

NOTES ON BYTHINELLA, ETC.

BY THE REV. J. E. TENISON-WOODS, F.G.S., F.L.S., HON.
COR. MEM. R. SOC. TAS., AND PRESIDENT OF THE LINN.
SOC. N. S. WALES.

Last year I reviewed in the proceedings of this Society the synonymy of the genus *Bythinella* as far as it is represented by the small freshwater shells of our streams. Since then I have had my attention drawn by Prof. Tate to a species described by Messrs. Quoy and Gaimard, which from the figures and diagnosis I make no doubt belong to the genus, and probably a subsequently described species; have also had an opportunity of seeing Mr. J. Brazier's type specimens of his *Amnicola Petterdiana*, in which I can see no differences to distinguish it from the shell already described. I was not able to examine this type specimen before, as Mr. Brazier had left Sydney, and his collection was packed away. In consequence of this I was obliged to omit any reference to the species in my last paper.

The diagnosis of Messrs. Quoy and Gaimard is as follows: *Paludina nigra*. Q. and G. Voyage de l'Australe, vol. 3, p. 174, plate 58, figs. 9, 12. *P. t. minima, ovato-turrita, nigra; anfractibus quaternis obliquis, convexis, spira obtusa, apertura, subcirculari, prominente.* (Shell minute, ovately turreted, black, whorls four, oblique, convex, spire obtuse, aperture subcircular, prominent). The last whorl equalling all the others. Umbilicus scarcely visible. Black when alive, brownish by dessication. Foot oval, muzzle prominent, cordiform, extended beyond the foot, tentacles long, obtuse, eyes at the base, animal all black except the underside of the foot, which is whitish. Operculum membranaceous. Inhabits the small freshwater streams of D'Entrecasteaux Channel. They add that it cannot be the young of any species, as they found it in such numbers and all of the same size.

I make no doubt that from both the habitat and description, that this is our common *Bythinella*, which has therefore the following synonymy:

BYTHINELLA NIGRA. Quoy and Gaimard, loc. cit. *Paludestrina Wisemaniana*; Brazier, Proc. Zool. Soc. Lond. 1871, p.

698; *Paludestrina Legrandiana*, Brazier, loc. cit. p. 699; *Amnicola Petterdiana*, Braz. Proc. Linn. Soc. N. S. Wales, vol. 1, p. 19; *Bythinia Legrandi*, Tenison-Woods, Proc. Roy. Soc. Tas. 1875, p. 76; *Bythinia unicarinula*, nobis. loc. cit. p. 71; *Bythinella Legrandiana*, nob. op. cit. 1878; *Bythinella nigra*, nob. loc. cit.; *Bythinia unicarinata*, Johnston, op. cit. March, 1878; *Bythinella Legrandiana*, Johnston, loc. cit.; *Paludestrina Legrandiana*, Johnston, loc. cit.; *Bythinia Tasmania*, Proc. Roy. Soc. Tas. 1865, p. 77; *Bythinella Tasmania*, Johnston, op. cit. March, 1878.

I have also to amend the diagnosis of *Tatea Huonensis*, nobis. Animal with a broadly ovate foot, truncate under the head, *with lateral sinuses*; muzzle reddish brown with colorless lip; tentacles long subulate, colorless, encircled with brown near the tip. Operculum subcalcareous, pauci-spiral, with a vertical submarginal claw.

With regard to the genus *Amnicola*, I have already given my reasons for regarding this as a purely American type. Its history is this: in 1840 Messrs. A. A. Gould and Haldeman in their supplement to a monograph of the Limniades cited the genus in these terms:—Head proboscidiform, shell like *Paludina*, operculum corneous and subspiral. No species was taken as a type. Dr. Gould in his work on the Invertebrata of Massachusetts subsequently defined the genus and took as a type the *Paludinæ* of few whorls. Mr. Stimpson published an essay on *Hydrobinæ* in 1865, and at p. 13 gave a figure of the operculum of American *Amnicolas*, showing that they possess peculiarities of structure which are found in American freshwater shells only. Mons. P. Fischer, in the *Jour. de Conchyl.* for 1878, vol. 18, p. 135, considers that the genus must be entirely restricted to American species, and in this opinion he is, I believe, followed by most conchologists.