rudiments of a fifth occur; septa of the first and second cycles broad, prominent, and subequal, those of the fourth narrow, curving, and generally meeting those of the third at some distance from the abundant and spongy columella.

This species recalls *Dendrophyllia surcularis*, Verrill, in many of its characters, but is easily distinguishable from it. The clump in the collection is about 12 cm. high, and a little wider than its height. When viewed from above the specimen has much of the appearance of a colony of *Astroites calycularis*, owing to the extremely packed arrangement of the calicles, which rise to the same level and are often united, though never so much so as to give rise to a simple wall.

Locality.—Australia.

3. *Dendrophyllia diaphana*, Dana.

Dendrophyllia diaphana, Dana, Zoophytes, p. 389, pl. xxx. fig. 3.

A very small colony of this rather delicate species was obtained.
Locality.—Kandavu, Fiji.

4. *Dendrophyllia equiserialis* (Milne-Edwards and Haime).

Cœnopsammia equiserialis, Milne-Edwards and Haime, Cor., iii. p. 129.

A small and rather delicate specimen occurs in the collection. It differs from typical specimens of the species in that the septa of the third and fourth cycle are extremely narrow.

Locality.—Samboangan, Philippines.

Family MADREPORIDÆ.

Genus *Madrepora*, Linnæus.

Madrepora, Linnæus, Syst. Nat., ed. x. p. 793.
„   Dana, Zoophytes, p. 431.
„   Duncan, Rev. Madrep., p. 183.

An extremely interesting new species (*Madrepora mirabilis*) in the collection presents a combination of characters hitherto unknown in the genus. While the greater number of apical calicles are of the ordinary type with twelve septa, others possess three cycles of septa, and these in a few calicles are all well developed (Pl. X. fig. 5a). This is certainly a most striking deviation from the normal condition in the genus; and if it had been common to all the apical calicles in the specimen of *Madrepora mirabilis*, it might have been regarded as a sufficient characteristic for generic separation. Consider-