

secondary septa smaller than the tertiary, and in which the tertiary septa fuse together in front of the secondary, which do not reach the centre. The coral, in fact, resembles *Stephanophyllia suecica*, a fossil from Ignaberga, Sweden; but in this coral the columella is rudimentary. On the other hand, Quenstedt's *Stephanophyllia florealis* has been supposed by Milne-Edwards to be Turbinolid, and allied to the genus *Thecocyathus*.

Stephanophyllia complicata perhaps comes nearest to *Stephanophyllia discoides* of Milne-Edwards and Haime¹ from the London Clay. It differs in having a laminate columella. In *Stephanophyllia discoides* the columella is papillose and circular. In *Stephanophyllia nysti* (M.-Edw. and H.), from Miocene formations at Antwerp, there is a similar fusion of septa to that occurring in *Stephanophyllia complicata*; but in this species the columella is almost absent.

Dimensions: of an adult specimen—extreme diameter, 1·7 cm.; extreme height from the summit of the columella to the centre of the base, 7 mm. Of the young specimen—extreme diameter, 6 mm.; height, 3·5 mm.

Station 192, off the Ki Islands. Lat. 5° 42' S., long. 132° 25' E. 129 fathoms. Only two specimens, one adult the other very young.

Stephanophyllia formosissima, Moseley (Pl. IV. fig. 11; Pl. XIII. figs. 6, 7; Pl. XVI. figs. 8, 9).

Stephanophyllia formosissima, Moseley, Proc. Roy. Soc., 1876, p. 561.

The corallum is discoid, with the base flat in the centre and slightly curved towards the margin. It is white, and very light and fragile, much more so than in *Stephanophyllia complicata*, being composed of a fine trabecular network, through which the light penetrates freely, as through a fine sieve, when the coral is held up to it. The base is composed of a series of fine, radiating, costal rods connected by transverse trabeculæ, which have a general concentric disposition. The septa are composed, like the remainder of the corallum, of fused trabeculæ; but these are stouter than those composing the base, and more perfectly fused, so as to form, in most regions, continuous plates pierced by rounded perforations. There are six systems of septa and five cycles. The upper margins of the septa rise in a curve from points distant a short space from the margin of the calicle, and, ascending to some height above the level of the base, sink down again internally to the wide, oval fossa occupied by the columella. The primary and secondary septa are straight. Their upper margins lie at a lower level than those of the remaining septa, and are only very slightly toothed. The primary septa are free from adherence. The margins of the tertiary, quaternary, and quinary septa are deeply dentate, the teeth being curved towards the columella. The quinary, quaternary, and tertiary septa fuse with one another laterally and by their upper margins at successive distances from the

¹ MM. Milne-Edwards and Haime, British Fossil Corals. London: Palæontological Soc., 1860-64, part 1, p. 34, pl. ii. fig. 3.