

SYSTEMATIC NOTES ON AUSTRALIAN LAND SHELLS.

By

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Museum routine necessitates the determination of any molluscan material submitted, and many land shells and slugs are included. These have been a continual source of trouble, as Australian land shells have not been systematically studied recently. My predecessor, Mr. Charles Hedley, began his conchological career by the examination of molluscous animals, but at that time with very little knowledge of their shells and their importance. He soon found that the latter must be given much more value than had been anticipated, and began accumulating systematic data for the elucidation of our land molluscan fauna. It was a long and tedious task, and, unfortunately, when his goal was in sight his work was terminated by his death. The preparation of an illustrated monographic account was left as a legacy to me, and I hope to complete the work in the near future.

Unfortunately in the past it has been traditional to depreciate or entirely discount shell features, and utilize imperfectly understood anatomical features in order to group land mollusca. Modern malacologists now agree that shells, when correctly studied, are of great value, and that until the shell is accurately distinguished the anatomical data cannot be properly valued. It is now necessary to separate a large number of small groups in which the shells may be ranged, and then, from a study of these restricted series, animal characters may be carefully examined and a sound classification formulated.

There are many pitfalls in the study of Australian land shells, and it has been a difficult matter to unravel the literary history of many of the species. The data collected will be published in full at the earliest opportunity, the present essay being merely an attempt to clear some of the difficulties out of the way. The most important works of reference are the following:—Pilsbry, *Manual of Conchology*, series 2, vol. ix; Cox's *Monograph of Australian Land Shells*; May's *Mollusca of Tasmania and Illustrated Index*; Hedley's *Essays in the Records of the Australian Museum* and in the *Proceedings of the Linnean Society of New South Wales*; Hedley's *West Australian List*; Tate's *Report of the Horn Scientific Expedition*; Cox and Hedley's *Victorian Index*, and now Gabriel's *Catalogue of Victorian Land Shells*. Other minor papers are referred to in the following pages.

Genus *Helicarion*.¹

All Australian Vitrinid molluscs have been classed in this genus, and its range has now been extended into other countries, so that the name *Helicarion* has become almost as meaningless in systematic usage as *Vitrina*. Fortunately the type of *Helicarion* is the Tasmanian species *H. cuvieri* Ferussac,² so that in this respect we are on sound ground. From this species the magnificent Queensland species *H. superba* Cox³ differs in the tenuity of the shell, the coiling, and the large size, and is here separated with the subgeneric name *Fastosarion*.

¹ Ferussac.—*Tabl. Syst. Fam. Limac.* 1821, p. 20 (16), June.

² Ferussac.—*Tabl. Syst. Fam. Limac.* 1821, p. 20 (16), pl. ix, fig. 8, June; Austr.

³ Cox.—*Proc. Zool. Soc. (Lond.)*, 1871, p. 54 (June 12); Port Denison, Q'ld.