2. Phormocyrtis fastosa, Haeckel.

Eucyrtidium fastosum, Ehrenberg, 1872 Abhandl. d. k. Akad. d. Wiss. Berlin, p. 291, Taf. ix. fig. 19.

Shell ovate, with two distinct strictures. Length of the three joints = 1:3:3, breadth = 1:5:6. Cephalis ovate, with a stout pyramidal horn of the same length, and numerous rather large pores. Pores in the campanulate thorax and the inflated abdomen much smaller, very numerous, regular, hexagonal. Along these two joints arise nine delicate, divergent ribs; these extend almost to the wide mouth, which is slightly constricted.

Dimensions.—Length of the three joints, $a\ 0.03$, $b\ 0.09$, $c\ 0.08$; breadth, $a\ 0.02$, $b\ 0.1$, $c\ 0.12$. Habitat.—Indian Ocean (Zanzibar), depth 2200 fathoms, Pullen.

3. Phormocyrtis costata, n. sp. (Pl. 69, fig. 6).

Shell smooth, with sharp collar, but indistinct lumbar stricture. Length of the three joints = 2:5:5, breadth = 2:6:6. Cephalis conical, with a stout pyramidal horn of twice the length. Thorax and abdomen together nearly cylindrical, constricted towards both poles, with thirty to forty longitudinal ribs, which are nearly parallel, vertical in the middle part, and convergent towards both poles; alternate with the same number of longitudinal rows of regular, circular pores. Mouth with a broad, hyaline, only slightly constricted peristome.

Dimensions.—Length of the three joints, α 0.04, b 0.1, c 0.1; breadth, α 0.04, b 0.12, c 0.12. Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

4. Phormocyrtis embolum, Haeckel.

Eucyrtidium embolum, Ehrenberg, 1875, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 70, Taf. x. fig. 5.

Shell smooth, with sharp collar, but indistinct lumbar stricture. Length of the three joints = 3:7:10, breadth = 3:9:7. Cephalis subspherical, with a pyramidal horn of the same length. Thorax campanulate; abdomen inversely truncate, conical; both with sixteen to twenty longitudinal ribs, and alternate longitudinal rows of small circular pores, converging towards the two poles. Mouth truncate, with broad hyaline peristome.

Dimensions.—Length of the three joints, a 0.03, b 0.07, c 0.1; breadth, a 0.03, b 0.09, c 0.07.

Habitat.—Central Pacific, Stations 265 to 268, depth 2700 to 2900 fathoms; fossil in Barbados.

5. Phormocyrtis quadrata, n. sp.

Shell ovate, papillate, with two slight strictures. Length of the three joints = 2:3:13, breadth = 4:6:11. Cephalis hemispherical, small, with two divergent, pyramidal horns of twice the length. Along the hemispherical thorax and the ovate inflated abdomen run twenty-four to thirty curved ribs, converging towards the two poles, and alternate with the same number of longi-