

## The Marine Mollusca of the Aupourian Province, New Zealand.

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IN addition to the descriptions of 66 new species, this paper provides a check-list of the marine mollusca from the northern portion of the North Auckland Peninsula and the Three Kings Islands. The paper is supplementary to my "Discovery II" Report on "New Species of Marine Mollusca from New Zealand" ("Discovery" Reports, 1937, vol. 15, pp. 153-222), in which 128 new species and 6 new genera were described, and a new faunal province, the Aupourian, proposed.

The Aupourian is defined as covering the Three Kings Islands and the extremity of the North Auckland Peninsula down as far as Ahipara on the West Coast and Whangaroa on the East Coast. Naturally there is a considerable overlapping of species between the Aupourian and the rest of the North Auckland Peninsula, i.e., the northern limit of the Cookian Province. However, there is a strong aggregation of genera and species of Peronian (Coastal New South Wales) origin that is confined to the arbitrary limits upon which I have based the Aupourian, making a faunal entity quite distinct from that of the Cookian.

Recorded herein are several Peronian genera additional to those listed in my 1937 report, and these combined make an exclusive element in the Aupourian which stands as follows: *Borniola*, *Cratis*, *Coenaculum*, *Dimya* (*Dimyarina*), *Epicodakia*, *Fautor*, *Fax*, *Fusus*, *Galfridus*, *Gazameda*, *Naricava* (*Tropidorbis*), *Nepotilla* (s. str.), *Notocochlis*, *Opimilda*, *Pedicularia*, *Peculator*, *Roya*, *Radulphus*, *Starkeyna*, and *Zeidora*. A number of other Peronian species are represented, but they are of more general distribution in New Zealand. Also a new *Siliquaria* is allied to the Queensland *ponderosa*, a new *Chileutomia* has its nearest relative in the genotype from the Victorian Tertiary, and *Xenophalium royanum* and *Eulima perspicua* are known elsewhere only from the Kermadec Islands. Another genus new to the fauna is *Ividella*, the genotype of which is a Recent Californian species. Several Forsterian and Rossian genera are represented in spite of the fact that they have not been recorded from the intervening Cookian. They are *Kidderia*, *Scalaronoba*, *Striatestea* and *Venustilifer*. The Aupourian is subjected to three main factors influencing the composition of the faunule—the main tidal stream which runs up the East Coast—the East Australian warm-water current and the prevailing west-wind drift. The effect of the latter is shown in the distribution of the giant kelp *D'urvillea*, which on the West Coast reaches as far as Cape Reinga, but is not found further eastward in the Aupourian. Two badly-worn examples

of the New Caledonian *Nautilus macromphalus* were picked up on the Ninety Mile Beach (A.W.B.P., Feb., 1932), and on Waikuku Beach, near the North Cape, a damaged sepion of the Peronian *Solito-sepia plangon* Gray was picked up in February, 1932. These illustrate the effectiveness of the East Australian Current which, originating in the tropical Pacific, passes New Caledonia before striking Eastern Australia on its way southward and then eastward across the Tasman. The air compartments in *Nautilus* render these shells permanently buoyant, and thus they become excellent current indicators.

In the Aupourian check list which follows, the numerals preceding the names refer to my check list in *The Shellfish of New Zealand*, 1937, Unity Press, Auckland. The numbers and symbols in brackets following the names refer to the locality lists given herein. The letter T denotes the type locality for the species.

This list shows the large total of 649 species, which is almost half of the known Recent mollusca of the Neozelanic fauna. Of this number 261 species are not known from outside the Aupourian in New Zealand. By comparison, the Moriorian has 256 species, 47 of which are endemic (see Powell, 1933, "The Marine Fauna of the Chatham Islands, *Rec. Auck. Inst. Mus.*, vol. 1, pp. 181-208). The Stewart Island fauna which represents the Forsterian, in part, has 362 species, 80 of which are restricted to that faunal province (see Powell, 1939, *Rec. Auck. Inst. Mus.*, vol. 2, pp. 211-238). A Rossian list is in preparation.

#### CHECK LIST OF AUPOURIAN MOLLUSCA.

##### PELECYPODA.

2. *Nucula hartvigiana* Pfeiffer, 1864. (D.25.)
4. *Nucula strangei* A. Adams, 1856. (D.10.)
8. *Nucula certisinus* Finlay, 1930. (D.20T.)
12. *Pronucula maoria* Powell, 1937. (D.2T.)
13. *Nuculana (Saccella) bellula* (A. Adams, 1856). (D.10, D.5, D.29.)
15. *Nuculana (Jupiteria) manawatawhia* Powell, 1937. (D.2T.)
16. *Ledella finlayi* Powell, 1935. (D.10T, D.2.)
20. *Neilo australis* (Quoy and Gaimard, 1835). (D.5.)
23. *Monia zelandica* (Gray, 1843). (1.)
24. *Monia furcata* (Suter, 1907). (D.5.)
25. *Anadara trapezia* (Deshayes, 1840). (8.)
26. *Acar sociella* (Brookes, 1926). (28.)
27. *Acar sandersonae* Powell, 1933. (26T, 7, D.3, D.10.)
28. *Arca novaezelandiae* Smith, 1915. (1, D.3.)
29. *Glycymeris (Grandaxinea) laticostata* (Q. and G., 1835). (1, D.8.)
30. *Glycymeris (Glycymerula) modesta* (Angas, 1879). (1, 9.)
31. *Microcucullaea cybaea* (Hedley, 1906). (D.10, D.5.)
33. *Aupouria parvula* Powell, 1937. (D.2T, D.3.)
43. *Hochstetteria munita* Finlay, 1930. (7.)
46. *Hochstetteria acutangula* Powell, 1935. (25T.)
48. *Cosa filholi* (Bernard, 1897). (D.2.)
49. *Cosa serratocostata* Powell, 1933. (7T, D.3, D.21.)
50. *Cosa serratocostata dispar* Powell, 1937. (D.2T.)
51. *Cosa laevicostata* Powell, 1933. (7T.)
52. *Cratis reticularia* Powell, 1937. (D.2T.)
53. *Cratis delicatula* Powell, 1937. (D.2T.)
55. *Perrierina substriata* Powell, 1935. (25T.)

60. *Mytilus canaliculus* Martyn, 1784. (1.)
  61. *Mytilus planulatus* Lamarck, 1819. (4.)
  63. *Modiolus neozelandicus* (Iredale, 1915). (1, 7.)
  64. *Modiolus areolatus* (Gould, 1850). (1, 9, 7.)
  65. *Modiolus fluviatilis* (Hutton, 1878). (10.)
  66. *Musculus impactus* (Hermann, 1782). (1.)
  67. *Trichomusculus barbatus* (Reeve, 1858). (7, D.6.)
  69. *Dacrydium radians* Suter, 1908. (D.9.)
  70. *Dacrydium pelseneeri* Hedley, 1906. (D.2, D.5.)
  71. *Pecten (Notovola) medius* Lamarck, 1819. (1.)
  72. *Chlamys zelandiae* (Gray, 1843). (1.)
  77. *Chlamys zealandoma* (Hertlein, 1931). (1.)
  78. *Chlamys consociata* Smith, 1915. (D.3.)
  82. *Pallium (Mesopeplum) convexum* (Q. and G., 1835). (1, D.8, D.7.)
  85. *Cyclopecten (Cyclochlamys) secundus* Finlay, 1926. (D.11T, D.2.)
  86. *Cyclopecten (Cyclochlamys) aupouria* Powell, 1937. (D.2T.)
  87. *Dimya (Dimyarina) maoria* Powell, 1937. (D.2T.)
  90. *Lima sydneyensis* Hedley, 1904. (7, D.2.)
  91. *Limatula (Stabilima\*) maoria* Finlay, 1926. (1, 9, 11, 7.)
  93. *Limatula (Stabilima) aupouria* Powell, 1937. (D.2T.)
  94. *Mantellum (Escalima†) murrayi* (Smith, 1891). (D.2.)
- \* Iredale, 1939. Moll., pt. 1, *Great Barrier Reef Exped. Brit. Mus.*, pp. 385-390..
- † Iredale, 1929. *Rec. Austr. Mus.*, vol. 17, p. 166.
98. *Saxostrea glomerata* (Gould, 1850). (1, 12.)
  108. *Kidderia aupouria* Powell, 1933. (7T.)
  110. *Neogaimardia finlayi* Powell, 1933. (7T.)
  113. *Costokidderia lyallensis* Finlay, 1926. (7.)
  114. *Talabrica bellula* (A. Adams, 1854). (D.8, D.18.)
  116. *Cuna mayi* Powell, 1930. (D.21, D.22.)
  119. *Cuna compressidens* Powell, 1933. (D.21T.)
  120. *Cuna aupouria* Powell, 1937. (D.2T.)
  121. *Cuna waikukuensis* Powell, 1937. (D.9T.)
  122. *Cuna manawatawhia* Powell, 1937. (D.3T, D.6.)
  123. *Cuna gibbosa* Powell, 1937. (D.2T.)
  125. *Cyamimactra problematica truncata* Suter, 1907. (D.8.)
  126. *Cardita aoteana* Finlay, 1926. (1.)
  127. *Cardita brookesi* Finlay, 1926. (23, 26.)
  128. *Venericardia purpurata* (Deshayes, 1854). (9, 11, D.22.)
  130. *Venericardia reinga* Powell, 1933. (2T, 6.)
  132. *Pleuromeris cf. marshalli* Marwick, 1924. (D.2.)
  133. *Pleuromeris latiuscula* Powell, 1937. (D.9T.)
  134. *Pleuromeris latiuscula benthicola*, Powell, 1937. (D.2T.)
  136. *Condylocardia concentrica* Bernard, 1897. (7, D.2, D.21.)
  140. *Benthocardiella pusilla* Powell, 1930. (D.22, D.2, D.5.)
  141. *Benthocardiella obliquata* Powell, 1930. (D.21T.)
  144. *Benthocardiella orbicula* Powell, 1930. (D.21T, D.22, D.2.)
  145. *Benthocardiella hamatadens* Powell, 1930. (D.2, D.21T.)
  147. *Gonimyrtea concinna* (Hutton, 1885). (D.7.)
  148. *Epicodakia neozelandica* Powell, 1937. (D.3T, D.8.)
  149. *Divaricella (Divalucina) cumingi* (Ad. and Ang., 1863). (1, D.5.)
  151. *Zemysia zelandica* (Gray, 1835). (1.)
  153. *Zemysia (Zemysina) striatula* Finlay, 1926. (1.)
  159. *Lasaea maoria* Powell, 1933. (22.)
  160. *Lasaea parengaensis* Powell, 1935. (D.24T.)
  161. *Marikellia rotunda* (Deshayes, 1856). (D.18.)
  162. *Pachykellya edwardsi* Bernard, 1897. (D.2.)
  169. *Arthritica bifurca* (Webster, 1908). (D.5.)
  171. *Melliterya parva* (Deshayes, 1856). (D.5.)
  172. *Myllitella vivens* Finlay, 1926. (7, D.7.)
  174. *Zemylita stoweii* (Hutton, 1873). (7.)
  179. *Mysella aupouria* Powell, 1937. (D.2T.)
  180. *Mysella alpha* Powell, 1937. (D.2T.)
  181. *Mysella beta* Powell, 1937. (D.2T.)

- 181.1. *Mysella larochei* Powell, n.sp. (26T, 7.)
- (189.) *Mysella tellinula* (Odhner, 1924). (18T.)
182. *Rocheffortula reniformis* (Suter, 1908). (7, 26.)
- (178.) *Rocheffortula bidentifera* (Powell, 1933). (7T.)
183. *Borniola neozelanica* Powell, 1937. (D.2T.)
184. *Notolepton cf. antipodum* (Filhol, 1880). (D.2.)
185. *Notolepton sanguineum* (Hutton, 1883). (7.)
187. *Notolepton sublaevigatum* Powell, 1937. (D.2T.)
188. *Notolepton subobliquum* Powell, 1937. (D.2T.)
190. *Scintilla stevensoni* Powell, 1932. (26.)
192. *Divariscintilla maoria* Powell, 1932. (22T.)
214. *Maoritellina huttoni* (Smith, 1885). (D.29.)
216. *Zearcopagia disculus* (Deshayes, 1855). (1, 9.)
218. *Amphidesma subtriangulatum* (Wood, 1828). (1, 9.)
225. *Longimactra elongata* (Q. and G., 1835). (1.)
227. *Scalpomactra scalpellum* (Reeve, 1854). (7, D.8, D.5, D.21, D.29.)
228. *Spisula aequilateralis* (Deshayes, 1854). (1.)
233. *Dosinia (Phacosoma) subrosea* (Gray, 1835). (1, 9)
234. *Dosinia (Phacosoma) maoriana* (Oliver, 1923). (1, D.8.)
236. *Notocallista (Striacallista) multistriata* (Sowerby, 1851). (D.9.)
239. *Tavera spissa* (Deshayes, 1835). (1, D.8.)
245. *Chione (Austrovenus) stutchburyi* (Gray, 1828). (1.)
248. *Protothaca crassicosta* (Deshayes, 1835). (9.)
249. *Gomphina (Gomphinella) maorum* Smith, 1902. (1T, D.3.)
251. *Notirus reflexus* (Gray, 1843). (1, 7.)
252. *Nemocardium pulchellum* (Gray, 1843). (D.7, D.5, D.29.)
253. *Gari lineolata* (Gray, 1835). (1, 9.)
254. *Gari stangeri* (Gray, 1843). (1.)
255. *Ascitellina urinatoria* (Suter, 1913). (D.2.)
261. *Hiatella australis* (Lamarck, 1818). (D.5, 26, D.29.)
271. *Parvithracia suteri* (Finlay, 1927). (D.2.)
272. *Parvithracia cuneata* Powell, 1937. (D.3T.)
275. *Myadora boltoni* Smith, 1880. (7.)
277. *Myadora novaezealandiae* Smith, 1880. (D.7.)
280. *Cleidotherus maorianus* Finlay, 1926. (1.)
281. *Haliris (Setaliris) setosa* (Hedley, 1907). (D.2, D.10.)
282. *Cuspidaria trailli* (Hutton, 1873). (D.7, D.5.)
284. *Austroneaera brevirostris* Powell, 1937. (D.2T.)

## GASTEROPODA.

289. *Scissurella manawatawhia* Powell, 1937. (D.2T.)
290. *Schizotrochus mantelli* (Woodward, 1859). (D.2, D.12, D.10.)
291. *Schizotrochus aupouria* Powell, 1937. (D.2T.)
292. *Schizotrochus finlayi* Powell, 1937. (D.3T.)
293. *Scissurona rosea* (Hedley, 1904). (7.)
298. *Schismope lyallensis* Finlay, 1926. (D.2.)
299. *Schismope laqueus* Finlay, 1926. (D.2.)
301. *Haliotis iris* Martyn, 1784. (1, 13.)
302. *Haliotis australis* Gmelin, 1790. (1, 13.)
303. *Haliotis virginea* Gmelin, 1790. (1, 9.)
305. *Incisura lytteltonensis* (Smith, 1894). (4, 29.)
306. *Emarginula striatula* (Q. and G., 1834). (1, D.8, D.3.)
308. *Tugali elegans* Gray, 1843. (1.)
311. *Tugali suteri bascauda* Hedley, 1917. (1, 7, 26.)
317. *Monodilepas diemenensis* Finlay, 1930. (3T, D.2, D.3.)
319. *Puncturella manawatawhia* Powell, 1937. (D.2T.)
321. *Zeidora maoria* Powell, 1937. (D.2T.)
323. *Trochus (Coelotrochus) tiaratus* Q. and G., 1834. (1.)
324. *Trochus (Thorista) viridis* (Gmelin, 1791). (1, 9.)
325. *Trochus (Thorista) camelophorus* Webster, 1906 (2T, D.3.)
331. *Thoristella oppressa* (Hutton, 1873). (3, 13, 26.)
332. *Thoristella carmesina* (Webster, 1908). (3.)
333. *Thoristella crassicosta* Powell, 1937. (D.2T.)

334. *Paraclancolus peccatus* Finlay, 1926. (1, 26.)
336. *Melagraphia aethiops* (Gmelin, 1791). (1, 7, 11, 13.)
337. *Zediloma digna* Finlay, 1926. (1.)
338. *Zediloma arida* Finlay, 1926. (13.)
340. *Zediloma (Fractarmilla) subrostrata* (Gray, 1835). (1.)
341. *Zediloma (Fractarmilla) atrovirens* (Philippi, 1851). (1.)
342. *Zediloma (Fractarmilla) morio* (Troschel, 1851). (13.)
343. *Cavodiloma coracina* (Philippi, 1851). (1, 7.)
344. *Anisodiloma lugubris* (Gmelin, 1791). (1.)
346. *Cantharidus opalus* (Martyn, 1784). (1.)
348. *Cantharidus purpuratus* (Martyn, 1784). (1, 7, 11.)
359. *Micrelenchus rufozonus* (A. Adams, 1853). (3, 7, D.21.)
360. *Micrelenchus oliveri* (Iredale, 1915). (3, 7.)
361. *Micrelenchus dilatatus* (Sowerby, 1870). (26.)
363. *Cantharidella tessellata* (A. Adams, 1851). (7.)
364. *Fossarina rimata* (Hutton, 1884). (7.)
365. *Herpetopoma bella* (Hutton, 1873). (3, 26.)
366. *Herpetopoma larochei* Powell, 1926. (26T.)
367. *Herpetopoma mariae* Finlay, 1930. (3T.)
368. *Herpetopoma benthicola* Powell, 1937. (D.2T, D.3.)
373. *Roya* sp. (Powell, 1934). (7.)
374. *Fautor onustus* (Odhner, 1924). (D.3, D.18T.)
375. *Maurea tigris* (Martyn, 1784). (1, 9.)
376. *Maurea pellucida* (Valenciennes, 1846). (1.)
377. *Maurea pellucida spirata* (Oliver, 1926). (1.)
382. *Maurea (Mucrinops) osbornei* (Powell, 1926). (1.)
383. *Maurea (Mucrinops) punctulata* (Martyn, 1784). (1, 9, 11.)
385. *Zetela textilis* (Murdoch and Suter, 1906). (D.10.)
386. *Zeminolia plicatula* (Murdoch and Suter, 1906). (D.6.)
389. *Zeminolia luteola* Powell, 1937. (D.2T.)
390. *Zeminolia vera* Powell. (D.8T, D.7.)
391. *Zeminolia benthicola* Powell, 1937. (D.2T.)
392. *Antisolarium egenum* (Gould, 1849). (7, 9, D.29.)
393. *Zethalia zelandica* (A. Adams, 1854). (1, 7, 11.)
394. *Munditia tryphenensis* (Powell, 1925). (7.)
398. *Munditia aupouria* Powell, 1937. (D.2T, D.3.)
399. *Munditia echinata* Powell, 1937. (D.2T.)
400. *Munditia manawatawhia* Powell, 1937. (D.2T.)
- 400.1. *Munditia delicatula* Powell, n.sp. (D.31T.)
- 400.2. *Munditia anomala* Powell, n.sp. (7T.)
- 401.1. *Lodderia iota* Powell, n.sp. (D.22T.)
404. *Lodderina formosa* Powell, 1937. (7, D.2, D.21T.)
405. *Lodderina nana* Powell, 1930. (D.21T.)
406. *Liotella polypleura* (Hedley, 1904). (29.)
408. *Liotella indigens* Finlay, 1926. (D.2, D.12T.)
410. *Liotella aupouria* Powell, 1937. (D.2T.)
411. *Liotella rotuloides* Powell, 1937. (D.2T, D.10, D.6.)
412. *Brookula prognata* Finlay, 1926. (D.12T, D.6.)
- 412.1. *Brookula lincta* Powell, n.sp. (D.6T.)
414. *Brookula annectens* Powell, 1937. (D.2T.)
- 414.1. *Brookula contigua* Powell, n.sp. (D.6T.)
417. *Brookula (Aequispirella) finlayi* Powell, 1933. (7, D.2, D.6, D.21.)
424. *Lissotesta caelata* Powell, 1937. (D.2T.)
425. *Lissotesta conoidea* Powell, 1937. (D.2T.)
426. *Lissotesta aupouria* Powell, 1937. (D.2T.)
- 426.1. *Lissotesta decipiens* Powell, n.sp. (D.10T.)
- 426.2. *Lissotesta consobrina* Powell, n.sp. (D.6T.)
- 426.3. *Lissotesta bicarinata* Powell, n.sp. (7T.)
- 426.4. *Lissotesta oblata* Powell, n.sp. (D.6T.)
427. *Zalipais lissa* (Suter, 1908). (29.)
432. *Cirsonella consobrina* Powell, 1930. (D.2, D.21T, D.22.,
433. *Cirsonella laxa* Powell, 1937. (D.2T.)
434. *Cirsonella paradoxa* Powell, 1937. (D.2T.)

435. *Cirsonella pisiformis* Powell, 1937. (D.2T.)
436. *Cirsonella waikukuensis* Powell, 1937. (D.9T, D.6.)
437. *Cirsonella simplex* Powell, 1937. (D.2T.)
- 437.1. *Cirsonella variegostata* Powell, n.sp. (D.33T.)
438. *Starkeyna maoria* Powell, 1937. (D.2T.)
440. *Conjectura atypica* Powell, 1937. (D.2T.)
- 440.1. *Conjectura carinata* Powell n.sp. (D.31T.)
441. *Dolicrossea vesca* Finlay, 1926. (D.3.)
442. *Crosseola errata* Finlay, 1926. (D.22T.)
444. *Crosseola favosa* Powell, 1937. (D.2T, D.3.)
445. *Crosseola intertexta* Powell, 1937. (D.2T.)
447. *Orbitestella toreuma* Powell, 1930. (D.2, D.21T, D.22.)
- 447.1. *Orbitestella vera* Powell, n.sp. (7T.)
451. *Argalista nana* Finlay, 1930. (D.2, D.3, D.22T.)
453. *Argalista rotella* Powell, 1937. (D.2T.)
454. *Argalista variegostata* Powell, 1937. (D.2, D.3T.)
455. *Lunella smaragda* (Martyn, 1784). (1, 7, 13.)
456. *Modelia granosa* (Martyn, 1784). (1, 9.)
457. *Astraea heliotropium* (Martyn, 1784). (1, D.8, 9.)
458. *Cookia sulcata* (Martyn, 1784). (1, 7.)
460. *Pellæ huttoni* (Pilsbry, 1888). (1, 7, D.21.)
461. *Nerita (Melanerita) melanotragus* (Smith, 1884). (1, 7, 13.)
463. *Notocrater craticulatus* (Suter, 1908). (D.5.)
464. *Tectisumen clypidellaeformis* (Suter, 1908). (D.2.)
466. *Tectisumen subcompressa* Powell, 1937. (D.2T.)
467. *Tectisumen finlayi* Powell, 1937. (D.3T.)
468. *Patelloida corticata* (Hutton, 1880). (1.)
469. *Patelloida corticata corallina* Oliver, 1926. (7.)
471. *Asteracmea cf. suteri* (Iredale, 1915). (7, D.2, D.21.)
477. *Notoacmea pileopsis* (Q. and G., 1834). (1, 9.)
478. *Notoacmea pileopsis cellanoides* Oliver, 1926. (3, 7.)
482. *Notoacmea (Parvacmea) subtilis* (Suter, 1907). (7, D.22.)
488. *Notoacmea (Subacmea) scopulina* Oliver, 1926. (1.)
491. *Cellana radians* (Gmelin, 1791). (1, 7, 13.)
494. *Cellana stellifera* (Gmelin, 1791). (1, 9, 13.)
496. *Cellana denticulata* (Martyn, 1784). (1, 13.)
497. *Cellana ornata* (Dillwyn, 1817). (1, 7, 13.)
518. *Melarhappe oliveri* Finlay, 1930. (1, 7.)
519. *Melarhappe cincta* (Q. and G., 1833). (7, 13.)
526. *Zelawitas cf. micra* (Finlay, 1924). (7.)
527. *Zelawitas iredalei* (Brookes, 1926). (26.)
- 527.1. *Zelawitas alta* Powell, n.sp. (29T.)
528. *Risellopsis varia* (Hutton, 1873). (7.)
529. *Fossarus aupouria* Powell, 1937. (D.2T.)
530. *Fossarus maoria* Powell, 1937. (D.2T.)
533. *Zeradina odhneri* Powell, 1927. (D.29T.)
534. *Zeradina (Radinista) corrugata* (Hedley, 1904). (D.19.)
- 534.1. *Zeradina (Radinista) scalarina* Powell, n.sp. (D.31T.)
540. *Austronoba candidissima* (Webster, 1905). (7, 26.)
541. *Austronoba carnosa* (Webster, 1905). (7, 26.)
543. *Austronoba iredalei* Powell, 1937. (D.2T, D.10.)
- 543.1. *Austronoba obliquata* Powell, n.sp. (7T.)
548. *Subonoba parvula* Powell, 1931. (D.23T.)
- 552.1. *Subonoba aupouria* Powell, n.sp. (D.31T.)
553. *Estea zosterophila* (Webster, 1905). (7.)
555. *Estea impressa* (Hutton, 1885). (7.)
559. *Estea semiplicata* Powell, 1927. (7, 26T, D.21.)
560. *Estea angustata* Powell, 1927. (7, D.2, D.21T.)
568. *Estea crassicarinata* Powell, 1937. (D.2T, D.6.)
569. *Estea porrectoides* Powell, 1937. (D.2T.)
570. *Estea crassicoordata* Powell, 1937. (D.2T.)
571. *Estea subrufa* Powell, 1937. (D.2T.)
572. *Estea manawatawhia* Powell, 1937. (D.1, D.2T.)
- 573.1. *Striatestea eulima* Powell, n.sp. (7T.)

- 574.1. *Scalaronoba secunda* Powell, n.sp. (D.10T.)
- 575. *Haurakia hamiltoni* (Suter, 1898). (7.)
- 577. *Haurakia finlayi* Powell, 1937. (D.2T.)
- 578. *Haurakia aupouria* Powell, 1937. (D.2T.)
- 579. *Haurakia duplicata* Powell, 1937. (D.2T.)
- 580. *Haurakia duplicata exuta* Powell, 1937. (D.2T.)
- 581. *Haurakiopsis pellucida* Powell, 1937. (D.2T, D.3.)
- 582. *Merelina lyalliana* (Suter, 1898). (7.)
- 584. *Merelina gemmata* Powell, 1927. (7, 26.)
- 585. *Merelina superba* Powell, 1927. (7, D.21.)
- 585.1. *Merelina taupoensis* Powell, 1939. (7.)
- 586. *Merelina compacta* Powell, 1927. (7, D.2, D.21T.)
- 588. *Merelina paupereques* Powell, 1937. (D.2, D.3.)
- 589. *Merelina manawatawhia* Powell, 1937. (D.2T.)
- 590. *Merelina crispulatus* Powell, 1937. (D.2T.)
- 591. *Merelina cochleata* Powell, 1937. (D.2T.)
- 592. *Merelina crassissima* Powell, 1937. (D.3T.)
- 593. *Promerelina crosseaformis* Powell, 1926. (7, 26.)
- 594. *Promerelina coronata* Powell, 1926. (D.1, D.22.)
- 595. *Promerelina tricarinata* Powell, 1937. (D.3T.)
- 595.1. *Promerelina lacunosa* Powell, n.sp. (D.7T.)
- 596. *Avanua dilatata* Powell, 1927. (7, D.21T, D.22.)
- 598. *Coenaculum secundum* Powell, 1937. (D.2T.)
- 604.1. *Linamera pinguoides* Powell, n.sp. (D.6T.)
- 605.1. *Lironoba anomala* Powell, n.sp. (7T.)
- 606. *Nobolira bollonsi* Powell, 1930. (D.2, D.3.)
- 608. *Nobolira cochlearella* Powell, 1937. (D.2T, D.3, D.6.)
- 608.1. *Nobolira regis* Powell, n.sp. (D.31T.)
- 609. *Nobolira manawatawhia* Powell, 1937. (D.3T, D.6.)
- 609.1. *Nobolira contigua* Powell, n.sp. (D.6T.)
- 609.2. *Nobolira affinis* Powell, n.sp. (D.32T.)
- 610. *Manawatawhia analoga* Powell, 1937. (D.2T, D.3.)
- 615. *Notosetia infecta* (Suter, 1908). (7.)
- 619. *Notosetia micans* (Webster, 1905). (D.2.)
- 622. *Notosetia unicarinata* Powell, 1927. (7, D.2.)
- 631. *Notosetia subgradata* Powell, 1937. (D.2T.)
- 632. *Notosetia aoteana* Powell, 1937. (D.2T.)
- 633. *Notosetia porcellanoides* Powell, 1937. (D.2T.)
- 634. *Notosetia subtenuis* Powell, 1937. (D.2T.)
- 635. *Notosetia aupouria* Powell, 1937. (D.2T.)
- 635.1. *Notosetia subcarinata* Powell, n.sp. (D.6T.)
- 635.2. *Notosetia crassilabrum* Powell, n.sp. (7T.)
- 635.3. *Notosetia multilirata* Powell, n.sp. (D.6T.)
- 636. *Rissopsis expansa* Powell, 1930. (D.21T.)
- 637. *Scrobs hedleyi* (Suter, 1908). (7, 26.)
- 638. *Scrobs hedleyi angulata* Powell, 1927. (D.21T.)
- 639. *Scrobs ovatus* Powell, 1927. (D.2, D.21, D.22T.)
- 640. *Scrobs elongatus* Powell, 1927. (D.21, D.22T.)
- 642. *Scrobs semen* (Odhnner, 1924). (4T.)
- 643. *Scrobs crassiconus* Powell, 1933. (D.2, D.6.)
- 644. *Scrobs excelsus* Powell, 1933. (D.22T.)
- 645. *Notoscrobs ornatus* Powell, 1927. (D.21T.)
- 646. *Notoscrobs erosus* (Odhnner, 1924). (D.2, D.6, D.4T.)
- 647. *Epigrus striatus* Powell, 1927. (7, D.2, D.3, D.21T.)
- 652. *Dardanula limbata* (Hutton, 1883). (7.)
- 654. *Dardanula roseola* (Iredale, 1915). (7, D.2, D.21, D.22.)
- 656. *Dardanula roseospira* Powell, 1937. (D.3T.)
- 657. *Dardanula tenella* Powell, 1937. (D.3T.)
- 658. *Dardanula pallida* Powell, 1937. (D.2T.)
- 659. *Dardanula minutula* Powell, 1937. (D.2T.)
- 660. *Nilsia conica* (Odhnner, 1924). (D.2.)
- 662. *Scrupus hyalinus* (Odhnner, 1924). (D.2.)
- 667. *Larochella alta* Powell, 1927. (D.21T, D.22.)
- 668. *Skenella pfefferi* Suter, 1909. (29.)

669. "*Rissoa*" *cyliindrella* Odhner, 1924. (D.18T.)
671. *Rissoina anguina* Finlay, 1926. (7, 23T.)
672. *Rissoina achatina* Odhner, 1924. (D.2.)
675. *Rissoina fucosa* Finlay, 1930. (D.8.)
676. *Rissoina larochei* Finlay, 1930. (D.22T.)
678. *Rissoina zonata* Suter, 1909. (23.)
679. *Rissoina aupouria* Powell, 1937. (D.2T, D.3.)
680. *Rissoina achatinoides* Powell, 1937. (D.9T.)
681. *Rissoina manawatawhia* Powell, 1937. (D.3T.)
682. *Nozeba emarginata* (Hutton, 1885). D.29.)
- 699.1. *Naricava (Tropidorbis) neozelanica* Powell, n.sp. (7T, D.7.)
700. *Zeacumantus subcarinatus* (Sowerby, 1855). (7.)
701. *Zeacumantus lutulentus* (Kiener, 1842). (1.)
704. *Zebittium editum* Powell, 1930. (D.2.)
705. *Zebittium laevicordatum* Powell, 1937. (D.2T.)
714. *Mendax attenuatispira* Powell, 1937. (D.2T.)
- 714.1. *Mendax duplicarinata* Powell, n.sp. (D.31T.)
715. *Paramendax apicina* Powell, 1937. (D.2T.)
716. *Socienna maoria* Finlay, 1930. (D.20T.)
719. *Socienna elegantula* (Powell, 1930). (D.2.)
720. *Alipta orenistria* (Suter, 1907) (D.3.)
721. *Zaclys sarissa* (Murdoch, 1905). (D.3.)
724. *Zaclys paradoxa* Powell, 1937. (D.3T.)
725. *Joculator caelata* Powell, 1930. (D.3, D.21T, D.12.)
726. *Joculator dirempta* Odhner, 1924. (D.18T.)
727. *Sundaya tuberculata* Powell, 1927. (D.3.)
730. *Lyroscila chathamensis* (Suter, 1908). (3, 26.)
731. *Ataococerithium huttoni* (Cossmann, 1895). (3, 7, D.3.)
732. *Notosinister fascelina* (Suter, 1908). (D.2.)
735. *Notosinister aupouria* Powell, 1937. (D.2T.)
738. *Vermicularia siphon* (Lamarck, 1818). (9.)
739. *Vermicularia maoriana* Powell, 1937. (D.2T.)
740. *Novastoa?* (9.)
- 743.1. *Siliquaria maoria* Powell, n.sp. (D.33T.)
745. *Caecum digitulum* Hedley, 1904. (7.)
746. *Maoricolpus roseus* (Q. and G., 1834). (1.)
- 747.1. *Maoricolpus finlayi* Powell, n.sp. (D.34T.)
- 747.2. *Gazameda maoria* Powell, n.sp. (D.31T.)
748. *Zeacolpus vittatus* (Hutton, 1873). (9, D.3.)
750. *Zeacolpus fulminatus* (Hutton, 1873). (9.)
751. *Zeacolpus ahiparanus* Powell, 1927. (D.29T.)
- 753.1. *Opimilda maoria* Powell, n.sp. (D.33T.)
754. *Struthiolaria papulosa* (Martyn, 1784). (1, 9.)
755. *Struthiolaria (Pellicaria) vermis* (Martyn, 1786). (1, 9.)
757. *Xenophora neozelanica* Suter, 1908. (1.)
759. *Neojanacus perplexus* Suter, 1907. (D.12.)
760. *Hipponix inexpectata* Mestayer, 1929. (D.12.)
761. *Maoricrypta costata* (Sowerby, 1824). (1.)
- 761.1. *Maoricrypta youngi* Powell, n.sp. (1T.)
762. *Maoricrypta (Zeacrypta) monoxyla* (Lesson, 1830). (1.)
763. *Sigapatella novaezelandiae* Lesson, 1830. (1, 7, 11.)
764. *Sigapatella terraenovae* Peile, 1924. (D.8, D.17T.)
765. *Zegalerus tenuis* (Gray, 1867). (7.)
766. *Zegalerus tumens* Finlay, 1926. (3T.)
767. *Tanea zelandica* (Q. and G., 1832). (1, 7, D.29.)
768. *Notocochlis migratoria* (Powell, 1927). (1, 14T, 22.)
769. *Proziuber australis* (Hutton, 1878). (D.7.)
770. *Mammilla simiae* (Deshayes, 1838). (1.)
- 772.1. *Uderella* n.sp. aff. *vitrea* (Hutton, 1873). (D.2.)
777. *Globisinum wollastoni* Finlay, 1927. (1, D.29.)
779. *Larochea miranda* Finlay, 1927. (D.22T.)
780. *Larochea secunda* Powell, 1937. (D.2T.)
781. *Lamellaria ophione* Gray, 1850. (1, 7.)



784. *Trichosirius inornatus* (Hutton, 1873). (7.)  
 787. *Zelippistes benhami* (Suter, 1902). (1, 5T, 7, D.2, 15.)  
 788. *Ellatirivia memorata* Finlay, 1926. (1, 21T, D.3.)  
 789. *Pedicularia maoria* Powell, 1937. (D.2T.)  
 790. *Cabestana (Cymatilesta) spengleri* (Perry, 1811). (1, 11, 14, 17.)  
 791. *Cabestana (Cymatilesta) waterhousei segregata* Powell, 1933. (14.)  
 792. *Cabestana (Cymatilesta) bolteniana* (A. Adams, 1854). (11.)  
 793. *Particymatium strangei* (Angas, 1864). (7.)  
 794. *Monoplex parthenopeus* (von Salis, 1790). (1.)  
 795. *Monoplex (Cabestanimorpha) exaratus* (Reeve, 1844). (1.)  
 797. *Charonia capax euclioides* Finlay, 1926. (9.)  
 798. *Austrosassia parkinsoniana* (Perry, 1811). (1, 9, 26.)  
 799. *Argobuccinum tumidum* (Dunker, 1862). (1.)  
 800. *Mayena australasia* (Perry, 1811). (7, 9, 14.)  
 802. *Ranella multinodosa* (Bucknill, 1927). (D.27T, 8.)  
 803. *Xenophalium royanum* (Iredale, 1912). (D.26.)  
 804. *Xenophalium (Xenogalea) pyrum* (Lamarck, 1822). (1, D.29.)  
 809. *Xenophalium (Xenogalea) ericanum* Powell, 1928. (D.28T.)  
 812. *Tonna haurakiensis* Hedley, 1919. (9.)  
 813. *Tonna tetracotula* Hedley, 1919. (1.)  
 813.1. *Tonna maoria* Powell, 1938. (16T.)  
 814. *Janthina violacea* Bolten, 1798. (3.)  
 815. *Janthina exigua* Lamarck, 1822. (3.)  
 819. *Epitonium (Acutiscala) philippinarum* (Sowerby, 1844). (D.21, D.29.)  
 820. *Epitonium (Hyaloscala) jukesianum* (Forbes, 1852). (3, 7, D.29.)  
 821. *Epitonium (Hyaloscala) bucknilli* Powell, 1924. (D.29.)  
 822. *Cirsotrema zeledori* (Dunker, 1866). (3, 9, D.29.)  
 823. *Nodiscala ahiparana* Powell, 1930. (D.30T.)  
 824. *Nodiscala zelandica* Finlay, 1930. (D.10T.)  
 827. *Aclis maoria* Powell, 1937. (D.2T.)  
 827.1. *Aclis pseudopareora* Powell, n.sp. (D.21T.)  
 828. *Murdochella levifoliata* (Murdoch and Suter, 1906). (D.2, D.22)  
 830. *Murdochella superlata* Finlay, 1930. (D.10T.)  
 831. *Murdochella tertia* Finlay, 1930. (D.10T.)  
 832. *Architectonica reevei* (Hanley, 1862). (24.)  
 833. *Philippia lutea* (Lamarck, 1822). (1, 3.)  
 833.1. *Philippia manifesta* Iredale, 1931. (24.)  
 835. *Mangonia bollonsi* Mestayer, 1930. (D.11T.)  
 836.1. *Helicacis stramineus* (Gmelin, 1791). (1.)  
 837. *Zerotula hedleyi* (Mestayer, 1916). (D.2.)  
 840. *Zerotula triangulata* Powell, 1937. (D.2T.)  
 841. *Zerotula crenulata* Powell, 1937. (D.2T.)  
 841.1. *Zerotula nummaria* Powell, n.sp. (D.22T.)  
 841.2. *Zerotula ammonitoides* Powell, n.sp. (D.21T.)  
 841.3. *Zerotula ramosa* Powell, n.sp. (D.10T.)  
 842.9. *Odostomia sherriffi* (Hutton, 1883). (D.6.)  
 849. *Odostomia incidata* Suter, 1908. (D.29.)  
 851. *Odostomia murdochi* Suter, 1913. (30T.)  
 855. *Odostomia vestalis* Murdoch, 1905. (30.)  
 843.) *Agatha georgiana* (Hutton, 1885). (D.29.)  
 848.1) *Puposyrnola missile* Laws, 1937. (D.10.)  
 856. *Gumina dolichostoma* (Suter, 1908). (D.22.)  
 860. *Syrnola menda* Finlay, 1926. (D.2.)  
 862. *Syrnola crawfordi* Powell, 1927. (D.29T.)  
 866. *Terelimella larochei* (Powell, 1930). (D.9, D.21T, D.22.)  
 867. *Terelimella aupouria* (Powell, 1937). (D.3T.)  
 868. *Pyrgulina rugata* (Hutton, 1886). (D.22.)  
 869.1. *Ividella maoria* Powell, n.sp. (D.31T.)  
 876. *Chemnitzia finlayi* Powell, 1926. (7, D.22, D.23T.)  
 880. *Chemnitzia lawsi* Powell, 1937. (D.3T.)  
 880.10. *Chemnitzia stipes* Laws, 1937. (D.6T.)  
 880.23. *Striarcana cryptolira* Laws, 1937. (7.)  
 881. *Graphis blanda* (Finlay, 1924). (D.2.)

- 882.3. *Eulima mangonuica* Powell, n.sp. (D.21T.)  
 891. *Bu.cis bollonsi* Powell, 1937. (D.10T.)  
 892. *Balcis aupouria* Powell, 1937. (D.2T.)  
 892.1. *Balcis maoria* Powell, n.sp. (3T.)  
 892.2. *Balcis pervegrandis* Powell, n.sp. (D.29.)  
 894.1. *Chileutomia neozelanica* Powell, n.sp. (D.31T.)  
 895. *Teretianax pagoda* Powell, 1926. (7, D.2, D.21, D.22.)  
 898.1. *Venustilifer secunda* Powell, n.sp. (D.33T.)  
 902. *Taron dubius* Hutton, 1908. (1.)  
 902.1. *Taron mouatae* Powell, n.sp. (1.)  
 905. *Vicimitra maoria* (Finlay, 1926). (1.)  
 906. *Proximitra obscura* (Hutton, 1873). (1.)  
 907. *Proximitra mortenseni* Odhner, 1924. (18T.)  
 909. *Peculator coma* (Odhner, 1924). (D.18T, D.8, D.7, D.1.)  
 911. *Austromitra rubiradiæ* Finlay, 1926. (23T.)  
 912. *Austromitra antipodum* (Brookes, 1926). (21T.)  
 914. *Austromitra angulata* (Suter, 1908). (D.3.)  
 917. *Austromitra erecta* Powell, 1934. (26T.)  
 919. *Egestas dissimilis* Powell, 1937. (D.2T.)  
 920. *Fusus mestayeræ* Iredale, 1915. (1, 26.)  
 921. *Buccinulum lineum* (Martyn, 1784). (1.)  
 925. *Buccinulum (Evarnula) fuscozonatum* (Suter, 1908). (26.)  
 946. *Buccinulum (Euthrena) heteromorphum* Powell, 1929. (26.)  
 952. *Buccinulum (Euthrena) suteri* Powell, 1934. (D.25T.)  
 952.1. *Buccinulum (Euthrena) mariae* Powell, n.sp. (1T.)  
 961. *Austrosipho adustus* (Philippi, 1845). (1, 9.)  
 967. *Aeneator attenuatus* Powell, 1927. (D.29T.)  
 972. *Austrofusus glans* (Bolten, 1798). (1, 9, D.29.)  
 975. *Cominella maculosa* (Martyn, 1853). (1.)  
 976. *Cominella virgata* H. and A. Adams, 1853. (1, 11, 13.)  
 978. *Cominella (Acominia) adspersa melo* (Lesson, 1840). (1, 9.)  
 986.1. *Cominella (Cominula) youngi* Powell, n.sp. (1T.)  
 987. *Cominella (Cominista) glandiformis* (Reeve, 1847). (1.)  
 989. *Fax mirabilis* (Powell, 1929). (D.12T.)  
 991. *Nassarius aoteanus* Finlay, 1926. (D.17T.)  
 995. *Radulphus necopinatus* Finlay, 1930. (3T, 1.)  
 996. *Coluzea spiralis* (A. Adams, 1856). (9, D.29.)  
 997. *Pteronotus (Pterochelus) eos* (Hutton, 1873). (1, 26.)  
 999. *Murexsul octogonus* (Q. and G., 1833). (9.)  
 1001. *Murexsul mariae* Finlay, 1930. (1, 3T.)  
 1003. *Zeatrophon ambiguus* (Philippi, 1844). (1, 11, D.29.)  
 1013. *Xymenella pusilla* (Suter 1907). (D.29.)  
 1015. *Azymene corticata* (Hutton, 1873). (1.)  
 1023. *Paratrophon stangeri* (Gray, 1843). (1.)  
 1032. *Galfridus virginalis* (Suter, 1913). (5T.)  
 1033. *Neothais smithi* (Brazier, 1889). (7.)  
 1034. *Neothais (Dicathais) scalaris* (Menke, 1829). (1, 7, 9, 13.)  
 1035. *Lepsia haustum* (Martyn, 1784). (7, 13.)  
 1036. *Lepsiella scobina* (Q. and G., 1833). (1, 13.)  
 1037. *Lepsiella scobina albomarginata* (Deshayes, 1839). (7, 9.)  
 1041. *Agnewia tritoniformis* (Blainville, 1833). (1, 7.)  
 1044.1. *Zeadmete finlayi* Powell, n.sp. (D.35T.)  
 1044.2. *Zeadmete aupouria* Powell, n.sp. (D.33T.)  
 1045. *Anapepta septentrionalis* Finlay, 1930. (D.10T.)  
 1056. *Zemitrella sericea* Powell, 1937. (D.2T.)  
 1057. *Zemitrella annectens* Powell, 1937. (D.2T, D.3.)  
 1058. *Zemitrella turgida* Powell, 1937. (D.2T.)  
 1059. *Zemitrella curvirostris* Powell, 1937. (D.2T.)  
 1059.1. *Zemitrella fallax* Powell, n.sp. (7T.)  
 1059.2. *Zemitrella attenuata* Powell, n.sp. (25T.)  
 1059.3. *Zemitrella regis* Powell, n.sp. (D.33T.)  
 1059.4. *Zemitrella laevirostris* Powell n.sp. (7T.)  
 1060. *Antimitrella laxa* Powell, 1937. (D.2T.)  
 1061. *Paxula paxillus* (Murdoch, 1905). (3.)

1067. *Liratilia conquisita* (Suter, 1908). (D.2T, D.3.)  
 1068. *Liratilia angulata* (Suter, 1908). (D.2, D.3.)  
 1070. *Liratilia compta* Powell, 1930. (7, 26T.)  
 1071. *Liratilia subnodosa* Powell, 1934. (7, 26T.)  
 1072. *Liratilia sinuata* Powell, 1937. (D.2T.)  
 1073. *Liratilia elegantula* Powell, 1937. (D.3T.)  
 1073.1. *Liratilia gracilis* Powell, n.sp. (D.19T.)  
 1076. *Macrozafra nodicincta* (Suter, 1899). (3, D.2.)  
 1076.1. *Macrozafra mariae* Powell, n.sp. (3T.)  
 1076.2. *Macrozafra enwrighti* Powell, n.sp. (D.35T.)  
 1077.1. *Aoteatilia larochei* Powell, n.sp. (D.22T.)  
 1082. *Alcithoe depressa* (Suter, 1908). (1, 9, 20T, 11, 22, D.29.)  
 1088. *Alcithoe (Leporemax) fusus* (Q. and G., 1833) = (*gracilis* Swainson, 1821). (1, 9.)  
 1091. *Microvoluta biconica* (Murdoch and Suter, 1906). (D.2, D.29.)  
 1093. *Baryspira australis* (Sowerby, 1830). (1, D.29.)  
 1094. *Baryspira mucronata* (Sowerby, 1830). (D.16, D.29.)  
 1095. *Baryspira (Alocospira) novaezelandiae* (Sowerby, 1859). (1, D.2, D.8, D.29.)  
 1096. *Baryspira (Pinguispira) depressa* (Sowerby, 1859). (1.)  
 1098. *Marginella (Glabella) pygmaea* Sowerby, 1846. (1, 7, 3, 26.)  
 1099. *Marginella (Glabella) vailei* Powell, 1932. (1T, 7.)  
 1101. *Marginella (Glabella) larochei* Powell, 1932. (D.22T, D.29.)  
 1102. *Marginella (Glabella) aupouria* Powell, 1937. (D.2T.)  
 1103. *Marginella (Glabella) manawatawhia* Powell, 1937. (D.2T.)  
 1104. *Marginella (Glabella) pygmaeaformis* Powell, 1937. (D.3T.)  
 1105. *Marginella (Volvarina) mustelina* (Angas, 1871). (3, 26.)  
 1106. *Marginella (Volvarina) maoriana* Powell, 1932. (3.)  
 1110. *Marginella (Serrata) cairoma* Brookes, 1924. (28T.)  
 1111. *Marginella (Serrata) aoteana* Powell, 1932. (D.21, D.22T.)  
 1118. *Marginella (Serrata) subamoena* Powell, 1937. (D.2T.)  
 1119. *Marginella angasi* Crosse, 1870. (D.2, D.3.)  
 1120. *Gibberula ficula* (Murdoch and Suter, 1906). (7, D.2, D.22.)  
 1122. *Closia maoria* Powell, 1937. (D.2T.)  
 1123. *Austrodrillia rawitensis* Hedley, 1922. (21.)  
 1125.1. *Splendrillia larochei* Powell, n.sp. (D.33T, D.22.)  
 1128. *Scorinium sandersonae* Bucknill, 1927. (26.)  
 1129. *Fenestrosyrinx nexilis bicarinatus* (Suter, 1915). (D.22.)  
 1126. *Micantapex angustatus* Powell, n.sp. (D.36.)  
 1131. *Nepotilla finlayi* Powell, 1937. (D.2T.)  
 1131.1. *Nepotilla nitidula* Powell, n.sp. (7T, D.29.)  
 1131.2. *Nepotilla vera* Powell, n.sp. (7T.)  
 1134. *Phenatoma rosea* (Q. and G., 1833). (1, D.29.)  
 1136. *Phenatoma (Cryptomella) albula* (Hutton, 1873). (D.29.)  
 1138. *Inquisitor buchanani maorum* (Smith, 1877). (D.29.)  
 1139. *Veprecula cooperi* Mestayer, 1919. (D.2.)  
 1142. *Stilla paucicostata* Powell, 1937. (D.2T.)  
 1144. *Mitriothara granulifera* Powell, 1937. (D.2T.)  
 1145. *Mitriothara regis* Powell, 1937. (D.2T.)  
 1146.1. *Neoguraleus* n.sp. (26, 22.)  
 1147. *Neoguraleus goodingi* (Smith, 1884). (26.)  
 1148. *Neoguraleus tyallensis* (Murdoch, 1905). (1.)  
 1149. *Neoguraleus tenebrosus* Powell, 1926. (3, 26T.)  
 1150. *Neoguraleus huttoni* (Smith, 1915). (1, D.17T.)  
 1150.1. *Neoguraleus murdochi* (Finlay, 1924). (22.)  
 1171. *Neoguraleus amoenus* (Smith, 1884). (21, D.29.)  
 1155. *Liracraea epentroma whangaroensis* (Murdoch, 1905). (23T.)  
 1160. *Utileya ahiparana* (Powell, 1927). (D.29T.)  
 1161.1. *Maorimorpha suteri* (Murdoch, 1905). (23T.)  
 1178. *Pervicacia flexicostata* (Suter, 1909). (1, 5T.)  
 1178.1. *Pervicacia mariae* Powell, n.sp. (3T.)  
 1180. *Cavolina gibbosa* Rang, 1836. (SN.1.)  
 1181. *Cavolina inflexa* (Lesueur, 1813). (D.3, SN.2.)  
 1182. *Cavolina strangulata* Hedley, 1907. (19, SN.1, D.7.)

1185. *Diacria trispinosa* (Lesueur, 1821). (D.1, D.7, D.3, SN.2.)  
 1186. *Oleodora compressa* Souleyet, 1852. (SN.2.)  
 1187. *Oleodora pyramidata* (Linn., 1767). (SN.2, D.2.)  
 1189. *Vaginella urocoilaris* Moersch, 1850. (SN.2.)  
 1191. *Styliola subula* (Quoy and Gaimard, 1827). (SN.2, D.12.)  
 1192. *Creseis virgula* Rang, 1828 (SN.2.)  
 1194. *Embolus inflatus* (d'Orbigny, 1836). (D.2, D.10, D.6, SN.2.)  
 1195. *Spiratella australis* (Eyd. and Soul., 1840). (D.2.)  
 1196. *Spiratella bulimoides* (d'Orbigny, 1835-37). (SN.2.)  
 1199. *Acteon craterioulatus* Hedley, 1906. (D.29.)  
 1200. *Pupa alba* (Hutton, 1873). (D.29.)  
 1208. *Retusa cookiana* (Suter, 1909). (D.2.)  
 1209. *Retusa murdochi* (Suter, 1913). (D.6.)  
 1210. *Retusa oruaensis* (Webster, 1908). (D.19.)  
 1213. *Retusa aupouria* Powell, 1937. (D.2T.)  
 1214. *Rhizorus nesentus* Finlay, 1926. (D.29.)  
 1217. *Cylichnella thetidis* (Hedley, 1903). (D.2, D.29.)  
 1217.1. *Cylichnella zealandica* (Kirk, 1880). (3.)  
 1218. *Bullaria (Quibulla) quoyi* (Gray, 1843). (3.)  
 1220. *Hydatina physys* (Linn., 1758). (24.)  
 1222. *Philine auriformis* Suter, 1909. (D.29.)  
 1223. *Philine umbilicata* Murdoch and Suter, 1906. (D.12.)  
 1227. *Tethys brunnea* (Hutton, 1875). (16.)  
 1229. *Tethys tryoni* (Meinertzhagen, 1880). (21.)  
 1231. *Umbraclum botanicum* Hedley, 1923. (14.)  
 1249. *Rostanga rubicunda* (Cheeseman, 1881). (D.16.)  
 1251. *Alloiodoris lamuginata* (Abraham, 1877). (7, 18.)  
 1256. *Ceratosoma amoena* (Cheeseman, 1881). (18, D.15.)  
 1257. *Lissodoris mollis* Odhner, 1934. (D.14T.)  
 1258. *Aphelodoris luctuosa* (Cheeseman, 1882). (D.13.)  
 1278. *Ophicardelus costellaris* (H. and A. Adams, 1855). (14.)  
 1279. *Marinula filholi* Hutton, 1878. (1.)  
 1282. *Leuconopsis obsoleta* (Hutton, 1878). (22.)  
 1286. *Siphonaria zelandica* Q. and G., 1833. (1, 7.)  
 1287. *Siphonaria cookiana* Suter, 1909. (7.)  
 1292. *Gadinia nivea* Hutton, 1878. (1, 7.)

## AMPHINEURA.

1565. *Ischnochiton maorianus* Iredale, 1914. (13.)  
 1574. *Parachiton textilis* Powell, 1937. (D.3.)  
 1580. *Paricoplas crocina* (Reeve, 1847). (26.)  
 1583. *Eudoxochiton nobilis* (Gray, 1843). (13.)  
 1598. *Notoplas aupouria* Powell, 1937. (D.3T.)  
 1599. *Notoplas websteri* Powell, 1937. (D.3T.)  
 1607. *Guildingia oblecta* (Pilsbry, 1893). (7.)  
 1613. *Rhyssoplas aerea* (Reeve, 1847). (26.)  
 1617. *Amaurochiton glaucus* (Gray, 1828). (7, 13.)  
 1618. *Sypharochiton pelliserpentis* (Q. and G., 1835). (7, 13.)  
 1619. *Sypharochiton sinclairi* (Gray, 1843). (13.)  
 1621. *Onithochiton neglectus* Rochebrune, 1881. (13.)

## SCAPHOPODA.

1625. *Dentalium nanum* Hutton, 1873. (D.29, D.30.)

## CEPHALOPODA.

1635. *Spirula spirula* Linn., 1758. (D.38.)  
 1641. *Pyroteuthis (Pterygioteuthis) giardi* Fischer, 1896. (D.37.)  
 1643. *Moroteuthis (Moroteuthopsis) ingens* (E. A. Smith, 1881). (SN.2.)  
 1646. *Pyrgopsis pacificus* (Issel, 1908). (SN.2.)  
 1647. *Teuthowenia antarctica* Chun, 1910. (D.37.)  
 1655. *Polypus australis* (Hoyle, 1885). (D.17.)  
 1659. *Argonauta nodosa* Solander, 1786. (31.)  
 1661. *Argonauta bottgeri* Maltzan, 1881. (SN.2.)  
 1662. *Tremoctopus violaceus* delle Chiaje, 1830. (SN.2.)

LIST OF LOCALITIES.

AUPOURIAN SHORE STATIONS.

1. Cape Maria van Dieman (beach-drift, Mr. F. Young).
2. Cape Maria van Dieman (beach-drift, Rev. W. H. Webster collection).
3. Cape Maria van Dieman (beach-drift, Dr. H. J. Finlay collection).
4. Cape Maria van Dieman (Nils H. Odhner, 1924).
5. Cape Maria van Dieman (H. Suter, 1913).
6. Sandy beach between Cape Maria van Dieman and Te Reinga (A.W.B.P., 1932).
7. Tom Bowling Bay (shell-sand, A.W.B.P., 1932).
8. Pandora, Spirits Bay (beach-drift, A.W.B.P., 1932).
9. Waikuku Beach near North Cape (A.W.B.P., 1932).
10. Taputaputa (brackish stream, A.W.B.P., 1932).
11. Kapo Wairua, Spirits Bay (A.W.B.P., 1932).
12. Tom Bowling Bay (intertidal rocks, A.W.B.P., 1932).
13. Te Reinga (intertidal rocks, A.W.B.P., 1932).
14. Te Hapua, Parengarenga Harbour (W. La Roche and A.W.B.P., 1932).
15. Mt. Camel, Houhora (Mr. F. Wagener).
16. Houhora Heads (Mr. F. Wagener).
17. Houhora Harbour (rocks near wharf, A.W.B.P.).
18. North Cape (under stones, Nils H. Odhner, 1924).
19. North Cape (Dr. H. J. Finlay collection).
20. Spirits Bay (Captain J. Bollons).
21. Cooper's Beach, Mangonui.
22. Awanui Heads.
23. Whangaroa Harour (Dr. H. J. Finlay collection).
24. Takou Bay near Whangaroa (C. H. Robinson).
25. Three Kings Islands (in stomachs of fish, Captain J. Bollons).
26. Taupo Bay, Whangaroa (W. La Roche and A.W.B.P.).
27. Reef Point, Ahipara.
28. Near Taipa, Doubtless Bay (A. E. Brookes).
29. Takapau Kura, Tom Bowling Bay (on seaweeds, A.W.B.P., 1932).
30. Whangaroa Harbour (Suter's Manual, 1913).
31. Rangiputa, North Auckland (C. Leith).

AUPOURIAN DREDGE STATIONS.

- D.1. Off Three Kings Islands in 185 metres (R.R.S. Discovery II Station 932).
- D.2. Off Three Kings Islands in 260 metres (R.R.S. Discovery II Station 933).
- D.3. Off Three Kings Islands in 92 metres (R.R.S. Discovery II Station 934).
- D.4. Off Three Kings Islands in 65 fathoms (Nils H. Odhner, 1924).
- D.5. Off Big King, Three Kings Islands, in 98 fathoms (Captain J. Bollons).
- D.6. Off Big King, Three Kings Islands, in 100 fathoms (Dr. H. J. Finlay collection).
- D.7. Between Spirits Bay and Three Kings Island in 95 metres (R.R.S. Discovery II Station 931).
- D.8. Off Spirits Bay in 59 metres (R.R.S. Discovery II Station 929).
- D.9. Off Waikuku Beach, near North Cape, in 29 metres (R.R.S. Discovery II Station 930).
- D.10. Off North Cape in 75 fathoms (Dr. H. J. Finlay and A.W.B.P. collections).
- D.11. North Cape,  $6\frac{1}{2}$  m. E. :  $5^{\circ}$  N., in 75 fathoms (Miss M. K. Mestayer, 1919).
- D.12. Off Three Kings Islands,  $15'$  S. of Big King, in 98 fathoms (Miss M. K. Mestayer, 1919).
- D.13. Off Big King, Three Kings Islands, in 549 metres (Nils H. Odhner, 1924).
- D.14. Spirits Bay in 20 metres (Nils H. Odhner, 1924).
- D.15. Spirits Bay in 20-37 metres (Nils H. Odhner, 1924).
- D.16. 2 m. East of North Cape in 55 fathoms. (Nils H. Odhner, 1924).
- D.17. Near North Cape in 11-20 fathoms (E. A. Smith).
- D.18. Cape Maria van Dieman, 10 m. N.W., in 50 fath. (Nils H. Odhner, 1924).
- D.19. Doubtless Bay in 12 fathoms (Dr. H. J. Finlay collection).
- D.20. Doubtless Bay in 6 fathoms (Dr. H. J. Finlay collection).
- D.21. Off Mangonui in 6 fathoms, Doubtless Bay (Mr. W. La Roche).
- D.22. Off Awanui in 12 fathoms, Doubtless Bay (Mr. W. La Roche).
- D.23. Awanui Heads in 5 fathoms (Mr. W. La Roche).

- D.24. Off Otehe Point, near entrance Parengarenga Harbour, in 7 fathoms (A.W.B.P., 1932).  
 D.25. Whangaroa Harbour in 10 fathoms (W. La Roche).  
 D.26. Cavalli Islands in 20 fathoms (Mrs. F. W. Sanderson).  
 D.27. Cavalli Islands in 25 fathoms (Mrs. F. W. Sanderson).  
 D.28. 25 fathoms off Berghan's Head, Mangonui (Mrs. F. W. Sanderson).  
 D.29. 23 fathoms off Ahipara (A.W.B.P., 1927).  
 D.30. Off Ahipara in 70 fathoms (Miss M. K. Mestayer).  
 D.31. Between Spirits Bay and Three Kings Islands in 50 fathoms (Captain J. Bollons).  
 D.32. Off Waikuku Beach, near North Cape, in 15 fathoms.  
 D.33. Off Three Kings Islands in 140 fathoms.  
 D.34. Off Spirits Bay in 32 fathoms.  
 D.35. Off North Cape in 60 fathoms.  
 D.36. Off Waikuku Beach, near North Cape, in 26 fathoms ("Will Watch" Expd., Feb., 1934).  
 D.37. Off Three Kings Islands (various depths, "Terra Nova" Expd.).  
 D.38. Ninety Mile Beach (A.W.B.P., 1932).

#### AUPOURIAN SURFACE NETTING STATIONS.

- SN.1. Off North Coast of New Zealand, "Terra Nova" Expd.  
 SN.2. Off Three Kings Islands, "Terra Nova" Expd.

### PELECYPODA.

#### ERYCINIDAE.

Genus: *MYSELLA* Angas, 1877.

Type: *Mysella anomala* Angas.

***Mysella larochei* n.sp.** Text-fig. 1a.

Shell of moderate size, thin, compressed, elongate-oval. Surface with numerous concentric growth striae. Umbones small, smooth, rounded, situated at posterior two-fifths. Anterior and posterior ends broadly rounded. Hinge typical; right valve with an anterior oblique triangular socket, a massive divergent elongate triangular cardinal, followed by a triangular chondrophore and finally an irregular oblique posterior cardinal. The left valve has two widely divergent cardinals, one on each side of the chondrophore, the anterior one being the stronger. Colour dull white.

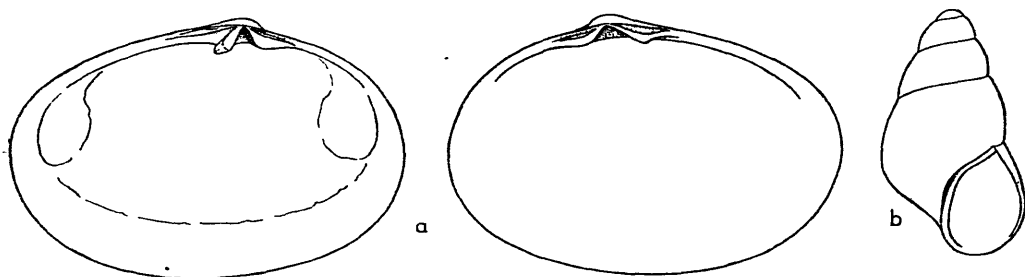
Height, 5.2 mm.; length, 7.6 mm.; thickness (one valve), 1.2 mm.

Holotype in writer's collection, Auckland Museum.

Localities: Taupo Bay, Whangaroa (W. La Roche) (holotype); Tom Bowling Bay (in shell-sand).

In outline the species is close to the Castlecliffian (Upper Pliocene) *Virmysella hounselli* Powell (*Rec. Auck. Inst. Mus.*, 1931, vol. 1, pt. 3, p. 111), but differs in being more regularly elongate-oval with the umbones nearer the middle. The escutcheon also is very much shorter and the hinge teeth differ in detail. The Recent *Montacuta tellinula* Odhner, 1924 (*Pap. Dr. Mort. Pac. Expd.*, N.Z. Mollusca, p. 77) is allied, also, but differs in being much more rotund and again in hinge modifications.

The reference of these shells to *Virmysella* should be dropped in favour of *Mysella*, to which they bear closer relationship. The genotype of the New South Wales *Virmysella* is a much larger, more massive and compressed style of shell.



TEXT-FIG. 1.—a *Mysella larochei* n.sp. Holotype 5.2 × 7.6 mm.  
b *Zelazitas alta* n.sp. Holotype 2 × 1.2 mm.

## GASTEROPODA.

### LIOTIIDAE.

Genus *MUNDITIA* Finlay, 1926.

Type: *Liotina tryphenensis* Powell.

***Munditia delicatula* n.sp.** Pl. 28, figs. 1 and 2.

Shell minute, white, glossy, discoidal, widely umbilicate. Whorls  $2\frac{3}{4}$ , very rapidly increasing, including a low rounded smooth protoconch of  $1\frac{1}{2}$  whorls. Post-nuclear sculpture of prominent regularly-spaced axials, 15 on the last whorl. The body-whorl has in addition a very weak spiral thread at the angle of the shoulder and a stronger one towards the middle of the base. The lower spiral renders the axials somewhat thickened and sharply angled at the points of intersection. Umbilicus wide, perspective, slightly greater than one-fourth the major diameter of the base. Aperture circular, peristome with a thin raised inner margin, surrounded by a flange-like varix. Spire flat, suture impressed.

Height, 0.5 mm.; diameter, 1.05 mm. (holotype).

Holotype presented to Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

The species is allied to both *owengaensis* Powell, 1933, and *manawatawhia* Powell, 1937, but differs in being more depressed and in having only two spirals on the body-whorl.

***Munditia anomala* n.sp.** Pl. 28, figs. 16 and 17.

Shell minute, discoidal, solid, white, bicarinate, closely radially striate. Whorls 3, including a small flattened protoconch of one whorl. Spire broadly rounded, very little raised. Peripheral carina projecting further than basal one, space between straight, oblique to axis. Umbilicus about one-fifth major diameter, deep, bounded by a ridge which is crenulated by the axial striae. Aperture circular, peristome with a smooth inner margin and bounded by a moderately heavy striated labial varix. The species resembles the genotype *tryphenensis* in shape and position of the keels, but there is a total absence of axial varices. Superficially it resembles a *Lodderina*.

Height, 0.45 mm.; diameter, 1 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Tom Bowling Bay, Northern New Zealand (in shell-sand).

Genus *LODDERIA* Tate, 1899.

Type: *Liotia lodderae* Petterd.

***Lodderia iota*** n.sp. Pl. 28, fig. 6.

Shell minute, subglobular, narrowly umbilicate, biangulate, radially and spirally ribbed. Whorls  $2\frac{1}{2}$ , including a dome-shaped smooth protoconch of  $1\frac{1}{2}$  whorls. Spire half height of aperture. Post-nuclear whorls sculptured with radial threads, about 40 on the body whorl and extending from suture to umbilicus. The convex whorls are rendered slightly angulate by a spiral thread above the middle defining a broad flattened shoulder, and a second one at the periphery. Aperture circular, peristome thickened. Umbilicus small, deep, crescentic. Colour pale buff.

Height, 0.55 mm.; diameter, 0.65 mm. (holotype).

Holotype in Auckland Museum.

Locality: Off Awanui in 12 fathoms, Doubtless Bay (W. La Roche).

***Lodderia waitemata*** n.sp. Pl. 28, fig. 7.

Shell minute, closely related to the above species, but more strongly biangulate, and with fewer axial threads. Whorls  $2\frac{1}{2}$ , including characteristic smooth dome-shaped protoconch of one whorl. Body-whorl sculptured with 20 fairly stout radial threads, extending from suture to umbilicus. In addition to the shoulder and peripheral carinae the narrow umbilical chink is bordered by a faint angle coinciding with a slight thickening of the radials. Operculum thin, horny, with a central nucleus. Colour pale buff. Spire slightly more than half height of aperture. Aperture circular, peristome slightly thickened with angulations caused by terminal points of spiral keels.

Height, 0.49 mm.; diameter, 0.51 mm. (holotype).

Holotype in Auckland Museum.

Locality: Takapuna, Auckland (seaweed washings, C. A. Fleming).

In spite of their minute size, this and the foregoing species seem to conform fairly well to the genus *Lodderia*.

Genus *CIRSONELLA* Angas, 1877.

Type: *Cirsonella australis* Angas.

***Cirsonella variecostata*** n.sp. Pl. 28, figs. 9 and 10.

Shell minute, depressed, dull white, umbilicate. Whorls 3, very rapidly increasing, including a low rounded smooth protoconch of  $1\frac{1}{2}$  whorls. Post-nuclear sculpture of closely spaced rounded axials, 27 on the body-whorl, the last four being much stronger than the rest. There is a faint shoulder subangle and a more prominent one towards the middle of the base at which the intersecting axials are thickened and sharply angulate. The axials become crowded and are linear spaced within the umbilicus, but are from two to three times



their own width apart at the periphery. Umbilicus one-fifth the major diameter. Spire about half height of aperture. Outline of body-whorl convex, but weakly biangulate. Suture narrowly canaliculate. Aperture circular, peristome thickened with an inner slightly raised rim.

Height, 0.6 mm.; diameter, 0.9 mm. (holotype).

Holotype presented to Auckland Museum.

Locality: Off Three Kings Islands in 140 fathoms.

Axial sculpture is unusual in this genus, but nevertheless the above species seems to be congeneric with the smooth typical species. *C. paradoxa* Powell, 1937, however, has strong radial sculpture on the base.

Genus *LISSOTESTA* Iredale, 1915.

Type: *Cyclostrema micra* Ten. Woods.

*Lissotesta consobrina* n.sp. Pl. 28, fig. 11.

Shell minute, turbinate, white, sculptured with strong narrow spiral ridges. Whorls  $3\frac{1}{2}$ , including a globular smooth protoconch of  $1\frac{1}{2}$  whorls. Spire slightly taller than height of aperture. Spire-whorls sculptured with three spiral ridges, the uppermost defining a broad flat subsutural shoulder; four considerably weaker and more closely spaced spirals extending from the periphery over the upper third of the base; remainder smooth except for two spiral threads bordering the crescentic umbilical depression which has a minute chink above. Aperture subcircular.

The species is nearest allied to *L. caelata* Powell (1937, "Discovery" Reports, vol. 15, p. 187, pl. 51, fig. 12) from 260 metres off Three Kings Islands.

Height, 0.85 mm.; diameter, 0.7 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: 100 fathoms off the Big King, Three Kings Islands.

*Lissotesta decipiens* n.sp. Pl. 28, fig. 3.

Shell minute, almost identical with *errata* Finlay, 1926, in shape, size, aperture and umbilicus; differing notably, however, in sculpture, there being a complete absence of spiral sculpture, even around the umbilicus. The whole shell is smooth except for a faint ridge bordering the umbilical area which also marks the termination of numerous radial threads occupying the lower half of the base.

Height, 1.4 mm.; diameter, 1.4 mm. (holotype).

Holotype in Auckland Museum (Dr. H. J. Finlay collection).

Locality: 75 fathoms off North Cape, New Zealand.

*Lissotesta oblata* n.sp. Pl. 28, fig. 13.

Shell minute, smooth, thin, white, subglobose, high-shouldered, spire depressed. Spire one quarter height of aperture, whorls  $3\frac{1}{2}$ , including a tiny smooth flattened protoconch of one whorl. Suture impressed. Umbilicus very narrow but deep and bordered by a crescentic sharp spiral thread. The only sculpture is in the form of fairly close regular growth lines showing faintly over the lower half of the base. Aperture subcircular, peristome thin, discontinuous.

Height, 0.63 mm.; diameter, 0.9 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: 100 fathoms off Big King, Three Kings Islands, N.Z.

**Lissotesta bicarinata** n.sp. Pl. 28, fig. 12.

Shell minute, thin, transparent, trochoid, with a distinct peripheral carina and a second on the lower part of the base. Spire about two-thirds height of aperture. Whorls  $3\frac{1}{2}$ , including a tiny smooth convex protoconch of one whorl. The surface is smooth except for regular axial growth threads, faint over the spire and upper part of base, but suddenly becoming stronger near the basal carina, which they cross, continuing into the umbilical area. Actual umbilicus a narrow chink. The basal carina is closely and regularly incised by the axial growth lines so that it resembles the lateral line of a carangid fish. Aperture circular, peristome continuous, slightly thickened.

Height, 0.6 mm.; diameter, 0.75 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

Genus **BROOKULA** Iredale, 1912.

Type: *Brookula stibarochila* Iredale.

**Brookula lincta** n.sp. Pl. 29, fig. 9.

Shell minute, thin, turbinate, umbilicate, sculptured with numerous weak subobsolete axial threads and faint spiral striae. Whorls  $3\frac{1}{2}$ , convex, periphery regularly rounded, including a small smooth globose protoconch of one whorl. The axial threads number about 40 on the body-whorl and are strongest over the latter half of the whorls near the suture and towards the umbilicus. All post nuclear whorls are sculptured with close-spaced faint spiral striae. Spire same height as aperture. Umbilicus open, one-ninth diameter of the base. Peristome circular, continuous. Colour white.

Diameter, 0.95 mm.; height, 0.9 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: 100 fathoms off Big King, Three Kings Islands.

The species is close to *B. prognata* Finlay, 1926, from the same locality, but that species has much stronger and more regular sculpture, both axial and spiral.

**Brookula contigua** n.sp. Pl. 29, fig. 8.

Shell minute, thin but not fragile, depressed-turbinate, umbilicate, sculptured with heavy axial varices and distinct close spiral lirae. Whorls 3, including a globular smooth protoconch of one whorl. On the base the axials become almost coalescent at the inner third of the base bordering the umbilical area, the deep perforation being about one-tenth the diameter of the base. There are 19 axials on the body-whorl. Spire a little more than half height of aperture. Peristome circular, continuous.

Diameter, 1 mm.; height, 0.8 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: 100 fathoms off Big King, Three Kings Islands.

This is the Recent descendant of the Upper Pliocene *funiculata* Finlay, 1924; it differs in being more depressed and in having narrower, sharper, more distant axials and stronger spiral lirae.

Genus CONJECTURA Finlay, 1926.

Type: *Crossea glabella* Murdoch.

**Conjectura carinata** n.sp. Pl. 28, fig. 8.

Shell minute, elevated turbinate, solid, white and glossy, having a high shoulder angulation, sharply raised spiral cords, a flattened apex, and a narrow crescentic umbilical chink. Whorls  $3\frac{1}{2}$ , including a tiny planorbid protoconch of  $1\frac{1}{2}$  smooth whorls. Spire whorls with two strong sharp spiral cords, another at the periphery of the body whorl and two on the base; the suture is bordered by a weak spiral thread, and towards the outer lip there is a similar thread in each intercostal space; also there are three closely spaced moderately strong ridges bordering and parallel to the umbilical chink. Spire about  $\frac{3}{4}$  height of aperture. Aperture circular; continuous, outer lip thin, dentated by the termination of the spiral cords; inner lip arcuate, as a narrow smooth raised callus. The species is related to *atypica* Powell, 1937 ("Discovery" Reports, vol. 15, p. 187, pl. 51, figs. 10, 11) from 260 metres off the Three Kings Islands.

Height, 1.1 mm.; diameter, 1.1 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

#### ORBITESTELLIDAE.

Genus ORBITESTELLA Iredale, 1917.

Type: *Cyclostrema bastowi* Gatliff.

**Orbitestella vera** n.sp. Pl. 28, figs. 4 and 5.

Shell minute, discoidal, thin, transparent, white, widely umbilicate. Whorls  $3\frac{1}{2}$ , including a minute smooth protoconch of one whorl. Whorls biangulated by a sutural and a basal smooth spiral keel. Spire almost flat, but with a broad straight slightly downward-sloping shoulder; straight and vertical between keels; base lightly convex. Umbilicus one-third diameter of base. Sculpture of numerous inconspicuous radial growth lines only. Aperture sub-quadrate. Peristome thin, discontinuous.

Height, 0.35 mm.; diameter, 0.8 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

#### TORNIDAE.

Genus NARICAVA Hedley, 1913.

Subgenus TROPIDORBIS Iredale, 1936.

Type: *T. mendicus* Iredale.

**Naricava (Tropidorbis) neozelanica** n.sp. Pl. 29, figs. 10 and 11.

Shell small, thin, semi-transparent, white, depressed, auriform, carinated. Whorls  $2\frac{1}{2}$ , very rapidly increasing, including a low convex smooth protoconch of one whorl. Spire about one-third height

of aperture. Upper surface broadly rounded, periphery bluntly keeled, base concave. Umbilicus widely open, perspective. Aperture wide, almost half the area of the base. Outer lip thin; inner lip continuous, bridging parietal wall. The only sculpture is in the form of close, regular, weak radial growth striae strongest within the basal concavity.

Height, 1.1 mm.; diameter, 2.3 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Localities: Tom Bowling Bay in shell-sand (holotype); Station 931, "Discovery II" Expd., 95 metres, between Spirits Bay and Three Kings Islands (1 damaged shell).

This adds a genus to the New Zealand fauna, the nearest related species being *N. kimberi* Verco, 1907, from Gulf St. Vincent, South Australia.

#### LITTORINIDAE.

Genus *ZELAXITAS* Finlay, 1926.

Type: *Laevilitorina cystophora* Finlay.

*Zelaxitas alta* n.sp. Text-fig. 1b.

Shell small, thin but moderately solid, shaped like a small *Potamopyrgus*, with tall spire, one and a third times height of aperture. Whorls  $4\frac{1}{2}$ , lightly convex on spire whorls, more so on base, resulting in a slight peripheral angulation. Sutures distinct, lightly impressed. Aperture ovate. Outer lip thin and sharp. Parietal wall callused. Columellar lip thin, free and encroaching upon a small crescentic umbilical chink. Colour dark red-brown, somewhat darker around the peristome. Operculum typical, ovate, concentric, with a median nucleus near to the inner margin.

Height, 2 mm.; diameter, 1.2 mm.

Holotype in Auckland Museum.

Locality: Takapau Kura, Tom Bowling Bay (seaweed washings).

The species is taller and narrower than *iredalei* (Brookes, 1926), darker in colour and with a smaller umbilical chink. *Rissoaformis* Powell, 1939, is similarly proportioned, but almost colourless, has more globose whorls and no peripheral angulation.

#### RISSOIDAE.

Genus *AUSTRONOA* Powell, 1927.

Type: *Rissoa candidissima* Webster.

*Austronoba obliquata* n.sp. Pl. 30, fig. 1.

Shell minute, white, related to the genotype but with more numerous spiral threads and wider-spaced obliquely-sinuuous axials. Whorls  $4\frac{1}{2}$ , including typical smooth dome-shaped protoconch of two whorls. Spire whorls with 12 spirals, body whorl and base with 15, plus three stronger ones parallel to the inner lip. Seven axials on the body whorl. Aperture oblique-oval, typical.

Height, 1.4 mm.; diameter, 0.6 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

## Genus SUBONOA Iredale, 1915.

Type: *Rissoa fumata* Suter.**Subonoba aupouria** n.sp. Pl. 30, fig. 8.

Shell small, ovate, thin, white, semi-transparent. Whorls 4, including a smooth dome-shaped protoconch of  $1\frac{1}{2}$  whorls. Spire same height as aperture. Outlines convex, slightly appressed towards suture. Post-nuclear whorls sculptured with broad, low, rounded spiral cords with interspaces varying from linear-spaced upon the penultimate to half the width of the cords on the body-whorl. Five cords on penultimate, twelve on body-whorl and base. Aperture oblique, D-shaped, tilted forwards basally. Outer and basal sections of lip thickened by a heavy striated varix. Inner lip as a well-defined smooth callus. The outer lip has a weak sinuous depression above.

Height, 1.25 mm.; diameter, 0.75 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

## Genus LINEMERA Finlay, 1924.

Type: *L. interrupta* Finlay.**Linemera pinguoides** n.sp. Pl. 30, fig. 7.

Shell minute, white, similar to *pingue* and *exserta*, but differing from both in detail of sculpture. Like *pingue* the early spire whorls are subquadrate, the sutures being sharply cut in. Axials 17-18 on last whorl, rather strong and blunt, their own width or less apart, absent on base. Spiral cords 4 on spire whorls, third down strongest, lowest narrow and margining the suture; 8 spirals on body whorl, the upper 4 crossing the axials and slightly nodulous at intersections, the lower 4 on base, subequidistant and smooth. *Pingue* has about 27 much finer and closer axial riblets, 4 spirals on spire-whorls, 7 on body whorl, the base having only three ribs. Aperture and protoconch as in *exserta* and *pingue*. Whorls  $4\frac{1}{2}$ .

Height, 2.3 mm.; diameter, 1.3 mm. (holotype).

Holotype in Auckland Museum (Dr. H. J. Finlay collection).

Locality: 100 fathoms off Big King Island, Three Kings Islands.

## Genus LIRONOBA Iredale, 1915.

Type: *Rissoa suteri* Hedley.**Lironoba anomala** n.sp. Pl. 30, fig. 3.

Shell minute, white, semi-transparent, fragile. Whorls 4, including a typical large smooth dome-shaped protoconch of 2 whorls. The species is almost a miniature of the genotype, *suteri*, in style and spiral sculpture, but differs in having a proportionately larger and projecting D-shaped aperture and crowded distinct axial striae between the spiral keels. *Anomala* is only half the height of *suteri*, yet it is obviously adult.

Height, 1.4 mm.; diameter, 0.9 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern New Zealand (in shell sand).

## Genus NOBOLIRA Finlay, 1926.

Type: *Lironoba polyvineta* Finlay.**Nobolira regis** n.sp. Pl. 30, fig. 4.

Shell small, attenuate, solid, with heavy closely-spaced spiral cords. Whorls  $5\frac{1}{2}$  including a large globose protoconch of 2 whorls sculptured with 9 regular fine spiral lirae and terminating in a thin axial varix. Spire a little more than twice height of aperture. First post-nuclear whorl with 3 spiral cords, second with 4, penultimate with 5, and body-whorl with 7 plus 3 on the base. The cords are sharply raised with deeply channelled narrow interstices. Aperture D-shaped, duplicated and heavily variced on the outer lip. The spiral cords cross the varix and continue radially across it to the smooth inner margin of the peristome. Colour buff, aperture white.

Height, 2.5 mm.; diameter, 1 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

**Nobolira contigua** n.sp. Pl. 30, fig. 5.

Shell minute, near to *cochlearella* Powell (1937 "Discovery" Reports, vol. 15, p. 195, pl. 52, fig. 15), from 260 metres off Three Kings Islands, but differing in having fewer and stronger spiral cords and a more distinct shoulder. Whorls 5, including a large globose protoconch of two whorls sculptured with 6 regular fine spiral lirae. Spire tall, almost twice height of aperture. First post-nuclear whorl with two heavy spiral cords, penultimate with three and body-whorl with four, plus three on the base. Shoulder broad concave, almost a third the height of a whorl in width. Aperture ovate thickened externally by a heavy varix which is rendered denticulate by the termination of the spiral cords. Colour white.

Height, 1.58 mm.; diameter, 0.7 mm. (holotype).

Holotype in Auckland Museum (Dr. H. J. Finlay collection).

Locality: 100 fathoms off Big King Island, Three Kings Islands.

**Nobolira affinis** n.sp. Pl. 30, fig. 6.

Shell minute, resembling both *manawatawhia* Powell, 1937 (*l.c.*, p. 196) and *finlayi* Powell, 1929 (*Trans. N.Z. Inst.*, vol. 60, p. 537). It has one more spiral cord per whorl than the former, but more the shape of the latter, and the protoconch is more elevated and the initial whorl smaller than in either species. Protoconch with 5 regular fine spiral lirae. Spire whorls with 5 cords, two weak ones above on shoulder, two prominent ones a little above and below the middle respectively, and another weak one near the lower suture. Base with four additional cords. Spire twice the height of aperture, outlines tabulated but regularly tapering. Aperture simple, not duplicated, outer lip slightly variced. Colour white.

Height, 2.05 mm.; diameter, 1.09 mm. (holotype).

Holotype in Auckland Museum.

Locality: 15 fathoms off Waikuku Beach, North Cape, N.Z.

## Genus SCALARONOA Powell, 1927.

Type: *S. costata* Powell, 1927.**Scalaronoba secunda** n.sp. Pl. 30, fig. 10.

Shell minute, white, rather thin, whorls 4. Spire  $1\frac{1}{2}$  times height of aperture. Protoconch large of two whorls, sculptured with four prominent spiral ridges. Post-nuclear whorls sculptured with oblique bluntly-rounded heavy axials extending from suture to suture and over the entire base, 13 on the body-whorl; there is a heavy spiral ridge at the suture. Aperture obliquely ovate, outer lip thin; peristome continuous over parietal wall as a sharply defined callus.

Height, 0.85 mm.; diameter, 0.45 mm.

Holotype in writer's collection, Auckland Museum (unique).

Locality: 73 fathoms off North Cape, N.Z. (Captain J. Bollons).

The only other described species is the genotype from off Puysegur Point in 170 fathoms, but I have a deformed example of probably a third species from 50 fathoms off the Snares Islands. Laws, 1940 (*Trans. Roy. Soc. N.Z.*, vol. 69, p. 437) records *costata* from the Waitotaran (Lower Pliocene) of Kaawa Creek, New Zealand.

## Genus PROMERELINA Powell, 1926.

Type: *P. crosseaformis* Powell.**Promerelina lacunosa** n.sp. Pl. 30, fig. 9.

Shell minute, attenuate, clathrate, whorls deeply indented at sutures. Whorls 6, including a typical protoconch of faintly beaded spiral lines. First and second post-nuclear whorls with two spiral keels, uppermost the stronger; remaining whorls with the addition of a third somewhat weaker upper keel. Base with the characteristic smooth flange-like spiral ridge running from the suture to the basal lip and a second flange bordering and parallel to the inner lip. Peristome continuous and heavily variced along the outer lip. Axials about 12 per whorl, nodulous at points of intersection. Suture margined. Colour light reddish-brown, slightly darker on the base. Spire about  $2\frac{1}{2}$  times height of aperture.

Height, 2.1 mm.; diameter, 1 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

## Genus STRIATESTEA Powell, 1927.

Type: *S. bountyensis* Powell, 1927.**Striatostea eulima** n.sp. Pl. 30, fig. 2.

Shell small, thin, white, semi-transparent, spire narrow and tall, slightly curved, resembling *Eulima*. Whorls  $5\frac{1}{4}$ . Protoconch of one oblique whorl, incoiled, leaving an apical concavity. Spire tall,  $2\frac{1}{2}$  times height of aperture. Outline of whorls almost straight on body whorl, spire whorls very slightly convex. Suture impressed, narrowly margined both above and below. On the base extending from the periphery there are four distinct rounded spiral cords. Aperture

entire, pyriform. Peristome continuous; outer lip slightly effuse; inner lip well defined as a narrow callus. The profile of the outer lip is straight in line with the axis of the spire.

Height, 1.45 mm.; diameter, 0.5 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

Compared with the genotype, the new species is proportionately much taller, more slender, and with four instead of three basal spirals.

Genus *NOTOSETIA* Iredale, 1915.

Type *Barleeia neozelanica* Suter.

***Notosetia subcarinata* n.sp.** Pl. 30, fig. 11.

Shell minute, ovate-conical, pure white, glossy, and with a faint narrow peripheral carina. Whorls  $3\frac{1}{2}$ , including a comparatively large, smooth, depressed protoconch of  $1\frac{1}{2}$  whorls, the apex being flat. Spire same height as aperture, outlines lightly convex. Body-whorl inconspicuously angled at peripheral carina. Aperture circular, peristome continuous, slightly thickened. There is a small crescentic umbilicus.

Height, 1.1 mm.; diameter, 0.9 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: 100 fathoms off Three Kings Islands, New Zealand.

The species is not closely related to any other, and can be readily distinguished by the flattened apex and weak peripheral carina.

***Notosetia crassilabrum* n.sp.** Pl. 30, fig. 12.

Shell minute, globular, white, glossy, semi-transparent and thin, except for the peristome, which is abnormally thickened for the genus. Whorls  $3\frac{1}{2}$ , including a low, convex, smooth protoconch of  $1\frac{1}{2}$  whorls. Spire a little less than height of aperture, outlines strongly convex. Aperture circular. Peristome extremely thickened, rounded and smooth over the outer lip; continued as a moderately heavy callus across the parietal wall. There is a crescentic umbilical chink. Suture false margined owing to the transparency of the shell.

Height, 1.29 mm.; diameter, 1.09 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

The species is readily distinguished by the massive peristome.

***Notosetia multilirata* n.sp.** Pl. 31, fig. 10.

Shell minute, ovate, solid, white, shining, narrowly umbilicate, sculptured with numerous linear spaced thread-like spiral lirae. Whorls  $3\frac{1}{2}$ , including a broad flattened convex smooth protoconch of  $1\frac{1}{2}$  whorls. Penultimate, body-whorl and base densely lirate; 16 lirations on the penultimate. Spire a little less than height of aperture. Aperture sub-circular; peristome continued across parietal wall as



a defined callus. Outer lip, basal lip and pillar thickened, smooth. There is a distinct narrow crescentic umbilical cavity. All whorls are broadly convex.

Height, 1 mm.; diameter, 0.75 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: 100 fathoms off Big King, Three Kings Islands.

Note on "*Rissoina fuscozona*" Suter, 1908: This is undoubtedly a *Potamopyrgus*, washed down from fresh water streams. I have frequently found *P. antipodum* and *P. corolla* in marine shallow-water dredgings and in one sample from 7 fathoms, Parengarenga Harbour, dead shells of *P. spelaeus pupoides* are quite abundant. The holotype of Suter's *R. fuscozona* is not *pupoides*, having too tall a spire and a more inflated body-whorl, characteristics which suggest typical *spelaus*, but I have no authentic specimens of this for comparison.

#### FOSSARIDAE.

Genus: *ZERADINA* Finlay, 1926.

Subgenus *RADINISTA* Finlay, 1926.

Type: *Couthouyia corrugata* Hedley.

***Zeradina (Radinista) scalarina* n.sp.** Pl. 31, fig. 9.

Shell of similar shape to *corrugata*, but with a more capacious body-whorl and aperture, much stronger axials, more distinct spiral striae, and a differently shaped sunken area between inner lip and body-whorl. Whorls 4, slightly scalariform, including a smooth globular protoconch of  $1\frac{1}{2}$  whorls. Spire same height as aperture. Axial ribs strong, slightly irregularly spaced with interspaces from two to four times the width of the ribs. Sixteen axials on the body-whorl, extending from suture to sunken area. This area is deep, moderately wide and crescentic, being widest medially. In *corrugata* the sunken area increases regularly, being widest almost at its basal termination. The whole of the post-nuclear whorls is sculptured with dense spiral striations. Colour dull white.

Height, 2.7 mm.; diameter, 1.85 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

#### TURRITELLIDAE.

Genus *MAORICOLPUS* Finlay, 1926.

Type: *Turritella rosea* Q. and G.

***Maoricolpus finlayi* n.sp.** Pl. 33, fig. 11.

Shell broadly attenuate, stout, outlines almost straight, base concave, periphery angulate, narrowly rounded. Whorls 10, including a small polygyrate smooth protoconch of 3 whorls, the last with a median carina. Spire whorls sculptured with three main cords and a number of subsidiary ones having linear interspaces. The three main cords are placed—one at about four-fifths the height of the whorl and the other two close together at the lower extremity of the whorl. The subsidiary spirals are distributed—4 between suture

and upper cord, 9 between upper cord and uppermost of the two lower cords, and 3 between these two lower cords. There are 16 weak spiral threads on the base. Colour pale buff with a tessellated pattern of small squarish dots appearing in revolving series on the cords and threads, but arranged axially also in sinuous lines corresponding to the curve of the broad median apertural sinus.

Height, 14.4 mm.; diameter, 5.4 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Off Spirits Bay in 32 fathoms.

This is not merely a benthic form of *rosea*, for the arrangement of the spiral sculpture is quite different. Benthic examples of *rosea* cannot be separated from the typical shore form. Suter's *difficilis* from 50 fathoms off the Snares has been synonymised with *rosea* by Finlay, 1926 (*Trans. N.Z. Inst.*, vol. 57, p. 389).

Genus *GAZAMEDA* Iredale, 1924.

Type: *Turritella gunnii* Reeve.

***Gazameda maoria* n.sp.** Pl. 33, fig. 7.

Shell stout, narrowly attenuate, outlines straight, base very slightly convex, periphery angulate, narrowly rounded. Whorls 10, including a moderately large, glossy, obtusely-rounded protoconch of  $1\frac{1}{2}$  whorls. Spire whorls sculptured with 12 narrow, rounded, low spiral cords with a tiny thread in each narrow interspace. The body-whorl has 13 cords, a broader one at the periphery, and nine weaker ones on the base. Aperture quadrate, outer lip with a broadly rounded moderately deep median sinus. Colour white with a pattern of regularly-spaced flexuous broad streaks of reddish-brown. These streaks are interrupted by the broader peripheral cord, but continue over the base as a rotary pattern converging around the columella.

Height, 15.75 mm.; diameter, 4.25 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

This species adds a genus to the New Zealand fauna. The genotype is from New South Wales, others are known from Tasmania, Victoria and South Australia.

The absolutely straight spire outline, paucispiral, smooth globular protoconch, and evenly developed spirals are features fully in accord with *Gazameda* and opposed to the New Zealand group *Zeacolpus*, which has a deeply indented spire outline caused by two of the spiral cords developing as strong keels.

Both this and the preceding species are known only from single specimens, and neither is quite fully grown.

#### MATHILDIDAE.

Genus *OPIMILDA* Iredale, 1929.

Type: *Mathilda decorata* Hedley.

***Opimilda maoria* n.sp.** Pl. 29, fig. 7.

Shell small, broad, turreted, white, spirally keeled and fenestrated by radial riblets. Whorls 4, plus the characteristic two-whorled smooth protoconch, which is sinistral, obliquely semi-inverted, and

partly immersed. Post-nuclear whorls with a strong peripheral keel below the middle, two weaker spirals above it and one below. Thin radials, 18 on the body-whorl, run vertically from suture to suture, rendering the spirals strongly gemmata at points of intersection. Two specimens only are available and both have the last whorl broken so that the basal sculpture is obscured by callus. Aperture subquadrate as in genotype.

Height, 3 mm.; diameter, 1.95 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: 140 fathoms off Three Kings Islands, New Zealand.

This adds a genus to the New Zealand fauna. The genotype is from 63–75 fathoms off Port Kembla, New South Wales, and it has been recorded also from 100 fathoms off Cape Wiles, South Australia. The genotype differs in having two main keels as well as two subsidiary spirals above and one below.

#### VERMETIDAE.

Genus *SILICUARIA* Bruguière, 1789.

I have not been able to find a satisfactory type designation for this genus apart from Fleming, 1818 (*Ency. Brit.*, Suppl. edits. 4, 5, 6, vol. 3, p. 314), who cited *Serpula anguina* Linn. as type of *Silicuarina* Lamarck, 1799. (See Winckworth, *Proc. Malac. Soc.*, vol. 18, p. 227). It is most likely that *Silicuarina* Brug. and *Silicuarina* Lamarck are based upon the same type. This probable type, *anguina* Linn., from Indian Ocean has been variously interpreted, but it seems definite that the name applies to the usual conception of the typical section, having a narrow open slit with spiral sculpture above it and radial wrinkles below. Certainly Cotton and Godfrey's citation (1938, Pub. No. 1, *Malac. Soc. S. Aust.*, p. 13) of *australis* Q. and G., 1834, cannot stand, for not only was that species published subsequently to the genus *Silicuarina*, whether of Brug. or Lamarck, but it is an *Agathirses* Montfort, 1810, the slit being in the form of a series of holes. With regard to *weldii* Ten. Woods, 1876, the type is from Tasmania and it is very doubtful if the New Zealand so-called shells are identical. For this style of shell *Pyxipoma* Moreh, 1860, should be used.

***Silicuarina maōria*** n.sp. Pl. 33, figs. 3, 4, and 5.

Shell obtuse, whorls circular in section, loosely coiled, telescoped so that the first  $2\frac{1}{2}$  post-nuclear whorls are perfectly flat. The whorls coil around a central space of slightly greater diameter than the whorl diameter. Protoconch as a small callus blob. On the top of the post-nuclear whorls there is a narrow spiral slit with slightly flexuous edges. Above the slit the whorls are sculptured with distinct dense waved spiral lamellae, below with strong rugose transverse deep cracks. A few irregular spirals continued below the slit cut the transverse cracks into rectangular shapes, reminiscent of a dried mud. Underneath, the transverse cracks are still stronger, and protractive in direction. The type specimen represents the early compacted

whorls, but fragments indicate that later the shell meanders and then straightens out in the usual manner.

Diameter of shell (at  $3\frac{1}{2}$  whorls), 16 mm.; height, 11 mm.; diameter of whorl, 5.5 mm.

Holotype in writer's collection, Auckland Museum.

Locality: Off Three Kings Islands in 140 fathoms.

The species is nearest to the Queensland *ponderosa*, which apart from being larger is more tightly coiled and has weak radials on the upper striated surface.

#### CERITHIIDAE.

Genus MENDAX Finlay, 1926.

Type: *Cerithiopsis trizonalis* Odhner.

**Mendax duplicarinata** n.sp. Pl. 29, fig. 4.

Shell small, narrow, very tall, slowly tapered, sculptured with two heavy nodulous keels and two smooth spiral cords, one immediately above and the other immediately below the suture. Whorls  $10\frac{1}{2}$  plus a typical blunt protoconch of one smooth whorl followed by  $1\frac{1}{2}$  of close spaced strong axial folds. There is a slight angulation of the nuclear whorls. On the post-nuclear whorls the smooth sutural cords are equal in size as also are the two heavy nodulous keels which are grouped together at the middle of the whorls. The keels have 14 laterally compressed oval nodules on each of the body-whorl keels. The base is smooth, except for the sutural cord and a thread defining the smooth pillar. Spire five times height of aperture. Aperture subquadrate with a broad shallow basal notch. Outer lip thin, sinuated by the keels.

Height, 4.25 mm.; diameter, 1 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

#### CREPIDULIDAE.

Genus MAORICRYPTA Finlay, 1926.

Type (orig. desig.): *Crepidula costata* Sowerby.

**Maoricrypta youngi** n.sp. Pl. 33, figs. 12 and 13.

Shell ovate but varying with the nature of the surface to which it was attached. Compared with *costata* the new species has the beak narrow and strongly projecting irrespective of shell shape. The surface is neither smooth nor radially costate, but irregularly malleated. Eight obsolete radial costae are just discernible, they merely break the contour of the surface into slight planes that may be seen by rotating the shell. A juvenile has definite low weak radials, but they are not sufficiently strong to indent the margin. Most likely the malleations are reflex to the surface of attachment which is suggested as the backs of the shells of *Anomia walteri*. The margin is smooth and the colour buff irregularly and faintly longitudinally streaked with light brown. Interior with the septum white and grading to darker brown beneath it. The protoconch, although worn in all examples seen, is similar to that of the genotype, certainly quite unlike that of *M. (Zeacrypta) monoxyla*. The septum is exactly as in *costata*.

Length: 27 mm.; breadth, 22 mm.; height, 8.5 mm. (holotype).

Holotype in Auckland Museum.

Locality: Cape Maria van Diemen.

#### PYRAMIDELLIDAE.

Genus *IVIDELLA* Dall and Bartsch, 1909.

Type: *Odostomia (Ividia) navisa* Dall and Bartsch, 1907.

*Ividella maoria* n.sp. Pl. 29, fig. 5.

Shell small, tall, turreted, semi-transparent, white, strongly sculptured, clathrate. Protoconch typical, 1-2 whorls, smooth, obliquely tilted and half immersed. Post-nuclear whorls 5, strongly keeled and shouldered, 2 keels on spire-whorls and the addition of a weaker median one between the main keels on the body-whorl, as well as a fourth at the lower suture. On the base there are three further spirals, the last defining a groove against the pillar, hardly an umbilical cavity. The spire whorls are crossed by weak axials which render the keels slightly thickened, hardly nodulous. There are about 17 axials on the last whorl. Spire a little more than twice height of aperture. Aperture ovate-pyriform. Outer lip thin, strongly dentate at the terminal points of the spiral keels. Columella subvertical, effuse below, and with a single weak spiral plait.

Height, 3.3 mm.; diameter, 1.3 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Localities: Between Spirits Bay and Three Kings Islands in 50 fathoms (holotype); Three Kings Islands in stomach of fish (Captain J. Bollons); Tom Bowling Bay in shell-sand.

This adds a genus to the New Zealand fauna, the genotype being from California. The only noticeable difference from the New Zealand species is the presence of a very narrow umbilical cleft, but in spite of this discrepancy the generic location of the local species seems definite. It may be noted that Cossmann, 1921, erred in spelling the genus *Ividiella* as also did Monterosato, 1917.

#### EULIMIDAE.

Genus *BALCIS* Leach, 1847.

Type: *Balcis montagui* (= *B. alba* da Costa).

*Balcis pervegrandis* n.sp. Pl. 31, fig. 1.

Shell of moderate size, subulate, translucent white, smooth and glossy. Spire tall,  $2\frac{1}{2}$  times height of aperture, erect, straight sided, slowly tapered except over the first four post-nuclear whorls, which increase rapidly following a small three-whorled mucronate protoconch with a minute apex. Whorls 12 including the protoconch, slowly increasing at first, but later accelerated so that the body-whorl occupies exactly half the height of the adult whorls (minus protoconch). Suture linear, false margined. Aperture narrowly pyriform. Outer lip thin and sharp.

Height, 10.6 mm.; diameter, 2.5 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Localities: 23 fathoms off Ahipara (July, 1925) (holotype); 25 fathoms off Hen and Chickens Islands (Dr. H. J. Finlay collection).

The species resembles *vegrandis* from 110 fathoms off the Great Barrier Island, but is proportionately larger, having 12 whorls in a length of 10.25 mm. as compared with 11 whorls in 6.9 mm. in *vegrandis*. The body whorl also in the new species is proportionately much larger, occupying almost half the height of the shell.

**Balcis maoria** n.sp. Pl. 31, fig. 2.

Shell large for the genus, solid, white, porcellanous. Spire tall,  $2\frac{1}{2}$  times height of aperture. Upper spire only, very slightly curved. Whorls 10 (tip of protoconch missing). Outline of whorls very slightly sinuous, lightly convex to almost straight except for slight concavity below the linear suture, which is rendered somewhat appressed. Body whorl large, periphery convex. Aperture pyriform. Outer lip thick but not variced, profile sinuous, a slight concavity below suture. Labial growth stages at approximately two-thirds of a whorl intervals, thus they do not fall in line. The body-whorl is less than half the total height of the shell.

Height, 19.5 mm.; diameter, 6.3 mm. (holotype).

Holotype in Auckland Museum (Dr. H. J. Finlay collection).

Locality: Cape Maria van Diemen Island.

This is the largest species of the genus in New Zealand. It cannot be Suter's *truncatula* described from the same locality from a juvenile specimen of 5 whorls, for *maoria* at the equivalent dimensions shows a considerably broader spire angle.

Genus *EULIMA* Risso, 1826.

Type: *E. subulata* = *E. glabra* (Da Costa).

(*Eulima* = *Strombiformis* auct. see. Winckworth, 1934, *Journ. of Conch.*, vol. 20, no. 1, p. 13, and *Subularia* Monterosato, 1884.)

**Eulima perspicua** (Oliver, 1915).

1915. *Subularia perspicua* Oliver, *Trans. N.Z. Inst.*, vol. 47, p. 533.

An elongate straight-sided *Eulima* with a sharp apex and a marbled light brown pattern was found in several northern dredgings and samples of shell-sand. It compares exactly with *perspicua* Oliver from dredgings off Sunday Island, Kermadec Group.

Localities: Maro Tiri, Chickens Islands, N.Z., in shell-sand; Tryphena Bay, Great Barrier Island, N.Z., in 5-6 fathoms.

**Eulima mangonuica** n.sp. Pl. 31, figs. 3 and 4.

Shell minute, straight-spined, solid, subcylindrical, with blunt rounded apex, thickened labial varix, light yellowish-brown, glossy. Whorls  $4\frac{3}{4}$ , including the blunt protoconch of one whorl. Outline of spire whorls straight; body-whorl broadly angled at periphery, base slightly convex. Suture faint, false margined. Spire twice height of aperture. Aperture pyriform; peristome thickened. Outer lip straight, in line with axis. Inner lip defined as a callus. Imperforate.

Height, 1.1 mm.; diameter, 0.4 mm. (holotype).

Holotype presented to Auckland Museum.

Locality: Off Mangonui Heads in 6 fathoms, Doubtless Bay (W. La Roche).

This minute, stockily built Eulimid is evidently adult, judging from the well-formed aperture and the fact that a series all of the same size were obtained. It is not a typical member of the genus, but may remain therein until the systematics of these troublesome shells is better known.

Genus *CHILEUTOMIA* Tate and Cossmann, 1898.

Type: *C. subvaricosa* Tate and Cossmann, 1898.

***Chileutomia neozelanica* n.sp.** Pl. 31, fig. 5.

Shell small, elongate-ovate, slightly compressed from back to front, opaque white, umbilicate, surface delicately spirally striated and with moderately strong varices over all post-nuclear whorls. Whorls  $6\frac{1}{2}$ , including a large globular smooth protoconch of two whorls. Spire tall,  $1\frac{1}{2}$  times height of aperture. Body whorl somewhat swollen. Aperture obliquely narrowly ovate. Outer lip variced, flexuous, having a distinct deep subsutural shallow sinus, base of lip broadly rounded. Inner lip thickened, especially below. Distinct labial varices persist at  $\frac{3}{4}$  whorl intervals, the last before the outer lip being situated on the left front of the body whorl and marks the termination of a deep arcuate umbilical groove bordering the pillar portion of the inner lip. A slight basal bulge borders the umbilical groove.

Height, 4.95 mm.; diameter, 1.6 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Between Spirits Bay and Three Kings Islands in 50 fathoms.

This adds a genus to the New Zealand fauna, the genotype being from the Victorian Tertiary. The Recent *anceps* Hedley, 1900, from New South Wales, originally described as *Menon* n.sp. and subsequently synonymised with *Chileutomia* by its author is not congeneric, for it has a depressed carinate protoconch and should be referred back to *Menon*. Judging from the figures *Auriculigerina* Dautzenberg, 1925, type, *miranda* Dautz. from deep water off Teneriffe, is congeneric with *Chileutomia*, and there are European Pliocene and Miocene representatives in *C. pontileviensis* (de Morgan) and *C. morgani* Cossmann.

Genus *VENUSTILIFER* Powell, 1939.

Type: *Hypermastus bountyensis* Powell, 1933.

***Venustilifer secunda* n.sp.** Pl. 29, fig. 6.

Shell small, globular, thin, smooth and semi-transparent. Almost identical with the genotype in shape, but differing from it in two important respects: The cylindrical two whorls protoconch is still more oblique and is half immersed all along one side, that of the genotype is only partly immersed, the whole of the apex projecting. The suture also, in *secunda*, is submargined by a distinct incised line, that of *bountyensis* being always plain as shown by a series of Stewart Island specimens in addition to the holotype.

Height, 1.65 mm.; diameter, 1.28 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Off Three Kings Islands in 140 fathoms.

## EPITONIIDAE.

Genus *ACLIS* Loven, 1846.Type: *Aclis supranitida* Wood.***Aclis pseudopareora*** n.sp. Pl. 31, fig. 6.

Shell small, elongately turreted, spirally keeled, glossy, pale buff. Whorls 7, including a blunt smooth protoconch of two convex whorls. Spire about  $3\frac{1}{2}$  times height of aperture. Slightly more than upper third of each spire whorl occupied by a straight steeply-descending shoulder as in *Pareora*. First post-nuclear whorl with two sharply raised spiral cords, second whorl with an incipient third keel, third whorl with three keels, fourth and body-whorl with four keels. A fifth weaker spiral is situated just below the aperture, but the rest of the base is smooth. Aperture ovate. Peristome thin, discontinuous. Pillar arcuate, slightly reflected over a narrow crescentic umbilical cavity.

Height, 3.15 mm.; diameter, 1.15 mm. (holotype).

Holotype presented to Auckland Museum.

Localities: 6-10 fathoms off Mangonui, Doubtless Bay (holotype); 6-10 fathoms off West Coast of Great Barrier Island.

Differs from the Recent *terebra* (Powell, 1930) and *planostoma* (Hutton, 1885) in having thinner and sharper spiral cords and a much wider and more steeply descending shoulder.

## HELIACIDAE.

Genus *ZEROTULA* Finlay, 1926.Type: *Discohelix hedleyi* Mestayer.***Zerotula nummaria*** n.sp. Pl. 28, figs. 14 and 15.

Shell discoidal, bicarinate, spire slightly sunken and base concave. Whorls  $2\frac{1}{2}$ , including a smooth protoconch of one whorl, the apex slightly inrolled. Periphery almost straight and vertical between the keels. Suture channelled, with faint bridging axial growth crenulations. Peripheral cords faintly serrated, margined above and below by weak spiral depressions. Spire and base similar in every respect. Aperture quadrate, peristome continuous. Colour white, shining.

Height, 0.5 mm.; diameter, 1.3 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Localities: Off Awanui, Doubtless Bay, N.Z., in 12 fathoms (W. La Roche).

The allied *Omalogyra bicarinata* Suter, 1908, from 50 fathoms off Snares Islands has the periphery strongly convex between the keels.***Zerotula ammonitoides*** n.sp. Pl. 29, figs. 1 and 2.

Shell minute, perfectly discoidal, bicarinate, spire and base slightly concave. Whorls  $3\frac{1}{2}$ , including a small smooth protoconch of one whorl, the apex slightly inrolled. Upper and lower peripheral keels each bounded by a broad rounded spiral ridge; edge of whorl between the keels vertical, very slightly convex and smooth. Upper



and lower surfaces sculptured with close-spaced, strong, rounded radials, 28 on the body-whorl. Aperture quadrate, peristome continuous. Colour uniformly golden brown.

Height, 0.4 mm.; diameter, 1.35 mm. (holotype).

Holotype presented to Auckland Museum.

Locality: 6–10 fathoms Mangonui, Doubtless Bay, N.Z. (W. La Roche).

**Zerotula ramosa** n.sp. Pl. 29, fig. 3.

Shell discoidal, nautiloid, periphery rounded, spire and base slightly concave. Whorls  $2\frac{1}{2}$ , including a small smooth globular protoconch of one whorl, the apex slightly inrolled. Sculpture deeply incised, consisting of strong radials, crenate at the channelled suture and haphazardly bifurcating or trifurcating over the rounded peripheral area. These are not alternating, but occur in variable succession of two or three. Aperture circular; peristome continuous. Colour dull white.

Height, 0.45 mm.; diameter, 0.8 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: 75 fathoms off North Cape, New Zealand.

#### LATIRIIDAE.

Genus **TARON** Hutton, 1883.

Type (by monotypy): *Trophon dubius* Hutton.

**Taron mouatae** n.sp. Pl. 33, fig. 6.

Shell larger than the genotype, ovate-fusiform, moderately solid. Whorls  $6\frac{1}{2}$ , including small, bluntly rounded protoconch of about  $2\frac{1}{2}$  whorls. The badly eroded protoconch of the holotype appears to have the first whorl smooth, but the remaining whorl and a half sculptured with strong rounded axial costae which are crossed by four evenly-spaced rounded spiral cords. On the post-nuclear whorls there are prominent fold-like axial costae with narrow interspaces. These axials are 13 per whorl, are strongest at the periphery and become almost obsolete both towards the upper suture on the spire whorls and on the base and the neck of the body-whorl. The spiral sculpture consists of moderately strong rounded low spiral cords, the three to four situated from the periphery downwards being strongest. On the shoulder there are two cords of moderate strength and two weak ones, the latter uppermost. There is an interstitial thread and several microscopic spiral striations in each interspace over all whorls. Primary spiral cords number 18 on the body whorl and base, and the fasciole has five strong spiral threads about half the strength of the cords of the body-whorl. The suture is margined below by a rather wide flattened zone marked off from the sculptured area by a shallow groove. Spire tall, a little less than height of aperture plus canal. Aperture comparatively small, ovate, produced below into a short, open, slightly oblique canal. Outer lip thin and sharp but internally thickened and spirally ridged within the aperture. Parietal callus with a weak plait-like denticle above as well as a weak plait at the base of the pillar. Colour ochreous buff, interior of aperture and parietal callus white.

This new species differs considerably from the monotypic *T. dubius* in being more slender, with a higher spire, in having uniform light colour, and in the more numerous axial and spiral ribs and a lighter build. Animal and operculum are unknown and the apex is eroded, but nevertheless the species appears to be accommodated more satisfactorily in *Taron* than elsewhere. Other specimens have been examined from Whangaroa, but none show a well-preserved apex.

Height, 22 mm.; diameter, 10.5 mm. (holotype).

Localities: Devonport, Auckland, in beach drift. Collected by Mrs. M. Mouat; Whangaroa Harbour (Mr. W. La Roche, 1922).

Holotype presented to the Auckland Museum by Mrs M. Mouat.

### BUCCINULIDAE.

Genus *BUCCINULUM* Swainson, 1837.

Subgenus *EVARNULA* Finlay, 1926.

Type: *Cominella striata* Hutton.

***Buccinulum (Evarnula) multilinum aupouria* n.subsp. Pl. 33, fig. 16.**

Shell identical in size and shape with typical species, but differing in sculpture and colouration. The subspecies is crowded with very faint almost obsolete spiral striae numbering 34 on the penultimate in the holotype. The regular raised dark brown stronger cords of the typical species are absent, but there are somewhat broader but very indistinct brown colour bands in their place, numbering 4 on the spire whorls, 5 on the penultimate and about 11 on the base. On the lower half of the base and on the labial varix the colour bands become very slightly raised, but elsewhere they are perfectly flat. Ground colour rusty brown, spirals and the numerous axial growth lines slightly darker red-brown, but very indistinct, the whole shell having a mottled appearance. Interior of aperture, parietal callus and columella dirty white, with a series of brown dots around the margin of the outer lip marking the termination of the spiral colour bands. A worn and bleached example from Cape Maria van Diemen has the spiral bands more pronounced through the elimination of the diffused axial growth streaks. In comparison with the typical species this specimen has the spiral bands from two to four times as wide.

Height, 32.6 mm.; diameter, 16.5 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Localities: Taupo Bay, Whangaroa (holotype); Cape Maria van Diemen.

***Buccinulum (Euthrena) mariae* n.sp. Pl. 33, figs. 1 and 2.**

Shell of moderate size, rather squat, inflated, moderately solid, but not crass, sculptured prominently with blunt axials and strong raised spiral cords. Whorls  $6\frac{1}{2}$ , including typical protoconch (surface detail eroded in all specimens), outline of whorls strongly convex, shouldered a little above the middle. Spire equal to height of aperture plus the short stout canal. Axials short, extending from the

shoulder to the lower suture only and absent from the base: they number 14 on the penultimate whorl. The spiral cords number 5 on the spire whorls and 13 on the body-whorl and base; the uppermost pair on the shoulder are weaker. Each interspace with a single weak spiral thread. The fasciole is almost smooth, showing sub-obsolete spirals only. Aperture typical, with lirate inner margin to the outer lip and a small parietal denticle. Colour of holotype buff with the primary spiral cords clear cut in dark reddish-brown. Interior of aperture white. Some paratypes are light reddish-brown with a darker broad spiral band extending from the shoulder to the lower suture; others have a narrower band and a second on the base in line with the parietal tubercle.

Height, 20 mm.; diameter, 10.75 mm. (holotype).

Holotype in Auckland Museum.

Locality: Cape Maria van Diemen (Island), Northern N.Z.

The species belongs to the subgroup of *colensoi*, *robustum* and *suteri*.

#### COMINELLIDAE.

Genus COMINELLA H. and A. Adams, 1853.

Subgenus COMINULA Finlay, 1926.

Type: *Cominella quoyana* A. Ad.

**Cominella (Cominula) youngi** n.sp. Pl. 33, figs. 9 and 10.

The type species of the subgenus, *quoyana*, does not exhibit much variation. It is invariably a slender shell with heavy axial plications over all post-nuclear whorls. A second species, *euthriaformis* Powell (1929, *Trans. N.Z. Inst.*, vol. 60, p. 96), is slender also, but has the axials obsolete from all but the early post-nuclear whorls. A third species is here described, being the common form at Cape Maria van Diemen, where neither of the two first-mentioned species has been found.

The Cape Maria shells vary a little in relative height in respect to diameter, but they are constant in having rather swollen whorls very little constricted at the suture, base more expanded than in *quoyana*, fasciole heavier and the axials subobsolete on the spire and absent or nearly so from the body-whorl. The colour pattern is normally of diffused reddish-brown axial streaks on a buff to yellowish-brown ground. The linear spiral grooves may be brown as in the genotype or white, cutting through the colour streaks. Occasional specimens have a well-marked tessellated pattern in brown on a buff ground. The protoconch, fasciole, and edge of the outer lip are purplish-brown. Interior of aperture greyish to dirty white within. The type specimen has the diffused reddish-brown pattern on a yellowish-brown ground, both cut by the white linear spiral grooves.

Height, 21.75 mm.; diameter, 10.5 mm. (holotype).

Holotype in Auckland Museum.

Locality: Cape Maria van Diemen (Island), Northern N.Z.

## PYRENIDAE.

Genus ZEMITRELLA Finlay, 1926.

Type: *Lachesis sulcata* Hutton.**Zemitrella fallax** n.sp. Pl. 32, fig. 3.

Shell small, ovate-elongate. Whorls  $4\frac{1}{2}$ , including a papillate smooth protoconch of  $1\frac{1}{2}$  whorls, the apex slightly tilted. Spire same height as aperture. Whorls gently rounded, sutures lightly impressed. Surface smooth and glossy, the only sculpture being seven spiral grooves upon the neck. Outer lip smooth, somewhat thickened but not dilated; there is a subsutural broad shallow sinus. Colour light golden and darker brown on a white ground. Pattern variable: the holotype has the spire whorls light golden brown, lighter on the apex and at a narrow subsutural band; body whorl mottled light brown; base with a broad subperipheral band of darker brown and faint mottling over the grooved neck; inside of aperture mottled greyish corresponding to the external pattern.

Height, 3.1 mm.; diameter, 1.52 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

The species is nearest to *stephanophora* (Suter, 1908), but is of smaller size and lacks the expanded lip of that species.

**Zemitrella attenuata** n.sp. Pl. 32, fig. 4.

Shell small, attenuate, smooth, but not highly polished. Whorls  $5\frac{1}{2}$ , including a typical papillate smooth protoconch of  $1\frac{1}{2}$  whorls. Spire  $1\frac{1}{4}$  times height of aperture. Whorls gently rounded, suture lightly impressed. Sculpture consisting of five evenly spaced spiral grooves on the neck. Outer lip smooth, only slightly thickened, and with a distinct broad shallow subsutural sinus. Inner lip distinct, marked off vertically across neck by a sharp edge to the callus. Colour buff with revolving irregular series of white elongate flecks showing through; on the body whorl the prevailing buff tint deepens to light brown and terminates sharply at the upper spiral groove. Interior of aperture uniformly pale buff.

Height, 4.4 mm.; diameter, 1.65 mm. (holotype).

Holotype presented to Auckland Museum.

Locality: Off Three Kings Islands in stomach of fish (Captain J. Bollons).

The species is characterised by its attenuate simple shape, few grooves on neck and simple pattern of white flecks on a buff ground.

**Zemitrella regis** n.sp. Pl. 32, fig. 1.

Shell small, fusiform, spirally grooved, dull white. Whorls 5, including a blunt dome-shaped smooth protoconch of  $1\frac{1}{2}$  whorls. First post-nuclear whorl smooth, rest of shell with close-spaced distinct spiral grooves, 10 on the penultimate and about 33 on the body-whorl, base and neck. Outer lip smooth, slightly thickened and with a distinct broad subsutural sinus. Spire same height as aperture.

Height, 3.7 mm.; diameter, 1.8 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Off Three Kings Islands in 140 fathoms.

**Zemitrella laevirostris** n.sp. Pl. 32, fig. 2.

Shell small, elongate, smooth and polished, without sculpture, even on neck, which lacks the characteristic spiral grooves. Whorls  $4\frac{1}{2}$ , including a papillate smooth protoconch of  $1\frac{1}{2}$  whorls. Spire slightly taller than aperture. Whorls evenly arcuate, suture impressed. Outer lip scarcely thickened, but with a distinct shallow subsutural sinus. Colour light golden and reddish-brown, patterned on a white ground. Pattern variable; the holotype has the protoconch and first whorl light reddish-brown; succeeding whorls with a subsutural collar of reddish-brown blotches and an interrupted narrow band of the same colour as well as a diffused general pattern of horizontal to slightly oblique streaks of light brown and pale grey; the whole of the base is almost uniformly light golden-brown. Aperture whitish within, except over the lower third, where the basal colour shows through.

Height, 3.3 mm.; diameter, 1.35 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

The species is characterised by its slender simple outlines and the total absence of grooves on the neck.

Genus *AOTEATILIA* Powell, 1939.

Type: *Daphnella substriata* Suter.

**Aoteatilia larochei** n.sp. Pl. 32, fig. 8.

Shell an exact miniature of *substriata*, only two-thirds the size and uniformly white. In *substriata* the protoconch is always lilac tinted and the rest of the shell buff. The protoconch in *larochei* is invariably white and noticeably more convex; the adult sculpture is similar except that the spiral striations on the penultimate in *larochei* number 16 compared with 18–20 in *substriata*. Otherwise the two species are very similar. Whorls  $4\frac{1}{2}$ , including protoconch.

Height, 3.3 mm.; diameter, 1.4 mm. (holotype).

Holotype presented to Auckland Museum.

Locality: 10 fathoms off Awanui, Doubtless Bay, N.Z. (W. La Roche).

Genus *LIRATILIA* Finlay, 1926.

Type: *Daphnella conquisita* Suter.

**Liratilia gracilis** n.sp. Pl. 32, fig. 7.

Shell elongate, sculptured with regular rounded spiral cords having subequal interspaces. Whorls 5, including a typical but more narrowly conic smooth protoconch of  $1\frac{1}{2}$  whorls. There are five spirals cords on the spire whorls, six on the body whorl, and a further 10 on the base, terminating in a few faint, closer-spaced spirals on the fasciole. Interspaces showing numerous weak axial threads. Spire about  $1\frac{1}{2}$  times height of aperture. Aperture typical. Colour uniformly light golden-brown.

Height, 4.2 mm.; diameter, 1.6 mm. (holotype).

Holotype in Dr. H. J. Finlay's collection, Auckland Museum.

Locality: 12 fathoms off Awanui, Doubtless Bay, New Zealand.

The species closely resembles the genotype, but differs in smaller size, narrower shell, and in the narrow interspaces of the spiral cords, which are crossed by weaker axial threads. The uniform brown colour is distinctive also.

Genus *MACROZAFRA* Finlay, 1926.

Type: *Clathurella subabnormis* Suter.

***Macrozafra mariae* n.sp.** Pl. 32, fig. 6.

Shell large for the genus, ovate, solid, spirally grooved and with weak axial folds. Whorls  $5\frac{1}{2}$ , including a smooth papillate protoconch of two whorls. Spire same height as aperture, whorls slightly angled at upper two-thirds. Post-nuclear sculpture of broad, low, spiral cords with linear interspaces; three weak cords above the angle, three larger ones below; base and neck with an additional 13 cords. The weak axial folds number 11 to 13 per whorl. Outer lip thickened and strongly dentate within. There is a distinct, broad, shallow subsutural sinus. Colour dull white.

Height, 8.6 mm.; diameter, 4 mm. (holotype).

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: Cape Maria van Diemen.

***Macrozafra enwrighti* n.sp.** Pl. 32, fig. 5.

Shell small, ovate-biconic, massive, dull white, heavily sculptured with spiral ridges rendered nodulose where regularly crossed by axials. Whorls 5, including a papillate smooth protoconch of two whorls. Spire about same height as aperture, angled at upper two-thirds. Spiral sculpture of two strongly raised ridges (with subequal interspaces) situated below the angle, and one subsidiary spiral above on the shoulder. A third ridge emerges from the suture on the last whorl and there are four more on the base terminating in three subsidiary spirals on the fasciole. There are 12 axials per whorl and they cause nodulations on the two main spirals of the spire-whorls and five on the body-whorl and base. Aperture narrow. Outer lip massive, much thickened, dentate within and with a broad shallow subsutural sinus.

Height, 3.8 mm.; diameter, 2 mm. (holotype).

Holotype in Auckland Museum.

Locality: Off North Cape in 60 fathoms (M.V. "Maude E," Feb., 1937).

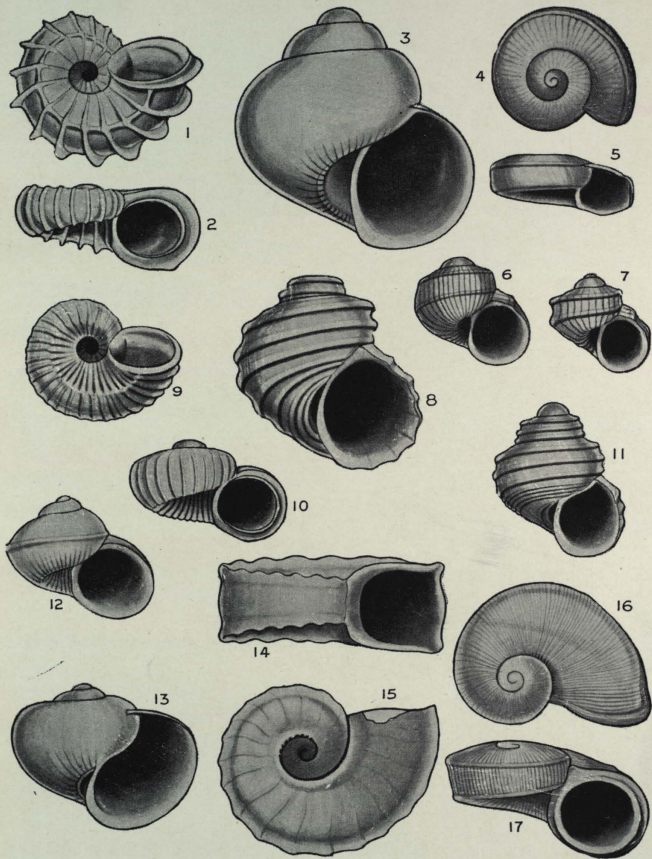
#### CANCELLARIIDAE.

Genus *ZEADMETE* Finlay, 1926.

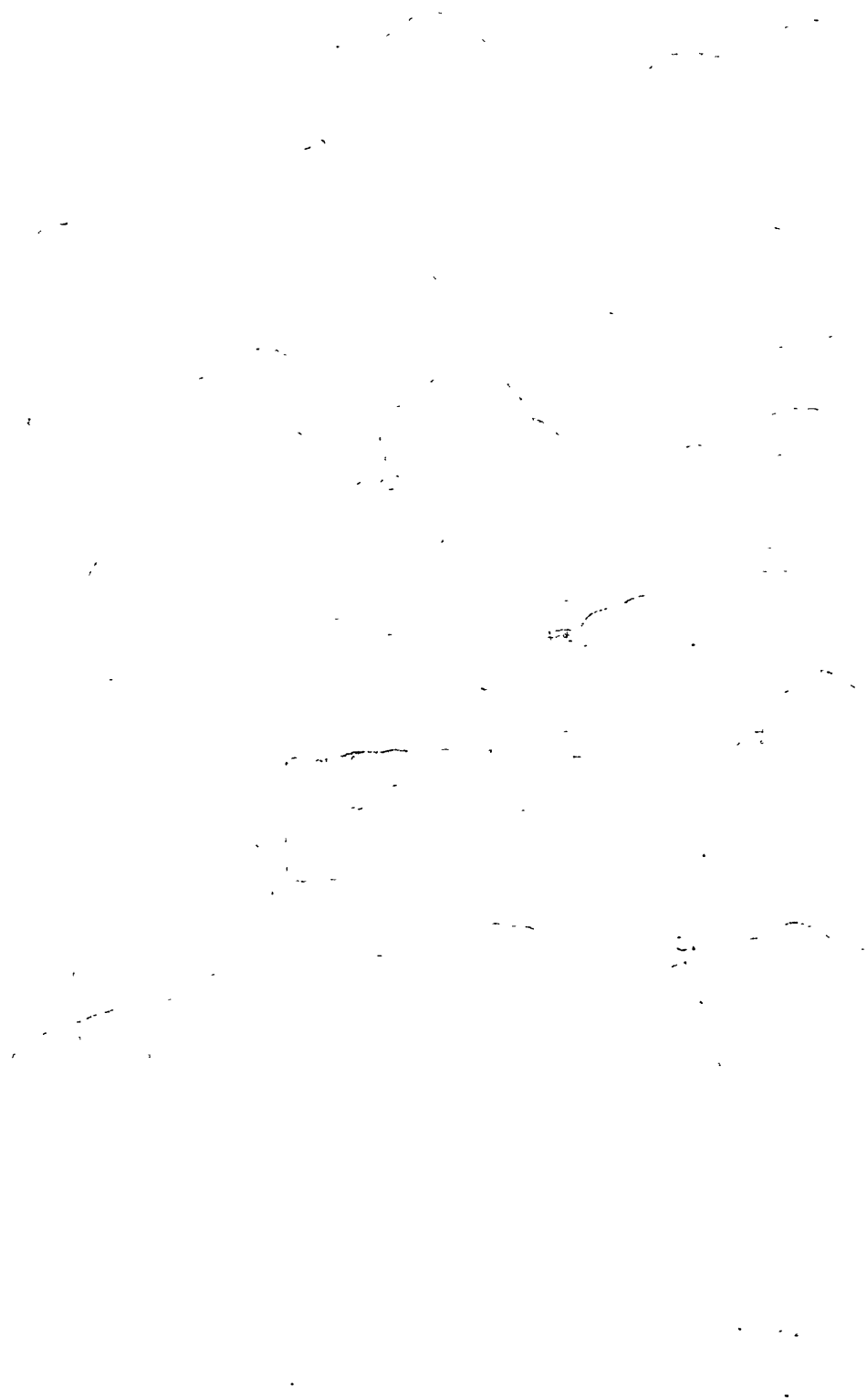
Type: *Cancellaria trailli* Hutton, 1873.

***Zeadmete finlayi* n.sp.** Pl. 29, fig. 12.

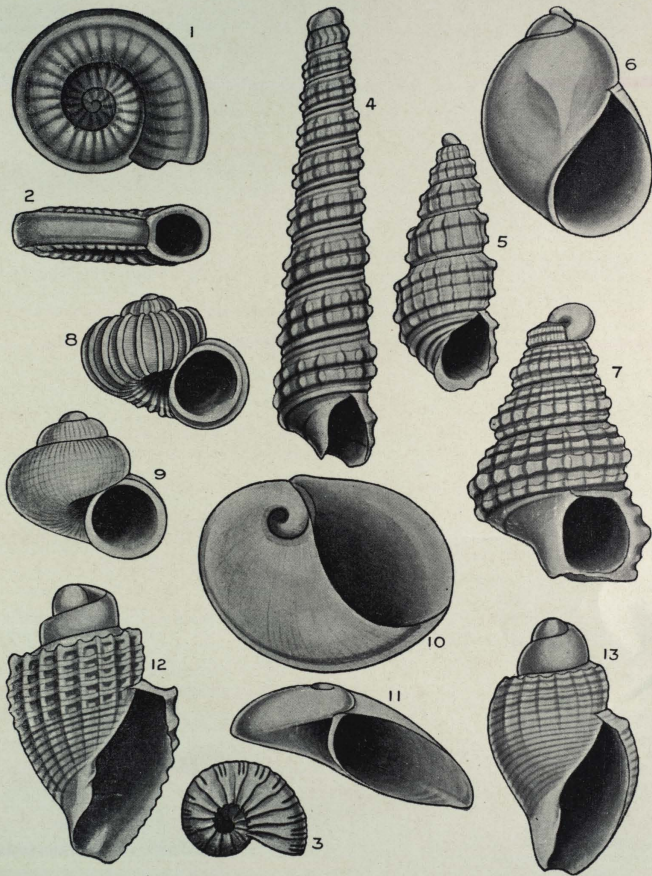
Shell small, oval, turreted, coronate, with a broad flat shoulder, cancellated, uniformly reddish-brown. Protoconch large, smooth, shouldered, of  $1\frac{1}{2}$  whorls, with the apex slightly immersed, leaving a cavity. Body whorl sculptured with two series of spiral squarish ridges, five from shoulder to aperture, having interspaces one to one and a half times their own width, and nine linear spaced over the base terminating at the smooth fasciole. There are 17 well-developed



FIGS. 1 and 2.—*Munditia delicatula* n.sp. Holotype.  $0.5 \times 1.05$  mm.  
 FIG. 3.—*Lissotesta decipiens* n.sp. Holotype.  $1.4 \times 1.4$  mm.  
 FIGS. 4 and 5.—*Orbitestella vera* n.sp. Holotype.  $0.35 \times 0.8$  mm.  
 FIG. 6.—*Lodderia iota* n.sp. Holotype.  $0.55 \times 0.65$  mm.  
 FIG. 7.—*Lodderia waitemata* n.sp. Holotype.  $0.49 \times 0.51$  mm.  
 FIG. 8.—*Conjectura carinata* n.sp. Holotype.  $1.1 \times 1.1$  mm.  
 FIGS. 9 and 10.—*Cirsonella varicostata* n.sp. Holotype.  $0.6 \times 0.9$  mm.  
 FIG. 11.—*Lissotesta consobrina* n.sp. Holotype.  $0.85 \times 0.7$  mm.  
 FIG. 12.—*Lissotesta bicarinata* n.sp. Holotype.  $0.6 \times 0.75$  mm.  
 FIG. 13.—*Lissotesta oblata* n.sp. Holotype.  $0.63 \times 0.9$  mm.  
 FIGS. 14 and 15.—*Zerotula nummaria* n.sp. Holotype.  $0.5 \times 1.3$  mm.  
 FIGS. 16 and 17.—*Munditia anomala* n.sp. Holotype.  $0.45 \times 1$  mm.

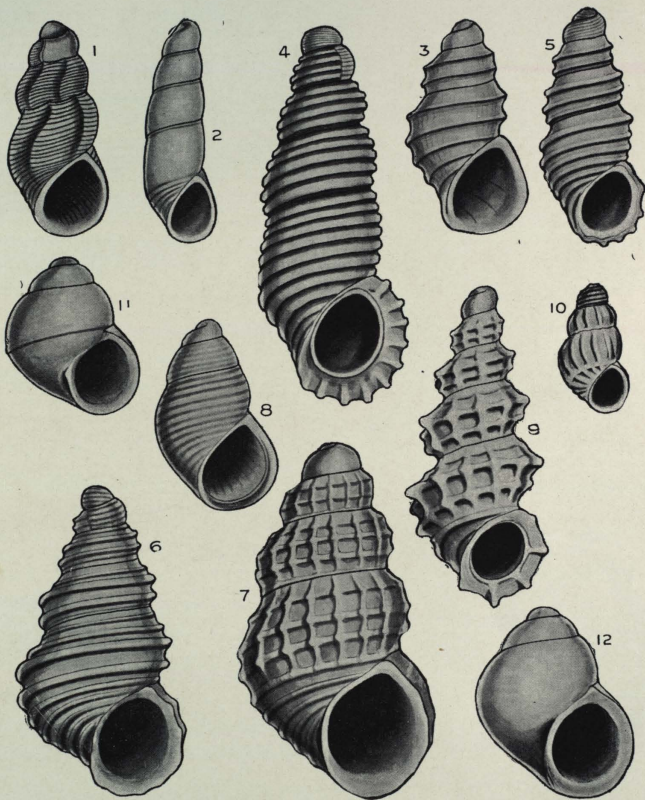






FIGS. 1 and 2.—*Zerotula ammonitoides* n.sp. Holotype.  $0.4 \times 1.35$  mm.  
 FIG. 3.—*Zerotula ramosa* n.sp. Holotype.  $0.45 \times 0.8$  mm.  
 FIG. 4.—*Mendar duplicarinata* n.sp. Holotype.  $4.25 \times 1$  mm.  
 FIG. 5.—*Ividella maoria* n.sp. Holotype.  $3.3 \times 1.3$  mm.  
 FIG. 6.—*Venustilifer secunda* n.sp. Holotype.  $1.65 \times 1.28$  mm.  
 FIG. 7.—*Opimilda maoria* n.sp. Holotype.  $3 \times 1.95$  mm.  
 FIG. 8.—*Brookula contigua* n.sp. Holotype.  $0.8 \times 1$  mm.  
 FIG. 9.—*Brookula lincta* n.sp. Holotype.  $0.9 \times 0.95$  mm.  
 FIGS. 10 and 11.—*Naricava (Tropidorbis) neozelanica* n.sp. Holotype.  $1.1 \times 2.3$  mm.  
 FIG. 12.—*Zeadmete finlayi* n.sp. Holotype.  $3 \times 1.8$  mm.  
 FIG. 13.—*Zeadmete aupouria* n.sp. Holotype.  $2.6 \times 1.65$  mm.





- FIG. 1.—*Austronoba obliquata* n.sp. Holotype.  $1.4 \times 0.6$  mm.  
 FIG. 2.—*Striatestea eulima* n.sp. Holotype.  $1.45 \times 0.5$  mm.  
 FIG. 3.—*Lironoba anomala* n.sp. Holotype.  $1.4 \times 0.9$  mm.  
 FIG. 4.—*Nobolira regis* n.sp. Holotype.  $2.5 \times 1$  mm.  
 FIG. 5.—*Nobolira contigua* n.sp. Holotype.  $1.58 \times 0.7$  mm.  
 FIG. 6.—*Nobolira affinis* n.sp. Holotype.  $2.05 \times 1.09$  mm.  
 FIG. 7.—*Linemera pinguoides* n.sp. Holotype.  $2.3 \times 1.3$  mm.  
 FIG. 8.—*Subonoba aupouria* n.sp. Holotype.  $1.25 \times 0.75$  mm.  
 FIG. 9.—*Promerellina lacunosa* n.sp. Holotype.  $2.1 \times 1$  mm.  
 FIG. 10.—*Scalaronoba secunda* n.sp. Holotype.  $0.85 \times 0.45$  mm.  
 FIG. 11.—*Notosetia subcarinata* n.sp. Holotype.  $1.1 \times 0.9$  mm.  
 FIG. 12.—*Notosetia crassilabrum* n.sp. Holotype.  $1.29 \times 1.09$  mm.



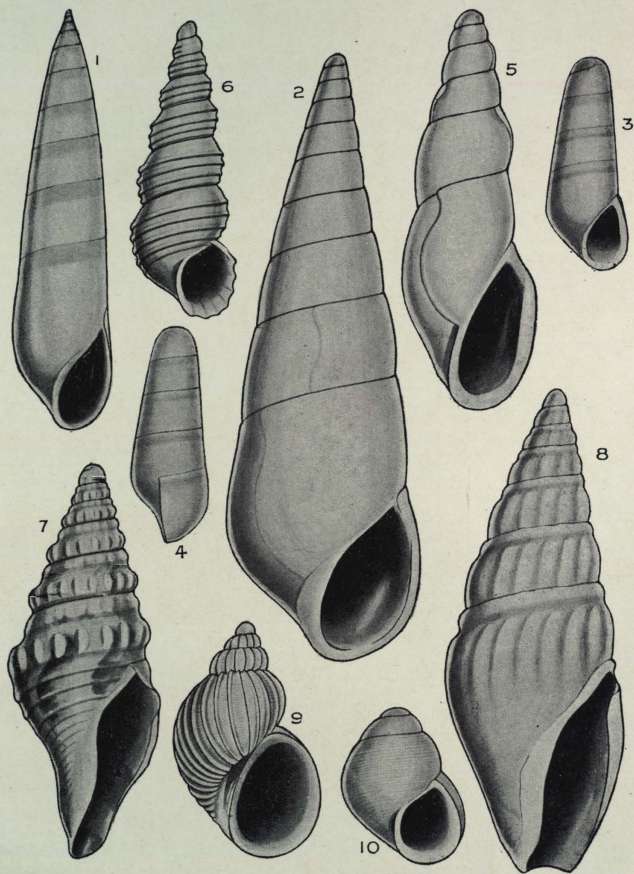


FIG. 1.—*Balcis pervegrandis* n.sp. Holotype.  $10.6 \times 2.5$  mm.  
 FIG. 2.—*Balcis maoria* n.sp. Holotype.  $19.5 \times 6.3$  mm.  
 FIGS. 3 and 4.—*Eulima manguica* n.sp. Holotype.  $1.1 \times 0.4$  mm.  
 FIG. 5.—*Chileutomia neozelanica* n.sp. Holotype.  $4.95 \times 1.6$  mm.  
 FIG. 6.—*Actis pseudopareora* n.sp. Holotype.  $3.15 \times 1.15$  mm.  
 FIG. 7.—*Micantapex angustatus* n.sp. Holotype.  $10.1 \times 4$  mm.  
 FIG. 8.—*Splendrillia larochet* n.sp. Holotype.  $16.5 \times 6.1$  mm.  
 FIG. 9.—*Zeradina (Kadinista) scalarina* n.sp. Holotype.  $2.7 \times 1.85$  mm.  
 FIG. 10.—*Notosetia multilirata* n.sp. Holotype.  $1 \times 0.75$  mm.



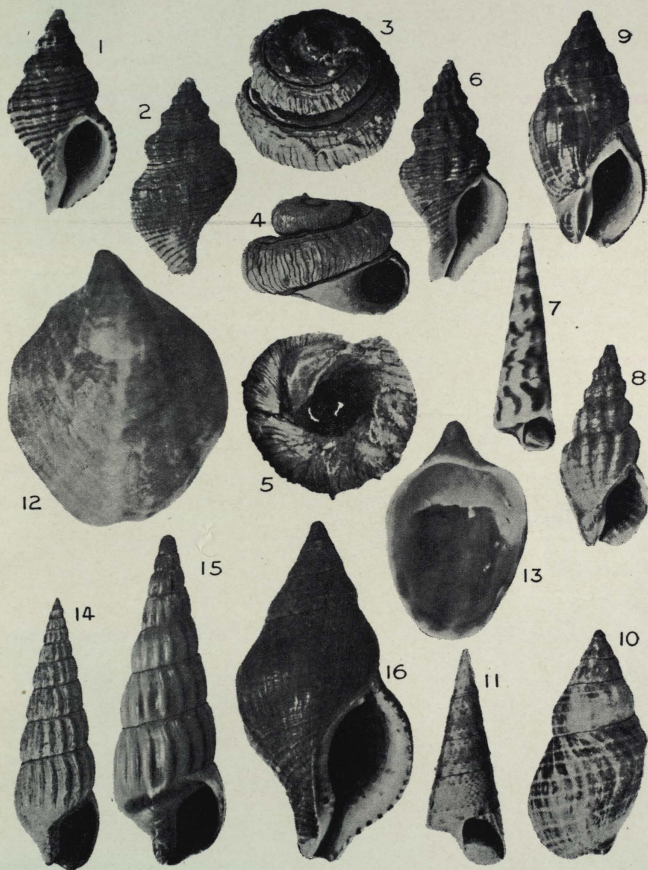




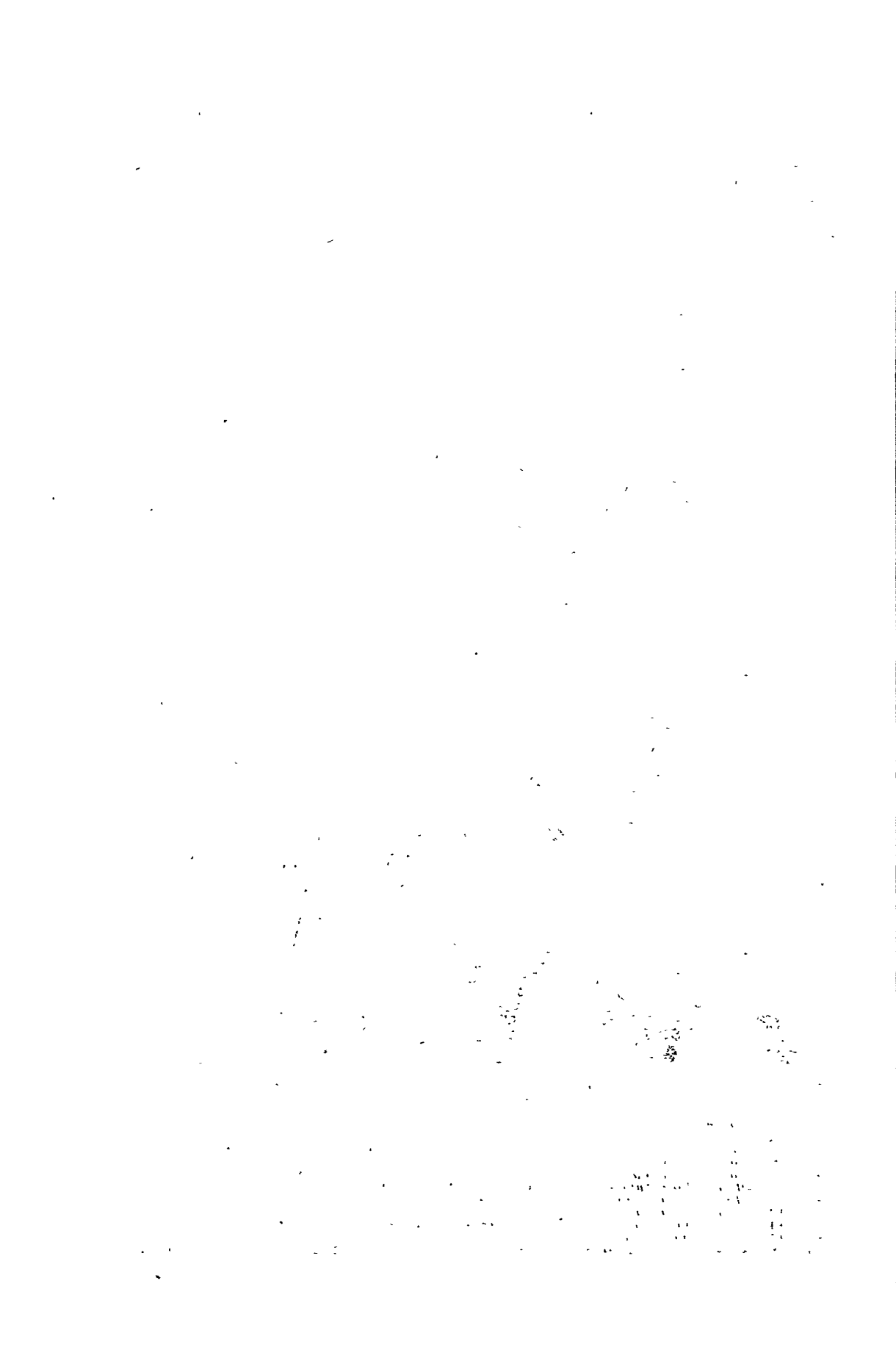
- FIG. 1.—*Zemitrella regis* n.sp. Holotype.  $3.7 \times 1.8$  mm.  
 FIG. 2.—*Zemitrella laevirostris* n.sp. Holotype.  $3.3 \times 1.35$  mm.  
 FIG. 3.—*Zemitrella fallax* n.sp. Holotype.  $3.1 \times 1.52$  mm.  
 FIG. 4.—*Zemitrella attenuata* n.sp. Holotype.  $4.4 \times 1.65$  mm.  
 FIG. 5.—*Macrozafra encrighii* n.sp. Holotype.  $3.8 \times 2$  mm.  
 FIG. 6.—*Macrozafra mariae* n.sp. Holotype.  $8.6 \times 4$  mm.  
 FIG. 7.—*Libratilla gracilis* n.sp. Holotype.  $4.2 \times 1.6$  mm.  
 FIG. 8.—*Aoteatilla larochei* n.sp. Holotype.  $3.3 \times 1.4$  mm.  
 FIG. 9.—*Nepotilla nitidula* n.sp. Holotype.  $2.45 \times 1.3$  mm.  
 FIG. 10.—*Nepotilla vera* n.sp. Holotype.  $1.9 \times 1.2$  mm.







- FIG. 1.—*Buccinulum (Euthrena) mariae* n.sp. Holotype.  $20 \times 10.75$  mm.  
 FIG. 2.—*Buccinulum (Euthrena) mariae* n.sp. Paratype.  
 FIGS. 3, 4, 5.—*Siliquaria maoria* n.sp. Holotype.  $11 \times 16$  mm.  
 FIG. 6.—*Taron mouatae* n.sp. Holotype.  $22 \times 10.5$  mm.  
 FIG. 7.—*Gazameda maoria* n.sp. Holotype.  $15.75 \times 4.25$  mm.  
 FIG. 8.—*Cominella (Cominula) quoyana* A. Adams. Takapuna, Auckland.  $19.5 \times 8.5$  mm.  
 FIG. 9.—*Cominella (Cominula) youngi* n.sp. Paratype.  
 FIG. 10.—*Cominella (Cominula) youngi* n.sp. Holotype.  $21.75 \times 10.5$  mm.  
 FIG. 11.—*Maoricolpus finlayi* n.sp. Holotype.  $14.4 \times 5.4$  mm.  
 FIG. 12.—*Maoricrypta youngi* n.sp. Holotype.  $27 \times 22 \times 8.5$  mm.  
 FIG. 13.—*Maoricrypta youngi* n.sp. Paratype.  
 FIG. 14.—*Pervicacia tristis* (Deshayes). Manukau Harbour.  $18.75 \times 5.75$  mm.  
 FIG. 15.—*Pervicacia mariae* n.sp. Holotype.  $22.5 \times 7.75$  mm.  
 FIG. 16.—*Buccinulum (Evarnula) multilineum aupaoria* n.subsp. Holotype.  $32.6 \times 16.5$  mm.



axials, strongest above where they coronate the shoulder, and weak over the base. Spire  $1\frac{1}{2}$  times height of aperture. Aperture narrow, sides subparallel, outer lip thin. Columella with two weak plaits.

Height, 3 mm.; diameter, 1.8 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: Off North Cape in about 60 fathoms.

The unique holotype is not adult, but the characteristics of the species are clearly apparent nevertheless.

***Zeadmete aupouria* n.sp.** Pl. 29, fig. 13.

Shell small, oval, turreted, with a narrow flat shoulder, weakly cancellated, pale buff. Protoconch large, smooth, dome-shaped, of  $1\frac{1}{2}$  whorls. Body-whorl sculptured with 20 low rounded linear spaced spiral cords, 7 on the penultimate and terminating at the smooth fasciole. There are 17 weak axial folds on the last whorl and they become obsolete over the base. Aperture narrowly ovate, outer lip thin. Columella with two weak plaits.

Height, 2.6 mm.; diameter, 1.65 mm. (holotype).

Holotype in writer's collection, Auckland Museum.

Locality: 140 fathoms off Three Kings Islands, New Zealand.

The two available specimens are not adult, but like the preceding represent a distinctive species readily recognisable.

#### TURRIDAE.

Genus *Splendrillia* Hedley, 1922.

Type: *Drillia woodsi* Beddome.

***Splendrillia larochei* n.sp.** Pl. 31, fig. 8.

Shell about the size of *aoteana* to slightly larger, somewhat different in details of sculpture and noticeably different in outline, contour of the base, and shape of aperture. Whorls  $7\frac{1}{2}$ , including a smooth convex protoconch of  $1\frac{1}{2}$  whorls. Spire whorls with a heavy rounded subsutural spiral fold, below which are subvertical strong rounded axial ribs, 14 on the penultimate, with narrow interspaces. On the body-whorl the axials do not extend over the base, there is no constriction of the base towards the fasciole, and the aperture is neither expanded above nor noticeably contracted below. Colour buff with a broad light brown band over the lower half of the whorls and a second one just above the fasciole (holotype). Two examples from off Awanui in 12 fathoms are purplish-pink with the bands slightly darker.

Height 16.5 mm.; diameter 6.1 mm. (Holotype)

Height 13.6 mm.; diameter 5.3 mm. (12 f., Awanui)

Height 13 mm.; diameter 5.1 mm. (12 f., Awanui)

Holotype in writer's collection, Auckland Museum.

Localities: 140 fathoms off Three Kings Islands; 12 fathoms off Awanui, Doubtless Bay (Mr. W. La Roche).

From *aoteana* and *debilis* the new species differs mainly in the less indented outline due to the heavy subsutural spiral fold and lack of basal constriction, in the shape of the aperture and the more vertical axials with narrower interspaces.

## Genus MICANTAPEX Iredale, 1936.

Type (o.d.) *Bathytoma agnata* Hedley and Petterd, 1906.

Turrids are notoriously difficult to classify owing to the large number of genera and the scarcity of the majority of the species, making the collection of a representative series of genotypes extremely difficult. As most generic determinations are of necessity based solely upon figures and descriptions, certain names have become mere conventional dumping grounds for ill-assorted species. In this respect *Bathytoma* has become a much-abused name in Australian and New Zealand systematics. Dr. H. J. Finlay, in his manuscript notes on Turrid genera, has pointed out that the Italian Pliocene genotype *Bathytoma cataphracta* Brocchi has a conical polygyrate and pointed protoconch, whereas most of the Austral shells so classified have a blunt rounded smooth protoconch of one or two whorls. A number of Recent Australian species of this type were accommodated in Hedley's *Epideira*, 1918, but owing to wrong localisation of the type (*striata*) the genus must be applied to an ill-defined species apparently from Western Australia, and the shell Hedley intended to typify his genus has been renamed *hedleyi* by Iredale (1931, *Rec. Austr. Mus.*, vol. 18, p. 225) and cited as type of a new genus *Epidirona*. While this genus covers most of Hedley's Australian species ascribed to *Epideira* the New Zealand *Bathytomas* and *Epideiras* still require attention. Actually, typical *Bathytoma* is represented in the New Zealand Tertiary by *Clavatula haasti* Hutton, 1877 (Mt. Harris), *Bathytoma mitchelsoni* Powell, 1935, *B. finlayi* Laws, 1939 (Clifden), and *B. bartrumi* Laws, 1939 (Pakaurangi Point). Neither *Epideira* nor *Epidirona* can be successfully applied in New Zealand nor can Iredale's *Epidirella* (1931, *op. cit.*, p. 226), type *Hemipleurotoma tasmanica* May, 1910, which has a two whorled narrow peg-like apex.

For a large series of undoubtedly congeneric Tertiary to Recent New Zealand Turrids superficially resembling *Epidirona* and *Bathytoma*, but with a blunt paucispiral protoconch it becomes necessary to use the obscurely published *Micantapex* Iredale, 1936 (*Rec. Aust. Mus.*, 19, p. 319), type *Bathytoma agnata* Hedley and Petterd, 1906, from 250 fathoms off Sydney. The genus has the build, sinus and sculpture of *Bathytoma*, and as far as can be judged from the figure, which shows only the lateral view of the shell, the canal is similar also. The genotype is known to me only from the original figure and description, but examination of other Australian material shows definitely that the Tertiary *rhomboidalis* Ten. Woods, *decomposita* Tate, and *fontinalis* Tate are congeneric with the New Zealand series I here assign to *Micantapex*. Possibly *pritchardi* Tate, which I have not seen, may belong here also.

To *Micantapex* as here interpreted belong seven Gisborne Tertiary species of Marwick, 1931, *pergracilis*, *filaris*, *praecisa*, *media*, *ngatapa*, *fortinodosa* and *tenuineta*, as well as the Nukumaruan *murdochi* Finlay, 1930 (= *Pleurotoma nodilirata* Murdoch and Suter, 1906, in part), the Waitotaran *Bathytoma hawera* Laws, 1940, and two Recent species described below.

*Epalxis* Cossmann, 1889, type *Pl. crenulata* Lamarek from Parisian Eocene, bears considerable resemblance to the narrow forms of *Micantapex*, having a similar apex, sinus and canal, but the sculpture is rather dissimilar.

***Micantapex angustatus* n.sp.** Pl. 31, fig. 7.

Shell narrowly fusiform, biconic, with nodulous keeled whorls. Spire same height as aperture plus canal. Whorls  $6\frac{1}{2}$ , including a blunt dome-shaped smooth protoconch of  $1\frac{1}{2}$  whorls. Spire whorls with a moderately strong nodulous subsutural swelling, a broad shallow concavity followed by a heavy rounded nodulous peripheral keel occupying most of the lower half of each whorl and then narrowly contracted underneath to the lower suture. On the base there are three narrow smooth raised wide-spaced spiral cords followed by ten closer-spaced very weak and indistinct threads fading out at the fasciole. The uppermost of the three basal cords is at the lower suture. The peripheral cord, and the subsutural one to a lesser extent, are ornamented with prominent laterally compressed slightly arcuate smooth nodules. The nodules number 16 on the penultimate. Linear spaced subsidiary spiral threads cover the spire-whorls, even between the peripheral nodules, but they become obsolete on the base. The apertural sinus is deep, with a squarish notch situated on the peripheral keel. Numerous sinuous axial lines of growth cover the whole shell. Aperture narrow, terminating in a moderately long open canal.

Colour buff, axially irregularly streaked with reddish-brown. Two distinct spiral brown bands on the body whorl, a broad one commencing just below the main keel and a narrower one above the fasciole.

Height, 10.1 mm.; diameter, 4 mm. (holotype).

Holotype in Auckland Museum.

Locality: 26 fathoms off Waikuku Beach, North Cape, N.Z., "Will Watch" Expedition, Feb., 1934.

Similar slender forms occur from 23 fathoms off Ahipara, 110 fathoms off the Great Barrier Island, and at Castlecliff (Upper Pliocene), Wanganui. These differ only in having the subsidiary striae crossing the nodules and in the uppermost of the upper three basal spirals being situated definitely above the lower suture. Individual variation exists to some extent, so with the small series available it is not advisable to recognise more than one narrow species. The broad Recent form from 110 fathoms off Great Barrier Island is, however, quite distinct from the Nukumaruan Mid-Pliocene *murdochi* Finlay. It has fewer peripheral nodules, 13–16 compared with 20–24 in *murdochi*, and the basal spirals are narrower and much wider spaced over the upper part of the base. This Recent species is well figured and described by Murdoch (1906, *Trans. N.Z. Inst.*, vol. 38, pl. 22, fig. 10) as *Pleurotoma (Hemipleurotoma) nodilirata* (nom. nov. for the Pliocene *tuberculata* Kirk, but preoccupied as shown by Finlay, 1930).

For the broad Recent species I now provide the name ***Micantapex finlayi* n.sp.** Holotype from 110 fathoms off Great Barrier Island in writer's collection, Auckland Museum. Height, 14.35 mm.; diameter, 7 mm.

Genus *NEPOTILLA* Hedley, 1918.

Type: *Daphnella bathytoma* Verco.

***Nepotilla vera* n.sp.** Pl. 32, fig. 10.

Shell minute, broadly fusiform, thin, turreted, uniformly golden-brown except for apical whorls which are dark reddish-brown. Sculptured with strong rounded spiral cords crossed by closely-spaced thin axials, gemmate at points of intersection. Whorls 4, including a typical large loosely-coiled pupoid protoconch of  $1\frac{1}{2}$  flat-sided whorls, sculptured with 10 spiral lines and terminated by a slight varix. Spire-whorls with two strong spiral cords and a weaker third just showing at the lower suture; on the base there are three more cords and four threads on the neck of the canal. The axials number 17 on the penultimate and 19 on the body-whorl. Spire about equal to height of aperture plus canal. Aperture with an extremely deep sutural sinus and a short open canal.

Height, 1.9 mm.; diameter, 1.2 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

The species is closely allied to *N. finlayi* (Powell, 1937, "Discovery" Reports, vol. 15, p. 217, pl. 56, fig. 8) from off Three Kings Islands in 260 metres.

***Nepotilla nitidula* n.sp.** Pl. 32, fig. 9.

Shell minute, narrowly fusiform, thin, weakly shouldered, light golden-brown above, body-whorl creamy buff. Sculptured with moderately strong rounded spiral cords crossed by closely-spaced thin axials, gemmate at points of intersection. Whorls 5, including typical protoconch as in preceding species. Spire-whorls with four subequal equispaced cords; on the base there are four more cords and five strong threads on the neck of the canal. The axials number 16 on the penultimate and 18 on the body-whorl. Spire equal to height of aperture plus canal. Aperture as in preceding species.

Height, 2.45 mm.; diameter, 1.3 mm. (holotype).

Holotype in Auckland Museum.

Locality: Tom Bowling Bay, Northern N.Z. (in shell-sand).

#### TEREBRIDAE.

Genus *PERVICACIA* Iredale, 1924.

Type: *Terebra ustulata* Deshayes.

***Pervicacia mariae* n.sp.** Pl. 33, fig. 15.

This Cape Maria van Diemen shell has been confused with Suter's *crassicostata* which was based upon a Lyall Bay shell diagnosed as differing from *tristis* in smaller size and in having stouter axial costae. Examination of the type and a series of topotypes shows that Lyall Bay shells are indistinguishable from *tristis* and that the name *crassicostata* must be included in the synonymy of that species.

The Cape Maria species is larger than *tristis* and proportionately much broader, resulting in a wider, more squarish, aperture. The axial ribbing also is bolder and the costae are fewer per whorl. In

*tristis* the penultimate has 21–24 costae, while in the new species they do not exceed 17. All the available specimens are somewhat bleached dead shells, but the coloration of fresh examples would appear to be almost identical with that of *tristis*, i.e., a broad spiral band of dark brown on the spire whorls and a narrower one on the base, leaving the pale ground colour as a narrow subsutural and a peripheral band.

Height 22.5 mm.; diameter 7.75 mm. (*mariae* holotype)

Height 19.5 mm.; diameter 6.5 mm. (*mariae* paratype)

Height 16.0 mm.; diameter 5.5 mm. (*mariae* paratype)

Height 15.1 mm.; diameter 4.9 mm. (*tristis*)

Height 17.1 mm.; diameter 5.0 mm. (*tristis*)

Holotype in Dr. H. J. Finlay collection, Auckland Museum.

Locality: Cape Maria van Diemen (holotype); off Pandora Beach in 20 fathoms; 40 fathoms off Maunganui Bluff, West Coast, N.Z.

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