

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.

VOL. VI. PART 6.

POLYZOA.

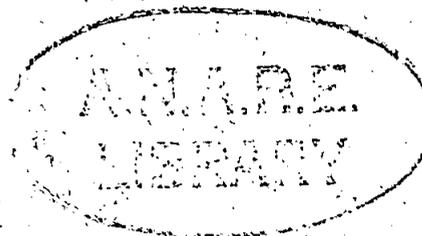
BY

L. R. THORNELY.

WITH FIVE TEXT-FIGURES.

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POLYZOA.

By L. R. THORNELY.

(With five text-figures.)

Subclass ECTOPROCTA.

Order GYMNOLÆMATA.

Suborder CHEILOSTOMATA.

AETEA ANGUINA (*Linn.*).

A small colony growing on a Bicellaria:

Locality.—Off Maria Island.

CATENICELLA HASTATA *Busk.*

MacGillivray, Prodr. Zool. Victoria, Dec. III, p. 19, pl. 24.

Locality.—East of Enderby Island, Auckland Islands.

CATENICELLA MARGARITACEA *Busk.*

MacGillivray, Prodr. Zool. Victoria, Dec. III, p. 15, pl. 24.

Locality.—East of Enderby Island, Auckland Islands, 40 fathoms.

BUGULA BICORNIS *Busk.*

Zool. Chall. Exp., Vol. X, Pt. XXX, p. 40.

These colonies form limp, strap-like stems $4\frac{1}{2}$ inches in height, with many fibres given off from the branches. Zoœcia are very long, and their upper free half is usually bent forward so that the surface of the colonies, to the naked eye, has quite a rough appearance. There are numerous short branches given off which have smaller zoœcia as described by Waters.* Avicularia are only to be seen here and there, but have probably been torn off. Oœcia are very tall and lie back at right angles to the zoœcium.

Localities.—Commonwealth Bay, Station 1, 345 fathoms; Station 3, 157 fathoms.

BUGULA RETICULATA *Busk.*

Zool. Chall. Exp., Vol. X, Pt. XXX, p. 40.

Several fragments of colonies having lateral radicles and a marginal spine on either side of the orifice. There is one oœcium present which is lofty as described by Busk.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

* Exp. Ant. Belge, p. 21.

BUGULA TRICORNIS Waters.

Exp. Antarct., Belge, Zool., Bryozoa, p. 23.

A small fragment only with no oœcia.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.*MENIPEA FUNICULATA MacGillivray.*

Prodr. Zool. Vict., Dec. XVIII, p. 285.

There are many good colonies of this species, about 4 inches in height. Zoœcia are in series of from 2 to 4. The zoarium is continuous and bordered by radicle fibres. There is one stout spine on the outer margin of the zoœcium. The scutum, which has faint marking on it, is large, almost filling the area. Besides the lateral avicularia, there are large raised ones here and there which have pointed mandibles, and there is a small one to one side above the oœcium. Oœcia are large, with a kidney-shaped pore in the centre.

The large central avicularia and the kidney-shaped pore, neither of which is mentioned in MacGillivray's description, are here striking features, but the radicle fibres, stout spine, and scutum correspond with his species.

Locality.—Commonwealth Bay, 3-5 fathoms, 25 fathoms; Station 8, 112 fathoms.

BICELLARIA TUBA Busk.

Brit. Mus. Cat. Marine Polyzoa, Pt. I, p. 42.

There is only a fragment of this species without avicularia or oœcia, and the zoœcia are a good deal broken, but show the digitiform, hollow process supporting three long incurved spines, and two other marginal spines situated on the margin behind this process.

Locality.—Off Maria Island.*FLUSTRA SPOLIATA (Ortman).*

Die Japanische Bryozoa: Arch. f. Naturgeschichte, Jahrg. LVI, Bd. 1, p. 27, Dec. 1889.

These specimens have the unarmed border to the zoœcia, and the avicularia above the zoœcia set askew, elliptical in shape, and with the rounded mandible of *F. spoliata*, but the zoarium here, although varying in the width of its branches, has them usually very narrow, delicate and pale brown in colour, the zoœcia very long and narrow and the avicularia with a curious little round knob at the tip of the mandible. These are points not mentioned in Ortman's description with which the specimens otherwise correspond.

Localities.—Commonwealth Bay, Station 3, 157 fathoms; Station 45, 50 fathoms, 14 Dec., 1913.

FLUSTRA ANTARCTICA *Calvet*.

Expéd. Antarctique Française, Bryozoaires, p. 11.

There are some good colonies of this species, the largest $3\frac{1}{2}$ inches in height. There are only one or two oëcia, but they show how the spines, when they are present, become longer, bending in front of the oëcia.

Localities.—Commonwealth Bay, 55 fathoms, 3-5 fathoms, 25-30 fathoms; Station 3, 157 fathoms.

FLUSTRA OVOIDEA *Busk*.*Carbasea ovoidea*, Busk, Cat. Mar. Polyzoa, Pt. I, p. 52.

A few colonies up to 4 inches in height, some with the usual broad fronds, others much narrower, bilaminate except apparently at their extremities. Beneath the aperture the zoëcia are much narrowed and elongated.

Locality.—Commonwealth Bay, Station 3, 157 fathoms.

FLUSTRA SPINULIGERA *Hincks*.

Ann. Mag. Nat. Hist., Ser. 6, Vol. VII, p. 286.

These specimens do not show the broadness of zoarium, a characteristic feature in Hincks's description of this species, and there are no oëcia present, but other features of zoëcia and avicularia are similar.

Locality.—Off Maria Island.

CARBASEA ELEGANS *Busk*.

Brit. Mus. Cat. Mar. Polyzoa, Pt. 1, p. 53.

The narrow ligulate divisions of the zoarium of this species are somewhat thick and fleshy, and of a pale brown colour. Zoëcia are remarkably wide above: also the orifice has a very wide opening.

Locality.—Commonwealth Bay, Station 3, 157 fathoms.

BEANIA ERECTA *Waters*.

Exp. Antarct., Belge, Bryozoaires, p. 30.

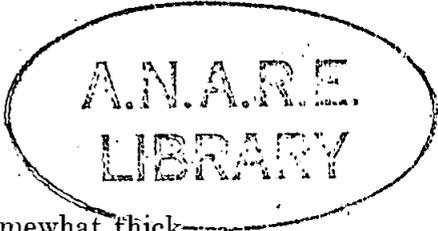
Locality.—Commonwealth Bay, 45-50 fathoms, 25 fathoms, 3-5 fathoms.

FARCIMINARIA ACULEATA *Busk*.

Brit. Mus. Cat. Mar. Polyzoa, Pt. I, p. 33.

A good colony with oëcia present.

Locality.—Off Maria Island.



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MEMBRANIPORA CORBULA *Hincks*.

Ann. Mag. Nat. Hist. Ser. 5, Vol. 6, p. 378. °

There is one specimen of this species. It has always four articulate oral spines, not two as described by Hincks, nor is one longer than the others, nor are they so thick and pod-like as described by MacGillivray.* There are six small spines on either side that meet across the zoecium and one central one.

Oœcia are not present.

Locality.—East of Enderby Island, Auckland Islands.

MEMBRANIPORA ELONGATA *n.sp.* (Fig. 1).

A fragment of a species that has very long zoœcia, oval above, narrowing below, the area occupying nearly the whole of the front wall and bordered by a thick

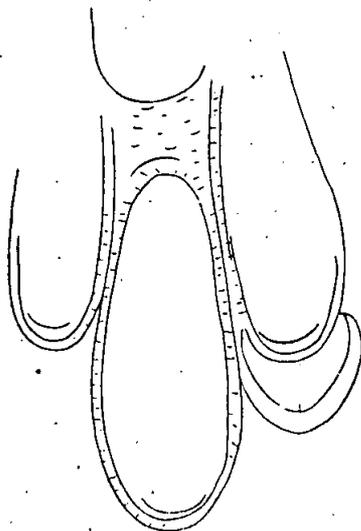


Fig. 1.

Membranipora elongata, n. sp.

crenulated ridge, the small space below the area having a dotted surface. There are no avicularia, but several oœcia which have a smooth area below, divided into two halves by a vertical line, and an arched ridge above.

Locality.—Commonwealth Bay, 25 fathoms.

CELLARIA FISTULOSA (*Linn.*).

Hincks, Brit. Mar. Polyzoa, p. 106.

There are a few avicularia of the characteristic shape on this colony.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

* Prodr. Zool. Vict. Dec. XIII, p. 103.

CELLARIA WANDELI *Calvet.*

Expéd. Antarct. Française, Bryozoaires, p. 23.

There is a 2½-inch branched piece of this form.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.CELLARIA MEMBRANACEA *n.sp.* (Fig. 2).

There is an unbranched, unjointed cylindrical species, about 3 inches long and $\frac{1}{10}$ inch wide with radicles at its base. It is nodulated slightly, like some of the Cellarinellas. Zoecia are large and very thickly calcareous, and there are very large avicularia

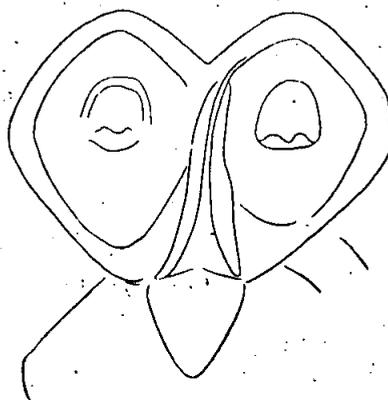


Fig. 2.

Cellaria membranacea.

lying between the zoecia; and reaching more than their length, having falciform mandibles that have a central ridge and membranous side expansions, and narrowing upwards, ending in a sharp curved point that rests on a raised beak.

Locality.—Commonwealth Bay, Station 11, 351 fathoms.MICROPORA BREVISSIMA *Waters.*

Exp. Antarct. Belge, Bryozoaires p. 40.

One small colony only, encrusting a stem of another Polyzoan.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.VINCULARIA ABYSSICOLA *Smitt.*

Floridan Bryozoa, Pt. II, p. 6.

Several fragments of this form with flattened, branched stems, the largest about 2 inches long. There are large numbers of the peculiar avicularia taking the place of zoecia.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

CRIBRILINA PROJECTA Waters.

Exp. Antarct. Belge, p. 41.

A few zoecia growing on a Polyzoon having avicularia, but not oecia present. The proximal edge of the peristome is sometimes raised into prominences like the distal edge.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

CRIBRILINA SPATULATA Calvet.

Exp. Antarct. Française, Bryozoaires, p. 19.

There is a fragment from one locality that is free growing and bilaminate and has five instead of four spines of the usual shape.

Locality.—Commonwealth Bay, Station 12, 110 fathoms, 25 fathoms, 45–50 fathoms, 25 to 110 fathoms.

CRIBRILINA MONOCEROS Busk.

Brit. Mus., Cat. Mar. Polyzoa, Pt. II, p. 72.

A colony encrusting a *Hornera*. It is old and very calcareous with large, deep perforations in the front wall which is raised below the orifice, where there are usually three small pointed avicularia on raised areas. There are also two small avicularia with pointed mandibles inside the orifice one on either side. There are a few oral spines on the colony, but no long club-shaped ones.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

MICROPORELLA DIVARICATA Canu.

Waters, Exp. Antarct. Belge, Bryozoaires, p. 46.

The specimen corresponds entirely with Waters' description in the erect bilaminate zoarium, the entire surface of the zoecium being perforated, and in the semicircular depressions above the zoecia, which probably show the first formation of oecia; these here have slightly raised margins which continues the idea of their being oecia. A new point, however, is that the colony has horny connections at intervals, which to the naked eye gives it the appearance of a *Cellaria*. It is about 2 inches in height.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

MICROPORELLA PROXIMA Waters.

Exp. Antarct. Belge, Bryozoaires, p. 44.

A single colony on the stem of a seaweed.

Locality.—Commonwealth Bay, Boat Harbour, 3½ fathoms.

MICROPORELLA TRINERVIS *Waters.*

Exp. Antarct. Belge, Bryozoaires, p. 45.

These specimens correspond in all external details with Waters's species, but have also sometimes a small rounded avicularium on either side of the orifice. Oœcia are present.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

MICROPORELLA INVERSA *Waters.*

Ann. Mag. Nat. Hist., Ser. 6, Vol. IV, p. 6.

A circular colony of this species, growing on a seaweed; probably immature, as the pores are not stellate except the suboral one, and there are no grooves between them. There are the bases of three spines above the orifice, but no avicularia or oœcia. The orifice has a thickened rim and is flattened proximally and distally as described for *Inversiula nutrix* in Waters' comparison of the two species.*

Localities.—Commonwealth Bay, Boat Harbour, 3½ fathoms; Commonwealth Bay, 3-5 fathoms.

MICROPORELLA MALUSII (*Aud.*)

Hincks, Brit. Mar. Pol. p. 211.

There is a colony on a seaweed. The pores are not stellate: they form a double or treble row round the margin, and there are three pores across below the orifice. A few zoœcia have four spines. Oœcia have an arched ridge at their lower edge and ridges running upwards also, but no areolations round the margins, and the central pore is crescentic, not toothed. There are a few zoœcia growing on a *Hornera* from another locality that have four branched spines. Busk† mentions occasional forked spines. *M. parvipora* (Waters)‡ has marginal, non stellate-pores and a crescentic median pore, but it is smaller and has a smaller orifice than here and also more marginal spines.

Localities.—Commonwealth Bay, 3-5 fathoms; Station 8, 120 fathoms.

LEPRALIA MARGINATA *Calvet.*

Exp. Antarct. Française, p. 24.

By the shape of the orifice, the marginal pores, central, rounded avicularium and the hole in the centre of the oœcium this species corresponds with Charcot's description, but the fragments of colonies here are foliaceous, having apparently been folded loosely round some foreign object, excepting one fragment which is free and bilaminar, the rest being unilaminar with a little process on the dorsal surface of some zoœcia, possibly for attachment.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

* Mission Sci. du Cap Horn, Bryozoaires, p. 44, pl. iv, fig. 8. † Chal. Exp., pt. xxx, p. 137. ‡ Exp. Antarct. Belge., p. 43.

SCHIZOPORELLA TUMIDA (*Hincks*) var. *tricuspis*.

Calvet, Exp. Antarct. Française, Bryozoaires, p. 28.

There are no vicarious avicularia or oecia to help in the identification of this species. The fragment is bilaminate.

Locality.—Commonwealth Bay, Station 1, 354 fathoms.

SCHIZOPORELLA HYALINA (*Linn.*).

Hincks, Brit. Mar. Pol., p. 271.

Growing on the stem of a *Barentsia*.

Localities.—Commonwealth Bay, Station 2, 318 fathoms, and 25 fathoms and 3-5 fathoms.

SCHIZOPORELLA SIMPLEX (*d'Orb.*).

Waters, Exp. Antarct. Belge, Bryoz., p. 51.

A small well-preserved young colony with oecia, growing on *Phylactella lyrula* and other Polyzoa.

Localities.—Commonwealth Bay, Station 7, 60 fathoms; Station 8, 120 fathoms.

CYCLICOPORA POLARIS (*Waters*).

Exp. Antarct. Belge, Bryoz., p. 53.

The zoecia correspond entirely with Waters's description and figure, but the zoarium is free-growing, forming much-branched flattened fronds, looking like a *Carbasea* excepting for frequent horny flexible portions not quite the same as the joints in *Cellaria*. The fronds are sometimes broad, sometimes quite narrow.

The front walls of the zoecia are very brittle and occasionally there is a small rounded avicularium to one side of the orifice, and two small horns above it. There are a few oecia, very large, taller than broad, and apparently smooth, but they are much cracked, being brittle, like the zoecia. The colonies much resemble *Carbasea pisciformis* (Busk)*, but are bilaminate jointed and calcareous.

Localities.—Commonwealth Bay, Station 7, 60 fathoms, 25-30 fathoms.

SYSTEMOPORA CONTRACTA *Waters*.

Exp. Antarct. Belge, Bryoz., p. 56.

There are two colonies about 2 inches in height, the zoarium is flattened and wider than figured by Waters, and slightly contracted at intervals up the stem. There are numerous rootlets at the base.

Locality.—Commonwealth Bay, Station 2, 318 fathoms.

* B.M.C., t. I, p. 50.

CELLARINELLA FOVEOLATA *Waters.*

Exp. Antarct. Belge, Bryoz., p. 57.

A branched colony.

Locality.—Commonwealth Bay, Station 2, 318 fathoms.CELLARINELLA DUBIA *Waters.*

Exp. Antarct. Belge, Bryoz., p. 58.

A small much-worn fragment. The pitted surface is not visible. There is a horn-like process above the orifice as well as the two lateral avicularia, which has not been mentioned by Waters.

Locality.—Two miles off Macquarie Island, 60 fathoms.CELLARINELLA WATERSI *Calvet.*

Exp. Antarct. Française, Bryoz., p. 33.

A fragment 3 inches in height that appears to represent part of a large colony.

Locality.—Commonwealth Bay, 45-50 fathoms; Station, 3,157 fathoms.CELLARINELLA NODULATA *Waters.*

Exp. Antarct. Belge, Bryoz., p. 58.

There are always two avicularia in this specimen, which is 1 inch in height. There is a fragment from another locality which is not nodulated, and is larger in every way and the avicularia have disappeared, but the pitted surface and central mould are present, and I believe it to be an old colony of the same species.

Localities.—Commonwealth Bay, Station 11; 35 fathoms, Station 2, 318 fathoms.SMITTIA CONSPICUA *Waters.*

Exp. Antarct. Belge, Bryoz., p. 66.

Locality.—Commonwealth Bay, Station 2, 318 fathoms.SMITTIA ANTARCTICA *Waters.*

Exp. Antarct. Belge, Bryoz., p. 65.

There are some large broken pieces.

Locality.—Commonwealth Bay, Station 12; 110 fathoms.

SMITTIA MARSUPIUM *MacGillivray*.

Prodr. Zool., Vict., Dec. IV, p. 22.

There are two colonies of this charming little species. An older one has four spines on the zoëcia and an umbo on the oëcia and the sides of the peristome are raised. In the other, younger colony, there are five spines. The pouch-like protuberance and small rounded avicularium are common to both colonies.

Locality.—Commonwealth Bay, 25 fathoms.

SMITTIA LANDSBOROVII *Johnston*.

Hincks Brit. Mar. Pol., p. 341.

There are a few zoëcia only of this form growing on the back of *Smittia reticulata*.

Locality.—Commonwealth Bay, Station 2, 318 fathoms.

SMITTIA RETICULATA *MacGillivray*.

Hincks Brit. Mar. Pol., p. 346.

The wide spatulate avicularia and almost square shape of the orifice make a decided variation on Hincks's form. Also the fragments, the largest of which is an inch by half an inch in size, are either free growing, or loosely attached, but it is impossible to tell the form of the colony; they are unilaminar. There are the three internal denticles, the marginal areolations and occasionally two spines above the orifice of *S. reticulata*.

Locality.—Commonwealth Bay, Station 2, 318 fathoms.

SMITTIA TRIPORA *Waters*.

Exp. Antarct. Belge, Bryoz., p. 67.

There are fragments of an encrusting species and some folded over on themselves. Avicularia lie horizontally on the top of the swollen portion, just in front of the central denticle, and within the secondary orifice, or in a sinus in the secondary orifice. In an old specimen the swollen portion is inclined to rise into an umbo in front of the avicularium. Zoëcia are larger in every way than those of *Porella marsupium* which they resemble most.

Localities.—Commonwealth Bay, Station 7, 60 fathoms; east of Enderby Island.

MUCRONELLA TERES *Hincks*.

Ann. Mag. Nat. Hist., Ser. 5, Vol. VIII, p. 124.

A few zoëcia only, growing on a Polyzoon. There are at least seven spines: the central tooth is broad with sharp lateral points. There are no lateral teeth. The zoëcia are very small.

Locality.—Commonwealth Bay, Station 12.

MUCRONELLA CORONATA, *n.sp.* (Fig. 3).

Zoarium encrusting. Zoecia large, with a coarse roughened surface, a thick rounded mucro hiding the lower edge of the orifice, which is arched above and straight below. On either side of the orifice there is a stout projection, straight to begin with, then bending forward and ending in a sharp spine, while two or three sharp spinous processes are given off from its upper bent surface so as to form altogether an encircling crown-like formation.

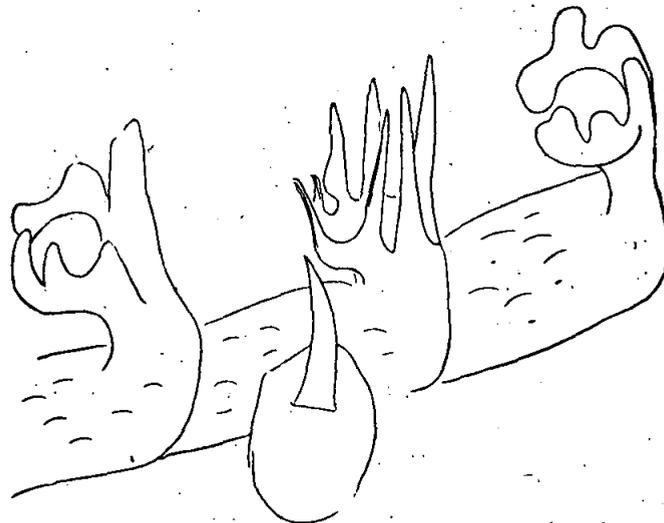


Fig. 3.
Mucronella coronata, *n.sp.*

There are avicularia on some zoecia, very long and pointed and situated on large prominences on the sides of zoecia. Oecia are large and globose with a surface less coarse than that of the zoecia.

This is a striking species—the zoarium to the naked eye showing the bristling spines of the crown and having a glistening surface. There is only one colony, which surrounds loosely the branches of a seaweed.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

MUCRONELLA CONTORTUPLICATA *Calvet*.

Exp. Antarct. Française, Bryoz., p. 36.

A colony that has probably loosely encircled some foreign object, zoecia being on the outside only of the cylinder it has formed.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

PHYLACTELLA LYRULATA *Calvet*.

Exp. Antarct., Française, Bryoz., p. 32.

There is a good quantity of material of this species, but it mostly consists of old broken fragments. Charcot had only one small imperfect colony, so that there are

additional features to describe here. The primary orifice has the lyre-like central tooth which Busk* describes for *Mucronella bisinuata* Smitt, as of rare occurrence, the central tooth here, however, is laterally pointed. The secondary orifice is much raised tubularly, the front portion more than the back, and this often rises to a pointed mucro. There are some oecia present—large and globose with a surface roughened like the zoecia, but without marginal perforations.

Localities.—Commonwealth Bay, 45–50 fathoms; Station 12, 110 fathoms; Station 2, 318 fathoms; Station 1, 354 fathoms; Station 7, 60 fathoms.

ASPIDOSTOMA GIGANTEUM (*Busk*).

Brit. Mus. Cat., Part II, p. 91; Zool. Chall. Exp., Vol. X, Pt. XXX, p. 161.

There are branched fragments about 2 inches in height, bilaminate. The pent-house like projection usually rises into stout, horn-like processes on either side of the orifice, and where an oecium is present, a small, arched opening into this lies between the horns. I have seen no avicularia on these specimens.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

ASPIDOSTOMA OBLIQUUM, *n.sp.* (Fig. 4).

There are two small fragments of a colony, unbranched, the stem almost flat and slightly nodulated.

Zoecia are neatly hexagonal, their surface granulated, depressed beneath the orifice. Orifice arched above, shielded below by a square mucro: the operculum fitted

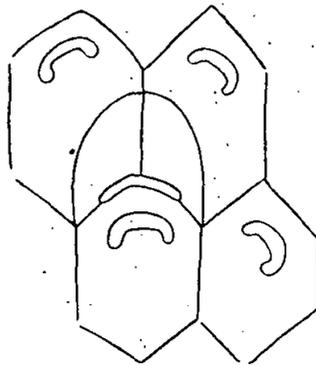


Fig. 4.

Aspidostoma obliquum, n. sp.

round this, is of a narrow kidney shape. The orifice is often obliquely set. There are no avicularia present. Oecia are large, seen embedded under the two zoecia situated above the arc to which it belongs, the opening being just above the margin of its zoecium, arch-shaped.

* Zool. Chall. Exp., Vol. X, pt. XXX, p. 157.

The characteristic pent-house process is not present in this species, and I have not been able to see whether the mucro continues down within the zoecia, but what can be seen of the character supports its belonging to *Aspidostoma*.

It is a remarkably pretty species with its shining surface and golden opercula.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

HASWELLIA AUSTRALIENSIS (*Haswell*).

Myriozoum australiense Haswell, Proc. Linn. Soc. N. S. Wales, Vol. V, pt. 1, p. 43,

Haswellia australiensis, Busk Zool. Chall. Esp. Vol. X, Pt. XXX, p. 172.

There is a small broken piece of this species.

Locality.—East of Enderby Island, Auckland Islands.

CELLEPORA EATONENSIS *Busk*.

Zool. Chall. Exp., Vol. X, Pt. XXX, p. 201.

These specimens are encrusting stems of varying thickness. The rostra vary in length, but are always open above, spout-like, with a rounded avicularium inside at its summit. There are numerous vicarious avicularia with duck-bill-shaped mandibles, closing down into deep cup-like beaks. Oecia, which Busk does not mention, have a smooth surface with a small arched area on the front wall.

Locality.—Commonwealth Bay, 45-50 fathoms; Station 3, 157 fathoms.

CELLEPORA SETOSA *n. sp.* (Fig. 5).

Zoarium large, branched, bristling with rostra. Zoecia smooth with small, scattered, rounded avicularia and a suboral rostrum often of enormous length, which is cylindrical below, flattened above, and ending in a large central and two smaller lateral

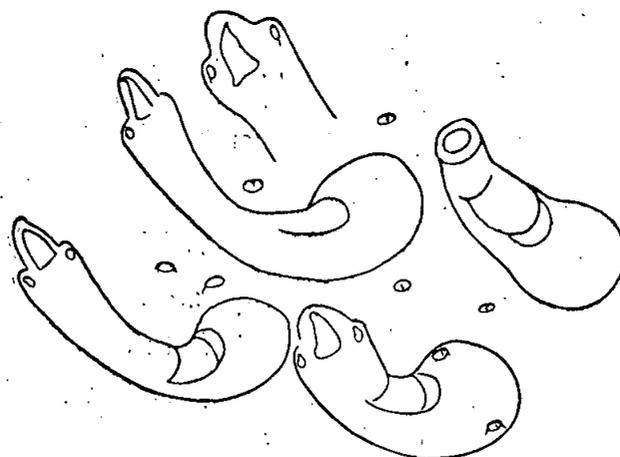


Fig. 5. Tube 19.
Cellepora setosa, n. sp.

points, bearing avicularia at their summits, the central one broad and pointed, the lateral ones smaller and round. Oecia are large and smooth.

Localities.—Commonwealth Bay, Station 12, 110 fathoms; Station 8, 120 fathoms.

TURRITIGERA STELLATA Busk.

Zool. Chall. Exp., Vol. X, Pt. XXX, p. 130.

There are one or two fragments of a free-growing, calcareous, bilaminar nature that may be young growth of this species. The front wall and tubular orifice are thick except towards the edge of the zoarium, where some rise to a thinner, taller tube, while the proximal side develops a spout-like process bearing a small avicularium at the top of its inner aspect. There are a few oœcia situated below the orifice on the front wall, having a small circular, finely perforated area. In this last point it differs from *T. stellata* particularly, but without more material I am inclined to consider it to be that species.

Locality.—Off Maria Island.

RETEPORA PLANA Hincks.

Ann. Mag. Nat. Hist., Ser. 5, Vol. I, p. 358.

This fragment, about 2 inches x 1 inch in size, has the large fenestræ, pointed above and below, described by Hincks, with three or four rows of zoœcia in the interspaces. Zoœcia are very simple, as he describes, with only one rounded avicularium on an umbo below the orifice, excepting for an occasional small one on the dorsal surface. The orifice is as described, but the lateral walls of the peristome are sometimes raised a little. There were no oœcia on his specimen. Here they are present, smooth with a vertical slit-like fissure in front.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

RETEPORA GELIDA Waters.

Exp. Ant. Belge, Bryoz., p. 84.

There are only some fragments of this species.

Localities.—Commonwealth Bay, Station 7, 60 fathoms; Station 8, 120 fathoms.

RETEPORA LEPRALIOIDES Waters.

Exp. Ant. Belge, Bryoz., p. 83.

Some broken pieces with the characteristic features of this species.

Locality.—Station 2, 318 fathoms.

RETEPORA FRIGIDA Waters.

Exp. Ant. Belge, Bryoz., p. 82.

There are many fragments of this species from 1 to 2 inches in height, variously folded on themselves. They have all the features of this species in zoœcia and oœcia,

and have the large raised elliptical avicularia on the front and back walls of the zoarium, but they have very few spines present on the zoecia, though indications of two and four can be seen on some.

Localities.—Commonwealth Bay, Boat Harbour, $3\frac{1}{2}$ fathoms; Station 7, 60 fathoms; Commonwealth Bay, 25 fathoms, and 55 fathoms.

Suborder CYCLOSTOMATA.

CRISIA BICILIATA *MacGillivray*.

Prodr. Zool. Vict., Dec. IV, p. 37.

Localities.—East of Enderby Island; Auckland Islands, 40 fathoms.

CRISIA CORNUTA (*Linn.*).

Hincks, Brit. Mar. Poly., p. 419.

Locality.—Commonwealth Bay, Station 12, 110 fathoms.

IDMONEA AUSTRALIS *MacGillivray*.

Prodr. Zool. Vict., Dec. VII, p. 30.

There are two fragments about 1 inch long, dichotomously branched.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

HORNERA FOLIACEA *MacGillivray*.

Prodr. Zool. Vict., Dec. XII, p. 71.

Part of a colony $2\frac{1}{2}$ inches in height.

Locality.—Enderby Island, Auckland Islands.

HORNERA CAESPITOSA *Busk*.

Brit. Mus. Cat., Pt. III, p. 17.

A 3-inch fragment of a colony of this species.

Locality.—Commonwealth Bay, Station 8, 120 fathoms.

HORNERA ANTARCTICA *Waters*.

Exp. Antarct. Belge, Bryoz., p. 93.

A small branched portion of a colony.

Locality.—Commonwealth Bay, Station 1, 354 fathoms.

AUSTRALASIAN ANTARCTIC EXPEDITION.

LICHENOPORA HISPIDA *Fleming*.

Hincks, Brit. Mar. Pol., p. 473.

A colony growing on *Phylactella lyrula*.*Locality*.—East of Enderby Island, Auckland Islands.FASCICULIPORA GRACILIS *MacGillivray*.

Prodr. Zool. Viet., Dec. XVI, p. 213.

There are several colonies of this form, less than half an inch across, situated on weeds. Branches radiate from the centre of the colony in five or six rays, which again divide several times, and are composed of bundles of long, free, tubular, slightly curving zoecia, which have their surface perforated and their openings at the top.

Locality.—Commonwealth Bay, 25 fathoms.

Sub-class ENTOPROCTA.BARENTSIA DISCRETA (*Busk*).

Waters, Exp. Antarct. Belge, Bryoz., p. 99.

A colony growing on the stem of a Sertularian and one on a *Menipea*.*Localities*.—Commonwealth Bay, 25–30 fathoms, and 55 fathoms.

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