

# DESCRIPTION OF A PTEROPOD FROM THE UPPER CAMBRIAN.

## PTEROPODA.

### Genus MATTHEVIA Walcott.

*Matthevia* Walcott, 1885. Amer. Jour. Sci., 3d ser., vol. xxx, p. 17.

Shell conical; aperture sinuous; transverse section ovate, elliptical, or rounded subquadrate; interior with two elongate chambers diverging from the apex and opening into a large, single, terminal chamber; both of the interior chambers are crossed by a single imperforate septum; calcareous; surface papillose. Operculum calcareous, nucleus eccentric, lines of growth concentric.

Type, *Matthevia variabilis*.

The generic name is proposed in honor of Mr. G. F. Matthew, who is doing so much good work on the St. John Cambrian fauna.

This peculiar shell is so distinct from all described forms referred to the Pteropoda that a new family, Matthevidæ, is instituted to receive the one genus now known.

In form and surface markings it approaches the genus *Conularia*; the operculum may be compared to that of *Hyolithes* and the imperforate transverse septum allies it to both *Hyolithes* and *Conularia*. Its thick shell is observed in the genera *Conularia*, *C. fecunda* Barr. (Syst. Sil. Bohême, vol. iii, pl. viii, fig. 8); *Hemiceras*, *H. cylindricus* Eichwald (Lethæa Ross., vol. i, atlas, pl. xl, fig. 17; pl. xlii, fig. 29); and *Hyolithes*, *H. impar* Ford (this Bulletin, pl. xiv, fig. 1). When we come to trace a relationship to the two inner chambers, we are at once at a loss for comparisons. The genus *Pterotheca* has a shelf-like projection that may indicate a division of the animal, and we may look to the shelf-bearing gasteropods, *Crepidula*, &c.; but, while these may indicate the origin of the dividing shell between the two chambers of *Matthevia*, the latter remains clearly and distinctly a type by itself.

There is a curious form described as *Tetradium*<sup>1</sup> *Wrangeli* Schmidt (Mém. Acad. Imp. Sci., St.-Petersbourg, vii<sup>e</sup> sér., t. xxi, No. 11, p. 42; t. iv, figs. 3-8, 1874), which Lindstrom suggests is by the thick-shelled *Conularia fecunda* liaked to the *Conulariæ* and made to stand in affinity to them (Sil. Gasteropoda and Pteropoda of Gotland, p. 41, 1884).

<sup>1</sup>The genus *Tetradium* being preoccupied (Dana, 1846; Safford, 1856), I propose *Palænigma* in place of Schmidt's *Tetradium*, 1874, for the species under discussion. *P. Wrangeli*.