

AUSTRALASIAN ANTARCTIC EXPEDITION

1911-14.

UNDER THE LEADERSHIP OF SIR DOUGLAS MAWSON, O.B.E., B.E., D.Sc., F.R.S.

SCIENTIFIC REPORTS.
SERIES C.—ZOOLOGY AND BOTANY.

Edited by Professor I. Harvey Johnston,
University of Adelaide.

VOL. IX. PART 5.

NON-CALCAREOUS SPONGES

BY

MAURICE BURTON, M.Sc.,
BRITISH MUSEUM (NAT. HIST.).

WITH ONE TEXT FIGURE.

PRICE: THREE SHILLINGS AND SIXPENCE.

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NON-CALCAREOUS SPONGES.

By MAURICE BURTON, M.Sc., Department of Zoology, British Museum
(Natural History).

(With one Text-figure.)

The sponges comprising the collection of the Australasian Antarctic Expedition offer little that is novel. Only one new species is recorded, *Myrilla lissostyla* sp.n., although the collection includes representatives of sixty-two species. This is, in itself, a sufficient indication of the advances made in our knowledge of the sponge-fauna of the Antarctic and Sub-Antarctic. The faunal records afforded by the identification of the present specimens are, however, of great value.

ORDER TETRAxonIDA.

SUB-ORDER ASTROSCLEROPHORA.

FAMILY TETILLIDAE.

Genus TETILLA *Schmidt*.

TETILLA LEPTODERMA *Sollas*.

T. leptoderma Sollas 1886, p. 179.

(For synonymy see Burton 1929, p. 418; 1932, p. 264.)

Occurrence.—Commonwealth Bay (67° S., 142° 36' E.), 25 fathoms, September 3–4, 1912.

Remarks.—The species appears to be as abundantly represented here as in other parts of the Antarctic, 17 specimens having been obtained, the largest of which measures 12 cms. in diameter.

Distribution.—Victoria Land; South Georgia; Falkland Islands; South America; Kerguelen.

Genus CINACHYRA *Sollas*.

CINACHYRA ANTARCTICA (*Carter*).

Tethya antarctica Carter 1872, p. 412, pl. XX.

(For synonymy see Burton 1929, p. 419; 1932, p. 264.)

Occurrence.—Commonwealth Bay (67° S., 142° 36' E.), 25 fathoms, September 3–4, 1912; Commonwealth Bay (Hunter's Station 1b), 55–60 fathoms, December 21, 1913.

Remarks.—The specimens range in size from 5 mm. to 10 cms. in diameter.

Distribution.—Antarctic generally.

AUSTRALASIAN ANTARCTIC EXPEDITION.

SUB-ORDER SIGMATOSCLEROPHORA.

FAMILY HAPLOSCLERIDAE.

Genus HALICLONA Grant.

HALICLONA ALTERA (Topsent).

(For synonymy see Burton 1929, p. 420, under *Chalina altera*.)

Occurrence.—Commonwealth Bay, King George V Land, 25 fathoms, September 3-4, 1912.

Distribution.—Victoria Land; Graham Land.

HALICLONA DANCOI (Topsent).

(The synonymy list given by me (1929, p. 420) under *Chalina dancoi* has to be amended by the removal of *Petrosia fistulata* to a separate genus (see Burton 1934, p. 18).)

Occurrence.—Commonwealth Bay, King George V Land, 25 fathoms, September 3-4, 1912.

Distribution.—Victoria Land; Wilhelm Land; Graham Land.

HALICLONA BIDENS (Topsent).

Gellius bidens Topsent 1901, p. 14, pl. ii, fig. 8; pl. iii, fig. 7; Burton 1929, p. 423.

Occurrence.—Off Cape Denison (Commonwealth Bay), 25 fathoms, September 3, 1912.

Remarks.—Two specimens, both erect, cylindrical and sub-stipitate, measuring 5 cms. high by 1 cm. in diameter.

Distribution.—Bellingshausen Sea (70° S., 80° W.); Inaccessible Is.

HALICLONA FORAMINOSA (Thiele).

Reniera foraminosa Thiele 1905, p. 465, figs. 10, 81, 101.

Occurrence.—Macquarie Is., shallow water.

Remarks.—One specimen has the external form strongly suggestive of *H. (Reniera) macropora* (Thiele), but the spiculation of *H. foraminosa*.

Distribution.—Tumbes, Peru.

HALICLONA VIRENS (Topsent).

Reniera virens Topsent 1908, p. 19, pl. v, fig. 10; *Chalinā virens* Burton 1929, p. 420.

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912.

Remarks.—Like the "Terra Nova" specimens, the present specimen is typical in all respects but the absence of the green colouration.

Distribution.—Victoria Land; Graham Land.

HALICLONA KERQUELENSIS (Hentschel).

Reniera kerguelensis Hentschel 1914, p. 134, pl. iv, fig. 15; pl. viii, fig. 15.

Occurrence.—Macquarie Is.

Remarks.—The specimen has a texture, spicules and skeleton very like that described for the holotype, but instead of being encrusting with mammillate oscules it is erect, stipitate and flabellate, with the oscules in linear series on the upper margin. In fact, the shape of the sponge suggests a fan formed by the coalescence of a row of tubes.

Distribution.—Kerguelen.

Genus *HEMIGELLIUS* Burton.

HEMIGELLIUS PACHYDERMA Burton.

H. pachyderma Burton 1932, p. 273, pl. xviii, fig. 4, text-fig. 11.

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912; Hunter's Station 7 (65° 46' S., 92° 13' E.), 60 fathoms, rock bottom, January 21, 1914.

Remarks.—According to a collector's field-note, specimens were also obtained from 40–50 fathoms in Commonwealth Bay: "Clear yellow in colour, very abundant."

All the specimens but one have sigmata, and there is so much variation in the arrangement of the skeleton that it is doubtful if the species can be kept distinct from *H. rudis* (Topsent), or the genus *Hemigellius* from *Haliclona*.

Distribution.—Falkland Is.

Genus *ADOCIA* Gray.

ADOCIA FLAGELLIFER (Ridley and Dendy).

Occurrence.—Commonwealth Bay, 20 fathoms, January 19, 1913.

Remarks.—No attempt is made to give a synonymy or range of distribution for the species since to determine these with any accuracy would involve a research not possible at this moment.

The flagellate sigmata in the present specimen measure up to .12 mm. chord.

Distribution.—? Cosmopolitan.

AUSTRALASIAN ANTARCTIC EXPEDITION.

ADOCIA CARDUUS (*Ridley and Dendy*).

(For synonymy see Burton 1932, p. 274.)

Occurrence.—Hunter's Station 8 (66° 8' S., 94° 21' E.), 120 fathoms, January 27, 1914.

Distribution.—South Shetlands; Shag Rocks; Falkland Is.; Magellan Straits; Mouth of Rio de la Plata; Crozet Is.; Marion Is.; Prince Edward Is.

ADOCIA CONICA (*Thiele*).

Pellinella conica Thiele 1905, p. 471, figs. 90, 103; *Adocia conica* Burton 1934, p. 13.

Occurrence.—Macquarie Is., east side, upper rocks at low tide.

Distribution.—Falkland Is.; Admiralty Sound.

ADOCIA CUCURBITIFORMIS (*Kirkpatrick*).

(For synonymy see Burton 1932, p. 276.)

Occurrence.—Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Distribution.—Victoria Land; Palmer Archipelago.

ADOCIA TENELLA (*Topsent*).

(For synonymy see Burton 1934, p. 13.)

Occurrence.—Hunter's Station 8 (66° 8½' S., 94° 21' E.), 120 fathoms, January 27, 1914; Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Distribution.—Graham Land.

ADOCIA TREMULUS (*Topsent*).

Gellius tremulus Topsent 1916, p. 171; 1917, p. 79, pl. i, fig. 7; pl. vi, fig. 20;
Adocia tremulus Burton 1932, p. 276.

Occurrence.—Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom January 31, 1914.

Distribution.—Graham Land; South Shetlands.

*Genus CALYX Vosmaer.*CALYX ARCUARIUS (*Topsent*).

(For synonymy see Burton 1932, p. 277; see also Id. 1934, p. 14.)

Occurrence.—Hunter's Station 9 (65° 18' S., 95° 20' E.), 240 fathoms, bottom temperature + 1.38° C., bottom ooze with erratics, January 28, 1914; Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Remarks.—The specimen from Station 9 is a large flabellate sponge, 15 cm. high and about the same across.

Distribution.—Victoria Land; Graham Land; South Georgia; South Orkneys; South Shetlands; Shag Rocks.

FAMILY DESMACIDONIDAE.

Section PLATYCHALINEAE.

*Genus PLATYCHALINA Ehlers.*PLATYCHALINA KERGUELENSIS (*Ridley and Dendy*).

(For synonymy see Burton 1932, p. 283, under *Isodictya kerguelensis*).

Occurrence.—Commonwealth Bay, September 3–4, 1912; Macquarie Is.

Distribution.—Graham Land; Kerguelen; Falkland Is.

PLATYCHALINA SETIFER (*Topsent*).

(For synonymy see Burton 1932, p. 284; see also Id. 1934, p. 19.)

Occurrence.—Hunter's Station 7 (65° 46' S., 92° 13' E.), 60 fathoms, rock bottom, January 21, 1914.

Distribution.—Victoria Land; Graham Land; South Georgia; Shag Rocks; Burdwood Bank; Falkland Is.

PLATYCHALINA DELICATA (*Thiele*).

Desmacidon delicata Thiele 1905, p. 435, figs. 1, 55; *Isodictya delicata* Burton 1932, p. 285.

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912.

Distribution.—Falkland Is.; Admiralty Sound.

PLATYCHALINA CACTOIDES (*Kirkpatrick*).

(For synonymy see Burton 1932, p. 286.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912.

Distribution.—Victoria Land; Palmer Archipelago; South Georgia.

PLATYCHALINA MICROCHELA (*Topsent*).

Homoeodictya microchela Topsent 1915, p. 37; *Isodictya microchela* Burton 1932, p. 286, pl. li, fig. 5.

Occurrence.—Macquarie Is.

Remarks.—The measurements of the spicules in the 4 specimens are:—

<i>Oxea.</i>	<i>Chelae.</i>
0.35 x 0.008 mm.	0.028 mm.
0.35 x 0.007 mm.	0.028 mm.
0.35 x 0.01 mm.	0.028 mm.
0.32 x 0.007 mm.	0.03 mm.

Distribution.—Burdwood Bank; Falkland Is.

PLATYCHALINA CAVICORNUTA (*Dendy*).

Isodictya cavicornuta Dendy 1924, p. 335, pl. x, figs. 2-3; Burton 1932, p. 424.

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912.

Distribution.—Victoria Land; New Zealand.

Section MYCOLEAE.

Genus AMPHILECTUS *Vosmaer*.AMPHILECTUS FUCORUM (*Esper*).

Spongia fucorum Esper 1794, p. 278, pl. xlix, figs. 1-2.

(For synonymy see Burton 1932, p. 289.)

Occurrence.—Macquarie Is.

Remarks.—There are a dozen fragments belonging to this species, so that it appears to be as abundantly represented here as on the coasts of Western Europe.

Distribution.—Europe; South Africa; New Zealand; Antarctic; Falklands; Tristan da Cunha.

Genus BIEMNA *Gray*.BIEMNA CHILENSIS *Thiele*.

(For synonymy see Burton 1932, p. 293.)

Occurrence.—Antarctica (no more exact locality given).

Distribution.—Wilhelm Land; Palmer Archipelago; South Shetlands; Falkland Is.; Chile.

*Genus MYCALE Gray.*MYCALE MAGELLANICA (*Ridley*).

(For synonymy see Burton 1932, p. 288, and 1934, p. 21.)

Occurrence.—Commonwealth Bay, 15–20 fathoms, rock bottom, January 20, 1913.*Distribution*.—Victoria Land; Wilhelm Land; Graham Land; South Georgia; South Orkneys; South Shetlands; Shag Rocks; Falkland Is.MYCALE ACERATA *Kirkpatrick*.

(For synonymy see Burton 1934, p. 23.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912; Hunter's Station 7 (65° 46' S., 92° 13' E.), 60 fathoms, rock bottom, January 21, 1914.*Remarks*.—In one specimen the spicules are very variable. The trichodragmata, for example, vary from 0.02 to 0.16 mm. long, the larger being like small oxea. The chelae vary also in shape, size, abundance and distribution.*Distribution*.—Victoria Land; Wilhelm Land; Graham Land; South Georgia; South Orkneys; South Shetlands; Shag Rocks; Falkland Is.*Genus ACANTHORHABDUS Burton.*ACANTHORHABDUS FRAGILIS *Burton*.*A. fragilis* Burton 1929, p. 432, pl. iv, fig. 2, text-fig. 5; 1932, p. 294.*Occurrence*.—Hunter's Station 8 (66° 8' S., 94° 21' E.), 120 fathoms, January 27, 1914.*Remarks*.—A single cylindrical, bifurcating specimen.*Distribution*.—Victoria Land; Clarence Island.*Genus PLUMOCOLUMELLA Burton.*PLUMOCOLUMELLA MAEANDRINA (*Kirkpatrick*).

(For synonymy see Burton 1932, p. 287.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912.*Distribution*.—Victoria Land; South Georgia.

*Section MYXILLEAE.**Genus MYXILLA Schmidt.**MYXILLA MOLLIS Ridley and Dendy.*

(For synonymy see Burton 1932, p. 28; 1934, p. 28.)

Occurrence.—Commonwealth Bay, Adelie Land, 25 fathoms on September 3-4, 1912, 45-50 fathoms on December 21, 1913.

Distribution.—Victoria Land; Wilhelm Land; Graham Land; South Georgia; Shag Rocks; Falkland Is.; east coast of South America up to mouth of Rio de la Plata.

MYXILLA LISSOSTYLA sp.n.

(Text-fig. 1.)

Occurrence.—Hunter's Station 9 (65° 18' S., 95° 20' E.), 240 fathoms, bottom temperature +1.38° C., bottom ooze with erratics, January 28, 1914.

Diagnosis.—Sponge massive; surface uneven, shaggy; oscules not apparent; colour, in spirit, pale yellow to dark brown; skeleton composed of a dendritic system of ascending fibres of styli, 0.08 by 0.035 mm.; tornota, strongylote, ends equal and ornamented with crowns of spines, 0.035 by 0.01 mm.; chelae, 0.11 mm. chord.



Remarks.—The several specimens are in various stages of maceration but as they so clearly represent a new and well-characterised species it has been thought worth while to give them a name. Their nearest relatives are *M. pistillaris* Topsent and *M. novae-zealandiae* Dendy, with which they agree in the shape of the tornota and in the possession of smooth styli, but differ from both in the large size of their spicules, particularly of the chelae, and in the shape of the chelae.

*Genus LISSODENDORYX Topsent.**LISSODENDORYX DECEPTA (Kirkpatrick).*

Myxilla decepta Kirkpatrick 1907, p. 278; 1908, p. 27, pl. xxii, figs. 1-2, pl. xxv, fig. 3.

Occurrence.—Hunter's Station 9 (65° 18' S., 95° 20' E.), 240 fathoms, bottom temperature +1.38° C., bottom ooze with erratics, January 28, 1914.

Distribution.—Victoria Land.

*Genus ANCHINOË Gray.*ANCHINOË AFFINIS *Brondsted.*

A. affinis Brondsted 1924, p. 467, fig. 22.

Occurrence.—Antarctica (no more exact locality given).

Distribution.—New Zealand.

ANCHINOË AREOLATA (*Thiele*).

(For synonymy see Burton 1932, p. 315; 1934, p. 30.)

Occurrence.—Commonwealth Bay, 25 fathoms, on September 3-4, 1912, 45-50 fathoms on December 21, 1913, 55-60 fathoms, on December 21, 1913; Hunter's Station 8 (66° 8' S., 94° 21' E.), 120 fathoms, January 27, 1913.

Distribution.—Victoria Land; South Georgia; Shag Rocks; Falkland Is.; Chile.

*Genus ECTYOMYXILLA Lundbeck.*ECTYOMYXILLA KERQUELENSIS *Hentschel.*

(For synonymy see Burton 1929, p. 437.)

Occurrence.—Macquarie Is.

Distribution.—Victoria Land; Kerguelen; New Zealand; Auckland Is.

ECTYOMYXILLA MARIANA var. TYLACANTHA (*Hentschel*).

Myxilla mariana var. *tylacantha* Hentschel 1914, p. 100, pl. vii, fig. 6.

Occurrence.—Hunter's Station 7 (65° 46' S., 92° 13' S.), 60 fathoms, rock bottom, January 21, 1914; Hunter's Station 12 (64° 32½' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Remarks.—The specimens are typical except that in both cases no small echinating acanthostyli could be found.

Distribution.—Wilhelm Land.

*Genus ECTYODORYX Lundbeck.*ECTYODORYX PAUPERTAS *subsp. NOBILE* (*Ridley and Dendy*).

(For synonymy see Burton 1932, p. 313; 1934, p. 29.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912.

Distribution.—South Georgia; Burdwood Bank; Falkland Is.; Patagonia; off the mouth of the Rio de la Plata; Crozet Is.

ECTYODORYX RAMILOBOSA (Topsent).

(For synonymy see Burton 1934, p. 29.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912; Hunter's Station 2 (66° 52' S., 145° 30' E.), 288 fathoms, bottom temperature -1.84° C., bottom diatomaceous ooze and terrigenous mud, December 28, 1913.

Distribution.—Victoria Land; Graham Land; South Georgia.

ECTYODORYX ANTARCTICA (Hentschel).

Lissodendoryx antarctica Hentschel 1914, p. 102, pl. vii, fig. 9; Burton 1929, p. 399;
Ectyodoryx antarctica Burton 1932, p. 314.

Occurrence.—Commonwealth Bay, 25 fathoms, on September 3-4, 1912; 55-60 fathoms, on December 21, 1913.

Distribution.—Victoria Land; Wilhelm Land; Shag Rocks.

*Genus MYXODORYX Burton.**MYXODORYX HANITSCHI (Kirkpatrick).*

Lissomyxilla hanitschi Kirkpatrick 1907, p. 275; Id., 1908, p. 26, pl. xxii, fig. 7, pl. xxvi, fig. 4; *Myxodoryx hanitschi* Burton 1929, p. 438.

Occurrence.—Hunter's Station 10 (65° 5' S, 96° 0' E), 340 fathoms, bottom temperature -1.65° C, bottom ooze, January 29, 1914.

Remarks.—The present specimen differs in only one respect from the type, that the basal third of the echinating spicules is smooth. Occasionally one of these spicules bears a few tubercles. It is of interest to note that in the holotype the echinating spicules bear the usual spines on the upper two-thirds of their length but have tubercles only on the base.

Distribution.—Antarctic.

*Genus TEDANIA Gray.**TEDANIA SPINATA (Ridley).*

(For synonymy see Burton 1932, p. 306, and 1934, p. 27.)

Occurrence.—Macquarie Is.

Distribution.—Falkland Is.; Chile; north coast of Argentine.

TEDANIA MASSA Ridley and Dendy.

(For synonymy see Burton 1932, p. 303, and 1934, p. 26.)

Occurrence.—Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Distribution.—Victoria Land; Wilhelm Land; Graham Land; Shag Rocks; South Georgia; Falkland Is.; South America.

TEDANIA CHARCOTI *Topsent*.

(For synonymy see Burton 1934, p. 27.)

Occurrence.—Commonwealth Bay, 25 fathoms, on September 3-4, 1912, 45-50 fathoms, on December 14, 1913, 55-60 fathoms, on December 21, 1913; Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Distribution.—Victoria Land; Graham Land; South Georgia; Burwood Bank; Falkland Is.

TEDANIA OXEATA *Topsent*.

(For synonymy see Burton 1932, p. 309.)

Occurrence.—Antarctica (no more exact locality given).

Distribution.—Victoria Land; Graham Land; Clarence Is.

Genus IOPHON *Gray*.IOPHON PROXIMUM (*Ridley*).

(For synonymy and description see Burton 1932, p. 296; 1934, p. 25.)

Occurrence.—Macquarie Is.

Distribution.—South Georgia; New Zealand; Kerguelen; Cape of Good Hope; Tristan da Cunha; Gough Is.; Falkland Is.; Burdwood Bank; Tierra del Fuego; Patagonia; northern coast of Argentine; Chile; Galapagos Is.; California; Canada (Pacific and (?) Atlantic coasts).

IOPHON RADIATUS *Topsent*.

(For synonymy see Burton 1934, p. 25.)

Occurrence.—Hunter's Station 7 (65° 46' S., 92° 13' E.), 60 fathoms, rock bottom with no ooze, January 21, 1914; Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 1, 1914.

Remarks.—Two of the specimens are worthy of special mention; the first has the typical "*flabello-digitatus*" form with "*aceratus*" spicules and the second the "*aceratus*" form (of Burton 1934, pl. iv, fig. 4) with the tornota figured by me (1930, fig. *d*).

Distribution.—Victoria Land; Wilhelm Land; Graham Land; South Georgia; South Shetlands; Falkland Is.

Genus INFLATELLA *Schmidt.*INFLATELLA BELLI (*Kirkpatrick*).

Joyeuxia belli Kirkpatrick 1907, p. 283.

(For synonymy see Burton 1934, p. 32.)

Occurrence.—Commonwealth Bay (67° S., 142° 36' E.), 25 fathoms, September 3–4, 1912; Hunter's Station 7 (65° 46' S., 92° 13' E.), 60 fathoms, January 21, 1914, bottom-rock, with no ooze.

Remarks.—The largest specimen is 14 cms. by 12 cms. by 6 cms.

Distribution.—Antarctic generally.

Section CLATHRIEAE.*Genus* CLATHRIA *Schmidt.*CLATHRIA PAUPER *Brondsted.*

C. pauper Brndsted 1926, p. 3, fig. 3.

Occurrence.—Hunter's Station 10 (65° 5' S., 96° 0' E.), 340 fathoms, bottom temperature —1.65° C., bottom ooze, January 29, 1914.

Distribution.—Discovery Inlet.

CLATHRIA LIPOCHELA *Burton.*

C. lipochela Burton 1932, p. 319, pl. lv, figs. 6–7, text-fig. 29; 1934, p. 32.

Occurrence.—Commonwealth Bay, 25 fathoms, September 3–4, 1912.

Distribution.—Falkland Is.

Genus OPHLITASPONGIA *Bowerbank.*OPHLITASPONGIA THIELEI *Burton.*

O. thielei Burton 1932, p. 322, pl. lv, fig. 8, text-fig. 32.

Occurrence.—Antarctica (no more exact locality is given).

Remarks.—In the original description of this species a table was given showing the variations in the spicules but this was unfortunately included under the heading of *O. membranacea* Thiele.

The variation in the size, shape, disposition and occurrence of the spicules in this species makes it difficult to separate it from *O. membranacea*. Of the "Discovery" specimens, those assigned to *O. membranacea* were incipiently digitate, those of *O. thielei* were massive, but the present specimen typical of *O. thielei* in spiculation, is erect and branching with branches 1 cm. in diameter. It is probable, therefore, that *O. thielei* is only a variety of *O. membranacea*.

Distribution.—South Georgia.

*Genus RHAPHIDOPHUS Ehlers.*RHAPHIDOPHUS PAUCISPICULUS *Burton.*

R. paucispiculus Burton 1932, p. 320, pl. lvi, fig. 1, text-fig. 30.

Occurrence.—Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Distribution.—Shag Rocks; Falkland Is.

*Genus MICROCIONA Bowerbank.*MICROCIONA BASISPINOSA *Burton.*

M. basispinosa Burton 1934, p. 38, pl. v, fig. 2, text-figs. 11, 12.

Occurrence.—Macquarie Is.

Distribution.—Falkland Is.

*Genus ARTEMISINA Vosmaer.*ARTEMISINA PLUMOSA *Hentschel.*

(For synonymy see Burton 1932, p. 323; 1934, p. 34.)

Occurrence.—Hunter's Station 10 (65° 5' S., 96° 0' E.), 340 fathoms, bottom temperature —1.65° C., bottom ooze, January 29, 1914; Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, rock bottom, January 31, 1914.

Remarks.—Two of the specimens agree with the holotype except that the chelae measure up to 0.035 mm. chord and toxa are absent. Embryos are present in one of them and this contains chelae but no styli. In the third specimen chelae are absent but toxa are abundant.

Distribution.—Wilhelm Land; Graham Land; Falkland Is.

ARTEMISINA JOVIS *Dendy.*

A. jovis Dendy 1924, p. 343, pl. xii, fig. 6.

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912.

Distribution.—New Zealand.

AUSTRALASIAN ANTARCTIC EXPEDITION.

FAMILY AXINELLIDAE.

*Genus HALICHONDRIA Fleming.*HALICHONDRIA PANICEA (*Pallas*).

(See note. Burton 1934, pp. 34, 35.)

Occurrence.—Macquarie Island.*Distribution.*—Cosmopolitan (?)

FAMILY CLAVULIDAE.

*Genus SUBERITES Nardo.*SUBERITES PAPILLATUS *Kirkpatrick*.

(For synonymy see Burton 1932, p. 336.)

Occurrence.—Hunter's Station 12 (64° 32' S., 97° 20' E.), 110 fathoms, bottom rock, January 31, 1914.*Distribution.*—Victoria Land; Graham Land; Palmer Archipelago; Clarence Is.; Shag Rocks; South Georgia.*Genus PSEUDOSUBERITES Topsent.*PSEUDOSUBERITES SULCATUS *Thiele*.

(For synonymy see Burton 1932, p. 336; 1934, p. 45.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912.*Distribution.*—South Georgia; Campbell Is., Burwood Bank; Falkland Is.; Admiralty Sound; Tierra del Fuego; Gough Is.*Genus RHIZAXINELLA Keller.*RHIZAXINELLA AUSTRALIENSIS *Hentschel*.

(For synonymy see Burton 1932, p. 331.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912.*Distribution.*—Victoria Land; South Georgia; South Shetlands; Palmer Archipelago; Australia,

Genus POLYMASTIA *Bowerbank.*POLYMASTIA ISIDIS *Thiele.*

(For synonymy see Burton 1932, p. 337.)

Occurrence.—Hunter's Station 5 (64° 34' S., 127° 8' E.), 1,700 fathoms, bottom temperature -0.3° C., bottom ooze with scattered erratics, January 6, 1914.*Distribution.*—Wilhelm Land; Palmer Archipelago; Falkland Is.; Admiralty Sound.POLYMASTIA INVAGINATA *Kirkpatrick.*

(For synonymy see Burton 1932, p. 338.)

Occurrence.—Commonwealth Bay, 25 fathoms, September 3-4, 1912; Hunter's Station 6 (63° 15' S., 101° 42' E.), 870 fathoms, bottom temperature -0.23 C., bottom ooze with scattered erratics, January 14, 1914.*Distribution.*—Victoria Land; Wilhelm Land; South Georgia; South Shetlands.*Genus* SPHAEROTYLUS *Topsent.*SPHAEROTYLUS ANTARCTICUS *Kirkpatrick.*

(For synonymy see Burton 1929, p. 446; 1932, p. 339).

Occurrence.—Commonwealth Bay, 25 and 59 fathoms.*Distribution.*—Victoria Land; Wilhelm Land; Shag Rocks.*Genus* LATRUNCULIA *Bocage.*LATRUNCULIA LENDENFELDI *Hentschel.**L. lendenfeldi* Hentschel 1914, p. 44, pl. v, fig. 1; Burton 1932, p. 340.*Occurrence.*—Antarctica (more exact locality not given).*Distribution.*—Wilhelm Land; Falkland Is.

ORDER KERATOSA.

SUB-ORDER DENDROCERATIDA.

FAMILY DARWINELLIDAE.

Genus DENDRILLA *Lendenfeld.*DENDRILLA MEMBRANOSA (*Pallas*).*Spongia membranosa* Pallas 1766, p. 398.

(For synonymy see Burton 1934, p. 595.)

Occurrence.—Commonwealth Bay (Hunter's Station 1b), 55-60 fathoms, December 21, 1913.*Distribution.*—Antarctic and Sub-Antarctic generally; Australia; Indian Ocean.

LIST OF SPONGES.

Identified from Dredgings taken by the Expedition off the Coast of Tasmania,
near Maria Island.

Stelletta communis Sollas.

„ *parvispicula* (Sollas).

Cliona vastifica Hancock.

Rhizaxinella radiata Hentschel.

Callyspongia ramosa (Gray).

Chondropsis kirkii Carter.

Crella incrustans (Carter).

Clathria rubens Lendenfeld.

Ophlitaspongia chalinoides (Carter).

„ *inornata* Hallmann.

Rhaphidophlus typicus var. *proximus* Hallmann.

Echinodictyum bilamellatum (Lamarck).

Aulena gigantea Lendenfeld.

„ *laxa* Lendenfeld.

Acanthella hirciniopsis Carter.

Fasciospongia conulata var. *australis* (Lendenfeld).

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