

hard, white, calcareous base is strongly contrasted with the axis of the stem. The calicles are prominent, scattered along the branches, either standing at right angles or obliquely; they are covered with moderately large, elongated or flat spicula, and are usually eight-lobed at the summit. Cœnenchyma very thin, with oblong or elongated spicula."

With our knowledge of the simple, unbranched form of *Strophogorgia*, which in the structure of its polyps and the formation of its axis and spicules shows so near a relationship to *Dasygorgia*, it seems well to unite these in one family, Dasygorgidæ, making Verrill's family of the Chrysogorgidæ a subfamily, for which the family characters laid down by him still hold good.

With regard to the relationship of the Chrysogorginæ to other Gorgonids, Verrill has pointed out their close connection with Isidæ and Primnoidæ. The relationship to the Isidæ is strengthened by the examination of the new genus *Primnoisis*, which in the structure of the polyps stands very close to the scaly forms of *Dasygorgia*. To the Chrysogorginæ must also be referred the genus *Riisea*, Duch. and Mich., which, as regards branching and structure of the polyps, unites itself with this family.

[Genus 1. *Iridogorgia*, Verrill.

Iridogorgia, Verrill, Bull. Mus. Comp. Zool., vol. xi. No. 1, pp. 21, 26, 1883.

With a spiral axis, from which a single series of long, slender, simple branches is given off on the outer side so that they likewise have a spiral arrangement. Zooids as well as polyps are present.

Iridogorgia pourtalesii, Verrill.

Iridogorgia pourtalesii, Verrill, loc. cit., p. 27.

Habitat.—Off Dominica; depth, 542 fathoms.
Off Guadeloupe; depth, 743 fathoms.]

Genus 2. *Dasygorgia*, Verrill (*emend.*).

Dasygorgia, Verrill, Bull. Mus. Comp. Zool., vol. xi. No. 1, p. 21, 1883.

Colony branched, consisting of a main stem and branches, which again give off twigs, and, indeed, follow the type of the uniparous cyme. The cœnenchyma is thin, with two layers of calcareous spicules. The polyps are large, mostly projecting perpendicularly from the twigs, and arising at wide intervals. There are seldom more than two on a node. The last polyp is never placed terminally, the cœnenchyma and axis are always produced beyond its base.

The spicules always form several layers upon the stem and polyps, and are produced along the dorsal sides of the tentacles, but are wanting in the pinnules. They form an