Genus Telesto, Lamouroux.

Telesto, Lamouroux, Nouveau Bull. Soc. Philom. Paris, 1812; Hist. d. Polyp. flexibles, p. 252, 1816.

" Dana, Zoophytes, p. 632, 1846.

.. Verrill, Mem. Bost. Soc. Nat. Hist., vol. i. p. 5, 1866.

Carijoa, F. Müller, Arch. f. Naturgesch., Jahrg. xxxiii. Bd. i. p. 330 Anm., pl. ix. fig. 56, 1867.

Telesco and Alexella, Gray, Ann. and Mag. Nat. Hist., ser. 4. vol. iii. p. 21, 1869. Clavularia, v. Koch, Morph. Jahrb., Bd. vii. p. 467, 1881.

The original diagnosis of Lamouroux is—"Polypier phytoide, rameux, fistuleux, cretacéo-membraneux, opaque, strié longitudinalement." He includes within the genus three species-Telesto lutea, Telesto aurantiaca, Telesto pelasgica. Dana added another species, Telesto fruticulosa, also from the American coast. As the result of Verrill's investigation of Dana's species, the generic diagnosis was emended as follows:-" Corallum tubular, arborescent, increasing by lateral buds from upright branches and sometimes also by basal stolons; walls thin, firm, membranous or like parchment, with eight longitudinal sulcations. Polyps wholly retractile, separated at the base from the cavity of the branch by a thin membrane." Gray, who changed Telesto into Telesco, described (loc. cit.) a new species, Telesto smithii, which diverged in its mode of growth from the typical forms, so that Gray felt himself thereby at once warranted in distinguishing three subgenera—(1) Telesco, for Telesto aurantiaca, Lamx., and Telesto rumulosa, Verrill; (2) Telescella, for Telesto nodosa, Verrill, which Verrill's own subsequent investigation showed to be an Annelid-tube; (3) Alexella, for Telesto smithii. Other species which must be referred to this genus have been described under manifold names by various authors. Thus Dana described a species as Gorgonia trichostemma; Fritz Müller, another from the Brazilian coast as Carijoa rupicola; Duchassaing and Michelotti, another form from the West Indies as Clavularia riissei. Koch gave an excellent detailed investigation of an East

In reviewing the various species belonging to this genus, it is possible to distinguish two main groups. In the first, to which the typical Telesto auruntiaca would belong, the structure of the polyps and the sparse ramification of the colony remind one of Clavularia. This may be regarded as a subgenus in contrast to those species in which the lateral calyces have a different shape from those of the main polyps, and the entire colony forms a large ramified mass. Telesto rupicola, Telesto smithii, Telesto prolifera may be regarded as types of another subgenus. For this latter F. Müller's designation Carijoa may be adopted, since this was first applied to a species of this subgenus. Gray's Alexella was of later date.

The characters of the genus may be given as follows:—

Indian form, which he called Clavularia prolifera, v. Koch.

From a membranous base, or from stolons which form a delicate network, the individual polyps arise. In structure they are like those of Clavularia. From the