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THE  
PROCEEDINGS  
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OF  
NEW SOUTH WALES.  
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[WITH TWENTY-SEVEN PLATES].

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1879.

As, however, all our freshwater shells have a very wide range, this may be a variety, and the observed differences are due to climate. The lat. of Bourke is about 30°, or nearly 600 miles N. W. of Sydney. The habitat of *M. onca* is from 14° to 12° S. of the Equator. I should mention, also, that the tropical species is covered with a dark olive periostraca, while *M. oncoides* has scarcely any, and of a light straw color.

## EXHIBITS.

Mr. Ramsay exhibited two species of Pigeon, *Chrysæna victor* (Gould), and *Lamprolia victoriae* (F. & H.), from Fiji. Also various Crotons, showing remarkable variations in foliage and color, from Duke of York Island, and two specimens of Hybrid *Coleus*, a leafy arborescent *Euphorbia*, and a remarkable example of *Aralia filicifolia* (?) from the same locality.

MONDAY, 25TH FEBRUARY, 1878.

W. J. STEPHENS, Esq., M.A., President, in the Chair.

## DONATIONS.

The SECRETARY reported receipts from the Hamburg Society of Natural History of their "Verhandlungen des Vereins für Naturwissenschaftliche Unterhaltung in Hamburg, for 1871-74 and 1875."

## PAPERS READ.

On a new genus of MILLEPORIDÆ.

By the Rev. J. E. TENISON-WOODS, F.G.S., F.L.S., Cor. Mem.  
Lin. Soc., N.S.W., &c.

The family of *Milleporidæ* were formerly included by zoologists amongst the *Zoantharia* in an entirely different class from the

*Acalephs*, to which they are now referred. They are solid and stony corals, as much so in fact as any of the reef-building class. They generally have a smooth surface, and are always without any prominent calices, there being only very minute rounded punctures over the surface from which the animals show themselves. Some of the principal reefs on the Carribean Sea are mainly composed of Millepore corals. The cells in the zoothome are divided parallel to the surface by very thin plates or tables, as in the *Pocilliporæ* and *Favosites*, and they were formerly classed therefore with the other tabulate corals. The following was the arrangement proposed by Messrs. Edwards and Haime.

## MADREPORARIA TABULATA.

Corallum essentially composed of a highly developed mural system, and having the visceral chambers divided into a series of stages by a complete diaphragm or transverse dissepiment. Septa rudimentary, either uniting or at most represented by processes extending more or less into the visceral chamber. There are four families in this section. A. *cœnenchyma* abundant. 1. Cellules or tubulæ foliaceous or massive *Milleporidæ*. 2. *Seriatoporidae*: compact in arborescent tufts. B. Little or no *cœnenchyma*, the walls uniting with one another. 1. *Favositidæ*: walls lamellar. 2. *Thecidæ*: wall thick and compact.

## 1st Family MILLEPORIDÆ.

Corallum composed of an abundant tubular or cellular *cœnenchyma*, distinct from the walls of the corallites. Septa, few; dessepiments well developed and numerous.

M. Agasiz has proved that these animals are not corals, properly speaking, but an intermediate form of *Acalephs* between the embryo and adult state of *Medusæ*. The Millepores afford, therefore, examples of coral-making by species of the class *Acalephs*. The corals are solid and stony, with a smooth surface without any prominent calices, there being only very minute rounded punctures over the surface from which the animals show themselves. They have no resemblance to true



polyps. There is simply a fleshy tube with a mouth at the top, and a few small rounded prominences in place of tentacles, four of them sometimes the largest.

ARACHNOPORA. New Genus.

Zoothome parasitic spreading like a small thin web over other corals.

ARACHNOPORA ARGENTEA. n. s.

Zoothome spreading in a small extremely thin web, silvery white, and in parts quite transparent, which are sparsely covered with small silvery granules. The calices are all small very slightly raised, rounded, on which septa protrude as three or six broadly triangular teeth; calices irregular, but with a tendency to a quincuncial arrangement. Length of zoothome 7, breadth 3 mil. Calices like minute dots, barely discernable to the unassisted eye.

In this species the substance of the zoothome seems a quite transparent membrane, on which there is generally a very close arrangement of small silvery granules. It occurs parasitic on corals, filling up half of the calice and spreading from opposite septa just like a spider's web. It also spreads over the sides of the costæ, where it appears just like a snail's track on which some very fine white dust had been sparsely scattered. There are no calices on the outside.

ON A NEW SPECIES OF PSAMMOSERIS.

By the Rev. J. E. TENISON-WOODS, F.G.S., F.L.S., Corr. Mem.  
Linn. Soc. N. S. W.

Plate I.

In 1848, Messrs. M. Edwards and J. Haime published in the *Annales des Sciences Naturelles* a definition of a new genus named *Heterocyathus*, which was referred to the second section of the Turbinolian family of corals. The genus thus established was meant to include simple cylindrical corals with a broad attachment always to shells which the base often enclosed, with

conspicuous ribs, circular calice, an essential columella, exert thick granular septa, and lobed pali. There were only two species in this genus, and one dependant upon a single specimen. They were always fixed upon a trochoid shell, which the tissue of the coral almost completely closed round in the course of its growth, and the only sign of its presence was the circular aperture which was always left for the mollusc thus imprisoned. Subsequently Mons. M. Edwards discovered that one of the species, in spite of its pali and sub-entire septa which closely resembled the type of the genus in which it was placed, possessed synapticulæ, and should be separated, and placed in a distant family, the *Fungidæ*. Here, however, it was also out of place, because no other genus of the family possesses pali. But the pali themselves are doubtful. They are lobed, and so are the septa, and indeed hardly distinguishable from them. In 1850 Mr. J. E. Gray added what he considered a third species to the genus. This was *Heterocyathus hemisphericus*, described in the *Annals of Nat. Hist* for 1850 (Second Series, Vol. 5, p. 410.) It was brought from the China Seas, and was thus described:—Corallum extremely short, four complete cycles; septa unequal, primaries very thick, especially near the columella, the next in extent are the fourth order, then the secondaries, then the fifth order, then the tertiaries, which are smaller than all the others, all very close, but little raised, and the border feebly arched. The two latter species have been erected into two genera. One *Psammoseris*, which is thus characterised: Corallum of trifling height, fixed on a shell which it completely encloses, except at the peristome; wall thick, bare, strongly granular, and scarcely striate beneath; columella papillary, septa scarcely prominent, thickly covered with very projecting granules, penultimate cycle more developed than the last, and approaching each other before the last. I confess that this description does not appear very clear. The words in French are as follows:—“*Celles (cloisons) de l'avant dernier cycle beaucoup plus développées que celles du dernier et rapprochées entre elles au-devant de ces dernières.*” It would seem as if the third cycle was larger than