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### X.—Polyzoa of Mauritius

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*Spongodes flabellifera*, n. sp.

The colony forms an upright stem, 73 millim. high, from which, at a height of 30 millim. and upwards, branches come off on all sides. These speedily ramifying form at the end small umbels, in which each terminal twig bears a bundle of from three to eight polyps; but here and there also single polyps occur. The lowermost branches are flat and their twigs are fused together; they thus form fan-shaped serrated folia, the margins of which are beset with rows of polyps. The ramification is loose, so that it can easily be made out everywhere. The polyp-heads are pedunculate, free from one another for a short space, and slightly surmounted by bundles of spicules. The heads are surrounded by eight groups of spicules arranged *en chevron*, which project like teeth above the margin.

	millim.
Height of the sterile stem .....	30
Diameter .....	16
Height of the polyp-bearing portion.....	43
Diameter .....	35

The colour of the polyp-umbels is dark fleshy red, the stem and branches are white.

*Locality.* Enoshima, Japan. Collected by Dr. Doederlein.

*Spongodes Klunzingeri*, n. sp.

*Spongodes ramulosa*, Klunzinger, Korallthiere des rothen Meeres, p. 37, pl. iii. fig. 2.

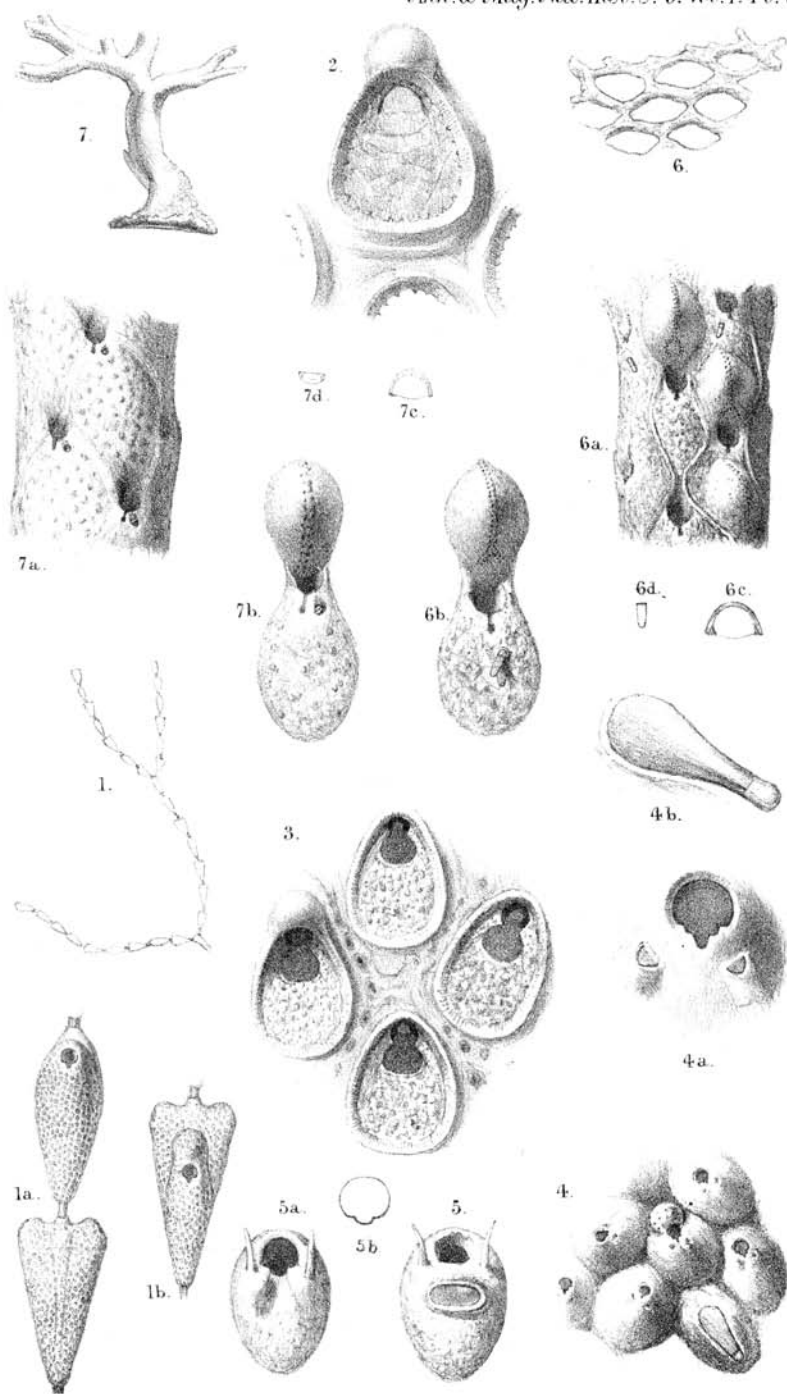
Non *Spongodes ramulosa*, Gray, Proc. Zool. Soc. 1862, pp. 28 and 29, figs. 5 and 6.

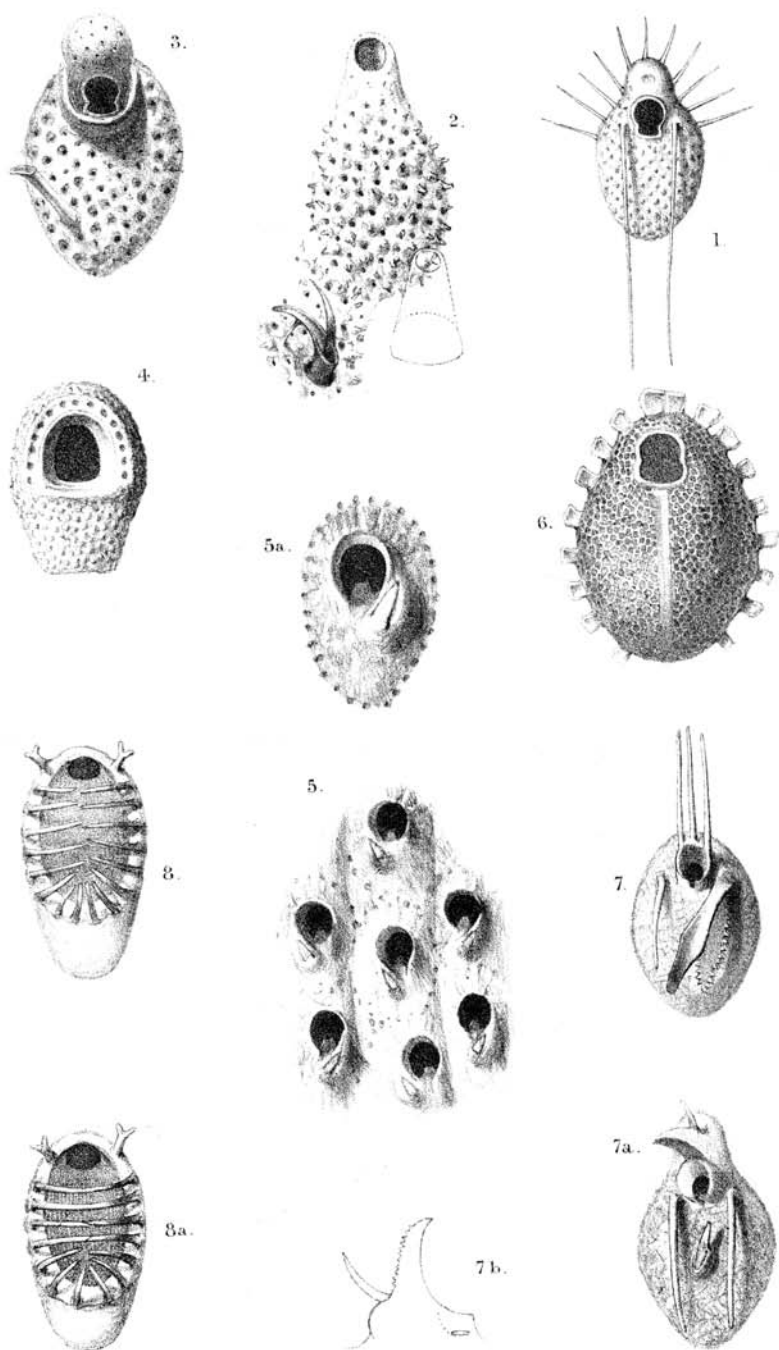
After a comparison of the typical specimen of *Spongodes ramulosa*, Klunzinger, which Professor von Martens most kindly lent me from the Berlin Museum, with specimens of Gray's species, it became evident that the two are specifically distinct. Hence the name *S. Klunzingeri* might be adopted for the species from the Red Sea described by Klunzinger.

X.—*Polyzoa of Mauritius.* By R. KIRKPATRICK,  
Assistant in the British Museum (Natural History).

[Plates VII.-X.]

I HAVE great pleasure in taking this opportunity of thanking the Rev. Thomas Hincks, F.R.S., for his kindness in reading my manuscript and offering many valuable suggestions.







1a.



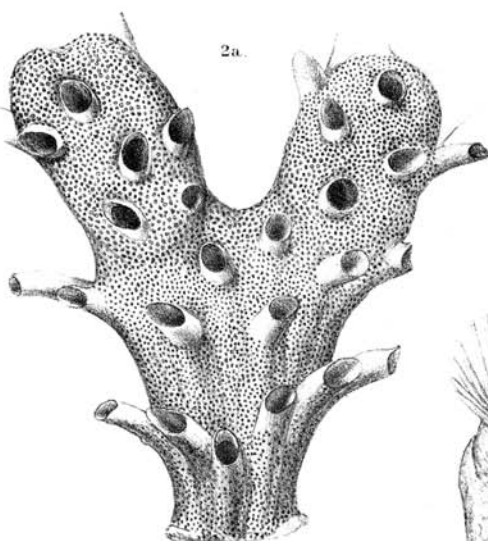
2



3.



1.



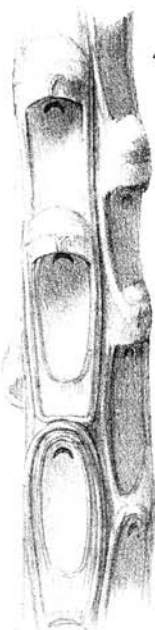
2a.



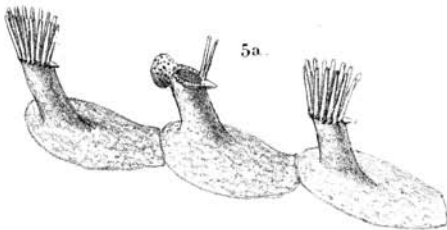
3a.



5.



4.



5a.



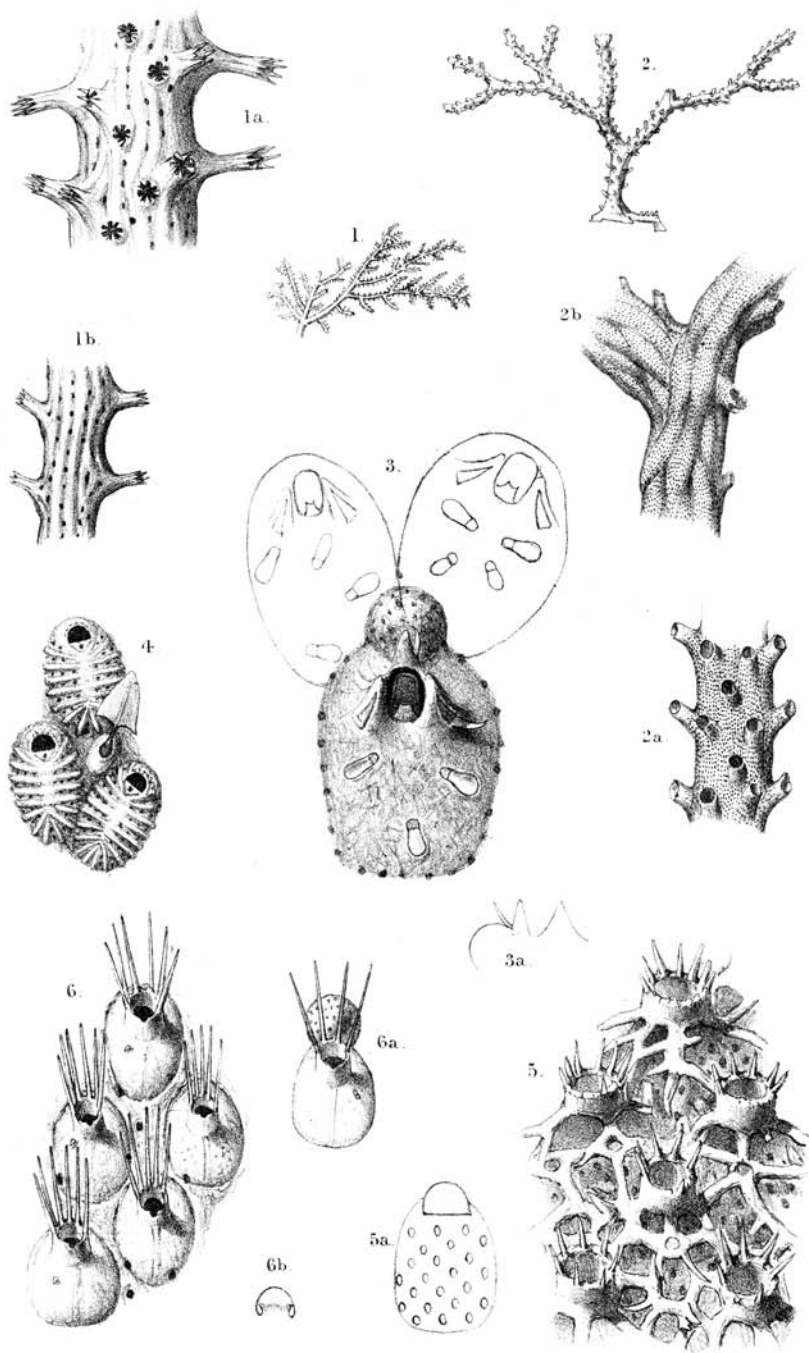
6b.



6a.



6.



Most of the forms described below were fragments incrusting the stem of a large *Gorgonia*; several specimens incrusting pieces of rock.

This small collection is remarkable for the large proportion of what seem to be new forms. Out of 36 species 23 appear to be new.

### Family Bicellariidæ.

#### DIPLÆCIUM, nov. gen.

Zoarium dichotomous. Zoœcia in pairs back to back, each pair at right angles to those above and below; the pairs separated by short cylindrical corneous internodes; orifice of cell with notch in lower border.

*Diplæcium simplex*, n. sp. (Pl. VII. fig. 1.)

Zoœcia semitransparent, marked with a mosaic pattern; each pair, viewed laterally, forming a triangle (with the angles truncate); orifice suborbicular, with a rounded notch below; peristome not raised; no avicularia. Oœcia depressed, flattened.

In some parts of the branches the internodes are suppressed; but the general arrangement of the zoœcia is as described above.

It is doubtful in what family *Diplæcium simplex* should be placed. I have placed it in the Bicellariidæ merely provisionally.

### Family Cellulariidæ.

#### Genus SCRUPOCELLARIA.

*Scrupocellaria minuta*, n. sp. (Pl. IX. fig. 3.)

Zoarium very slender, branched dichotomously. Zoœcia small, oblong; area occupying  $\frac{1}{2}$  of cell; spines 4 on outer side, 2 on inner, operculum fan-shaped, entire; lateral avicularia large in comparison with cell, curved at apex; no anterior avicularia; vibracular cells vertical, with short vibracula; radical fibres simple (not hooked). Oœcia?

#### Genus NELLIA.

*Nellia simplex*, Busk. (Pl. IX. fig. 4.)

*Nellia simplex*, Busk, B. M. C. p. 19, pl. lxxv.; 'Chall.' Rep. p. 27, pl. v. fig. 6.

The Mauritius specimen is in some parts crowded with oœcia, which I have not seen figured or described. The



oœcia are half immersed in the superjacent zoœcium, cucullate, rather flattened from before backwards; marked with a short vertical ridge bifurcating above, and by a horizontal ridge formed by the lower border of the zoœcium above.

### Family **Membraniporidæ**.

#### Genus **MEMBRANIPORA**.

*Membranipora defensa*, n. sp. (Pl. VIII. fig. 8.)

Zoœcia corneous, large, ovate, slightly produced below; aperture oval, with raised, slightly crenulated margin; one short, thick, upright, bifurcate, oral spine at each upper angle, and 6-8 flattened spines on each side, bending over the aperture, interdigitating. No avicularia. Oœcia?

In some instances the spines have fused, thus forming solid bars above the aperture, and foreshadowing what takes place more completely in *Membraniporella*.

*Membranipora marginalis*, n. sp. (Pl. VII. fig. 2.)

Zoarium incrusting. Zoœcia large, oval, slightly produced below the area, the produced portion being thick, hyaline, marked with concentric curved lines; area oval, wider below than above; margin thick, sloping inwards to aperture, slightly crenate; no internal calcareous lamina; no avicularia. Oœcia cucullate, smooth.

*Membranipora mauritiana*, n. sp. (Pl. VII. fig. 3.)

Zoarium incrusting. Zoœcia varying in shape, generally oval; separated from each other by short tubes; very slightly produced below the area; walls of zoœcia hyaline in younger, opaque in older cells, granulose; area surrounded by a high crenulated border, oval, wider below than above; lamina hyaline, granulose; aperture (portion uncovered by encroachment of lamina) shaped like a wide figure of eight; orifice of zoœcium at top of cell semicircular, not truly articulated. Oœcium cucullate, smooth, opaque, not punctured.

The inter-zoœcial tubes are hardly discernible in the older parts of the colony; also the portions of the zoœcia produced below the area are obliterated.

Whether those forms of the Membraniporidæ with a calcareous lamina partially covering the "area" should be included under a distinct genus (viz. *Amphiblestrum*) or not is a vexed question.

The forms with the lamina seem to be intermediate between *Membranipora* proper and *Micropora*, the latter genus being

apparently derived from *Membranipora* by the growth of the lamina over the whole area (excepting, of course, the operculum), and by the suppression of the infra-areal portion of the zoecium; the circum-areal ridge of *Membranipora* would be represented by the raised line round the cell in *Micropora*.

In *Amphiblestrum* the operculum is still attached to the chitinous covering of the area to however great an extent the lamina may be developed.

In the opinion of many, to make a separate genus of those forms with the lamina is to make an artificial group.

**Family Microporidae.**

*Micropora coriacea*, Esper.

**Family Steganoporellidae.**

*Steganoporella Rozieri*, Audouin.

The Mauritius specimen belongs to the "normal form," with marginal tubercles, bilobate oecium, without avicularia.

**Family Cribrilinidae.**

Genus CRIBRILINA.

*Cribrilina radiata*.

Innominate form without avicularia.

*Cribrilina radiata*, var. *flabellifera*, nov. var. (Pl. X. fig. 4.)

The zoecia in almost every respect resemble those of the "innominata" form of *Cribrilina radiata*, but a considerable modification has taken place in the avicularium. As in the Madeiran variety described by Mr. Hincks, the avicularium is developed as a distinct cell; but the mandible has a remarkable shape, being broad at the base, then tapering and branching out into two rib-like processes, and from the conjoined bases of the latter a thin triangular chitinous expansion arises.

**Family Microporellidae.**

STEPHANOPORA, nov. gen.

Zoecia with semicircular orifice, lower margin straight, not dentate, without sinus; peristome raised posteriorly; from anterior margins of wall thus formed a process is given off on each side uniting in front to form with posterior wall a tubular peristome incomplete below. From lower margin of peristome a broad branched process is given off uniting with processes from other zoecia to form a secondary cribriform roof. Special pore wanting.

*Stephanopora cribrispinata*, n. sp. (Pl. X. fig. 5.)

Zoarium incrusting, loosely attached. Zoecia broad, ventricose, smooth, hyaline, perforated by large, well-defined pores; margin of secondary orifice crowned by short spines. Avicularia none. Oœcia?

The specimen is placed in the family Microporellidæ, from its possessing a mouth of the shape characteristic of the Microporellidæ, and from the absence of features indicating an affinity with other groups.

The genus is based on the following characters:—Secondary cribriform roof, Microporellidan mouth, and absence of special pore.

## Genus MICROPORELLA.

*Microporella ciliata*, Pallas.

## Family Porinidæ.

## Genus ANARTHROPORA.

*Anarthropora horrida*, n. sp. (Pl. VIII. fig. 2.)

Zoecia broadly expanded and rounded below, tapering upwards towards a tubular peristome; surface verrucosinose (wart-like processes with short spines on the summit), punctured; primary orifice semicircular, with concave lower border; secondary orifice varying from oval to circular; on the front surface of the zoecia (and occasionally apparently between the cells) short tubular avicularia, lengthening out above in the form of grooved spout-like processes. Oœcia?

## Family Myrizoidæ.

## Genus SCHIZOPORELLA.

*Schizoporella venusta*, Norman.

*Lepralia venusta*, Norman, Ann. N. H., Jan. 1864, p. 84, pl. x. figs. 2, 3.  
*Gemellipora glabra*, forma *striatula*, Smitt, Flor. Bry. pt. ii. p. 37, pl. xi fig. 207.

*Schizoporella venusta*, Hincks, Brit. Mar. Pol. p. 276, pl. xxx. figs. 6, 7.

The Mauritius form possesses most of the characteristics of the British one, but there is no umbo on the former.

On the other hand the two forms resemble one another in the shape of the orifice, the presence of modified and aborted cells, &c.

*Schizoporella ampla*, n. sp. (Pl. VII. fig. 4.)

Zoarium incrusting. Zoecia ventricose, somewhat irre-

gularly heaped; walls smooth, white, thick; orifice orbicular with articular notch; on one or both sides on a level with the articular notch, a small subcylindrical avicularian cell with small subtriangular mandible; scattered over the zoarium large avicularian cells with long pear-shaped mandibles. Oöcia prominent, globose, vitreous, punctate, fertile cells generally with two avicularian cells.

The form of the orifice in *Schizoporella ampla* was made the sole characteristic of a genus (*Gemellipora*) by Prof. Smitt (Flor. Bry. pt. ii. p. 37). Mr. Busk retains this genus in his 'Challenger' Report, but mentions as an additional character the presence of a median avicularium. *Schizoporella ampla* possesses the orifice characteristic of *Gemellipora*, but has, in place of a median avicularium, a similar organ on one or both sides of the mouth.

#### Genus MASTIGOPHORA.

*Mastigophora Dutertrei*, Aud., var. *pesanseris*.

*Hippothoa pesanseris*, Smitt, Flor. Bry. pt. ii. p. 43, pl. vii. figs. 159, 160.

The small avicularia (or vibracula) on each side of the mouth possess the peculiar "web-foot" mandibles.

In the British form these appendages are slender setæ. The difference of form in these appendages is merely varietal.

#### Genus GIGANTOPORA.

*Gigantopora lyncoides*, Ridley. (Pl. VII. fig. 5.)

*G. lyncoides* was described by Mr. Ridley in his Report on the 'Alert' Polyzoa (Proc. Zool. Soc., Jan. 1881).

The type specimen in the British Museum consists of only a few fully developed cells.

In that specimen there is but little indication of the manner in which the tubular peristome and large pore are developed; but in the Mauritius specimens the manner of development of these secondary structures is evident.

The vibraculoid avicularia on each side of the orifice are elevated above the surface of the zoecium, and arch over the orifice, forming a bridge over the latter. By the growth in breadth of the interavicularian portion of the bridge the tubular peristome and "pore" are formed. A calcareous rim grows up round the pore, thus rendering obscure the mode of formation of the latter.

The primary orifice of the zoecium is subquadrate, the lower border sinuated.

From the mode of development of the tubular peristome and pore it is clear that *G. lyncoïdes* has no affinities with the Microporellidæ or Porinidæ, but belongs to the Myriozoidæ or Schizostomatous group of Escharidæ.

A supraoral bridge is formed in *Gephyrophora* in the same manner as in *Gigantopora*.

The presence of this bridge, formed in the manner indicated, may scarcely seem a character of sufficient importance on which to found a genus.

#### Genus RHYNCHOPORA.

##### *Rhynchopora bispinosa*, Johnst.

In the Mauritius form the oral avicularium is only present on a few cells.

The oecium is marked in front by a less thickly calcified area semicircular in shape.

Until I saw the oral avicularia the specimen seemed to me to be a new species of *Schizoporella*.

#### Family Escharidæ.

##### Genus LEPRALIA.

##### *Lepralia gigas*, Hincks.

*Lepralia gigas*, Hincks, Ann. & Mag. Nat. Hist. March 1885, pl. ix. fig. 8.

The Mauritius form is only loosely incrusting. The dorsal surface shows the zoecia separated by broad bands; the square areas marked out are pitted by numerous large punctures.

*Loc.* Trincomalee, Mauritius.

##### *Lepralia judex*, n. sp. (Pl. VIII. fig. 4.)

Zoarium incrusting. Zoecia radiating from a centre, rhomboidal, narrowed inferiorly, surface flattened; walls opaque, rough, granulose; orifice oblong, broader below than above; round the orifice, laterally and behind, a thick semicircular wall, extending on each side as far as the lower border of the mouth; on the upper border of the wall from fifteen to twenty marks, indicating the presence of as many stout spines in the perfect state. Avicularia none. Oecia?

##### *Lepralia Poissonii*, Audouin. (Pl. VIII. fig. 1.)

? *Escharella setigera*, Smitt, Flor. Bry. pt. ii. pl. x. fig. 206.

This species is figured in Savigny's 'Description de

l'Egypte.' The vibracula are represented as two apparently solid knob-like processes, and there are no setæ.

The Mauritius specimen is remarkable for the length of the setæ, which are in several instances more than twice the length of the cell. Perhaps it would be more correct to speak of the setæ as vibraculoid mandibles.

*Lepralia mosaica*, n. sp. (Pl. VIII. fig. 6.)

Zoecia in linear series, by the branching of which and junction of adjacent cells an irregularly-shaped zoarium is produced. Zoecia large, ventricose, surface shining, marked with a mosaic pattern, punctured; along the mid-line of the cell a longitudinal beaded line; orifice quadrangular, constricted above lower margin of the orifice by a projection on each side. Avicularia none. Oœcia?

The zoecia are attached to the surface on which they grow and to each other, when contiguous, by a fringe of membranous processes, with a perforation at the base communicating with the body of the cell.

In one cell which had the misfortune to bridge over a chasm the basal fringe of processes is strongly developed in the endeavour of the zoœcium to attach itself securely.

Genus PHYLACTELLA.

*Phylactella columnaris*, n. sp. (Pl. VIII. fig. 3.)

Zoarium incrusting. Zoecia large, ventricose, walls thick, white, punctured; orifice quadrangular, constricted on each side about the middle; lower border slightly concave; round the front and sides of the orifice a high peristome; rising from the body of the zoœcium a tubular avicularium, with small triangular mandible. Oœcia globose, punctured, below the level of and embraced by lateral walls of peristome.

The tubular avicularia in two instances rise from the front of the peristome. On one cell two columnar avicularia rise from the same base and diverge at an acute angle.

Genus SMITTIA.

*Smittia tubula*, n. sp. (Pl. X. fig. 6.)

Zoarium incrusting. Zoecia hyaline, ventricose, slightly verrucose, separated by raised lines; primary orifice orbicular, with one broad denticle; peristome tall, tubular, with six tall spines; secondary orifice horizontal, notched; a small avicularium, with small rounded mandible on one side of orifice. Oœcium globose, punctured.

The raised lines are in one part of the specimen developed to such an extent that the zoecia appear to grow out of a common crust.

*Smittia rostriformis*, n. sp. (Pl. VIII. fig. 7.)

Zoarium incrusting. Zoecia rhomboidal, hyaline, glistening, granulose; primary orifice suborbicular, with three denticles; peristome vertical, with three tall spines; one long avicularium on each side, with long, slender, pointed mandible nearly the length of the cell, margins of avicularian cell serrate; on centre of anterior surface a small avicularium, with triangular mandible pointing downwards; replacing one of the lateral avicularia on some cells, a large avicularium with thickly serrate margin and long hastate mandible. Oœcia small, punctured; on the front and upper part a curved beak-like avicularium projecting vertically upwards; orifice of oœcium opening within peristome.

*Smittia latiavicularia*, n. sp. (Pl. X. fig. 3.)

Zoarium incrusting. Zoecia depressed, subimmersed, white, granulose, not punctured, margins faintly areolated, separated by raised lines; primary orifice oblong; one median denticle (traces of rudimentary lateral denticles in a few cells); peristome deficient posteriorly, rising on each side into a triangular eminence, bearing on its outer side an avicularium with acute mandible pointing forwards; over front of zoecia one or more shallow avicularia with spatulate mandibles. Oœcium globose, punctured; orifice surrounded by a rim terminating above in a triangular area, supporting an avicularium with pointed mandible.

*Smittia murarmata*, n. sp. (Pl. VIII. fig. 5.)

Zoarium incrusting, covered by a thin, orange-tinted, iridescent membrane. Zoecia oblong; surface glistening, granulose, areolated round the margins; primary orifice horseshoe-shaped, lower margin straight, with one very prominent hammer-shaped denticle; peristome raised, with wide sinus in front, one lateral wall higher and longer than the other; along the higher side of peristome an avicularian cell with triangular mandible pointing upwards and forwards. Oœcia?

*Smittia marmorea*, Hincks.

*Smittia marmorea*, Hincks, Brit. Mar. Pol. p. 350, pl. xxxvi. figs. 3-5.

*Smittia reticulata*, J. MacG.

The zoecia of the Mauritius specimen are smaller than those of the British form; the lateral denticles are rudimentary and have disappeared in some cells. The avicularium points obliquely instead of vertically downwards, as in the British form.

Genus PORELLA.

*Porella nitidissima*, Hincks.

*Porella nitidissima*, Hincks, Ann. & Mag. Nat. Hist., July 1880.

The only specimen hitherto found comes from Madeira.

Genus MUCRONELLA.

*Mucronella porelliformis*, n. sp. (Pl. IX. fig. 1.)

Zoarium incrusting. Zoecia small, rhomboidal, surface glistening, verrucose; orifice suborbicular, lower margin not dentate; peristome raised in front into a broad, convex, hammer-shaped process, finely crenate at the top; in young cells a small process rising from the peristome on each side of the orifice and bending inwards; six oral spines; on each side of the orifice a slender avicularium, with acute triangular mandible pointing upwards and outwards. Oœcia small, recumbent, vitreous, not punctured.

The species is called "*porelliformis*" from the appearance presented by the orifice. The large pouch-like mucro arches over the orifice in such a way as to give the cell the appearance of possessing a secondary orifice resembling that of *Porella*. This is especially the case when one or both of the lateral processes blend with the median. There is no avicularium on the inner side of the pouch thus formed.

*Mucronella cothurnica*, n. sp. (Pl. IX. fig. 5.)

Zoarium incrusting, zoecia forming linear series; walls thick, coarsely punctate. Zoecia large, oval below, rising to a tall peristome surmounted by about twenty stout jointed spines nearly encircling the orifice, except a small space in front; orifice subquadrangular; anteriorly a grooved, triangular, horizontal mucro. Avicularia none. Oœcia small, globular, punctured.



## Genus ESCHAROIDES.

*Escharoides discus*, n. sp. (Pl. IX. fig. 6.)

Zoarium discoid, spreading by a thin calcareous lamina; marginal zoœcia decumbent, central erect, heaped up; surface of zoœcia hyaline, verrucose; primary orifice semicircular, entire, not toothed; peristome at first shallow and notched, with an avicularium with pointed mandible on inner side of one of the processes forming the notch; avicularium forming a prominent triangular projection; peristome in older zoœcia high, tubular, crowned by blunt processes; an avicularium on the front of the cell with triangular mandible projecting forwards and upwards. Oœcia small, globular, punctured.

In one of the specimens one disk is superimposed on an older colony. In old cells with a tall peristome the internally projecting avicularium appears like the denticle present in *Smittia* &c.

## Family Reteporidae.

## Genus RETEPORA.

*Retepora tenuis*, n. sp. (Pl. VII. fig. 6.)

Zoarium with large oval fenestræ, much wider than the slender trabeculæ. Surface of zoœcia verrucose, semihyaline; primary orifice semicircular, secondary orifice orbicular; peristome with fissure and præoral pore (often obliterated); very small spatulate avicularia scattered over the zoarium. Dorsal surface glistening, granulose, divided into irregularly shaped areas. Oœcia lofty, prominent, with trifoliate stigma consisting of a long, broad, vertical arm terminating at the summit of the oœcium in an umbo, the other two arms short, just above the orifice.

The specific characters consist in the large fenestræ, slender trabeculæ, absence of specially situated avicularia, or of avicularia with pointed mandibles, the shape and markings of the oœcium. In one or two oœcia lateral pressure has caused the horizontal arms to curve inwards, so as to meet and form a small complete circle.

Chitinous appendages consist of the small semicircular mandibles, of the circular avicularia, and of the operculum, which is semicircular, with straight lower border (see Pl. VII. fig. 6c).

*Retepora Hincksii*, n. sp. (Pl. VII. fig. 7.)

Zoarium erect, branching in one plane; branches free, sub-

dichotomous. Zoœcia rhomboidal, opalescent, glistening, granulose, not punctured; older zoœcia immersed, the orifices of the separate cells alone being visible; primary orifice oval (long diameter transverse); peristome with a slit-like fissure terminating in a round pore; on one side of peristome a small avicularium with small hemispherical mandible. Dorsal surface glistening, granulose, divided into irregular areas by raised lines. Oœcia long, oval, depressed, marked with a broad, median, beaded band, narrowing superiorly to a slight ridge. Chitinous appendages.

### Family Tubuliporiæ.

#### Genus IDMONEA.

##### *Idmonea radicata*, n. sp. (Pl. IX. fig. 2.)

Zoarium about  $\frac{1}{2}$  an inch high, ramose, branches flattened, subdichotomous, anastomosing, giving off cylindrical calcareous processes, fixing it to the base from which it grows; anterior surface hyaline, finely punctured. Zoœcia in pairs in younger, and threes in older parts of branches, forming subparallel alternating rows; zoœcia closely connate for about half their length, then diverging, curved so as to be concave downwards, increasing in height from within outwards; dorsal surface flat, faintly marked with transverse concentric rings of growth, finely punctured and marked with fine parallel longitudinal striæ. Oœcia anterior, formed by an inflation of the branch; surface punctured; four or five zoœcia subimmersed.

##### *Idmonea tortuosa*, n. sp. (Pl. X. fig. 2.)

Zoarium erect, flattened, branching dichotomously, branches subtriangular. Zoœcia in two or three series, increasing from within outwards, large, free only for a quarter of their length; punctured both in the adnate and free portions. Dorsal surface covered by thick, punctured, tortuous, intertwining tubes. Oœcia?

In this form aborted zoœcia instead of forming radical tubes, as in some species, are closely adpressed to the dorsal surface of the zoarium.

#### Genus HORNERA.

##### *Hornera spinigera*, n. sp. (Pl. X. fig. 1.)

Zoarium flabellate, irregularly pinnate; branches cylin-

drical, surface marked by ridges and punctures, both on the front and dorsally. Zoecia in series one to three on alternate sides of front of branches, in subparallel oblique series; zoecia increasing in height from within outwards, innermost almost level with surface, outermost long, slender, exserted, and projecting out on a plane with the general surface of the zoarium; outer zoecia with long vertical spines, inner with short spines, bent in at right angles to orifice; intermediate zoecia with vertical and horizontal spines. Oecia?

It was at first a matter of doubt whether *H. spinigera* was not a form of *H. pectinata*, Busk; but an examination of the type specimen of the latter showed several important differences. The zoecia of *H. pectinata* are larger and of stouter build and are not so regularly arranged as in *H. spinigera*. The zoecia in *H. spinigera* are arranged almost as regularly as those in the genus *Idmonea*; but the presence of the inter-zoecial striæ and punctures indicates that the specimen belongs to the former rather than to the latter genus.

## EXPLANATION OF THE PLATES.

### PLATE VII.

- Fig. 1. Diplæcium simplex*, nov. gen. et sp. 1 *a.* Magnified. 1 *b.* Showing suppression of internode and oecium.  
*Fig. 2. Membranipora marginalis*, n. sp.  
*Fig. 3. Membranipora mauritiana*, n. sp. Cells from edge of colony, well separated.  
*Fig. 4. Schizoporella ampla*, n. sp. 4 *a.* Magnified cell, showing two avicularia. 4 *b.* Pyriform mandible of large avicularian cell (see fig. 4).  
*Fig. 5. Gigantopora lyncoides*, Ridley. 5 *a.* Cell in which the avicularia have not joined to form the bridge and pore. 5 *b.* Primary orifice.  
*Fig. 6. Retepora tenuis*, n. sp. 6 *a.* Trabecula, magnified. 6 *b.* Fertile zoecium, enlarged. 6 *c.* Operculum. 6 *d.* Spatulate mandible.  
*Fig. 7. Retepora Hincksii*, n. sp. 7 *a, b.* Magnified trabecula and cell. 7 *c, d.* Operculum and mandible.

### PLATE VIII.

- Fig. 1. Lepralia Poissonii*, Audouin.  
*Fig. 2. Anarthropora horrida*, n. sp.  
*Fig. 3. Phylactella columnaris*, n. sp.  
*Fig. 4. Lepralia judex*, n. sp.  
*Figs. 5, 5 a. Smittia murarmata*, n. sp.  
*Fig. 6. Lepralia mosaica*, n. sp.  
*Figs. 7, 7 a. Smittia rostriformis*, n. sp. 7 *b.* Lateral view, showing avicularium on oecium.  
*Fig. 8. Membranipora defensa*, n. sp. 8 *a.* Cell, showing junction of spines.

PLATE IX.

- Figs. 1, 1 *a*. *Mucronella porelliformis*, n. sp.  
 Fig. 2. *Idmonea radicata*, n. sp. 2 *a*. Enlarged, showing two oecia.  
 Fig. 3. *Scrupocellaria minuta*, n. sp. 3 *a*. Dorsal view.  
 Fig. 4. *Nellia simplex*, Busk, showing oecia.  
 Fig. 5. *Mucronella* (? *Lepralia*) *colburnica*, n. sp. 5 *a*. Three cells, showing arrangement of zoarium.  
 Fig. 6. *Escharoides discus*, n. sp. 6 *a*. Marginal cell, showing avicularium on one side of notch. 6 *b*. Central cell, with peristome developed.

PLATE X.

- Fig. 1. *Hornera spinigera*, n. sp. 1 *a*. Anterior surface. 1 *b*. Posterior surface.  
 Fig. 2. *Idmonea tortuosa*, n. sp. 2 *a*. Anterior surface. 2 *b*. Posterior surface, showing tortuous tubes.  
 Fig. 3. *Smittia latiavicularia*, n. sp. 3 *a*. Lateral view, to show avicularium on oecium.  
 Fig. 4. *Cribrilina radiata*, var. *flabellifera*, nov. var.  
 Fig. 5. *Stephanopora cribrispinata*, nov. gen. et sp. 5 *a*. Cell, showing shape of orifice.  
 Figs. 6, 6 *a*. *Smittia tubula*, n. sp. 6 *b*. Primary orifice, with denticle.

XI.—Note on the Extinct Reptilian Genera *Megalania*, Owen, and *Meiolania*, Owen. By A. SMITH WOODWARD, F.G.S., F.Z.S., of the British Museum (Natural History).

THE relabelling of the Australian fossils in the British Museum, at various times described and figured by Sir Richard Owen under the names of *Megalania* and *Meiolania*, has lately necessitated a careful examination of the literature of the subject and comparison of specimens. Recent discoveries are generally admitted to have proved that several of the original determinations, founded upon imperfect materials, were erroneous; some of the fossils are truly Lacertilian, others are known with equal certainty to be Chelonian, and I am able to add on the present occasion that the remainder are Mammalian. The nomenclature of the genera is also somewhat confusing, and it may therefore be of interest briefly to summarize the present aspect of the questions involved.

The "Gigantic Land-Lizard" (*Megalania prisca*) of Australia was first made known in 1858 by Sir Richard Owen\*,

\* R. Owen, "Description of some Remains of a Gigantic Land-Lizard (*Megalania prisca*, Owen) from Australia," Phil. Trans. 1859, pp. 43-48, pls. vii., viii.