PLATE 185, FIG. 1.

AMATHIA BICORNIS (TENISON-WOODS).

[Genus AMATHIA (LAMOUROUX) = SERIALARIA (LAMARCK). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Ctenostomata. Family Vesicularidæ.)
Gen. Char.—Zoarium radicate, erect or creeping, with free filiform dichotomous branches. Zoœcia sub-tubular, connate, in two parallel rows, continuous or in distinct groups which are placed on one or two sides of the branches or wound spirally, partially or wholly, round them.]

DESCRIPTION.—Zoœcia of moderate height, deeply hollowed above (when dry), with a long hollow process on each side at the summit, arranged in close spiral clusters of about two whirls, the basal clear parts of the internodes being about the same length as the clusters.

REFERENCES.—*Serialaria spiralis*, Tenison-Woods, Trans. Roy. Soc. N. S. Wales, 1877, p. 84; *Amathia bicornis*, Tenison-Woods, Tr. Roy. Soc. Vict., June, 1879.

Port Phillip Heads.

Forms dense masses of a brownish colour, the largest I have being about an inch and a half in each direction. The close double spiral clusters, separated by clear portions of the branches of about the same length, with the peculiar hollow processes from the summits of the zoœcia, are sufficiently distinctive.

EXPLANATION OF FIGURES.

PLATE 185.—Fig. 1, part of specimen, natural size. Fig. 1*a*, small portion of same, magnified. Fig. 2*b*, two zoœcia, more highly magnified.

PLATE 185, FIG. 2.

AMATHIA SPIRALIS (LAMX).

DESCRIPTION.—Zoarium forming large tufts of dichotomously divided branches. Zoœcia very long and narrow, arranged in a continuous spiral round the branches, interrupted only at the bifurcations.

REFERENCE.—Lamouroux, Hist. des Polyp. Corall. Flex., p. 161, pl. iv., fig. 2.

Port Phillip Heads.

This species occurs in tufts several inches in height. The zoœcia form a continuous spiral round the branches, interrupted only at the bifurcations. They are separated by deep grooves, but in dried specimens, as in that figured, they become depressed and the partitions appear as prominent ridges. The united separating walls of contiguous zoœcia project upwards as blunt points (more prominent when dried). It is at once distinguished from the other species by its stoutness, the uniform length of the zoœcia and the closeness of the spiral entirely concealing the branches except at the bifurcations. There can be no doubt that this is Lamouroux's species. That described and figured by Busk as *A. spiralis* in the "*Challenger*" Polyzoa is quite different.

EXPLANATION OF FIGURES.

PLATE 185.—Fig. 2, branch, natural size. Fig. 2*a*, portion of same (dried), magnified.

PLATE 185, FIG. 3.

AMATHIA TORTUOSA (TENISON-WOODS).

DESCRIPTION.—Zoarium slender, straggling, of a dull olive colour; branches clear and glassy. Zoœcia slender, of moderate height, arranged in long spiral clusters extending from two-thirds to more than a complete turn round the axis, and leaving a clear space at the base of the internode.

REFERENCES.—*A. tortuosa*, Tenison-Woods, Tr. Roy. Soc. Vict., 1879. *A. connexa*, Busk, "*Challenger*" Polyzoa, pt. ii., p. 35, pl. vi., fig 3.

Port Phillip Heads; Sealers' Cove, Baron von Mueller.

I believe that this is the species intended by Mr. Woods, although it does not quite agree with his figure and description. Mr. Busk, however, was doubtful as to the identification and named this *A. connexa*, considering another allied species, which he describes and figures, to be the true *A. tortuosa*.

The branches are colourless, very clear, and glassy. The zoœcia are of moderate height, of nearly uniform size, although usually rather shorter distally, and are arranged in an open spiral forming a nearly complete turn. The figure, taken from a dried specimen, does not show the characters so satisfactorily as one preserved in spirit, and I shall therefore give a fresh one when figuring the remaining species of the genus.

EXPLANATION OF FIGURES.

PLATE 185.—Fig. 3, portion of specimen, natural size. Fig. 3*a*, portion of same, magnified.

PLATE 185, FIG. 4.

AMATHIA INARMATA (McG.).

DESCRIPTION.—Zoœcia arranged in unilateral biserial groups of 4-9 pairs, occupying nearly the whole length of the internodes which are slightly arcuate, of moderate height, slightly diminishing towards the distal extremity.

REFERENCE.—P. H. MacGillivray, Tr. Roy. Soc. Vict., Nov., 1886.

Port Phillip Heads.

This is considered by Kirkpatrick (Ann. and Mag. Nat. Hist., July, 1888) to be the *A. biseriata* of Krauss. I have not seen Krauss's work (Corallinen und Zoophyten der Sudsee), and therefore cannot say whether this identification is correct. South African specimens, however, which I have received from Dr. Pergens as *A. biseriata* are certainly different.

The extent of internode occupied by the clusters varies, these sometimes extending almost the whole length, at other times a considerable portion at the base being bare.

EXPLANATION OF FIGURES.

PLATE 185.—Fig. 4, portion of specimen, natural size. Fig. 4*a*, part of same, magnified.

PLATE 185, FIG. 5.

AMATHIA AUSTRALIS (TENISON-WOODS).

DESCRIPTION.—Zoœcia arranged in straight unilateral clusters of 5-7 subalternate pairs, of nearly uniform thickness, diminishing in height from the proximal to the distal; the terminal clusters having beyond the distal zoœcia a pair of large, confervoid, and frequently branched processes; a similar process often replacing a branch at a bifurcation.

REFERENCES.—*Serialaria Australis*, Tenison-Woods., Proc. Roy. Soc. N. S. Wales, 1877; *Amathia Australis*, T.-Woods, Tr. Roy. Soc. Vict., 1879.

Port Phillip Heads.

Occurs in loose tufts several inches in height. The zoœcia usually diminish in height from the proximal to the distal, but are occasionally nearly equal throughout the clusters. At a bifurcation one branch is frequently represented by a confervoid filament similar to those at the extremities of the terminal clusters.

This species is probably the *A. cornuta* of Lamouroux. His figure, however, represents the zoœcia as increasing in height from the proximal to the distal, and as there is, therefore, some doubt about the determination, it is better to adopt Mr. Tenison-Woods' name.

EXPLANATION OF FIGURES.

PLATE 185.—Fig. 5, portion of specimen, natural size. Fig. 5*a*, part of same, magnified.

The specimens and descriptions illustrated by this plate are from Mr. MacGillivray.

FREDERICK McCOY.

PLATE 186, FIG. 1.

SCHIZOPORELLA ROSTRATA (McG.)

[Genus SCHIZOPORELLA (HINCKS). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Escharidæ).

Gen. Char.—Zoarium encrusting, or erect and foliaceous, or columnar and branched. Zoœcia closely adherent to each other; lower lip with a distinct notch or sinus; no true peristome]

DESCRIPTION.—Zoarium encrusting. Zoœcia rhomboidal, separated by narrow, sharply-raised margins, very slightly convex or nearly flat, silvery, with numerous faintly-bordered pores; mouth with a wide shallow sinus in the lower lip and a minute denticle on each side internally; an elevated process immediately below the lower lip, on the inner aspect of which is an avicularium with the triangular mandible pointed upwards. Oœcia large, globular, surface punctate or obscurely perforated.

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

Port Phillip Heads, Mr. J. Bracebridge Wilson.

EXPLANATION OF FIGURES.

PLATE 186.—Fig. 1, two young zoœcia. Fig. 1*a*, another portion from same specimen, showing older zoœcia and oœcia.

PLATE 186, FIG. 2.

SCHIZOPORELLA WOOSTERI (McG.).

DESCRIPTION.—Zoœcia broad, subquadrate, separated by distinct raised margins, surface granulated; mouth subcircular, with a wide rounded sinus below. An avicularium, with semicircular mandible, on each side of the mouth at the upper angles of the zoœcia.

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

Queenscliff, Mr. Wooster.

EXPLANATION OF FIGURE.

PLATE 186.—Fig. 2, small portion of specimen, magnified.

PLATE 186, FIG. 3.

SCHIZOPORELLA PULCHERRIMA (McG.).

DESCRIPTION.—Zoœcia separated by narrow raised lines, broad and nearly flat, surface hyaline, traversed by faint lines converging from minute pores or depressions at the margins; mouth very wide, edge thickened, contracted towards the base, and the lower lip forming a shallow sinus or nearly straight. A broadly elliptical avicularium placed obliquely on each side of the mouth.

REFERENCE.—P. H. MacGillivray, Tr. Roy. Soc. Vict., Nov., 1885.

Port Phillip Heads.

The only specimen I have seen is in the hemeschara form. It is not complete, measures three-eighths of an inch across, and is remarkable for the small amount of calcareous matter, being very thin and translucent.

EXPLANATION OF FIGURE.

PLATE 186.—Fig. 3, portion of specimen, magnified. The middle zoœcium is probably formed by the fusion of two.

PLATE 186, FIG. 4.

SCHIZOPORELLA LATISINUATA (HINCKS).

DESCRIPTION.—Zoarium encrusting. Zoœcia large, broad, separated by raised thickened margins, surface punctate and perforated—when recent, covered by a delicate epitheca; mouth arched above, with a wide notch beneath, not contracted at its opening; edge of mouth slightly thickened. Oœcia large, globose, granular, or perforated, frequently personate.

REFERENCE.—Hincks, Ann. and Mag. Nat. Hist., Aug., 1882.

Port Phillip Heads.

The form of the mouth in the figured specimen differs somewhat from that given by Mr. Hincks, the sinus in the lower lip being narrower and deeper, and the border of the mouth thinner.

In other specimens, however, it is much shallower and scarcely distinguishable. The separating margins at their junctions with the sides of the mouth occasionally rise to form an acute angle projecting forwards.*

EXPLANATION OF FIGURE.

PLATE 186.—Fig. 4, portion of specimen, magnified.

PLATE 186, FIG. 5.

SCHIZOPORELLA BITURRITA (HINCKS).

DESCRIPTION.—Zoarium thick, encrusting algæ. Zoœcia confused, indistinct, large, oblong; surface granular and perforated; mouth very large, with a deep, wide, rather pointed sinus in the lower lip. A large triangular avicularium on the inner side of a thick calcareous process on either side of the mouth. Oœcia large, conical, surmounted by a thick, prominent umbo; surface strongly granular and perforated.

REFERENCE.—Hincks, Ann. and Mag. Nat. Hist., Oct., 1884.

Port Phillip Heads.

This very peculiar and striking species is readily distinguished. It forms thick, calcareous layers, usually surrounding the stems of small dark algæ. The zoœcia are very indistinct, little prominent except immediately below the mouth. The surface is covered with granulations and pores. The mouth is very large and wide, with a broad sinus in the lower lip. On each side of the mouth is a stout, calcareous process, on the inner aspect of which is a large, triangular avicularium with the mandible pointed upwards. The upper part of this process is mamilliform and nearly smooth, the lower part granular. The oœcia are very large, mamilliform, surmounted by a nearly smooth, blunt umbo; the remainder covered with large granulations and round pores. These granulations and pores are arranged in more or less radiating and concentric series.

EXPLANATION OF FIGURES.

PLATE 186.—Fig. 5, specimen, natural size. Fig. 5*a*, two zoœcia and oœcia, magnified. Fig. 5*b*, oœcium and oral avicularium seen in profile.

* Since the above was printed I have received specimens precisely agreeing with Hincks' figure and description, and differing a good deal in the mouth from those previously examined by me. I will give a figure, with description, in another plate. It may be doubted whether the present should not be considered a distinct species.

PLATE 186, FIG. 6.

SCHIZOPORELLA PACHNOIDES (McG.)

DESCRIPTION.—Zoarium encrusting. Zoœcia elongated, irregular in shape, separated by distinct grooves with an elevated line at the bottom; surface covered with small elevations, or, from the opening of these, white-bordered pores; mouth lofty, horse-shoe shaped, with a wide, deep sinus in the lower lip; margin thickened, especially below; upper border becoming thickened and raised with age. An avicularium, with the triangular mandible pointed straight or obliquely downwards, on a slight elevation below the mouth. Oœcia of moderate size, rounded, finely granular.

REFERENCE.—P. H. MacGillivray, Tr. Roy. Soc. Vict., Nov., 1886.

Port Phillip Heads.

EXPLANATION OF FIGURES.

PLATE 186.—Fig. 6, group of zoœcia, magnified. Fig. 6*a*, single zoœcium.

PLATE 186, FIGS. 7–9.

SCHIZOPORELLA HYALINA (LINN. SP.).

DESCRIPTION.—Zoarium thin and silvery. Zoœcia in more or less radiating lines, closely united or separated by punctures, elongated, smooth, or transversely rugose; mouth subcircular, lower lip entire or with a sinus. Oœcia large, globose, smooth, vertically carinate, or umbonate, or granular, or perforated.

REFERENCES.—*Schizoporella hyalina*, Hincks, Brit. Mar. Pol., p. 271, pl. xviii., figs. 8–10; pl. xlv., fig. 2. *Lepralia hyalina*, Busk, Brit. Mus. Cat. Mar. Pol. pt. ii., p. 84; pls. lxxxii., xcv., ci.

On algæ, shells, and stones, common.

This cosmopolitan species usually occurs in small circular colonies on algæ or shells. The zoœcia are thin and hyaline, arranged in irregularly radiating lines, either closely united or separated by intervening perforated spaces, the parts between the perforations being hollow or tubular. They are generally much

elongated and transversely rugose. Sometimes, however, they are quite smooth. The mouth varies considerably, being either subcircular and entire or with a sinus in the lower lip. The part immediately below the mouth is frequently produced upwards and forwards into a transverse umbo obscuring the lower lip. The oœcia also vary very much. They are crowded towards the centre of the zoarium where they frequently present somewhat the appearance of a Cellepore. The ovicelligerous zoœcia, as pointed out by Mr Hincks, are mostly small and aborted.

The following varieties have been distinguished :—

Var. α: *cornuta.*—A stout tubular process on each side of the mouth.

Var. β: *incrassata.*—Walls thickened and opaque.

Var. γ: *tuberculata.*—A number of tubercles on the front of the zoœcia, and often a strongly developed umbo below the orifice.

Var. δ: *pellucida.*—Described and figured in Plate 38, fig. 9, of the present work as *Lepralia pellucida.* Zoœcia very thin and pellucid, mouth small and sinuated. Oœcia smooth and carinate.

There is some difference of opinion as to the generic position of the species, it presenting several of the characters of *Chorizopora. Schizoporella,* however, seems to be its proper place.

EXPLANATION OF FIGURES.

PLATE 186.—Fig. 7, single zoœcium, showing a sinus in the lower lip. Fig. 8, group of zoœcia from another colony. Fig. 9, part of a colony, showing zoœcia with the lower lip entire or sinuated, and oœcia variously smooth, umbonate, and perforate.

I am indebted to my friend Mr. MacGillivray for the specimens and descriptions of the Polyzoa on this plate.

FREDERICK McCOY.

PLATE 187, FIGS. 1–3.

MEMBRANIPORELLA DISTANS (McG.).

[Genus MEMBRANIPORELLA (SMITT). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Cribrilinidæ.)

Gen. Char.—Zoarium adnate or foliaceous. Zoœcia contiguous or disjunct; front closed by a series of flattened, more or less consolidated, calcareous ribs.]

DESCRIPTION.—Zoœcia contiguous or separated, oval or elongated; ribs 8–11 on each side, a thin raised line down the centre marking the suture of the opposite ribs; mouth with 2–6 thick, articulated spines. Oœcia rounded, with a depressed area separated by a thick margin.

REFERENCE.—P. H. MacGillivray, Trans. Roy. Soc. Vict., July, 1882.

Port Phillip Heads; Warrnambool, Mr. H. Watts.

In young specimens the ribs are seen to bifurcate at the inner extremities. At first they are separated by considerable intervals, but, as growth and calcification advance, they become almost contiguous. The oral spines are thick and occasionally almost pod-like, the first pair frequently larger. The oœcium has a large depressed area in front bounded by a thickened ridge. The ovicelligerous cells have one pair of spines. In the first specimen described the zoœcia are separated by considerable distances, but in others they are closely adjunct, although with a tendency to spread at the edges of the zoarium. It is allied to the European *M. nitida*, from which it differs in the stouter spines and, especially, in the structure of the oœcia. There are no avicularia in my specimens.

EXPLANATION OF FIGURES.

PLATE 187.—Figs. 1 and 1*a*, zoœcia from the disjunct form, young. Fig. 2, zoœcia and oœcia from an older and more calcified specimen. Fig. 2*a*, single oœcium.

PLATE 187, FIGS. 3 AND 4.

CRIBRILINA RADIATA (MOLL. SP.).

[Genus CRIBRILINA (HINCKS). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Cribrilinidæ.)

Gen. Char.—Zoarium encrusting, or adnate, or erect. Front of zoœcia with radiating furrows occupied by regular series of perforations, or irregularly pierced by large, more or less rounded foramina; mouth semicircular or subcircular, entire below.]

DESCRIPTION.—Zoarium crustaceous. Zoœcia closely adjunct or slightly separated and connected by an intervening basis, rounded or ovate; front occupied by 6–10 ribs on each side radiating from a smooth or ridged central spot or line, the intervening sulci pierced by a row of small round foramina; a triangular smooth space below the mouth usually bounded by a raised margin and with a small perforation at the lower part; mouth semicircular, with 4–6 spines on the upper margin and frequently a thin setiform spine on each side below the angle. Oœcia globular, smooth, with a vertical ridge or umbo.

REFERENCE.—*C. radiata* (including *innominata*), Hincks, Brit. Marine Polyzoa, p. 185, pl. xxxvi., figs. 1–9.

Port Phillip Heads, on shells and calcareous nodules.

This beautiful species is subject to considerable variation. The zoœcia are usually ovate or nearly round, sometimes they are narrower and produced below, or they may be very broad. The centre is usually raised into a ridge or keel, terminating above in an umbo; sometimes, however, it is smooth. The aperture in the triangular smooth space below the mouth is by no means constant and the bounding ridge is frequently absent, as are also the setiform spines. The extent and prominence of the oœcial ridge varies. Avicularia are rarely (in Australian specimens) developed between the zoœcia.

There is no doubt that Mr. Hincks is right in uniting *C. radiata* and *innominata*.

EXPLANATION OF FIGURES.

PLATE 187.—Fig. 3, small group of zoœcia, with the ribs very prominent and showing the setiform spines. Fig. 4, three zoœcia, from another specimen, slightly separated from each other.

PLATE 187, FIG. 5.

CRIBRILINA SETIROSTRIS (McG.).

DESCRIPTION.—Zoarium crustaceous. Zoœcia distinct, elongated, surface with numerous round or pyriform foramina, frequently arranged in irregular single or double transverse rows; mouth arched above, straight below, margin thickened and

frequently produced into a sharp point at the centre of the lower lip. An avicularium at the base of the zoœcium, with a very long setiform mandible directed up one side of the cell.

REFERENCE.—P. H. MacGillivray, Tr. Roy. Soc. Vict., Oct., 1882.

Port Phillip Heads.

This species may be at once recognised by the peculiar avicularia with the long setiform mandibles.

EXPLANATION OF FIGURE.

PLATE 187.—Fig. 5, group of zoœcia. In all the lower lip is smooth, but the peristome is very frequently produced into a short, sharp, central process.

PLATE 187, FIG. 6.

CRIBRILINA MONOCEROS (BUSK).

DESCRIPTION.—Zoarium adherent or hemescharine. Zoœcia with large foramina, the margins of which are thickened; mouth large, the peristome of the lower lip raised into a central pointed process; occasionally two or three thin and furcate spines on the upper margin of the mouth; a thick oral spine on one side of the mouth, within the peristome. Oœcia subimmersed, smooth, or with slight radiating ridges, and frequently with two or more avicularia on elevations. Avicularia absent, or numerous and very variable; in some specimens scattered and usually close to the sides of the zoœcia, with sharp or blunt mandibles; in others very large, with large acute or spatulate mandibles; they are also found sessile on eminences round the mouth, and one occasionally surmounts the mucronate elevation of the lower lip.

REFERENCES.—Busk, Brit. Mus. Cat., Mar. Pol. pt. ii., p. 72, pl. xciii., figs. 5, 6; MacGillivray, Prd. Zool. Vict., pl. xxxv.

Port Phillip Heads; Portland, Mr. Maplestone; Warrnambool, Mr. Watts.

Two distinct species seem to have been confounded under this name, and I therefore give an amended description and an additional figure of the true *C. monoceros*—that of Busk in the British Museum Catalogue and myself in this work.

EXPLANATION OF FIGURE.

PLATE 187.—Fig. 6, zoœcia and oœcia, showing the intra-peristomial spine.

PLATE 187, FIG. 7.

CRIBRILINA ACANTHOCEROS (McG.).

DESCRIPTION.—Zoarium adherent. Zoœcia with large foramina; mouth large, lower lip straight, without mucro; a large spine, very long, and with sharp secondary spines or prickles directed upwards, immediately below the lip and to one side. Oœcia subimmersed, usually with a small mitriform smooth space below, and several large perforations round the upper margin. Frequently a large avicularium, with triangular mandible, at each side of the mouth towards the angle.

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

Port Phillip Heads; Portland, Mr. Maplestone.

This differs from *C. monoceros* in the following points:—The lower lip is straight and the peristome is not developed into a mucro; the oœcium is somewhat different; and especially the situation of the azygos oral spine is different. In *C. monoceros* it is always situated at one side of the mouth, close to the margin above the angle and is enclosed within the peristome when that is developed. In *C. acanthoceros* the spine, besides being very long and furnished with the peculiar armature, is situated *below* the lower lip, and if a peristome should be developed, which I have never seen, would be outside it.

EXPLANATION OF FIGURE.

PLATE 187.—Fig. 7, two zoœcia, showing oral spines and avicularia.

PLATE 187, FIGS. 8 AND 9.

HIPPOTHOA DIVARICATA (BUSK).

[Genus HIPPOTHOA (LAMOUROUX). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Escharidæ.)

Gen. Char.—Zoarium adnate. Zoœcia distant, connected by creeping tubes so as to form linear series, or partly clustered in small patches; mouth with a sinus in the lower lip.]

DESCRIPTION.—Zoœcia connected by short thick tubes, pyriform, usually carinate, smooth or finely striated, or transversely annulated or corrugated; mouth with a slight notch in the lower lip. Oœcium surmounting a zoœcium, rounded, smooth, or slightly carinate, or with a rounded umbo.

REFERENCES.—*H. divaricata*, Busk, Brit. Mus. Cat. Mar. Pol., pt. i., p. 30, pl. xviii., figs. 3, 4; Hincks, Brit. Mar. Pol., p. 288, pl. xliv., figs. 1–4; and pl. i., fig. 2; *H. patagonica*, Busk, Brit. Mus. Cat. Mar. Pol., pt. i., p. 30, pl. xvii., fig. 1.

Hobson's Bay and Port Phillip Heads, on algæ, shells, and zoophytes. Usually occurs in slender, silvery, dendritic colonies, the zoœcia being connected by short, rather thick fibres, originating from the summits or sides of the zoœcia in irregular numbers (usually one or two) and occasionally branching from other tubes. The tubes or fibres are smooth or annulated. Their length varies very much, being sometimes considerably longer than the zoœcia, at other times short and scarcely apparent, the result being in the so-called variety *conferta* almost as close an aggregation as in a *Lepralia*, but with a tendency to branch off at the edges. The mouth is expanded above, narrowed below, and has usually a shallow sinus in the lower lip. The oœcium is round or globular, the zoœcium which it surmounts usually smaller than the normal, and frequently originating directly from the side of another. The oœcium also frequently has a round boss or umbo in front. The roughly annulated form is Busk's *H. patagonica*.

EXPLANATION OF FIGURES.

PLATE 187.—Fig. 8, portion of a specimen with the zoœcia transversely striated and carinate. Fig. 8*a*, zoœcium and oœcium from the same. Fig. 9, portion of another specimen, with zoœcia mostly annulated and those bearing oœcia arising from the sides of ordinary zoœcia, connecting fibres of considerable length.

PLATE 187, FIGS. 10–13.

HIPPOTHOA DISTANS (McG.).

DESCRIPTION.—Zoœcia connected by very long, slender threads, small, elongated, smooth, finely striated, or faintly annulated; anterior surface rounded or carinate; mouth subcircular, or wider above and narrowing downwards into a shallow sinus, peristome distinctly thickened. Oœcia globular, terminal, smooth, or umbonate.

REFERENCES.—*H. distans*, P. H. MacGillivray, Tr. Roy. Soc. Vict., 1868; *H. flagellum*, Hincks, Brit. Mar. Pol., p. 293, pl. xliv., figs. 5—7; Busk, Chall. Pol., pt. i., p. 4, pl. xxxiii., fig. 7.

Hobson's Bay and Port Phillip Heads, on algæ shells and zoophytes, probably common in other localities also. Differs from *H. divaricata* in the zoœcia being much smaller and narrower and the connecting tubes being very long and slender. The zoœcia are usually much elongated, narrow, and smooth, or very faintly striated, and are frequently carinate. The anterior extremity of the zoœcium sometimes projects slightly forwards. The mouth is small, narrowed below into an inconspicuous sinus and has a narrow peristome. In addition to the fibres from the end, very frequently one arises from each side of a zoœcium.

This species and *H. divaricata* are very closely allied, differing chiefly in the zoœcia of the present species being much smaller, narrower, and more elongated, and in the connecting tubes being very long and thin. The oœcium is similar to that of *H. divaricata*, except that it is smaller.

There can be no doubt that *H. flagellum* of Manzoni, Hincks in British Marine Polyzoa, and Busk in the "*Challenger*" Polyzoa, is the same as the present species, an identification which has already been made by Hincks. Both Hincks and Busk describe and figure the zoœcia as smooth and destitute of carina, but in Manzoni's figure of *H. flagellum* they are distinctly carinate.

EXPLANATION OF FIGURES.

PLATE 187.—Fig. 10, portion of specimen on shell. Figs. 11, 12, and 13, zoœcia from another specimen on an alga. One zoœcium is very sharply carinate, another strongly annulate, whilst the ovicelligerous one is nearly smooth.

PLATE 187, FIG. 14.

ELECTRA AMPLECTENS (HINCKS SP.).

[Genus ELECTRA (LAMOUROUX). (Sub-kingdom Mollusca. Class Polyzoa. Order Infundibulata. Sub-order Cheilostomata. Family Membraniporidæ.)

Gen. Char.—Zoarium encrusting, or filiform and erect, or foliaceous. Zoœcia elongated, narrow below, closely adherent together, lower part convex; area oval or rounded, occupying the whole width of the zoœcium above, deep, with thickened margins; one or more large, whip-like spines (occasionally replaced by an avicularium) below the margin of the area, and a variable number of short, sharp spines on its circumference.]

DESCRIPTION.—Zoarium encrusting. Zoœcia arranged in single, bifurcating series, pyriform, with smooth surface; aperture oval, occupying more than half the front of the zoœcium and with a slightly thickened margin, covered with a thin membrane; two thin spines above at the upper extremity of the zoœcium and two, or usually three, short, sharp spines on each side of the aperture; a long, flexible spine immediately below the lower edge of the aperture. Oœcia situated above a zoœcium at the bifurcation of a branch, oval, the front surface covered by a series of slender, converging ribs connected by a thin membrane and bounded by a narrow calcareous line, beyond which is a smooth part.

REFERENCE.—*Membranipora amplectens*, Hincks, Ann. and Mag. Nat. Hist., Aug., 1881.

Port Phillip Heads, Mr. J. Bracebridge Wilson.

I have only seen one not very good specimen on a piece of alga, covered also with *Schizoporella hyalina*. It is allied to *E. pilosa*, but is very much smaller. The oœcium is very peculiar. The front wall is covered by a series of slender, white ribs converging to a short line in the lower part. The ribs are bounded externally by a narrow calcareous rim and are connected by a thin membrane which is frequently slightly deficient at the margin. Beyond the ribbed part is a narrow smooth portion.

EXPLANATION OF FIGURES.

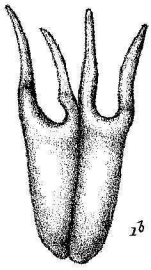
PLATE 187.—Fig. 14, small portion of a specimen. The zoœcium of the commencing branch at one side of the bifurcation below the oœcium is deficient. Fig. 14*a*, another portion of the same specimen, showing three zoœcia and an oœcium, more highly magnified to show the structure of the latter.

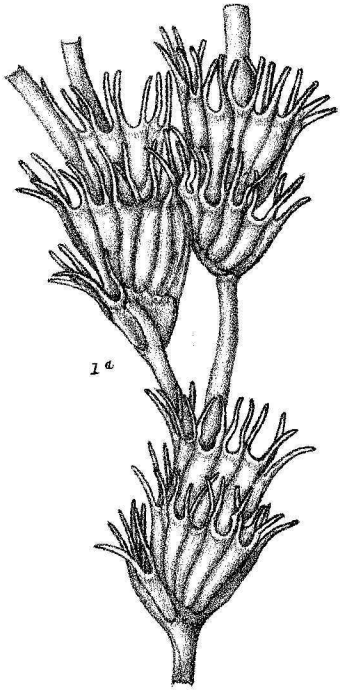
Mr. MacGillivray has contributed the specimens and descriptions for this plate.

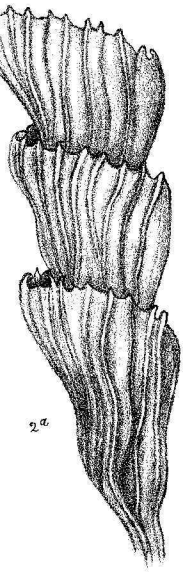
FREDERICK McCOY.

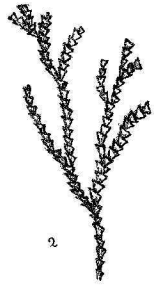
ZOOLOGY OF VICTORIA

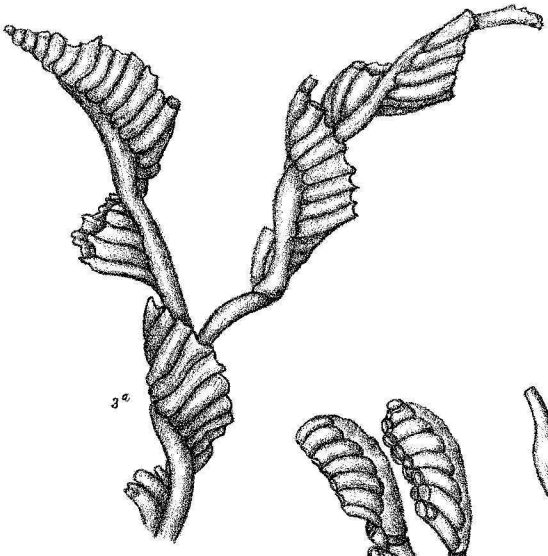
(Polyzoa)

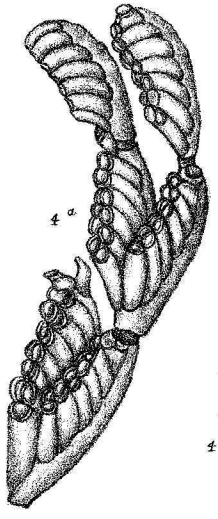


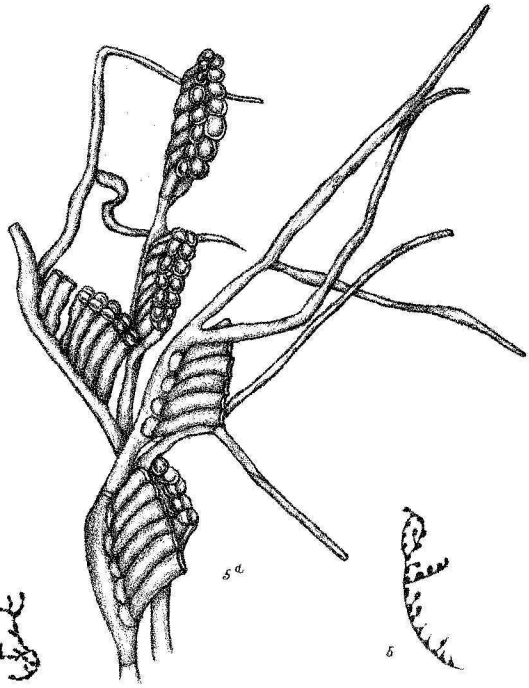










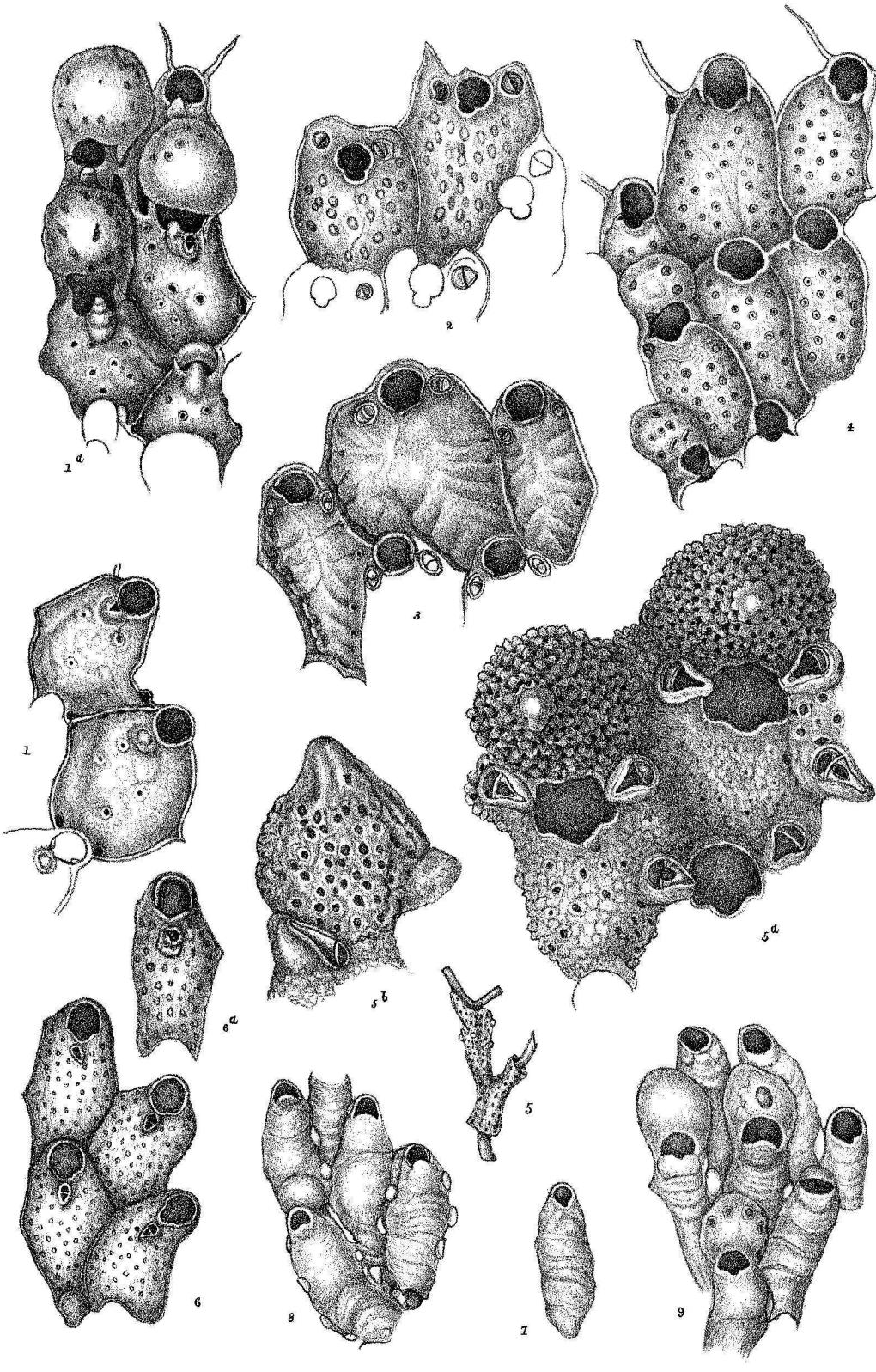


P.H. Macgillivray del.
J. Ripper lith.

Prof.r M.c Coy direct.

Steam. litho. Govt. Printing Office.

ZOOLOGY OF VICTORIA
(Polyzoa)

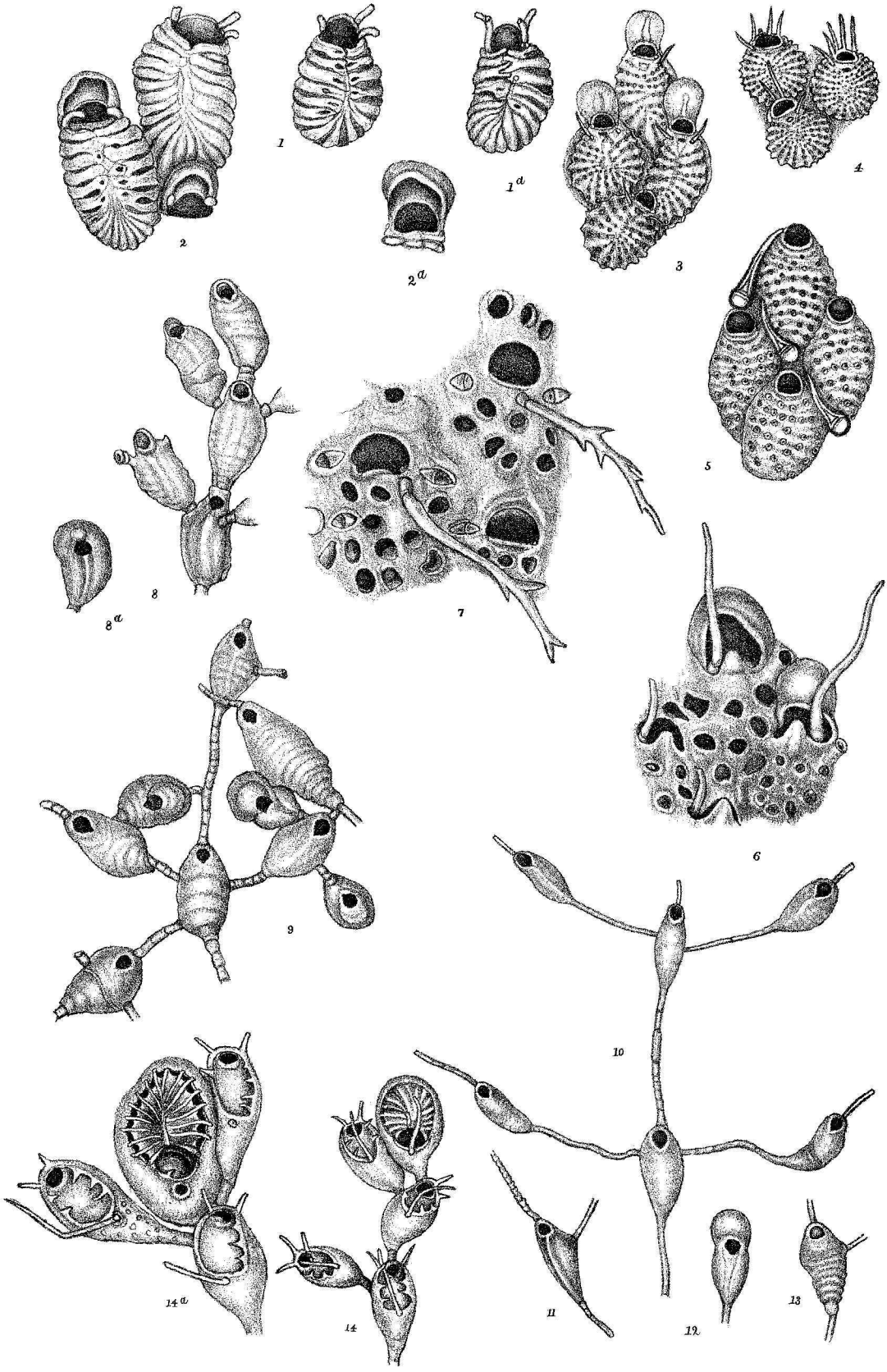


P.H. Macgillivray del.
J. Ripper lith.

Prof. M^c Coy direx^t.

Steam. Litho. Gov^t Printing Office

ZOOLOGY OF VICTORIA
(Polyzoa)



P.H. Macgillivray del.
J. Ripper lith.

Prof. McCoy direxit

Steam Litho. Govt Printing Office