

## Further Tertiary Mollusca from Hokianga District, North Auckland.

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In a previous paper (*Trans. Roy. Soc. N.Z.*, Vol. 76, 1947, pp. 537-40), the writer recorded and described certain fossils from beds in the Hokianga district; but recent collecting, mainly in the vicinity of Waimamaku, has led to considerable increase in the number of species known from these beds. The majority of the new forms are small species that have been obtained by sieving matrix collected from small lenses and strings containing broken shelly material. There is little doubt that systematic search at further outcrops will yield results that will considerably increase the number of tiny molluscs constituting the fauna of these beds.

The localities where the recent collections were made are for convenience designated by letters, as follows:—

- A. Hokianga South Head. A low outcrop at top of beach below the house of the keeper of the signal station.
- B. Hokianga South Head. An outcrop constituting a wave-cut platform two or three chains nearer the Head than A.
- C. Taita Stream, twenty chains above its junction with Oraora Stream.
- D. Taita Stream, approximately thirty chains above its junction with Waimamaku River.
- E. Waimamaku River, approximately twenty-five chains below its junction with Taita Stream.
- F. Low cliffs along bed of creek draining from the north into Waimamaku River, one mile north-west of Waimamaku Post Office.

### Faunal List.

(P indicates Pakauangi Point beds, Kaipara Harbour.)

	A	B	C	D	E	F	P
<i>Nucula</i> n.sp. . . . .	+						+
<i>Nucula</i> ( <i>Linucula</i> ) <i>waiatea</i> Laws . . . . .						+	+
<i>Nuculana</i> ( <i>Saccella</i> ) <i>duplicarina</i> Laws . . . . .	+		+			+	+
<i>Nuculana</i> ( <i>Jupiteria</i> ) <i>vadosa</i> Laws . . . . .			+				+
<i>Ledella</i> <i>pakaurangiensis</i> Laws . . . . .			+				+
<i>Monia</i> sp. . . . .		+					
<i>Acar harringtoni</i> Laws . . . . .						+	+
<i>Cucullaea</i> sp. . . . .		+					
<i>Hochstetteria</i> <i>zearana</i> Laws . . . . .						+	+
<i>Trichomusculus</i> n.sp. . . . .	+						
<i>Modiolaria</i> n.sp. . . . .						+	+
<i>Pleuromeris</i> <i>instata</i> Laws . . . . .	+					+	+
<i>Pleuromeris</i> <i>otamateaensis</i> Laws . . . . .						+	+
<i>Pleuromeris</i> sp. . . . .			+			+	+
<i>Notolepton</i> cf. <i>sanguineum</i> (Hutton) . . . . .	+						+
<i>Angulus</i> ( <i>Peronidia</i> ) <i>inflatus</i> Laws . . . . .						+	+
<i>Turra</i> n.sp. . . . .	+						+
<i>Notocorbula</i> <i>innerans</i> Laws . . . . .						+	+
<i>Schismope</i> <i>finlayi</i> n.sp. . . . .	+					+	

	A	B	C	D	E	F	P
<i>Miofractarmilla bartrumi</i> n.gen., n.sp. . . . .						+	
<i>Herpetopoma parvumbilicata</i> (Laws) . . . . .	+					+	+
<i>Zeminolia ordo</i> Laws . . . . .	+						+
<i>Elachorbis</i> n.sp. . . . .						+	
<i>Lissotestella waimamakuensis</i> n.sp. . . . .						+	
<i>Cirsonella waimamakuica</i> n.sp. . . . .						+	
<i>Cirsonella zeornata</i> n.sp. . . . .						+	
<i>Dolicrossa clifdenensis</i> Finlay . . . . .						+	+
<i>Argalista provariecostata</i> n.sp. . . . .	+					+	
<i>Argalista</i> sp. . . . .	+						
<i>Opella subfimbriata</i> (Marshall) . . . . .	+	+					
<i>Astraea (Astraliu) hokianga</i> n.sp. . . . .						+	
<i>Zeradina (Radinista) n.sp. B</i> . . . . .	+						+
<i>Zeradina (Naridista) jocelynae</i> Laws . . . . .					+		+
<i>Estea asymmetrica</i> Laws . . . . .						+	+
<i>Haurakia onerata</i> Laws . . . . .						+	+
<i>Haurakia sodalis</i> Laws . . . . .						+	+
<i>Haurakia chemnitzia</i> n.sp. . . . .	+					+	+
<i>Merelina waiotemarama</i> n.sp. . . . .						+	
<i>Linemera waimamakuensis</i> n.sp. . . . .						+	
<i>Notasetia</i> sp. . . . .						+	
<i>Notosetia</i> sp. . . . .	+						
<i>Scrobs latoscrobis</i> n.sp. . . . .						+	
<i>Notoscrobs semiornatus</i> n.sp. . . . .	+					+	
" <i>Epigrus</i> " <i>pakaurangia</i> Laws . . . . .						+	+
<i>Dardanula subexcavata</i> Laws . . . . .						+	+
<i>Dardanula</i> n.sp. . . . .						+	+
? <i>Dardanula</i> sp. . . . .						+	+
<i>Scrupus tumidus</i> n.sp. . . . .						+	
<i>Rissoina emilyae</i> n.sp. . . . .						+	
Rissoidae n.gen., n.sp. . . . .						+	+
? <i>Austronoba</i> n.sp. . . . .						+	
<i>Zaclys propria</i> Laws . . . . .					+		+
<i>Zaclys</i> n.sp. . . . .						+	+
<i>Zaclys (Miopila) mucro</i> Laws . . . . .	+					+	+
<i>Ataococerithium</i> n.sp. . . . .					+		+
<i>Notosmister insertus</i> Marwick . . . . .						+	+
<i>Caecum pertenuis</i> Laws . . . . .						+	+
<i>Maoricolpus</i> sp. . . . .		+					
<i>Maoricolpus</i> sp. . . . .			+				
<i>Zeacolpus</i> sp. . . . .		+					
<i>Spirocolpus</i> sp. . . . .	+					+	
<i>Pareora pinguis</i> Laws . . . . .	+						+
<i>Hipponya cf. centrifugalis</i> Marwick . . . . .						+	
<i>Maoricrypta</i> sp. . . . .						+	
<i>Zegalerus</i> sp. . . . .	+						
<i>Tanea socia</i> (Finlay) . . . . .			+				+
<i>Magnatica cf. planispira</i> (Suter) . . . . .		+					+
<i>Eratopsis erro</i> Laws . . . . .					+		+
<i>Cypraerato submorosa</i> (Laws) . . . . .	+						+
<i>Austrosassia</i> n.sp. . . . .						+	
<i>Turriscala cf. kaiparaensis</i> Laws . . . . .	+						
<i>Pliciscula komitica</i> Laws . . . . .			+				+
<i>Architectonica (Discotectonica) marwicki</i> n.sp. . . . .	+						+
<i>Turbonilla komitica</i> Laws . . . . .	+						+
<i>Chemnitzia granti</i> Laws . . . . .	+						+
<i>Tibersyrnola</i> sp. . . . .				+			
<i>Chrysallida zecarinata</i> n.sp. . . . .						+	
<i>Balcis</i> sp. . . . .						+	
<i>Falsicolus kaiparaensis</i> (Suter) . . . . .		+					+
<i>Falsicolus</i> sp. . . . .	+						
<i>Austrofusus</i> sp. . . . .		+					
<i>Cominella (Acominia) sp.</i> . . . . .	+						
<i>Hima (Mirua) cf. separabilis</i> Laws . . . . .	+						

	A	B	C	D	E	F	P
<i>Xymenella protocarinata</i> Laws .. .. .					+		+
<i>Inglisella</i> sp. .. .. .						+	
<i>Baryspira</i> cf. <i>spinigera</i> (Marshall) .. .. .		+					
<i>Marginella</i> sp. .. .. .					+		
<i>Gemmula kaiparaensis</i> (Marshall) .. .. .			+			+	+
<i>Gemmula</i> n.sp. .. .. .				+		+	+
<i>Bathytoma</i> cf. <i>bartrumi</i> Laws .. .. .		+					
<i>Zemacies climacota</i> (Suter) .. .. .			+				+
<i>Austrotoma</i> cf. <i>kaiparaensis</i> Powell .. .. .			+				
<i>Pseudoinquisitor</i> n.sp. .. .. .			+				+
<i>Austroclavus nodulatus</i> n.sp. .. .. .			+				
<i>Awateria experta</i> Laws .. .. .				+		+	
<i>Rugobela tenuilirata</i> (Suter) .. .. .					+		+
<i>Nepotilla bartrumi</i> Laws .. .. .					+		+
<i>Spiratella ferox</i> Laws .. .. .						+	+
<i>Ringicula zecorpulenta</i> Laws .. .. .	+					+	+
<i>Taita callosa</i> n.gen., n.sp. .. .. .				+			
<i>Dentalium mantelli</i> Zittel .. .. .	+						+
<i>Laevidentalium</i> sp. .. .. .				+			
<i>Cadulus</i> ( <i>Gadila</i> ) n.sp. .. .. .						+	+

Of the 103 species contained in the list, 53 are definitely known to occur in the beds at Pakaurangi Point, and 26 of these are peculiar to the beds at both Hokianga and Kaipara. The pteropod *Spiratella ferox* is an unusual form with a limited range in time, and for this reason it is to be regarded as useful for purposes of correlation. Further remarks concerning this fossil will be made in a paper relating to the faunule at Pakaurangi Point, now in final stages of preparation. The above considerations show that evidence is strong for correlating the fossiliferous Hokianga beds with those at Pakaurangi Point, Kaipara.

It has been impossible to determine accurately many of the fossils from the platform at Hokianga South Head owing to fairly advanced concretionary cementation of matrix around the shells.

The writer is greatly indebted to Professor Bartrum, who has been entirely responsible for the photography.

Holotypès of the species described in this paper are located in the writer's collection.

#### Descriptions of Species.

##### *Schismope finlayi* n.sp. (Fig. 21.)

Of described Neozelanic species, this shell most resembles *S. ngatutura* Laws, a Pliocene fossil from the Kaawa Creek beds, but its individuals are consistently smaller. The radials on supra-fasciolar area are similar in both species; the spirals in this zone are four in number in *finlayi* and are confined to the half of the zone nearer the fasciole. The infra-fasciolar concave zone is very much narrower, though seen to be deep when oriented favourably with respect to light. There is one fine thread in this trough, two somewhat stronger ones immediately below it, and the rest of the whorl below these carries numerous thin spaced spirals. In addition, the body-whorl is ornamented with fine, spaced axial folds that trend antecurrently to suture. The penultimate whorl carries axials only.

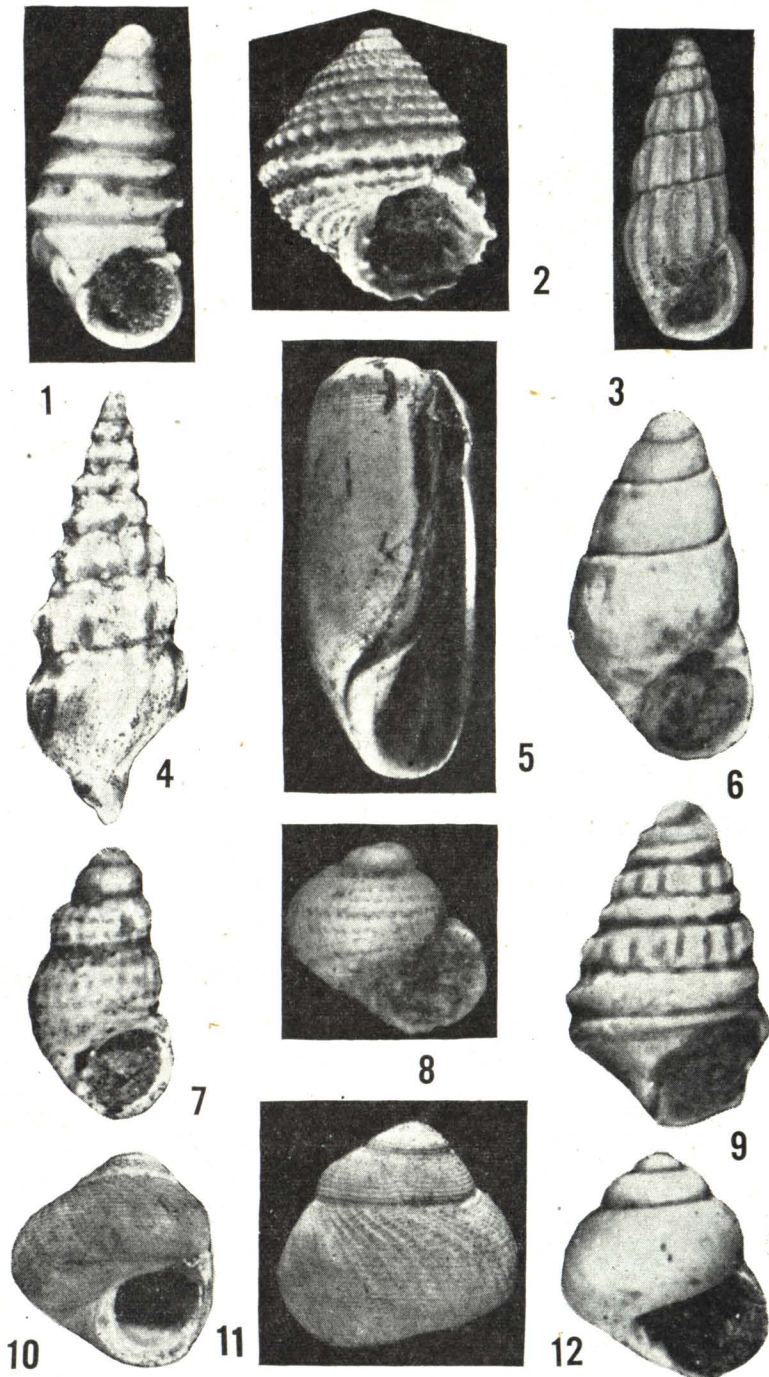
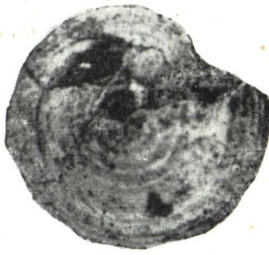


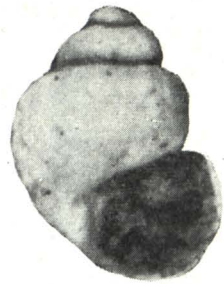
FIG. 1—*Notoscrobs semiornatus* n.sp. Holotype,  $\times 25.0$ . FIG. 2—*Herpetopoma parvumbilicata* (Laws). Waimamaku,  $\times 8.25$ . FIG. 3—*Rissoina emilyae* n.sp. Holotype,  $\times 10.0$ . FIG. 4—*Austroclavus nodulatus* n.sp. Holotype,  $\times 5.3$ . FIG. 5—*Taita callosa* n.gen.n.sp. Holotype,  $\times 5.6$ . FIG. 6—*Scrobs latoscrobis* n.sp. Holotype,  $\times 41.7$ . FIG. 7—*Linemera waimamakuensis* n.sp. Holotype,  $\times 24.6$ . FIG. 8—*Cirsonella zeornata* n.sp. Holotype,  $\times 42.0$ . FIG. 9—*Chrysallida zecarinata* n.sp. Holotype,  $\times 38.5$ . FIGS. 10-11—*Miofractarmilla bartrumi* n.gen.n.sp. Holotype,  $\times 4.0$ . FIG. 12—*Lissotestella waimamakuensis* n.sp. Holotype,  $\times 24.0$ .



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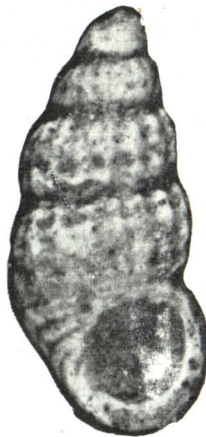
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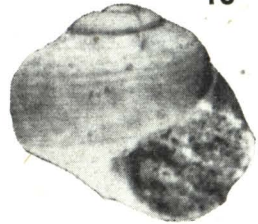
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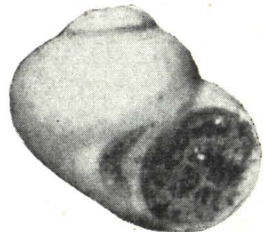
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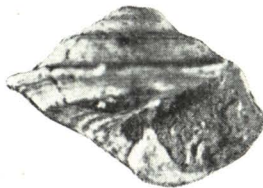
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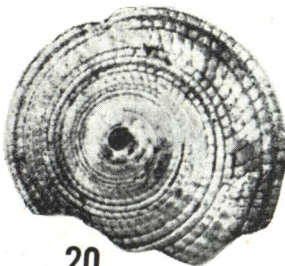
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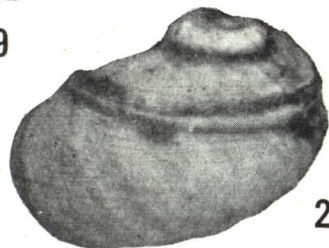
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FIGS. 13, 19—*Astraea (Astraliium) hokianga* n.sp. Holotype,  $\times 9.2$ . FIG. 14—*Haurakia chemnitzia* n.sp. Holotype,  $\times 26.3$ . FIG. 15—*Scrupus tumidus* n.sp. Holotype,  $\times 42.2$ . FIG. 16—*Cirsonella waimamakuica* n.sp. Holotype,  $\times 53.3$ . FIG. 17—*Mervelina waiotemarama* n.sp. Holotype,  $\times 27.6$ . FIG. 18—*Argalista provaricostata* n.sp. Holotype,  $\times 20.0$ . FIG. 20—*Architectonica (Discotectonica) marwicki* n.sp. Holotype,  $\times 3.5$ . FIG. 21—*Schismope finlayi* n.sp. Holotype  $\times 44.0$ . FIG. 22—*Scrobs chattonensis* n.sp. Holotype,  $\times 28.5$ .

Height, 0.6 mm.; width, 1.0 mm.

Locs.: A and F.

Numerous specimens collected. *S. lyallensis* Finlay (Recent) lack radials on the area between fasciole and suture.

#### TROCHIDAE.

##### *Miofractarmilla* genus nov.

This name is proposed for a delightfully sculptured little fossil with obvious monodontid affinities. The nacreous band from basal lip reaches only half way along the inner lip, thus resembling *Fractarmilla* Finlay. There is one small, sharply elevated tooth lengthened horizontally and located on the front of the columella, and thus external to aperture. Sculpture consists of numerous almost linear incised spiral lines with, on the body-whorl, numerous close, narrow, sharp, oblique axials, strongly antecurrent to suture. The subsutural rib is lightly moniliform. Protoconch of one smooth volution.

Genotype: *Miofractarmilla bartrumi* n.sp.

##### *Miofractarmilla bartrumi* n.sp. (Figs. 10, 11.)

In addition to the characters recorded in the generic diagnosis, the following relate to the species. Whorls of spire lightly convex, body-whorl more strongly convex. Height of spire about equal to that of body-whorl. Penultimate whorl with 12 fine, low, rounded spirals, separated by linear interstices, the axial growth-ridges very weak on this whorl. Below periphery and over entire base there are dense, wavy and very fine spiral lirae, hidden in the region of the inner lip by a broad, thin spread of callus.

Height, 8.5 mm.; width, 8.5 mm.

Loc.: F.

##### *Herpetopoma parvumbilicata* (Laws). (Fig. 2.)

1939. *Zetela parvumbilicata*. Laws. *Trans. Roy. Soc. N.Z.*, Vol. 68, p. 477, fig. 56.

A perfect larger shell from the Hokianga beds near Waimamaku shows clearly that the original reference to *Zetela* was erroneous. Apparently none of the Pakaurangi shells are full grown, and the narrow umbilical chink becomes obliterated in the adult. The aperture of the adult assumes characters closely similar to those of *H. bella* (Hutton), as shown by the Hokianga specimen, which is illustrated in this paper. In *parvumbilicata* the two teeth and intervening notch at base of inner lip are less pronounced than those of *bella*, but the inner lip bears the typical spaced lirations set back a little from its margin. In both species there are several small denticles at base of inner lip and columella, and just behind the teeth and notch. The sculpture is remarkably similar to that of *Zetela hutchinsoniana* from the same beds.

Locs.: A, F, Pakaurangi Point.

This is the first Neozelanic fossil record of the genus, the three previously recorded species being constituents of the Recent fauna.

##### *Lisstotestella waimamakuensis* n.sp. (Fig. 12.)

Shell small, of three convex whorls, suture abutting, protoconch large, not globose, but rather flattened. Spirals seem to have been

universally developed, but they are distinct only on base, being very fine indeed around periphery and coarser towards umbilicus. Aperture filled with matrix, but peristome appears entire. Outer lip with varix.

Height, 1.45 mm.; width, 1.25 mm.

Loc.: F.

In shape and outline nearest to *L. tenuilirata* (Powell), the genotype, but notably smaller.

***Cirsonella waimamakuica* n.sp.** (Fig. 16.)

Of Neozelanic forms this species seems closest to *C. aedicula* Laws from the Pliocene beds at Kaawa Creek. It is to be readily distinguished, however, by the presence of basal spirals, which are excessively fine and require careful observation to pick them up. *Aedicula* has the sutures less abutting than those of the new species, which further may be distinguished by wider umbilical hollow and by inner margin of peristome being more remote from wall of body-whorl.

Height, 0.6 mm.; width (greatest), 1.0 mm.

Loc.: F.

***Cirsonella zeornata* n.sp.** (Fig. 8.)

Shell very tiny, somewhat resembling *C. waikukuensis* Powell in ornament. Aperture filled with matrix, but peristome seems to be continuous. As in *waikukuensis* the umbilicus is encircled by inwardly projecting, axial, teeth-like processes. Similar axial processes are present around posterior of whorls, where they are directed towards sutures. Otherwise there is no axial ornamentation. Broad, deep, spiral grooves universally present, these coarsely punctate. The sculpture as a whole is coarse for the size of the shell.

Height, 0.5 mm.; width (greatest), 0.8 mm.

Loc.: F.

***Argalista provariecostata* n.sp.** (Fig. 18.)

Much like *variecostata* Powell (Recent), which has three heavy spirals on the body in addition to many fine ones. The heavy spiral around mid-whorl is absent in the fossil, the spire as a whole is notably lower, and the umbilicus is merely a narrow chink, not semi-circular as in *variecostata*. The nodular circum-umbilical spiral is, however, present. Some specimens show the colour pattern.

Height, 1.5 mm.; width (greatest), 1.8 mm.

Locs.: A, F.

***Astraea (Astraliium) hokianga* n.sp.** (Figs. 13, 19.)

This shell bears resemblance to *Astraea (Astraliium) sublongispina acosmeta* Woodring save that it lacks the long spines of that species. In the general depressed form, sharply angled, keeled periphery, and small umbilicus there is close comparison. Above periphery of last whorl there are seven or eight thin spirals. The sutures undulate, giving evidence of the location of early broad, blunt spines. The periphery of body-whorl also gently undulates, but seems not to have been produced into spines, which here may be regarded as obsolete. On the base, from periphery inwards, there

are first four to five thin spirals, then a heavy keel, followed by development of spirals, which become coarser towards umbilicus, which is small but definite. Parietal wall lightly callused. Outer lip narrowly and sharply angled at half its length.

Height, 3.0 mm.; width, 4.0 mm.

Loc.: F.

**Haurakia chemnitzia** n.sp. (Fig. 14.)

Height of spire one and a half times that of aperture, its outlines straight; whorls strongly convex, sutures very distinct. Ornamentation consists of thin, sharply elevated, oblique axials separated by interstices whose width is four times that of the axials. The grooves terminate abruptly as in *Chemnitzia*, the line of termination being slightly above suture. Base smooth, with growth-lines only. There are several weak spiral threadlets in interstices on body-whorl. Protoconch smooth, of about one volution. Aperture circular to subquadrate, a varix present along outer lip. The basal lip is shallowly notched as in *Haurakiopsis pellucida* Powell, but the protoconch is definitely unsculptured.

Height, 1.5 mm.; width, 0.9 mm.

Locs.: A, F.

*H. oamarutica* Finlay is somewhat similar, but has not the basal notch and the chemnitzid cessation of interstices.

**Merelina waiotemarama** n.sp. (Fig. 17.)

A typical *Merelina*, good specimens of which show spirals on the protoconch. The sculpture is cancellated, both spiral and axial elements being of equal strength. Whorls convex, sutures cut in. Penultimate whorl with three equally-spaced spirals (nodulated at intersections with axials) plus a very weak one at upper suture. Body-whorl with eight spirals, the axials extending well down on base, but weakening below periphery. Aperture typical. Outer lip with heavy varix.

Height, 2.1 mm.; width, 1.0 mm.

Loc.: F.

*M. gemmata* Powell is larger and not so slender, nor does it have the sutures so much cut in. *Superba* Powell is notably larger and of different outline, with the spire more tapering and protoconch more exsert. *Kaawaensis* Laws is a smaller, slenderer shell with the aperture spreading more laterally, only two spirals on penultimate whorl, and axials obsolete on base. *Harrisonae* Powell is more elevated in relation to width, has five as against four whorls, and fewer spirals on the body. *Tauypoensis* Powell is larger, has straight outline to spire, and has coarser sculpture.

**Linemera waimamakuensis** n.sp. (Fig. 7.)

Shell tiny, more similar in sculpture to the Awamoan *L. awamoensis* Finlay and *L. pukeuriensis* Finlay than to other described forms, but smaller than either. Sculpture clathrate, the spirals, however, rather heavier than the axials, the reverse being the case for *pukeuriensis*. *Awamoensis* has five as against three spirals in *wai-*



*mamakuensis* on penultimate whorl, and five as against four on body-whorl above aperture.

Height, 1.5 mm. ; width, 0.9 mm.

Loc. : F.

**Scrobs latoscrobis** n.sp. (Fig. 6.)

Shell nearest to *S. kaawaensis* Laws in build, the last whorl angled, and those of spire flat. Sutures indistinct. From *kaawaensis* the new species may be readily distinguished by constant smaller size, notably wider channel separating peristome from parietal wall, and relatively smaller aperture, which appears more detached than is usual. Suture lightly margined in some individuals.

Height, 1.15 mm. ; width, 0.7 mm.

Locs. : A, F.

There is a similar species in the beds at Chatton, near Gore, and this, on account of its similarity to the species discussed above, is described in an appendix to this paper.

**Notoscrobs semiornatus** n.sp. (Fig. 1.)

Shell small, outlines practically straight, height of spire a little less than that of body-whorl. Aperture typical, but not spreading laterally like that of *ornatus* Powell. There are two spiral keels per whorl of spire, located around anterior and posterior zones of whorls, the anterior one the stronger. Keels thin, smooth, but some individuals show incipient nodulation of keels, and faint traces of axials between the spirals. Body-whorl with three keels, the anterior one emerging from posterior angle of aperture. Below this on base there are two spaced weaker spirals.

Height, 1.8 mm. ; width, 0.9 mm.

Locs. : A, F.

Close to *N. ornatus* Powell, which, however, has coarser spirals, the posterior of which is heavily nodulated.

**Scrupus tumidus** n.sp. (Fig. 15.)

Shell tiny, body-whorl considerably swollen. All whorls convex, sutures strongly evident, abutting. Aperture circular, outer lip with varix; basal lip notched; a shallow channel bordering inner lip and running back as far as umbilical region. Sculpture absent.

Height, 0.9 mm. ; width, 0.6 mm.

Loc. : F.

Nearest to *S. sinuatus* Laws, a fossil from the Pliocene beds at Kaawa Creek, but distinguishable at sight by its minute size, less sinuous outer lip, lower spire, and more swollen body.

**Rissoina emilyae** n.sp. (Fig. 3.)

Shell moderate in size, outlines of spire lightly convex, whorls convex, suture distinct, height of spire greater than half that of shell. All post-nuclear whorls with narrow, sharp, straight, vertical axials, spaced about twice their own width apart and extending low down on base. About fourteen axials on penultimate whorl. Whole adult

surface crowded with fine spiral lirae. Outer lip with broad, heavy varix. Aperture drawn down and outwards to right.

Height, 4.2 mm.; width, 1.85 mm.

Loc.: F.

Not particularly close to any described form.

**Architectonica (Discotectonica) marwicki** n.sp. (Fig. 20.)

Marwick's description of "*Architectonica (Discotectonica) n.sp.*" (*N.Z. Geol. Surv. Pal. Bull.*, no. 13, p. 102, fig. 179; 1931) and his figure accord exactly with the characters of a shell from the Hokianga beds, the dimensions of which are closely similar to those he gives for the Gisborne shell. The species is therefore now named.

Loc.: A.

**Chrysallida zecarinata** n.sp. (Fig. 9.)

Shell small, stumpy, outlines of spire straight. Post-nuclear whorls three in number, heavily keeled. Protoconch heterostrophe, somewhat corroded so that nucleus cannot be observed. Whorls of spire with two strong keels, the posterior one heavily beaded, the anterior one thin, sharp, smooth. Weak axial prolongations of beads extend across interspaces between the keels. On body-whorl a third somewhat lighter keel emerges from within posterior angle of aperture. Base unsculptured, but growth-lines are evident. Aperture filled with matrix that cannot be removed, but shape apparently sub-quadrate.

Height, 1.2 mm.; width, 0.7 mm.

Loc.: F.

**Austroclavus nodulatus** n.sp. (Fig. 4.)

Shell of moderate size and typical build, nearest to *A. marshalli* Powell. Protoconch typically that of the genus, but differs from that of all other species in being less broadly conic, and so stands up more sharply. Axial sculpture takes the form of nodules (eight on penultimate whorl) that have only weak or obsolete prolongation downwards. The sculpture is thus somewhat prickly, and the base is devoid of axial sculpture. Body-whorl biangulate, with trace of spiral sculpture about the lower angulation. Suture sub-margined by a swollen cord.

Height, 11.0 mm.; width, 4.0 mm.

Loc.: C.

SCAPHANDRIDAE.

**Taita** genus nov.

Shell elongate, cylindrical, spire involute, posterior end not excavated. Body-whorl shouldered near posterior end. Aperture broadening from behind, very wide in front. Columella long, truncated below, with two parallel oblique folds, the anterior weak, the posterior one very strong and sharply elevated, extending to outer edge of thick raised callus pad, but not sweeping around to become confluent with anterior of aperture, as in *Cylichnella* Gabb. Basal lip lightly notched below end of columella.

Genotype: *Taita callosa* n.sp.

**Taita callosa** n.sp. (Fig. 5.)

Refer to generic characters stated above. In addition, the following specific features may be noted. Right margin straight, left lightly convex. Callus on parietal wall is thin and narrow from behind down to anterior third, where it thickens and broadens considerably, sweeping to left, its surface appreciably above that of base of whorl. The posterior end and posterior part of body-whorl carry numerous fine spiral striae, similar spirals being developed on anterior third of body, the portion of whorl between these two zones smooth.

Height, 10.2 mm.; width, 4.5 mm.

Loc.: D.

*Appendix.***Scrobs chattonensis** n.sp. (Fig. 22.)

Shell very small, similar in build to *S. latoscrobis* n.sp. and *S. kaawaensis* Laws, but more elevated in relation to width, with the periphery not so sharply angled and the whorls of spire lightly convex; suture indistinct. Apertural features quite typical. Shell solid for its size.

Height, 1.4 mm.; width, 0.7 mm.

Loc.: Chatton sands, Chatton, near Gore, Southland.