three divergent, irregularly dentate ribs, which at the second joint bear stronger, pyramidal teeth, also at the third stricture a strong, terminal tooth. Fourth joint without ribs, inversely conical, with a strong, conical, terminal spine of half the length on the basal pole. Pores subregular, circular, double-edged.

Dimensions.—Length of the shell (with four joints) 0·15. Breadth of the third (broadest) joint 0·08. Length of the single joint, *a* 0·02, *b* 0·03, *c* 0·05, *d* 0·05.

Habitat.—Western Tropical Pacific, Station 225, depth 4475 fathoms.

Family LXIX. Phormocampida, n. fam.

Artophormida et Artophænida, Stichophormida et Stichophænida, Haeckel, 1881, Prodromus, pp. 438, 439.

Definition.—Stichocyrtida multiradiata. (Cyrtoidea with an annulated shell, divided by three or more transverse constrictions into four or more annular joints, with numerous, four to nine or more, radial apophyses.)

The family Phormocampida comprises those Cyrtoidea in which the lattice-shell is composed of numerous (four to eight or more) annular joints, and bears numerous (four to eight or more) radial apophyses. We divide it into two subfamilies, differing in the shape of the terminal mouth. This is a simple wide opening in the Stichophormida (and the united Artophormida), closed by a lattice-plate in the Stichophænida (and the united Artophænida). The phylogenetic origin of the Phormocampida may be found in the Phormocyrtida.

Three fossil forms only of Phormocampida were hitherto known, two of which were described by Stöhr as *Eucyrtidium acutatum* and *Lithocampe fimbriata*, the third by Ehrenberg as *Eucyrtidium barbadense*; the latter belongs to *Artophormis*, the two former to *Cyrtophormis*. All the other Phormocampida here described, forming together thirty-one species, are new; twenty-two of them belong to the Stichophormida, and nine to the Stichophænida. The latter are disposed in two, the former in four genera.

The number of the radial apophyses is sometimes six or nine, sometimes twelve or more, usually a multiple of three. They are either lateral ribs or wings (Pl. **75**, figs. 2, 5, 12), or terminal feet (Pl. **77**, figs. 13 to 18). Usually they are solid, not latticed, and not strongly developed. The majority of Phormocampida have probably been derived from Phormocyrtida by growth of the abdomen, which becomes annulated by transverse constrictions. Some forms, however, may be derived from similar Podocampida, by interpolation of three to six or more secondary apophyses between the three primary or perradial apophyses.