

PLATE 146, FIG. 1.

CATENICELLA GEMELLA (McG.).

[Genus CATENICELLA (BLAINVILLE). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Catenicellidæ.)

Gen. Char.—Branches originating from the summits of each of a geminate pair, or rarely from the sides of ordinary zoœcia. Zoœcia in single series, but at a bifurcation geminate, or each internode consisting of a geminate pair; mouth with simple margins, straight or hollowed and entire below, or with a small, rounded notch.]

DESCRIPTION.—Each internode consisting of a geminate pair of zoœcia, each pair in the main stem giving origin to two double zoœcia, the one pair continuing the stem directly upwards, the other originating a lateral branch, these branches starting alternately right and left; the lateral branches mostly undivided, but occasionally giving off secondary branches; in the lateral branches, the geminate pairs giving off the next pair alternately from the right and left zoœcium; mouth large, lofty, straight below. Beneath the mouth a series of 5–7 fenestræ around an area continuous with that of the mouth, depressed at the margin and slightly bulging centrally; the mouth and fenestrate area surrounded by a thick margin; lateral processes large; at each upper angle a small, acuminate, chitinous process (possibly the mandible of a small avicularium); a minute, marginal, avicularium at the middle of each lateral process on the extremity of a tube-like mark; a small avicularium on a slight elevation between the zoœcia. Posterior surface umbonate and finely sulcate.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., July 1886.

Port Phillip Heads, Mr. J. B. Wilson.

I have only examined two small specimens of this species, which is characterized by the *constant* gemination and peculiar arrangement of the zoœcia. The structure of the zoœcia is, however, precisely that of the geminate pairs in *C. alata*, including the anterior avicularia and the chitinous points on the upper angles; and I at first referred it to that species, an opinion which Mr. Waters has also expressed in a letter to me. I think it ought, in consideration of its peculiar colonial habit, to be ranked as a species, although it is quite possible that the examination of other specimens may show that it is merely a variety of *C. alata*.

EXPLANATION OF FIGURE.

PLATE 146.—Fig. 1, portion of branch magnified, anterior view.

PLATE 146, FIG. 2.

CATENICELLA URNULA (McG.).

DESCRIPTION.—Zoœcia vase-shaped; mouth slightly hollowed below; anterior surface with 7 large, shallow fenestræ; lateral processes large, erect, sharply pointed, frequently a small avicularium on the front of one or both, and a shallow hollow on the superior surface. Posterior surface with a narrow, vertical, thickened band, from which two processes extend on each side to the margin of the zoœcium, leaving three shallow depressions. Oœcia galeate, on the summit of zoœcia.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., March 1886.

Port Phillip Heads, Mr. J. B. Wilson.

This species is of a dark reddish-brown colour, and attains a large size, a tuft received from Mr. Wilson being 6 inches in height. It is allied to *C. plagiostoma* and *C. intermedia*, but is readily distinguished by its straight mouth, the shallowness of the fenestræ, the shape and structure of the avicularian processes, and the markings on the back of the zoœcia. The oœcia are large and terminal. The ovicelligerous zoœcium has a deep, rounded sinus in the lower lip of the mouth, and a very large operculum; the upper margin of the mouth is bordered by a thick rim, above which, on each side of the oœcium, is a broad depressed area. The back of the ovicelligerous cell is smooth, separated by a raised line from the oœcium, which has usually a transverse, elliptical depression and two somewhat quadrate, superior spaces, separated by raised bands. I have only examined dried specimens, and it is possible that the depressed areas may, in the living state, be level or even elevated.

EXPLANATION OF FIGURES.

PLATE 146.—Fig. 2, front view of small portion of branch, magnified. Fig. 2a, back view of same.

PLATE 146, FIG. 3.

CATENICELLA GRACILENTA (McG.).

DESCRIPTION.—Zoœcia much elongated, very narrow; mouth arched above and slightly hollowed below, or sub-circular; anterior surface papillose, posterior smooth;

a narrow, entirely lateral vitta extending the whole length of the zoecium; lateral processes small, usually with a sharp angle above projecting outwards and forwards; a minute avicularium opening outwards on the outer edge. Oecium cemented to the front of the zoecium above, with a quadrate smooth area.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., Nov. 1884.

Port Phillip Heads, Mr. J. B. Wilson.

In this small species the zoecia are exceedingly slender. The oecium, which is cemented to the cell above, as in *C. elegans*, *Buskii*, *fusca*, and some others, has on the front a smooth, quadrate area, totally different from the markings of any other species.

EXPLANATION OF FIGURES.

PLATE 146.—Fig. 3, anterior surface of portion of a branch, magnified. Fig. 3a, posterior view of same.

PLATE 146, FIG. 4.

CATENICELLA VENUSTA (McG.).

DESCRIPTION.—Zoarium small; branches very slender, crystalline. Zoecia elongated, very narrow, with usually a sharp, barren process on one side and a thick aviculiferous one on the other; mouth sub-circular; a narrow, sub-lateral vitta extending about two-thirds of the length of the zoecium; surface in front slightly papillose. Oecia elongated upwards, adnate to the cell above, with a vertical thickened line (indicating the closure of a fissure), margin with a thickened rim, inside which is usually a series of white-bordered puncta.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., March 1886.

Port Phillip Heads, Mr. J. B. Wilson.

In this lovely species, the zoecia are remarkably slender. The avicularian processes are directed upwards and forwards; one is usually sharply pointed and without avicularium, while the other is thicker, and is surmounted by a minute avicularium.

EXPLANATION OF FIGURES.

PLATE 146.—Fig 4, anterior view of portion of a branch, magnified; an oecium shows the vertical fissure only partially closed. Fig. 4a, two zoecia and mature oecium. Fig. 4b, posterior view of portion of same branch.

PLATE 146, FIG. 5.

CLAVIPORELLA PULCHRA (McG.).

[Genus CLAVIPORELLA (McG.). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Catenicellidæ.)

Gen. Char.—Branches springing, usually, from the summits of the zoecia of a geminate pair, but, occasionally, from the sides of single zoecia. Zoecia single or geminate; usually a large lateral process on each side above, supporting a large, gaping avicularium, occasionally small, altered or aborted; mouth narrow, arched above, contracted below, and extending downwards as a deep notch, giving the whole a key-hole appearance; usually several blunt, hollow processes above and to the side of the mouth.]

DESCRIPTION.—Zoarium very small; branches originating either from the summits of geminate zoecia or from the sides of ordinary zoecia. Zoecia vase-shaped, with, usually, a wide lateral process on each side, turned slightly forwards and supporting a gaping avicularium; mouth narrow, with the oral sinus very narrow and with a tumid border; two blunt, mamilliform processes on each side of the mouth; a central, vertically-elongated pore in the front of the zoecium, the rest of the surface papillose, with the papillæ generally larger in the neighbourhood of the central pore; posterior surface smooth.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., July 1886.

Port Phillip Heads, Mr. J. Bracebridge Wilson.

At once distinguished from the other species by the smaller and narrower zoecia. It is the only species in which I have seen the branches originate from the sides of zoecia.

EXPLANATION OF FIGURE.

PLATE 146.—Fig. 5, portion of branch showing the anterior surface, magnified.

PLATE 146, FIG. 6.

CLAVIPORELLA IMPERFORATA (McG.).

DESCRIPTION.—Zoarium small; branches originating from the upper extremity of each of the zoecia of a geminate pair. Zoecia broadly vase-shaped; a wide, gaping avicularium (frequently differing in size or wanting) at each upper angle; mouth rather wide, oral sinus small; two mamilliform processes on each side of the mouth; front of zoecia papillose, usually a few of the papillæ towards the centre larger, and, when worn, forming pore-like marks, but no proper central pore. Posterior surface smooth. Zoecia galeate, tubercular, either surmounting the terminal zoecium of a branch or one in its continuity; in the former case the upper outline rounded, in the latter a wide, gaping avicularium at each upper angle.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., July 1886.

Port Phillip Heads.

Closely allied to *C. aurita* (Busk sp.), but differing principally in the absence of the central foramen. The genus *Claviporella*, as proposed by me, differs from *Catenicella* in the peculiar key-hole form of the mouth, and from *Calpidium*, in which the shape of the mouth is somewhat similar, in wanting the overarching hood of that genus.

EXPLANATION OF FIGURE.

PLATE 146.—Fig. 6, portion of branch, anterior surface, magnified, showing also a terminal oöcium and one in the continuity of a branch.

The specimens and descriptions of the Polyzoa on this Plate are from Mr. MacGillivray.

FREDERICK MCCOY.

PLATE 147, FIG. 1.

DIASTOPORA CRISTATA (McG.).

[Genus DIASTOPORA (JOHNSTON). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Tubuliporidae.)

Gen. Char.—Zoarium adnate, discoid or flabelliform, or wholly or partly raised and bilaminate. Zoecia tubular, with an elliptical or sub-circular orifice, crowded and immersed towards the centre, more distinct and partially free towards the margins.]

DESCRIPTION.—Zoarium either encrusting and with portions raised into bilaminate lobes, or wholly bilaminate, the laminae parted by a thin calcareous septum, the margin of which is produced beyond the zoecia to form a crest-like ridge. Zoecia crowded, free for a considerable extent; immersed portions separated by shallow grooves; surface finely and closely punctate, except the free part which is smooth or obscurely ringed; mouth circular or oblique. Oecium a large inflation of the zoarium.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., March 1886.

Port Phillip Heads, Mr. J. Bracebridge Wilson.

In some specimens, as that figured of the natural size, the greater part of the zoarium is bilaminate, the lobes being large and only a small part encrusting. In others, as in that from which the magnified figures were drawn, the zoarium is mostly encrusting, frequently surrounding the calcareous tubes of annelids, and in parts rising into small bilaminate lobes. In the encrusting parts a thin, basal, calcareous membrane frequently extends beyond the zoecia, and a similar membrane separates the layers of the bilaminate lobes. The zoecia vary a good deal in size, in some parts being almost wholly immersed, while in others the free part is long and tubular.

In the Proceedings of the Linnean Society of New South Wales for 1881, is a contribution by Mr. Haswell, describing a species as *Mesenteripora repens* which may be identical with this, but there is no figure, and the description is scarcely sufficient for identification.

EXPLANATION OF FIGURES.

PLATE 147.—Fig. 1, bilaminate specimen, natural size. Fig. 1a, one surface of a lobe from another specimen, showing the extension of the calcareous septum. Fig. 1b, another portion of the same, showing an encrusting portion, a bilaminate lobe, and an oecium.

PLATE 147, FIG. 2.

DIASTOPORA CAPITATA (McG.).

DESCRIPTION.—Zoarium consisting of bilaminar lobes, rising from an encrusting layer, by narrow, stem-like portions, and expanding above; lamina separated by a thin, calcareous septum, slightly produced beyond the zoecia. Zoecia indistinct at their lower parts, more or less free and tubular above, minutely punctate.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., March 1886.

Port Phillip Heads, Mr. J. Bracebridge Wilson.

The only specimen I have seen consists of a cluster of four lobes, rising from an encrusting layer of zoecia. Each lobe is narrowed and thicker below, expanded, thinner and undulated above, and usually divided into two secondary lobes. The summit of the lobes is flatter than in the last, and cellular from the openings of imperfectly formed zoecia. The zoecia are not so numerous on the stem-like portion, but increase in number and prominence upwards, until towards the summit they are considerably elongated to assume a corymbose appearance. In the encrusting part a few of the zoecia are closed, the lid having a minute perforation in its centre.

These two species are interesting, as clearly showing the unstable nature of the characters on which the genus *Mesenteripora*, as proposed by Blainville and generally adopted, is founded. Mr. Hincks has also, in the British Marine Polyzoa, united the two genera.

EXPLANATION OF FIGURES.

PLATE 147.—Fig. 2, specimen, natural size. Fig. 2a, one of the isolated lobes, magnified.

PLATE 147, FIG. 3.

DIASTOPORA BICOLOR (McG.).

DESCRIPTION.—Zoarium adherent, nearly circular, consisting of three parts: a central elevated portion composed of perfect zoecia, surrounded by a broad fringe of imperfectly developed zoecia, beyond which is a thin calcareous lamina; central portion red, much raised, flat and depressed at the centre; the remaining parts glassy.

Zoecia arranged in distinct, irregular, radiating series, slightly rugose and thickly punctate; mouth oval or elliptical, with slightly thickened margin; in the marginal zoecia open, most of the inner closed by a punctate or perforated plate; towards the centre are numerous rounded eminences, mostly at the commencement of series of zoecia, and of the same width, punctate or perforated in the same manner, but presenting no trace of mouth. Surrounding fringe consisting of a broad layer of imperfectly developed zoecia, and the thin lamina beyond marked with slight, radiating grooves, as occurs in the corresponding part of other species.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., Nov. 1884.

Port Phillip Heads, Mr. J. Bracebridge Wilson.

I have only seen two specimens—the perfect one figured, and another not so complete.

EXPLANATION OF FIGURES.

PLATE 147.—Fig. 3, specimen, natural size. Fig. 3a, the same magnified.

PLATE 147, FIG. 4.

DIASTOPORA SARNIENSIS (NORMAN).

DESCRIPTION.—Zoarium thick, encrusting, and irregularly shaped, or partly free at the margin. Zoecia large, distinct, arranged in irregular lines, a considerable part free, especially in those towards the margin; surface smooth or transversely corrugated, thickly punctate, except in the peristome; mouth circular or elliptical, in many of those towards the centre closed by a calcareous plate, with a central, raised, tubular opening.

REFERENCE.—Hincks, Brit. Mar. Polyzoa, p. 463, pl. lxvi., figs. 7-9.

Port Phillip Heads.

This species varies a good deal in size and shape. The zoecia are thick, usually pretty prominent and free; the curious cover when present gives a ready means of distinction from the other species. I have not seen the oecia, but they are described by Mr. Hincks as “transversely elongated, subelliptical inflations of the zoarium, of considerable size.”

EXPLANATION OF FIGURES.

PLATE 147.—Fig. 4, specimen, natural size. Fig. 4a, portion magnified. Fig. 4b, portion of same more highly magnified, showing the calcareous plates closing the orifices of several of the zoecia.

PLATE 147, FIG. 5.

DIASTOPORA PATINA (LAMARCK, SP.).

DESCRIPTION.—Zoarium small, thin, usually more or less circular or elliptical, surrounded by an extension of the basal lamina. Zoecia stout, thickly punctate, crowded, more immersed towards the centre, in more or less radiating lines towards the circumference and usually open; orifice in the central zoecia elliptical or round and frequently closed by a minutely perforated calcareous plate, in those towards the margin elliptical or produced on one side. Oecium a large inflation of the zoarium.

REFERENCE.—Hincks, Brit. Mar. Poly., p. 458, pl. lxvi., figs. 1-6.

Port Phillip Heads.

The specimens I have examined of this species are all small, silvery and encrusting. In Europe, where it is abundant, it seems to vary very much, being sometimes calciculate and partly free, and occasionally proliferous at the margins. A full account of these forms is given by Mr. Hincks.

EXPLANATION OF FIGURES.

PLATE 147.—Fig. 5, specimen, natural size. Fig. 5a, portion of same magnified, showing two central zoecia closed by perforated plates and an oecium.

The specimens and descriptions of our *Diastoporæ* on this plate I owe to Mr. MacGillivray.

FREDERICK MCCOY.

PLATE 148, FIG. 1.

CELLEPORA MEGASOMA (McG.).

[Genus CELLEPORA (FABRICIUS). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Celleporidæ.)

Gen. Char.—Zoarium encrusting, partly adnate, massive, foliaceous, erect and ramose, or glomerulous. Zoœcia, in the older parts more or less erect and irregularly heaped together; one or more rostral processes (occasionally absent), usually bearing avicularia, in the neighbourhood of the mouth. Generally scattered vicarious avicularia.]

DESCRIPTION.—Zoarium encrusting. Zoœcia ovoid, irregularly arranged, frequently bulging below, and with an imperfect umbo. Mouth arched above, about as high as wide, with a sinus in the lower lip. Scattered avicularia, frequently a small one, with a nearly semicircular mandible, below or to one side of the mouth. Oœcia large, rounded, granular or pitted.

REFERENCES.—P. H. MacGillivray, *Lepralia megasoma*, Prod. Zool. Vict., plate 38, fig. 5; *Cellepora megasoma*, Trans. Roy. Soc. Vict., 1884.

Port Phillip Heads.

Forms an encrusting zoarium, occasionally of large size, one specimen measuring 2 inches by 1½ inches. The marginal zoœcia are decumbent, and I believe it was a cluster of these that I described as *Lepralia megasoma*. The others are more or less elevated. There is no proper mucro. The surface of the zoœcia is normally smooth, but in portion of one specimen in which most are so, a number have a series of longitudinal elevated ribs extending the whole length.

EXPLANATION OF FIGURE.

PLATE 148.—Fig. 1, small group of zoœcia, magnified, showing also two pitted oœcia; the oral sinus is not generally so sharply defined.

PLATE 148, FIG. 2.

CELLEPORA COSTATA (McG.).

DESCRIPTION.—Zoarium small, encrusting or attached to algæ or zoophytes. Zoœcia large, very irregular, mostly erect, surface strongly ribbed; mouth lofty, arched above, with a deep rounded sinus in the lower lip; two or more stout, thick processes at its sides, rounded at the summits and surmounted on the inner side by a conspicuous oval avicularium. Oœcia rounded, with a mitriform or semicircular sculptured area.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., 1868.

Port Phillip Heads; Wilson's Promontory; Portland, Mr. Maplestone; Warrnambool, Mr. Watts.

This species is of frequent occurrence, and is found in small masses usually attached to Polyzoa and Hydrozoa. The zoëcia are very irregular, distinct, and mostly nearly erect. The surface is beautifully fluted, with prominent convex ribs extending from the mouth to the base. These are sometimes thicker above, forming a prominent ridge round the mouth. There are usually two (occasionally more) thick, erect, calcareous processes at the sides of the mouth, either smooth or fluted like the surface of the zoëcia. Each is surmounted, towards the inner side, by an oval or elliptical avicularium, with the mandible directed downwards. There are also, occasionally, larger vicarious avicularia, on elevated calcareous processes, with nearly semicircular mandibles. The oëcia are of considerable size, extending nearly horizontally from the upper edge of the mouth. They are rounded, occasionally smooth, but mostly with a sculptured area. These markings are usually shallow, but in old specimens are much deeper and more numerous, and the area then has a sharply defined margin.

EXPLANATION OF FIGURES.

PLATE 148.—Fig. 2, specimen, natural size. Fig. 2a, portion magnified, showing zoëcia previous to growth of oral processes; one with processes commencing to grow, and the others with one or two fully developed. The oëcia are of the usual appearance. A large vicarious avicularium is seen on the right.

PLATE 148, FIG. 3.

CELLEPORA ROTA (McG.).

DESCRIPTION.—Zoarium encrusting. Zoëcia irregularly arranged, nearly erect, more or less globose, surface smooth or pitted; mouth with a deep sinus in the lower lip; on each side of the mouth an elevated process, surmounted by a short broad avicularium, the mandible broadly triangular with an obtuse point. Oëcia much raised, with a nearly circular, defined area marked by radiating grooves.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., Dec. 1884.

Port Phillip Heads.

Allied to *C. costata*, with which it has been united by Mr. Waters, but certainly distinct. The zoëcia are distinct, little

prominent, in older specimens nearly globose. The surface is smooth or pitted, the pits occasionally, near the mouth, giving an obscurely ribbed appearance. The peristome forms a thin rim, with occasionally a prominence on each side, on the summit of which is an oval or broadly elliptical avicularium, the mandible directed upwards and outwards.

EXPLANATION OF FIGURES.

PLATE 148.—Fig. 3, two zoëcia from the growing edge. Fig. 3*a*, two zoëcia, with growing and mature oëcia. Fig. 3*b*, vertical view of zoëcium to show the mouth.

PLATE 148, FIGS. 5-6.

CELLEPORA COSTAZEI, VAR. (AUDOUIN).

DESCRIPTION.—Zoarium encrusting. Zoëcia ovate, smooth, irregularly arranged, confused; mouth wide, with a broad rounded sinus in the lower lip; usually a prominent mucro below the mouth, supporting a small avicularium and occasionally an aviculiferous process from the peristome on one or both sides. Numerous scattered avicularia, some very large, with broadly expanded spatulate mandibles. Oëcia of moderate size, with a rounded or mitriform area, bounded by a distinct, raised margin, pitted or sculptured in a radiate manner.

REFERENCES.—P. H. MacGillivray, Trans. Roy. Soc. Vict., 1884; typical form, Hincks, Brit. Mar. Pol., p. 411, pl. 55, figs. 11-14; typical form, *C. Hassallii*, Busk, Brit. Mus. Cat. Mar. Pol., pt. ii. p. 86, pl. cix., figs. 4-6.

Port Phillip Heads.

There may be some doubt as to the identification of this with the European species. It differs in the general absence of the elevated avicularia on the sides of the mouth, which are only occasionally found on one side. In an English specimen, however, they are also absent in many of the zoëcia. The sub-oral mucro is also generally wanting in English specimens. The vicarious avicularia are also larger in the Australian form. I had at first intended to describe it as a new species under the name of *C. spatula*, which may be retained as that of the variety.

EXPLANATION OF FIGURES.

PLATE 148.—Fig. 5, portion of specimen, magnified. Fig. 6, portion of another specimen. Fig. 6*a*, oëcia of same. Fig. 6*b*, single zoëcium, with avicularium on high process.

PLATE 148, FIG. 7.

CELLEPORA PLATALEA (McG.).

DESCRIPTION.—Zoarium very small, pisiform, glassy. Zoœcia very small, rounded, irregularly heaped; mouth slightly hollowed below, but without a distinct sinus; frequently a broad sub-oral mucro. Avicularia with very long, slender spatulate mandibles. Oœcia globular, with a distinct arched area with radiating grooves.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., Nov. 1884.

Port Phillip Heads, and probably common.

A very minute species, distinguished by the markings on the area of the oœcium, and the very long, narrow avicularia.

EXPLANATION OF FIGURE.

PLATE 148.—Fig. 7, portion of specimen, magnified.

PLATE 148, FIG. 8.

CELLEPORA GLOMERATA (McG.).

DESCRIPTION.—Zoarium very small, pisiform, glomerular, attached to stems of zoophytes. Zoœcia very irregularly heaped; mouth with a shallow sinus in the lower lip; in young zoœcia a long superior mucro with a sessile avicularium on the inner aspect; in older zoœcia a short, thick, sub-oral mucro with a small avicularium at the summit or internally; scattered vicarious avicularia, with broadly spatulate mandibles. Oœcia small, globular, smooth and glossy, or occasionally (when young) with a small mark on the front.

Port Phillip Heads, on Zoophytes.

A minute species, distinguished by its glomerulate mode of growth, the smooth oœcia, and the broadly spatulate avicularia.

EXPLANATION OF FIGURES.

PLATE 148.—Fig. 8, specimen, natural size. Fig. 8a, portion of same, magnified, showing young oœcia and avicularia. Fig. 8b, portion of same, showing marginal zoœcia with superior processes.

PLATE 148, FIG. 9.

CELLEPORA VITREA (McG.).

DESCRIPTION.—Zoarium small, encrusting, glassy. Zoœcia elongated, distinct, horizontal at the margins, more confused centrally; margins areolated or surface traversed by prominent glassy ribs; mouth with a rather wide and not very deep sinus on the lower lip; a large, broad, smooth mucro below the mouth.

Port Phillip Heads, a single specimen, Mr. J. B. Wilson.

I have some doubt whether to refer this species to *Cellepora* or *Schizoporella*. The marginal zoecia are quite horizontal, those further removed confused, but not so erect as usual in *Cellepora*. The sub-oral rostrum seems to be unarmed, but it is possible that there may be an avicularium on its internal surface. I have another specimen which seems to belong to the same species. In it the zoecia are shorter, some smooth, but others with glassy elevations, the sub-oral process rises and curves forward, or occasionally inclines to one side, and has a small avicularium on the inner surface towards the summit. The oecia are rounded, with a small, nearly circular area, punctate within the margin. There are also several vicarious avicularia with spatulate mandibles. This latter specimen agrees with Busk's *C. signata* of the "Challenger" Polyzoa in the markings of the oecia and the vicarious spatulate avicularia, but differs in the sub-oral mucro and in the wider and shallower sinus.

EXPLANATION OF FIGURE.

PLATE 148.—Fig. 9, portion of specimen, magnified.

PLATE 148, FIG. 10.

CELLEPORA TIARA (McG.).

DESCRIPTION.—Zoarium minute, encrusting. Zoecia small, rather short, smooth, confused; primary mouth with a rather deep, narrow, slit-like sinus; peristome considerably developed, with a stout, thick mucro at one side, usually slightly overarching the mouth, and surmounted by a comparatively large avicularium with broadly triangular mandible. Oecia sub-globular, reclinate, with a sub-triangular, smooth, or sculptured area.

Port Phillip Heads.

The few specimens I have are all growing on *Retepora monilifera*. It is distinguished by the thick, incurving oral mucro and the character of the area on the front of the oecium.

EXPLANATION OF FIGURES.

PLATE 148.—Fig. 10, specimen, natural size, encrusting *Retepora*. Fig. 10a, portion of same, magnified. In all the zoecia the primary mouth is obscured by the peristome.





