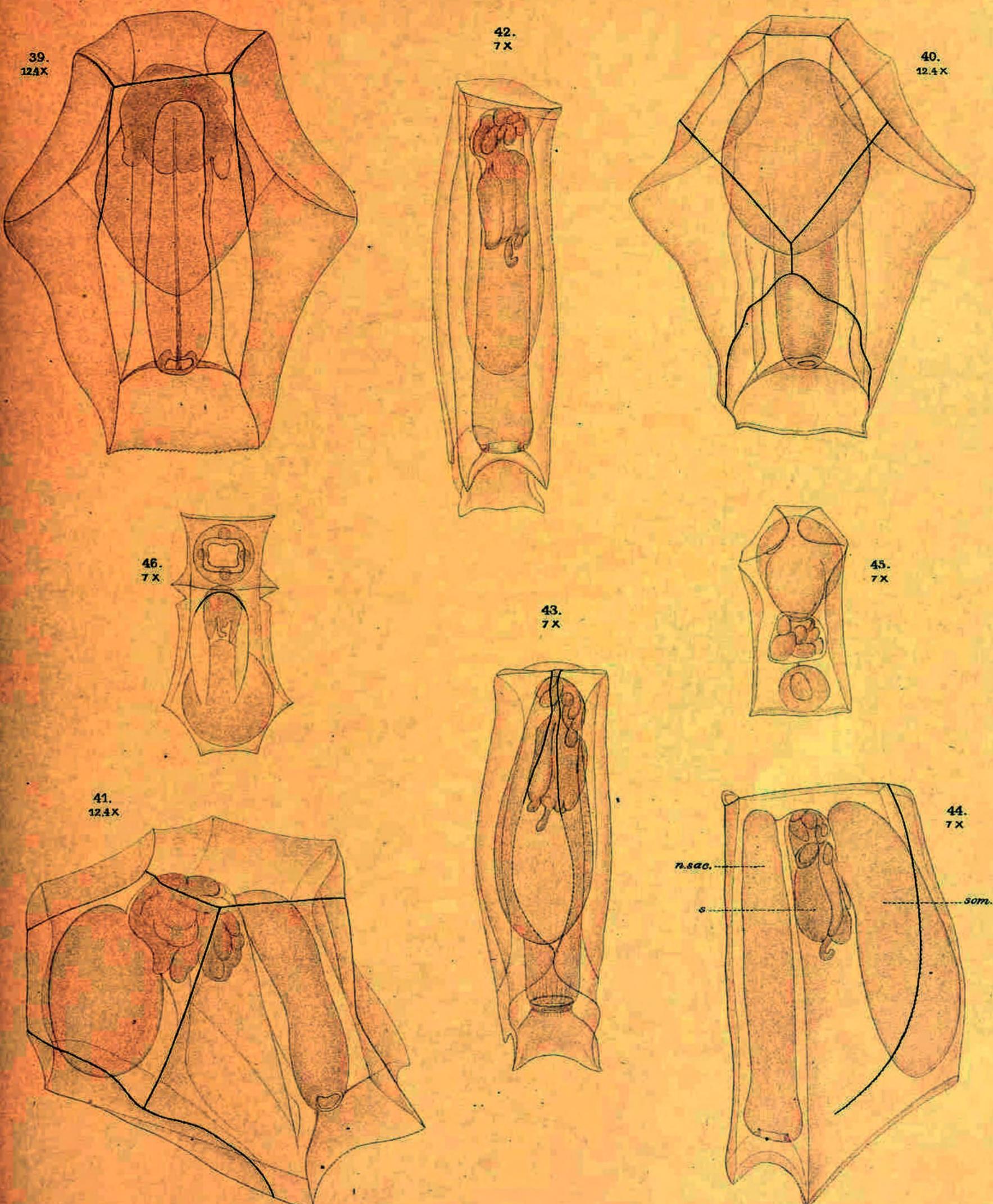


PLATE VI.

Fig. 47. *Diphyabyla Hubrechti* nov. gen. nov. spec. (Cat. 118). $6\frac{1}{2} \times$. Right lateral view of the superior nectophore.
som. = somatocyst, *hydr.* = hydroecial cavity, *n.sac.* = nectosac, *br.* = bract, *z.* artificial ridge.

Fig. 48. *Diphyes contorta* nov. spec. (Cat. 122 C.). $20 \times$. Dorsal view of a superior nectophore.
For the explanation of the letters see text p. 41.

Fig. 49. *Diphyes contorta* nov. spec. (Cat. 164 H.). $15 \times$. Left lateral view of a superior nectophore.
som. = somatocyst, *n.sac.* = nectosac.

Fig. 50. Nearly ventral view of the same. $15 \times$.
n.sac. = nectosac, *hydr.* = hydroecial cavity.

Fig. 51. *Diphyes dispar* Cham. et Eys. (Cat. 127). Left lateral view of the superior nectophore. $4 \times$.

Fig. 52. One of the groups of appendages of the same, enlarged. $20 \times$.

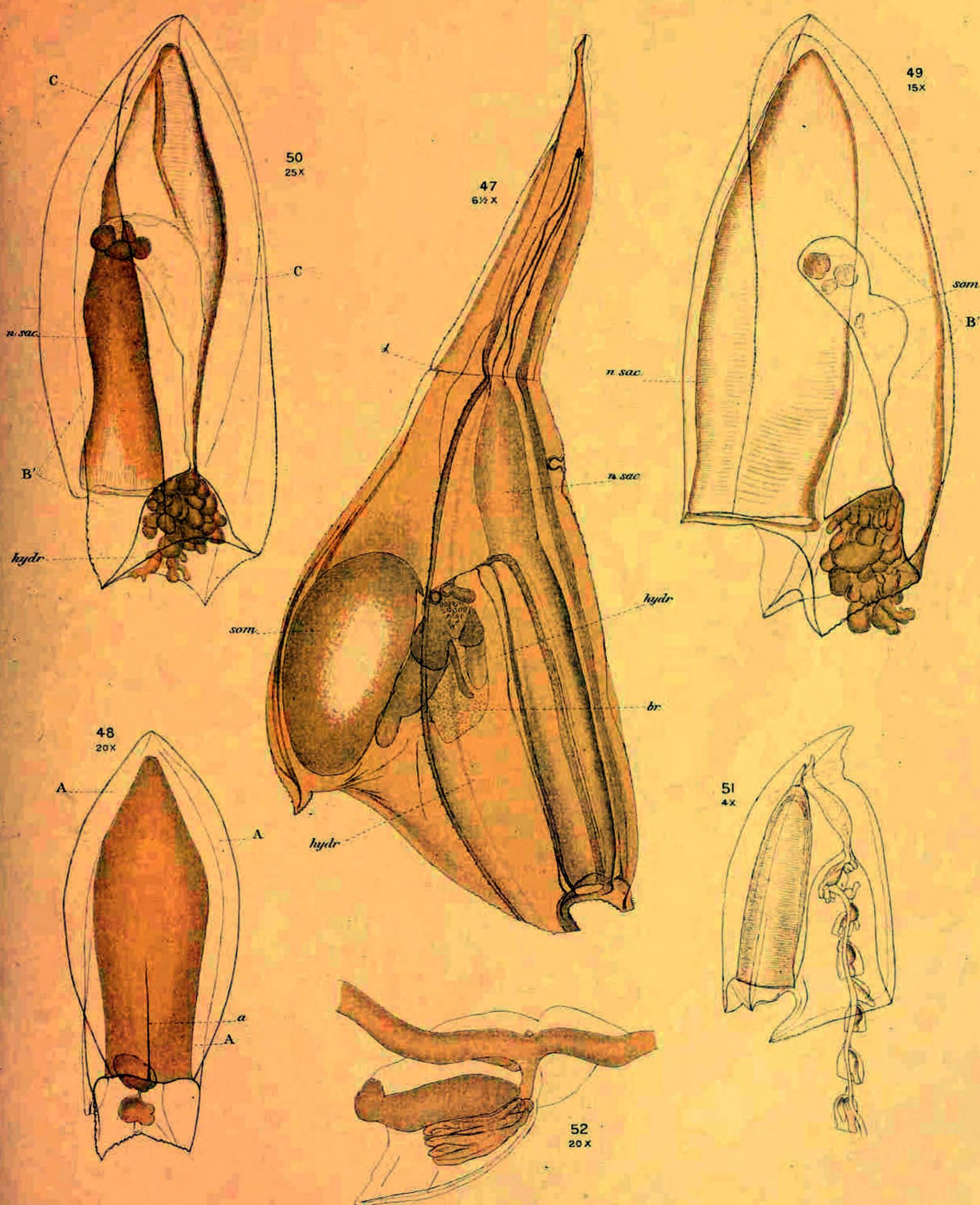
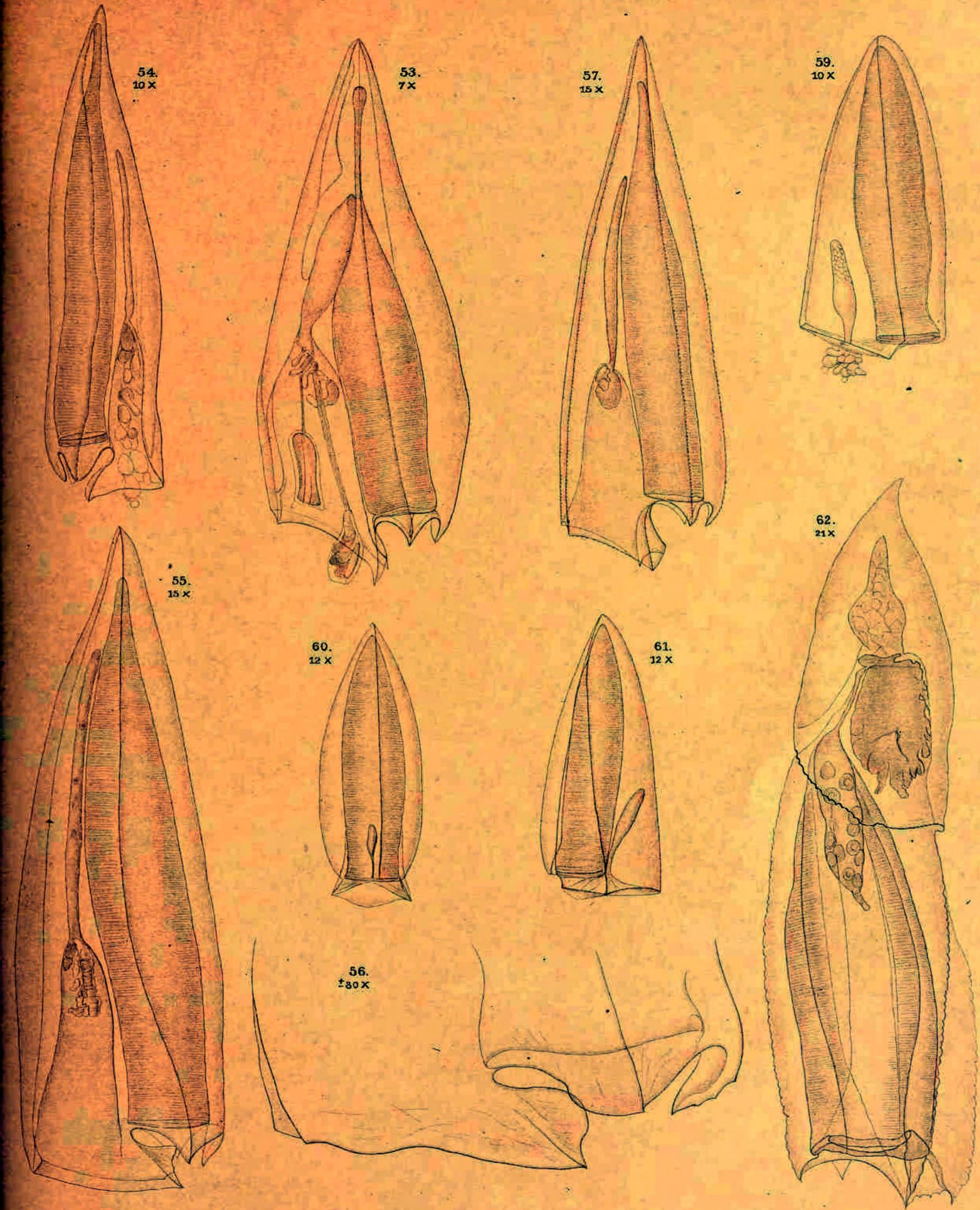


PLATE VII.

- Fig. 53. *Diphyes Nierstraszii* nov. spec. (Cat. 166 C.G.). 7 \times . Right lateral view of the superior nectophore.
Fig. 54. *Diphyes indica* nov. spec. (Cat. 45 A.I.). 10 \times . Left lateral view of the superior nectophore.
Fig. 55. *Diphyes (Diphyopsis) malayana* nov. spec. (Cat. 100 A.2). 15 \times . Right lateral view of the superior nectophore.
Fig. 56. Basal part of the same enlarged 30 \times .
Fig. 57. *Diphyes (Diphyopsis) Gegenbauri* nov. spec. (Cat. 42 A. (2)). 15 \times . Right lateral view of the superior nectophore.
Fig. 59. *Diphyes (Diphyopsis) subtiloides* nov. spec. (Cat. 97 B.I.). 10 \times . Right lateral view of the superior nectophore.
Fig. 60. *Diphyes (Diphyopsis) subtiloides* nov. spec. (Cat. 80 J.). 12 \times . Ventral view of the superior nectophore.
Fig. 61. Left lateral, nearly ventral view of the same. 12 \times .
Fig. 62. *Eudoxia campanula* Lkt. Complete. 21 \times .



Fa. P. W. M. Trap impr.

PLATE VIII.

- Fig. 58. *Diphyes (Diphyopsis) Gegenbauri* nov. spec. (Cat. 42 A.(2). 15 \times . Left lateral view of the superior nectophore.
- Fig. 63. *Diphyopsis campanulifera* Q. et G. (Cat. 80 A.I.). 7,7 \times . Complete. Left lateral view.
- Fig. 64. *Ersaea Lessoni* Huxl. (Cat. 166 C.A.I.). 10 \times . Complete. Left lateral view.
- Fig. 65. *Diphyopsis diphyoides* nov. spec. (Cat. 80 H.I.). 11,5 \times . Left lateral view of the superior nectophore.
- Fig. 66. Dorso-basal view of the same. a = basal ridge. 11,5 \times .
- Fig. 67. *Diphyopsis Weberi* nov. spec. (Cat. 55 B.I.). 8 $\frac{1}{3}$ \times . Left lateral view of the superior nectophore..
- Fig. 68. Dorso-basal view of the same. 10 \times .
- Fig. 69. *Diphyopsis anomala* nov. spec. (Cat. 58 G.). 20 \times . Left lateral view of the superior nectophore.

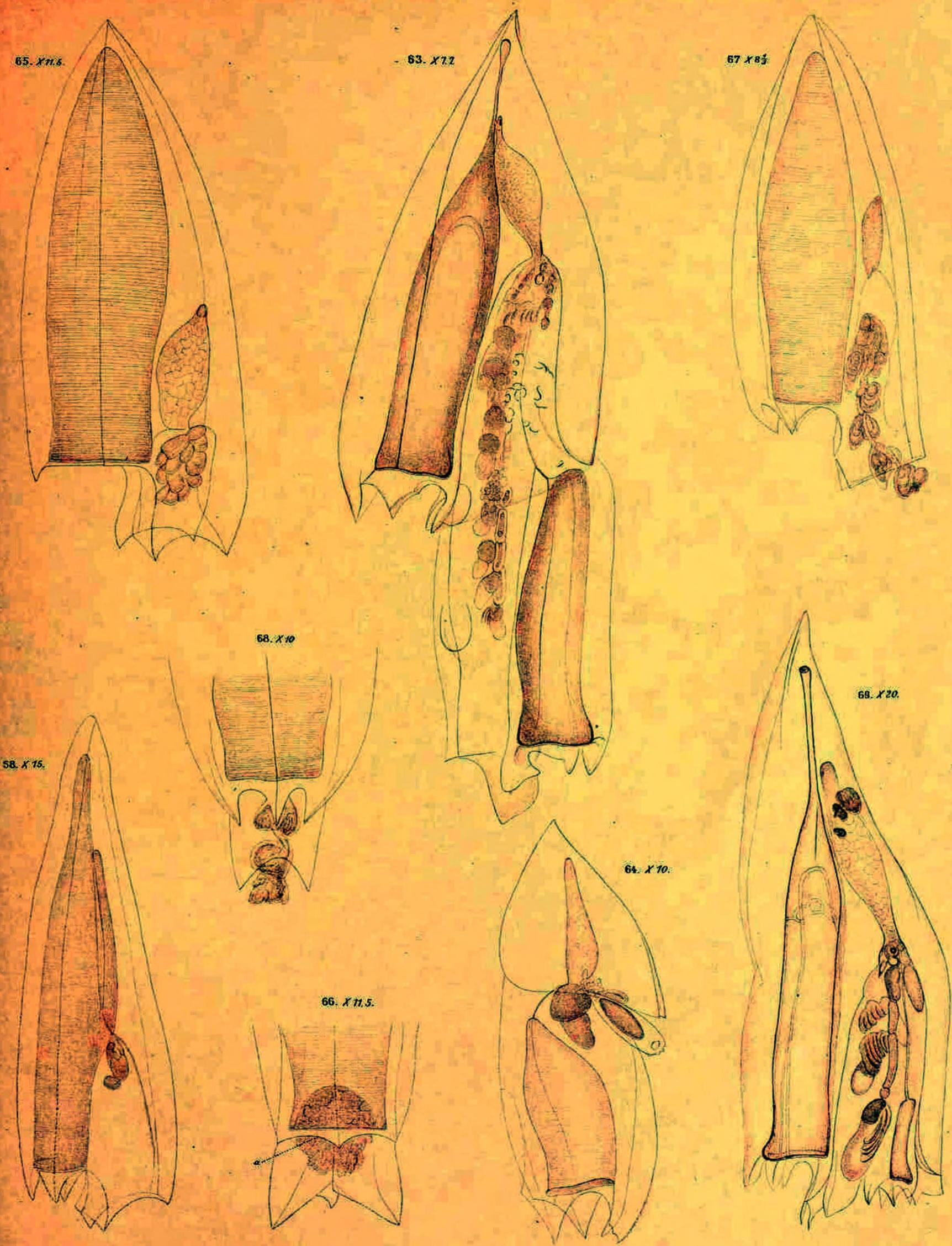


PLATE IX.

- Fig. 70. *Diphyopsis anomala* nov. spec. (Cat. 58 G.). 20 \times . Right lateral view of the superior nectophore.
Fig. 71. Detached inferior nectophore of *Diphyopsinae*. (Cat. 77 D.). 26 \times . Right lateral view.
Fig. 72. Dorsal view of the same. 24 \times .
Fig. 73. Ventral view of the same. 24 \times .
Fig. 74. *Galeolaria quadrivalvis* Les. (Cat. 164 L.(2)). 4 \times . Left lateral view of the superior nectophore.
Fig. 75. *Galeolaria biloba* M. Sars. (Cat. 119 E.(1)). 4,5 \times . Right lateral view of the superior nectophore.
Fig. 76. *Galeolaria monoica* Ch. (Cat. 97 E.(1)). 5,6 \times . Right lateral view of the superior nectophore.
Fig. 77. Basal view of the same. 20 \times .
Fig. 78. *Galeolaria Chuni* nov. spec. (Cat. 97 E.(3)). 15 \times . Right lateral view of the superior nectophore.
Fig. 79. *Galeolaria Chuni* nov. spec. (Cat. 97 E.(1)). 10 \times . Basal view of the same.
Fig. 80. *Hippopodius luteus* Q. et G. (Cat. 105 B.). 4 \times . One of the nectophores.

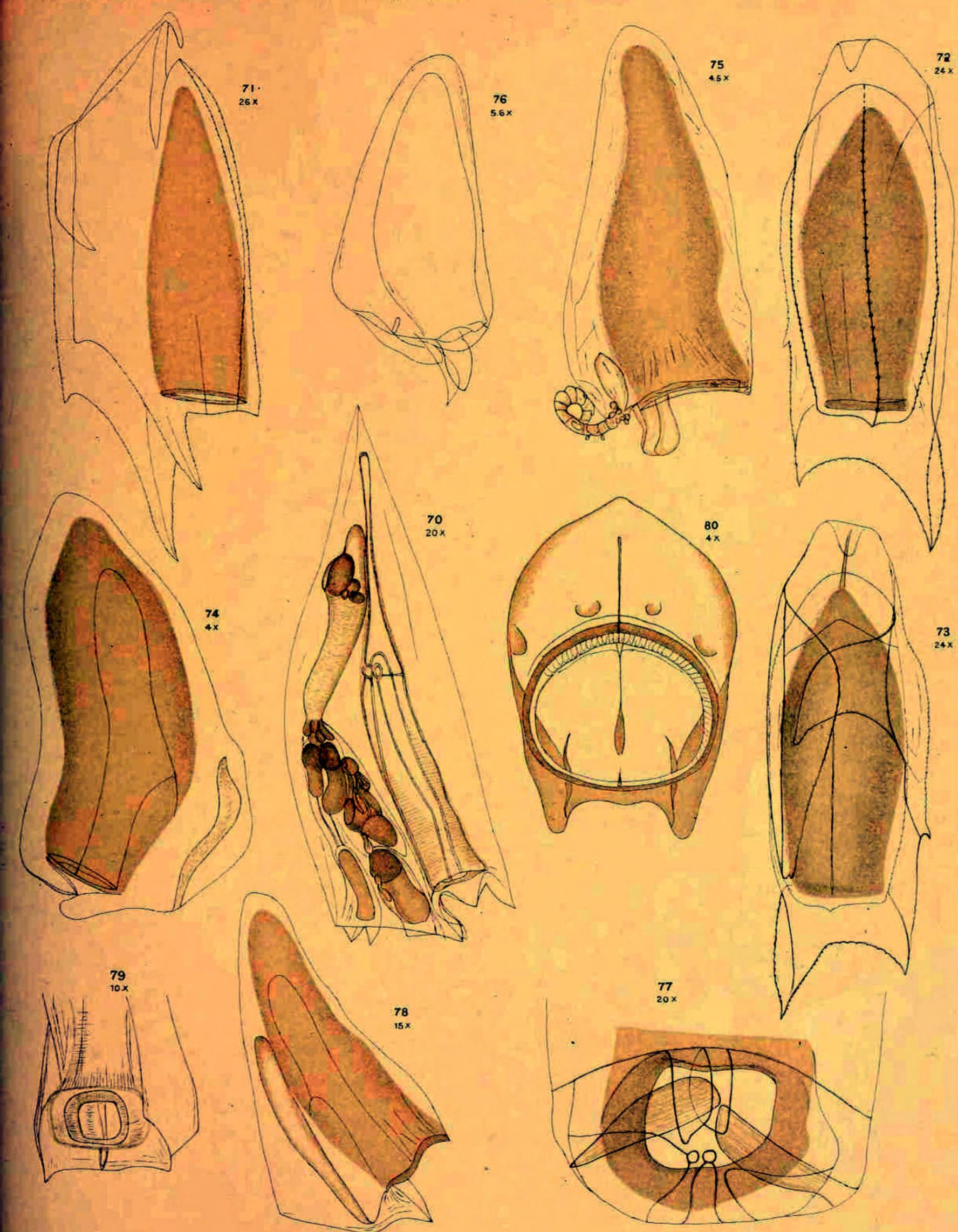


PLATE X.

Fig. 81. *Forskalia contorta* M. Edw. (Cat. 114). 9 \times . Complete.

Fig. 82. *Forskalia Edwardsi* Köll. (Cat. 183). 9,25 \times . Complete.

Fig. 83. *Forskalia Edwardsi* Köll. (Cat. 215 J.). 60 \times .

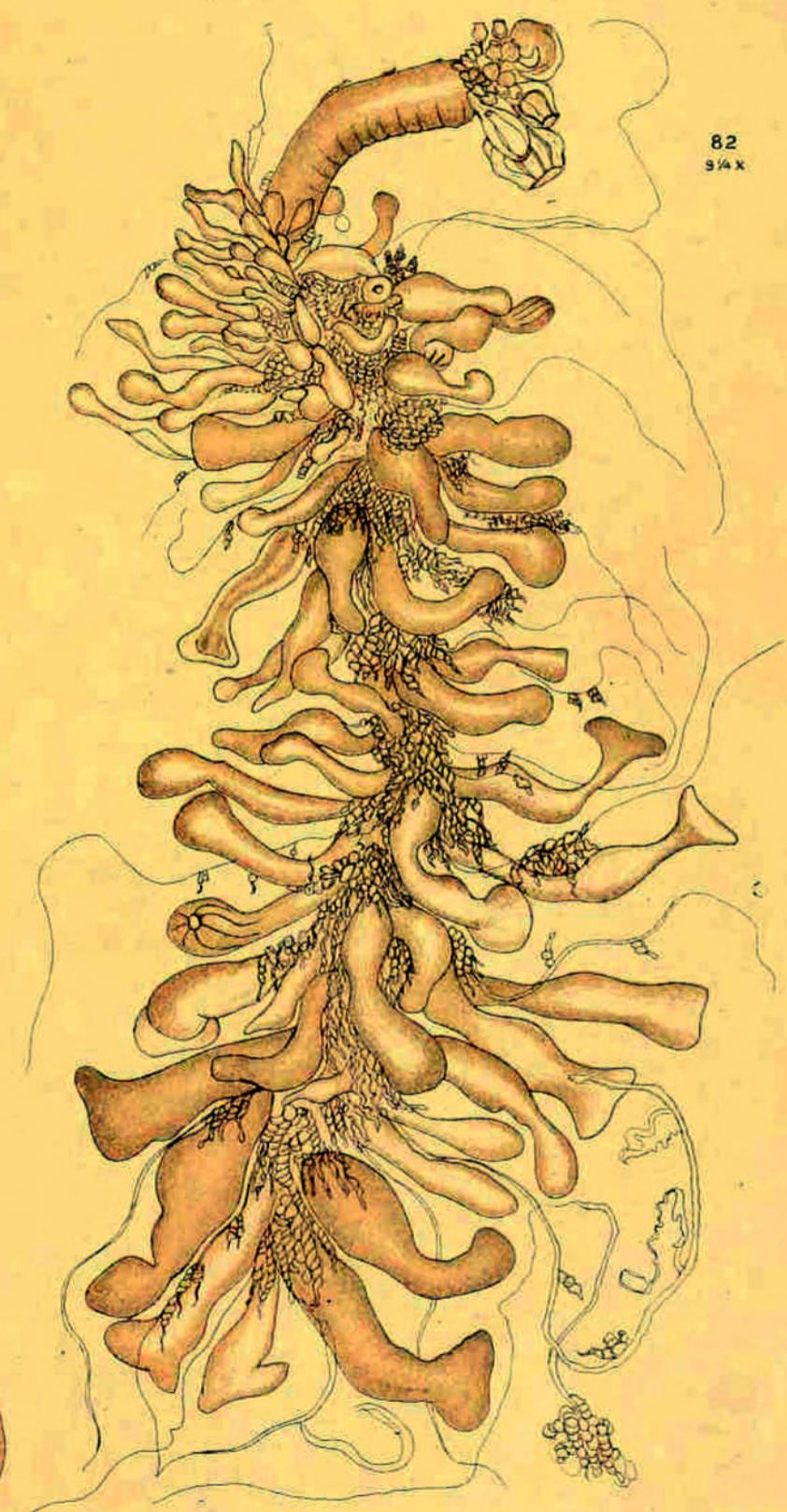
83

60 X



82

9/4 X



81

9 X

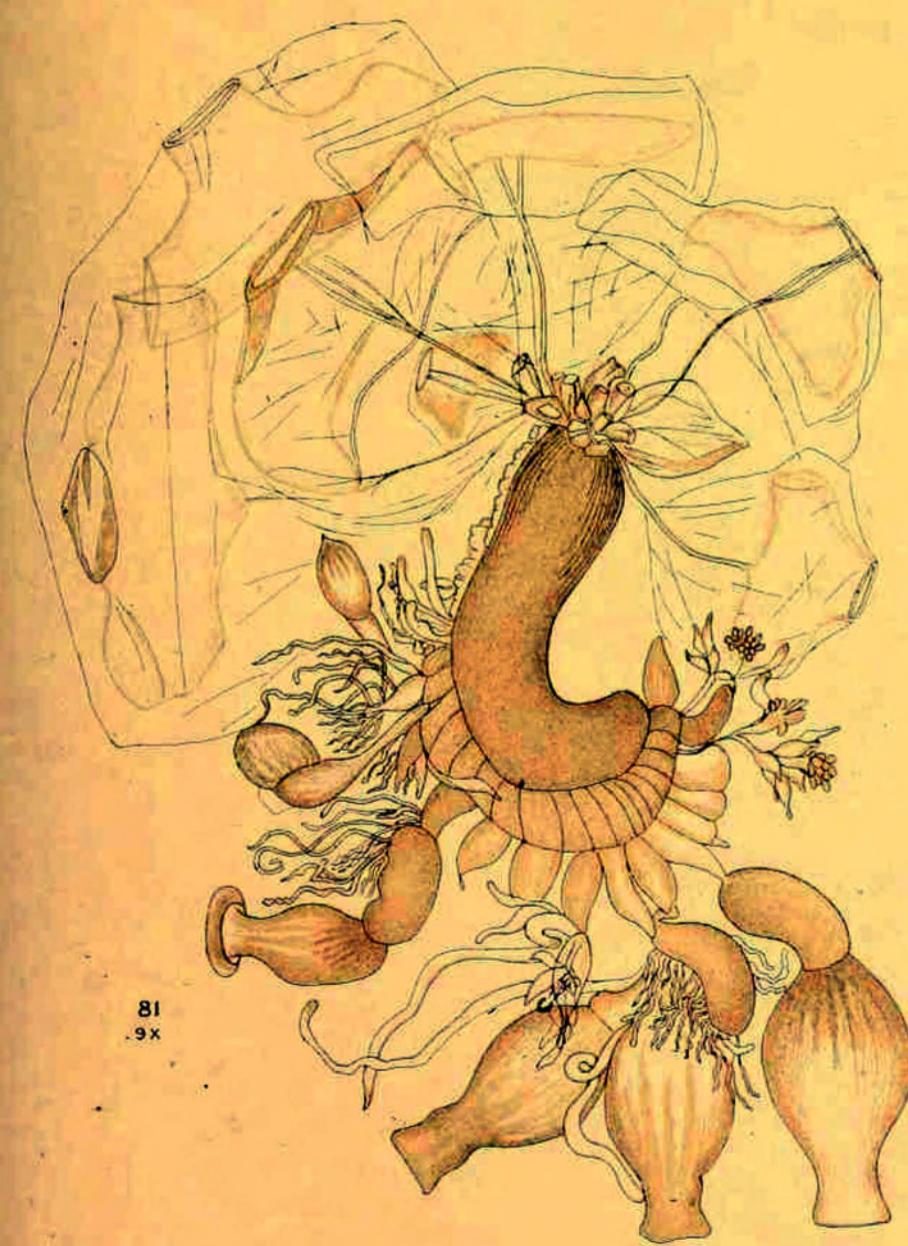


PLATE XI.

Fig. 84. *Forskalia contorta* M. Edw. (Cat. 114). 36 \times . Detached tentacle and tentilla of Fig. 81.

Fig. 85. *Erenna Bcdoti* nov. spec. (Cat. 7). 4 \times . Detached nectosome.

p_n = pneumatophore, b_n = buds of nectophores, b_{na} = immature nectophore, enlarged view in fig. 87, r_n = remains of detached mature nectophores, n_s = nectosome, α = point where the siphosome (Fig. 86) has been attached to the nectosome.

Fig. 86. The siphosome of the same. 4 \times .

α' = point where the nectosome (Fig. 85) has been attached to the siphosome, s, s = siphons (showing only their basal part, the basigaster and proboscis having been lost), t, t = tentacles, ti, ti = tentilla. For α , 1, 2, and 3 see text p. 67.

Fig. 87. Young nectophore (b_{na} of Fig. 85) enlarged. 25 \times .

Fig. 88. Tentacle and young tentilla of the same. 8 \times .

t, t = tentacle, ti, ti = tentilla.

Fig. 89. Enlarged view of a tentillum, somewhat older than those on fig. 88 of the same. 15 \times .

pti = pedicle of the tentillum, $cpti$ = crest of the tentillum containing nematocysts and black granulations, $mpti$ = middle part of the tentillum (not indicated in fig. 89 but situated between $cpti$ and $apti$), $apti$ = apex of the tentillum.

Fig. 90. A young bract of the same. 4 \times .

Fig. 91. *Crystallomia* spec. group I. (Cat. 163 D). 25 \times .

n = young nectophore, b_n = buds of nectophores, prs = primary siphon.

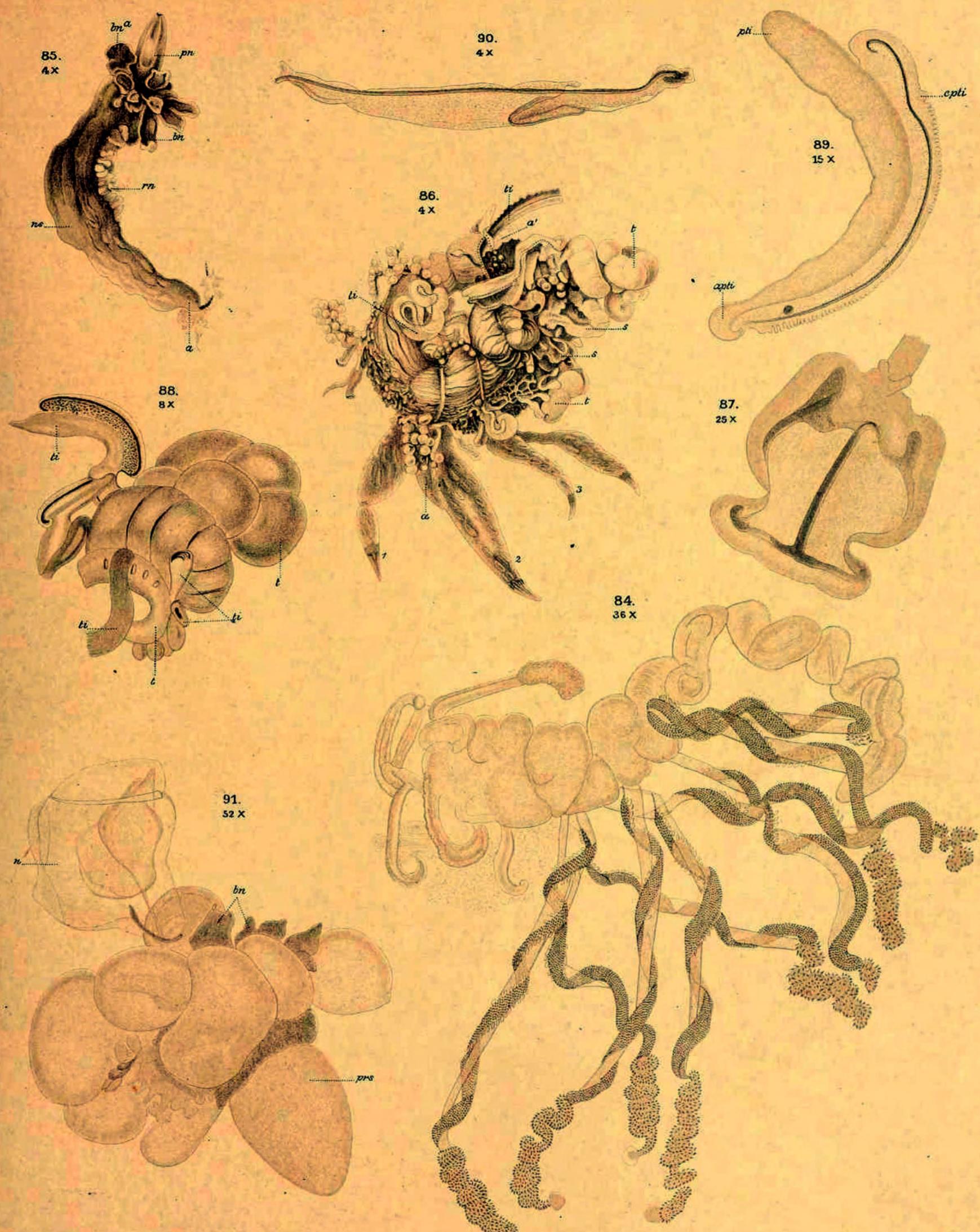
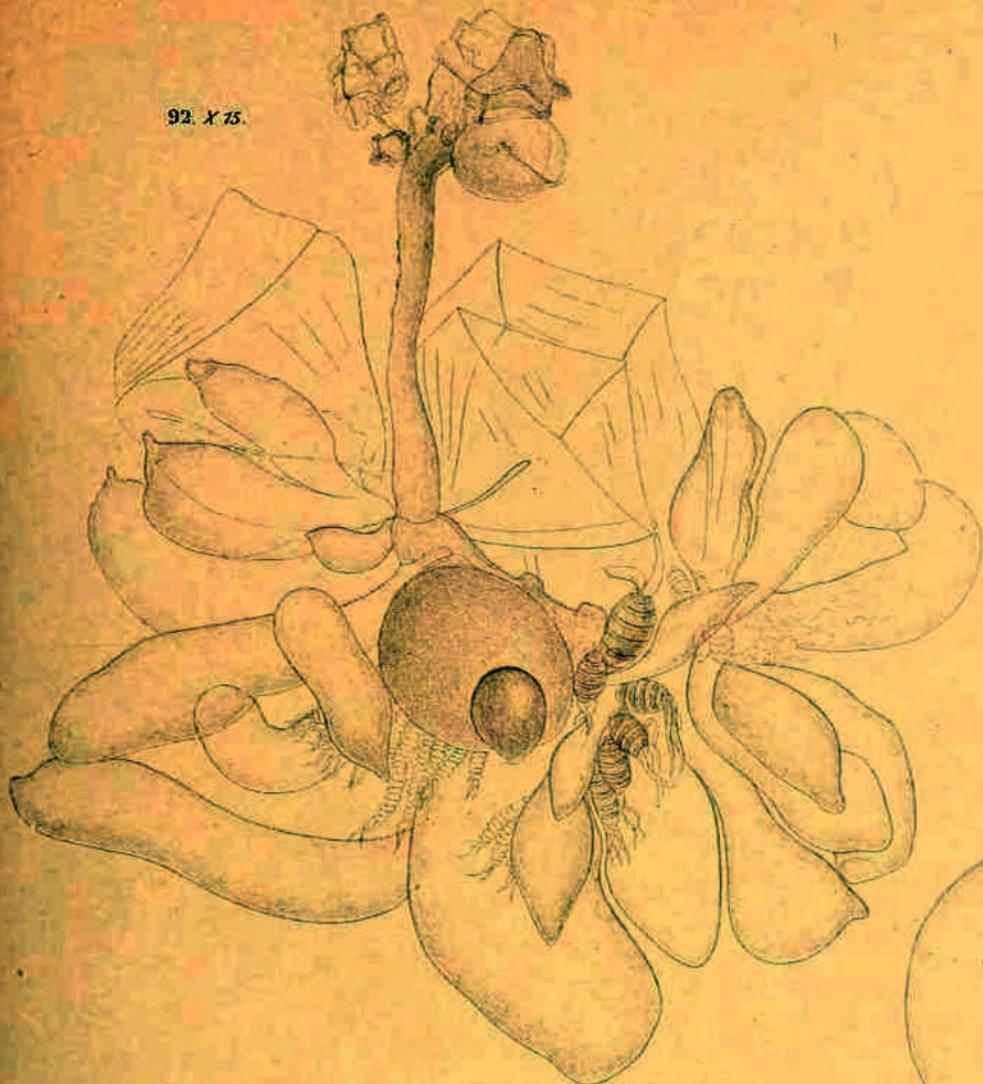


PLATE XII.

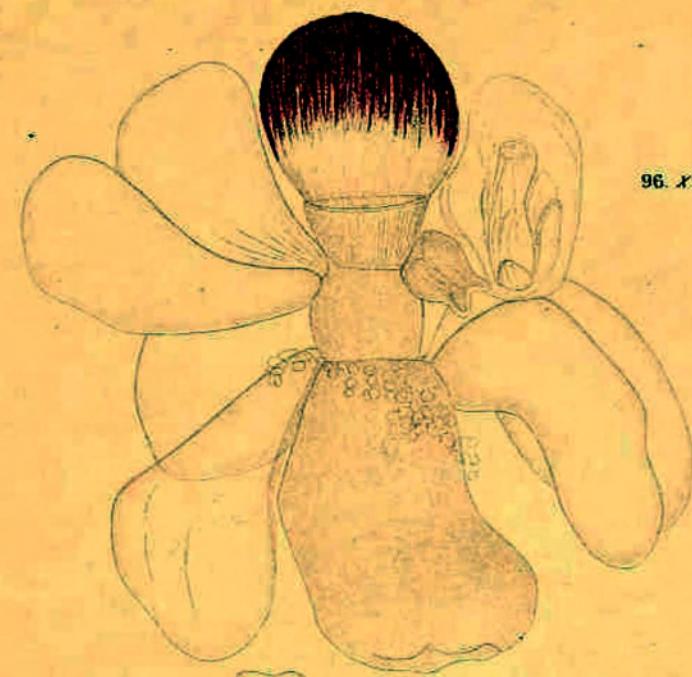
Crystallomia Dana.

- Fig. 92. *Crystallomia* spec. group I. (Cat. 25 A.). 15 ×
Fig. 93. *Crystallomia* spec. group I. (Cat. 151 F.). 14 ×.
Fig. 94. *Crystallomia* spec. group I. (Cat. 88 M.). 13 ×.
 rprs = reduced primary siphon.
Fig. 95. *Crystallomia* spec. group I. (Cat. 163 A.). 25 ×.
Fig. 96. *Crystallomia* spec. group I. (Cat. 71 B.). 28 ×.

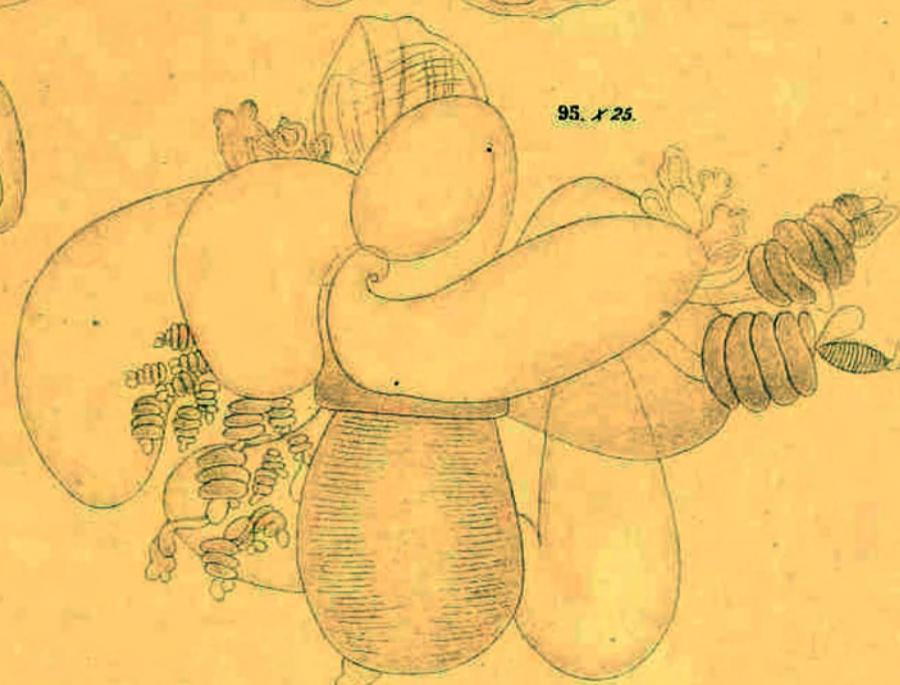
92. X 15.



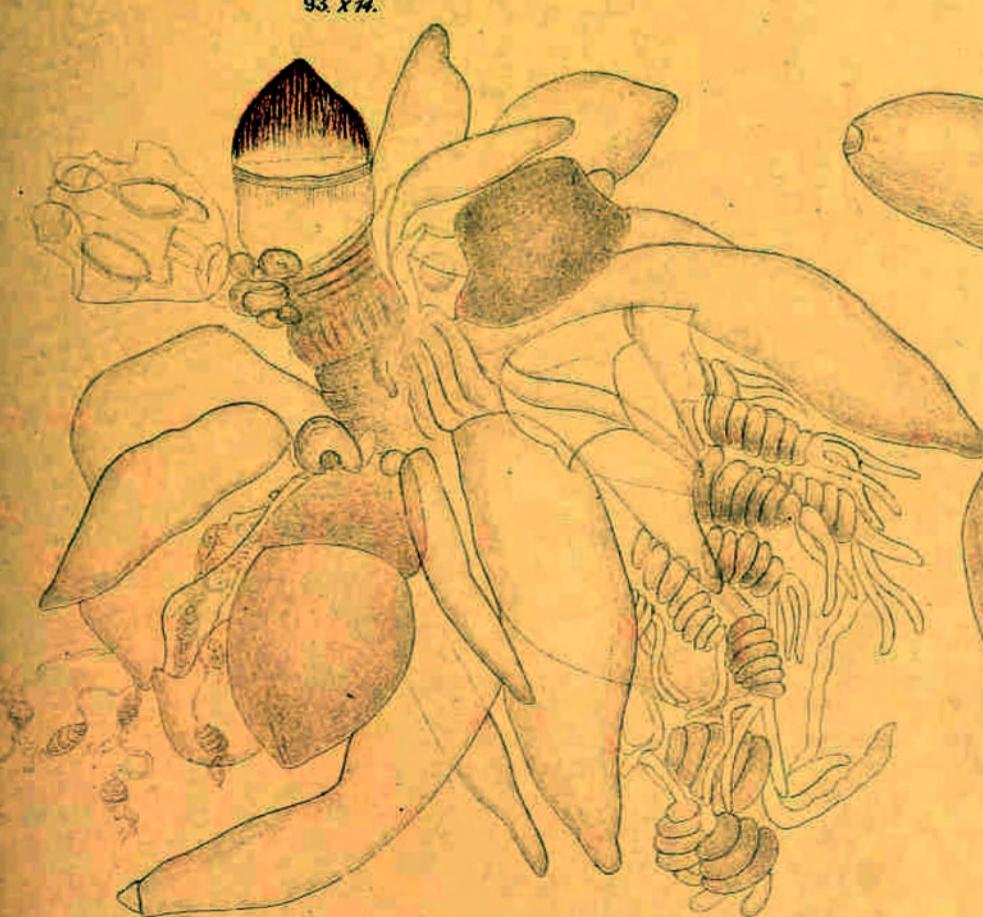
96. X 28.



95. X 25.



93. X 24.



94. X 13.

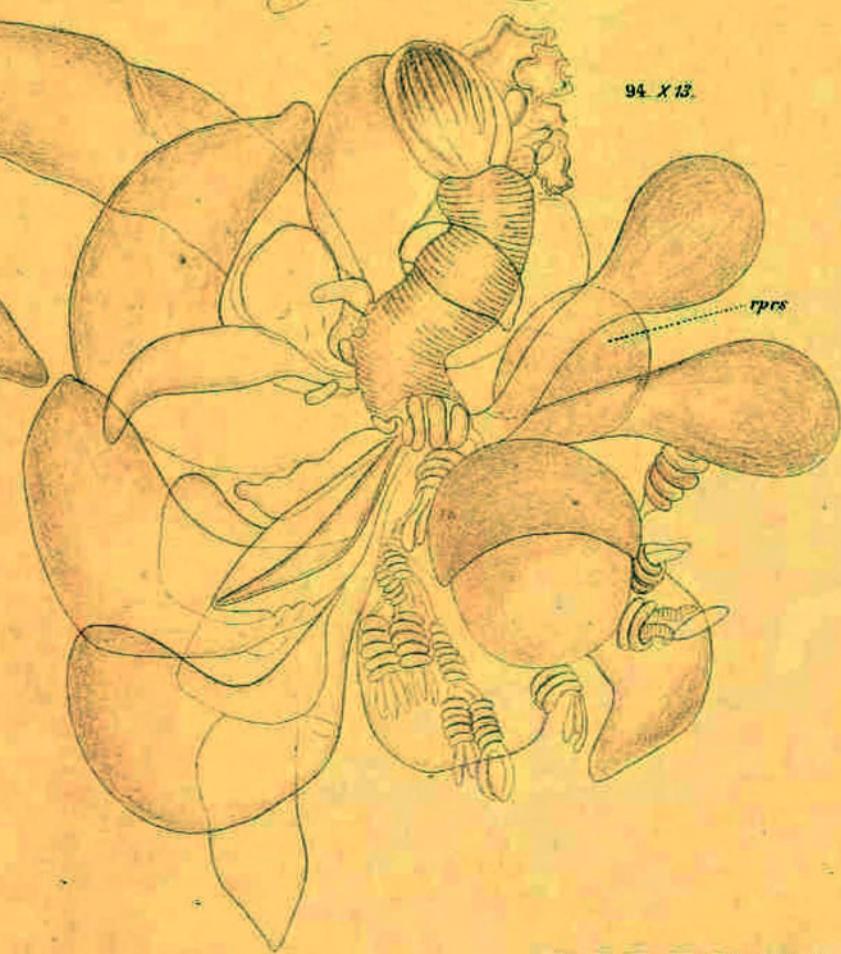


PLATE XIII.

Fig. 97. *Larva of Agalma* spec. (Cat. 157). 25 \times .

Fig. 98—102. Tentilla belonging to the genus *Crystallomia* Dana.

Fig. 98. *Tentillum type I.* (Cat. 25 A. see fig. 92, Pl. XII). 50 \times .

Fig. 99. *Tentillum type II.* (Cat. 151 A see fig. 109, Pl. XIV). 220 \times .

Fig. 100. *Tentillum type II.* (Cat. 151 A see fig. 109, Pl. XIV). 61 \times with lateral filaments and first turn of the cnidoband protruding out of the involucrum.

Fig. 101. *Tentillum type III.* (Cat. 154 see fig. 105, Pl. XIV). 28 \times .

Fig. 102. *Tentillum type IV.* (Cat. 154 see fig. 105, Pl. XIV). 50 \times .

Fig. 103. *Crystallomia* spec. group IV. (Cat. 53). 8 \times .

Fig. 104. Peripheral glands found on the bracts of Cat. 53. 65 \times .

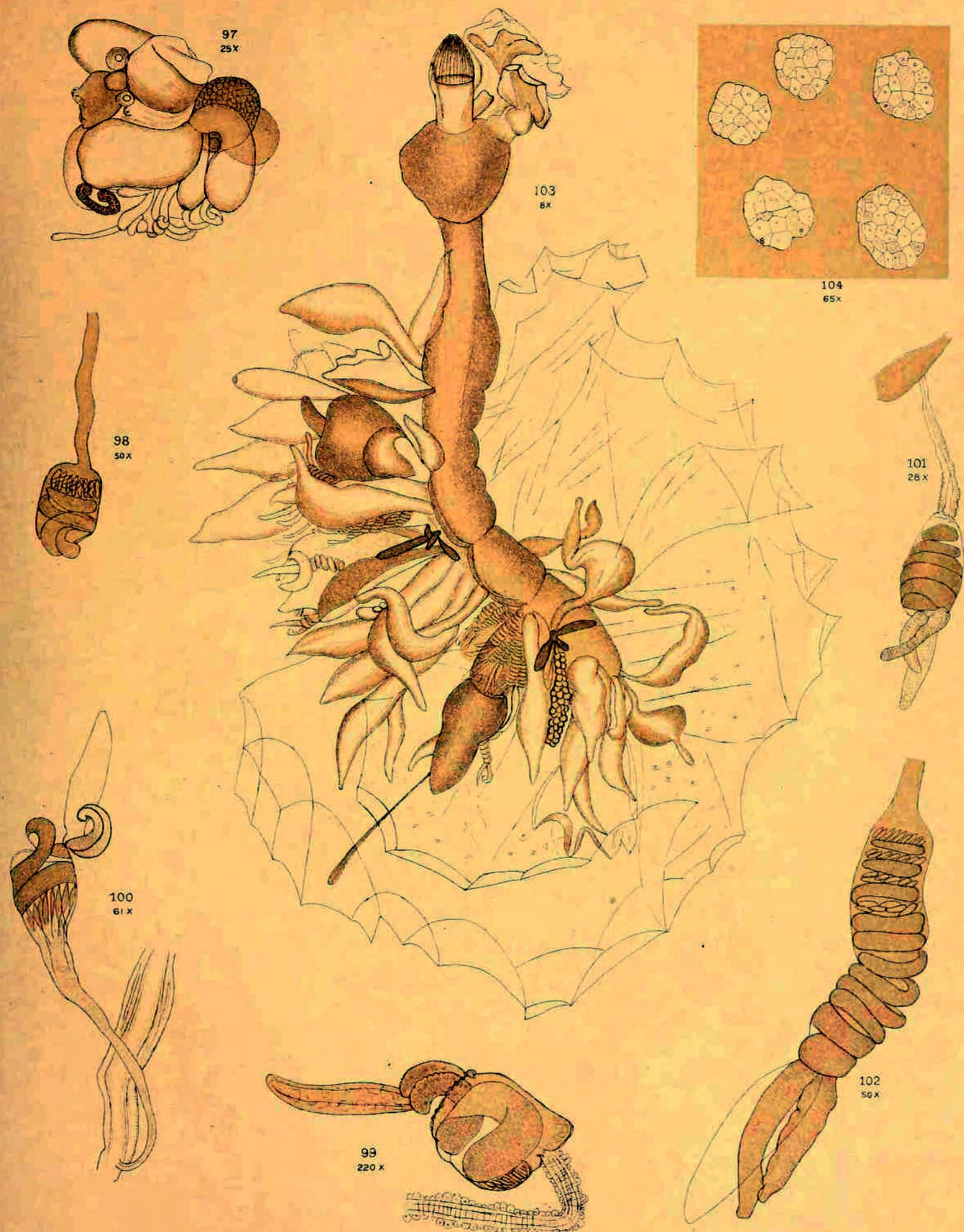
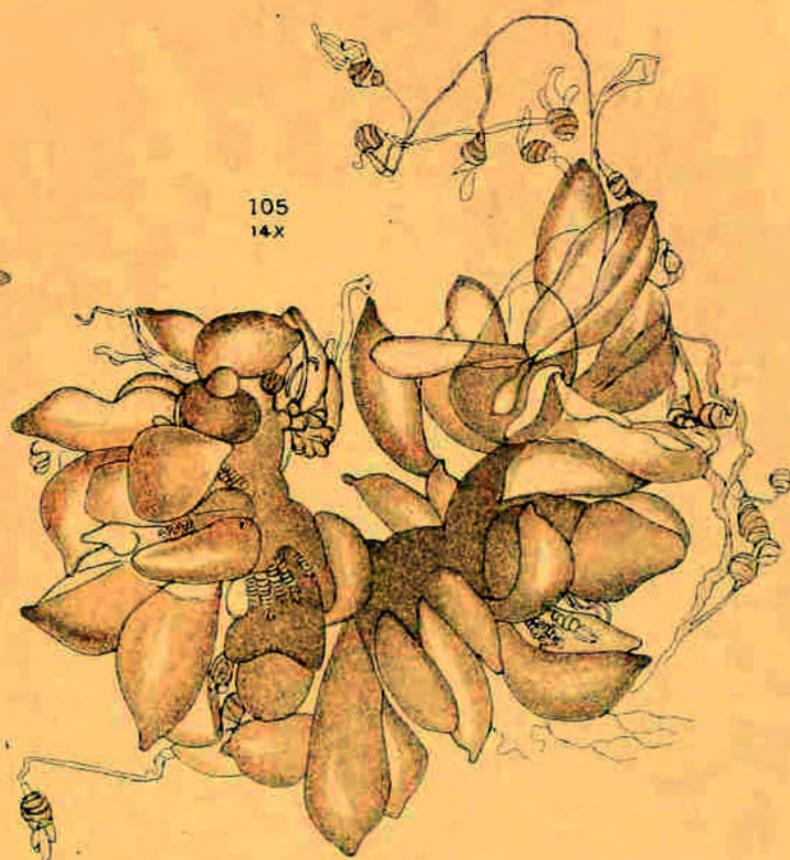
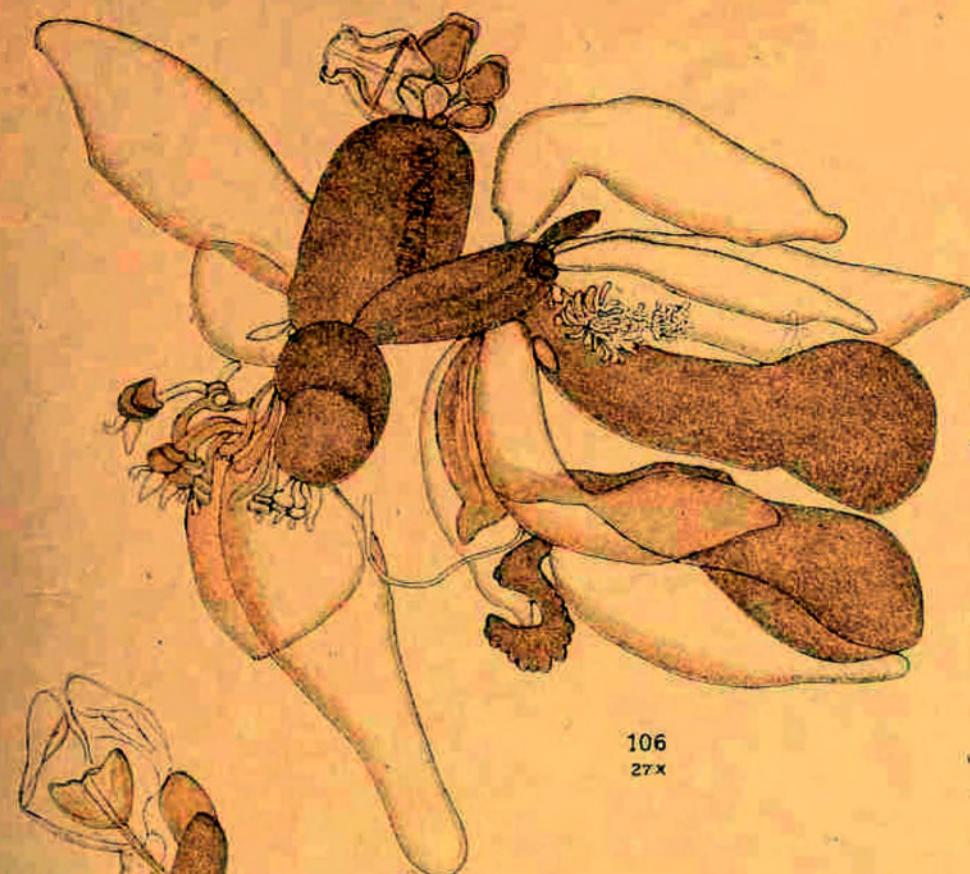


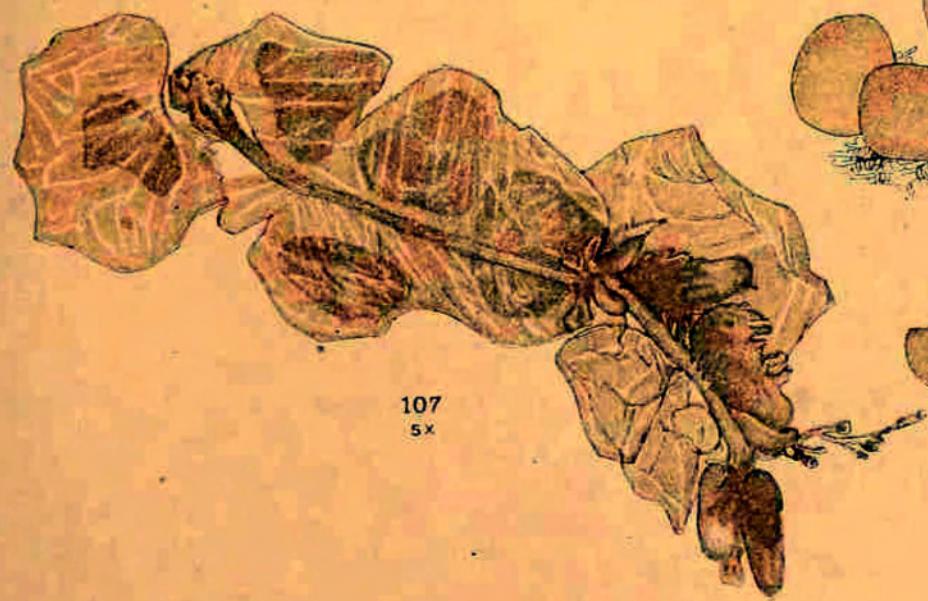
PLATE XIV.

Crystallomia Dana.

- Fig. 105. *Crystallomia* spec. group I. (Cat. 154). 14 \times . Pneumatophore invisible, situated on the left side of the drawing underneath the other appendages.
- Fig. 106. *Crystallomia* spec. group II. (Cat. 175 G.). 27 \times .
- Fig. 107. *Crystallomia* spec. group II. (Cat. 88 J.). 5 \times . Nectophores much altered through preservation.
- Fig. 108. *Crystallomia* spec. group II. (Cat. 176 F.). 16 \times .
- Fig. 109. *Crystallomia* spec. group II. (Cat. 151 A.). 10 \times .



108
16x



107
5x



109
10x

PLATE XV.

- Fig. 110. *Crystallomia* spec. group II. (Cat. 215 F.). 12 \times .
Fig. 111. *Crystallomia* spec. group II. (Cat. 88 D.). 6 \times .
Fig. 112. Detached cormidia of *Crystallomia* spec. group II. (Cat. 215 B.). 10 \times .
Fig. 113. Mutilated specimen of *Stephanomia* spec. Per. et Les. (Cat. 115 A.). 3,5 \times .
 n = much altered unique nectophore.
Fig. 114. The detached bract α (Fig. 113) of the same. 2,8 \times .
Fig. 115. *Halistemma* spec. Huxl. (Cat. 153). 8 \times .

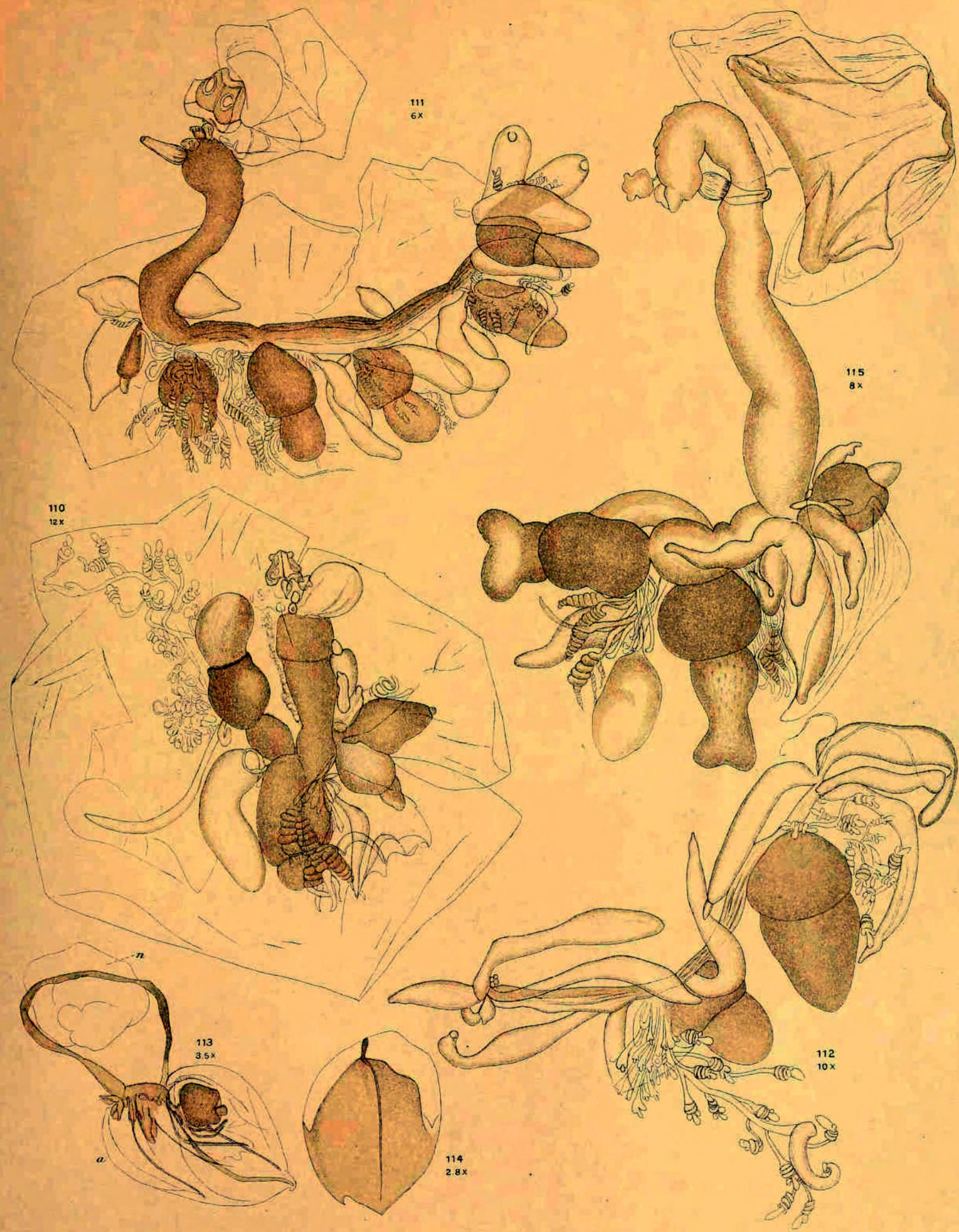


PLATE XVI.

- Fig. 116. *Halistemma cupulifera* nov. spec. (Cat. 160). 11 \times . Complete.
Fig. 117. A tentillum of the same. 27 \times .
Fig. 118. The basal part of the terminal filament of a tentillum (fig. 117). 130 \times .
Fig. 119. A full-grown bract of the same. 17 \times .
Fig. 120. *Physophora hydrostatica* Forsk. (Cat. 230). 18 \times . Complete.
Fig. 121. *Physophora hydrostatica* Forsk. (Cat. 173 B.). 8 \times . Complete.
Fig. 122. A tentillum of *Physophora hydrostatica* Forsk. (Cat. 230). 22,5 \times .
Fig. 123a. *Anthophysa formosa* Fewk. (Cat. 23 B.). 10 \times . Complete.
Fig. 123b. The only remaining bract of the same enlarged. 15 \times .



PLATE XVII.

Archangeliopsis typica nov. gen. nov. spec.

Abbreviations.

pco = pneumatocodon (Luftschild).
exo = ectoderm layer of the pneumatocodon.
fo = chitinous layer of the pneumatocodon.
eno = entoderm layer of the pneumatocodon.
p.sacc = pneumatosaccus (Luftsack).
exac = ectoderm layer of the pneumatosaccus.
fac = chitinous layer of the pneumatosaccus.
enac = entoderm layer of the pneumatosaccus.
p.cav = pericystic cavity.
py = pneumatocyst (Luftblase).
c.py = club-shaped enlargement of the pneumatocyst.
f.py = folds of the same in the secondary ectoderm, situated in the pneumatosaccus.
p.oy = pneumatopyle (Trichterforte).

pe = pneumatochone (air-funnel, infundibulum, Luftpfeil).
sec. exy = secondary ectoderm in the pneumatochone (pneumadenia) and in the cavity of the pneumatosaccus.
r.z = gigantic cells in the secondary ectoderm.
cav. sec = cavities which are formed by the gas-secreting secondary ectoderm.
b.a = buds of youngest appendages.
s.a.z = transverse entodermal septa, connecting the pneumatochone and the pneumatocodon.
s.s.β = transverse entodermal septa connecting the pneumatosaccus and the pneumatocodon.
a.s = appendages of the siphosome.
a.s.a = buds of nectophores (?).

Fig. 124. A reconstruction of a median longitudinal section through a typical Angelid (after sections through three specimens of *Archangeliopsis typica* nov. gen. nov. spec. enlarged about 25×. (Ectoderm = yellow, chitinous layer = black, entoderm = grey, secondary ectoderm = green) Semi-diagrammatical.

Fig. 125 I. A longitudinal section of the same showing part of the pneumatosaccus; first appearance of the air-funnel after section through the youngest appendages (Cat. 10 A. z glass 10 III 7). Abbreviations as indicated above (Cat. 10 A. z glass 10 III 8). ± 25×.

Fig. 126 II. The same, the buds of appendages on this figure and the next (126—133) are left out. (Cat. 10 A. z glass 11 II 4) ± 25×. First appearance of the club-shaped enlargements of the pneumatocyst as an odd spherical body of chitinous substance in the air-funnel.

Fig. 127 III. The same (Cat. 10 A. z glass 11 III 3). The air-funnel approaching the pneumatosaccus, both their chitinous layers uniting, paired club-shaped enlargements increasing in size. ± 25×.

Fig. 128 IV. The same (Cat. 10 A. z glass 11 III 7). The chitinous layer of the pneumatosaccus shows an interruption, the club-shaped enlargements are connected by a thread, which faces the pneumatocyst. ± 25×.

Fig. 129 V. The same (Cat. 10 A. z glass 12 I 4). The thread of the club-shaped enlargements unites on both sides with the chitin of the pneumatocyst. The pneumatocyst with its chitinous ring is now clearly recognizable. This time we may speak of pneumatopyle (Trichterforte). ± 25×.

Fig. 130 VI. The same (Cat. 10 A. z glass 12 II 5). Formation of cavities in the secondary ectoderm, both in pneumatochone and near pneumatosaccus. ± 25×.

Fig. 131 VII. The same (Cat. 10 A. z glass 13 I 4) ± 25×. The same cavities increase in size. Compare this sketch with Fig. 136 of Pl. XVIII.

Fig. 132 VIII. The same (Cat. 10 A. z glass 13 I 7). The cavities become spherical again and are separated one from the other by secondary ectoderm. ± 25×.

Fig. 133 IX. The same (Cat. 10 A. z glass 13 III 5). The same cavities close again. ± 25×. (N.B. By mistake IX has been omitted on the plate).

Fig. 134. One of the youngest buds of appendages, greatly magnified (Cat. 10 A. z glass 12 II 7). 220×.

Fig. 135. Secondary ectoderm cells with part of a branched giant-cell (black granulation). (Cat. 10 A. z glass 13 II 6). 220×.

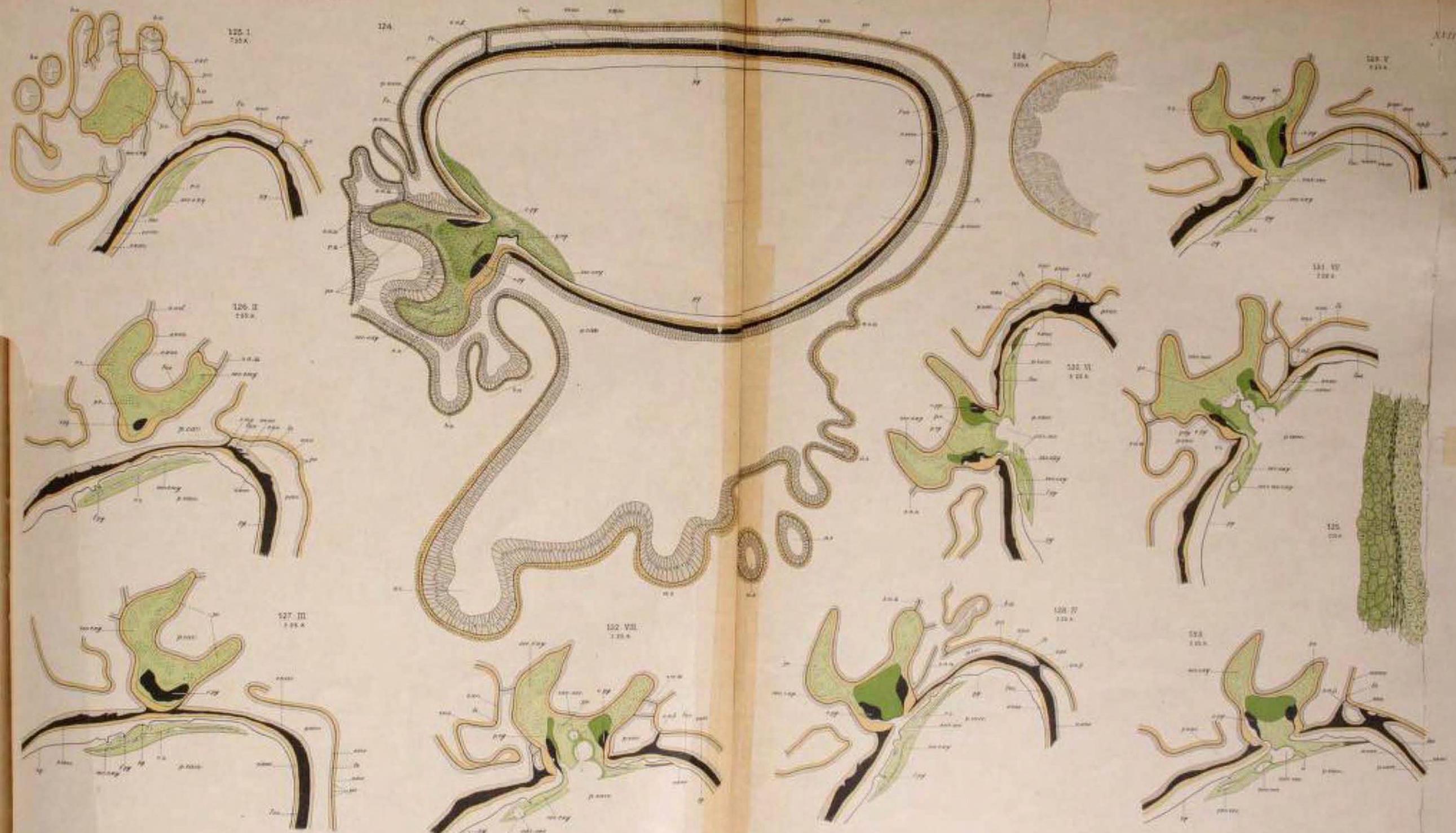


PLATE XVIII.

Fig. 136. *Angelopsis globosa* Fewkes (after FEWKES 89 Pl. VII, fig. 2). Transverse section through the float and the siphosome.

gm = spherical bag-like structure, *o* = opening of the same into the cavity of the float, *f* = "muscular floor".

Fig. 137. *Archangelopsis typica* nov. gen. nov. spec. (Cat. 10 A.). Complete, after a photograph. 4,5 \times . The arrow indicates the direction of the sections.

pn = pneumatophore, *z.pr* = zone of proliferation, *n* = nectophores, *s* = siphon, *t, t* = tentacles.

Fig. 138. *Archangelopsis typica* nov. gen. nov. spec. (Cat. 22). 4,5 \times . Complete, after a photograph.
Abbreviations as in Fig. 137.

Fig. 139. *Archangelopsis typica* nov. gen. nov. spec. (Cat. 10 B.). Longitudinal median section.
Abbreviations as in Pl. XVII.

Fig. 140. Parts of gigantic cells of the same. (Cat. 10 A. α glass 14 III 4). 225 \times .

Fig. 141. *Rhizophysa filiformis* Forsk. A young specimen, complete. (Cat. 166 A.). 9 \times .

Fig. 142. One of its young tentilla, the future trifid type, enlarged. 220 \times .

Fig. 143. *Rhizophysa filiformis* Forsk. (Cat. 18). A trifid tentillum showing its two lateral filaments. 110 \times .

Fig. 144. A lateral view of the same. 110 \times .

Fig. 145. A beak-like tentillum of the same, altered through the preservative fluid. 110 \times .

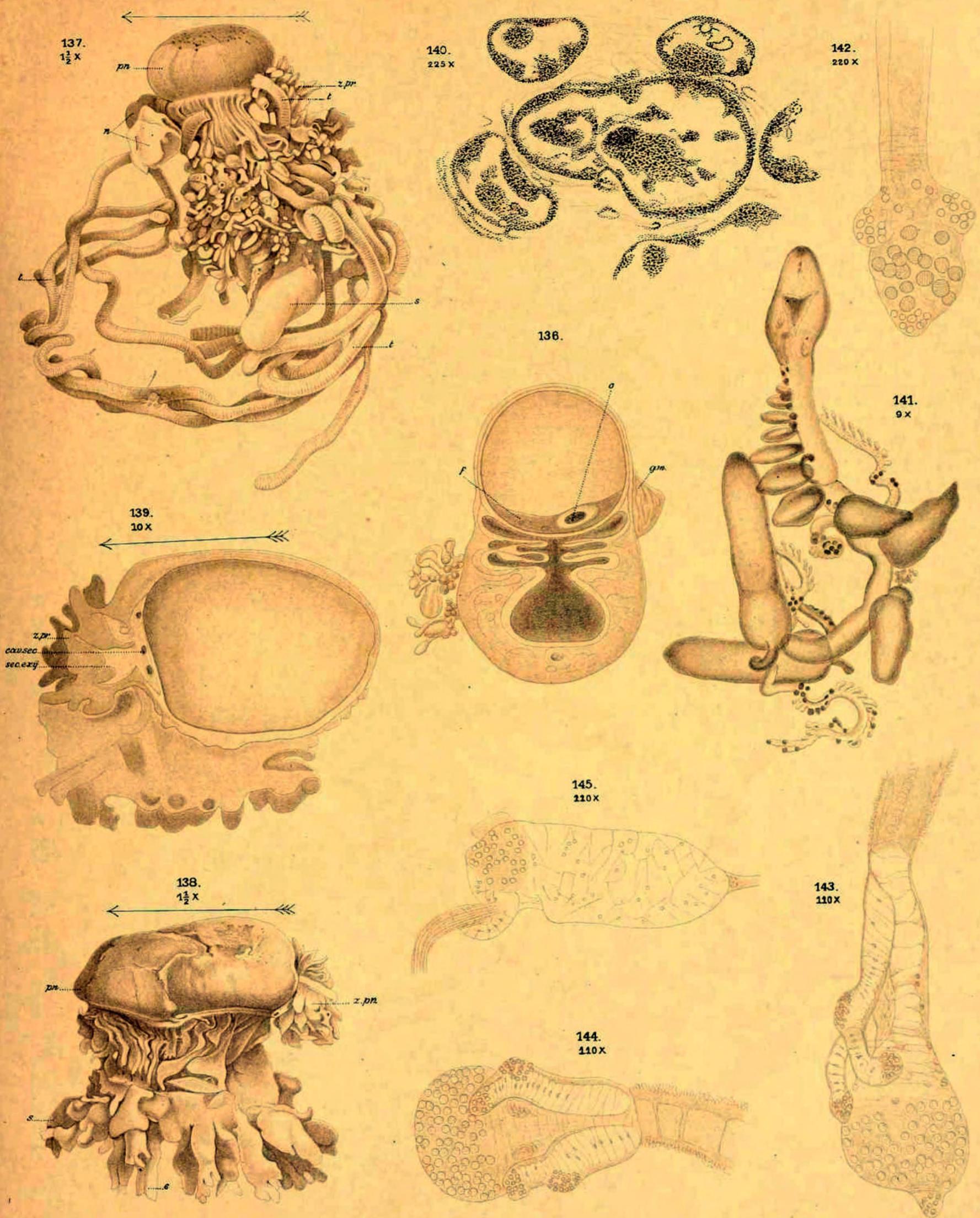


PLATE XIX.

Fig. 146. *Pterophysa grandis* Fewk. Natural size. (Cat. 8). See text p. 108.

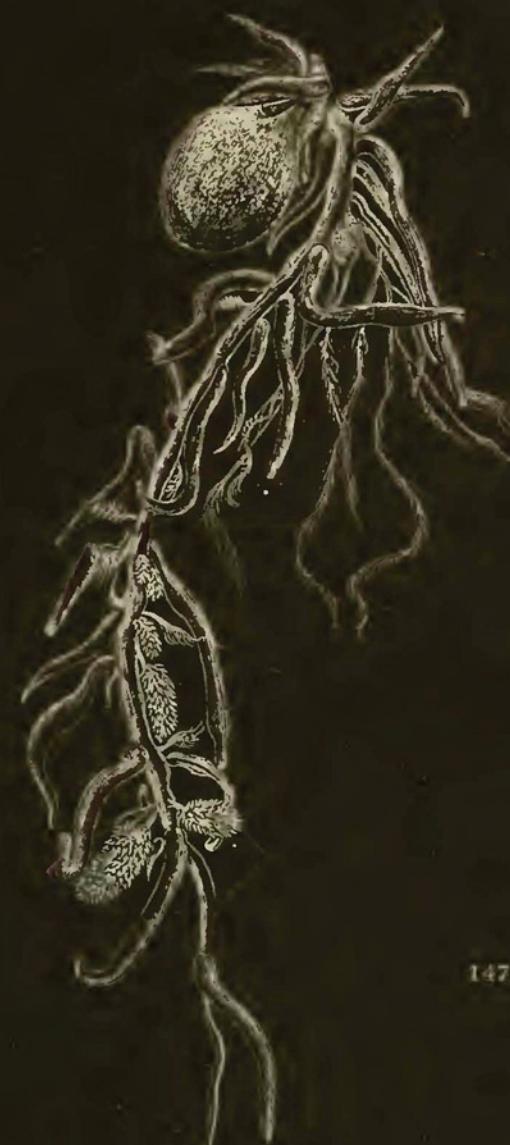


PLATE XX.

Fig. 147. *Rhizophysa Eysenhardtii* Ggbr. (Cat. 20 A.). Natural size.

Fig. 148. *Bathyphysa Sibogae* nov. spec. (Cat. 27). Natural size.

Fig. 149. *Pterophysa (Bathyphysa) Studeri* nov. spec. (Cat. 6). A lateral view of its pneumatophore. The pneumatocodon entirely split open (as far as the porus). Apically part of its wall has been cut away, to show the bunch of hypocystic villi.



147.



148.



149.



PLATE XXI.

Fig. 150. *Rhizophysa Eysenhardtii* Ggbr. (Cat. 14 A.). Natural size.

Fig. 151. *Rhizophysa filiformis* Forsk. (Cat. 18). Natural size.

Fig. 152. A palmate tentillum of the same, much altered through the preservative fluid. 110 \times .

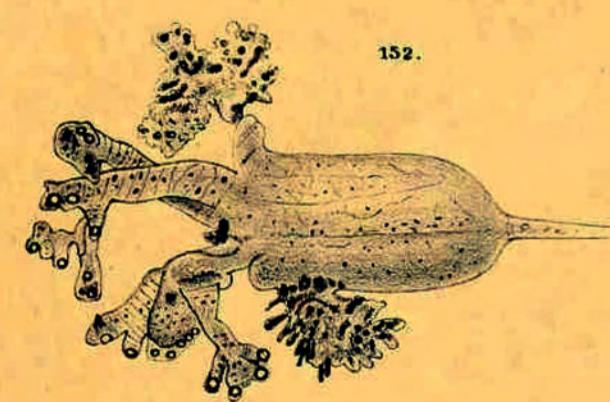
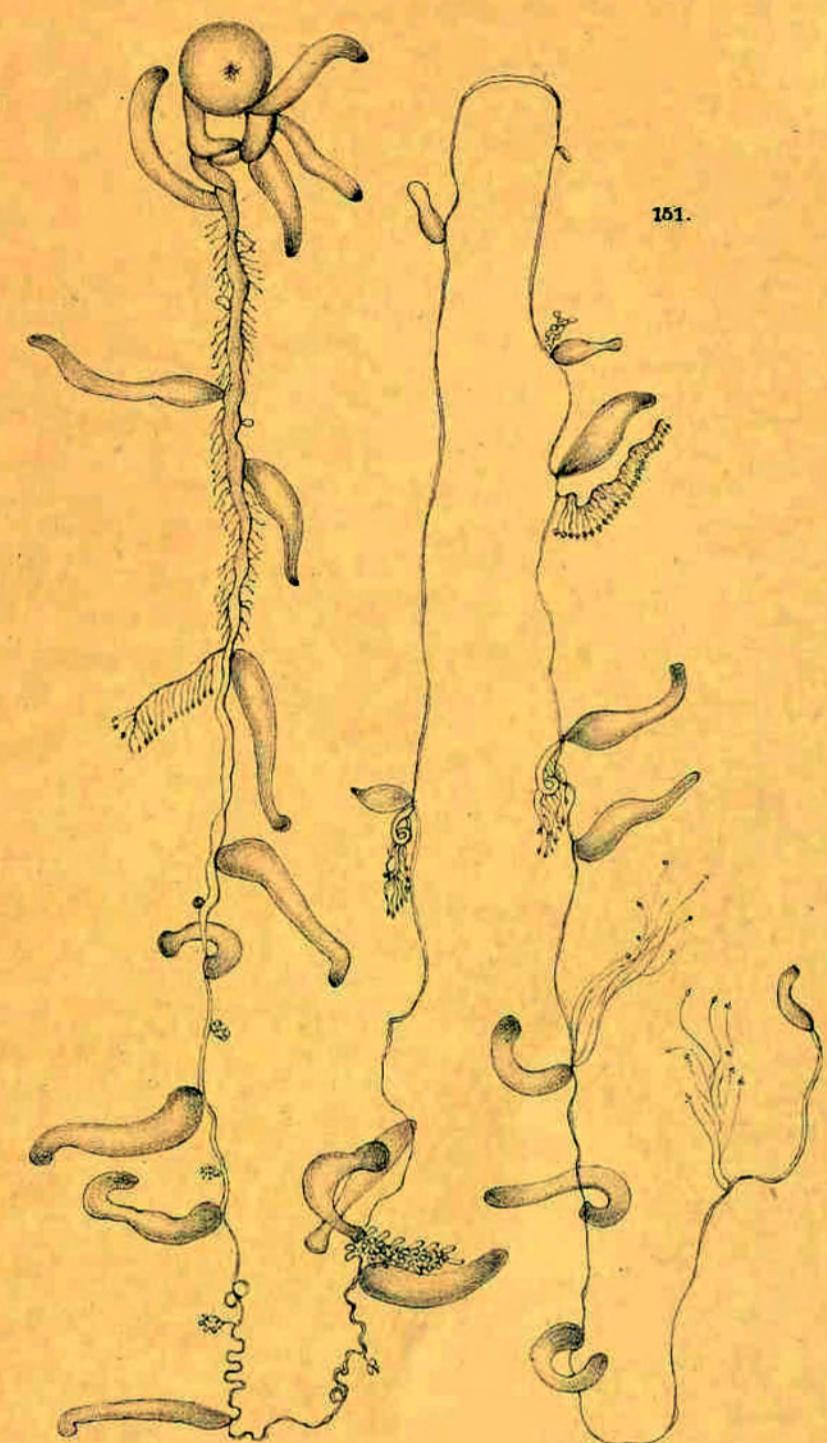
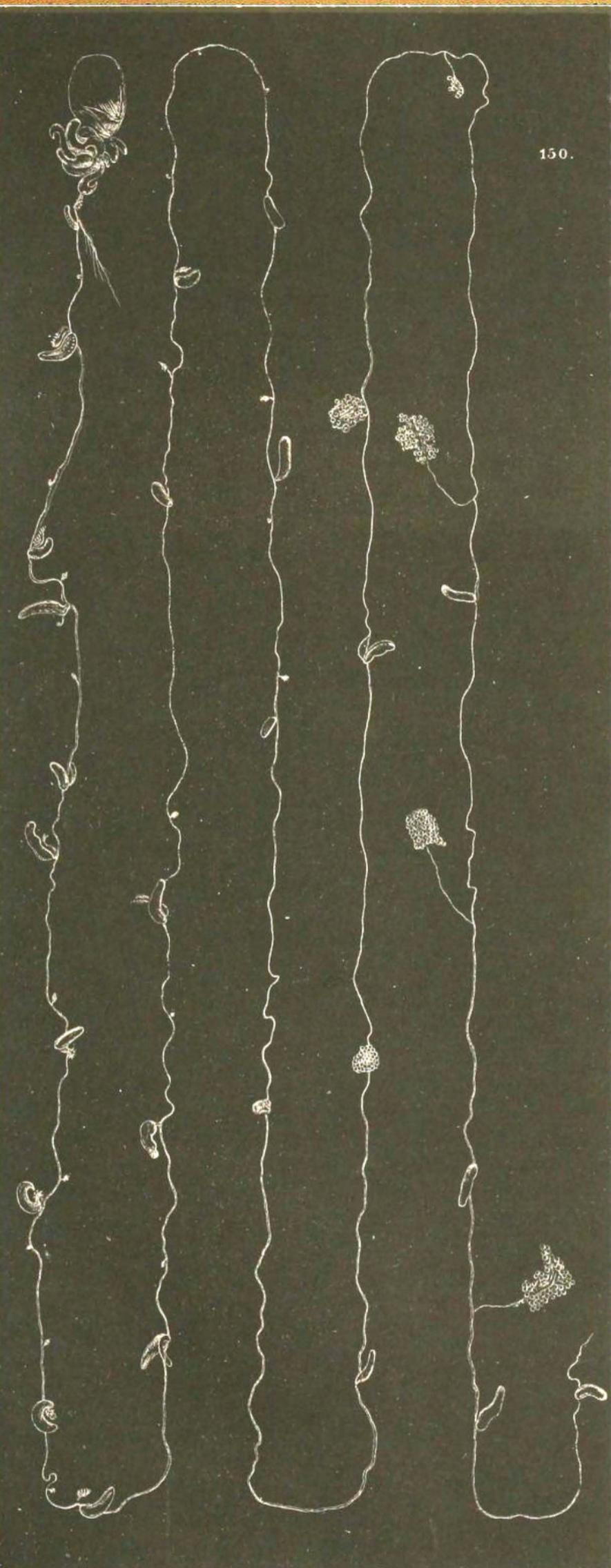


PLATE XXII.

Fig. 153. *Pterophysa (Bathyphysa) Studeri* nov. spec. (Cat. 6). The hypocystic villi in the pneumatophore are not sketched; the pneumatophore therefore is shown in its more natural shape. Natural size. s, s, s = three siphons.

Fig. 154. The second siphon of the same enlarged, to show the short pedicle at its base. $2 \times$.

Fig. 155. A hypocystic villus of the same. A median longitudinal section (Cat. 6 glass 3 IV 4), showing an outward layer of entodermal cells and a gigantic nucleus interiorly. $120 \times$.

Fig. 156. *Rhizophysa Eysenhardtii* Ggbr. (Cat. 16). Entodermal cells of the apical outer part of a hypocystic villus. $200 \times$.

Fig. 157. *Pterophysa (Bathyphysa) Studeri* nov. spec. (Cat. 6). A transverse section through the gigantic nucleus of the cell indicated on Plate XXII, fig. 155 (glass 7 II 1). The surrounding entoderm layer only partly indicated. $930 \times$.

Fig. 158. A transverse section of the same somewhat further, also indicated on Pl. XXII, fig. 155 (glass 7 II 3). $930 \times$.

Fig. 159. A hypocystic villus of the same enlarged. $25 \times$. Showing the size of the cell in which the gigantic nucleus is contained, and another transverse wall of a cell in which no nucleus is to be found.

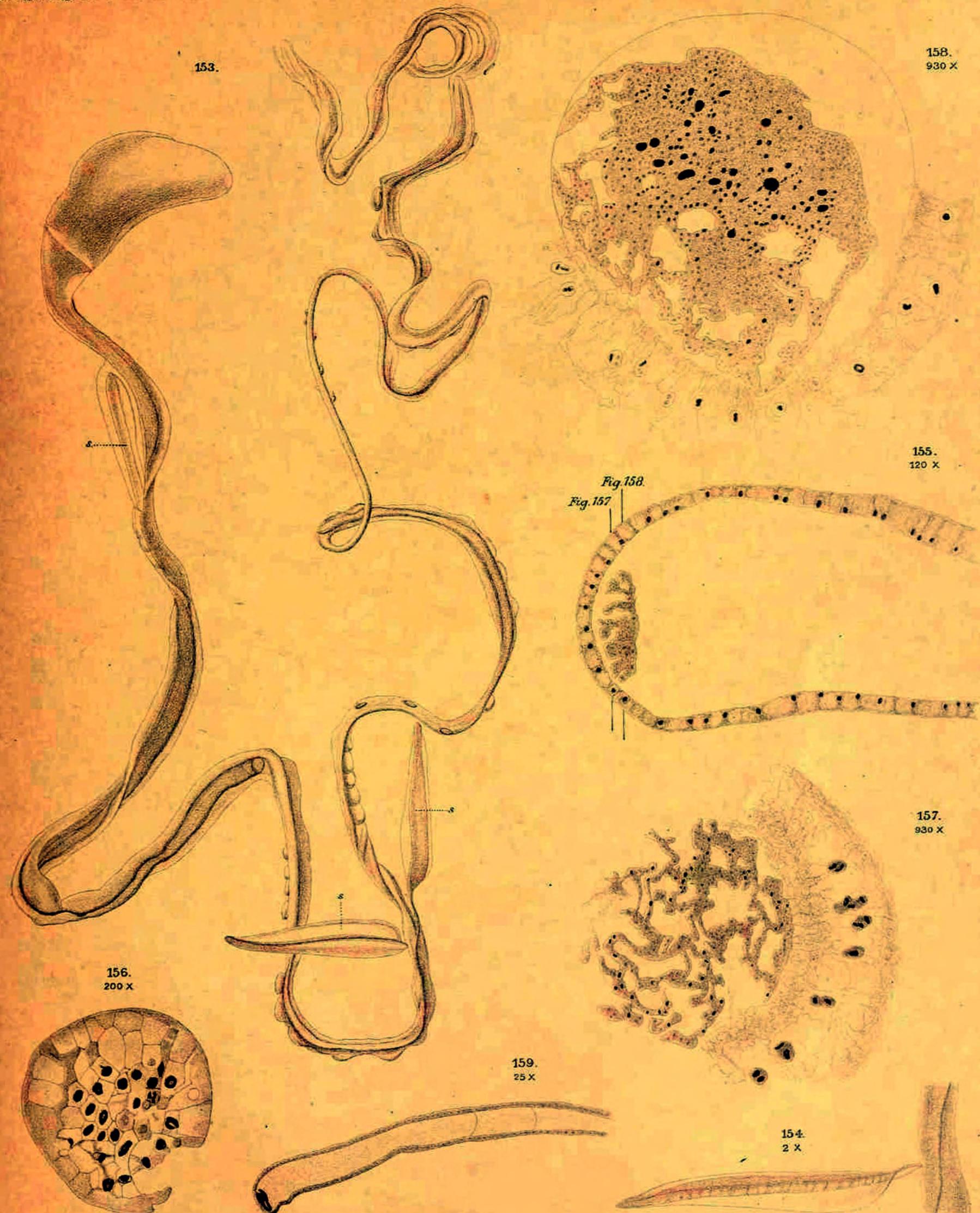


PLATE XXIII.

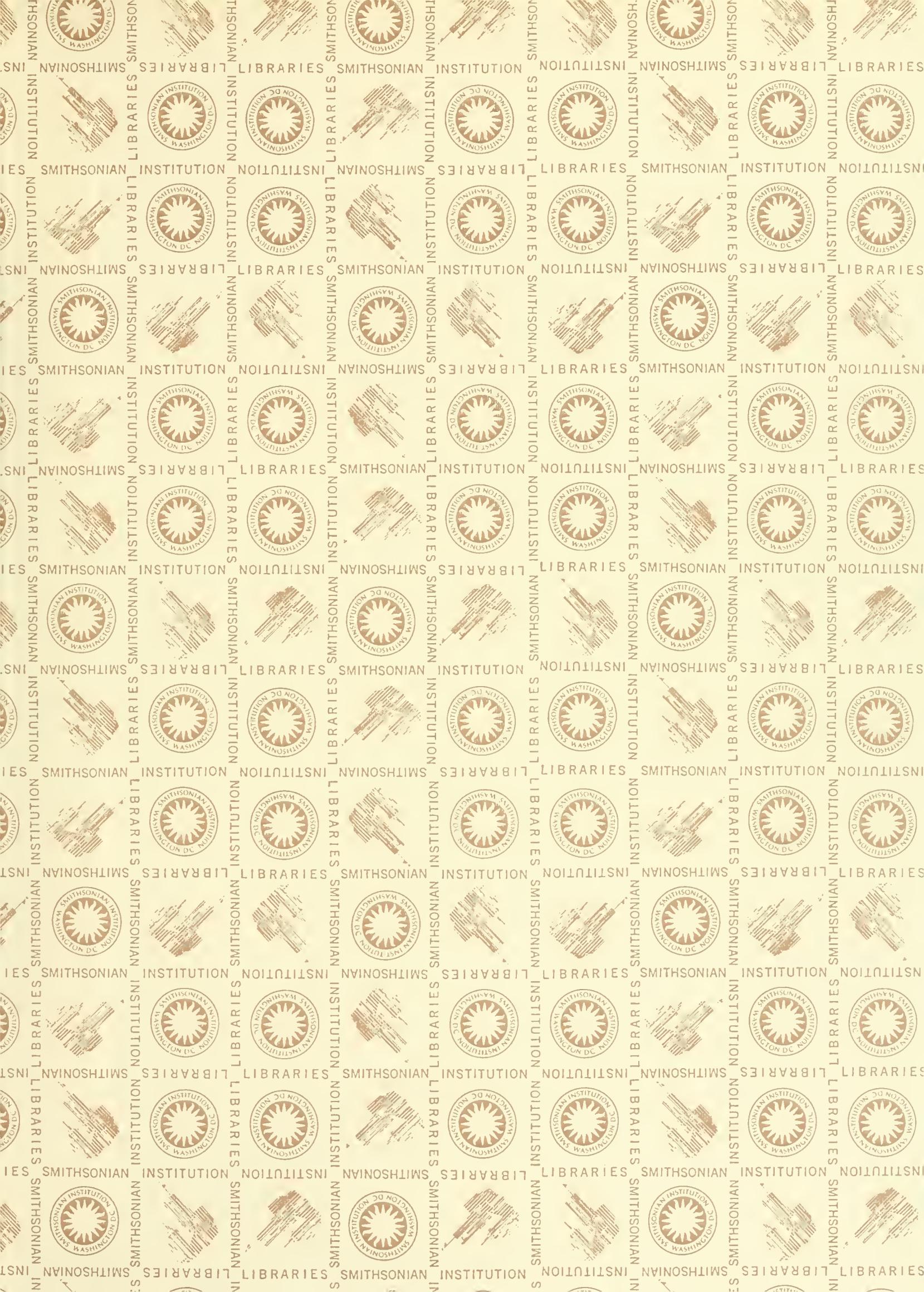
- Fig. 160. *Bathyphysa Sibogae* nov. spec. (Cat. 5). Natural size. 1—32, indications of detached (except 21, 23) siphons on the stem.
Fig. 161. Pneumatophore and youngest appendages of the stem of the same. 1,5 ×.
Fig. 162. One of the youngest siphons of the same (x in fig. 161) enlarged. 13 ×.
Fig. 163. Tentacle and tentilla of the same (Tentacle of the 21st siphon). 15 ×.
Fig. 164. The largest tentillum of Fig. 163 enlarged. 56 ×.
Fig. 165. Transverse median section through a siphon of *Pterophysa (Bathyphysa) Studeri* nov. spec. (Cat. 6). 14 ×.



PLATE XXIV.

- Fig. 166. *Bathyphysa abyssorum* Studer. Pneumatophore of STUDER's original material, sketch made in Berlin. Natural size.
p.o = pneumatocodon, *p.sacc.* = pneumatosaccus, *p.e* = remains of pneumatochone.
- Fig. 167. *Pterophysa grandis* Fewk. (Cat. 6). A young siphon (on Plate XIX indicated as *s. 1*). 2 \times . The lateral ptera well-developed.
- Fig. 168. Another siphon of the same (on Pl. XIX indicated as *s. 2*). 2 \vee . The lateral ptera as small longitudinal lines. At its base a tentacle and a young gonodendron.
- Fig. 169. A third mature siphon of the same (on Pl. XIX indicated as *s. 3*). 2 \times . No lateral ptera. Long tentacle at the base of the siphon.
- Fig. 170. Median longitudinal section through a siphon (Cat. 8 glass b 1 II 2) of the same. 260 \times .
- Fig. 171. Part of the stem of *Pterophysa* (*Bathyphysa*) *Studeri*, which does not belong to the specimen of Pl. XXIII, fig. 160, but was found in the same bottle. 0,5 \times .
- Fig. 172. *Rhizophysa Eysenhardtii* Ggbr. (Cat. 20 A.), a tentacle (*t*) with tentilla (*ti*, *ti*). 11 \times .
- Fig. 173. *Bathyphysa Sibogae* nov. spec. (Cat. 27) see Pl. XX, fig. 148. Base of a siphon (*t*) with tentacle and young tentilla (*ti*). 13,5 \times .
- Fig. 174. *Physalia utriculus* Lamartinière. (Cat. 4). Part of a gonodendron showing a gelatinous polypoid, 2 palpons, a medusiform gonocalyx and 11 gonophores. 15 \times .
- Fig. 175. The main-branch of a gonodendron of the same with the principal side-branches (A—F) a gelatinous polypoid, gonophores and a siphon (?). 7 \times .





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