In another direction, *Cornularia* seems to be a starting-point for *Clavularia* and *Sarcodictyon*. In *Clavularia* the polyps spring from stolon-like processes, or from a basal membrane. In this latter case the bases of the polyps are not surrounded by the membrane, but are seated upon its surface and continued into its substance by stolon-like endodermic tubes. Furthermore, in this genus the oral region is retractile within a rigid calyx portion. Similar conditions are, according to Herdman,[1] to be observed in *Sarcodictyon*, where the polyps, provided with retractile mouths, are seated upon a basal expansion. The latter is, however, narrow and stolon-like, and extends from each polyp mainly in two directions, so that the individuals of the colony are united in rows, and only at rare intervals are aggregated on a common basal surface. In *Cornularia* the polyps bear no spicules and the stolons have a horny ectodermic layer. In *Gymnosarca*, which is perhaps closely related to *Cornularia* through *Cornulariella*, the creeping stolons, which are numerous and thick-walled, anastomose and give off free cylindrical stolons on which polyps are seated. Finally, in *Telesto*, upright elongated polyps rise from the stolons, and exhibit thick, horny walls with spicules, from the canal-system of which there arise cylindrical individuals with shorter cavities. This genus also includes *Clavularia prolifera*, v. Koch, perhaps identical with *Gorgonia trichostemma*, Dana, and also *Clavularia rupicola*, described by F. Müller[2] under the generic title *Carijoa*. *Telesto* exhibits marked affinities with many Gorgonacea, towards which *Cœlogorgia* forms a transition link.

The genus *Cyathopodium* diverges in another direction. This is Verrill's generic title for *Aulopora tenuis*, Dan.,[3] in which the walls of the stolons become calcified, and thus suggest the condition met with in *Tubipora*. With *Clavularia*-like forms having flat basal expansions, certain genera are connected in which the tendency to upright branching appears. This is the case in the genus *Sclerauthelia*, and in *Anthopodium*, which latter, according to Verrill, is related on the one hand to *Telesto*, on the other to *Callipodium*.

A group of forms, more or less related to *Sarcodictyon*, is formed by the genera *Sympodium*, *Erythropodium*, and *Callipodium*. Of these the latter, according to Verrill's description and figures, very closely resemble *Sarcodictyon*. On the other hand, the whole group is related to the family Briareidæ, which has perhaps been derived from similar forms.

1. *Cornularia*, Lamarck.
2. *Rhizoxenia*, Ehrenberg.
3. *Clavularia*, Quoy and Gaimard.
4. *Sarcodictyon*, Forbes.
5. *Anthelia*, Savigny.
6. *Gymnosarca*, Saville Kent.
7. *Cornulariella*, Verrill.
8. *Telesto*, Lamouroux.

[1] *Proc. Roy. Phys. Soc. Edin.*, vol. viii. p. 31.
[2] *Archiv f. Naturgesch.*, Jahrg. xxxiii. p. 330, Anm. fig. 50, 1867.
[3] Zoophytes, p. 630, pl. lix. fig. 5.