

XXXVIII.—*The Deep-sea Mollusca of the Bay of Biscay.*

By J. GWYN JEFFREYS, LL.D., F.R.S.

DURING the French deep-sea exploration last July, in the Bay of Biscay, in which expedition I was privileged to take part, on the obliging invitation of the Minister of Public Instruction, I was intrusted with the Mollusca. Perhaps the accompanying *catalogue raisonné* may interest conchologists.

*A List of the Mollusca procured during the Cruise of the 'Travailleur' in the Bay of Biscay, 1880.*

BRACHIOPODA.

1. *Terebratula caput-serpentis*, Linné. See as to this and other 'Porcupine' Mollusca the 'Proceedings of the Zoological Society of London' for 1878 and 1879.
2. *T. cranium*, Müller. A fragment.
3. *Platydia anomioïdes*, Scacchi & Philippi.
4. *Megerlia truncata*, L.
5. *Crania anomala*, Müll.

CONCHIFERA.

6. *Anomia ephippium*, L.
7. *Spondylus Gussoni*, O. G. Costa.
8. *Pecten pes-lutræ*, L. *P. septemradiatus*, Müll.
9. *P. groenlandicus*, G. B. Sowerby.
10. *P. fragilis*, Jeffreys.
11. *P. obliquatus*, J. (MS.).
12. *P. vitreus*, Chemnitz; and variety *abyssorum*.
13. *Amussium fenestratum*, Forbes; a monstrous variety.
14. *A. lucidum*, J.
15. *Lima elliptica*, J.
16. *L. subauriculata*, Montagu.
17. *L. Jeffreysi*, Fischer (MS.).
18. *Mytilus luteus*, J. (MS.). Allied to *Modiola incurvata*, Philippi, = *M. Martorelli*, Hidalgo; but it differs in shape, sculpture, epidermis, and colour.
19. *Modiolaria subclavata*, Libassi.
20. *M. cuneata*, J. (MS.).
21. *Dacrydium vitreum* (Holböll), Möller.
22. *Arca pectunculoïdes*, Sc., var. *septentrionalis*.
23. *Leda messanensis*, Seguenza. *L. acuminata*, J. (not Von Buch).
24. *L. pustulosa*, J.
25. *L. striolata*, Brugnone.

26. *L. lucida*, *Lovén*; and a variety.
27. *L. pusio*, *Ph.*; and variety *latior*.
28. *L. sericea*, *J.*
29. *L. Jeffreysi*, *Hid.* *L. lata*, *J.* (not Hinds).
30. *L. expansa*, *J.*
31. *Nucula ægeensis*, *Forb.*
32. *N. corbuloïdes*, *Seg.*
33. *N. tumidula*, *Malm.*
34. *N. sulcata*, *Bronn.*
35. *Limopsis cristata*, *J.*
36. *L. minuta*, *Ph.*
37. *Malletia obtusa*, *M. Sars.*
38. *M. cuneata*, *J.*
39. *Montacuta ferruginosa*, *Mont.*
40. *M. tumidula*, *J.*
41. *Lasæa pumila*, *S. V. Wood.* A Coralline-Crag fossil.
42. *Loripes lacteus*, *L.*
43. *Axinus flexuosus*, *Mont.*
44. *A. croulinensis*, *J.*
45. *A. eumyarius*, *M. Sars.*
46. *A. ferruginosus*, *Forb.*
47. *A. subovatus*, *J.*
48. *A. granulosus*, *J.*
49. *A. tortuosus*, *J.* (MS.).
50. *Mytilimeria? Fischeri*, *J.* (MS.).
51. *Cardita corbis*, *Ph.*
52. *Cardium minimum*, *Ph.*
53. *Isocardia cor*, *L.*; and the fry, which has many synonyms.
54. *Scrobicularia alba*, *W. Wood.*
55. *S. longicallus*, *Sc.*
56. *S. nitida*, *Müll.*
57. *Lyonsia formosa*, *J.* (MS.).
58. *Verticordia insculpta*, *J.* (MS.).
59. *Thracia convexa*, *W. Wood.* Young.
60. *T. tenera*, *J.* (MS.).
61. *Neæra abbreviata*, *Forb.*
62. *N. rostrata*, *Spengler.*
63. *N. cuspidata*, *Olivi*, var.
64. *N. bicarinata*, *J.* (MS.). A fragment.
65. *N. sulcifera*, *J.* (MS.).
66. *N. truncata*, *J.* (MS.).
67. *N. lamellosa*, *M. Sars.*
68. *N. striata*, *J.*
69. *N. imbricata*, *J.* (MS.).
70. *Saxicava rugosa*, *L.*

## SOLENOCONCHIA.

71. *Dentalium striolatum*, *Stimpson*. *D. abyssorum*, *M. Sars*.
72. *D. gracile*, *J.* Not *D. filum*, *G. B. Sowerby, Jun.*
73. *Siphodentalium lofotense*, *M. Sars*.
74. *S. Olivi*, *Sc.*
75. *S. tetragonum*, *Brocchi*. *Dentalium quinquangulare*, *Forb.*, = *S. pentagonum*, *M. Sars*.
76. *Cadulus semistriatus*, *J. (MS.)*.
77. *C. tumidosus*, *J.*
78. *C. artatus*, *J. (MS.)*.

## GASTROPODA.

- 79.\**Chiton alveolus*, *G. O. Sars*.
80. *Rimula asturiana*, *J. (MS.)*.
81. *Cylostrema sphaeroidcum*, *S. V. Wood*. A Coralline-Crag fossil.
82. *Trochus gemmulatus*, *Ph.* A Sicilian fossil.
83. *Turbo filus*, *Ph.* A Calabrian and Sicilian fossil, = *Trochus glabratus*, *Ph.*
84. *Hela tenella*, *J.*
85. *Rissoa cimicoïdes*, *Forb.*
86. *R. abyssicola*, *Forb.*
87. *R. deliciosa*, *J. (MS.)*.
88. *R. tenuisculpta*, *J. (MS.)*.
89. *Scalaria Trevelyana*, *Leach*.
90. *S. clathratula*, *Adams*.
91. *S. Cantrainei*, *Weinkauff*.
92. *Aclis Walleri*, *J.*
93. *Odostomia conoïdea*, *Brc.*
94. *O. Lukisi*, *J.*
95. *O. praelonga*, *J. (MS.)*.
96. *O. acicula*, *Ph.*, var. *obeliscus*. From *M. de Folin's* gleanings.
97. *O. lineata*, *J. (MS.)*.
98. *O. paucistriata*, *J. (MS.)*.
- 99.†*O. fasciata*, *Forb.*
100. *O. Scillæ*, *Sc.*
101. *O. plicatula*, *Brc.* *Turbonilla speciosa*, *H. Adams*.
102. *Ianthina exigua*, *Bruguère*. Brought by Gulf-stream.
103. *Eulima stenostoma*, *J.*
104. *E. pyriformis*, *Brugn.* *M. de Folin*.
105. *E. subangulata*, *J. (MS.)*.
106. *E. solidula*, *J. (MS.)*; and a fragment of perhaps a new species.
107. *Natica sordida*, *Ph.* *N. fusca*, *De Blainville*, may be either this species or a variety of *N. millepunctata*.
108. *N. subplicata*, *J. (MS.)*.

109. *Solarium pseudo-perspectivum*, *Brc. S. discus*, Ph.  
 110. *Seguenzia elegans*, *J.*  
 111. *Lamellaria perspicua*, *L.?* or perhaps a distinct species.  
 Adriatic (*Stossich*).  
 112. *Aporrhais Serresianus*, *Michaud*.  
 113. *Cerithium metula*, *Lov.*  
 114. *Buccinum Humphreysianum*, *Bennett*.  
 115. *Ranella gigantea*, *Lamarck*.  
 116. *Trophon muricatus*, *Mont.*  
 117. *T. rugosus*, *J. (MS.)*; and a fragment of perhaps another species.  
 118. *Fusus gracilis*, *Da Costa*.  
 119.\**F. turgidulus*, *J. (MS.)*. Fragments.  
 120. *F. berniciensis*, *King*.  
 121. *Cassidaria tyrrhena*, *Ch.* Perhaps a variety of *C. echinophora*, *L.*  
 122. *Nassa semistriata*, *Brc.*  
 123. *N. incrassata*, *Ström.*  
 124. *N. limata*, *Ch.*, var.  
 125. *Columbella haliæti*, *J.*  
 126. *Taranis cirrhatus*, *Bru gn.* *Trophon Mörchii*, *Malm.*  
 127. *Defrancia crispata*, *De Cristofori & Jan.*  
 128. *D. parvula*, *J. (MS.)*.  
 129. *D. formosa*, *J. (MS.)*.  
 130.\**Pleurotoma nivalis*, *Lov.*  
 131. *P. pinguis*, *J. (MS.)*.  
 132. *P. modiolus*, *De Cr. & Jan.* *P. carinata*, Ph.  
 133. *Ringicula leptochila*, *Bru gn.*  
 134. *Cylichna umbilicata*, *Mont.*  
 135. *C. ovata*, *J. (MS.)*.  
 136. *Utriculus expansus*, *J.*  
 137. *Actæon exilis*, *J.*  
 138. *A. ovatus*, *J. (MS.)*.  
 139. *Bullina elongata*, *J. (MS.)*.  
 140. *Bulla pinguicula*, *J. (MS.)*.  
 141. *Scaphander punctostriatus*, *Mighels & Adams.* *S. librarius*, *Lov.*  
 142. *Philine scabra*, *Müll.*  
 143. *P. striatula*, *J. (MS.)*. Young.  
 144. *P. quadrata*, *S. V. Wood.*  
 145. *Melampus myosotis*, *Draparnaud.* Drifted from the shore.  
 146. *Carinaria mediterranea*, *Péron & Lesueur.*

## PTEROPODA.

147. *Limacina helicoïdes*, *J.*  
 148. *Cavolina trispinosa*, *Pér. & Les.*

149. *C. labiata*, *D'Orbigny*. *Hyalæa inflexa*, Pér. & Les.  
 150. *Clio pyramidata*, *Browne*.  
 151. *C. lanceolata*, *De Bl.*  
 152. *C. cuspidata*, *Lam.*

The species first named in italics appear to be new to science; those to which an asterisk is prefixed I consider peculiarly northern; and that to which a dagger is prefixed I consider peculiarly southern or Mediterranean. All the other species had been dredged by me in the 'Porcupine' cruise of 1870 off the western coasts of Spain and Portugal. The result shows that out of the 152 species in the above list, 11 are new, 3 northern, 1 southern, and 137 'Porcupine.' When M. de Folin has completed his examination of the sifted material, other species will in all probability have to be added to the list.

XXXIX.—*Descriptions of five new Species of Shells from Uruguay.* By EDGAR A. SMITH.

THE shells about to be described were collected by Dr. Copping, of H.M.S. 'Alert,' at present stationed in the Straits of Magellan for the purpose of surveying and exploration. The specimens from that region will shortly be treated upon elsewhere; and as those now characterized have a distinct geographical distribution, it is deemed advisable to publish their descriptions separately.

*Nassa (Cesia) simplex.*

Shell rather thin, dirty whitish or pinkish white, with some small indistinct red spots or stains beneath the suture between the ribs. Whorls six and a half. Two apical ones smooth, the rest convex, separated by a deep suture, longitudinally plicated and transversely ridged and sulcated. Plicæ not very prominent, about seventeen in number on the penultimate whorl; spiral sulci shallow, cutting through the folds, rather narrower than the interstices, about seven on the upper whorls, two or three of them at the upper part being closer together than the rest. Last whorl sulcated throughout, with the plicæ attenuated beneath, yet extending to the base. Aperture small, somewhat irregularly circular, dirty brownish within; outer lip thin at the edge, with an exterior varix, very feebly lirate within. Columella arcuate at the middle, covered with a small callosity bearing an elongate transverse inconspicuous tubercle at the upper part, and some smaller and less distinct ones beneath. Length 12 millims., diam. 7; aperture  $4\frac{1}{3}$  long,  $3\frac{1}{3}$  wide.