

DESCRIPTIONS OF NEW SPECIES¹ OF NEW ZEALAND MARINE SHELLS.

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TROPHON (KALYDON) COLUMNARIS, n.sp. Pl. VII, Fig. 1.

Shell very small, fusiform, turreted, thin, with a sharp spire, very strong axial ribs, and distant spiral cords. Sculpture consisting of distant, high, and rounded axial ribs, obsolete on the shoulder and the lower part of the base, about nine on a whorl, crossed by rather distant spiral cords, absent upon the shoulder, three on the spire-whorls, and about nine on the body-whorl, the lowest of which is more prominent; they pass over the axial ribs, usually without becoming nodulous. Fasciole not very well marked. Colour fulvous, rarely with a white band below the angle of the whorls; aperture light brown within. Spire elevated, conic, turreted, of the same height as the aperture with canal. Protoconch small, papillate, of one and a half smooth and convex whorls, the globose nucleus slightly excentric. Whorls 6, regularly increasing, with a narrow concave shoulder, convex below; base contracted above the canal. Suture not deep, undulating. Aperture oblique, narrowly oval, broadly angled above, produced below into a short, slightly oblique, and recurved open canal. Outer lip sharp, strengthened by an axial rib, angled above, smooth inside. Columella vertical, straight, twisted and narrowed below; inner lip thin and narrow, spreading over the lightly excavated parietal wall, narrowed below. There is no umbilical fissure. Operculum unknown. Diameter 4.3, height 8.3 mm.

Hab.—Near the Bounty (type) and Snares Islands, in 50 fathoms (Captain J. Bollons).

This shell has the aspect of a miniature of *T. Paiva*, Crosse; the axial sculpture, however, is bolder, and the spirals are more distant and much less numerous.

TROPHON (TROPHONOPSIS) CRISPULATUS, n.sp. Pl. VII, Fig. 2.

Shell very small, fusiform, turreted, very thin, white, translucent, reticulated by numerous axial crispate varices and a few spiral liræ. Sculpture consisting of close, fine, and sharp varices, usually twenty to twenty-five on a whorl, but occasionally their number is reduced to about fifteen; they are either straight or strongly crispate lamellæ, retractive on the shoulder, but vertical below it; on the base they extend as fine striæ upon the neck of the canal; they are reticulated by distinct spiral threads, sometimes, however, inconspicuous, the points of crossing raised into sharp, short spines; the spire-whorls with three spirals, the first carinating the shoulder, body-whorl with five cingula, the lower part of the base without spirals, the interstice between the first and second spiral is always broader than the

¹ The types of all these species are in my own collection.

succeeding ones. Fasciole minute, transversely striated. Colour white. Spire conical, turreted, higher than the aperture with canal. Protoconch small, papillate, of one and a half smooth and convex whorls, the globose nucleus slightly lateral. Whorls 5, regularly increasing, shouldered and keeled; base contracted above the canal. Suture well impressed, the varices passing across it. Aperture somewhat oblique, oval, biangulate above, with a short, slightly oblique, and recurved open canal. Outer lip sharp, prominently angled above, a little strengthened by the last varix, smooth inside. Columella subvertical, straight twisted and tapering below; inner lip very thin and narrow, polished, spreading over the lightly excavated parietal wall, narrowed below to a fine point. Operculum unknown. Diameter 1.9, height 4 mm.

Hab.—Near the Snares Islands, in 50 fathoms, type (Captain J. Bollons); 21½ miles north-east of Wreck Reef, Stewart Island, in 50 to 54 fathoms (Edgar R. Waite); 24 miles south-east of Long Point, in 120 fathoms (E. R. Waite).

Allied to the Pliocene *T. Gouldi*, Cossmann (= *crispus*, Hutton, *non* Gould), which, however, is a larger shell, with much less axial costæ, more spirals, and the outer lip strongly dentate within.

MITRELLA STEPHANOPHORA, n.sp. Pl. VII, Fig. 3.

Shell small, ovoid, smooth and polished, translucent, yellowish, with spiral bands of brown zigzag lines on the body-whorl. Sculpture consisting of a few close spiral threads upon the short beak. Colour yellowish white, with fulvous zigzag markings on the later spire-whorls, and continued on the periphery of the body-whorl, a second similar spiral band upon the base. Spire rather short, conical, a little higher than the aperture; outlines faintly convex. Protoconch papillate. Whorls 5, regularly increasing, flatly convex, the last ventricose and rounded; base somewhat contracted. Suture not much impressed. Aperture narrow, angled above, not much narrowed below, and without a distinct canal. Outer lip straight above, convex below, smooth inside. Columella subvertical, lightly turned to the left below; inner lip very narrow and thin, smooth, spreading over the straight parietal wall. Operculum unknown. Diameter 2.4, height 4.5 mm.

Hab.—New Zealand, exact locality unknown. One specimen was found by Mr. E. A. Annett, of Crawley, Sussex, who collected shells in New Zealand some years back, and kindly gave me the specimen.

MITRELLA PSEUDOMARGINATA, n.sp. Pl. VII, Fig. 4.

Shell small, subulate, smooth, and polished, whitish, with light-brown zigzag markings, translucent. The only sculpture consists of a few spiral ridges on the neck of the base. Colour yellowish white, with fulvous zigzag markings, interrupted on the body-whorl by a narrow whitish spiral band below the periphery; lower part of base white. Spire high, acuminate, conic, about one and a half times the height of the aperture; outlines straight. Protoconch papillate, of one and a half smooth whorls. Whorls 6, regularly increasing, flat,

body-whorl lightly convex, contracted below. Suture linear, false-margined, as is very often the case in *Eulima*. Aperture slightly oblique, narrow, sub-channelled above, but little narrowed below, without a canal. Outer lip vertical, rounded below, somewhat thickened and denticulate within. Columella vertical, slightly bent to the left below; inner lip narrow and smooth, very thin on the straight parietal wall. Operculum unknown. Diameter 2.75, height 6.6 mm.

Hab.—Bay of Islands.

Distinguished from the nearly allied *M. choava*, Reeve, by the larger size and much higher spire.

MITRELLA SUBANTARCTICA, n.sp. Pl. VII, Fig. 5.

Shell small, acuminate, smooth to the naked eye, polished, semi-transparent, fulvous. Sculpture consisting of fine and dense microscopic spiral striæ on all the whorls, lightly decussated by the fine and somewhat oblique growth-lines. Colour yellowish brown, with a darker band below the suture, produced by the lower part of the preceding whorl. Spire high, conic, nearly one and a half times the height of the aperture; outlines straight. Protoconch of one and a half whorls, papillate. Whorls 6, regularly increasing, lightly convex, the last whorl rounded and a little contracted at the base. Suture impressed, but not deep. Aperture oval, subvertical, with a very short, widely open canal. Outer lip sharp, not much thickened, convex, smooth inside, sometimes with a slight contraction below. Columella vertical, somewhat arcuate, bent to the left toward the base; inner lip narrow, smooth, extending over the faintly excavated parietal wall. Operculum unknown. Diameter 2.7, height 5.4 to 6 mm.

Hab.—Near the Bounty Islands, in 50 fathoms (Captain J. Bollons).

Nearly allied to *M. pavillus*, Murdoch, but not so slender, the spiral striæ closer, more numerous, and always present, and the body-whorl not angled.

MITRELLA LEPTALEA, n.sp. Pl. VII, Fig. 6.

Shell small, subulate, smooth, shining, thin and pellucid, yellowish. Sculpture consisting of almost obsolete fine microscopic spiral striæ, and a few faint spiral ridges on the lower part of the base; growth-lines fine, straight. Colour light yellowish. Spire subulate, a little higher than the aperture; outlines nearly straight. Protoconch small, papillate, the nucleus somewhat oblique. Whorls 5, regularly increasing, very lightly rounded, the last convex, contracted at the base. Suture linear, false-margined below. Aperture narrow, angled above, slightly contracted below, but without a canal. Outer lip thin and sharp, smooth within, lightly convex, somewhat contracted below. Columella vertical, a little convex; inner lip narrow, smooth, spreading as a very thin glaze over the lightly arcuate parietal wall. Operculum unknown. Diameter 1.8, height 4.5 mm.

Hab.—Near the Bounty (type) and Suares Islands, in 50 fathoms (Captain J. Bollons).

ALCIRA SANGUINEA, n.sp. Pl. VII, Fig. 7.

Shell small, elongately ovate, smooth, not shining. There is no sculpture except the fine growth-lines. Colour crimson; dead shells are pinkish. Spire high, conic, about one and a half times the height of the aperture; outlines straight. Protoconch sometimes slightly oblique, of one and a half smooth whorls, papillate. Whorls 6, regularly increasing, flattish, the last rather large, rounded, and contracted at the base. Suture impressed. Aperture vertical, narrowly ovate, lightly channelled above, with a short and widely open canal below. Outer lip thick, with a blunt edge, smooth inside, almost straight above, curved below. Columella vertical, arcuate, with a distinct oblique fold below, bending to the left; inner lip narrow and very thin, smooth. Operculum unknown. Diameter 2·7, height 6·2 mm.

Hab.—Near the Bounty Islands, in 50 fathoms (Captain J. Bollons).

ALCIRA LÆVIGATA, n.sp. Pl. VII, Fig. 8.

Shell small, thin, translucent, smooth, faintly shining, elongately oval. Sculpture confined to a few oblique ridges on the lower part of the base. Colour yellowish white, sometimes faintly marbled with pure white. Spire elevated, conic, about the same height as the aperture; outlines almost straight. Protoconch of one and a half smooth, porcellanous and smooth whorls, the nucleus a little oblique. Whorls 5, regularly increasing, lightly convex, the last rounded and contracted at the base. Suture deep. Aperture subvertical, high and narrow, lightly channelled above, and with a very short, widely open canal below. Outer lip slightly curved, sharp, but little thickened. Columella vertical, with a deep-seated oblique fold at the base; inner lip very narrow and thin, extending over the flattish parietal wall. Operculum unknown. Diameter 1·8, height 4·1 mm.

Hab.—Five miles south of Cuvier Island, in 38 fathoms, type (Captain J. Bollons); off Great Barrier Island, in 110 fathoms.

ALCIRA ANGULATA, n.sp. Pl. VII, Fig. 9.

Shell small, elongate fusiform, turreted, spirally ribbed, fulvous. Sculpture: the protoconch smooth, all the succeeding whorls sharply spirally ridged; two fine spiral threads on the shoulder, the upper close to the suture, a third strong spiral cord upon the angle of the whorls, and three smaller ones below, the lowest fine and margining the suture; the spiral ornamentation is continued over the whole of the body-whorl, the spirals on the base being closer together; interstices above the base slightly broader than the cingula, with fine growth-lines. Colour yellowish brown, the base lighter. Spire elevated, conic, turriculate, about one and a half times the height of the aperture. Protoconch conical, smooth, of two whorls, the nucleus small, the second whorl relatively high. Whorls $6\frac{1}{2}$, regularly increasing, distinctly shouldered, lightly convex below the angle; body-whorl high, moderately convex, contracted below. Suture linear, bimarginate. Aperture narrow, subrhomboidal, the margins parallel, angled above, with a very short and broad canal below.

Outer lip vertical at the middle, lirate within, the liræ corresponding to grooves on the outside, edge sharp. Columella straight above, forming a blunt angle with the parietal wall, slightly turned to the left below, smooth, twisted, and with a distinct fold at the base; inner lip narrow and thin. Operculum unknown. Diameter 3, height 7.1 mm.

Hab.—Foveaux Strait.

This species may at once be distinguished from all the other New Zealand species of the genus by the shouldered whorls, a somewhat exceptional feature in this family.

ATILIA BICONICA, n.sp. Pl. VII, Fig. 10.

Shell small, biconic, very thin, translucent, not shining, yellowish white, with a distinct canal. Sculpture consisting of oblique spiral threads upon the neck; the growth-lines are microscopic, fine and dense. Colour yellowish white, with a few light-brown zigzag markings. Spire elevated, conic, of about the same height as the aperture with canal; outlines straight. Protoconch papillate, of one and a half smooth whorls. Whorls 5, regularly increasing, flattish, the last well rounded at the periphery, considerably contracted below. Aperture high and narrow, oblique, angled above, produced below into a straight, short, and widely open canal, truncated at its base. Outer lip distinctly convex at the middle, contracted below, thin and sharp. Columella subvertical, lightly convex in the middle, the spirals of the neck passing over it; inner lip obsolete. Operculum unknown. Diameter 2.1, height 4.7 mm.

Hab.—Hauraki Gulf, in 25 fathoms.

The two specimens I have do not appear to be full-grown.

FULGURARIA (ALCITHOE) DEPRESSA, n.sp. Pl. VII, Fig. 11.

Shell moderately large, ovate, solid, with a short spire and large aperture, the last two or three whorls with nodules on the angle of the shoulder, with a few brown zigzag lines. Sculpture: the penultimate whorl with a row of distant, roundish nodules above the suture, the body-whorl with a row of elongated, prominent nodules on the angle of the shoulder, their number being about eight or nine. Colour very likely yellowish white, with a few longitudinal fulvous zigzag bands, indistinctly arranged into three spiral bands on the body-whorl, and a fourth above the fasciole; outer lip with a few brown spots. Spire low, conoidal, its height about one-third that of the aperture. Protoconch much worn and nucleus lost in my specimen. Whorls about 5, the last very large, the upper whorls lightly convex, the last two broadly shouldered, the slope flattish, body-whorl flatly convex at the periphery and somewhat contracted below; the fasciole broad, hardly raised, flattish. Suture distinct, but not deep. Aperture high, triangular, narrow above, widened below, with a narrow upper channel, very broadly truncated and rather deeply notched at the base. Outer lip oblique, its upper part nearly straight, the lower moderately curved, much thickened, rounded, smooth, but not reflected, retrocurrent toward the suture. Columella subvertical,

straight, with six somewhat inequidistant, subequal, strong, and flat plaits, sometimes with an additional small plait above; the columella slightly twisted below, and produced into a narrowly rounded beak, extending beyond the inferior end of the outer lip; inner lip thin, spreading broadly over the body and the convex parietal wall, with a roundly-raised outer edge below. Diameter 35, height 70 mm.

Hab.—Spirits Bay, North Island (Captain J. Bollons, C. Cooper).

Only much worn specimens have hitherto been available, and the description is therefore somewhat deficient.

MARGINELLA (S.S.) STEWARTIANA, n.sp. Pl. VII, Fig. 12.

Shell small, elongately oval, smooth and polished, white, with an elevated spire. There is no sculpture. Colour white. Spire elevated, conic, with a pointed apex, its height a little less than half that of the aperture. Protoconch small, smooth, rounded. Whorls 3, the last high, moderately convex, narrowed towards the base; spire-whorls flatly rounded. Suture lightly impressed, narrowly margined below. Aperture oblique, high and narrow, lightly channelled above, truncated and not notched below. Outer lip oblique, straight, and thickened at the middle, lightly retrocurrent and with a narrow sinus above, smooth inside. Columella faintly concave, with four subequidistant, slender, and oblique plaits, the lower two more prominent, the last extending to the basal margin; inner lip thin and transparent. Diameter 2.3, height 4.6 mm.

Hab.—Port Pegasus, Stewart Island, in 18 fathoms (Captain J. Bollons).

This species is very closely allied to *M. hebescens*, Murd. & Sut., but it is more elongate, the spire more acuminate and with a much sharper apex, and the suture is less impressed.

MARGINELLA (GLABELLA) PARVISTRIATA, n.sp. Pl. VII, Fig. 13.

Shell very small, oviform, semitransparent, dull, white, with a short spire, axially finely striated. Sculpture consisting of minute, close, and straight axial striae, continuous over the spire to the body-whorl. Colour white or yellowish white. Spire short, conoidal, with a blunt apex, its height about one-fifth that of the aperture. Protoconch smooth, broadly convex. Whorls 3, flat on the spire, body-whorl high, moderately convex, slightly narrowed towards the base. Suture indistinct. Aperture high and narrow, a little wider below, sub-channelled above, roundly truncated at the base. Outer lip slightly convex, vertical, a little retrocurrent toward the suture, thickened and rounded, smooth inside, with an outer varix extending a short way up the spire and across the basal margin. Columella a little oblique, with four oblique, nearly equidistant, strong plaits; inner lip broad and thin, distinct only outside the columella; parietal wall lightly convex. Diameter 1.7, height 3.1 mm.

Hab.—Foveaux Strait, in 15 fathoms.

MARGINELLA (GLABELLA) LURIDA, n.sp. Pl. VII, Fig. 14.

Shell very small, narrowly oval, smooth and shining, white, translucent when fresh, with a moderately elevated spire. There is no

sculpture. Colour white, but fresh shells are vitreous. Spire elevated, conic, about half the height of the aperture. Protoconch obtuse, rounded. Whorls 3, the last high, moderately convex, narrowed towards the base, the spire-whorls flattish. Suture superficial. Aperture oblique, narrow, widening below, lightly channelled above, truncated and flatly rounded at the base. Outer lip slightly convex, thickened at the middle, with a low outer varix, smooth inside, retro-current towards the suture, and with a shallow sinus. Columella oblique, with four equidistant strong plaits, the lowest twisted and extending to the basal margin. Diameter 1.5, height 3 mm.

Hab.—Foveaux Strait, in 15 fathoms; type, near the Snares and Bounty Islands, in 50 fathoms (Captain J. Bollons).

MARGINELLA (GLABELLA) AMÆNA, n.sp. Pl. VII, Fig. 15.

Shell small, ovate, rather solid, smooth and polished, with a moderately raised spire, white. There is no sculpture. Colour white, fresh shells vitreous. Spire conoidal, with a blunt apex, a little less than half the height of the aperture; outlines straight. Protoconch very small, broadly rounded. Whorls 3, the spire-whorls flat, body-whorl large, convex, somewhat inflated above, narrowed towards the base. Suture indistinct, not impressed. Aperture slightly oblique, high and narrow, the margins subparallel, lightly channelled above, truncated and not notched below. Outer lip somewhat convex, thickened, the inner margin faintly and minutely crenate, with an outer varix which does not extend much upon the spire, lightly sinuate above. Columella oblique, straight, with four nearly equidistant strong plaits, the upper two almost transverse, the lower two more oblique, the lowest extending to the basal margin; inner lip thin and transparent. Diameter 2.4, height 4.2 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons).

This species is very nearly allied to *M. hebescens*, Murd. & Sut., but is distinguished from it in being a little larger and more ventricose, having the spire slightly lower and broader, the spire-whorls flat, the protoconch much smaller, the suture not impressed, and the outer lip minutely crenate.

DRILLIA CHORDATA, n.sp. Pl. VII, Fig. 16.

Shell small, fusiform, fairly solid, whitish; suture strongly margined, whorls angulated by a row of large nodules, spire high, anal sinus moderately deep. Sculpture consisting of a row of large oval nodules on the middle of the whorls, about fourteen on a whorl, those on the last two whorls somewhat stretched out towards the suture below, and incised in the middle by a spiral linear groove; a very strong spiral cord margines the suture below, and a fine thread above; the latter is continued as a rather strong cord on the body-whorl, and is succeeded below by a similar cord; the base of the body-whorl is adorned with fine spiral threads, close together upon the beak; the whole sculpture crossed by very fine, strongly flexuous, and oblique growth-lines. Colour whitish. Spire high, conic, somewhat less than twice the height of the aperture. Protoconch of two whorls, which are

microscopically spirally striate, the nucleus oblique, rounded, the second volution with a sharp median keel. Whorls 7, regularly increasing, roundly angled at the middle by the nodules, concave above and below it; body-whorl slightly convex, contracted at the base. Suture linear, bimarginate. Aperture oblique, oval, angled above, produced below into an oblique, short, and open canal, slightly notched at its base. Outer lip sharp, somewhat strengthened outside, moderately convex, contracted below, with a fairly deep and rounded sinus in the depression above the row of nodules. Columella slightly arcuate, excavated on meeting the parietal wall; inner lip thin and narrow, drawn out to a point towards the margin of the canal. Operculum unknown. Diameter 3·9, height 9 mm.

Hab.—Dredged off Otago Heads (A. Hamilton).

Allied to *D. Wanganuiensis*, Hutt., from the Pliocene, by the very strong sutural cord.

DRILLIA LÆVIS PARVA, n.subsp.

Distinguished from the species by its much smaller size, the broader shoulder, and the slender, short, oblique costæ, sometimes reduced to pointed tubercles on the last whorl, their number being twelve to fourteen on a whorl. Diameter 3·5, height 8 mm.

Hab.—Near Cuvier Island, in 37 fathoms; type, near the Snares Islands, in 50 fathoms; Port Pegasus, Stewart Island, in 18 fathoms (Captain J. Bollons).

BELA NEOZELANICA, n.sp. Pl. VII, Fig. 17.

Shell small, ovate, solid, slightly turriculate, with blunt axial ribs and spiral liræ, maculated with brown and white below the shoulder. Sculpture consisting of rather distant, low, rounded axial costæ, nine to ten on the body-whorl, extending on the spire-whorls from the angle to the suture below, but only over the periphery on the body-whorl; they are crossed by subequal, flat, spiral liræ, fine on the shoulder, broad upon the base, separated by linear interstices. Colour: the protoconch is flavescent, the other spire-whorls yellowish or brownish white, maculated with brown and white below the shoulder, the ribs usually white, the interstices brown; body-whorl light brown below the maculations on the periphery; aperture fulvous inside. Spire conic, turriculate, very little higher than the aperture. Protoconch papillate, of two smooth convex whorls. Whorls 6, the last high in proportion, with a sloping, broad, and lightly excavated shoulder, slightly convex below the inconspicuous angle; body-whorl convex, but faintly contracted at the base. Suture distinct, but little impressed. Aperture lightly oblique, elongately oval, angled above, with a rudimentary, broad, and truncated canal below. Outer lip convex, rather thin and sharp, smooth inside, with a very slight broad sinus below the suture. Columella vertical, excavated toward the parietal wall, slightly turned to the left below; inner lip narrow, thin, spreading over the convex parietal wall, tapering to a fine point below and extending to the base of the canal. Operculum very small, length 2·1 mm., oval, the nucleus apical. Diameter 4·8, height 10 mm

Hab.—Whangarei Heads, in 3–4 fathoms (C. Cooper).

This is the second species of the genus recorded from New Zealand waters.

MITROMORPHA GEMMATA, n.sp. Pl. VII, Fig. 18.

Shell small, ovate, thin and fragile, semitransparent, white, axially costate and spirally striate, the crossing-points gemmate. Sculpture: all the whorls below the smooth protoconch are axially, equidistantly, and closely costate, about eighteen on the last whorl, the interstices narrow; towards the base the riblets are getting obsolete; they are crossed by equidistant spiral cords of nearly equal strength, the points of intersection produced into transversely oval gemmules; the interstices between the spirals of about the same width as the cords, but that below the first spiral is slightly broader and deeper than the others; on the body-whorl there are about fifteen spirals, of which the lowest six are smooth. Colour white. Spire elevated, conic; outlines somewhat convex, but little higher than the aperture. Protoconch a little oblique to the axis, of one and a half smooth whorls, the nucleus globose. Whorls 6, the last high and somewhat ventricose, convex, attenuated towards the base. Suture not deep, undulating, bimarginate. Aperture slightly oblique, high and narrow, angled above, with a rudimentary broad canal below, its base truncated. Outer lip convex, thin, crenated on the outside by spiral sculpture, with a shallow sinus below the suture. Columella subvertical, almost straight, with two rounded, short plaits above, absent in young examples; inner lip thin and narrow, spreading over the straight parietal wall. Operculum unknown. Diameter 3·1, height 7·2 mm.

Hab.—Near the Snares Islands, in 50 fathoms, type (Captain J. Bollons); 24 miles south-east of Long Point, in 120 fathoms; off south-east of Cape Saunders, in 100 fathoms (Edgar R. Waite).

In form and sculpture somewhat resembling *Daphnella vestalis*, Hedley.

BATHYTOMA GRATIOSA, n.sp. Pl. VII, Fig. 19.

Shell very small, fusiform, white, thin, turriculate, spirally distantly ribbed and with numerous axial threads. Sculpture: the spire-whorls below the smooth protoconch have a fine thread margining the suture below, a second very prominent spiral cord on the angle of the shoulder, and a third equally strong cord at the middle between the angle and the suture below; the interstices concave and broader than the cords; body-whorl with six spirals from the angle down toward the base, the upper three of which are strong, the others closer together and not so high; base with a few indistinct spirals. Axial sculpture consisting of subequidistant fine threads, slightly retrocurved on the shoulder, flexuous further down; on the body-whorl they are becoming more irregular, fine growth-lines appearing in the interstices. Colour whitish. Spire conic, turriculate, about the same height as the aperture. Protoconch globular, smooth, of one and a quarter whorls. Whorls 4, with a very distinct and but slightly sloping shoulder; base somewhat contracted. Suture superficial,

margined. Aperture subpyriform, angled above, with a short and broad canal below, slightly emarginate at the base. Outer lip angled above, then convex, contracted below, thin and sharp, crenulated on the outside by the spirals, sinus rounded, not deep, situate just above the carina. Columella straight, smooth, concave on meeting the parietal wall, bent to the left toward the canal below; inner lip thin, narrow, extending over the faintly convex parietal wall, tapering to a fine point below. Operculum unknown. Diameter 2, height 3.7 mm.

Hab.—Port Pegasus, Stewart Island, in 18 fathoms (Captain J. Bollons).

MANGILIA DEVIA, n.sp. Pl. VII, Fig. 20.

Shell small, fusiform, turriculate, with distant nodulous axial ribs, continuous over the whorls, spirally distantly liriate, whitish, with indications of two brown spiral bands. Sculpture: the protoconch has a sharp carina on the nucleus, two on the succeeding half volution, and this is continued on the next three spire-whorls, the upper spiral on the angle of the shoulder, the second midway between angle and suture; on the following whorl a third spiral appears just above the angle of the shoulder, and on the penultimate whorl an additional fine spiral above it, thus giving these lower whorls a more convex outline, the shoulder becoming inconspicuous on the body-whorl, which has five additional spirals in front of the aperture. The axial sculpture consists of rather distant, slightly oblique, broad, and distinct ribs, about ten on the last whorl, strongly nodulous at the points of intersection, continuous over the whorls, and on the base to the siphonal fasciole; the interstices slightly broader than the ribs. Colour yellowish white, with indications of two brown spiral bands above and below the periphery. Spire produced, conic, turreted, nearly one and a half times the height of the aperture with canal. Protoconch with the nucleus distinctly oblique, flat above the carina. Whorls $6\frac{1}{2}$, the upper ones distinctly shouldered, the lower ones convex, base contracted. Suture inconspicuous. Aperture oblique, pyriform, broadly angled above, produced below into a short, oblique, truncated canal. Outer lip convex, strengthened on the outside by the last axial rib, smooth inside, contracted below, the sinus inconspicuous, shallow. Columella vertical, smooth, obliquely truncated below, concave at the junction with the parietal wall; inner lip thin and narrow, drawn out to a fine point on reaching the left margin of the canal. Diameter 3, height 7.2 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons); a single specimen.

In sculpture this species somewhat resembles *M. dictyota*, Hutt., but this has not the tilted and carinated protoconch and coarse spiral sculpture of the base. *M. epentroma*, Murd., has a similar protoconch.

MANGILIA QUADRICINCTA, n.sp. Pl. VII, Fig. 21.

Shell very small, fusiform, thin and fragile, white, semitransparent, turriculate, clathrate. Sculpture: the first whorl below the smooth

protoconch has a fine spiral cord on the sharp angle of the shoulder, the following a second below the carina, and the body-whorl has four cords, of which the two lower ones are closer together and in front of the upper part of the aperture; they are crossed by equidistant, straight, thin, axial riblets, about eighteen on the last whorl, extending over the greater part of the base, the interspaces much broader than the riblets, and ornamented with very fine growth-lines. Colour white. Spire conic, gradate, but little higher than the aperture. Protoconch of one and a quarter smooth, convex whorls, the nucleus globose, oblique. Whorls 4, shouldered and prominently keeled, straight above and below the keel; base contracted. Suture linear. Aperture somewhat oblique, pyriform, very broadly angled above, with an oblique, moderately long, open and truncated canal below. Outer lip strongly convex, lightly angled above, contracted below, crenated on the outside by the spirals, somewhat strengthened by the last axial riblet; sinus close to the suture, broad and shallow. Columella vertical, concave towards the parietal wall, slightly twisted and drawn out to a narrow ridge towards the margin of the canal; inner lip very thin, narrow, smooth, spread over the flat parietal wall. Diameter 2·1, height 4·4 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons); one specimen only.

Allied to *M. murrhea* and *infanda*, Webst., both of which, however, have a spirally striate base and a short, straight canal.

MANGILIA COPHINODES, n.sp. Pl. VII, Fig. 22.

Shell small, elongate oval, white, with traces of a brown spiral band, axially costate and spirally lirate. Sculpture consisting of narrow, rounded, axial costæ, about eighteen on the last whorl, getting obsolete on the base; they are slightly oblique and curved, the interstices of the same width as the riblets; crossed by spiral cords, with linear interspaces, six on the spire-whorls, about eighteen on the body-whorl, the spirals on the beak much finer; points of intersection very slightly nodulous. Colour whitish, with a trace of a brown spiral band below the periphery. Spire conical, slightly higher than the aperture; outlines almost straight. Protoconch conic, of two smooth whorls, the nucleus broadly rounded. Whorls 6, regularly increasing, moderately convex, base contracted. Suture well impressed. Aperture sub-rhomboidal, roundly angled above, with a short, oblique, broad canal below, its base very slightly notched. Outer lip lightly convex, somewhat strengthened on the outside by the last axial rib, smooth inside, with a broad and shallow sinus below the suture. Columella vertical, excavated towards the parietal wall, slightly convex below, bent towards the margin of the canal; inner lip thin and narrow, smooth. Diameter 3·1, height 7 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons).

A near ally of this species is the Pliocene *M. Hamiltoni*, Hutt., which has more prominent smooth axial ribs; they number only twelve to fifteen on a whorl, and the spirals are mostly inconspicuous and not passing over the ribs, which extend over the whole of the base.

DAPHNELLA TOTOLIRATA, n.sp. Pl. VII, Fig. 23.

Daphnella lacunosa, Suter, non Hutton: Suter, Trans. N.Z. Inst., vol. xxxi (1899), p. 75.

Shell minute, narrowly fusiform, thin, semitransparent, spirally lirate. Sculpture: the protoconch is microscopically finely spirally striate; the succeeding whorls have three and the body-whorl ten to twelve equidistant fine spiral liræ, the interstices smooth and slightly broader than the threads. Colour white. Spire narrowly conical, about one and a half times the height of the aperture. Protoconch of one and a half convex whorls, the nucleus narrowly rounded, oblique. Whorls 4 to 5, regularly increasing, lightly convex, somewhat flattened below the suture; base slightly contracted. Suture not much impressed. Aperture high and narrow, angled above, with a very short, broad, and truncated canal below. Outer lip convex, straightened below the suture, with a very shallow, broad sinus at the suture, smooth inside, crenated on the outside by spiral sculpture, thin and sharp. Columella vertical, straight, lightly excavated towards the flat parietal wall; inner lip very thin and narrow, smooth. Diameter 1.1, height 2.8 mm., with 5 whorls.

Hab.—Foveaux Strait, in 15 fathoms, type (A. Hamilton); Whangaroa Harbour (C. Traill); near the Snares Islands, in 50 fathoms (Captain J. Bollons); Chatham Islands.

This species, no doubt, is in form and sculpture very much like *D. lacunosa*, Hutt., but the fossil form is nearly twice as high (5 mm.), and there is no evidence that the protoconch is striate. I therefore consider it advisable to make the recent form the type of a new species. It is much smaller than the also nearly allied *D. chariessa*, Sut., which has more spirals on a whorl and a much higher and smooth protoconch.

DAPHNELLA ACICULA, n.sp. Pl. VII, Fig. 24.

Shell minute, acicular, the last whorl very high and spirally striate. Sculpture consisting of equal fine spiral threads with linear grooves between them, on the last whorl only, and more distinct on the base. Colour flavescent, the protoconch purple. Spire subcylindrical, slightly higher than the aperture, the outlines faintly convex. Protoconch comparatively large, papillate, of one and a half smooth whorls, the nucleus oblique, broadly rounded. Whorls 4, the last two very rapidly increasing, faintly convex, very little attenuated towards the base. Suture linear. Aperture high, triangular, narrowly angled above, with a broad rudimentary canal below. Outer lip sharp, slightly thickened, somewhat convex, with a broad, shallow sinus at the suture, thence advancing in a broad curve toward the base, smooth inside. Columella oblique, forming a straight line up and over the parietal wall; inner lip very thin, inconspicuous. Diameter 1.3, height 3.6 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons).

DAPHNELLA TENUISTRIATA, n.sp. Pl. VII, Fig. 25.

Shell very small, subulate, thin and fragile, minutely spirally striate. Sculpture consisting of very fine, dense, and equal spiral striæ from the protoconch down to the base, the former most likely smooth. Colour flavescent to fulvous, the protoconch purple. Spire elevated, conic, somewhat higher than the aperture; outlines faintly convex. Protoconch broken off in all the four specimens at my disposal. Whorls 5 to 6, lightly convex, rather rapidly increasing; base contracted. Suture linear, well impressed. Aperture subrhomboidal, the sides parallel, angled above, with a short, broad, and slightly emarginate canal below. Outer lip moderately convex, acutely curved, and sometimes a little contracted below, sharp, with a shallow, broad sinus below the suture. Columella vertical, straight, excavated on meeting the faintly convex parietal wall; inner lip thin and very narrow. Diameter 2, height of three whorls without protoconch 5, with it probably about 6 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons).

Although none of the specimens are quite perfect, I do not hesitate to describe this elegant species, especially as there is no prospect of getting more material in the near future. One specimen has part of the protoconch left, showing its colour and smoothness. It is nearly related to *D. acicula*, but is larger, and the sculpture extending not only over the body-whorl, and the canal is more distinct.

DAPHNELLA AMPHIPSILA, n.sp. Pl. VII, Fig. 26.

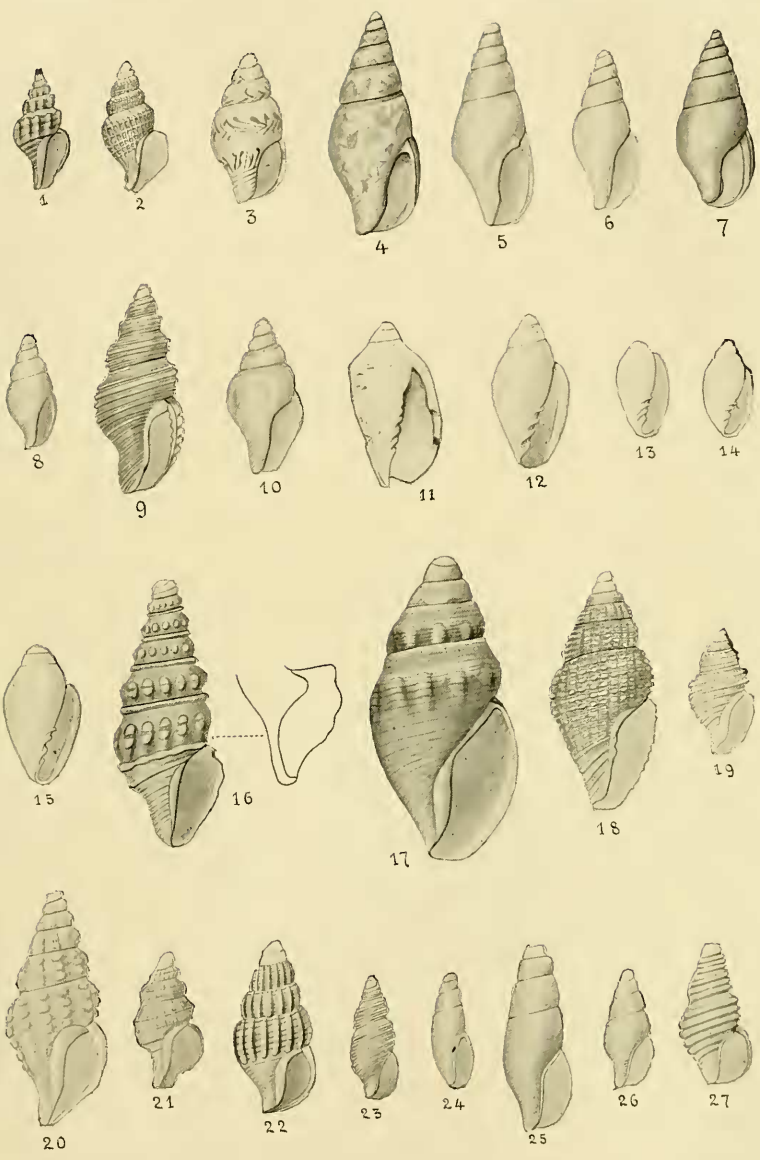
Shell very small, narrowly fusiform, thin, white, translucent, smooth. The sculpture consists of a number of spiral striæ on the base, and a few indistinct microscopic spiral lines on the whorls; growth-lines very fine and dense. Colour white, vitreous. Spire conic, a little higher than the aperture, outlines straight. Protoconch mamillary, of two smooth whorls, the nucleus minute, the succeeding whorl rather swollen. Whorls 5, regularly increasing, lightly convex, base contracted. Suture linear. Aperture subrhomboidal, the sides subparallel, angled above, produced below into a somewhat oblique, but distinct, short, broad, and truncated canal. Outer lip moderately convex, straightened at the middle, contracted below, smooth inside. Columella straight, excavated toward the flat parietal wall, lightly curved below towards the margin of the canal; inner lip thin and narrow, smooth. Diameter 1.6, height 3.5 mm.

Hab.—Near the Snares Islands, in 50 fathoms (Captain J. Bollons).

The species is nearly allied to *D. psila*, Sut., which is larger and has distinct spiral lines.

DAPHNELLA CRASSILIRATA, n.sp. Pl. VII, Fig. 27.

Shell very small, elongate fusiform, white, with stout spiral cords, turriculate. Sculpture: the protoconch, the shoulder on the following whorls, and the base are smooth; the lower spire-whorls have four strong spiral cords, separated by narrow interstices, the uppermost forming the angle of the narrow and but little sloping shoulder; body-whorl with six or seven spiral cords, the greater part of the base



H. Suter del.

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