

Genus 431. *Tympanidium*,¹ Haeckel, 1881, Prodrömus, p. 447.

Definition.—Tympanida with two bisected horizontal rings, which are connected by four vertical meridional rings (or eight columellæ).

The genus *Tympanidium* differs from all other Protympanida in the development of four vertical rings, placed in four different meridional planes. Only one of these is complete, the primary sagittal ring; the three others are incomplete, inserted on the two horizontal rings, which are formed by the paired mitral and basal branches of the sagittal ring; one of these three lies in the frontal plane, the two others in diagonal meridional planes (between the frontal and sagittal). The shell therefore exhibits twelve large gates, four of which are horizontal (the two superior mitral and the two inferior basal gates); the eight others are vertical, separated by the eight columellæ, or the halves of the four meridional rings. In the subgenus *Tympanomma* the number of gates amounts to sixteen, the four lateral gates being bisected by an incomplete equatorial ring. The genus *Tympanidium* may be derived from *Acrocubus* by development of the two diagonal rings (between the frontal and sagittal).

Subgenus 1. *Tympanura*, Haeckel.

Definition.—Shell with twelve gates; the four lateral gates simple.

1. *Tympanidium foliosum*, n. sp. (Pl. 94, fig. 1).

Shell with twelve gates; the four lateral gates simple. Basal gates of the shell larger than the mitral gates. Sagittal ring ovate, much smaller than the three other meridional rings, which are armed with numerous large elegant spines, bearing a lanceolate leaf on a thin pedicle. The sagittal ring bears a bunch of similar spines only at the apex, and on both poles of the sagittal axis (in the equator) a single forked spine, with two thorny branches.

Dimensions.—Length of the shell 0.09 (with spines 0.25), breadth 0.15.

Habitat.—South Pacific, Station 300, depth 1375 fathoms.

2. *Tympanidium spinosum*, n. sp.

Shell with twelve gates; the four lateral gates simple. Basal and mitral gates of about equal size. Shell similar to that of the preceding species, differing mainly in the different armature; the numerous spines, covering the convex outside of the four vertical rings, are not leaf-shaped, but conical, short, of very variable size, partly simple, partly irregularly branched.

Dimensions.—Length of the shell 0.08 (with spines 0.2), breadth 0.12.

Habitat.—South Pacific, Station 295, depth 1500 fathoms.

¹ *Tympanidium* = Small drum; τυμπανιδιον.