



<http://www.biodiversitylibrary.org/>

The Zoological journal.

London :W. Phillips,1824-

<http://www.biodiversitylibrary.org/bibliography/39584>

v.5 1832-1834: <http://www.biodiversitylibrary.org/item/47898>

Article/Chapter Title: Observations upon the Dentalium subulatum of Deshayes

Author(s): M. J. Berkeley

Subject(s): Polychaeta, taxonomy

Page(s): Title Page, Text, Text, Text, Text, Page 424, Page 425, Page 426, Page 427, Text

Contributed by: Natural History Museum Library, London

Sponsored by: Natural History Museum Library, London

Generated 28 September 2016 5:54 PM

<http://www.biodiversitylibrary.org/pdf4/055904600047898>

This page intentionally left blank.

THE
ZOOLOGICAL
JOURNAL.

VOL. V.

From 1832---1834.

EDITED BY

N. A. VIGORS, Esq., D.C.L., F.R., L., G.S., & M.R.I.A.

WITH THE CO-OPERATION OF

THOMAS BELL, Esq., F.R. & L.S.	Major-Gen. THOS. HARDWICKE F.R. & L.S.
E. T. BENNETT, Esq., F.L.S., Sec. Z.S.	T. HORSFIELD, M.D., F.R. & L.S.
J. E. BICHENO, Esq., F.R. & L.S.	Rev. W. KIRBY, A.M., F.R. & L.S.
W. J. BRODERIP, Esq., F.R.S., &c. V.P.G.S.	J. De C. SOWERBY, Esq., F.L.S.
J. G. CHILDREN, Esq., Sec. R.S., &c.	G. B. SOWERBY, F.L.S.
	W. YARRELL, Esq., F.L.S.



London:

Printed by E. J. Stirling, 29, Addle Street, Wood Street, Cheapside;

AND PUBLISHED BY G. B. SOWERBY, 50, GREAT RUSSELL STREET, BLOOMSBURY.

1835.

CONTENTS.

No. XX. 1832—1834.

	Page
ART. LI. <i>Remarks on the nature of the Respiratory Organs in certain littoral Mollusca of Madera. By the Rev. R. T. LOWE, A.M.</i>	485
ART. LII. <i>Description of a Genus of Reptilia of the family of Amphisbænidæ. By THOMAS BELL, Esq, F.R. & L.S.</i>	391
ART. LIII. <i>Description of a new Genus of Reptilia of the family Scincidæ. By THOMAS BELL, Esq., F.R. & L.S., &c.</i> . .	393
ART. LIV. <i>On the Food and Habits of certain Insects. By T. BRIGHTWELL, Esq., F.L.S.</i>	396
ART. LV. <i>On the Spiders of the Genus Dysdera, Latr., with the Description of a new allied Genus. By ROBERT TEMPLETON, Esq. In a Letter to the Editor.</i>	400
ART. LVI. <i>Account of several Fishes and other Animals of Jamaica. By E. N. BANCROFT, M.D. In a Letter to the Editor.</i>	409
ART. LVII. <i>Observations upon the Dentalium subulatum of Deshayes. By the Rev. M. J. BERKELEY, A. M.</i>	424
ART. LVIII. <i>Description of the Animals of Voluta denticulata, Mont., and Assiminia Grayana, Leach. By the Rev. M. J. BERKELEY, A.M.</i>	427
ART. LIX. <i>A description of the anatomical structure of Cerithium Telescopium, Brug. By the Rev. M. J. BERKELEY, A.M., and G. H. HOFFMAN, Esq.</i>	431

EXPLANATION OF THE PLATES.

	Page
PLATE XVI.— <i>Fig.</i> 1. <i>Anops Kingii</i>	391
2. <i>Lerista lineata</i>	393
PLATE XVII.— <i>Fig.</i> 1—9. <i>Dysdera Templetoni</i>	402
10—18. <i>Oonops pulcher</i>	404
PLATE XVIII.— <i>Echeneis lunata</i>	413
PLATE XIX.— <i>Fig.</i> 1. Larva of <i>Corethra plumicornis</i> ; <i>a.</i> natu- ral size; <i>b.</i> highly magnified	397
2. <i>Ditrupa subulata</i>	427
3. <i>Voluta denticulata</i>	428
4. <i>Assiminia Grayana</i>	429
5. <i>Rissoa subumbilicata</i>	430
PLATES XX. & XXI.—Details of <i>Cerithium Telescopium</i>	437
PLATE XXII.— <i>Fig.</i> 1. <i>Metallyticus splendidus</i>	442
2. <i>Strongyloderus serraticollis</i>	444
3. Antenna of <i>Tripetalocera ferruginea</i>	444
4. <i>Cheilopogonus punctiger</i>	441
5. Antenna of <i>Ozocera interrupta</i>	449
6. <i>Deroploa parva</i>	445
7. <i>Pentatoma verrucosa</i>	446
8. <i>Platydius subpurpurascens</i>	446
9. <i>Opistoplaytis Australasiæ</i>	447
10—11. <i>Gynoplistes nervosa</i>	448
12. Antenna ♂ of <i>Gyn. variegata</i>	448
13. Antenna ♀ of <i>Gyn. variegata</i>	448
14—15. <i>Ptilogyna marginalis</i>	449
16—17. <i>Hemicteina gracilis</i>	450
18. Antenna of <i>Acronolepia</i>	451
19. <i>Phoroncidia aculeata</i>	453

N. B. Part V. of the Supplementary Plates to this Journal is published at the same time as this 20th Part.

CONTENTS OF THE THIRD PART
OF THE
SUPPLEMENTARY PLATES
TO THE
ZOOLOGICAL JOURNAL.

TAB. XVI. *bis.*

- Fig. 1. *Bulinus hæmastomus*, young.
2. Head of the animal of a full grown specimen of the same
3. Egg of the same.
4. Egg broken to show the perfectly formed Shell within.
Vide Vol. I. pp. 131, 566, and Vol. II. p. 440.

TAB. XVII. *bis.*

- Fig. 1, 2. *Succinea Cuvierii*. Vol. II. p. 443.
3. The same with the animal magnified.
4. A young Shell of the same, with its apparently stercoreous covering.
5. Form of the under side of the foot.
6. *Helicina variabilis*, with its animal, magnified. Vol. II. p. 443.
7. Upper side of the front of the head.
8. Under side of the foot.
9. Operculum.
10, 11, and 14. Three varieties of the natural size.
12, 13. Two varieties, magnified.

TAB. XVIII.

- Fig. 1. *Modiola rhombea*. Vol. III. p. 229.
2. Animal of *Serpula Arundo*. Vol. III. p. 229.
3. Animal of *Serpula Filograna*. Vol. III. p. 230.

CONTENTS.

TAB. XIX.

- Fig.* 1. *Voluta antiqua*. Vol. II. p. 234.
2. Cast of the same.

TAB. XXI.

Phyllostoma Jamaicense. Vol. III. p. 238.

TAB. XXIII.

Testudo Actinodes. Vol. III. p. 419.

TAB. XXIV.

Testudo Tentoria. Vol. III. p. 420.

TAB. XXV.

Testudo Pardalis. Vol. III. p. 420.

TAB. XXVI.

Fig. 1. to 6. *Ancylus irroratus*. Vol. III. p. 535.

Fig. 7. to 9. ——— *radiatus*. Vol. III. p. 536.

TAB. XXVII.

Fig. 1. *Stenopus lividus*, with its animal. Vol. III. p. 528.

2. Length and diameter of the Shell.

3. Shell magnified.

4. *Succinea Barbadosensis*. Vol. III. p. 532.

5. and 6. Two views of the Shell, magnified.

7. and 8. *Ampullaria dubia*, two views, with the animal,
a. the operculum. Vol. III. p. 539.

TAB. XXVIII.

Fig. 1, 2, 3. *Paludina parvula*. Vol. III. p. 537.

4, 5, 6, 7. *Ceratodes fasciatus*. Vol. III. p. 539.

made known. I therefore hope Mr. Bell will find occupation with them, and perhaps a treat. Some of the above I never had leisure to examine; but of several of the smaller ones I took memoranda while alive; and from these I might have been tempted to introduce some extracts, but that I have at last opened my eyes to the length to which this letter has already been protracted; and I will not therefore trifle longer with your patience farther than to say that there are in the other bottles a variety of our domestic Spiders, and of Insects, many among which may also be new.

I have the honour to be, dear Sir,

Your's very sincerely,

E. N. BANCROFT.

ART. LVII. *Observations upon the Dentalium subulatum of Deshayes. By the Rev. M. J. BERKELEY, A. M.*

DURING the summer of 1830 extensive soundings were made by Captain A. Vidal, R. N. on the N. W. coast of Ireland on the great bank running parallel with the coast, in search of Aitkin's Rock. A few of the specimens of sand, gravel, &c. from different parts of the bank having been kindly placed in my hands, I found amongst them several individuals of a *Dentalium* new to our coasts. These, on comparison with Madeira specimens from Mr. Lowe, and others in Mr. G. B. Sowerby's collection, proved to be the *Dentalium subulatum* of Deshayes, (Anat. & Monogr. du genre Dentale, p. 53); the only points of difference being a paler hue, and an almost total absence of the constriction near the orifice. The former difference is exactly such as might be expected from their occurring in a higher latitude, and the latter is clearly so variable, as not to throw any suspicion on the specific identity of the several specimens. They occurred in fine sand, at various distances from the coast, in lat. 55°, at great depths, from 60 to 120 fathoms. As I was not sure

that any were alive when taken, it became a matter of interest if possible to procure further information establishing the claim of the species to a place in the list of our marine animals: and I was the more anxious, as an examination of Mr. Lowe's specimens had convinced me that it was not a *Dentalium*, but formed a new genus among the *Annelida*. Accordingly, when in the following summer the survey of the bank was resumed, I requested Captain Vidal to preserve for me in spirits whatever animals he should procure alive in sounding; and if possible specimens of the *Dentalium*. This he very kindly undertook and noted the depth at which each specimen was taken. The *Dentalium* did not occur at any less depth than $63\frac{1}{2}$ fathoms, and twice (on one occasion off St. Kilda) it occurred at 171* fathoms. Nothing could be concluded as to habit from the manner in which the shells were imbedded in the tallow, but this was of the less consequence as from information received from Mr. Lowe it appears that they are found in great numbers together, in masses of a conglomerate (if it may be so called) of mud and various marine substances, the broader end only appearing above the surface. From the amazing difference in the diameter, it should seem that the narrow or posterior end is gradually absorbed in the course of growth. The animals of the Madeira and British specimens, as was supposed, proved perfectly identical.

It will clearly appear from the description and accompanying figure that notwithstanding the resemblance of the shell to that of true *Dentalia*, it is most nearly allied to *Serpula*; but evidently distinct in having an unattached shell (for there is no evidence to lead to a suspicion that it is attached, even in infancy), and more especially in possessing a posterior as well as anterior aperture. I have therefore no hesitation in proposing a new genus *Ditrupa* ($\delta\iota\varsigma$ and $\tau\rho\upsilon\pi\eta$ foramen) for the reception of this and such other species now included in *Dentalium*, as shall be found to possess an animal similarly organized. One at least is so circumstanced, *Dentalium Gadus*, Mont. (*Dent. coarctatum*, Lam.), of the

* A specimen of *Crania personata* was taken at the immense depth of 255 fathoms.

animal of which indeed I have seen only a single specimen; but this was enough to prove it most clearly congeneric with *Dentalium subulatum*, though from the complete evaporation of the spirit in which it was preserved and the circumstance of the surface of the operculum being overgrown with *Ceramium repens* and another minute *Algæ*, I was not able to understand its structure sufficiently to give a figure. I at first thought that there were some appendages to the operculum: nor from the extreme minuteness could I ascertain so certainly the nature of a third substance, in addition to the two *Algæ* above mentioned, as to pronounce decidedly upon the point with such scanty materials. It is highly probable that the other minute British *Dentalia* will prove to possess an animal of like structure, though possibly even in that case it would be requisite to place them in a distinct genus.

The characters of the genus

DITRUPA

are as follows.

Shell free, tubular, open at both ends.

Operculum fixed to a conical pedicellated cartilaginous body, thin, testaceous, concentrically striate.

Branchiæ 22 in two sets, not rolled up spirally, flat, broadest at the base, feathered with a single row of cilia.

Mantle rounded behind, slightly crisped, denticulated in front, strongly puckered on either side.

Fascicles of bristles 6 on each side.

I take this opportunity of referring to the two *Serpulæ* described in Vol. 3, p. 229. Since the account there given was published I have dredged several specimens of *Serpula Arundo**, and find my former observations confirmed. It belongs to the genus *Sabella* as characterised

* *Serpula Arundo*, Turton, *Serp. tubularia*, Mont. The latter name being the original ought to be retained, and the species named *Sabella tubularia*. *Serpula tubularia*, Turt. is quite a different species, and the same with *Serp. vermicularis*, Lam., excluding var. b. I am obliged to Dr. Johnston for calling my attention to this point in Loudon's Magazine of Natural History, vol. 7, p. 126.

by Cuvier, being one of the rare instances in which a calcareous tube occurs in that genus.

For the other, *Serpula Filograna*, I beg leave to propose a new genus which will be characterised by the nature of its opercula and number of branchiæ, and may be called *Filograna*; in which case, Turton's specific name *implexa* will be very appropriate.

FILOGRANA, nob.

Shell very slender, filiform, gregarious.

Branchiæ 8, filiform, of which two bear an infundibuliform obliquely truncate operculum.

Mantle rectangular.

Fascicles of bristles 7 on each side.

Reference to the Figures.

PLATE XIX.

See oppp. 397.

Fig. 2. *Ditrupa subulata*.

a. The animal.

b. One of the branchiæ.

c. A portion of the anterior part of the mantle.

d. Operculum.

ART. LVIII. *Description of the Animals of Voluta denticulata, Mont. and Assiminia Grayana, Leach. By the Rev. M. J. BERKELEY, A. M.*

Voluta denticulata, Mont. (*Carychium Myosotis*, Michaud, Compl. de l'Histoire de Draparn.) and *Assiminia Grayana*, Leach, abound under stones in the salt marshes by the Thames at Gravesend. Having an opportunity of examining both in a living state in the summer of 1832,

WATERBURY, J. O., Esq., Observations upon the genus of Coleopterous Insects, *Clavicornis* of King, and its species 52

Observations upon the *Wetaria*, a family of Coleopterous Insects, with characters of two new British genera, separated from the genus of the same name of Coleopterous Insects, by J. O. Waterbury, Esq., belonging to the family *Lampyridae*, and description of two species 68

On the affinities of the genus *Clavicornis* of King 213

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

Observations upon the Eighteenth Number of the Zoological Journal 202

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

YARRELL, W., Esq., Notice of a new species of *Hemiptera*, Appendix to his paper on the Organs of Voice in Birds 277

Notice of his paper on the Organs of Voice in Birds 280

Notice of his account of the *Wetaria*, a family of Coleopterous Insects, with characters of two new British genera, separated from the genus of the same name of Coleopterous Insects, by J. O. Waterbury, Esq., belonging to the family *Lampyridae*, and description of two species 68

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

CORRIGENDUM.

As the animal on which Mr. Berkeley's observations upon *Dentalium Gadus* of Mont. were founded proves on a reference to Mr. Lowe's Manuscripts to have been taken from a very young specimen of *Dentalium subulatum* of Deshayes, though hastily labelled "*Dentalium Gadus*," Mr. Berkeley feels it incumbent upon him to state the error into which he has unavoidably fallen.

YARRELL, W., Esq., Notice of a new species of *Hemiptera*, Appendix to his paper on the Organs of Voice in Birds 277

Notice of his paper on the Organs of Voice in Birds 280

Notice of his account of the *Wetaria*, a family of Coleopterous Insects, with characters of two new British genera, separated from the genus of the same name of Coleopterous Insects, by J. O. Waterbury, Esq., belonging to the family *Lampyridae*, and description of two species 68

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

YARRELL, W., Esq., Notice of a new species of *Hemiptera*, Appendix to his paper on the Organs of Voice in Birds 277

Notice of his paper on the Organs of Voice in Birds 280

Notice of his account of the *Wetaria*, a family of Coleopterous Insects, with characters of two new British genera, separated from the genus of the same name of Coleopterous Insects, by J. O. Waterbury, Esq., belonging to the family *Lampyridae*, and description of two species 68

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

Notice of his paper on the *Wetaria*, a family of Coleopterous Insects 208

Fig. 1.

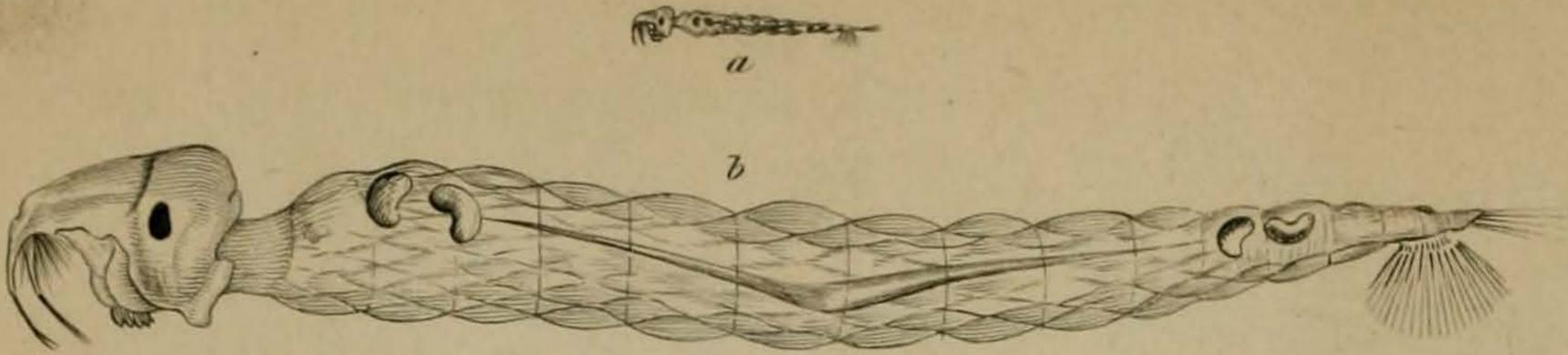


Fig. 2.

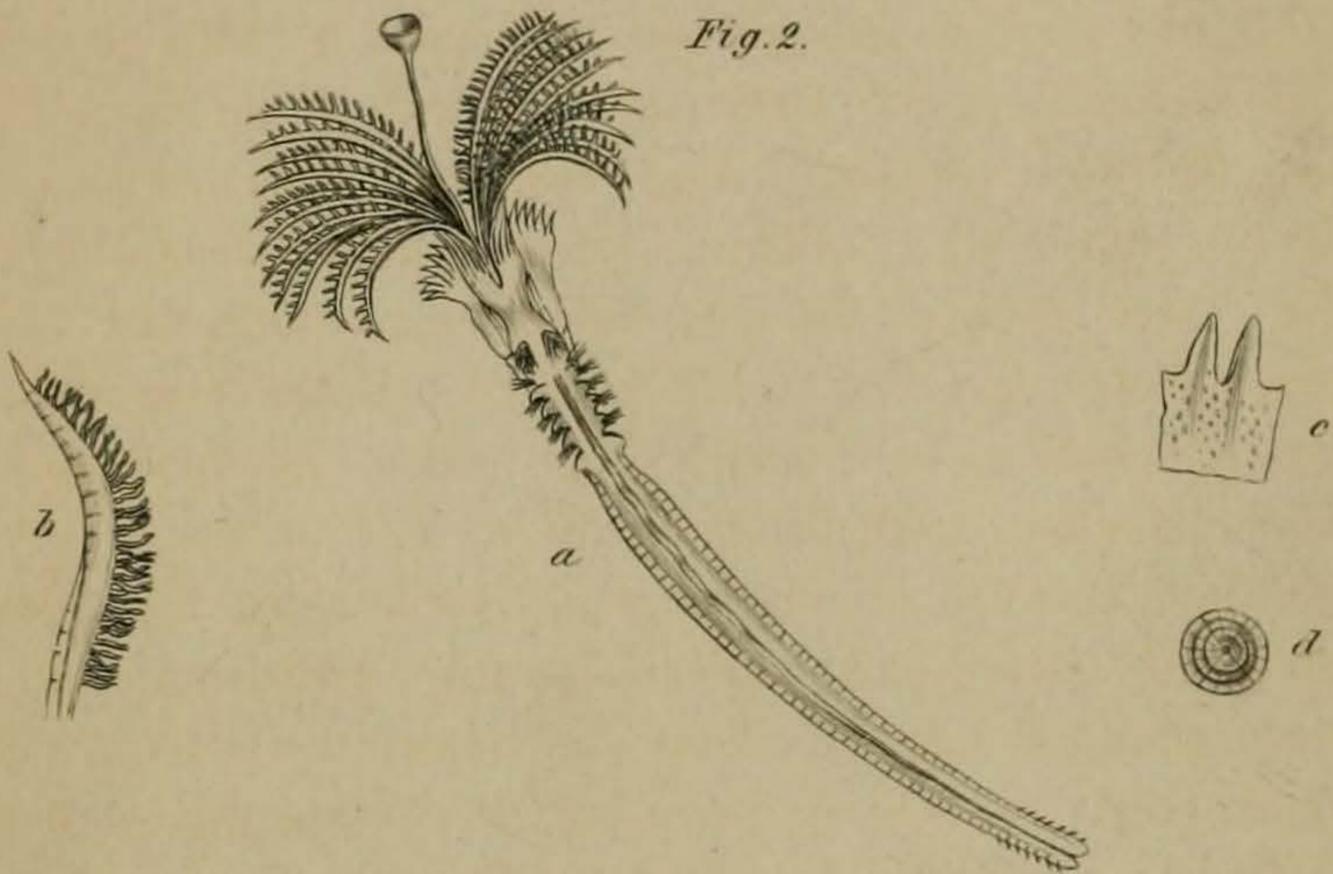


Fig. 3.

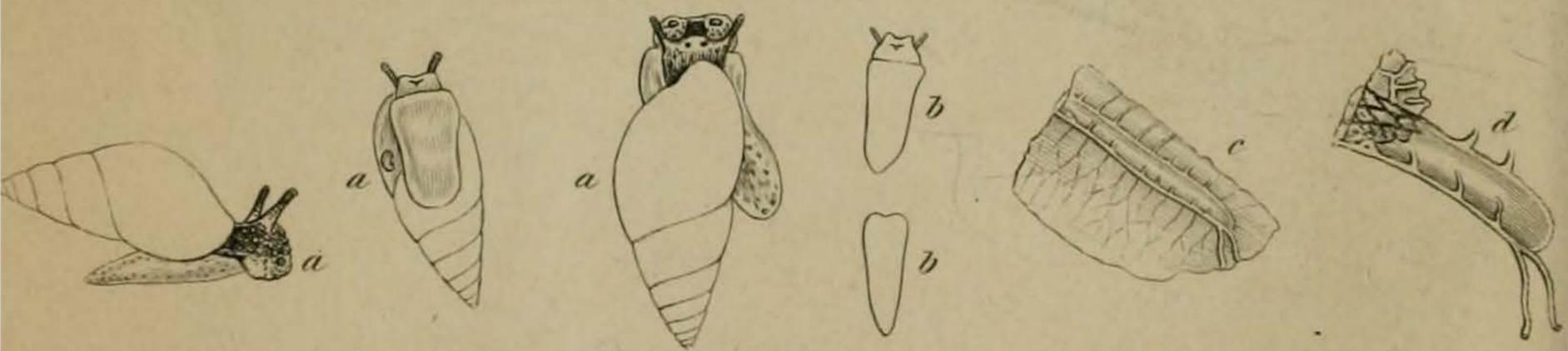


Fig. 4.

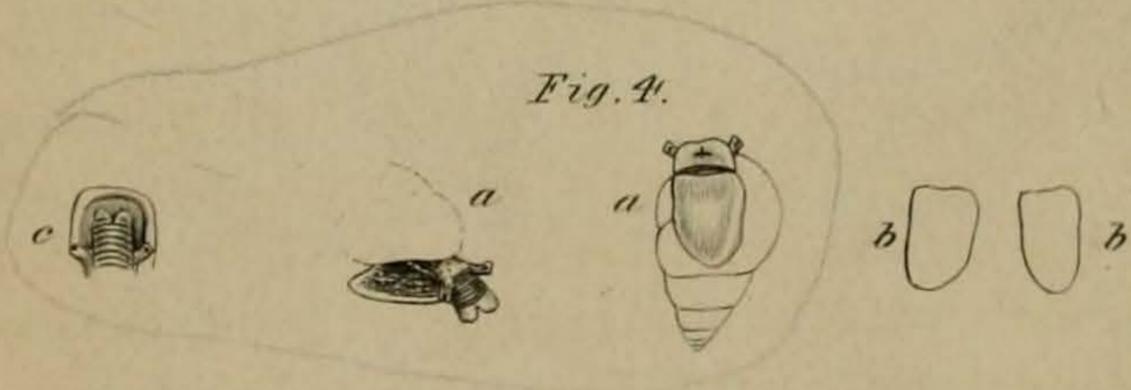
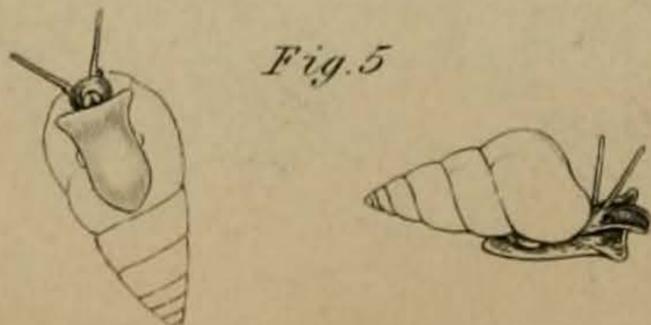


Fig. 5.



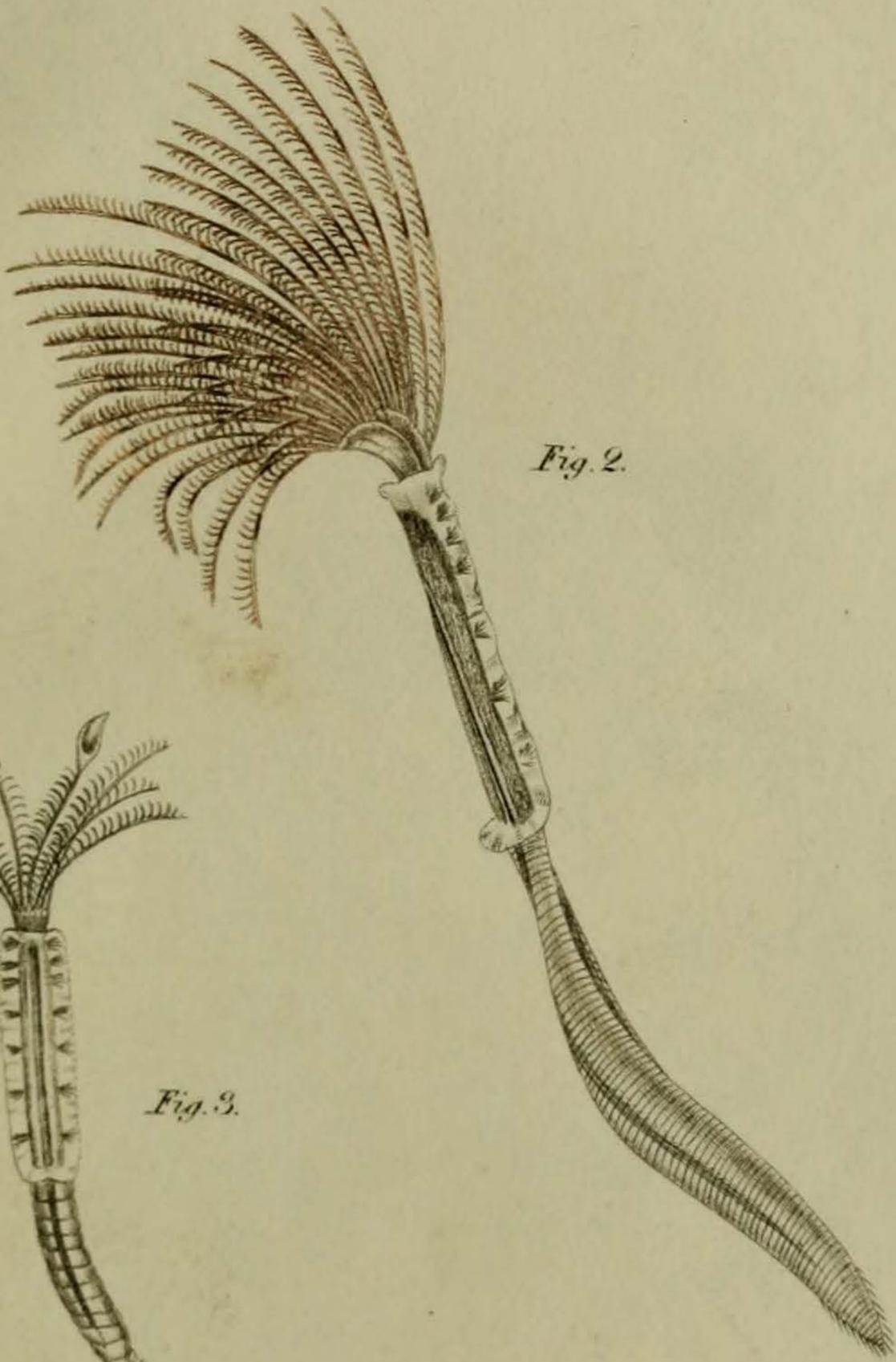


Fig. 2.

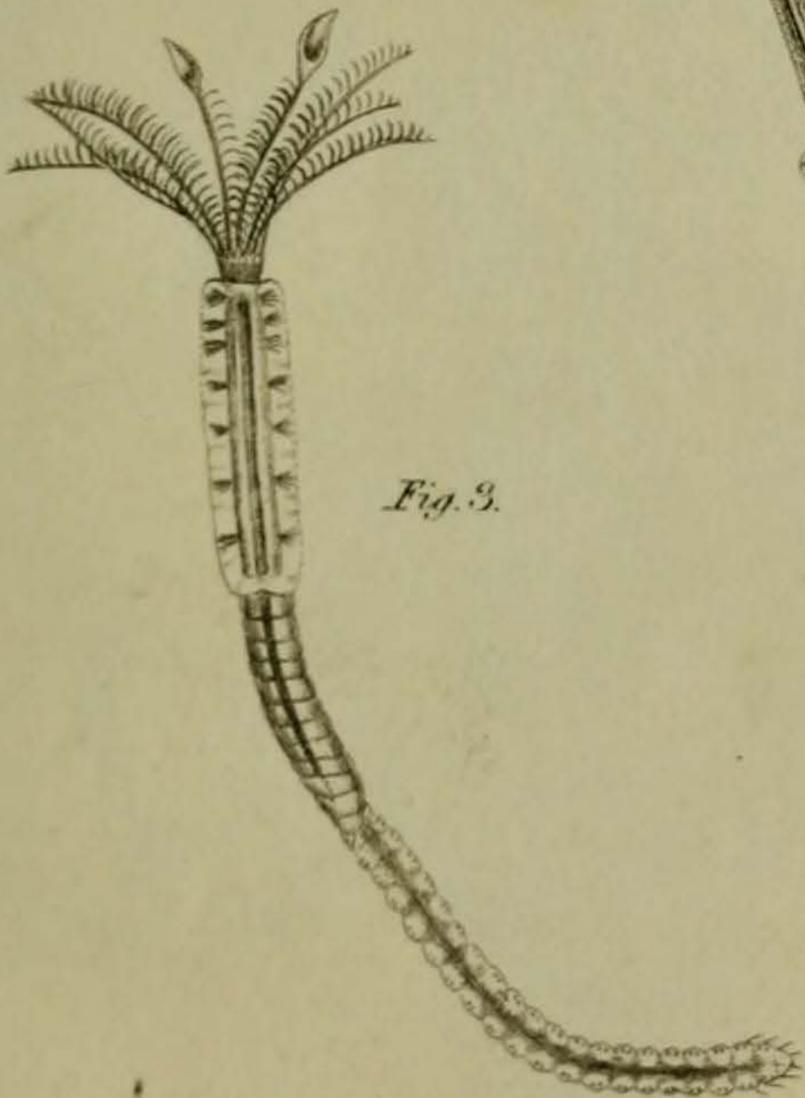


Fig. 3.

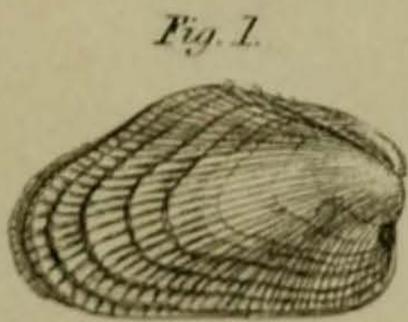


Fig. 1.

- Fig. 1. *Modiola rhombea*. p. 229.
 " 2. Animal of *Serpula trunco*. p. 229.
 " 3. " " " *Filograna*. p. 230.