

ADDITIONS TO AND ALTERATIONS IN THE CATALOGUE OF THE LAND SHELLS OF VICTORIA
(INCLUDING DESCRIPTIONS OF NEW SPECIES)

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(Plates 9-10).

(Received for publication June 25, 1947)

In the Proceedings of the Royal Society of Victoria Vol. XLIII, pp. 62-88, 1930, the writer published a catalogue of the Land Shells of Victoria, recording forty-five species and two varieties including eight new forms. In the interim, the list has been considerably augmented, bringing the total to 62 species and two varieties including eight new to science, the descriptions of which are now offered. Many of the additions have been located in the Gippsland area, and it is my earnest conviction that diligent search in this region will prove the existence of further species, and that they merely await the collecting. Several apparently new forms are in the cabinet of the writer but as noted in the above catalogue, with single specimens it is considered advisable to postpone descriptions until further examples appear. The present novelties, types of which have been presented to the National Museum of Victoria, are as follow: *Charopa jemmysensis*, *C. illustra*, *C. okeana*, *C. colliveri*, *C. inexpectata*, *C. problematica*, *C. lakesentranciencia*, *Allodiscus marysvillensis*, and special attention is drawn to the first named species, a small but most exquisite form, located with several species near Jimmy's Point, Lakes Entrance. In his Basic List of the Land Mollusca of Australia, Iredale (*loc. cit.*) has erected many New Genera, several of which appear in the present communication. The List of Introduced Forms is increased by the presence of *Vallonia pulchella* Müller, discovered at Stanhope by Mr. P. R. Johnson.

The type specimens mentioned in the 1930 Catalogue as being in the collections of the writer have now been deposited with the National Museum of Victoria.

Opportunity is here taken of expressing my best thanks to Mr. C. W. Brazenor of the National Museum for his splendid illustrations accompanying this paper.

made *H. nelsonensis* Brazier the type of his new genus *Tasmadelos*, Aust. Zool., ix, p. 118, 1938.

Genus ECHOTRIDA Iredale, 1933.

Echotrifa strangeoides (Cox).

1864. *Helix strangeoides* Cox, Cat. Aust. Land Shells, p. 20.
 1868. *Id.*, Cox, Mon. Aust. Land Shells, p. 27, pl. 17, figs. 3, 3a, 3b.
 1933. *Echotrifa strangeoides* (Cox). Iredale, Rec. Aust. Mus., xix, p. 48.
 1938. *Id.*, Iredale, Aust. Zool. ix, p. 117.

Size.—Maj. diam., 0.40; min., 0.33; alt., 0.15 of an inch.

Locality.—Gippsland (exact locality unknown), J. A. Kershaw (one specimen).

Observations.—A small, shining species, irregularly and rather coarsely striated; decussated above and below with numerous close-set spiral lines, a feature distinguishing it from the allied species *H. splendidula* Pfeiffer. This is an interesting addition to the Victorian fauna. Type of genus *Echotrifa*.

Family LAOMIDAE

Genus PARALAOMA Iredale, 1913.

Paralaoma morti (Cox).

1864. *Helix morti* Cox. Ann. Mag. Nat. Hist., (3), xiv, p. 182.
 1930. *Laoma morti* Cox. Gabriel, P.R.S. Vic., xliii, pt. 1 (N.S.), p. 78.
 1937. *Paralaoma morti* Cox. Iredale, Aust. Zool., viii, pt. 4, p. 313.

Size.—Maj. diam., 2.03; min., 1.77; alt., 1.01mm.

Localities.—Widely distributed throughout the State.

Observations.—A small, exceedingly common species, presenting features which are subject to considerable variation, hence the heavy synonymy. It enjoys an extensive range, being recorded from New South Wales, Victoria, South Australia, Western Australia and Tasmania. Found under stones, dry timber and fallen leaves. The description of the genus appears in P. Mal. Soc. Lond., x, 1913, p. 380. Haplotype, *P. raoulensis* from Sunday Island, Kermadec Group.

Paralaoma mucoides (Tenison Woods).

1879. *Helix mucoides*, Tenison Woods, P.L.S., N.S.W., iii, p. 125, pl. 12, figs. 5, 5a.
 1930. *Laoma mucoides* (T. Wds.). Gabriel, P.R.S., Vic. xliii, pt. 1, (N.S.), p. 79.
 1937. *Paralaoma mucoides* (T. Wds.). Iredale, Aust. Zool. viii, pt. 4, p. 314.

Size of Type.—Maj. diam., 3; min. 2.5; alt., 1.5mm.

Localities.—Melbourne (Type); Meredith (J. H. Young); Gong Gong Reservoir (C. Oke); Trentham Falls (J. K. and R. C. Gabriel); Splitters' Falls Lorne (Self).

Family RHYTIDIDAE

Genus PROLESOPHANTA Iredale, 1933.

Prolesophanta dyeri (Petterd).

1879. *Helix dyeri* Petterd, Mon. Tas. Land Shells, p. 40.
 1930. *Paryphanta dyeri* Pett. Gabriel, P.R.S. Vic., XLIII, pt. 1, (N.S.), p. 71.
 1933. *Prolesophanta dyeri* (Pett.), Iredale, Rec. Aust. Mus., xix, p. 40.
 1938. *Id.*, Iredale, Aust. Zool., ix, p. 116.

Size of Type.—Maj. diam., 3·5; min., 2·5; alt., 1·5mm.

Localities.—Tarraville, South Gippsland (T. Worcester and C. Oke); Belgrave, Ferntree Gully, Hall's Gap Grampians (C. Oke); Olinda Falls, Splitter's Falls Lorne, Mt. Dandenong (Self); Warburton (F. E. Wilson).

Observations.—A small, glossy shell, easy of recognition. Transference to the above genus is necessary. Iredale (*loc. cit.*) regards this as incorrectly placed under *Paryphanta* remarking "The spire is a little elevated, the apical whorls roughened, the surface consists of fine radial growth lines only, the mouth is somewhat oblique, and there is no umbilicus." Not uncommon, being widely distributed throughout the state. This is a moist-loving species found nestling in moss (*Rhizogonium novaehollandiae* Brid.), and the Hepatic (*Blyttia spinosa* Gotch). Type from banks of Distillery Creek, near Launceston, Tasmania.

Genus DELOS Hutton, 1904.

Delos nelsonensis Brazier.

1871. *Helix (Hyalinia) nelsonensis* Brazier, P.Z.S. Lond., (1870), p. 661.
 1871. *Helix (Paryphanta) fulgetrum* Cox, in Legrand Coll. Mon. Tas. Land Shells, sp. 31, pl. 1, fig. 11.
 1894. *Rhenea nelsonensis* (Brazier). Suter, Ann. Mag. Nat. Hist., (6), xiii, p. 64.
 1909. *Delos nelsonensis* (Brazier). Petterd and Hedley, Rec. Aust. Mus., vii, p. 288.
 1921. *Id.*, May, Check-list Moll. Tas., p. 92, No. 904.
 1923. *Id.*, May, Ill. Index Tas. Shells., pl. 42, fig. 14.

Size.—Maj. diam., 0·15; min., 0·11; alt., 0·06 of an inch.

Localities.—Mount Higginbotham (C. Oke); Mount Hotham (C. Oke).

Observations.—A thin, polished shell belonging to a genus hitherto unrecorded from Victoria. The type locality of the species is south Tasmania, but it is generally distributed throughout the island. Iredale (*loc. cit.*) notes that a little variation exists in the northern shells and figures a subspecies *abitens* which is larger but with a narrower umbilicus, the type from Launceston measuring 4mm. in breadth and 2mm in height. Iredale has

Observations.—In form and sculpture a close ally of *L. morti* Cox. Both species possess radial lamellæ, which are less developed in *L. mucoides*. The last whorl is obtusely carinated, a feature absent in *L. morti*.

Type in Australian Museum, Sydney.

Paralaoma halli (Cox).

1871. *Helix (Rhyssota) halli* Cox, in Legrand Coll. Mon., sp. 34, pl. 2, fig. 9.
 1930. *Laoma halli* Cox. Gabriel, P.R.S. Vic. xliii, pt. 1, (N.S.), p. 81.
 1937. *Paralaoma halli* (Legrand). Iredale, Aust. Zool, viii, pt. 4, p. 314.

Size of Type.—Maj. diam., 1.52; min., 1.26; alt., 1.01mm.

Localities.—Castlemaine (F. L. Billingham); Frankston and Tarraville (T. Worcester); Ferntree Gully, Mt. Donna Buang (C. Oke); Trentham Falls (J. K. and R. C. Gabriel); Grampians, Lorne (Self); French Island (A. R. Trebilcock).

Observations.—A minute form, found under decaying wood, and in moss. Narrowly umbilicated and finely striated. It is widely distributed in Victoria. Consistency in shape is not apparent, as considerable variation is seen, more particularly in regard to height. Iredale (*loc. cit.*) regards Legrand as the author of the species.

Genus LAOMAVIX Iredale, 1933.

Laomavix collisi (Brazier).

1868. *Helix minima* Cox, Mon. Aust. Land Shells, p. 10, pl. 12, fig. 8. (non *Helix minima* Schlotheim, Min. Taschen., p. 340, 1818) (non *Helix minima* H. Adams P.Z.S. Lond., p. 303, 1867).
 1877. *Helix (Pitys) collisi* Braz., P.R.S. Tas., for 1876, p. 168.
 1930. *Laoma minima* Cox. Gabriel, P.R.S. Vict., XLIII, pt. 1 (New Series), p. 80.
 1933. *Thryasona diemencensis* Cox. Iredale, Rec. Aust. Mus., XIX, p. 54.
 1937. *Id.*, Iredale, Aust. Zool., VIII, p. 315.

Size of Type.—Maj. diam., 1.77; min., 1.52; alt., 0.76mm.

Localities.—Bairnsdale and Tarraville (T. Worcester); Carrum (C. Oke); Jemmy's Point Lakes Entrance under stones, decayed timber and fallen leaves (Self).

Observations.—A small, shining, broadly umbilicated species, with nothing comparable in Victoria. Further study of this peculiar little shell convinces one of its misplacement in *Laoma*, and the writer is in agreement with Iredale that a new genus is necessary for its reception and *Laomavix* is now adopted. Cox's name being invalid, the shell will be known as above. Type of *H. minima* Cox is in the Australian Museum, Sydney.

Genus MISELAOMA Iredale, 1933.

Miselaoma sinistra (Gabriel).

1930. *Laoma sinistra* Gabriel, P.R.S., Vic., XLIII, (N.S.), pt. 1. p. 81, pl. 2, fig. 8.

1937. *Miselaoma sinistra* (Gabriel), Iredale, Aust. Zool., VIII, p. 316.

Size of Type.—Maj. diam., 1.0; min., 1.0; alt., 1.2mm.

Localities.—Tarraville (Type, T. Worcester); Ferntree Gully (C. Oke).

Observations.—A peculiar sinistral form. In 1933 Rec. Aust. Mus. XIX, p. 53, Iredale erected this genus for the reception of the Tasmanian *Helix weldii* Tenison Woods, naming it as the Type, and later (*loc. cit.*) included *Laoma sinistra* mihi, from Victoria. These two species are somewhat similar, the Tasmanian form being a much broader shell. This interesting genus is further represented by *M. reevesbyi* Cotton from Reevesby Island, South Australia. Type of *M. sinistra* in National Museum, Victoria.

Genus TROCHOLAOMA Iredale, 1937.

Trocholaoma parvissima (Cox).

1871. *Helix (Conulus) parvissima* Cox, in Legrand Coll. Mon. Tas. Land Shells, sp. 39, pl. 2, fig. 1.

1879. *Helix parvissima* Cox. Petterd, Mon. Tas. Land Shells, p. 22, sp. 33.

1894. *Endodonta parvissima* (Cox). Pilsbry, Mon. Conch., IX, p. 34.

1896. *Endodonta parvissima* (Cox). Hedley, Rec. Aust. Mus., II, p. 104.

1909. *Laoma parvissima* (Cox). Petterd and Hedley, Rec. Aust. Mus., VII, p. 296.

1921. *Id.*, May, Check-List Moll. Tas., p. 95, No. 928.

1923. *Id.*, May Ill., Index Tas. Shells, pl. 43, fig. 13.

1937. *Trocholaoma parvissima* (Legrand). Iredale, Aust. Zool., VIII, pt. 4, p. 316.

Size.—Maj. diam., 0.05; min., 0.04; alt., 0.06 of an inch.

Localities.—Victoria (Iredale); Trentham Falls (J. K. and R. C. Gabriel).

Observations.—A minute, conical species not comparable with any Victorian form. The Trentham record is based on two fragmentary specimens found in moss near the falls and although a trifle smaller, they appear to represent the series. The author's locality is near Brown's River, Tasmania, but is generally distributed throughout the island. It is also recorded from Mt. Kosciusko, New South Wales. *Helix spiceri* Petterd from Tasmania is selected as the type of the genus.

Genus **TURBOLAOMA** Iredale, 1937.*Turbolaoma turbinuloidea* (Gabriel).

1930. *Laoma turbinuloidea* Gabriel, P.R.S. Vic., XLIII (N.S.), pt. 1, p. 81, pl. 2, fig. 7.

1937. *Turbolaoma turbinuloidea* (Gabriel). Iredale, Aust. Zool., VIII, p. 317.

Size of Type.—Maj. diam., 2·2; min., 2·2; alt., 2·0mm.

Locality.—Bairnsdale (T. Worcester).

Observations.—A small, umbilicated, shining, thin, chocolate-brown, turbinately-globose shell, with nothing approaching it in Victoria. So strikingly peculiar is this form that in the original description a suggestion was made that the species may represent a new genus. Naming the above as the type, Iredale erected *Turbolaoma* and added "the species differs in its few very rounded whorls with deep sutures, very fine sculpture, thin shell, rather rounded mouth, deep narrow umbilicus, columella reflected, and may not even be related to the Laomid Shells proper." Type in National Museum, Victoria.

Family **FLAMMULINIDAE**Genus **THRYASONA** Iredale, 1933.*Thryasona diemenensis* (Cox).

1868. *Helix diemenensis* Cox, P.Z.S. Lond., for 1867, p. 723.

1930. *Charopa diemenensis* (Cox). Gabriel, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 75.

1933. *Thryasona diemenensis* (Cox). Iredale, Rec. Aust. Mus., XIX, p. 54.

1937. *Id.*, Iredale, Aust. Zool., VIII, Pt. 4, p. 318.

Size of Type.—Maj. diam., 9·39; min., 8·37; alt., 3·55mm.

Locality.—Mount William (Nat. Mus. Vic.), collected by J. Clark, (one specimen).

Observations.—A shell with numerous riblets and many radiate pale-red bands. It is common in Tasmania and on the islands in Bass Strait. From the reference list, 1930, it is obvious the generic location of the shell has proved a difficulty and the writer concurs with Iredale in his treatment as above. This is the orthotype of the genus.

Thryasona elenescens (Cox and Hedley).

1912. *Flammulina elenescens* Cox and Hedley, Mem. Nat. Mus. Melb., No. 4, p. 12, pl. 3, figs. 16-18.

1930. *Charopa elenescens* (Cox and Hedley). Gabriel, P.R.S. Vic., XLIII, pt. 1, (N.S.), p. 75.

1937. *Thryasona elenescens* (Cox and Hedley). Iredale, Aust. Zool., VIII, pt. 4, p. 319.

Size of Type.—Maj. diam., 6·7; min., 5·4; alt., 2·9mm.

Localities.—Merri Creek (Tenison Woods); Preston (C. L.

Barrett); Geelong (H. W. Davey); Sunshine (J. E. Dixon); Broadmeadows.

Observations.—A rather flat species with a broad umbilicus. The authors describe the colour as ochraceous-buff, with a few faint radial streaks of brown, and remark: "in general appearance like *F. diemenensis* and *F. marchianae*, between which it is intermediate in size. The break in sculpture of *F. elenescens* readily distinguishes it." It is a species easy of recognition. Type in Australian Museum Sydney.

Genus THALASSOHELIX Pilsbry, 1892.

Thalassohelix translucens Gabriel.

1934. *Thalassohelix translucens* Gabriel, Mem. Nat. Mus. Vic., VIII, p. 157, pl. 18, figs. 1-3.

Size of Type.—Maj. diam., 14.5; min. diam., 12mm.

Locality—Lilly Pilly Gully, National Park, Wilson's Promontory (under logs), (J. A. Kershaw).

Observations.—The other member of the genus in Victoria is *T. fordei* (Braz.) var. *m'coyi* (Petterd), a form frequently located in the Dandenong ranges. *T. translucens* may be distinguished by a more angled periphery and by its zigzag colour bands; the latter character, where a little variation exists is more evident in the paratype than in the holotype. This species is placed by Iredale in his genus *Mulathena*, Aust. Zool., IX., p. 1, 1937, a genus erected by the author Rec. Aust. Mus. XIX, p. 53, 1933 with *Helix fordei* Brazier as Type.

Family ENDODONTIDAE

Genus CHAROPA Albers, 1860.

Charopa ricei (Brazier).

1871. *Helix (Charopa) ricei* Brazier, P.Z.S. Lond. (1870), p. 660.
 1871. *Helix rotella* Brazier, *op. cit.* (colour variation).
 1871. *Helix (Charopa) onslowi* Braz., P.Z.S. Lond. (1870).
 1871. *Id.*, Brazier, in Legrand Coll. Mon., sp. 46.
 1894. *Endodonta (Charopa) ricei* (Braz.). Pilsbry, Man. Conch., IX, p. 34.
 1901. *Helix (Charopa) onslowi* Braz. Aneey, Journ. de Conch. XLIX, p. 146, footnote.
 1909. *Endodonta ricei* (Brazier), Petterd and Hedley, Rec. Aust. Mus., VII (4), p. 291, pl. 83, figs. 11-13.
 1921. *Id.*, May, Check-List Moll. Tas., p. 93, No. 914.
 1923. *Id.*, May, Ill. Index Tas. Shells, pl. 43, fig. 1.

Size.—Maj. diam., 0.18; min., 0.14; alt., 0.11 of an inch.

Locality—Lakes Entrance (T. Worcester).

Observations.—A finely sculptured species. Petterd and Hedley (*loc. cit.*) note "This is usually known by the name of *H.*

legrandi Cox. Authors have compared it with *H. juloidea* Forbes, but it more nearly approaches *H. funerea* Cox, from which it differs by narrower umbilicus, greater height in proportion to diameter and finer sculpture." With the excellent illustrations provided by these authors, no difficulty should be experienced in identifying the species.

Charopa inusta (Cox).

1866. *Helix nautilodea* Cox, Journ. de Conch., XIV, p. 47, January 1.
 1866. *Helix nautilodes* Cox, P.Z.S. Lond. (1865), p. 696, April 24.
 1868. *Helix inusta* Cox, Mon. Aust. Land Shells, p. 13, pl. 10, fig. 3. nom. nov.
 for *H. nautilodoca* Cox and *H. nautilodes* Cox. non. *H. nautilodes*
 Ferussac, Hist. Nat. Moll, i, p. 191, 1850.
 1886. *Charopa inusta* Cox. Tryon, Man. Conch., 11, p. 209, pl. 62, figs. 21, 22.
 1894. *Endodonta nautiloides* Cox. Pilsbry, Man. Conch., IX, p. 34.
 1894. *Endodonta inusta* (Cox). Pilsbry, Man. Conch., IX, p. 34.

Size.—Maj. diam., 0·23; min., 0·19; alt., 0·12 of an inch.

Locality.—Merri Creek (J. A. Kershaw).

Observations.—A dull reddish-brown shell, closely allied to *H. sericatula* Pfr. but a smaller, and a more finely ribbed species. This Victorian record is based on a single, perfect specimen presented to the writer by the late Mr. J. A. Kershaw.

Charopa subrugosa Brazier.

1871. *Helix (Pitys) subrugosa* Brazier, in Legrand Coll. Mon., sp. 68.
 1871. *Id.*, Braz. P.Z.S. Lond., p. 697.
 1879. *Helix subrugosa* Braz. Petterd, Mon. Tas. Land Shells, p. 35, sp. 53.
 1894. *Endodonta (Charopa) subrugosa* Braz. Pilsbry, Man. Conch. IX, p. 35.
 1909. *Endodonta subrugosa* (Braz.). Petterd and Hedley, Rec. Aust. Mus.,
 VII (4), p. 292.
 1921. *Id.*, May, Check List Moll. Tas., p. 94, No. 916.
 1923. *Id.*, May, Ill. Index Tas. Shells, pl. 43, fig. 3.

Size of Type—Maj. diam., 1 $\frac{3}{4}$; min., 1 $\frac{1}{2}$; alt., 1 line.

Locality.—Victoria, exact locality unknown (J. A. Kershaw).

Observations.—This is recorded from several localities in Tasmania. The author remarks "Of this beautiful species I received two samples from Mr. Petterd, collected by him near Hobart Town; it may be distinguished from any other known species by the bold projecting out of the ribs, by the interstices being of finer sculpture, and the depressed and furrowed appearance of the last whorl just above the periphery." Petterd (*loc. cit.*), notes, "The sculpture represents *H. matthiae* (mihi) in miniature by its widely separated bold striae and striated interstices. The striae vary somewhat in prominence and compactness, so much so that Mr. Beddome, at one time, thought it would be advisable to create a new species for the specimens from The Blue Tier under the name of *H. kannaria*, but after careful examination with a large

series of examples I am confident that it is but an individual variation.' Iredale, Aust. Zool, VIII, pt. 4, p. 328, 1937, has made *Helix subrugosa* Legrand the type of his new genus *Kannaropa*.

Charopa jemmysensis sp. nov. (Pl. 9, Fig. 1).

Shell small, discoidal, light horn-colour, widely umbilicated, distinctly distantly ribbed. Apex slightly sunken. Whorls, including protoconch, about four and one half, convex, last whorl slightly descending. Sutures well impressed. Sculpture consisting of subequidistant radial ribs about thirty two on the ultimate whorl; interstices bearing minute and numerous growth-lines, reticulated by fine microscopic spiral striæ. Protoconch finely radially ribbed. Aperture oblique, rotundly lunate. Peristome simple, acute, callus on the previous whorl distinct, concealing several of the ribs. Umbilicus deep, exposing all the volutions and on which the radial sculpture may be clearly seen.

Size of Type.—Maj. diam., 2.5; min., 2.2; alt., 1.1mm.

Locality.—Type, near Jemmy's Point, Lakes Entrance (Self); Mitchell Gorge one specimen (C. Oke); Tarra Valley one specimen (C. Oke).

Observations.—This ornate little species may not be confused with any Victorian form. Its nearest ally is *C. subrugosa* Brazier, a shell of somewhat similar sculpture, but from which it may be distinguished by its much flatter form. Considerable variation exists as regards colour, one specimen appearing almost an albino. Found at the first named locality a little above tide mark under logs and decaying leaves. Type in collections of National Museum of Victoria. Reg. No. F. 1054.

Charopa illustra sp. nov. (Pl. 9, Fig. 2.)

Shell small, discoidal, light brown, umbilicated. Whorls, including protoconch about four and one half, fairly-regularly radiately ribbed, about eighty appearing on the ultimate whorl which is slightly descending. Interstices microscopically finely reticulated. Sutures well impressed. Aperture broadly lunar. Peristome acute. Inner lip with a shining white glaze covering several of the ribs. Umbilicus moderately wide, deep, showing all the volutions and with the radial sculpture easily discernible.

Size of Type.—Maj. diam., 3.1; min., 2.5; alt., 1.3mm.

Locality.—Type with several paratypes found under logs at end of north arm, Lakes Entrance (Self).

Observations.—This species may be confused with *H. legrandi* Cox from Tasmania but is readily distinguished by its smaller umbilicus. A similarity to *Charopa tarravillensis* (mihi) appears, the novelty being a much flatter shell. Type in collections of the National Museum of Victoria. Reg. No. F. 1056.

Charopa okeana sp. nov. (Pl. 9, Fig. 3.)

Shell small, thin, discoidal, umbilicated, closely ribbed, light brown with numerous, very faint, subequidistant, radiating reddish-brown colour bands.

Whorls including protoconch five, convex. Sutures impressed. Sculpture consisting of very close, lightly curved axial riblets, approximately two hundred on the ultimate whorl. Interstices possessing very few growth lines reticulated by dense microscopic spiral striæ, a feature visible only under high magnifying power. Umbilicus wide, about one third of the greatest diameter of the shell, exposing all the earlier volutions and the very fine radial sculpture. Aperture roundly-lunar. Peristome thin, sharp. Inner lip with definite callus glaze, concealing numerous riblets.

Size of Type.—Maj. diam, 4.3; min., 3.9; alt., 2.0mm.

Localities.—Type. Mount Feathertop, 6,136 feet (C. Oke); Mount Higginbotham, 6,000 feet (C. Oke).

Observations.—Two paratypes with colour bands barely discernible are in the collection of the writer. The species somewhat resembles *C. albanensis*, Cox, from which it may be separated by its finer sculpture and flatter form. I have much pleasure in associating with this interesting novelty the name of Mr. C. Oke who has rendered such valuable assistance in the collecting of these puzzling land forms. Type in the collections of the National Museum of Victoria. Reg. No. F. 1058.

Charopa colliveri sp. nov. (Pl. 9, Fig. 4.)

Shell small, light brown, thin, perforated, spire lightly raised. Sculpture distinct. Whorls including protoconch four and one half, ornamented with prominent, subequidistant, slightly curved radial ribs about sixty on the ultimate whorl which is descending considerably below the level of the penultimate. Interstices with few microscopic growth lines and crowded concentric striæ. Sutures impressed. Entering the extremely narrow umbilicus the radial sculpture is clearly perceptible. Aperture oblique, rotundly lunate. Peristome thin and sharp. Inner lip with callus glaze concealing several of the ribs.

Size of Type.—Maj. diam., 2.5; min., 2.2; alt., 1.2mm.

Localities.—Type under logs at end of north arm Lakes Entrance (Self); Snuff Gully near Lake Tyers and Buchan (Self).

Observations.—With no Victorian species could this be confused. It somewhat approaches *H. cochlidium* Cox from Clarence River, New South Wales a species with fewer ribs and a comparatively wide umbilicus. The colour is not constant, one specimen in the cabinet of the writer being almost white. In connecting the name of my friend Mr. F. S. Colliver with this beautiful little shell, it is done so in appreciation of his enthusiasm and work on Victorian conchology. Type in the collections of the National Museum of Victoria. Reg. No. F. 1060.

Charopa inexpectata sp. nov. (Pl. 10, Fig. 5.)

Shell minute, discoid, depressed, umbilicated, fragile, white, silky. Whorls, including protoconch four, rounded. Sculpture consisting of equidistant, fine, radial riblets to the number of one hundred and ten on the ultimate

whorl. Interstices microscopically reticulated. Sutures well defined. Umbilicus wide, nearly one third of diameter of shell, volutions well exposed, with radial sculpture clearly discernible. Aperture oblique, narrowly lunate. Peristome acute, simple. Inner lip not reflexed, parietal wall with a broad shining glaze, concealing several riblets.

Size of Type.—Maj. diam., 1.3; min., 1.1; alt., 0.5mm.

Locality.—Michel Dene, Marysville under decaying timber (Self).

Observations.—This tiny species is the smallest of our Victorian *Charopid* forms and is easily separable by its fine sculpture and diminutive size.

Type in the collections of the National Museum of Victoria. Reg. No. F. 1062.

Charopa lakesentranciencia, sp. nov. (Pl. 10, Fig. 6.)

Shell minute, white, thin, fragile, subdiscoidal, spire just slightly elevated, umbilicated. Whorls, including protoconch, about four and one half, rounded. Sculpture consisting of subequidistant, radial, fine, slightly-curved riblets, about sixty on the last whorl. Interstices with minute growth lines averaging eight to ten, reticulated by fine concentric striae. Last whorl descending below the level of the penultimate whorl. Sutures impressed. Umbilicus about one quarter of shell's greatest diameter, volutions well exposed with sculpture clearly seen even to apex. Aperture lunate. Peristome simple, acute. Inner lip not reflexed, callus glaze concealing about four of the radial riblets.

Size of Type.—Maj. diam., 2.3; min., 2.0; alt., 1.2mm.

Localities.—Type. End of North Arm Lakes Entrance under decaying timber (Self); Jenny's Point, Lakes Entrance (Self).

Observations.—A delicate form which could not be confused with any known Victorian species. Type in the collections of the National Museum of Victoria. Reg. No. F. 1063.

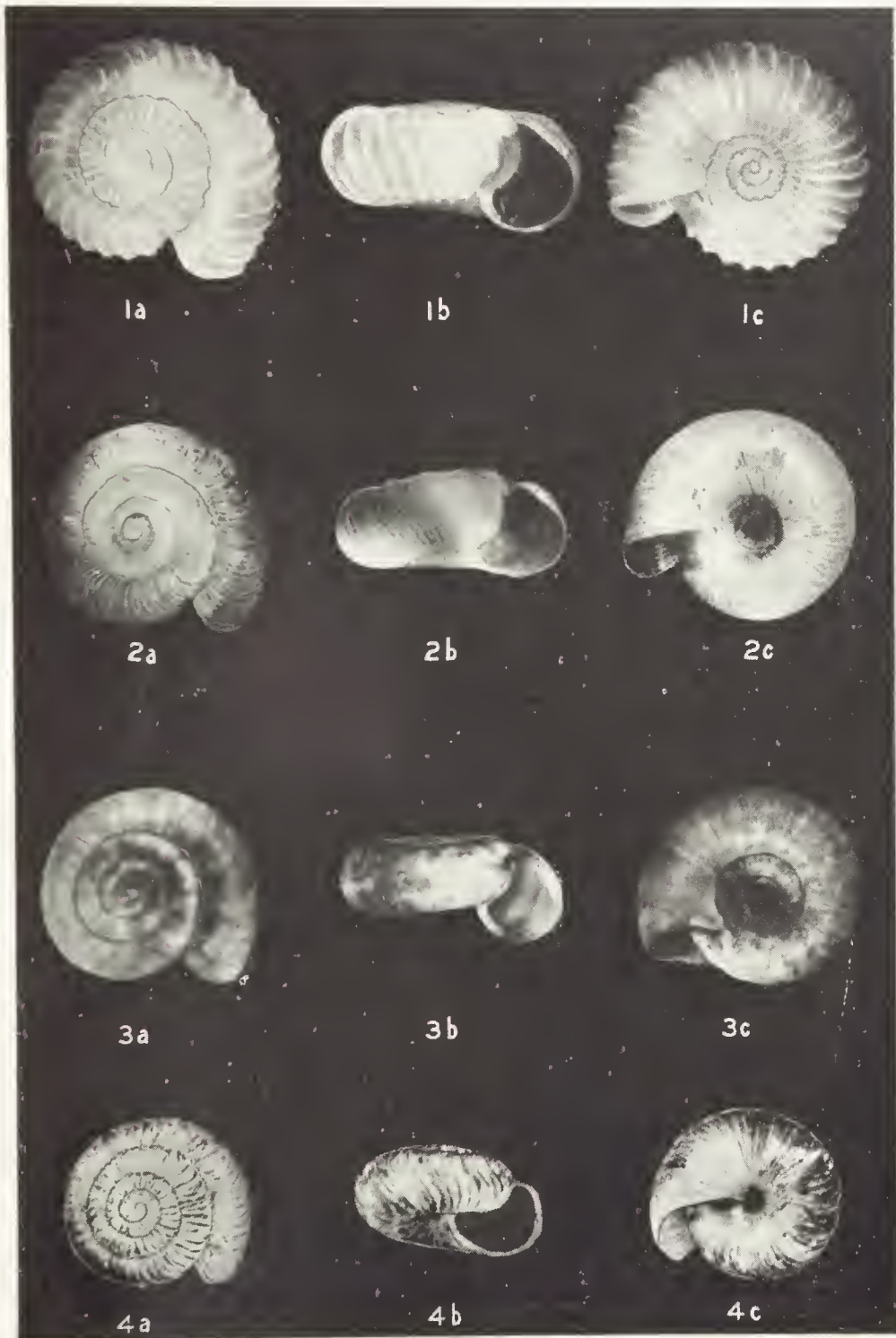
Charopa problematica sp. nov. (Pl. 10, Fig. 7.)

Shell small, thin, discoid, umbilicated, closely radiately ribbed. Colour brown, with irregularly-spaced white streaks extending to the umbilicus. Whorls including protoconch about four and one half, rounded, slowly and regularly increasing, the ultimate very slightly descending, almost on the plane of the shell. Sutures well defined. The shell is sculptured with radial ribs to the number of about one hundred and fifty on the last whorl. Interstices with very fine radial riblets averaging about six. Umbilicus wide, broadly conical, about one third of the shell's greatest diameter, volutions with radial sculpture clearly discernible. Aperture roundly lunate. Peristome thin, sharp. Inner lip not reflexed; callus glaze broad and thin, concealing several ribs.

Size of Type.—Maj. diam., 2.2; min., 2.0; alt., 0.8mm.

Locality.—Type. Fernshaw (W. Kershaw).

Observations.—A pretty little species comparable with *C. tamarensis* (Petterd) from which it may be distinguished by its flatness and smaller size. Reference is here made that this species



with several others recorded in this communication were presented to the writer by that keen land shell enthusiast, to whom I am much indebted—the late Mr. J. A. Kershaw.

Type in the collections of the National Museum of Victoria. Reg. No. F. 1065.

Genus EGILODONTA Iredale, 1937.

Egilodonta bairnsdalensis Gabriel.

1930. *Charopa bairnsdalensis* Gabriel. P.R.S. Vic., XLIII (N.S.), pt. 1, p. 78, pl. 2, figs. 11, 12.

1937. *Egilodonta bairnsdalensis* (Gabriel). Iredale, Aust. Zool. VIII, p. 328.

Size of Type.—Maj. diam., 2.0; min., 1.8; alt., 0.9mm.

Localities.—Bairnsdale (Type, T. Worcester); Jemmy's Point, Lakes Entrance (Self).

Observations.—The type and two paratypes are imperfect. It is a beautifully sculptured form found alive at the latter locality, a little above tide mark under logs and decaying leaves, in association with the new species *Charopa jemmysensis*. Its removal to the above genus is obvious, as Iredale points out "the mouth shows a long entering palatal lamella, and another shorter basal one, a feature not noticed in the original description." (Type of Genus.) Externally somewhat approaches *H. cochlidium* Cox, but is flatter and possesses a larger umbilicus.

Genus OREOMAVA Iredale, 1933.

Oreomava otwayensis Petterd.

1879. *Helix otwayensis* Petterd, Mon. Tas. Land Shells (April), p. 39.

1930. *Allodiscus otwayensis* Pett. Gabriel, P.R.S. Vic., XLIII, pt. 1, (N.S.), p. 82.

1933. *Oreomava otwayensis* (Pett.). Iredale, Rec. Aust. Mus., XIX, p. 54.

1937. *Id.*, Iredale, Aust. Zool., VIII, p. 330.

Size of Type.—Maj. diam., 2; min., 1.5; alt., 1mm.

Localities.—Cape Otway (Petterd); Fernshaw (Kershaw); Ferntree Gully, Gong Gong Reservoir, Mt. Erica, Warburton, Mitchell Gorge (C. Oke); Taggerty (Nat. Mus. Vic.); Tarraville (T. Worcester); Mt. Dandenong, Marysville (Self).

Observations.—An ornate little species, imperforate and with the interstices minutely decussate. The type locality is Cape Otway scrubs. Johnston in Petterd (*loc. cit.*) records a variety from north west Tasmania and remarks "Two specimens obtained by T. R. Atkinson and myself in the vicinity of Surrey Hills nearly 2,000 feet above the sea level. It is nearly twice the size of its Victorian representative, and the sculpture is proportionately coarser. On this account, and as it is new to Tasmania, I



ERRATA

Some figures on Plate X are transposed:

Allodiscus marysvillensis, p. 122, should read Fig. 6.

Charopa lakesentranciencia, p. 119, should read Fig. 7.

Charopa problematica, p. 119, should read Fig. 8.

propose *alpina* as the name of the variety." *Alpina* being pre-occupied, Iredale (*loc. cit.*) has renamed it *Oreomava johnstoni*. Petterd's species is fairly abundant, easily recognisable and could not be confused with any Victorian form. Larger specimens exist, the type dimensions of which are exceeded in a specimen from Ferntree Gully, which measures 3mm. This is the Ortho-type of *Oreomava*.

Oreomava cannfluviatilus Gabriel.

1929. *Allodiscus cannfluviatilus* Gabriel, Vic. Nat, XLVI, (6), p. 133, figs. 1, 2, and text fig.
 1930. *Id.*, P.R.S. Vic., XLIII, Pt. 1, (N.S.), p. 83.
 1937. *Oreomava cannfluviatilus* (Gabriel). Iredale, Aust. Zool., VIII, p. 330.

Size of Type.—Maj. diam., 2·8; min., 2·4; alt., 1·7mm.

Localities.—Type, Cann River (Nat. Mus. Vic.) collected by J. Clark; Snuff Gully near Lakes Entrance (Self), under decaying timber.

Observations.—A distinctive little form. Bordering the umbilicus, several rather strong spiral liræ are evident; this is a constant feature, providing a helpful and striking diagnostic character. Compared with *Helix otwayensis* Petterd, it may be distinguished by its fewer ribs, and the presence of an umbilicus. Found in association with *Flammulina excelsior* Hedley, *Charopa tamarensis* (Petterd), and *Rhytida ruga* (Cox).

Genus ALLODISCUS Pilsbry, 1892.

Allodiscus dandenongensis Petterd.

1872. *Helix* (*Charopa*) *subdepressa* Brazier, P.Z.S. Lond., 1871, p. 641 (*non Helix subdepressa* Orbigny, Prod. Palaeont., III, p. 1, 1852).
 1879. *Helix dandenongensis* Petterd, Journ. of Conch., II, p. 355.
 1930. *Allodiscus subdepressus* (Brazier). Gabriel, P.R.S., Vic., XLIII, pt. 1, (N.S.), p. 82.

Size of Type.—Maj. diam., 3·17; min., 2·11; alt., 1·05; diameter of umbilicus, 1·58mm.

Localities.—Snowy River and Fernshaw (Kershaw); Dandenong Range (Petterd and Self); Oakleigh (C. French); Gembrook (Coghill); Emerald District (Jarvis); Yarragon (Nat. Mus. Vic.); S. Gippsland (Rev. G. Cox); Korumburra (F. L. Billingham); Meredith (J. H. Young); Balook and Mt. Erica (C. Oke); Marysville, Hordern Vale, Lorne (Self); Trentham (J. K. and R. C. Gabriel).

Observations.—A white shell, with an umbilicus equalling more than half the diameter. It is of gregarious habit, being commonly located in large numbers under decayed timber and among moss. Many more localities could be recorded but the above are sufficient

to indicate the wide distribution the species enjoys in Victoria. It is certainly one of the most frequent of our smaller forms. The species has been placed by Iredale in his genus *Pillomena*, Rec. Aust. Mus. XIX, p. 54, 1933, a genus erected by the author with *Flammulina meraca* Cox and Hedley, as the Orthotype.

Allodiscus niveus Hedley.

1896. *Endodonta nivea* (Hedley), Rec. Aust. Mus., ii, p. 102, pl. 23, figs. 5-7.

Size of Type.—Maj. diam., 3.25; min., 2.75; alt., 1.5mm.

Locality.—Wombargo Creek, Wulgulmerang (Nat. Mus. Vic.), 4,000 feet.

Observations.—A small, white, thin, shining shell possessing a narrow perforation. Whorls are three, the last being "crossed by 115 sharp costæ." It is a characteristic species and with its few whorls should be easy to recognize. The author remarks "This species nearly approaches *E. antialba*, Beddome from Tasmania from which its narrow umbilicus and shallow spire readily distinguishes it." Type locality Mt. Kosciusko, New South Wales.

Allodiscus marysvillensis, sp. nov. (Pl. 10, Fig. 8.)

Shell minute, white, discoid, umbilicated. Whorls including protoconch four, rounded. Sculpture extremely fine, consisting of subequidistant radial ribs, about one hundred and seventy on the last whorl. Interstices reticulated with fine growth lines and microscopic spiral striæ, in the case of the former an average of four to five. Sutures impressed. Umbilicus moderately wide, about one quarter of shell's greatest diameter, with the volutions well exposed showing distinctly the radial sculpture and the concentric sculpture of the protoconch. Aperture rotundly lunate. Peristome simple, sharp. Inner lip not reflexed; parietal wall with a thin white glaze covering several of the ribs.

Size of Type.—Maj. diam., 2.3; min., 2.0; alt., 1.0mm.

Localities.—Type. Marysville (near Wolfram mine) under decaying timber (Self); Gembrook, and Paradise Falls near Whitfield (Self).

Observations.—A most delicate and beautifully closely ribbed species and the smallest of the genus in Victoria. Its affinity would seem to lie with *H. gadensis* Beddome from Tasmania. It is a slightly taller shell and examination of the protoconch reveals a distinguishing character where the sculpture is extremely fine. In the novelty about twenty spirals appear, being three times as numerous as in the Tasmanian form. Type in National Museum, Victoria. Reg. No. F. 1066.

Family ACHATINELLIDÆ

Genus TORNATELLINA Beck, 1837.

Tornatellina jacksonensis Cox.

1864. *Bulimus jacksonensis* Cox, Cat. Aust. Land Shells, p. 25.

1868. *Achatinella jacksonensis* (Cox), Mon. Aust. Land Shells, p. 77, pl. 12, fig. 15.

1902. *Tornatellina jacksonensis* (Cox). Hedley, P.L.S., N.S.W., XXVI., pt. 4, p. 705.
 1915. *Id.*, Pilsbry, Man. Conch. (2), XXIII, p. 181, pl. 38, figs. 5, 6.
 1937. *Tornatellinops jacksonensis* (Cox). Iredale, Aust. Zool., VIII, p. 300.

Size.—Length, 0.14; breadth, 0.06; aperture, 0.05 long, of an inch.

Locality.—Near Jenny's Point, Lakes Entrance (Self).

Observations.—It is an inconspicuous horny-brown shell, located a little above tide mark under logs and decaying leaves in association with *Egilodonta bairnsdalensis* (mihi) and the new species *Charopa jemmysensis*. With the author's splendid description and comparison with an authentic specimen from Darling Point, Sydney, New South Wales, the identification was rendered easy. This is placed by Pilsbry (*loc. cit.*) in his section *Tornatellinops*, 1915. A genus and species providing an interesting addition to our land shell fauna.

NATURALIZED LAND MOLLUSCA FOUND IN VICTORIA.

Vallonia pulchella Müller.

Size.—2mm. (approx.).

Locality.—Stanhope (P. R. Johnson).

Observations.—Unknown to the writer from any other locality in Victoria except the above. It is small, creamy white, suborbicular, with spire scarcely raised. Aperture almost circular margined by a broad opaque white peristome (a useful recognition mark). It appears to be well established in Australia being also recorded from Tasmania, New South Wales and South Australia.

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EXPLANATION OF PLATES 9 AND 10.

- Fig. 1. *Charopa jemmysensis* sp. nov. Type. Reg. No. F. 1054, near Jemmy's Point, Lakes Entrance.
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- Fig. 5. *Charopa inexpectata*, sp. nov. Type. Reg. No. F. 1062. Michel Dene, Marysville.
- Fig. 6. *Charopa lakesentranciencia* sp. nov. Type. Reg. No. F. 1063, end of North Arm, Lakes Entrance.
- Fig. 7. *Charopa problematica* sp. nov. Type. Reg. No. F. 1065, Fernshaw.
- Fig. 8. *Allodiscus marysvillensis* sp. nov. Type. Reg. No. F. 1066, near Wolfram Mine, Marysville.
- a.—Upper surface. b.—Side view. c.—Lower surface.