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Institute for Marine Scientific Research
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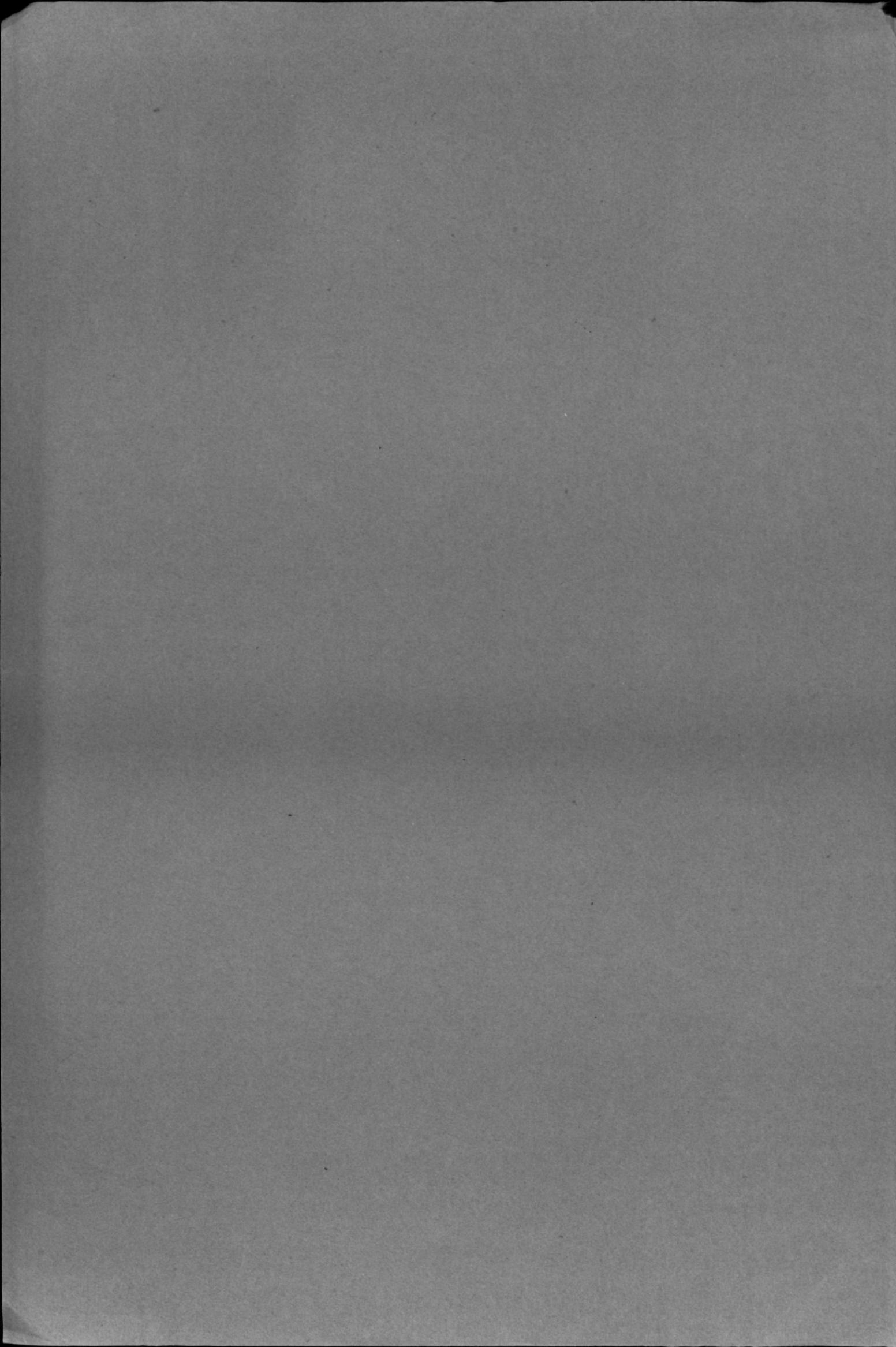
INFORMATION SERIES

**A catalogue of the Sipuncula,
Echiura and Priapulida
in the collections of
the Royal Scottish
Museum, Edinburgh**

G. SMALDON and K. R. WATT

NATURAL HISTORY 3

DECEMBER 1974



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D.J. Bryden.

TECHNOLOGY 2/in press. The Playfair Collection of Chemical Apparatus, R.G.W. Anderson.

INTRODUCTION

Between the years 1935 and 1958, the late A.C. Stephen held the keepership of the Department of Natural History at the Royal Scottish Museum, Edinburgh. The specimens of Sipuncula and Echiura which were the subject of his research during that period form the basis of the collections reported here.

For many years the Priapulida were included with the Sipuncula and Echiura in the assemblage known as the "Gephyrea", not now considered valid, but used so widely in the literature as to warrant continual attention. All three groups are now rightly considered as separate entities.

Throughout this catalogue the classification and nomenclature of Stephen and Edmonds (1972) have been followed, and all identifications re-checked. All material listed is stored in 70% ethanol.

Acknowledgement

We are grateful to P.E. Gibbs, Plymouth, for checking much of the material from British waters, and to N. Tebble and D. Heppell, Royal Scottish Museum, for valuable discussion.

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PHYLUM SIPUNCULA

Family Sipunculidae

Genus *Sipunculus* Linnaeus, 1766.

Type Species: *Sipunculus nudus* Linnaeus, 1766.

Sipunculus nudus Linnaeus, 1766.

1833. 4. 50 Naples. 1 specimen.
1883. 4. 51 Naples. 2 specimens.
1904. II. 19 Naples. 1 specimen.
1958. 23. 48 Pwaku Sandbank, Zanzibar Is. 3 specimens. (See Stephen and Robertson, 1952).
1958. 23. 49 Mbweni and Intoni beaches, Zanzibar Is. 2 specimens. (See Stephen and Robertson, 1952).
1958. 23. 255 Tanjong Gil, Singapore. In stiff mud. 4 specimens.
1966. I. 4 South Africa. Stn. FAL 676 M. 34° II'S, 18° 35'E. 42m. 2 specimens. (See Stephen and Cutler, 1969; originally identified as *S. robustus*).

Sipunculus indicus Peters, 1850.

1958. 23. 53 Mtoni, Zanzibar Is. In mud at low water. 1 specimen. (See Stephen and Robertson, 1952).
1958. 23. 54 Mbweni, Zanzibar Is. Deep burrows in clean sand. 4 specimens. (See Stephen and Robertson, 1952).
1958. 23. 95 Zanzibar Harbour, Zanzibar Is. 3 specimens.
1962. 10. I Between Ponta Rasa and Ponta Paduini, Inhaca, Mozambique. 1 specimen.
1962. 10. 2 Near Lighthouse, Inhaca, Mozambique. Mid-littoral. 1 specimen.

Sipunculus norvegicus norvegicus Danielsson, 1868

1958. 23. 179 61° 34'N, 2° 04'E. 380m. 18.7.13. 2 specimens. (See Stephen, 1934).

Sipunculus robustus Keferstein, 1865.

1958. 23. 94 Zanzibar Harbour, Zanzibar Is. 1951. 2 specimens.
1962. 2. I Sand bar, Alligator Harbour, Florida. 1 specimen.

Sipunculus titubans titubans Selenka and Bülow, 1883.

1958. 23. 51 Mtoni beach, Zanzibar Is. In mud at low water. 2 specimens. (See Stephen and Robertson, 1952).
1958. 23. 52 Mtoni beach, Zanzibar Is. In sand at low water. 1 specimen. (See Stephen and Robertson, 1952).
1958. 23. 143 Sierra Leone. 09° 23½'N, 13° 48½'W. In muddy sand. 3 specimens.
1965. 27. 1 Puerto Pizarro, North Peru. In muddy sand of the mangrove swamps. 4 specimens.

Sipunculus titubans diptychus Fischer, 1895.

1965. 28. 1 Vema Sea Mount, Stn. 18. $31^{\circ} 38.4' S$, $08^{\circ} 18.35' E$. 61m. 16.11.64.
2 specimens, in poor condition. (See Stephen, 1966).

Genus *Xenosiphon* Fisher, 1947.

Type Species: *Sipunculus mundanus* var. *branchiatus* Fischer, 1895.

Xenosiphon mundanus (Selenka and Bülow, 1883)

1958. 23. 116 Lord Howe Island, New South Wales, Australia. 1 specimen.

Genus *Siphonosoma* Spengel, 1912.

Type Species: *Sipunculus australis* Keferstein, 1865.

Subgenus *Damosiphon* Fisher, 1950.

Type Species: *Siphonosoma cumanense* (Keferstein, 1867)

Siphonosoma (Damosiphon) cumanense cumanense (Keferstein, 1867)

1958. 23. 97 Bwejue, Zanzibar Is. 27.4m from high water mark. 1 specimen.

1958. 23. 98 Zanzibar Harbour Area, Zanzibar Is. 12 specimens.

1962. 10. 9 Inhaca, Mozambique. 1 specimen.

1969. 55. 1 Baie de St. Vincent, New Caledonia. 1 specimen.

Siphonosoma (Damosiphon) cumanense koreae Sato, 1939.

1958. 23. 114 Anonyme Reef, Seychelles. 3 specimens.

1960. 48. 1 Malagasy Republic, 24.12.58. 2 specimens.

Siphonosoma (Damosiphon) cumanense opacum (Selenka and Bülow, 1883)

1960. 48. 2 Inhaca, Mozambique. 2 specimens.

1960. 48. 3 Malagasy Republic, 27.12.58. 2 specimens.

1960. 48. 4 Malagasy Republic. 2 specimens, in poor condition.

1962. 10. 3 Inhaca, Mozambique, 1956. 27 specimens.

1962. 10. 4 West Flats, Inhaca, Mozambique, 1955. 5 specimens.

1962. 10. 5 Inhaca, Mozambique. From sheltered *Scolopendra* cove, in muddy sand.
4 specimens.

1962. 10. 6 Inhaca, Mozambique. Mid-littoral, July 1961. 8 specimens.

- Siphonosoma (Damosiphon) cumanense semirugosum* (Selenka and de Man, 1883)
1958. 23. 56 Mbweni, Zanzibar Is. I specimen. (See Stephen and Robertson, 1952).
1960. 48. 5 Inhaca, Mozambique. 5 specimens.
1962. 10. 7 West Flats, Inhaca, Mozambique. II specimens.
1962. 10. 8 Inhaca, Mozambique. I specimen.

- Siphonosoma (Damosiphon) cumanense vitreum* (Selenka and Bülow, 1883)
1958. 23. 55 Chwaka Bay, Zanzibar Is. Mid-tide zone. 2 specimens.
(See Stephen and Robertson, 1952).
1962. 10. 10 Saco Bay, Inhaca, Mozambique. 4 specimens.
1962. 10. 11 West Flats, Inhaca, Mozambique. Lower mid-tidal zone. 2 specimens.
1962. 10. 12 Inhaca, Mozambique. Sheltered bay, in mid-tidal zone. 7 specimens.

- Siphonosoma (Damosiphon) cumanense yapense* Sato, 1935.
1960. 48. 6 Malagasy Republic, 30.12.58. 8 specimens.
1962. 10. 13 West Flats, Inhaca, Mozambique. Mid-tidal zone. 4 specimens.

- Siphonosoma (Damosiphon) edule* (Pallas, 1774)
1958. 23. 104 Mauritius. 6 specimens.

- Subgenus *Hesperiophion* Fisher, 1950.
- Type Species: *Siphonosoma vastum* (Selenka and Bülow, 1883)

- Siphonosoma (Hesperiophion) vastum vastum* (Selenka and Bülow, 1883)
1958. 23. 96 Zanzibar Harbour, Zanzibar Is. 1 specimen.

- Subgenus *Siphonosoma* (*sensu stricto*)
- Type Species: *Siphonosoma australe* (Keferstein, 1865)

- Siphonosoma (Siphonosoma) australe* (Keferstein, 1865)
1958. 23. 57 Mbweni, Zanzibar Is. In deep burrows in sand. I specimen.
(See Stephen and Robertson, 1952).

- Siphonosoma (Siphonosoma) dayi* Stephen, 1942.
1958. 23. 1 Knysna Harbour, South Africa, HOLOTYPE. (See Stephen, 1942).

- Siphonosoma (Siphonosoma) pellucidum* (Sluiter, 1902)
1958. 23. 129 Off Takoradi Harbour, Gold Coast. 27.4m. 2 specimens.

Family Golfingiidae

Genus *Golfingia* Lankester, 1885.

Type Species: *Sipunculus vulgaris* de Blainville, 1827.

Subgenus *Golfingia* (sensu stricto)

Golfingia (Golfingia) vulgaris vulgaris (de Blainville, 1827)

1958. 23. 68 Chwaka Bay, Zanzibar Is. 5.5m. 1 specimen.
(See Stephen and Robertson, 1952).
1958. 23. 149 Plymouth, 1931. 1 specimen.
1958. 23. 163 Loch Sween, Argyll. In muddy gravel. 7 specimens.
1958. 23. 164 Cumbrae Deep, Firth of Clyde. 110m. 2 specimens.
1958. 23. 165 Skelmorlie, Ayr. In *Lima hians* "nest", stiff mud. 9.8.49. 4 specimens.
1958. 23. 166 Loch Sween, Argyll. 053050. Stiff mud. 1 specimen
1958. 23. 188 Off Montrose, Angus. 64m. 1 specimen. (See Stephen, 1934).
1958. 23. 189 55° 20'N, 5° 30'W. 40m. 1 specimen. (See Stephen, 1934).
1958. 23. 190 55° 42'N, 5° 7'W. 97m. 2 specimens. (See Stephen, 1934).
1958. 23. 191 North Western North Sea, 1922 - 1924. 1 specimen. (See Stephen, 1934).
1974. 55. 2 Salstone, Salcombe, Devon. In muddy gravel, LWM.
50° 15.2'N, 03° 45.3'W. 14.4.72. 2 specimens.

Golfingia (Golfingia) capensis (Teuscher, 1874)

1958. 23. 20 Port Nolloth, South Africa. Stn. NN44. 1 specimen.
1958. 23. 21 Port Nolloth, South Africa. Stn. N110. 2 specimens.
1958. 23. 22 Lambert's Bay, South Africa. Stn. B14. 2 specimens.
1958. 23. 23 Lambert's Bay, South Africa. Stn. B197. 1 specimen.
1958. 23. 24 Lambert's Bay, South Africa, Stn. B199. 3 specimens.
1958. 23. 25 Oudekraal, South Africa. Stn. A38. 6 specimens.
1958. 23. 26 False Bay, St. James, South Africa. Stn. F24. 10 specimens.
1958. 23. 27 False Bay, St. James, South Africa. Stn. F106. 2 specimens.
1958. 23. 28. False Bay, St. James, South Africa. Stn. F214. 2 specimens.
1958. 23. 29 Reef Bay, Port Elizabeth, South Africa. Stn. E29. 7 specimens.
(For 1958. 23. 20 to 1958. 23. 29 see Stephen, 1942).
1966. 1. 5 South Africa, stations as listed below. (See Stephen and Cutler, 1969).
- SCD 118J 34° 24'S, 21° 46'E. 18m. 1 specimen.
- SWD 72 A-C 27° 27'S, 15° 28'E. 23m. 6 specimens.
- SB 197 Q 34° 04.4'S, 17° 56.4'E. 35m. 1 specimen.
- SB 276 33° 01.9'S, 18° 00'E. 17m. 3 specimens.

- FAL 355 $34^{\circ} 23.2'S$, $18^{\circ} 39.4'E$. 97 - 100m. 1 specimen.
 FAL 733 F $34^{\circ} 08'S$, $18^{\circ} 45'E$. 29 - 26m. 1 specimen.
 FAL 651 A $34^{\circ} 06'S$, $18^{\circ} 33'E$, 15m. 2 specimens.
 WCD 58 R-S $32^{\circ} 04'S$, $18^{\circ} 18'E$. 18m. 1 specimen.
 FAL 745 R $34^{\circ} 09'S$, $18^{\circ} 50.6'E$. 7m. 4 specimens.
 FAL 752 Q $34^{\circ} 04.6'S$, $18^{\circ} 35'E$. 4m. 4 specimens.
 LU 54 J $26^{\circ} 35'S$, $15^{\circ} 09'E$. Inter-tidal. 8 specimens.
 LU 19 $26^{\circ} 35'S$, $15^{\circ} 09'E$. Inter-tidal. 7 specimens.
 SB 175 J $33^{\circ} 02.8'S$, $18^{\circ} 00.6'E$. 15m. 1 specimen.

Golfingia (Golfingia) elongata (Keferstein, 1863)

1931. 79 Loch Ranza, Arran, Firth of Clyde. 73m., June 1902. 1 specimen.
 This HOLOTYPE was described by Stephen (1931) as *Phascolosoma cluthensis* n. sp., but has since been shown to be *Golfingia (G) elongata* by Stephen and Edmonds (1972).
 1958. 23. 150a Plymouth, 1931. 1 specimen.
 1958. 23. 153 Off Garroch Head, Bute. 90m. 1949. II specimens.
 1958. 23. 154 Loch Fyne, Argyll. 53m. 2 specimens.
 1958. 23. 156 Loch Sween, Argyll, In stiff mud. 1 specimen.
 1958. 23. 157 Firth of Clyde, 066088. 45m. 1 specimen.
 1958. 23. 158 Loch Sween, Argyll. In stiff mud. 1 specimen.
 1958. 23. 159 Cumbrae Deep, Firth of Clyde. 1 specimen.
 1958. 23. 169a Off Ascog, Bute. 1 specimen.
 1958. 23. 170 Loch Sween, Argyll. 1 specimen
 1958. 23. 171 Tan Spit, Millport, Firth of Clyde. 2 specimens.
 1958. 23. 180 Moray Firth, 1923. 3 specimens (See Stephen, 1934).
 1958. 23. 181 $55^{\circ} 42'N$, $5^{\circ} 07'W$. 97m. 18.8.30. 3 specimens. (See Stephen, 1934).
 1958. 23. 181a $55^{\circ} 49.5'N$, $5^{\circ} 18.5'W$. 95m. 4.9.28. 2 specimens. (See Stephen, 1934).
 1958. 23. 249. Skalbergen, Gullmarfjord, Sweden. On muddy bottom in the gelatinous tube of *Pachycerianthus multiplicata*. 1 specimen.
 1974. 55. 1 In muddy gravel, Salstone, Salcombe Estuary, Devon.
 $50^{\circ} 15.2'N$, $03^{\circ} 45.3'W$. 14.4.72. 10 specimens.

Golfingia (Golfingia) margaritacea margaritacea (Sars, 1951)

1958. 23. 144 Fayal, Azores. Littoral zone. 3 specimens. (See Chapman, 1955).
 1958. 23. 152 Raasay, Inverness, July 1937. 16 specimens.
 1958. 23. 224 Off Iceland. From Cod stomach. 1 specimen.
 1958. 23. 225 Off Iceland. From Haddock stomach. 4 specimens.

1958. 23. 226 Off Iceland. From Cod stomach. 6 specimens.
1958. 23. 227 Off Iceland. From Haddock stomach. 1 specimen.
1958. 23. 228 Off Iceland. From Cod stomach. 3 specimens.
1958. 23. 229 Off Iceland. From Cod stomach. 9 specimens.
1958. 23. 230 Off Iceland. From Cod stomach. 1 specimen.
1958. 23. 231 Off Iceland. From Cod stomach. 7 specimens.
1958. 23. 232 Off Iceland. From Cod stomach. 1 specimen.
1958. 23. 233 Off Iceland. From Cod stomach. 1 specimen.
1958. 23. 234 Off Iceland. From Cod stomach. 3 specimens.
1958. 23. 235 Off Spitzbergen, Arctic Ocean. From Cod stomachs. 2 specimens.
(For 1958. 23. 224 to 1958. 23. 235 see Brown and Cheng, 1946)
1974. 55. 3 Rock crevice, LWM, Wembury Point, Devon. 9.8.72. 1 specimen.

Golfingia (Golfingia) margaritacea trybomi (Theel, 1905)

1958. 23. 187 $58^{\circ} 21'N$, $0^{\circ} 46'E$. 152m. 3.4.24. 1 specimen (See Stephen, 1934).

Subgenus *Phascolana* Wesenberg-Lund, 1959.

Type Species: *Golfingia tenuissima* Wesenberg-Lund, 1959.

Golfingia (Phascolana) longirostris Wesenberg-Lund, 1959.

1966. 1. 6 South Africa, stations as below. (See Stephen and Cutler, 1969).
 NAD 72 R-S $29^{\circ} 16.2'S$, $31^{\circ} 32.3'E$. 35m. 6 specimens.
 NAD 83 L-M $29^{\circ} 10'S$, $31^{\circ} 40'E$. 33m. 4 specimens.
 NAD 84 K-L $29^{\circ} 12'S$, $31^{\circ} 42'E$. 40m 2 specimens.
 NAD 70 P-Q $29^{\circ} 18.0'S$, $31^{\circ} 33.1'E$. 47m. 1 specimen.

Subgenus *Thysanocardia* Fisher, 1950.

Type Species: *Phascolosoma procerum* Möbius, 1875.

Golfingia (Thysanocardia) procera (Möbius, 1875)

1958. 23. 160 Tan Spit, Firth of Clyde. 2 specimens.
1958. 23. 161 Little Cumbrae Bank, Firth of Clyde. 1 specimen.
1958. 23. 162 Firth of Clyde, 066088. 82.3 - 86.0m. 1 specimen.
1958. 23. 169b Off Ascog, Bute. 1930. 2 specimens.
1958. 23. 182 Firth of Forth, 1922 - 28. 6 specimens. (See Stephen, 1934).
1958. 23. 184 $56^{\circ} 09'N$, $2^{\circ} 33'W$. 53m. 1 specimen. (See Stephen, 1934).

1958. 23. 185 $56^{\circ} 11' N$, $2^{\circ} 37' W$. 46m. 1 specimen. (See Stephen, 1934).
1958. 23. 186 Square XX 14C. 1 specimen. (See Stephen, 1934).
1958. 23. 197a $57^{\circ} 35' N$, $0^{\circ} 08' W$. 107m. 1 specimen. (Identified as *Phascolion strombi* in Stephen, 1934).

Golfingia (Thysanocardia) semperi (Selenka and de Man, 1883).

1958. 23. 69 Zanzibar, Zanzibar Is. 1 specimen.
1958. 23. 100 Zanzibar Harbour, Zanzibar Is. 1 specimen.

Subgenus *Phascoloides* Fisher, 1950.

Type Species: *Sipunculus eremita* Sars, 1851.

Golfingia (Phascoloides) eremita eremita (Sars, 1851).

1958. 23. 236 Off Iceland. From Cod stomach. 2 specimens (V. poor condition).
1958. 23. 237 Off Iceland. From Cod stomach. 1 specimen.
1958. 23. 238 Off Iceland. From Haddock stomach. 2 specimens (V. poor condition).
1958. 23. 239 Off Iceland. From Cod stomach. 1 specimen (V. poor condition).
(For 1958. 23. 236 to 1958. 23. 239, see Brown and Cheng, 1946).

Golfingia (Phascoloides) minuta (Keferstein, 1863).

1958. 23. 150 Plymouth. 4 specimens.
1958. 23. 152a Raasay, Inverness. 3 specimens.
1974. 55. 4 Rock crevices, LWM. West Looe, Cornwall, 27.7.72. 25 specimens.
1974. 55. 5 Rock crevices, LWM. Yellow Craig, East Lothian. 7.8.74.
NT 520862. 14 specimens.
1974. 55. 6 Rock crevices, LWM. Long Craigs, west of Dunbar, East Lothian.
7.8.74. NT 664795. 30 specimens.

Golfingia (Phascoloides) pellucida (Keferstein, 1865).

1969. 55. 2 Baie de St. Vincent, Grand Tenia, New Caledonia. 1 specimen.

Golfingia (Phascoloides) rimicola Gibbs, 1973.

1974. 42 Wembury Point, Devon. 6.2.73. 10 specimens. (See Gibbs, 1973).

Golfingia (Phascoloides) verrillii (Gerould, 1908).

1965. 31. 6 Cape Lookout Jetty, North Carolina, U.S.A. From the coral
Oculina arbuscula. 8 specimens.

Genus *Onchnesoma* Koren and Danielssen, 1875.

Type Species: *Onchnesoma steenstrupii* Koren and Danielssen, 1875.

Onchnesoma steenstrupii Koren and Danielssen, 1875.

1958. 23. 202 $58^{\circ} 58'N$, $3^{\circ} 37'E$. 264m. 24.9.22.
 $58^{\circ} 35'N$, $3^{\circ} 56'E$. 270m. 6.6.23. 23 specimens. (See Stephen, 1934).
1958. 23. 203 $61^{\circ} 34'N$, $2^{\circ} 04'E$. 362m. 20.5.07. 29 specimens. (See Stephen, 1934).
1966. 1. 14 South Africa, stations listed below. (See Stephen and Cutler, 1969).
 SCD 237 $34^{\circ} 51'S$, $23^{\circ} 41'E$. 183m. 4 specimens.
 SCD 275 U $34^{\circ} 51'S$, $23^{\circ} 41'S$. 183m. 1 specimen.

Onchnesoma squamatum (Koren and Danielssen, 1875).

1958. 23. 204 $61^{\circ} 34'N$, $2^{\circ} 04'E$. 362m. 20.5.07. 172 specimens. (See Stephen, 1934).
1958. 23. 205 $61^{\circ} 34'N$, $2^{\circ} 04'E$. 330m. 28.8.07. 7 specimens. (See Stephen, 1934).
1958. 23. 241 Off Bear Island, Arctic Ocean. From Cod stomach. 1 specimen.
(See Brown and Cheng, 1946).

Genus *Phascolion* Theel, 1875.

Type Species: *Sipunculus strombi* Montagu, 1804.

Phascolion strombi (Montague, 1804).

1909. 233 Firth of Forth. "Goldseeker". Stn. 1, 20.1m. 5.1.06. 3 specimens.
1958. 23. 172 The Spit, Tarbert, Loch Fyne, Argyll. 9.1m. 4 specimens.
1958. 23. 192 North-West North Sea, 1922 - 1930. 9 specimens.
1958. 23. 193 Moray Firth, 1922 - 1930. 4 specimens.
1958. 23. 194 North-West North Sea. In *Dentalium* shells. 22 specimens.
1958. 23. 195 North-West North Sea. From *Turitella* shells. 3 specimens.
1958. 23. 196 $58^{\circ} 32'N$, $6^{\circ} 25'W$. 117m. 2 specimens.
1958. 23. 197 $57^{\circ} 35'N$, $0^{\circ} 08'W$. 107m. 1 specimen.
1958. 23. 198 $60^{\circ} 07'N$, $1^{\circ} 11'W$. 27m. 1 specimen.
(For 1958. 23. 192 to 1958. 23. 198, see Stephen, 1934).
1958. 23. 215 Off Iceland. 220m. In *Pectinaria* tube. 1 specimen.
1958. 23. 220 From stomachs of Lemon Soles taken in Scottish waters. 522 specimens.
1958. 23. 240 Off Bear Island, Arctic Ocean. From Haddock stomach. 1 specimen.
(See Brown and Cheng, 1946).
1959. 39. 1 Off the Eileans, Millport, Firth of Clyde. 39 specimens.

Phascolion heteropapillosum Wesenberg-Lund, 1963.

1966. 1. 11 South Africa, stations as listed below. (See Stephen and Cutler, 1969)

- SCD 207 X-Y 34° 51'S, 23° 41'E. 183m. 5 specimens.
 SCD 325 Y-Z 34° 27'S, 25° 57'E. 172m. 3 specimens.
 SCD 237 D-F 34° 51'S, 23° 41'E. 183m. 1 specimen.

Phascolion robertsoni Stephen and Robertson, 1952.

1958. 23. 75 Chwaka Bay, Zanzibar Is. Dredge, 3.7-5.5m. June 1947. HOLOTYPE.
 1958. 23. 76 Chwaka Bay, Zanzibar Is. Dredge, 3.7-5.5m. June 1947. 2 specimens.
 1958. 23. 77 Chwaka Bay, Zanzibar Is. Dredge, 3.7-5.5m. June 1947. 5 specimens.
 1958. 23. 78 Chwaka Bay, Zanzibar Is. Dredge, 3.7-5.5m. June 1947. 3 specimens.
 1958. 23. 79 Chwaka Bay, Zanzibar Is. Dredge, 3.7-5.5m. June 1947. 1 specimen.
 1958. 23. 80 Chwaka Bay, Zanzibar Is. Dredge, 5.5m. June 1947. 1 specimen.
 1958. 23. 81 North-East Nyange Sandbank, Zanzibar Is. In gastropod shells
at low spring tide. 3 specimens.
 1958. 23. 82 Chumbe Island, Zanzibar Is. In gastropod shells at low spring tide.
3 specimens.
 (For 1958. 23. 75 to 1958. 23. 82, see Stephen and Robertson, 1952).
 1966. 1. 2 South Africa, Stn. FAL 341 A-B, 34° 11'S, 18° 35.5'E. 44m.
1 specimen. (See Stephen and Cutler, 1969).

Genus *Themiste* Gray, 1828.

Type Species: *Themiste hennahi* Gray, 1828.

Themiste hennahi Gray, 1828.

1965. 27. 2 Lagunilla, near Pisco, central Peru. 20cm. deep in muddy ground,
inter-tidal. 1 specimen.
 1974. 48. 3 San Bartola, Peru. 13.11.55. 1 specimen.

Themiste alutacea (Grübe, 1958).

1965. 31. 5 Cape Lookout Jetty, North Carolina, U.S.A. Taken in 0.6m. water
from the coral *Oculina arbuscula*. 2 specimens.

Themiste blanda (Selenka and de Man. 1883)

1958. 23. 251 Tip of Point Loma, San Diego County, California, U.S.A. 1 specimen.

Themiste cymodoceae (Edmonds, 1956)

1958. 23. 122 Saint Vincent's Gulf, South Australia. 1 specimen.
 1958. 23. 123 Perth, Western Australia. 1 specimen.
 1969. 50. 35 New Caledonia. 1 specimen.
 1969. 50. 36 Ilot Canard, New Caledonia. 4 specimens.

1969. 50. 37 ^Île Hugon, New Caledonia. 5 specimens.
1969. 50. 38 Baie Inaccessible, St. Vincent, New Caledonia. 1 specimen.
1969. 50. 39 ^Île Hugon, New Caledonia. 1 specimen.

Themiste dehamata (Kesteven, 1903)

1958. 23. 121 Saint Vincent's Gulf, South Australia. 1 specimen.
1958. 23. 125 Near Perth, Western Australia. 1 specimen.

Themiste dyscrita (Fisher, 1952)

1958. 23. 252 Tip of Point Loma, San Diego County, California, U.S.A. 1 specimen.

Themiste buttoni (Benham, 1904)

1958. 23. 124 Near Perth, Western Australia. 1 specimen.

Themiste lageniformis Baird, 1868

1958. 23. 126 Heron Island, Queensland, Australia. 1 specimen.
1962. 10. 18 North Bay, Inhaca, Mozambique. 1 specimen.

Themiste minor (Ikeda, 1904)

1958. 23. 30 Preekstoel, South Africa. 13 specimens. (See Stephen, 1942)
1958. 23. 31 Shelley Beach, East London, South Africa. 2 specimens. (See Stephen, 1942)
1958. 23. 32 Shelley Beach, East London, South Africa. 6 specimens. (See Stephen, 1942).
1958. 23. 33 Bats Cave Rocks, East London, South Africa. 3 specimens. (See Stephen, 1942).
1966. 1. 9 South Africa, Stations listed below. (See Stephen and Cutler, 1969).
LU 76A 26° 35'S, 15° 09'E. Inter-tidal. 4 specimens.
LU 82M 26° 35'S, 15° 09'E. Inter-tidal. 2 specimens.

Themiste robertsoni (Stephen and Robertson, 1952)

1958. 23. 70 Chukwani, Zanzibar Is. Feb. 1949. HOLOTYPE, 1952, as *Dendrostoma robertsoni*.
1958. 23. 71 Chukwani, Zanzibar Is. Feb. 1948. FIGURED SPECIMEN. (See Stephen and Robertson, 1952. Figs. 3 & 4)
1958. 23. 72 Chukwani, Zanzibar Is. Feb. 1949. FIGURED SPECIMEN. (See Stephen and Robertson, 1952. Figs. 3 & 4)
1958. 23. 73 Chukwani, Zanzibar Is. 26.12.47. 3 specimens.
1958. 23. 74 Chukwani, Zanzibar Is. Feb. 1949. In soft limestone. 18 specimens. (For 1958. 23. 70 to 1958. 23. 74, see Stephen and Robertson, 1952).

Themiste stephensi (Stephen, 1942)

1958. 23. 34 Port Alfred, Cape Province, South Africa. Sept. 1929. 1 specimen.
HOLOTYPE and FIGURED SPECIMEN, 1942, as *Dendrostoma stephensi* (Stephen, 1942. Pl. XI, Fig. 5)
1958. 23. 35 False Bay, St. James, South Africa. June 1930. 3 specimens.
1958. 23. 36 Still Bay, Preekstoel, Cape Province, South Africa. 1 specimen.
1958. 23. 37 Port Alfred, Cape Province, South Africa. Sept. 1929. 3 specimens.
1958. 23. 38 Bats Cave Rocks, East London, South Africa. 11.7.37. 1 specimen.
(For 1958. 23. 34 to 1958. 23. 38, see Stephen, 1942)
1966. 1. 10 South Africa, stations listed below. (See Stephen and Cutler, 1969)
SCD 91A $33^{\circ} 03' S$, $27^{\circ} 55' E$. 27m. 4 specimens.
SCD 362 $33^{\circ} 50.7' S$, $25^{\circ} 47.5' E$. 36m. 1 specimen.
FAL 617R $34^{\circ} 07' S$, $18^{\circ} 35' E$. 22m. 1 specimen.
FAL 630S $34^{\circ} 08' S$, $18^{\circ} 49' E$. 7-9m. 1 specimen.
FAL 661 T-U $34^{\circ} 07' S$, $18^{\circ} 36' E$. 26m. 1 specimen.
SB 179 $33^{\circ} 03.6' S$, $18^{\circ} 00.4' E$. 15m. 1 specimen.
LU 82M $26^{\circ} 35' S$, $15^{\circ} 09' E$. Inter-tidal. 1 specimen.
FAL 737 S-U $34^{\circ} 06' S$, $18^{\circ} 40' E$. 29-26m. 1 specimen.

Family Aspidosiphonidae

Genus *Aspidosiphon* Diesing, 1851

Type Species: *Aspidosiphon muelleri* Diesing, 1851.

***Aspidosiphon muelleri* Diesing, 1851.**

1958. 23. 146 Fayal, Azores. Littoral zone. 3 specimens. (See Chapman, 1955)
1958. 23. 199 North-West North Sea, 1922-1924. 4 specimens. (See Stephen, 1934).
1958. 23. 200 $60^{\circ} 2' N$, $1^{\circ} 32' W$. 132m. 4.5.24. 1 specimen. (See Stephen, 1934).
1958. 23. 201 $58^{\circ} 27.5' N$, $5^{\circ} 46.5' W$. 118m. 2 specimens. (See Stephen, 1934).
1958. 23. 219 From stomachs of Lemon Soles taken in Scottish waters. 13 specimens.
1974. 52. $50^{\circ} 37' N$, $10^{\circ} 42' W$. 172m. Anchor dredge. 2 specimens.

***Aspidosiphon homomyarius* Johnson, 1964.**

1965. 32. 1 Gulf of Kutch, India. 2 specimens.

Aspidosiphon jukesii Baird, 1873

1958. 23. 85 North-East Nyange sandbank, Zanzibar Is. 11-16.5m. 2.7.50.
1 specimen. FIGURED SPECIMEN. (See Stephen and Robertson, 1952,
Fig.2)
1958. 23. 86 North-East Nyange sandbank, Zanzibar Is. 11-16.5m. 2.7.50
11 specimens. (See Stephen and Robertson, 1955).

Aspidosiphon venabulus Selenka and de Man, 1883

1958. 23. 138 Takoradi Harbour, Gold Coast. 7 specimens.
1958. 23. 142 Kakim Island, Sierra Leone. In hole in stone. 10m. 1 specimen.

Genus *Paraspidosiphon* Stephen, 1965

Type Species: *Aspidosiphon steenstrupii* Diesing, 1859

Paraspidosiphon steenstrupii steenstrupii (Diesing, 1859)

1958. 23. 39 Isipingo Beach, Durban, South Africa. July 1936. 1 specimen.
(See Stephen, 1942).
1958. 23. 40 Port Edward, South Africa. Inter-tidal. 30.12.38. 1 specimen.
1958. 23. 83 Bwejui, Zanzibar Is. 15.2.49. 1 specimen.
(See Stephen and Robertson, 1952).
1958. 23. 84 Kwale Island, Zanzibar Is. 15.2.49. 1 specimen.
(See Stephen and Robertson, 1952).
1958. 23. 101 Zanzibar Harbour, Zanzibar Is. 1957. 1 specimen.
1958. 23. 111 Mogadishu, Somali Republic. In soft sandstone. Jan. 1947. 1 specimen.
1958. 23. 112 Mogadishu, Somali Republic. From rock bench. Aug. 1947. 4 specimens.
1969. 55. 43 Île Mathieu, Baie de St. Vincent, New Caledonia. 2 specimens.
1969. 55. 45 Baie de Gu, Île des Pins, New Caledonia. 2 specimens.
1969. 55. 46 Baie de Gu, Île des Pins, New Caledonia. 2 specimens.
1969. 55. 47 Baie de Gu, Île des Pins, New Caledonia. 1 specimen.
1969. 55. 48 Baie de Gu, Île des Pins, New Caledonia. 5 specimens.

Paraspidosiphon cumingii (Baird, 1868)

1965. 30. 2 Negro Reef, Mayaguez, Puerto Rico. From stomach of Goatfish.
1 specimen.
1969. 55. 40 St. Vincent, New Caledonia. Loose bottom. 1 specimen.
1969. 55. 41 St. Vincent, New Caledonia. Sandy bottom. 2 specimens.

Paraspidosiphon exostomus (Johnson, 1964)

1965. 32. 2 Gulf of Kutch, India. 1 specimen.

Paraspidosiphon spinososcutatus (Fischer, 1922)

1965. 30. 3 Negro Reef, Mayaguez, Puerto Rico. From the stomach of the Trunk-Fish, *Lactophrys triqueter*. 1 specimen.
1965. 31. 1 Cape Lookout, North Carolina, U.S.A. 41 specimens.
1965. 31. 2 Cape Lookout, North Carolina, U.S.A. 20 specimens.
1965. 31. 3 Cape Lookout Jetty, North Carolina, U.S.A. From the coral *Oculina arbuscula*. 1.5m. 10 specimens.
1965. 31. 4 Cape Lookout, North Carolina, U.S.A. 9 specimens.

Genus *Cloeosiphon* Grube, 1868

Type Species: *Loxosiphon aspergillus* Quatrefages, 1865

Cloeosiphon aspergillus (Quatrefages, 1865)

1958. 23. 87 Bwejui Reef, Zanzibar Is. Nov. 1947. 2 specimens.
1958. 23. 88 Fumba, Zanzibar Is. Nov. 1947. 3 specimens.
1958. 23. 89 Kwale Island, Zanzibar Is. 15.2.49. 1 specimen.
1958. 23. 90 Mbweni, Zanzibar Is. 15.2.49. 1 specimen.
(For 1958. 23. 87 to 1958. 23. 90, see Stephen and Robertson, 1952).
1969. 55. 50 Grand Tenia, St. Vincent, New Caledonia. 1 specimen.
1969. 55. 51 Île des Pins, New Caledonia. 1 specimen.
1969. 55. 52 Lagon Beautemps, Loyalty Islands, New Caledonia. 1 specimen.

Family Phascolosomatidae

Genus *Phascolosoma* Leuckart, 1828

Type Species: *Phascolosoma granulatum* Leuckart, 1828

Subgenus *Rueppellisoma* Stephen and Edmonds, 1972

Type Species: *Phascolosoma rueppellii* Grübe, 1868

Phascolosoma (Rueppellisoma) rueppellii Grübe, 1868

1958. 23. 107 Mogadishu, Somali Republic. In soft sandstone. Jan. 1947. 1 specimen.
1958. 23. 108 Mogadishu, Somali Republic. From rock bench. Aug. 1947. 6 specimens.

Subgenus *Antillesoma* Stephen and Edmonds, 1972.

Type Species: *Phascolosoma antillarum* Grübe and Oersted, 1858

Phascolosoma (Antillesoma) antillarum Grübe and Oersted, 1858

1958. 23. 130 Discove shore, Gold Coast. 1 specimen.

Phascolosoma (*Antillesoma*) *asser* (Selenka and de Man, 1883)

1969. 55. 11 Lagon Beaumtemps, Beaufre, Loyalty Islands, New Caledonia. 1 specimen.

Subgenus *Phascolosoma* (*sensu stricto*)

Phascolosoma (*Phascolosoma*) *granulatum* Leuckart, 1828

1877. 18. 69 Valentia, Eire. 1 specimen.
1877. 18. 277 Off Connemara, Eire. 1 specimen.
1929. 19 Birsay, Orkney. On the shore. 28.12.28. 1 specimen.
(First Scottish record, see Stephen, 1929).
1938. 45. 3 Gallanach, Camus Mor, Isle of Muck, Inverness. 17.4.38. 2 specimens.
1958. 23. 137 Hospital Reef, Axim, Gold Coast, 13. 4. 49. 1 specimen.
1958. 23. 145 Fayal, Azores. Littoral zone. 19 specimens. (See Chapman, 1955).
1958. 23. 147 Arrecife, Canary Islands. 1955. 3 specimens.
1958. 23. 151 Isle of Muck, Inverness. 9 specimens.
1958. 23. 151a Isle of Muck, Inverness. 1 specimen. Three specimens of the sponge,
Scypha (*Sycon*) *ciliata* are attached to this specimen. (See Stephen, 1961)

Phascolosoma (*Phascolosoma*) *agassizii* Keferstein, 1867

1958. 23. 131 Axim, Gold Coast. From shore, 14.4.49. 7 specimens.
1958. 23. 132 Hospital Reef, Axim, Gold Coast. 7.1.51. 3 specimens.
1958. 23. 133 Pram Pram shore, Tagelaar, Gold Coast. 30.1.49. 16 specimens.
1958. 23. 134 Lighthouse Reef, Axim, Gold Coast. 14.4.49. 1 specimen.
1958. 23. 135 Apam, Gold Coast. On shore. 16.2.49. 1 specimen.
1958. 23. 141 Sierra Leone. 08° 45'N, 14° 38'W. 220 - 240m. 1 specimen.
1960. 48. 7 Inhaca, Mozambique. 1 specimen.
1965. 28. 2 Vema Sea Mount. 31° 37.8'S, 08° 19.3'E. 61m. 4.11.64.
4 specimens. (See Stephen, 1966)
1966. 1. 7 South Africa, stations as listed below. (See Stephen and Cutler, 1969)
SCD 155Z 34° 03'S, 25° 59'E. 84m. 1 specimen.
SCD 246U-V 34° 02'S, 23° 28.4'E. 49m. 5 specimens.
FAL 341N 34° 11'S, 18° 35.5'E. 44m. 2 specimens.
FAL 573T 34° 17.1'S, 18° 34.2'E. 54m. 2 specimens
WCD 101Z 32° 05'S, 18° 17'E. 17m. 1 specimen.
WCD 8M-N 34° 09'S, 18° 17'E. 43m. 1 specimen.

Phascolosoma (*Phascolosoma*) *albolineatum* Baird, 1868

1969. 55. 3 Ilot Signal, Noumea, New Caledonia. 2 specimens.

1969. 55. 4 Baie de Gu, Île des Pins, New Caledonia. 3 specimens.
1969. 55. 5 Baie de Gu, ^Île des Pins, New Caledonia. 1 specimen.
1969. 55. 6 Ilot Signal, Noumea, New Caledonia. 1 specimen.
1969. 55. 7 Baie de Carrala, New Caledonia. 3 specimens.
1969. 55. 8 Baie de St. Vincent, New Caledonia. 3 specimens.
1969. 55. 9 Baie de Upi, ^Île des Pins, New Caledonia. 1 specimen.
1969. 55. 10 Ile Moro, ^Île des Pins, New Caledonia. 2 specimens.

Phascolosoma (Phascolosoma) annulatum Hutton, 1879

1958. 23. 119 Vivonne Bay, Kangaroo Island, South Australia. 2 specimens.

Phascolosoma (Phascolosoma) arcuatum arcuatum (Gray, 1828)

1958. 23. 120 Sandgate, Queensland, Australia. 2 specimens.
1958. 23. 257 Kranji, Singapore. In stiff mud at edge of mangroves. 23 specimens.

Phascolosoma (Phascolosoma) evisceratum (Lanchester, 1905)

1958. 23. 66 Chukwani, Zanzibar Is, 16.12.47. 1 specimen.
(See Stephen and Robertson, 1952).
1958. 23. 67 Kwale Island, Zanzibar Is. 15.2.49. 1 specimen.
(See Stephen and Robertson, 1952).

Phascolosoma (Phascolosoma) japonicum Grübe, 1877

1958. 23. 22 Lambert's Bay, South Africa. 25.7.38. 2 specimens.
1958. 23. 3 Lambert's Bay, South Africa, 29.7.38. 1 specimen.
1958. 23. 4 Humewood Beach, Port Elizabeth, South Africa. July, 1936. 1 specimen.
1958. 23. 5 Isipingo Beach, Durban, South Africa, July, 1936. 1 specimen.
(For 1958. 23. 2 to 1958. 23. 5, see Stephen, 1942).
1966. 1. 7 South Africa. Stations as listed below. (See Stephen and Cutler, 1969).
- SCD 109 P 34° 35'S, 21° 11'E. 75m. 2 specimens.
- SCD 118 J 34° 24'S, 21° 46'E. 18m. 1 specimen.
- SCD 155 Z 34° 03'S, 25° 59'E. 84m. 2 specimens.
- SCD 182 V 34° 20'S, 23° 31'E. 110m. 1 specimen.
- SCD 246 U-V 34° 02'S, 23° 28.4'E. 49m. 8 specimens.
- LAM 61 L 32° 12'S, 18° 17.9'E. 29m. 1 specimen.
(The above identified in Stephen and Cutler as *P. agassizii*).
- SCD 58 W 33° 37'S, 26° 56.6'E. 46m. 1 specimen.
- SCD 138 T 34° 35'S, 21° 56'E. 77m. 3 specimens.
- SCD 155 X 34° 03'S, 25° 59'E. 84m. 10 specimens.

SCD 171 G $33^{\circ} 58.9'S$, $25^{\circ} 41.4'E$. 4-11m. 3 specimens.
 SCD 246 U-V $34^{\circ} 02'D$, $23^{\circ} 28.4'E$. 49m. 1 specimen.
 SCD 264 H-N $33^{\circ} 02.5'S$, $27^{\circ} 56.5'E$. 55m. 17 specimens.
 SCD 362 G $33^{\circ} 50.7'S$, $25^{\circ} 47.5'E$. 36m. 32 specimens.
 SCD 388 A-B $34^{\circ} 04.4'S$, $23^{\circ} 23.6'E$. 11m. 4 specimens.
 SB 276 G-J $33^{\circ} 01.9'S$ $18^{\circ} 00'E$. 17m. 4 specimens.
 FAL 334 U-W $34^{\circ} 15'S$, $18^{\circ} 36'E$. 44m. 5 specimens.
 FAL 500 A $34^{\circ} 14'S$, $18^{\circ} 30'E$. 42m. 27 specimens.
 FAL 515 P $34^{\circ} 16'S$, $18^{\circ} 31'E$. 50m. 2 specimens.
 FAL 617 R $34^{\circ} 07'S$, $18^{\circ} 35'E$. 22m. 29 specimens.
 FAL 661 T-U $34^{\circ} 07'S$, $18^{\circ} 36'E$. 26m. 6 specimens.
 FAL 697 E $34^{\circ} 10'S$, $18^{\circ} 43'E$. 36m. 7 specimens.
 FAL 708 U $34^{\circ} 05'S$, $18^{\circ} 44'E$. 39m. 3 specimens.
 FAL 732 D $34^{\circ} 08'S$, $18^{\circ} 45'E$. 29-26m. 2 specimens.
 FAL 737 S-U $34^{\circ} 06'S$, $18^{\circ} 40'E$. 29-26m. 1 specimen.
 SB 207 M $33^{\circ} 02.5'S$, $17^{\circ} 57.5'E$. 27.5m. 1 specimen.

Phascolosoma (Phascolosoma) nigrescens Keferstein, 1865

1958. 23. 59 Chukwani, Zanzibar Is. 26.12.47. 1 specimen,
 (See Stephen and Robertson, 1952).
 1960. 48. 10 Malagasy Republic, 27.12.58. 10 specimens.
 1960. 48. 11 Inhaca, Mozambique. 1 specimen.
 1965. 29 Ambariode Island, near Nossi Bé, Malagasy Republic. 2 specimens.
 1969. 55. 12 Ilot Basse, ¹Île des Pins, New Caledonia. 1 specimen.
 1969. 55. 13 Lagon Beautemps, Loyalty Islands, New Caledonia. 2 specimens.
 1969. 55. 14 Baie de Carrala, New Caledonia. 2 specimens.
 1969. 55. 15 Île Mathieu, Baie de St. Vincent, New Caledonia. 1 specimen.

Phascolosoma (Phascolosoma) pacificum Keferstein, 1866

1958. 23. 58 Kwale Island, Zanzibar Is. 15.2.49. 2 specimens.
 (See Stephen and Robertson, 1952).
 1958. 23. 99 Zanzibar Harbour, Zanzibar Is. 1951. 4 specimens.
 1958. 23. 115 Anonyme Reef, Seychelles. 1916. 2 specimens.
 1959. 60 Dixlove Island, Garu Arru Atoll, Maldives Islands. 21.4.59. 1 specimens.
 1969. 55. 16 Ilot Maitre, Noumea, New Caledonia. 1 specimen.

Phascolosoma (Phascolosoma) scolops scolops (Selenka and de Man, 1883)

1958. 23. 7 Port Nolloth, South Africa. 27.10.35. 1 specimen.
1958. 23. 8 False Bay, St. James, South Africa. 25.4.33. 1 specimen.
1958. 23. 9 False Bay, Seaforth, South Africa. 29.8.31. 3 specimens.
1958. 23. 10 Still Bay, South Africa. 7.1.32. 1 specimen.
1958. 23. 11 Bats Cave Bay rocks, East London, South Africa. 13.7.37. 6 specimens.
1958. 23. 12 Shelley Beach, East London, South Africa. 7.7.37. 1 specimen.
1958. 23. 13 Isipingo Beach, Durban, South Africa. 15.7.35. 2 specimens.
1958. 23. 14 Isipingo Beach, Durban, South Africa. July, 1936. 13 specimens.
1958. 23. 15 Inyoni rocks, Durban, South Africa. 20.7.35. 2 specimens.
(For 1958. 23. 7 to 1958. 23. 15, see Stephen, 1942).
1958. 23. 60 Bwejui Reef, Zanzibar Is., Nov. 1947. 7 specimens.
1958. 23. 61 Fumba, Zamzibar Is. Nov. 1947. 1 specimen.
1958. 23. 62 Chukwani, Zanzibar Is. 16.12.47. 2 specimens.
1958. 23. 63 Chukwani, Zanzibar Is. 26.12.47. 1 specimen.
1958. 23. 64 Kwale Island, Zanzibar Is. 15.2.49. 2 specimens.
1958. 23. 65 Kwale Island, Zanzibar Is. 15.2.49. 1 specimen
(For 1958. 23. 60 to 1958. 23. 65, see Stephen and Robertson, 1952).
1958. 23. 99a Zanzibar Harbour, Zanzibar Is. 1951. 7 specimens.
1958. 23. 109 Mogadishu, Somali Republic. In soft sandstone. Jan. 1947. 18 specimens.
1958. 23. 100 Mogadishu, Somali Republic. In rock bench. Aug. 1947. 39 specimens.
1958. 23. 117 Perth, Western Australia. 1 specimen.
1958. 23. 118 Myoru, Queensland, Australia. 1 specimen.
1958. 23. 127 Banks, St. Helena. In rock pool. 5 specimens.
1962. 10. 14 Inhaca, Mozambique. 5 specimens.
1962. 10. 15 North-East Rocks, Inhaca, Mozambique. Mid-littoral zone. 3 specimens.
1965. 28. 3 Vema Sea Mount. $31^{\circ} 38.4'S$, $08^{\circ} 18.35'E$. 61m. 16.11.64
1 specimen. (See Stephen, 1966)
1965. 54. 2 Eritrea, Red Sea. 1 specimen. (See Stephen, 1965).
1966. 1. 9 South Africa. Stn. PED 12 C-D. $24^{\circ} 46'S$, $34^{\circ} 50'E$. 22m. 4 specimens.
(See Stephen and Cutler, 1969)
1969. 55. 17 Petit Tenia, St. Vincent, New Caledonia. 1 specimen.
1969. 55. 18 Petit Tenia, St. Vincent, New Caledonia. 1 specimen
1969. 55. 19 Petit Tenia, St. Vincent, New Caledonia. 1 specimen.
1969. 55. 20 ^ Ile Hugon, Baie de St. Vincent, New Caledonia. 6 specimens.
1969. 55. 21 ^ Ile Hugon, Baie de St. Vincent, New Caledonia. 2 specimens.
1969. 55. 22f ^ Ile Hugon, Baie de St. Vincent, New Caledonia. 1 specimen.

1969. 55. 23 Ilot Sable, Baie de St. Vincent, New Caledonia. 2 specimens.
1969. 55. 24 Île Testard Sud, Baie de St. Vincent, New Caledonia. 1 specimen.
1969. 55. 25 Grand Tenia, St. Vincent, New Caledonia. 1 specimen.
1969. 55. 26 Île Testard Sud, Baie de St. Vincent, New Caledonia. 1 specimen.
1969. 55. 27 Île Canard, Numea, New Caledonia. 9 specimens.
1969. 55. 28 Île Croissant, Numea, New Caledonia. 26 specimens.
1969. 55. 29 Kumo, Île des Pins, New Caledonia. 17 specimens.
1969. 55. 30 Île Moro, Ile des Pins, New Caledonia. 2 specimens.
1969. 55. 31 Île des Pins, New Caledonia. 1 specimen.
1969. 55. 32 Lagon Beautemps, Loyalty Islands, New Caledonia. 2 specimens.
1969. 55. 33 Lagon Beautemps, Loyalty Islands, New Caledonia. 2 specimens.
1969. 55. 34 Baie de Canala, New Caledonia. 1 specimen.

Phascolosoma (Phascolosoma) scolops mossambiciense (Selenka and de Man, 1883)

1958. 23. 16 False Bay, Seaforth, South Africa. 1 specimen. (See Stephen, 1942)
1960. 48. 12 Inhaca, Mozambique. 2 specimens.

Phascolosoma (Phascolosoma) stephensi (Stephen, 1942)

1958. 23. 17 Isipingo Beach, Durban, South Africa. July, 1936. HOLOTYPE of *Physcosoma stephensi* (See Stephen, 1942).
1958. 23. 18 Isipingo Beach, Durban, South Africa. July 1936. 4 specimens. (See Stephen, 1942).
1958. 23. 19 Isipingo Beach, Durban, South Africa. July, 1936. 1 specimen. (See Stephen, 1942).
1960. 48. 13 Lighthouse, Inhaca, Mozambique. 4 specimens.
1960. 48. 14 Lighthouse, Inhaca, Mozambique. 3 specimens.
1962. 10. 16 N.E. rocks, Inhaca, Mozambique. Mid-littoral zone. 10 specimens.

Phascolosoma (Phascolosoma) varians Keferstein, 1865

1965. 30 Magueyes Island, Pargueran Lajas, Puerto Rico. 26.10.57. 4 specimens.

PHYLUM ECHIURA

Order ECHIUROINEA

Family Bonelliidae

Genus *Acanthosonellia* Fisher, 1948

Type Species: *Bonellia miyajimai* Ikeda, 1904

Acanthobonellia miyajimai (Ikeda, 1904)

1965. 32. 3 Gulf of Kutch, India. 1 specimen. (poor condition).

1965. 32. 4 Gulf of Kutch, India. 1 specimen. (poor condition).

Genus *Bonellia* Rolando, 1821

Type Species: *Bonellia viridis* Rolando, 1821

Bonellia viridis Rolando, 1821

1913. 16. 17 No locality. 1 specimen.

Genus *Hamingia* Danielssen and Koren, 1881

Type Species: *Hamingia arctica* Danielssen and Koren, 1881

Hamingia arctica Danielssen and Koren, 1881

1958. 23. 223 From Cod stomach. Off Iceland. 1 specimen. (See Brown and Cheng, 1946).

Genus *Maxmuelleria* Bock, 1942

Type Species: *Thalassema gigas* Muller, 1852

Maxmuelleria lankesteri (Herdman, 1898)

1951. 18. Millport, Firth of Clyde. Mid-channel, between Ardlamont Point and N. Inchmarnock. 117m. 1 specimen.

1958. 23. 168 Millport, Firth of Clyde. 2 specimens.

1958. 23. 178 Firth of Clyde. 55° 11'N, 5° 17'W. 29.9.97. Blue mud. 77m. (See Stephen, 1934)

1958. 23. 248 50° 41'N, 01° 52'W. Off Bournemouth, Hants. 16.5m. 13.11.58. 3 specimens.

1974. 48. 5 Cumbrae Deep, Firth of Clyde. Jan - Feb. 1949. 2 proboscis only.

Genus *Pseudobonellia* Johnston and Tiegs, 1919

Type Species: *Pseudobonellia biuterina* Johnston and Tiegs, 1919

Pseudobonellia biuterina Johnston and Tiegs, 1919

1969. 55. 54 Baie de St. Vincent, New Caledonia. 1 specimen.

Family Echiuridae

Sub-family *Echiurinae*

Genus *Echiurus* Guerin - Meneville, 1831

Type Species: *Lumbricus echinus* Pallas, 1767

Echiurus echinus echinus (Pallas, 1767)

1877. 18. 66 St Andrews, Fife. 1 specimen.

1877. 18. 316 West Sands, St. Andrews, Fife. 2 specimens.

1912. 34 Cast up on Aberdeen Beach, North of Donmouth. 19.10.05. 1 specimen.

1919. 31. 2 No locality. 1 specimen.

1958. 23. 173 Inside Peterhead breakwater, Aberdeenshire. 1 adult,
52 juvenile specimens (poor condition).

1958. 23. 174 Squares B 13d, C 13c, C 13a, (See Stephen, 1934).

1958. 23. 175 St. Andrews Bay, Fife. $56^{\circ} 25.3'N$, $2^{\circ} 41'W$. 11m. 3.11.22. 1 specimen.

1958. 23. 176 $56^{\circ} 10.45'N$, $2^{\circ} 27.3'W$. 52m. 2.12.24. 1 specimen.

1958. 23. 177 $55^{\circ} 46'N$, $6^{\circ} 16'E$. 45m. 14.9.29. 35 specimens.
(For 1958. 23. 173 to 1958. 23. 177, see Stephen, 1934).

1958. 23. 213 St. Andrews Bay, Fife. 18m. 24.11.27. 6 specimens.

1958. 23. 214 Firth of Forth. 11m. 24.11.27. 2 specimens.

Sub-family *Thalassematinae*

Genus *Arhynchite* Sato, 1937

Type Species: *Thalassema arhynchite* Ikeda, 1924

Arhynchite californicus Fisher, 1949

1974. 48. 4 No locality. 1 specimen.

Genus *Listriolobus* Spengel, 1912

Type Species: *Listriolobus bahamensis* Fischer, 1926

Listriolobus pelodes Fisher, 1946

1974. 48. 2 Off Redona Beach, California. 78.6 - 155.4m. Mud. 3 specimens.

Genus *Ochetostoma* Leuckart and Rüppell, 1828

Type Species: *Ochetostoma erythrogrammon* Leuckart and Rüppell, 1828

Ochetostoma erythrogrammon Leuckart and Rüppell, 1828

1958. 23. 45 Mbweni, Zanzibar Is. In muddy sand under stone. 10.2.49
1 specimen. (See Stephen and Robertson, 1952).
1958. 23. 113 Anonyme reef, Seychelles. 1916. 1 specimen.
1958. 23. 254 Tanjong Gil, Singapore. 14.2.56. 8 specimens.
1962. 10. 20 Inhaca, Mozambique. 1960. 2 specimens.
1965. 54. 1 Goliath Bay, Entedebir Island, Red Sea. 30.3.62.
2 specimens. (See Stephen, 1965).

Ochetostoma baronii (Greeff, 1879)

1962. 10. 22 Ponta Reduini Sandbank, Inhaca, Mozambique. 1 specimen.
1962. 10. 23 West Flats, Inhaca, Mozambique. 5 specimens.

Ochetostoma capense Jones and Stephen, 1955

1958. 23. 41 Zwartkops River, Port Elizabeth, South Africa. March, 1949. HOLOTYPE.
1958. 23. 42 Zwartkops River, Port Elizabeth, South Africa. 15.1.50.
FIGURED SPECIMEN. (Jones and Stephen, 1955. Fig. 1).
1958. 23. 43 Zwartkops River, Port Elizabeth, South Africa. March, 1949. 29 specimens.
1958. 23. 44 Zwartkops River, Port Elizabeth, South Africa. 15.1.50. 36 specimens.
(For 1958. 23. 41 to 1958. 23. 44, see Jones and Stephen, 1955).

Ochetostoma caudex (Lampert, 1883)

1958. 23. 106 Mogadishu, Somali Republic. Intertidal. 20.11.46. 1 specimen.

Ochetostoma formulosum (Lampert, 1883)

1962. 10. 24 Nossi Bé, Malagasy Republic. 30.12.58. 1 specimen.

Ochetostoma mercator Wesenberg-Lund, 1954

1958. 23. 128 Off Takoradi Harbour, Gold Coast. 27.4m. 1954. 14 specimens.
1958. 23. 139 Sierra Leone River, Muddy sand, mid-estuary. 10-15m.
26.7.55. 3 specimens.
1958. 23. 140 Rokupa, Sierra Leone. L.W.S. 19.11.54. 3 specimens.

Ochetostoma stuhlmanni (Fischer, 1892)

1962. 10. 19 Near Saco Bay, Inhaca, Mozambique. Under rocks. 14.7.61. 1 specimen.

Ochetostoma zanzibarensis Stephen and Robertson, 1952

1958. 23. 47 Bat Island, Zanzibar Is. 5.4.49. 1 specimen. HOLOTYPE and FIGURED SPECIMEN. (See Stephen and Robertson, 1952. Fig. 1).

1962. 10. 21 West Flats, Inhaca, Mozambique. 1 specimen.

Genus *Anelassorhynchus* Annandale, 1922

Type Species: *Thalassema branchiorynchus* Annandale and Kemp, 1915

Anelassorhynchus inanensis (Ikeda, 1904)

1962. 10. 25 North Bay, Inhaca, Mozambique. 15.7.61. 4 specimens.

Anelassorhynchus moebii (Greeff, 1879)

1958. 23. 91 Bwejui, Zanzibar Is. 7.9.47. 1 specimen

1958. 23. 92 Boribu, Zanzibar Is. 1951. 2 specimens.

1958. 23. 102 Mauritius. 22.6.51. 1 specimen.

Anelassorhynchus semoni (Fischer, 1896)

1962. 10. 26 Ponta Torres, Inhaca, Mozambique. 1 specimen.

1966. 1. 3 fi South Africa. $29^{\circ} 26' S$, $31^{\circ} 46' E$. 77m. 1 specimen.
(Originally identified as *Thalassema neptuni* Gaertner, 1774
in Stephen and Cutler, 1969).

Genus *Thalassema* Lamark, 1801

Type Species: *Lumbricus thalassema* Pallas, 1766

Thalassema thalassenum (Pallas, 1766)

1958. 23. 148 Plymouth. 1931. 5 specimens.

Genus *Prashadus* Stephen and Edmonds, 1972

Type Species: *Ikedsoma pirotensis*, Menon and Datta Gupta, 1962

Prashadus pirotensis (Menon and Datta Gupta, 1962)

1967. 32 Pirotan Island, Gulf of Kutch, India. Oct. 1965. 1 specimen.

1974. 48. 1 Pirotan Island, Gulf of Kutch, India. 1 specimen.

PHYLUM ASCHELMINTHES

CLASS PRIAPULIDA

Genus *Priapulus* Lamark, 1816

Type Species: *Priapus humanus* Linnaeus, 1758 (= *Priapulus caudatus* Lamarck, 1816)

Priapulus caudatus Lamarck, 1816

1958. 23. 206 North Sea, 1922 - 1927. 2 specimens.
1958. 23. 207 Firth of Forth, 1922 - 1927. 4 specimens.
1958. 23. 208 Kirkcaldy Bay, Firth of Forth. 19.11.29. 15-22m. 7 specimens.
1958. 23. 209 Shetland. 6 specimens.
1958. 23. 210 $56^{\circ} 10' N$, $2^{\circ} 45' W$. 18.4.27. 46m. 1 specimen.
1958. 23. 211 $56^{\circ} 46' N$. $6^{\circ} 16' W$. 14.9.29. 44m. 1 specimen.
1958. 23. 212 $57^{\circ} 04' N$, $1^{\circ} 46' W$. 24.2.26. 118m. 1 specimen.
(For 1958. 23. 206 to 1958. 23. 212, see Stephen, 1934).
1958. 23. 217 No locality. 1 specimen.
1958. 23. 218 Big Bay, North Rona, Inverness. 8.8.37. 1 specimen.
1958. 23. 221 Kirkcaldy Bay, Firth of Forth. 27.9.30. From Plaice stomachs.
2 specimens.
Kirkcaldy Bay, Firth of Forth. 22.9.30. From Plaice stomachs.
7 specimens.
- Kirkcaldy Bay, Firth of Forth. 22.9.30. From Plaice stomachs.
2 specimens.
- Aberlady Bay, Firth of Forth. 1.9.31. From Plaice stomachs.
2 specimens.
- Inchkeith, Firth of Forth. 1.9.31. From Plaice stomachs.
3 specimens.
(See Stephen, 1934).
1958. 23. 222 Moray Firth. May, 1900. From Plaice stomachs. 4 specimens.
1958. 23. 245 Off Iceland. From Haddock stomach. 1 specimen.
1958. 23. 246 Off Iceland. From Haddock stomachs. 2 specimens.
1958. 23. 247 Off Iceland. From Cod stomach. 1 specimen.
(For 1958. 23. 245 to 1958. 23. 247, see Brown and Cheng, 1946).
1967. 24. 3 Firth of Forth. $1\frac{1}{2}$ miles North of Fisherrow Harbour.
June 1966. 1 specimen.
1967. 24. 4 Firth of Forth. $1\frac{1}{2}$ miles North of Prestongrange, $1\frac{1}{2}$ miles East
of Musselburgh. 1 specimen.

Priapulus bicaudatus (Koren and Danielssen, 1875)

1958. 23. 216 No locality. 1 specimen.
1958. 23. 242 Off Bear Island, Arctic Ocean. From Cod stomach. 1 specimen.
1958. 23. 243 Off Iceland. From Cod stomach. 1 specimen.
1958. 23. 244 Off Iceland. From Haddock stomach. 2 specimens.
(For 1958. 23. 242 to 1958. 23. 244, see Brown and Cheng, 1946).

Genus *Halicryptus* von Siebold, 1849

Type Species: *Halicryptus spinulosus* von Siebold, 1849

Halicryptus spinulosus von Siebold, 1849

1961. 1. 2 Tvarminne, Storfjord, Finland. 10 specimens.

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