

* *DENDROTROCHUS*, Pilsbry, ASSIGNED TO
TROCHOMORPHA.

BY C. HEDLEY, F.L.S.

[Plate XXI.]

FROM considerations of shell characters, and perhaps of geographical distribution, Pilsbry attached † to the genus *Papuina*, a compact and newly defined group, *Dendrotrochus*, embracing the species kindred to (*Helix*) *helicinoides*, Hombron and Jacquinot. The author of it added that the soft anatomy of the section was unknown to him.

Some examples of the animal of the type species collected by Dr. V. Gaunson Thorp, of H.M.S. "Penguin," presented by him to Dr. J. C. Cox, and transferred by the latter to the Australian Museum, have just been examined by myself. The result is to convince me that at least *T. helicinoides*, and probably the species Pilsbry associates with it, must be dismissed from the genus *Papuina*, and be ranked under the genus *Trochomorpha*. Those features in which *Dendrotrochus* leans from *Trochomorpha* towards more normal Zonitidæ, namely the tripartite sole, caudal mucous pore and side cusps of the rachidian tooth, induce me to hold it as closer than *Trochomorpha* proper to a primitive stock. The evidence furnished by the foot, dentition and genitalia of *Dendrotrochus* harmonise, in the classification I propose, with those characters of its shell which are emphasised in the diagnosis of the section. On page 1 of the work above cited, "columellar margin arcuate, short, not dilated or reflexed," is italicised as an important distinction of *Trochomorpha*; while on page 143, "columellar lip not expanded or reflexed" is given similar prominence in the description of *Dendrotrochus*.

It is a matter of regret to the writer that his inquiries should have led him to mar with corrections a single page of so brilliant a work as Pilsbry's "Guide to the Study of Helices;" but the progress of knowledge thus exacts its dues as we rise, to paraphrase the poet, on stepping-stones of our dead classifications to higher things.

* Since this article was in print, I have received a letter from Mr. Pilsbry, discussing this classification. Accepting the proposed reform, he points out to me that Stoliczka described (*Journ. Asiat. Soc. Bengal*, xlii., Pt. ii., p. 20) a rudimentary tail pore in *Sivella*. From my description he now considers "that *Dendrotrochus* is an arboreal section or subgenus of *Trochomorpha* retaining an old character in the tail pore."

† *Man. Conch.* (2) ix., p. 143.