another. The polyp calyces are distinctly bilateral. The calyx scales form longitudinal rows; an individual scale usually overlaps for half its length the adjoining scale. The dorso-lateral surfaces of the calyx are usually covered by two longitudinal rows of scales; the ventral side has small, flat disc-like scales. The shape of the calyx scales is irregularly quadrangular, the nucleus is always excentric, and from it small protuberances radiate outwards. The new polyps arise between the existing whorls.

11. Caligorgia, Gray (emend. Studer).

Callogorgia, Gray, Proc. Zool. Soc. Lond., 1857, p. 286; Ibid., 1859, p. 484. Calligorgia, Gray, Cat. Lithophytes Brit. Mus., 1870, p. 35. Calligorgia, Studer, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, 1878, p. 645.

The colony is upright, and branched in one plane. The polyp calyces are cylindrical or club-shaped, and occur irregularly distributed upon the stem, but on the branches and twigs in whorls of more than three. The calyx scales call to mind ctenoid fish scales; they are more or less fan-shaped, with ribs which radiate out from the nucleus, and diverging towards the upper margin of the scale end in projecting teeth. Two species referred by Studer to the genus Narella, viz., Narella modesta and Narella divaricata may be for the present included in this genus.

Subfamily 4. PRIMNOIDINÆ.

The colony is branched in one plane; the polyps are small and opposite. The spicules are flat, thin scales, which are uniformly disposed over the coenenchyma and the polyp calyces; they overlap one another like the tiles of a house. Opercular scales are not distinctly differentiated, and the opening of the polyp calyx is therefore but imperfectly protected.

12. Primnoides, Wright and Studer, Archiv f. Naturgesch., Jahrg. liii. Bd. i. p. 52. The diagnosis of the subfamily will serve for the genus.

Family VIII. MURICEIDE.

Muricea, Lamoroux, Ehronberg.

Primnoacea, Milne-Edwards (pars), Hist. Nat. des Coralliaires, t. ii. p. 138.

Primnoacea, Kölliker (pars), Icones histiologicae, pt. ii. p. 135.

Muriceadæ (subfamily), Studer, Monatsber. d. k. prouss. Akud. d. Wiss. Berlin, 1878, p. 649.

Muriceida, Verrill, 1883, Bull. Mus. Comp. Zool., vol. xi. p. 30.

Holaxonia, usually with a horny axis, over which there is an outer layer of variously shaped-calcareous spicules in the form of spiny discs or half-spiny spindles, spiny stars,