colony, which is ramified in one plane. The horny axes are frequently flattened in the same plane, and the cœnenchyma is also compressed. Thus the stem and branches show in section two flattened surfaces and two edges. The polyps are ranged chiefly on the edges of the axis, and, in some cases, they occupy it alone, but in rare cases they are found massed on the flattened surfaces (*Hymenogorgia*). The system of longitudinal canals shows the same tendency. The longitudinal canals vary in width according to their position on the axis. Through the lateral position of the polyps, the longitudinal canals, which run along the surface of the axis, are very few in number, as in the smaller species of *Leptogorgia*, in which,—as, for example, in *Leptogorgia arbuscula*, Verr.—only one large longitudinal canal runs along the flattened side of the axis. The course of the larger longitudinal canals is often indicated externally by one or more ridges or furrows on the cœnenchyma. In some cases the larger longitudinal canals run along the edges of the compressed axes, while smaller ones course down their flattened surfaces. This is the case in *Gorgonia anceps*, Pall., for which, therefore, the generic name *Xiphigorgia*, Milne-Edwards, is retained. *Swiftia*, Duchassaing and Michelotti, appears to belong to the Gorgonidæ, though in their Memoir on the Corals of the Antilles these authors place it among the Primnoidæ.

1. *Platycaulos*, n. gen.
2. *Lophogorgia*, Milne-Edwards.
3. *Leptogorgia*, Milne-Edwards, *emend.* Verrill.
4. *Stenogorgia*, Verrill.
5. *Callistephanus*, n. gen.
6. *Swiftia*, Duchassaing and Michelotti.
7. *Gorgonia*, Linneus, *emend.* Verrill.
8. *Eugorgia*, Verrill.
9. *Danielssenia*, Grieg.
10. *Xiphigorgia*, Milne-Edwards.
11. *Hymenogorgia*, Valenciennes.
12. *Phycogorgia*, Valenciennes.

1. *Platycaulos*, n. gen.

The colony is branched in one plane, the branches sometimes anastomosing. The axis is horny, compressed, with a calcareous centre and calcareous particles interspersed. The nutrient canals are symmetrical. Polyps prominent on edges of the stem and branches, retractile within verrucæ. The cœnenchyma is moderate, tough, the spicules, straight and curved, spiny spindles and stellate forms.

2. *Lophogorgia*, Milne-Edwards, Hist. Nat. des Coralliaires, t. i. p. 167.

Gorgonia, Kölliker (*pars*), Icones histiologicæ, pt. ii. p. 139.
Leptogorgia, Verrill (*pars*), Amer. Journ. Sci. and Arts, vol. xlviii. p. 425.

The colony is upright, branched in one plane, with flattened stem and branches; the terminal twigs assume a cylindrical form. The polyps are sunk into the cœnenchyma without forming true verrucæ.