

the back. Though shorter and wider these objects are not unlike plates of Plumulites, not only do they have the same sharp, transverse ridges, but a similar arched band extends across the middle, from the apex. This genus when described was placed by its author among the Pteropods, but if I am right in having referred to it certain small fossils of the Paradoxides beds, there would seem to be features indicating affinities with the Crustaceans, and especially with the ancient Cirripedes, rather than the Pteropods.

*and* Stenotheca had thin calcareo-chitinous shells similar to the tests of trilobites, sharply raised ridges parallel to the lower border; the apical angle was bounded by two sides, one of which was convex and the other concave. The convex side is called dorsal, and the concave ventral, the third side is the aperture or base.

STENOTHECA CONCENTRICA. (Plate XIV., fig. 1.)

*Stenotheca concentrica*, Trans. Roy. Soc., Vol. III., pt. iv., p. 59, pl. vi., fig. 11.

Amended description. Outline of the compressed fossil rudely lenticular, the dorsal and ventral slopes being together equal to the strongly arched apertural margin. The apex varies from a bluntly rounded form to one which is prolonged into a short triangular point. For about one-third from the apex the surface has irregular undulations, about seven in number, concentric to the apex, and the rest of the test on the ventral slope about eight strongly marked ridges, concentric to the apex; these ridges are increased on the dorsal slope to the number of twelve or thirteen by the intercalation of additional ridges in the dorsal third.

*Sculpture.* The surface appears to have minute pores and is ornamented with linear ridgelets which have a roughly parallel and sometimes anastomosing arrangement. The most typical form of ornamentation is a chevron or zigzag arrangement of minute ridges, visible only with a lens, and most marked on the outer part of the shell; these chevron lines sometimes cross two of the concentric ridges before turning and usually run angling across the ridges. The chevron sculpture varies to an irregular wavy arrangement of ridgelets, and that to a more or less linear grouping, which is the usual appearance of the ornamentation at the apex: occasionally straight lines on the primary ridges, alternate with wavy or somewhat zigzag lines in the hollows between. Another occasional variety of the sculpture is that of irregular wavy ridgelets crowned by little tubercles along the summit of the ridgelets; this gives the effect of a cancellated surface.