

NEW SPECIES OF MARINE MOLLUSCA FROM THE SUBANTARCTIC ISLANDS OF NEW ZEALAND.

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[PLATE 20.]

WITH the exception of two species the material described in this paper was found in some dredgings and beach drift received from Miss M. K. Mestayer, of Wellington, to whom the writer is indebted for permission to describe the new species.

PERRIERINIDÆ. Genus PERRIERINA Bernard, 1897.

Type (by monotypy): *P. tarodonta* Bernard.

PERRIERINA MESTAYERÆ n.sp. (Fig. 2).

Shell minute, thin and fragile, obliquely ovate, inequilateral; the beaks rounded, prominently raised and slightly nearer to the anterior end, outline of valves oval, anterior end rendered slightly rostrate by the undercutting of the anterior ventral margin. The anterior and posterior dorsal margins are about equal and descend in a gradual arc, and this brings the subangle of the rostrum to about two-thirds the height of the shell. The posterior end is broadly rounded. Surface of valves smooth except for fine, close, somewhat irregular concentric lines of growth.

Hinge narrow and long, typical. Right valve with two divergent cardinals, joined above as an inverted V and situated in front of the narrow oblique resilium. The anterior cardinal is the larger and more massive and it is roughly wedge shaped and very oblique. In addition there are four anterior and five posterior lamellæ set on the distal parts of the hinge plate, approximately in a horizontal plane. Left valve with three anterior cardinals, apart from the dorsal lamellæ. Central cardinal triangular, outer two narrow and oblique, the one nearest to the resilium quite short. Adductor scars unequal, the anterior pyriform, the posterior rounded. Pallial line simple and entire. Colour white. Length 1.9 mm.; height 1.5 mm.; thickness (one valve) 0.45 mm.

Holotype (one right valve) and paratype (left valve) in the collection of Miss M. K. Mestayer.

Habitat: Snares Islands in 50 fathoms. (Captain J. Bollons.)

From the genotype this species differs considerably in outline and general proportions.

Perrierina was a monotypic genus until Marwick in 1928 (*Trans. N.Z. Inst.*, vol. 58, p. 444) described *P. ovata*, an upper Tertiary species from the Chatham Islands. The members of this genus now number three, two of which are Recent species. All are restricted to the New Zealand faunal region.

PERRIERINIDÆ. Genus *LEGRANDINA* Tate & May, 1901Type (by original designation): *L. bernardi* Tate & May.*LEGRANDINA AUCKLANDICA* n.sp. (Fig. 1).

Shell very small, rather solid, sub-ovate almost equilateral, the beaks about central, flattened and broadly rounded, with the prodissoconch defined by a groove. Outline of valves roughly oval, anterior and posterior ends and ventral margin broadly rounded, but both the anterior and posterior dorsal margins are flattened and descend rather abruptly from the beaks. Hinge rather massive and moderately long. Right valve with two cardinals, almost joined above but strongly divergent below. The anterior cardinal is long and obliquely triangular but the posterior one is considerably shorter, more upright and not expanded. There are from four to six horizontal lamellæ spread over the distal parts of the hinge plate. In the left valve, apart from the corresponding horizontal lamellæ, there are two cardinals, a short triangular laterally compressed bifid central one and a moderately long oblique anterior one. Colour dull greyish white, the posterior end stained light ochreous brown. Adductor scars typical, unequal, the anterior pyriform, the posterior rounded. Pallial line simple and entire. Length 2 mm.; height 1.65 mm.; thickness (one valve) 0.40 mm.

Holotype and many *paratypes* in the collection of Miss M. K. Mestayer.

Habitat: Faith Harbour, Auckland Islands (beach drift). (Captain J. Bollons.)

The hinge in the above species differs slightly in detail from that of the genotype but has the essential characters for the genus.

This is the first record of *Legrandina* from the New Zealand region. Previously this genus was allocated in Leptonidæ, but it proves to be closely allied to the genus *Perrierina*, so must be removed to the family Perrierinidæ.

LITTORINIDÆ. Genus *MACQUARIELLA* Finlay, 1926.Type (by original designation): *Paludestrina hamiltoni* Smith.*MACQUARIELLA AUCKLANDICA* n.sp. (Plate 20, fig. 6).

Shell very small, globose, moderately strong, narrowly umbilicated, smooth and of a uniform reddish brown colour. Spire short, obtuse, about one-sixth height of aperture. Protoconch of moderate size, flat, of $1\frac{1}{2}$ smooth whorls. Whorls $2\frac{3}{4}$ to 3, rapidly increasing, convex, base rounded. Suture deep. Aperture large, ovate. Peristome continuous, outer lip thin and sharp, basal lip slightly thickened, pillar very thick and massive, and above connected by a callus to the outer lip. Umbilicus, a narrow chink. Height 1.40 mm.; major diameter 1.75 mm., minimum diameter 1.20 mm. (holotype).

Holotype and paratypes in collection of Miss M. K. Mestayer.

Habitat: Faith Harbour, Auckland Islands (beach drift). (Captain J. Bollons.)

From the genotype the Auckland Island shell differs in being smaller, more globose with a smaller aperture and in having a much thicker and more massive pillar.

RissoiDÆ. Genus SUBONoba Iredale 1915.

Type (by original designation): *Rissoa fumata* Suter.

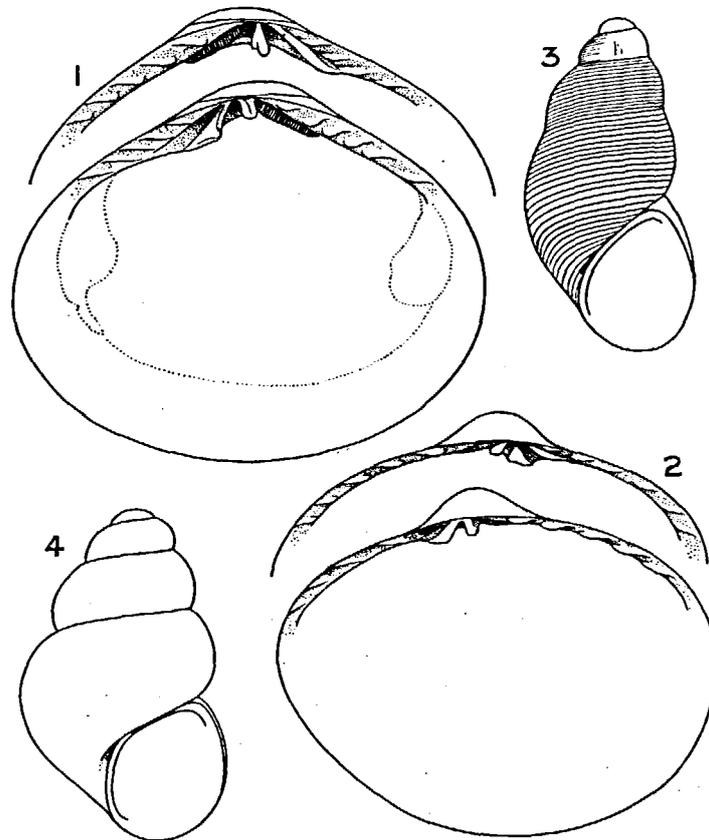
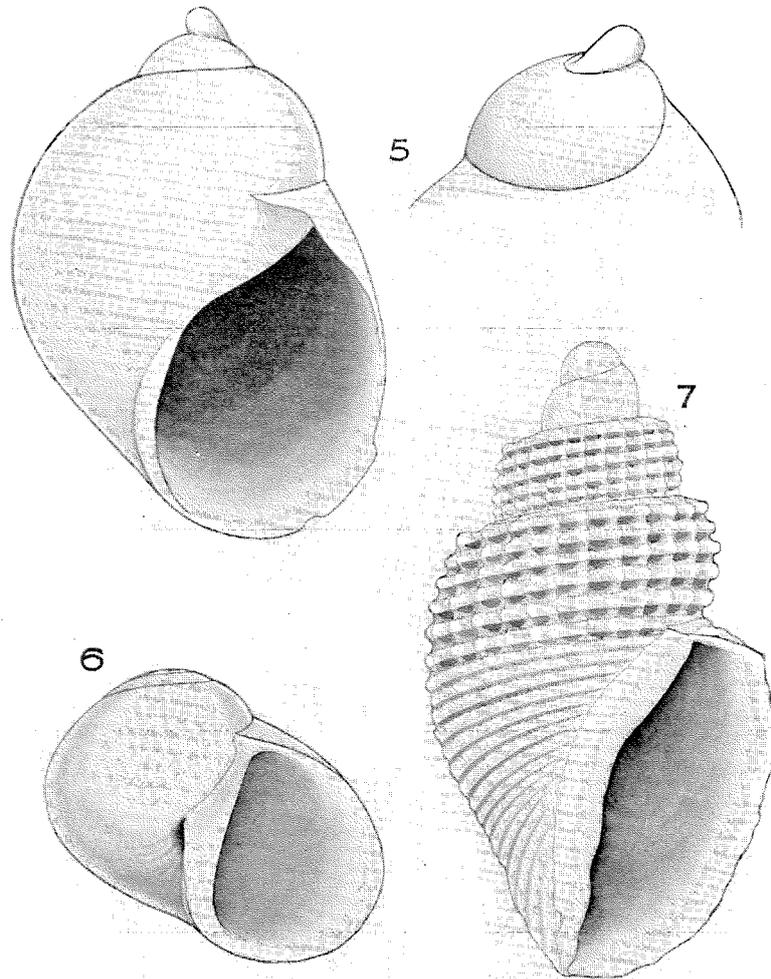


FIG. 1.—*Legrandina aucklandica* Powell. Holotype. 2×1.65 mm.
 FIG. 2.—*Perrierina mestayeræ* Powell. Holotype. 1.9×1.5 mm.
 FIG. 3.—*Subonoba delicatula* Powell. Holotype. 1.9×1.0 mm.
 FIG. 4.—*Subonoba tenuistriata* Powell. Holotype. 2.0×1.25 mm.



NEW ZEALAND MOLLUSCA.

FIG. 5.—*Hypermastus bountyensis* Powell. Holotype. 1.84×1.34 mm.

FIG. 6.—*Marquariella aucklandica* Powell. Holotype. 1.40×1.75 mm.

FIG. 7.—*Zeadmete subantarctica* Powell. Holotype. 4.6×2.5 mm.

SUBONOA DELICATULA n.sp. (Fig. 3).

Shell minute, subcylindrical, thin and fragile. Translucent, whitish. Whorls $4\frac{1}{2}$, including bluntly rounded protoconch of $1\frac{1}{2}$ smooth whorls. Spire tall, about $1\frac{2}{3}$ times height of aperture. Sculpture consisting of numerous fine and close spiral liræ, fifteen on penultimate whorl and about 24 on the body-whorl and base. The interspaces are about half the width of the liræ.

This species differs from *fumata* in having a relatively lower spire, more swollen and evenly arcuate whorls and more numerous and finer spiral liræ. The sculpture is very close to that of *S. insculpta* Murdoch but the shape is much too slender for that species. Height 1.9 mm.; diameter 1.0 mm. (Holotype.)

Holotype and paratypes in the collection of Miss M. K. Mestayer.

Habitat: Faith Harbour, Auckland Islands (beach drift). (Captain J. Bollons.)

SUBONOA TENUISTRIATA n.sp. (Fig. 4).

Shell small, elongate, thin and fragile. Translucent, whitish. Whorls 5, including a bluntly rounded protoconch of $1\frac{1}{2}$ smooth whorls. Spire tall, about $1\frac{1}{2}$ times height of aperture. Sculpture consisting of exceedingly fine and numerous closely spaced spiral liræ, about thirty-four on the penultimate whorl. Aperture broadly-ovate, peristome thin, continuous with the columella, but broken for a small space by a thin parietal callus. There is a slight umbilical chink separating the columella from the base.

This species is, in shape, almost identical with Murdoch's *insculpta*, but has just double the amount of sculpture per whorl, in fact, the sculpture is so fine that at first sight the shell appears to be smooth. Height 2.0 mm., diameter 1.25 mm.

Holotype in the collection of Miss M. K. Mestayer, Wellington.

Habitat: 14 miles north of the Auckland Islands in 95 fathoms.

STROMBIFORMIDÆ. Genus HYPERMASTUS Pilsbry 1899.

Type (by original designation) *Eulima (Hypermastus) coxi* Pilsbry = *Lambertia* Souverbie 1869, preoccupied.

HYPERMASTUS BOUNTYENSIS n.sp. (Plate 20, fig. 5).

Shell globular, thin, white, semi-transparent, surface showing very faint distant axial growth lines. Whorls $4\frac{1}{2}$, including characteristic inclined protoconch of two whorls. Sides of protoconch straight and parallel, not tapering, apical extremity rounded. Post-nuclear whorls very rapidly increasing. Outline of whorls and base strongly convex. Spire a trifle more than half height of aperture. Suture impressed and false-margined due to the semi-transparency of the shell. Aperture ovate, capacious. Peristome discontinuous, thin and sharp, damaged in holotype the only known specimen. Parietal wall not defined by glaze or callus. Columella strong,

rounded, arcuate, gradually diminishing below and merging into the thin basal lip. Height 1.84 mm., diameter 1.34 mm.

Holotype in writer's collection.

Habitat: 170 fathoms off the Bounty Islands. (From a dredging by the late Captain Fairchild, 1893.)

The genus *Hypermastus* is here recorded from New Zealand waters for the first time. Besides the genotype which is a Recent New South Wales shell, the genus includes the New Caledonian *Lambertia montrouzieri* Souverbie and the Lower Californian *Lambertia cookeana* (*Proc. U.S. Nat. Mus.*, vol. 53, p. 354, pl. 49).

The Bounty Island shell is much more globular than the New South Wales genotype and in this respect it is nearer to the New Caledonian *montrouzieri*, but that species is much larger, being 10 mm. in height. The height of *cori* is 4 mm., of *cookeana*, 3.7 mm.

CANCELLARIIDÆ. Genus ZEADMETE Finlay 1926.

Type (by original designation): *Cancellaria trailli* Hutton.

ZEADMETE SUBANTARCTICA n.sp. (Plate 20, fig. 7).

Shell small, ovate-cylindrical, thin, cancellated, dull white, except for the protoconch which is ochreous buff. Whorls $4\frac{1}{2}$, including protoconch of $1\frac{1}{2}$ smooth, globose whorls. Spire elevated, about same height as aperture. All whorls with a broad subsutural shoulder and rather straight subparallel sides. Post-nuclear sculpture of numerous flat-topped spiral ridges with slightly narrower interspaces, and these are crossed by low axial riblets (obsolete from the base) which resolve into small oval nodules where they intersect the spirals. On the penultimate whorl there are seven spirals, one at the angle of the shoulder, one between this angle and the upper suture and five between the angle and the lower suture. On the body-whorl there are seven nodulous spirals and a further fourteen plain spirals on the base and fasciole. Aperture narrowly ovate, with a small open canal below. Outer lip thin, slightly crenulated by the external sculpture. Inner lip with a narrow white callus on parietal wall. Columella vertical, with three subobsolete plaits.

Height 4.6 mm., diameter 2.5 mm. (Holotype.)

Holotype and paratype in the Suter Collection, Wanganui.

Habitat: Snares Islands in 50 fathoms, Subantarctic, N.Z.

This new species is nearer allied to the Pliocene *Zeadmete pliocenica* Finlay 1930 than it is to the Recent South Island *trailli* (Hutton). It differs from *pliocenica* in having more regular sculpture and a smaller adult size, and from *trailli* in having a well-marked shoulder. Also, compared with *trailli*, the new species, *subantarctica*, has a smaller but more elevated protoconch, is altogether a smaller shell and far more cylindrical in shape.

The writer is indebted to Mr. J. Grant of the Wanganui Museum for the loan of the specimen here described.