

The genus *Lychnodictyum* differs from the preceding *Lychnocanium* only in the fenestration of the three terminal feet, and bears therefore to it the same relation that the ancestral *Tripocyrtis* does to *Dictyophimus*.

1. *Lychnodictyum challengeri*, Haeckel.

*Dictyopodium challengeri*, Wyville Thomson, 1877, Atlantic, vol. i. p. 234, fig. 52.

*Dictyophimus* (vel *Tripocyrtis*) *challengeri*, Haeckel, 1878, Protistenreich, p. 47, fig. 35.

Shell campanulate, smooth, with sharp collar stricture. Length of the two joints = 1:3; breadth = 1:4. Cephalis subspherical, with a large, oblique, pyramidal horn thrice the length. Thorax with three inflated bosoms between the three decurrent ribs, which are prolonged into three vertical, parallel, pyramidal, in the upper half fenestrated feet, as long as the thorax. Pores regular, circular. Mouth constricted, flat, half as broad as the thorax.

*Dimensions*.—Cephalis 0.03 diameter; thorax 0.08 long, 0.12 broad.

*Habitat*.—Tropical Atlantic, Station 338, depth 1990 fathoms.

2. *Lychnodictyum wyvillei*, n. sp.

Shell pyramidal, smooth, with obliterated collar stricture. Length of the two joints = 1:3; breadth = 1:5. Cephalis subspherical, with a large, straight, pyramidal horn of twice the length. Thorax nearly tetrahedral, inflated, with three rounded, decurrent ribs, which are prolonged into three widely divergent, angular, curved feet, about as long as the shell, with pyramidal fenestrated base. Pores regular, circular. Mouth constricted, flat, half as broad as the thorax.

*Dimensions*.—Cephalis 0.025 diameter; thorax 0.08 long, 0.12 broad.

*Habitat*.—Central Pacific, Stations 266 to 274, depth 2350 to 2925 fathoms.

3. *Lychnodictyum scaphopodium*, n. sp. (Pl. 56, fig. 4).

Cephalis hemispherical, large, without horn, with irregular, small, roundish pores. Thorax a little larger, campanulate, with three broad, shovel-shaped, fenestrated, vertical feet, and larger, irregular pores. In the figured specimen the third (posterior) foot was broken off. In another specimen the three feet were somewhat longer and not so broad.

*Dimensions*.—Cephalis 0.03 long, 0.05 broad; thorax 0.05 long, 0.06 broad.

*Habitat*.—Central Pacific, Station 274, depth 2750 fathoms.

4. *Lychnodictyum sethopodium*, n. sp.

Cephalis hemispherical, large, with a rudimentary conical horn, and very scarce small pores. Thorax twice as broad and long as the cephalis, campanulate, with irregular, roundish pores, and three slender, pyramidal, divergent feet twice the length, which in the upper half are fenestrated, in the lower half solid.

*Dimensions*.—Cephalis 0.025 long, 0.045 broad; thorax 0.05 long, 0.09 broad.

*Habitat*.—South Atlantic, Station 330, surface.