

3. *Pylospyris canariensis*, n. sp. (Pl. 95, fig. 16).

Shell rough, with deep coronal and slight sagittal constriction. Galea hemispherical, with numerous small irregular, roundish pores, about half as long as the cephalis, with a slender conical horn of twice the length. Cephalis nut-shaped, with larger roundish pores of very unequal size, three pairs of larger pores on each side of the ring. Basal plate with two larger pores.

*Dimensions*.—Galea 0.03 long, 0.08 broad; cephalis 0.06 long, 0.11 broad.

*Habitat*.—North Atlantic, Canary Islands, surface.

Family LIV. PHORMOSPYRIDA, Haeckel (*sensu emendato*) (Pl. 83, figs. 13–15; Pl. 95, figs. 17–19).

*Phormospyrida*, Haeckel, 1881, Prodrömus, p. 442.

*Definition*.—Syröideä with a thorax, without galea; the shell composed of the bilocular cephalis and of a simple thorax arising from its basal face.

The family Phormospyrida differs from the Zygospyrida, their ancestral group, in the development of a thorax, or a second fenestrated shell-joint, which arises from the lower face of the cephalis. It corresponds, therefore, to the Dicyrtida among the Cyrtöideä, and may perhaps be, wholly or partially, the ancestral group of the latter. When the sagittal ring and the longitudinal constriction of the cephalis disappear, the Phormospyrida pass over into the Dicyrtida.

Only three species of this family have been hitherto known, which were found fossil in Barbados, and described by Ehrenberg (1875) as *Lithobotrys stiligera* and *Petalospyris confluens*, and by Bütschli (1882) as *Petalospyris anthocyrtoides*. Fifteen other species are found in the Challenger collection, which we dispose here among five genera.

Two of these five genera (the horned *Acrospyröis* and the hornless *Phormospyris*) possess the three typical basal feet of *Cortina* and *Tripöspyröis*, and may be derived from these genera by the development of network between the bases of the feet. The three other genera possess numerous feet, and may be derived in the same way from the Polyspyrida; the apical face differs in the three genera, in *Desmospyris* it is hornless, in *Patagospyris* it bears an apical horn, and in *Rhodöspyröis* three horns (an apical and two lateral or frontal).

The cephalis in the Phormospyrida exhibits the same typical structure, which we have described above, of all Syroideä (compare, p. 1017). The thorax or the second joint of the shell arises by reticular connection of the bases of the basal feet, and represents a cylindrical or truncate-conical joint in the poly podal forms, or a three-sided joint in the tripod al forms. The terminal aperture or the mouth of the thorax is constantly open, and surrounded by the free ends of the feet.