

orbicular in form; they are finely serrated on their edges, and are tuberculated all over; the tubercles radiating from a nucleus, which is either central or excentric; they are large, those of the body measuring 1 to 1 by 0·80 by 0·75 mm. The row of subcalycine spicules are triangular in shape; the apices prolonged into long spines; some of the largest measure 1–0·5 mm. across the base, with 1 mm. in length to base of spine; the total length including the spine varies from 4 to 4·5 mm. The triangular portions are tuberculated as in the other spicules, but the spines are smooth, circular on section, and hollow. The opercular scales are of an isosceles-triangle shape, more serrated at the base than on the longer sides; sometimes winged, measuring 1·50–1·75; 1–1·50 mm.

It seems probable that this species lived prostrate in the mud, and possibly there may have been some power of expansion and contraction in the colony. It is evidently closely related to *Primnoa*. It was dredged in the most southern station reached by the Challenger.

Habitat.—Station 153, near the Antarctic Sea (the most southerly dredging during the cruise); depth, 1675 fathoms; bottom, blue mud.

Subfamily 2. CALYPTROPHORINÆ.

In 1870 Dr. Gray¹ established a family "Calyptrophoridæ" for his genus *Calyptrophora*. While there can be no doubt as to the form for which the family and genus were intended, it would be impossible to identify the species from the diagnosis of either. In several respects *Calyptrophora* is related to such genera of the next subfamily as *Calypterinus*, *Stachyodes*, &c. The very remarkable annular form assumed by some of the spicules of the bodies of the polyps will, however, with certainty distinguish it; indeed the presence of these scales with their broad and deep dorsal surfaces, and their equally broad but narrow ventral surfaces, will mark out the species of this genus from all other Primnoids.

The colony is branched in the one plane. The axis is hard, calcareous.

Polyps in whorls. The cœnenchyma of the axis is thin, with large irregularly shaped calcareous spicules, slightly overlapping. The second and third series of spicules on the bodies of the polyps are annular. The dorsal portions (mandral) of each are broadly expanded, forming a protective and defensive covering to the polyp. The tentacles are retractile, and the opercular scales are well marked.

¹ Cat. Lithophytes Brit. Mus., p. 41.