

Genus 24. *Orbicella*, Dana.*Orbicella*, Dana, Zoophytes, p. 206.*Heliastrea*, Milne-Edwards and Haime, Cor., ii. p. 456.

,, Duncan, Rev. Madrep., p. 104.

Verrill¹ has pointed out that this name should be applied to this group rather than the later term *Heliastrea* of Milne-Edwards and Haime, which has been adopted by the generality of recent writers.

Orbicella cavernosa (Esper).*Madrepora cavernosa*, Esper, Pflanz. Forts., p. 18, Madrep. pl. xxxvii.*Orbicella argus*, Dana, Zoophytes, p. 207.*Heliastrea cavernosa*, Milne-Edwards and Haime, Cor., ii. p. 463.

From the accurate descriptions given by Dana and by Milne-Edwards and Haime of this common West Indian form, the specimens obtained off Barra Grande, Brazil, differ but slightly in having the surface of the intercalicinal spaces vesiculate, causing the union of the costæ of adjoining calicles with one another to be indistinct, and also in having the septa more uniformly thickened throughout. It was obtained from a depth of 30 fathoms, and tends to prove that species of Coral, which are reef-building forms, live at much greater depths than is usually believed. The rounded masses, as stated by Professor Moseley in his journal, were about 2 feet in diameter at the flat base, and were extremely and regularly convex above. When broken open, these masses were found to be bored by *Lithodomus dactylus*, but the molluscs were dead, apparently shut in by the rapid growth of the Coral.

Locality.—Barra Grande, Brazil, 30 fathoms.

Genus 25. *Cyphastræa*, Milne-Edwards and Haime.*Cyphastræa* et *Solenastræa*, Milne-Edwards and Haime, Cor., ii. pp. 484, 495.

Following Klunzinger,² I have united the genera *Solenastræa* and *Cyphastræa* under the latter name, which was first defined by Milne-Edwards and Haime, and should therefore be retained. The extreme forms of the genus present very striking differences, and would certainly warrant generic separation but for the clearly intermediate nature of many other species.

Four species were obtained.

1. *Cyphastræa pleiades* (Ellis and Solander).*Madrepora pleiades*, Ellis and Solander, Zoophytes, p. 169, pl. liii. figs. 7, 8.*Astræa pleiades*, Dana, Zoophytes, p. 213, pl. x. fig. 5.

A dead and worn specimen occurs in the collection. The size of the cells is rather variable, being often only 2 mm., especially towards the basal part of the colony. The

¹ Dana, Coral and Coral Islands, p. 336.² Cor. roth. Meer., iii. p. 50.