



Family V. DASYGORGIDÆ.

In the species of this family the colonies are simple or branched, with a horny calcareous axis; the cœnenchyma is thin and the polyps are large and distant from one another; the polyps are not retractile, and in rest simply curve their tentacles over the oral apertures. Both the cœnenchyma and polyps contain simple smooth calcareous needle-like or spindle-like spicules, or semi-opaque scales which are continued on to the tips of the tentacles.

The Dasygorgidæ represent in many ways the simplest type of Holaxonia. The axis is either simple, rod-like, and unbranched, or else ramified in such a way that from the main axis lateral branches are given off, which may again bear twigs. The axis springs from a calcareous basis which is sometimes ramified in stolon-like processes and sometimes becomes a simple flatly expanded disc. The axis itself is composed of a fibrous horny substance, with interstratified calcareous particles. The latter is most abundant towards the base, less so towards the ends of the stem, branches, and twigs, the terminal twigs being horny. The surface of the axis and branches is smooth and shining, and often exhibits a golden or iridescent appearance. The cœnenchyma is in most cases very thin. The polyps are large, often of greater diameter than the branch on which they are seated, and usually occur in a single row on the stem and branches. Their structure is simple; calyx, œsophageal, and tentacular portions are never well differentiated. A layer of calcareous spicules extends from the base of the polyp to the tips of the tentacles, leaving only the pinnæ free. When at rest the tentacles are simply folded over the oral disc. Besides the tentacle-bearing polyps (autozooids), very small conical shaped polyps (siphonozoids) occur in many species. These exhibit a capitate apex filled with nematocysts, and under this the cleft-like oral cavity. The canalicular system consists of four longitudinal canals, which extend along the axis, and directly receive the eight canals issuing from each polyp form. The spicules in the cœnenchyma and polyps are simple smooth needles, or spindles, or scales which are often dentate at their margin and have a hyaline appearance.

The first described genus of this family was *Herophila*, Steenstrup; those which Duchassaing and Michelotti¹ described under the titles *Chrysgorgia* and *Riisea*

¹ Memoire sur les Coral. des Antilles, 1860, Suppl., p. 21, pl. iv. fig. 5.