

## XXII.—Description of Two New Species of Zonites from Tennessee.

BY THOMAS BLAND.

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**Zonites Wheatleyi**, nov. sp.

*T. umbilicata*, depressa, tenuis, nitens, pellucida, fusculo-cornea, delicate striatula; spira sub-planulata; sutura leviter impressa; anfr. 4½, convexiuscula, ultimus basi convexior, ad aperturam rapide accrescens, vix descendens; umbilicus pervius; apertura depressa, oblique lunaris; peristoma simplex, acutum, marginibus approximatis, callo tenui junctis.

Fig. I.



Shell umbilicated, depressed, thin, shining, pellucid, brownish horn-colored, finely striated; spire subplanulate, suture slightly impressed; whorls little convex, the last more convex at the base, rapidly increasing at the aperture, scarcely descending; umbilicus pervious; aperture depressed, obliquely lunate; peristome simple, acute, the margins approximating, joined by a thin callus.

Diam., major 5, min. 3½; Alt., 2 mill.

Z. *Wheatleyi*.

*Habitat*.—The Cliffs, Knoxville, Tennessee, Mrs. George Andrews; also, Tiverton, Rhode Island, J. D. Thomson.

*Remarks*.—This, with the following species, was discovered and communicated to me, in 1879, by Mrs. Andrews, who thus described the locality in which the two species were found:—"The Cliffs rise up 200 feet on the south side of the river,—they are very steep and rocky, face the north, are almost always shady, damp, and covered with mosses and ferns. I collected the shells on the ledges of the rocks among the dead leaves, at an elevation above the river of about 100 feet. I have not found either of the species in any other locality."

Mr. J. H. Thomson, to whom I submitted specimens, sent to me examples of the same species collected by him, "on a high rocky ledge, covered with old trees, at Tiverton, Rhode Island."

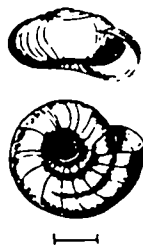
This species, *Z. Wheatleyi*, is more nearly allied to *Z. viridulus*, Mke, than to any other North American form, but differs from it, especially in the form of aperture, in the descending last whorl, and in having a wider umbilicus.

I dedicate the species to the memory of my late valued and lamented friend, Chas. M. Wheatley.

***Zonites petrophilus*, nov. sp.**

T. late umbilicata, depresso subglobosa, tenuis, nitens, translucens, albida, irregulariter striata; sutura mediocris; anfr.  $5\frac{1}{2}$ —6, convexiusculus, ultimus convexior, non descendens; umbilicus extus late excavatus, perspectivus; apertura rotundato-lunaris; peristoma simplex, paululo subincrassatum, sæpe roseum, margine columellari reflexiusculo.

Fig. 11.



Shell broadly umbilicate, depressed; subglobose, thin, shining, translucent, whitish, irregularly striated; suture moderately impressed; whorls  $5\frac{1}{2}$ —6, rather convex, the last more convex, not descending; umbilicus widely excavated externally, pervious; aperture roundly lunate; peristome simple, somewhat thickened, often rose colored, the columellar margin slightly reflected.

Diam., major 6, min.  $5\frac{1}{4}$ ; Alt. fere 3 mill.

*Z. petrophilus.*

*Habitat.*—The Cliffs, Knoxville, Tennessee, found with *Z. Wheatleyi*, Mrs. Geo. Andrews.

*Remarks.*—This species is, in general form, nearly allied to *Z. arboreus*, but the color is different, the striæ are more developed, and the umbilicus is much wider.

My friend, Mr. W. G. Binney, examined the dentition of *Z. petrophilus*, and favored me with notes on the subject. He found the teeth 15—1—15, with two perfect laterals, one only on each side. *Z. viridulus* has the same number of laterals, but many more marginals.

I would express my deep obligation to Mrs. Andrews for her uniform kindness and liberality in supplying me, during many years, with numerous rare and interesting species.