Annals and Magazine of Natural History: Series 7

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tnah13>

I.—Notes on some Recent Bryozoa in d'Orbigny's Collection

Arthur Wm. Waters

Published online: 01 Dec 2009.

To cite this article: Arthur Wm. Waters (1905) I.—Notes on some Recent Bryozoa in d'Orbigny's Collection , Annals and Magazine of Natural History: Series 7, 15:85, 1-16, DOI: [10.1080/03745480509443633](https://doi.org/10.1080/03745480509443633)

To link to this article: <http://dx.doi.org/10.1080/03745480509443633>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan,

sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

THE ANNALS

AND

MAGAZINE OF NATURAL HISTORY.

[SEVENTH SERIES.]

"..... per litora spargite muscum,
 Naiades, et circum vitreos considite fontes:
 Pollice virgineo teneros hinc carpito flores:
 Floribus et pictum, divæ, replete canistrum.
 At vos, o Nymphæ Craterides, ite sub undas;
 Ite, recurvato variata corallia trunco
 Vellite muscosis e rupibus, et pingui conchas
 Ferte, Dææ pelagi, et pingui conchylia succo."
N. Parthenii Giannettast, Ecl. 1.

No. 85. JANUARY 1905.

I.—*Notes on some Recent Bryozoa in d'Orbigny's
 Collection.* By ARTHUR WM. WATERS.

[Plate I.]

BEFORE completing my memoir * on the Bryozoa collected in the Antarctic by the 'Belgica,' I looked through d'Orbigny's collection to see if it contained any of the species found in the Antarctic. These recent † Bryozoa are in the Palæontological Department of the Muséum d'Histoire naturelle in Paris, and were referred to by d'Orbigny in the 'Palæontologie Française,' 'Terrains Crétacés,' vol. v., and some had already been described by him in 'Voyage dans l'Amérique Méridionale.' However, a large proportion of the species

* "Résultats du Voyage du S.Y. 'Belgica,' Bryozoa," Expéd. Antarct. Belge, 1904.

† The fossil Cyclostomata have been revised by Pergens in "Révisions des Bryozoaires du Crétacé figurés par d'Orbigny," Bull. de la Soc. Belge de Géologie, vol. iii. 1889, pp. 305-400, pls. xi.-xiii.; and the fossil Chilostomata have been revised by Canu in "Révision des Bryozoaires du Crétacé figurés par d'Orbigny, Chilostomata," Bull. Soc. Géol. de France, 3^e sér. vol. xxvii. 1900, pp. 334-463, pls. iv.-vii.

were described in such a way that we have had no idea as to the species intended, for the characters used were not those which we now know are of most importance.

Although my examination was but a very hurried one, it was possible to recognize many species which have since d'Orbigny's time been more fully described; in others the affinities only could be indicated, for it is often only possible to make a determination after prolonged examination and preparation of opercula and other structures, besides reference to the literature. Some of the most important books were at my side during the examination, but it was not possible to have all available as if I had worked in my own study. In some cases nothing more could be said than that the determination of some unsatisfactory specimens is impossible; but even this may save other people time and prevent their trying to make impracticable comparisons and determinations.

Naturally our knowledge of the geographical distribution is increased in many cases, and some of the 'Challenger' species had been previously seen by d'Orbigny, as:—

Thalamoporella labiata, Busk.
Adonella polymorpha, Busk.
Lepralia japonica, Busk.

Haecellia auriculata, Busk.
Adonella platalea, Busk.

It has seemed advisable to refer to the species in the order in which they occur in the 'Paléontologie Française,' giving the page and plates, when figured, then the reference to 'Voyage dans l'Amérique Méridionale' is added, as well as to my memoir of the Bryozoa from the Antarctic collected by the 'Belgica,' and to a paper of mine on Bryozoa from Cape Horn now in the printer's hands. It may be taken that, with few exceptions, the names in the collection are those given in the 'Paléontologie Française,' but a few species have the names given in the 'Voyage,' and some others the convenient name *Cellepora*; but it has not been necessary to refer to these exceptions.

It will be understood that only a part of the recent Bryozoa described by d'Orbigny are here mentioned and that the paper is worked up from rough notes made during a short visit. Fig. 1 (Pl. I.) is drawn from the actual specimen, but the other figures are drawn from rough sketches and must be considered to a large extent diagrammatic.

Recent Bryozoa in d'Orbigny's Collection.

3

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plate.			
28		13608	<i>Cellaria candiana</i> , d'Orb.	Chinese Seas. = <i>Cellaria salicornioidea</i> , Lamx., group. Patagonia. = <i>Cellaria malvinensis</i> , Busk.
28		13607	<i>Cellaria ornata</i> , d'Orb. Voy. Amér. Méri. p. 9, pl. ii. figs. 10-14. <i>Cellaria malvinensis</i> , Waters, Expéd. Ant. Belge, Bry. p. 37, pl. ii. figs. 10 a, b, pl. viii. fig. 5. <i>Cellaria quadrilatera</i> , d'Orb.	
29		13610		Chinese Seas. = <i>Farcinia oculata</i> *, Busk. Widely distributed: Australia, Indian Ocean, Kerguelen, N. & S. Atlantic.
48		13611	<i>Terriellaria aculeata</i> , d'Orb. <i>Tricellaria aculeata</i> , d'Orb. Voy. Amér. Mér. pl. ii. figs. 1-4. <i>Dicellaria aculeata</i> , d'Orb. ib. p. 8. <i>Cellularia puctata</i> , d'Orb.	Patagonia. In the tube there was a label "Algers," but there was only <i>Membranipora pilosa</i> , so that some change has been made.
50		13612	<i>Dicellaria puctata</i> , d'Orb. Voy. Amér. Méri. p. 1, pl. i. figs. 9-13. <i>Flabellopora elegans</i> , d'Orb.	Patagonia. = <i>Scrupocellaria</i> . The dorsal surface has vitreaula and avicularia. Long radicle from near the avicularium.
53 & 180 b	661, figs. 1-5	13669		Malacca. (Pl. I. fig. 5.) This is not what I described as <i>Contschellina elegans</i> , d'Orb. (Ann. & Mag. Nat. Hist. ser. 5, vol. xx. p. 200, pl. v. figs. 13-17), although d'Orbigny's figure more nearly corresponds with my specimen than with the original from Malacca. There is an oval depressed area, the oral aperture is sinuated, above the aperture there is a small oval avicularium and an opening below; distally to the area there are two openings, which may be replaced by avicularia.

* This is the *Nellia oculata*, Busk, but the diagnosis of the genus *Nellia* is so unsatisfactory that it cannot be retained. Fourtales (1867) took the name *Farcinia*, although it had been previously used by Fleming for *Cellaria*; but Fleming's name had been dropped, as being a synonym.

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plato.			
59		13616	<i>Vincularia elegans</i> , d'Orb. Voy. Amér. Mérid. p. 21, pl. ix. figs. 25-28. <i>Vincularia labiata</i> , Busk, Zool. Chall. Exp. pl. xxx. p. 73, and fig. 3. <i>Thalamoporella labiata</i> , Waters, "Dry. Cape Horn," J. Linn. Soc., Zool. figs. 6-11. <i>Vincularia pentagona</i> , d'Orb. Voy. Amér. Mér. p. 21, pl. x. figs. 4-8. <i>Haustellia auriculata</i> , Waters, "Dry. Cape Horn," Journ. Linn. Soc., Zool.	In the lower part of the zoarium there are numerous round openings for the attachment of radicles. I am not prepared to discuss the generic position from the slight examination made, and therefore the name <i>Haustellipora</i> is left provisionally. <i>Thalamoporella labiata</i> (Busk). To a few zoecia there is a bar across the opesium. <i>Haustellia auriculata</i> (Busk). Falkland Islands.
59		13617	<i>Vincularia sinensis</i> , d'Orb. <i>Esclara retiformis</i> , d'Orb. <i>Esclara parvonia</i> , d'Orb.	
101		13618	<i>Esclara elegantula</i> , d'Orb.	
101		13620 A 13621	<i>Esclara elegantula</i> , d'Orb.	
102		13622	<i>Esclara elegantula</i> , d'Orb.	Chinese Seas. = <i>Membranipora Savartii</i> , Aud., group. Mediterranean. = <i>Porella</i> or <i>Escleroides</i> . Mediterranean. = <i>Lophalia foliacea</i> , Ell. & Sol. He de Ré. = <i>Porella</i> . This is flabelliform, ovicells not much raised, large avicularia, but the avicularian chamber does not extend as far down as in the Antarctic <i>Porella saccula</i> (Busk). Newfoundland. This is not the <i>E. elegantula</i> of Smitt and others, but has been described by Busk as <i>E. perpusilla</i> (see Waters, "Dry. from Franz-Josef Land," Journ. Linn. Soc., Zool. xxviii. p. 81, pl. x. figs. 13, 18, 19, pl. xi. fig. 1). Ile de Noirmoutiers. = bilaminated <i>Membranipora pilosa</i> , L. = <i>Membranipora pilosa</i> , Linn. <i>Membranipora pilosa</i> , L.
188*		13626	<i>Electrina lamellosa</i> , d'Orb.	
201			<i>Esclerellina nitida</i> , d'Orb.	

Recent Bryozoa in d'Orbigny's Collection.

5

207	....	13681	<i>Escharellina ramosa</i> , d'Orb.	Pondicherry. = <i>Brachyridgia</i> or <i>Aiconella</i> . (Pl. I. fig. 10.) This has a depressed suboral pore, and to all the zoecia except the outside ones there is a pair of large avicularia directed downwards and towards the median line of the zoecium. The outer zoecia have no avicularia and there is a wide denticle in the aperture.
207	....	13682	<i>Escharellina laminosa</i> , d'Orb.	Ile de Basilan. = <i>Aiconella</i> , probably <i>A. polymorpha</i> , Busk. There is only a small piece.
207	....	13683	<i>Escharellina Ocellana</i> , d'Orb.	Ile de Basilan. = <i>Aiconella platata</i> , Busk. There may also be another species among the specimens. There are very long vicarious avicularia about the length of two zoecia.
244	....	13701	<i>Bifustra ramosa</i> , d'Orb.	Manila. = <i>Membranipora Savatii</i> group. I have this erect branching form from Palm Island, N.E. Australia.
244	....	13702 13716	<i>Bifustra aculeata</i> , d'Orb. <i>Membranipora bipartita</i> , d'Orb. Pal. Fr. p. 543.	Newfoundland. (Pl. I. fig. 1.) There are about the middle of the border of the zoecium two strong processes, which often meet to form a bridge, and they are seen to be each formed of two spines. There are occasionally other smaller processes arising from the border. This was also described as <i>M. bipartita</i> , but I do not think that <i>S. aretica</i> is more than a manuscript name. Although when first seen I expected to find it had subsequently been figured and described, I have not met with any other description.
244	....	13703	<i>Bifustra puelcia</i> , d'Orb. <i>Fustra puelcia</i> , d'Orb. Voy. Amér. Mér. p. 18, pl. viii. figs. 15, 16.	Patagonia. <i>Membranipora Savatii</i> group, bilaminato.
322	....	13587	<i>Ornithopora avicularia</i> , d'Orb.	= <i>Dugula</i> . Patagonia. The specimen is in very poor
323	....	13589	<i>Ornithopora multiseriata</i> , d'Orb.	

* The paging 185-188 is duplicated, and the second set must be called 185 a-188 a.

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plate.			
331	....	13600	<i>Acamarcus multiseriatis</i> , d'Orb. Voy. Amér. Mér. p. 10, pl. iii. figs. 9-12.	condition. There is a large avicularium arising from the middle of the zoecium. 2-3 inner spines, 4 outer spines. Patagonia. Poor fragment, apparently <i>Caberea Darwinii</i> , Busk.
332	....	13601	<i>Canda patagonica</i> , d'Orb. Voy. Amér. Mér. p. 9, pl. ii. figs. 6-9.	Brazil. <i>Cellularia</i> group.
333	....	13602	<i>Canda indica</i> , d'Orb.	Australia. Multiseriat.
336	....	13613	<i>Caberea dichotoma</i> , d'Orb.	Australia. = <i>Cellaria setigera</i> , Desm. & Les.
345	....	....	<i>Tubularia barbata</i> , d'Orb.	= <i>Adeonella</i> .
			<i>Eschara lobulata</i> , M.-Edw., marked "Pincularia."	
364	....	13625	<i>Retepora indica</i> , d'Orb.	Ile de Basilan. Perhaps <i>R. contortuplicata</i> , Busk.
366	....	....	<i>Semiaschara africana</i> , d'Orb.	Probably <i>Retepora cellulosa</i> , L. Perhaps specimens have been changed.
366	722, fig. 1	....	<i>Semiaschara lamellosa</i> , d'Orb.	Newfoundland. Will be <i>Escharoides</i> .
367	....	13629	<i>Semiaschara magna</i> , d'Orb.	Détroit de Malacca. = <i>Lepralia japonica</i> , Busk. In one case there are a few broad triangular avicularia on the front, and on the dorsal surface there are pores of attachment, as in <i>L. dorsipora</i> , H. Specimens from Japan have a broad triangular avicularium near the aperture.
388	....	13636	<i>Mollia tuberculata</i> , d'Orb.	Calvados. = <i>Gonolipora venusta</i> , Norm. The surface of the zoecia and ovicells is perforated, but until washed this was scarcely distinguishable. There are other species on the shell.
399	....	13637	<i>Collepore subtorquata</i> , d'Orb.	Rio Janeiro. D'Orbigny's figure is good, but the lateral wings by the side of the sinus project more than is figured.
399	....	13643	<i>Escharina torquata</i> , d'Orb. Voy. Amér. Mér. p. 11, pl. iv. figs. 1-4.	
			<i>Collepore Douganvillei</i> , d'Orb.	
			<i>Escharina Ramainvillei</i> , d'Orb. Voy.	Falkland Islands. = <i>Hippothoa</i> . A few zoecia on a shell have the thick insertion near the aperture and

399	....	13638	<i>Cellepora chilina</i> , d'Orb. <i>Escharina chilina</i> , d'Orb. Voy. Amér. Mér. p. 11, pl. iv. figs. 5, 8.	there is not the regularity figured by Busk. Ovicells wide. Chili. = <i>Hippothoa</i> . Forms a continuous incrustation. The ovicells are perforated, wide, like those figured by d'Orbigny for <i>Cellepora Bougainvillei</i> , d'Orb. I do not find the two projections on the front; but there are sometimes pores round the zoecia, though not with projecting tubes, as in <i>C. Bougainvilleana</i> , d'Orb. Arica. This is <i>Schizoporella</i> with lozenge-shaped zoecia surrounded by a raised border; the surface is perforated; the sinus of the oral aperture is wide, and there is a small oval avicularium by the side of the sinus. In the shape of the zoecium, aperture, and the position of the avicularium this reminds us of <i>Schizoporella sydneyensis</i> , Waters, but there are none of the characteristic bosses.
399	....	13639	<i>Cellepora elegans</i> , d'Orb. <i>Escharina elegans</i> , d'Orb. Voy. Amér. Mér. p. 13, pl. v. figs. 9-12.	Falkland Islands. = <i>Hippothoa</i> . D'Orbigny's figure is not very satisfactory. The structure is more or less porcellaneous, and in the younger zoecia there are two oral spines. The oral aperture of the ovicelligerous zoecia is wider than that of the ordinary zoecia, but the sinus in the former is much the narrower. The front wall frequently projects over the aperture, forming a mucro. Probably <i>H. Edwardsiana</i> , H. <i>Bougainvillei</i> , and <i>H. chilina</i> are only varieties of the same thing.
399	....	13640	<i>Cellepora costata</i> , d'Orb. <i>Escharina costata</i> , d'Orb. Voy. Amér. Mér. p. 14, pl. vi. figs. 5-8.	Chili. = <i>Lepralia</i> . The aperture is Lepralioid, there are radiating ribs and a thick ovicell. At the side there is an avicularium directed outwards, as in <i>E. Alvareziana</i> , d'Orb., which it much resembles.
399	....	13641	<i>Cellepora peruviana</i> , d'Orb. <i>Escharina peruviana</i> , d'Orb. Voy. Amér. Mér. p. 16, pl. vii. figs. 9-12.	On the shell there is <i>M. Matusii</i> , Aud., and <i>Schizoporella linearis</i> , and it looks as though it were Mediterranean and as if it were out of place. Nothing like <i>C. peruviana</i> was seen.

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plate.			
418		13654	<i>Reptolateresclara copensis</i> , d'Orb.	Cape of Good Hope. I do not see that this differs from <i>Schizoporella annularis</i> , Moll.
420		13657	<i>Celleporaria ramosissima</i> , d'Orb.	The branches are about 3·5 mm. in diameter and anastomose, the ovicell is widely open and imperforate, and there is a stout avicularium by the aperture. Apparently <i>Cellepora ramulosa</i> , L.
216			<i>Celleporina ramosissima</i> , d'Orb.	Manila. Is probably <i>Cellepora dichotoma</i> , Hincks.
420		13658	<i>Celleporaria gracilis</i> , d'Orb.	Senegal. The zonium is branched, mamillated; ovicells much raised, with deep area; oral aperture small, Leptaloid.
216			<i>Celleporaria gracilis</i> , d'Orb.	L. Labelled <i>Escharella africana</i> , but it is <i>Micro-</i>
420		13659	<i>Celleporaria tuberculata</i> , d'Orb.	<i>porella ciliata</i> , Pall. There are only a few zoecia.
216			<i>Celleporina tuberculata</i> , d'Orb.	Perforated all over.
434		13667	<i>Porina africana</i> , d'Orb.	Rio Janeiro. It is much like <i>Schizoporella unicornis</i> , Johnston, and has a similar micro, but differs in having the ovicell perforated all over, and the sinus in the aperture is somewhat wider. The older zoecia are sometimes erect, as in <i>Cellepora</i> , and are surrounded by a raised border, which usually encloses the avicularium and the ovicell.
442		13672	<i>Reptoporina Isabelleana</i> , d'Orb.	Falkland Islands.
			<i>Escharina Isabelleana</i> , d'Orb. Voy. Amér. Mér. p. 12, pl. iv. figs. 13-15.	
442		13673	<i>Reptoporina simplex</i> , d'Orb.	
			<i>Escharina simplex</i> , d'Orb. Voy. Amér. Mér. p. 13, pl. v. figs. 5-8.	
			<i>Schizoporella simplex</i> , Waters, Exp. Antart. Belg. Bry. p. 61, pl. iii. fig. 6.	
443		13675	<i>Reptoporina rugosa</i> , d'Orb.	Ile de Ré. = <i>Schizoporella unicornis</i> , Johnston.
444		13676	<i>Reptoporina hexagona</i> , d'Orb.	Ile de Ré. = <i>Microporella Mathusii</i> , Aud.

443	....	13674	<i>Reptoporina cornuta</i> , d'Orb. <i>Escharina cornuta</i> , d'Orb. Voy. Amér. Mér. p. 13, pl. v. figs. 13-16.	Chili. I do not find any <i>R. cornuta</i> on the shell. There is, however, <i>Smittia Alvaréziana</i> , d'Orb.
444	....	13677	<i>Reptoporina aspera</i> , d'Orb.	Algers. = <i>Schizoporella</i> with small round avicularium below the oral aperture.
444	....	13678	<i>Reptoporina cauleana</i> , d'Orb.	Chinese Seas. = <i>Schizoporella</i> with round avicularium below the sinus, wide globular ovicell.
447	714, figs. 14-16	13679	<i>Conescharrellina angustata</i> , d'Orb.	Illo do Brasil. (Pl. I. fig. 7.) D'Orbigny's figure does not give a correct idea. The zoecia occur in longitudinal rows, and between these rows there is a depressed groove with avicularian or vibraculum pores. The zoecia have an oval aperture with an avicularium below it.
447	....	13680	<i>Conescharrellina dilatata</i> , d'Orb.	Manila. (Pl. I. fig. 6.) There are two species in the tube. One has a nearly round oral aperture, with an avicularium below, and between the rows of zoecia there is a depressed groove with a single row of large pores.
453	....	13686	<i>Reptescharrellina Alvaréziana</i> , d'Orb. <i>Escharina Alvaréziana</i> , d'Orb. Voy. Amér. Mér. p. 14, pl. vi. figs. 1-4. <i>Smittia Alvaréziana</i> , Waters, "Bry. Cape Horn," Journ. Linn. Soc., Zool.	Payta (Peru). The figure is pretty good, but the avicularia project further out than figured. No ovicells. Small mucro to aperture.
454	....	13689	<i>Reptescharrellina borealis</i> , d'Orb.	Newfoundland. = <i>Schizoporella vulgaris</i> , Moll.
453	....	13688	<i>Reptescharrellina armata</i> , d'Orb. <i>Escharina armata</i> , d'Orb. Voy. Amér. Mér. p. 15, pl. vii. figs. 5-8.	Falkland Islands. = <i>Microoporella ciliata</i> . There is a crescentic pore, granulated surface, avicularium at one side.
453	....	13687	<i>Reptescharrellina regularis</i> , d'Orb. <i>Escharina regularis</i> , d'Orb. Voy. Amér. Mér. p. 15, pl. vi. figs. 13-16.	Payta. This is <i>Microoporella</i> , probably <i>M. ciliata</i> , var. <i>californica</i> , Hincks.
454	....	13690	<i>Reptescharrellina inequalis</i> , d'Orb.	Malacca. (Pl. I. fig. 8.) = <i>Schizoporella</i> . Zoecial surface granular, pores round the border of the zoecium; on one or both sides of the oral aperture an avicularium on a raised chamber directed downwards, and an oval avicularium immediately below the sinus placed

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plate.			
458		13691	<i>Multescharellina globulosa</i> , d'Orb. <i>Multescharellina candana</i> , d'Orb.	transversely. There is also another specimen marked "13690?" from the Ile de Basilan. This is, however, quite different, more like <i>Batopora</i> , with <i>Gemellipora</i> -like aperture, and a large avicularium at one side of the zoecium and a small triangular one above the aperture. Algiers. = <i>Lagenipora Costazii</i> , Aud. Straits of Malacca. = <i>Colopora</i> of the Holostomatous group. There are denticles on the proximal edge of the aperture and there are vicarious avicularia. There is only one small and poor specimen. = <i>Lepralia Palusiana</i> , Moll.
458		13692		
462		13694	<i>Semischarella flexuosa</i> , d'Orb. <i>Reptescharella Brongniartiana</i> , d'Orb. <i>Escharina Brongniartiana</i> , d'Orb. Voy. Amér. Mér. p. 14, pl. vi. figs. 8-12.	Valparaiso. This is <i>Hippothoe</i> with three forms of oral aperture, namely, the ovicelliferous short and wide, the ordinary ones with a wide sinus, and a much smaller one with a narrow sinus; the ovicells are wide and large, as in <i>Hippothoe Dougallvillei</i> , d'Orb. There are pores between the zoecia, but no raised tubes as in the next specimen. Africa. (Pl. I. figs. 2-4.) This specimen was in a tube with <i>R. elegans</i> , d'Orb., and is one of the most interesting things met with, as from the pore-chambers there are erect tubes, either simply tubular or funnel-shaped, and frequently at the proximal end of the zoecium there is a very large tube. The presence of these sinifs from the pore-chambers seems to be unknown in any other species, and in some parts of the colony the tubes are hardly raised, while, as already
465		13695		
		13699	<i>Reptescharella Brongniartiana</i> , d'Orb.	

463	....	<i>Reptescharella rimulata</i> , MacG. <i>Escharina rimulata</i> , d'Orb. Voy. Amér. Mér. p. 16, pl. vii. figs. 1-4.	tubes. In <i>Lepralia Poissonii</i> , Aud., there are distinct spines round the border of the zoecium, and the function may be similar. The primary zoecium, as seen from below, is acutely round.
466	....	<i>Reptescharella indica</i> , d'Orb.	Falkland Islands. In the tube there is a ticket, "échancrures manquant"; but the <i>Smithia reticulata</i> , MacG., occurs on other shells, and we may take it that d'Orbigny had <i>S. reticulata</i> before him.
474 477	.... ....	<i>Discoporella Derardiana</i> , d'Orb. <i>Reptoporellina porosa</i> , d'Orb.	Straits of Malacca. It is <i>Cribrella</i> , probably <i>radiata</i> without nuchularia.
478	....	<i>Reptoporellina porosa</i> , d'Orb. <i>Reptoporellina costata</i> , d'Orb.	Algiers. = <i>Cypulteria umbellata</i> , Desf. Algiers. = <i>Microporella Heckeli</i> *, Rouss. = <i>M. violacea</i> , nuct.
480	....	<i>Reptescharipora complanata</i> , d'Orb.	Corsica. <i>M. Heckeli</i> , Rouss. Malacca. There are several species on the shell, but the one referred to will be <i>Smithia reticulata</i> , MacG.
516	....	<i>Flustrellaria canalicula</i> , d'Orb.	Manila. There are several species on the shells, but the one which I think was referred to by d'Orbigny is a <i>Smithia</i> much like <i>S. reticulata</i> , var. <i>spatulata</i> , MacG. The oblong rectangular zoecia grow in regular longitudinal lines; they are surrounded by a row of pores, and at one side there is a large curved avicularium.
530	....	<i>Pyripora ramosa</i> , d'Orb.	Malacca. = <i>Membranipora Savartii</i> , Aud., or allied species.
541	....	<i>Membranipora echinata</i> , d'Orb. Voy. Amér. Mér. p. 10, pl. vii. figs. 13-17 (misprinted in text <i>echinata</i>).	Ile de Noirmoutiers. This has a long oval opesium and belongs to the <i>Pyripora</i> group of the Membraniporidae. Chili. On one specimen there were 7 spines, but another specimen so named was <i>M. spinosa</i> .

* Noviani has made a genus *Heckeli* for this form ("Bri. foss. d. Farnesina o Monto Mario," Pal. Ital. p. 106 (30), pl. v. figs. 27, 29).

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plate.			
542		13708	<i>Membranipora spinosa</i> , d'Orb. Voy. Amér. Mér. p. 16, pl. viii. figs. 1-4.	Peru. The specimen has no spines, and perhaps sponge-spicules were mistaken for spines; but there is a <i>Membranipora</i> from Chili with 17-18 spines which is <i>M. spinosa</i> .
542		13709	<i>Membranipora irregularis</i> , d'Orb. Voy. Amér. Mér. p. 17, pl. viii. figs. 5, 6.	Peru. There is no <i>Membranipora</i> on the shell, only <i>Microporella Madusii</i> , Aud.
542		13713	<i>Membranipora sinensis</i> , d'Orb.	Chinese Seas. (Pl. I. fig. 9.) It has a large round opesium, a small cap-like ovicell, and by the distal edge a long slightly curved avicularium. This reminds us of <i>M. nigrans</i> , Hincks, but the avicularia are much longer.
543		13714	<i>Membranipora malaccensis</i> , d'Orb.	Malacca. = <i>M. Savartii</i> , Aud., group.
543		13714 ^A	<i>Membranipora malaccensis</i> , d'Orb.	Ile de Gallega. This is quite a different thing.
543		13716	<i>Membranipora bipartita</i> , d'Orb.	Newfoundland. = <i>Difflustra aculeata</i> , d'Orb. Pal. Fr. p. 244 (see page 6).
543		13716	<i>Membranipora ciliata</i> , d'Orb.	Calvados. Someone had written in the box " <i>spinifera</i> ." There are stout spines round the border, and it is probably <i>M. spinifera</i> , Johnston.
561		13718	<i>Discofustrella domo</i> , d'Orb.	Algiers. Zoecium hexagonal, with the oral aperture subtriangular.
570		13722	<i>Pyrisfustrella aretica</i> , d'Orb.	Spitzbergen. = <i>Microporella</i> with large zoecia; surface coarsely granular, few small pores over the surface; median pore round, not far from the oral aperture.
571		13721	<i>Reptofustrella americana</i> , d'Orb.	Newfoundland. This is what Norman has called <i>Callopora unicornis</i> , var. <i>armifera</i> , Hincks (Ann. & Mag. Nat. Hist. ser. 7, vol. xi. p. 551).
582		13724	<i>Reptofustrella arctica</i> , d'Orb.	Spitzbergen. = <i>Membranipora</i> with large oval opesium, a wide cap-like ovicell, with a small avicularium at each corner of the ovicell.

581	....	13723	<i>Reptodustriina complanata</i> , d'Orb.	Indian Sea. Seems to be <i>Membranipora membranacea</i> .
593	....	13725	<i>Seridularia cornuta</i> , Lamk.	Australia. In the tube is only <i>Pingula</i> .
595	....	13726	<i>Seridularia cornuta</i> , Lamk.	Australia. Is like <i>Amathia lentigera</i> , L. Label inside "cornuta."
599	....	13729	<i>Crisia sinensis</i> , d'Orb.	Chinese Seas. Fragments too poor for determination.
600	....	13731	<i>Crisia punctata</i> , d'Orb.	Ile Venado, California. Fragments of <i>Filisparsa</i> .
602	....	13732	<i>Hierisia Edueuridiana</i> , d'Orb.	Patagonia. There are four small specimens. There are first a number of basal joints without any zoecia, then follow others with two or three zoecia, the internodes being separated by black chitinous joints. There are but few spines, and these have joints, as figured by d'Orbigny.
602	....	13734	<i>Myrioecium subgracile</i> , d'Orb.	Newfoundland. There is also the same species labelled "Ile du Rié," but without any number. This last specimen has probably been displaced.
608	....	13735	<i>Fasciculipora ramosa</i> , d'Orb. Voy. Amér. Mér. p. 21, pl. ix. figs. 22-24.	Falkland Islands. On the specimen or on the stone are also <i>Stomatopora</i> , <i>Schizoporella simplex</i> , d'Orb., and <i>Cribrella laminarigata</i> , Busk.
675	....	13737	<i>Discofascigera cupula</i> , d'Orb.	Spitzbergen. It is a worn <i>Lichenopora</i> which it would be impossible to determine.
675	....	13738	<i>Discofascigera candiana</i> , d'Orb.	Ile Chuzan. One of the two specimens might be basal growth of <i>Heteropora</i> or might be <i>Lichenopora</i> .
678	....	13739	<i>Trendipora verrucosa</i> , Lamx.	Spitzbergen. It is the basal growth described as <i>T. reticulata</i> , Blain.
731	....	13742	<i>Idmonea dilatata</i> , d'Orb.	Ile du Rié. Small piece, doubtless <i>I. serpens</i> .
731	....	13743	<i>Idmonea angustata</i> , d'Orb.	Newfoundland. May be <i>I. atlantica</i> , but there is only a small piece.
731	....	13744	<i>Idmonea rustica</i> , d'Orb.	Manila. All the specimens <i>Filisparsa</i> .
732	....	13743	<i>Idmonea Mineana</i> , d'Orb. Voy. Amér. Mér. p. 20, pl. ix. figs. 17-21.	Falkland Islands. The ovicell is near a bifurcation, not much raised and not extending over many zoecia.
732	....	13746	<i>Idmonea canariensis</i> , d'Orb.	Teneriffe. Fragments of what Smitt described as <i>Crisma Hackstetteriana</i> , Stol. Floridan Bry. p. 6, pl. ii. figs. 11-13.

Pal. Franç. vol. v.		Number.	Name in Pal. Franç.	Locality and Remarks.
Page.	Plato			
762	....	13749	<i>Reptotubigera confluenta</i> , d'Orb.	Newfoundland. It is probably <i>Idmonca serpens</i> , L. The colour is violet.
817	....	13753	<i>Filisparsa marginata</i> , d'Orb.	Teneriff. Worn <i>Idmonca</i> .
817	....	13757	<i>Filisparsa rugosa</i> , d'Orb.	Chuzan. Zoccia very close together, as in some <i>Entalophora</i> .
827	758, figs. 10-12	13760	<i>Dinatopora latomarginata</i> , d'Orb.	Newfoundland. This is well figured by d'Orbigny.
832	....	13762	<i>Tubulipora organiana</i> , d'Orb. Voy. Amér. Mér. p. 19, pl. ix. figs. 1-3; Waters, Exp. Ant. Belge, Bry. p. 92.	Falkland Islands. Zoocial tube 0.14 mm. On the specimen <i>Eucratea ambigua</i> , d'Orb., is growing.
832	....	13764	<i>Tubulipora gregaria</i> , d'Orb.	Australin. <i>Tubulipora</i> with fasciculate growth.
836	....	13765	<i>Stomatopora eburnea</i> , d'Orb. Voy. Amér. Mér. p. 20, pl. ix. figs. 14-16.	Falkland Islands.
			<i>Stomatopora eburnea</i> , Waters, Exp. Ant. Belge, Bry. p. 88, pl. ix. figs. 7 a, b.	
847	....	13766 a	<i>Probooscina serpens</i> , Feh.	
847	....	13766	<i>Probooscina dichotoma</i> , d'Orb. Voy. Amér. Mér. p. 19, pl. ix. figs. 7-13.	Ile de Ré. There is <i>Idmonca serpens</i> , L., and <i>Stomatopora</i> .
			<i>Stomatopora dichotoma</i> , Waters, Exp. Ant. Belge, Bry. p. 87.	Falkland Islands.

847 847	.... ....	13708 13709	<i>Probooscina latifolia</i> , d'Orb. <i>Probooscina malaccensis</i> , d'Orb.	Newfoundland. Largo spreading <i>Stomatopora</i> . Straits of Malacca. This is <i>Diatopora</i> with inter-zoecial tubules (zoeciales) by the oral aperture, as in the Arctic <i>Diatopora obelia</i> , var. <i>arctica</i> , Waters (see "Bry. Cape Horn," Journ. Linn. Soc., Zool.).
862	760, figs. 7-9	13770	<i>Berenicia prominens</i> , Lamx.	Mediterranean. Some specimens are <i>Diatopora obelia</i> , Johnston, and others are a <i>Diatopora</i> without inter-zoecial tubules (zoeciales), and in these the closure of the zoecia has tubules.
880	....	13772	<i>Clavicausa africana</i> , d'Orb.	Algiers. This is <i>Entalopora</i> with the ends of the branches clavate.
894	....	13771	<i>Clausa rustica</i> , d'Orb. <i>Psustopora rustica</i> , d'Orb. Voy. Amér. Mér. p. 22, pl. x. figs. 13-15. <i>Bifurcaria rustica</i> , Waters, Exp. Ant. Belg., Bry. p. 60, pl. viii. figs. 19 a, b. <i>Hornera lichenoides</i> , Pont.	Falkland Islands.
919	....	13773		Mediterranean. There is <i>H. frondiculata</i> , Lamx., and another <i>Hornera</i> is either <i>H. lichenoides</i> , Pont., or <i>H. mediterranea</i> , Waters.
972	....	13781	<i>Unicavea californica</i> , d'Orb.	The zoecia are uniserial, slightly raised; zoecia and cancelli about the same size. This does not seem to be the <i>Discoporella californica</i> , Busk.
972	....	13779	<i>Unicavea clypeiformis</i> , d'Orb. Voy. Amér. Mér. p. 19, pl. ix. figs. 4-6.	Falkland Islands. This is of the <i>Zichenopora hispidula</i> , Flem., group. The zoecia are larger than the cancelli.

Other species seen.

Monoporella albicans, Hincks, 13782, occurs from Cuba with *Unicavea*.

Microporella parvipora, Waters, 13676, Falkland Islands, with *Stomatopora*. E. Ant. Belge, p. 43, pl. iii. figs. 2 a, b.

Smittia reticulata, MacG., 13676, Falkland Islands.

Euratea ambigua, d'Orb., 13672, Falkland Islands, with *Tubulipora organisans*, d'Orb.

Laminopora? contorta, d'Orb., locality not given. Michelin, Magasin de Zoologie, 1842, pl. iii. This does not seem to be uncommon in the North Atlantic, as unnamed specimens occur in several museums. Many of the characters resemble those of *Schizoporella bimimita*, Hincks. Busk marked a specimen now in the British Museum from John Adams Bank, Cape de Verde, "Herald," with the manuscript name *Adeonella dolichostoma*, Busk.

Smittia pavonella, Alder, occurs from Teneriffe.

EXPLANATION OF PLATE I.

- Fig. 1. *Membranipora aculeata* (d'Orb.). No. 13702, as *Biflustra aculeata*, d'Orb. Newfoundland. $\times 25$. Page 5.
 Fig. 2. *Hippothoa Brongniartiana* (d'Orb.). No. 13630. From Arica, without name. Copied from sketch. Page 10.
 Fig. 3. Ditto. The erect tubes seen from the side.
 Fig. 4. Ditto. Diagrammatic section across the zoecium, showing the zoecial chambers (z.c.) and the interstitial pore-chambers (p.c.), from which the erect tubes arise.
 Fig. 5. *Flubellopora? elegans*, d'Orb. No. 13669. From Malacca. Drawn from outline-sketch. Page 3.
 Fig. 6. *Conescharellina? dilatata*, d'Orb. No. 13630. From Manila. From outline sketch. Page 9.
 Fig. 7. *Conescharellina? angustata*, d'Orb. No. 13679. From Ile de Basilan. Copied from sketch. Page 9.
 Fig. 8. *Schizoporella (Reptescharellina) inaequalis*, d'Orb. No. 13690. From Malacca. Copied from sketch. Page 9.
 Fig. 9. *Membranipora sinensis*, d'Orb. No. 13713. From Chinese Seas. From sketch. Page 12.
 Fig. 10. *Bracebridgia (Escharellina) ramosa*, d'Orb. No. 13681. From Pondicherry. The right-hand zoecia are on the border of the zoarium. From sketch. Page 5.