

the exerted portion being of a very thin and delicate texture rarely shows the orifice in a perfect condition. It may perhaps be identical with M. d'Orbigny's *Idmonea canariensis* (Palæont. Franç., p. 732); but as neither figure nor sufficient description of that species are given, and it is merely stated to be "slender as a thread and almost round, with very few cells," it is impossible to be certain.

(4) *Idmonea australis*, Macgillivray (Pl. III. fig. 3).

Idmonea australis, Macgilliv., *loc. cit.*, Dec. vii. p. 30, pl. lxxviii. fig. 2.

Character.—Zoarium of small size ($\frac{1}{2}$ to $\frac{3}{4}$ inch), irregularly branched once, each short branch terminating in a single fork; branches contorted and sometimes twisted; four to six zoecia in each series, the inner the longest; no intermediate longitudinal space in front between the series. Zoecia very slender (0.12 mm.), connate below, but when perfect much produced or free for one-half or two-thirds of their length, slightly tapering, some nearly straight and ascending obliquely, but towards the upper part of the branches curved forwards, not flattened in front; series 0.7 to 1.0 mm. apart. Branches compressed, rounded both in front and behind, about 0.6 mm. wide, everywhere minutely dotted, up to the border of the aperture; dorsal surface very finely striated longitudinally, intermediate spaces with very minute dots in irregular longitudinal series.

Habitat.—Station 163B, off Port Jackson, 30 to 35 fathoms, rock. Off Marion Island, 50 to 75 fathoms.

[Port Philip Heads, 10 to 15 fathoms, Macgilliv.]

A very distinct and well-marked species, easily recognisable by the compressed form of the branches, which on section are oval, as well as by the extremely fine punctation, or rather white dotting of the surface, and the fine or close longitudinal striation of the dorsal aspect. It appears to vary very much in the length of the exerted portion of the zoecia, which, in the specimens from Marion Island, forms more than half the length of the cell (Pl. III. fig. 3). The exerted part is very slightly tapering and no part of it appears to be peristomal, as the wall exhibits the minute punctation quite up to the orifice, and there is very rarely any appearance of annular lines of growth. None of the specimens present any oecial chamber.

Mr. Macgillivray suggests that this species may prove to be a form of *Idmonea atlantica*, but for this view I can see no grounds whatever.

(5) *Idmonea eboracensis*, n. sp. (Pl. III. fig. 4).

Character.—Zoarium very small, not more than $\frac{1}{4}$ inch high; branches very short and irregular, once furcate, much compressed, 0.6 mm. wide; dorsal aspect rounded, longitudinally striated but not grooved. Striæ (fig. 4c), about 0.01 mm. apart, a single irregular