RECORDS OF THE AUCKLAND MUSEUM

VOLUME 54 | 2019

Tāmaki
Paenga Hira
Auckland
War Memorial
Museum

Fossil and Recent molluscan types in the Auckland War Memorial Museum. Part 3: Gastropoda (Patellogastropoda and Vetigastropoda)

Wilma M. Blom Auckland War Memorial Museum

Abstract

The Marine Department of Auckland War Memorial Museum has an actively growing type collection with over 1770 primary types and a further 1836 paratypes and paralectotypes. The majority are molluscan, and this third part of a catalogue of these collections reviews the types for 12 Patellogastropoda and 184 Vetigastropoda species and subspecies. It deals with 130 primary types and 142 secondary type lots, which are split between 140 Recent taxa and 56 fossil taxa. Eleven of the holotypes reviewed here are illustrated for the first time.

Keywords

Auckland Museum; name-bearing types; Mollusca; Patellogastropoda; Vetigastropoda.

INTRODUCTION

The Marine Department of Auckland War Memorial Museum (Auckland Museum) holds over 1770 lots of name-bearing types, in the form of holotypes, neotypes, syntypes and lectotypes, and a further 1836 paratypes and paralectotypes. These are spread across several Phyla, but the great majority are Mollusca. They include terrestrial Mollusca as well as marine species, and fossil as well as extant taxa.

Auckland Museum's first list of biological primary types, which included the molluscs, was published by Powell (1941) and he followed this with a supplement in 1949 (Powell, 1949). The present publication is Part 3 of an updated and expanded catalogue and covers the Patellogastropoda and Vetigastropoda. See Blom (2016) for Part 1, which deals with the Bivalvia, and Blom (2017) for Part 2, which deals with the Polyplacophora and Scaphopoda. Part 3 deals with 130 primary types and 142 secondary type lots representing 12 limpet species and 184 vetigastropod species. These are split between Recent (140) and fossil (56) taxa. The majority are from New Zealand (182), but there are also species from Bouvet Island (1), Falkland Islands (2), Fiji (1), Marion Island (1), Solomon Islands (1), South Georgia (3), Tasman Sea (1), Ukraine (1), Unites States of America (2) and Western Samoa (1).

COMPLEXITIES

As with any museum collection there are inherent limitations to records relating to data quality and data gaps. Record-keeping systems and standards change over

time, and those used by early curators are often vastly different from modern systems and methodologies. For example, many early collectors, curators included, did not record collection dates. So, many early specimens lack this information and the only way to get indicative collecting dates is if it is known when – and where – their respective collectors were active.

The bulk of early marine-related specimens were recorded in a register of acquisitions started by T.F. Cheeseman (1874–1923). However, in 1929, when Auckland Museum moved to its present site in Auckland Domain, more specialised curatorial positions became available and with this the pace of collecting stepped up (Powell *et al.* 1967). After that, the responsibility of registering scientific specimens devolved to each of the separate departments, which all appear to have had slightly different systems in place.

A.W.B. Powell, appointed in 1929 as Auckland Museum's first Conchologist and Palaeontologist, maintained a register of acquisitions (Blom 2016). He also had a series of card-files, amongst which were separate files for the type collections, the general molluscan collections, his personal scientific library, reference literature, taxonomic information for molluscan taxa, as well as one for his beloved Turridae.

Much of this legacy data has now been digitised as part of Auckland Museum's relational database management system, but this process may have generated errors. Errors in transcription of handwriting, confusions about old place names and collectors' names are but a few.

Early specimen lots often have a series of labels, which can show their progression from field collecting to incorporation into the Museum's collections. However,

Figure 1. a. labels with the holotype of *Arthritica bifurca* (Webster, 1908). It was donated by the Rev. Webster in 1929 as shown by the middle label, written by A.W.B. Powell, which records the registration number followed by the year (326/29); b. labels with the holotype of *Lissotesta oblata* Powell, 1940. The third label, written by Powell, has 'coll.' as postscript indicating that the specimen originally came from the collection of H.J. Finlay; c. the second label has 'coll.' preceding the proper noun, denoting that the specimen came directly from the collector; d. labels with the holotype of *Scutellastra tucupiana*, with Powell's label recording the Rev. J.L.A. Kayll as its collector in 1922

as lots were frequently gifted, swapped, or traded amongst both professional and amateur shell collectors, labels may have been kept, replaced or lost at any point and so any remaining labels may or may not be a flawed record of these activities.

Another problem is in the attribution of specimens to collectors. Particularly with the move in 1929 to the new building in The Domain, Auckland Museum was the recipient of private conchology collections from people, such as the Rev. W.H. Webster (Fig. 1a), who were keen to help grow its holdings. Original labels were transcribed by A.W.B. Powell, who usually annotated them with the name of the original donor and/or collector. His format was to use 'coll.' ahead of the name to indicate the collector of the specimen, and to use 'coll,' after the name to indicate when he/she was the donor of the collection (Figs 1b, c). This has led to subsequent transcription errors when the collector was conflated with the donor. Transcription of information onto non-standardised printed labels prior to digitization in the 1990s sometimes led to further confusion between the classifier of the specimen, the field collector, owner of a collection, or transcriber of the information.

There are a number of specimen lots throughout Auckland Museum's Marine Collections (including type lots in this paper: MA70417; MA71554; MA70112; MA71555; MA72083; MA70106; MA71565), which were all collected from either 98 fathoms or 100 fathoms 'off Great Island, Three Kings Islands'. None has a collection date, but they most likely came from material dredged in 1914 by Captain John Bollons, from 98 fathoms, 15'S of Big King, Three Kings Group. Bollons gave the material to Marjorie Mestayer and her father Richard (Mestayer 1916), and while the latter used it to extract Foraminifera (Hayward 2012), the former identified many of the molluscs, including a figured one as *Brookula* sp. This was later selected by Finlay (1926a) as the type specimen of *Brookula prognatha* (holotype M.001748 at MONZ). Auckland Museum bought Finlay's collection in 1937, and many of the presumed Bollons specimens are accompanied by labels in Finlay's hand-writing – it appears that he changed the figure of 98 fathoms to a rounded 100 fathoms. Mestayer gave both specimens (>100) and bulk lots of shell sand (46) to A.W.B. Powell (Hayward & Morley 2011) all of which are still housed in Auckland Museum's Marine Department.

METHODS

Within the currently accepted family placement, taxa are here listed alphabetically under their original name first by genus and then by species.

For most of the Recent New Zealand species a combination of Spencer *et al.* (2016) and MolluscaBase (2019) was used for the taxonomic order, family placements and current names. This was also the major reference for foreign species. MolluscaBase records were accessed through World Register of Marine Species (WORMS 2019) for the relevant species entries. Taxonomic placement, current names and ages for New Zealand Cenozoic fossil taxa are taken from a combination

of Maxwell (in Spencer *et al.* 2009), Beu & Maxwell (1990), Beu & Raine (2009) and MolluscaBase (2019).

All specimens listed here were sighted and cross-checked against original publications, apart from one holotype and five paratypes, which appear to be missing. These are marked with an asterisk (*). Fossil taxa are indicated by a dagger (†) and their ages have been included as international periods followed by the equivalent New Zealand stage in parentheses. Geochronological subdivisions used in original papers have in many cases been superseded by new nomenclature and their boundaries revised. For the currently accepted New Zealand timescale and formats see Raine *et al.* (2015).

Type definitions are those used by the International Code of Zoological Nomenclature (ICZN 2019).

Paratypes have been included in this catalogue, because in some instances the name-bearing type is not readily available (e.g. because it is missing, affected by glass disease, or held outside New Zealand). It is therefore useful to know that some of the type series is available within New Zealand.

Of the gastropod species reviewed here 11 were not originally figured, and for these, high-resolution images created with automontage focus stacking techniques are provided. High-resolution images for many of the other primary types may be accessed through Auckland Museum's Collections Online (<http://www.aucklandmuseum.com/collections-research/collections>).

Additional data not shown here may be held with each accession record (e.g. precise site details).

ABBREVIATIONS

NMNH	Muséum National d'Histoire Naturelle, Paris, France
MONZ	Museum of New Zealand, Te Papa Tongarewa, Wellington, New Zealand
GNS	GNS Science, Wellington, New Zealand
USNM	United States National Museum of Natural History, Smithsonian Institution, Washington (D.C.) USA
NHM	Natural History Museum, London, United Kingdom
CM	Canterbury Museum, Christchurch, New Zealand
AUG	Auckland University Geological Collections, Auckland University, Auckland, New Zealand

Class GASTROPODA

Subclass PATELLOGASTROPODA

PATELLIDAE

†*Scutellastra cooperi* Powell, 1938

Powell, A.W.B., 1938a, p. 379, pl. 39, fig. 14 (holotype), fig. 13 (paratype).

Holotype: MA70706, incomplete specimen, collected by C. Cooper from Early Miocene (Otaian) Cape Rodney Formation, 200 m east of Nga Taikorapa, Motuihe Island, Auckland, New Zealand.

Paratype: MA72420, from the type locality.

Current name: *Scutellastra cooperi* Powell, 1938 – **Maxwell in:** Spencer *et al.* (2009: 239).

***Scutellastra tucopiana* Powell, 1925**

Powell, A.W.B., 1925, pp. 169–170 (figured, no plate number).

Holotype: MA72139, here accepted to have been collected by the Rev. J.L.A. Kayll in 1922, from a reef on Tikopia Island, Temotu Province, Solomon Islands.

Paratype: MA71405, from the type locality.

Remarks: The holotype and paratype are the only specimens known of the species and there is a suspicion they are wrongly labelled. The specific name is taken from Tikopia, (spelled by Powell as Tucopia), which is the southernmost island in the Temotu Province of the Solomon Islands. Culturally its people are Polynesian (Wikipedia 2019) while geographically it is in Melanesia, and it has had a long association with New Zealand through the activities of the Melanesian Mission. Powell (1925) recorded the collector as J.L.A. Kayll 1922 (Fig. 1d) and in his type description stated that ‘During a recent visit to Tucopia Island, Melanesia, the Rev. J.L.A. Kayll, of the Melanesian Mission, obtained from a native two specimens of a large, handsome limpet, of the genus *Scutellastra*, which were stated to have been found alive on an adjacent reef.’

In 2012 Dr Philippe Bouchet (NMNH) indicated that the species was on his radar of ‘possibly extinct’ marine species as it has not been collected since Powell’s (1925) original description (Bouchet pers. comm. 2012). As the types are the only two specimens and there are no records of giant limpets from archaeological excavations in Tikopia he also suggested they did not originate from there. If so, then *Scutellastra tucopiana* could be synonymous with a giant limpet from elsewhere in the world.

From comparisons with specimens held in the Auckland Museum collections the taxon appears to be closest to the south west Australian *Scutellastra laticostata*. However, a comparison of the paratype with specimens held at Museum of Western Australia, Perth, proved inconclusive.

From 1896 until his death in 1944, the Rev. J.L.A. Kayll was a Diocesan Chaplain of the Anglican Church in parishes all over New Zealand (Derbyshire 2006). Apart from being an Anglican minister, criminologist and prison reformer (Te Ara 2019), records show that the Rev. Kayll was also directly involved with the Church’s Melanesian Mission as its Organising Secretary, probably for several years from 1919 (Steward 1919). While those same records fail to mention him ever having travelled to Melanesia himself, he was involved in the commissioning of a promotional film of the region for the Melanesian Mission (Ramage 2015). A letterbook (MS-187) of the period, held in Auckland Museum Archives on behalf of the Mission, contains dozens of copies of letters signed by Kayll, some of which reference his having contracted malaria (letters 9 and 12 June 1922), and watercolours painted by him of ‘the islands’ (letter 12 June 1922).

In addition, there are a further eight specimens, almost all *Placostylus* species, in Auckland Museum’s

collections which are attributed to the Rev. Kayll as the collector. They are all from the Solomon Islands, and where collection dates are recorded, these are 1922 and 1924. It therefore seems quite plausible that J.L.A. Kayll did visit the Solomon Islands, and that he obtained the specimens of *Scutellastra tucopiana* while in Tikopia.

Current name: *Scutellastra tucopiana* Powell, 1925 – MolluscaBase (2019).

NACELLIDAE

***Cellana pricei* Powell, 1973**

Powell, A.W.B., 1973, p. 155, pl. 128 (holotype, paratype).

Holotype: MA71337, collected by L. Price in 1964, from black volcanic rocks at half-tide, Upolo, near Apia, Western Samoa.

Current name: *Cellana pricei* Powell, 1973 – MolluscaBase (2019).

***Cellana strigilis bollonsi* Powell, 1955**

Powell, A.W.B., 1955, p. 73, pl. 5, fig. 51 (holotype), figs 52, 53 (paratypes).

Holotype: MONZ M.008560

Paratypes: MA72381, two specimens, collected by W.R.B. Oliver in April 1927, from the Antipodes Islands, New Zealand.

Remarks: In Powell (1955) the figure numbers given at the start of the description are incorrect and relate to *Cellana strigilis oliveri* and *vice versa*.

Current name: *Cellana oliveri* Powell, 1955 – Spencer *et al.* (2016).

***Cellana strigilis flemingi* Powell, 1955**

Powell, A.W.B., 1955, pp. 72, 73, pl. 5, fig. 45 (holotype), figs 46, 47 (paratypes).

Holotype: GNS TM600

Paratypes: MA72380, eight specimens, collected by C.A. Fleming on 27 November 1947 from the high intertidal at the ‘boat harbour’, The Snares, New Zealand.

Current name: *Cellana strigilis* (Hombron & Jacquinot, 1841) – Spencer *et al.* (2016).

***Cellana strigilis oliveri* Powell, 1955**

Powell, A.W.B., 1955, pp. 73, 74, pl. 5, fig. 48 (holotype), figs 49, 50 (paratypes).

Holotype: MONZ M.008565

Paratype: MA72382*, collected by W.R.B. Oliver in April 1927, from the Bounty Islands, New Zealand.

Remarks: In Powell (1955) the figure numbers given at the start of the description are incorrect and relate to *Cellana strigilis bollonsi* and *vice versa*.

* this specimen has not been sighted since at least 1993.

Current name: *Cellana oliveri* Powell, 1955 – Spencer *et al.* (2016).

***Cellana vitiensis* Powell, 1973**

Powell, A. W. B., 1973, pp. 158, 159, pl. 129, figs 1, 2; pl. 132, fig. 2.

Holotype: USNM 5839

Paratypes: MA71898, three shells and two dried animals,

collected by W. Cernohorsky on 4 October 1963 from under rocks at high tide level, Viti Levu Bay, north eastern Viti Levu, Fiji.

Current name: *Cellana vitiensis* Powell, 1973 – MolluscaBase (2019).

LOTTIIDAE

Actinoleuca campbelli bountyensis Powell, 1955

Powell, A.W.B., 1955, p. 65, pl. 1, fig. 9.

Holotype: MA71208, collected from 91 m (50 fathoms), Bounty Islands, New Zealand.

Remarks: The only information with this specimen is that it came from Bounty Islands, was collected at 50 fathoms, and came to Auckland Museum in 1937 as part of the H.J. Finlay Collection. In his introduction, Powell (1955) gave an inventory of material examined, which included a reference to dredgings made off the Bounty Islands at 50 fathoms by Captains J. Fairchild and J. Bollons in the period 1890–1907. Powell stated that this material was “distributed in collections in Auckland and Canterbury Museums, New Zealand Geological Survey, Wellington (Suter collection), and the Powell collection, Auckland”. Given the connections between early collectors, it seems plausible that Finlay was also the recipient of some of this material and that therefore his specimen was collected by either Fairchild or Bollons during this period.

Current name: *Actinoleuca campbelli bountyensis* Powell, 1955 – Spencer *et al.* (2016).

Atalacmea multilinea Powell, 1934

Powell, A.W.B., 1934a, p. 154, pl. 21, figs 1, 3 (holotype).

Holotype: MA70051, collected by A.W.B. Powell in January 1928 at low tide from the underside of stones, Katiki Beach, Otago, New Zealand.

Paratypes: MA71647, three specimens, from the type locality.

Remarks: Powell (1934) stated that it was collected by him in January 1928, but a label in his hand, before the species was named, has *Atalacmea* n.sp. A.W.B.P. 1927.

Current name: *Atalacmea multilinea* Powell, 1934 – Spencer *et al.* (2016).

†*Notoacmea (Parvacmea) chattonensis* Laws, 1932

Laws, C.R., 1932, p. 187, pl. 32, fig. 47 (holotype).

Holotype: MA70527, collected by C.R. Laws in 1930 from the Late Oligocene (Duntroonian) Chatton Shellbed, Shell Gully, Chatton, Southland, New Zealand.

Paratypes: MA72818, two specimens, from the type locality.

Current name: *Notoacmea chattonensis* Laws, 1932 – Maxwell in: Spencer *et al.* (2009: 239).

†*Notoacmea (Parvacmea) nukumaruensis* Oliver, 1926

Oliver, W.R.B., 1926, pp. 575, 576, pl. 99, fig. 3.

Holotype: MA70528, collected from the Early Pleistocene (Nukumaruan) Nukumar Brown Sand, 7 km south east of Waiinu Beach, near the site of the former ‘Nukumar boat-landing’, Manawatu-Whanganui, New Zealand.

Current name: *Notoacmea nukumaruensis* Oliver, 1926 – Maxwell in: Spencer *et al.* (2009: 239).

Acmaea intermedia Suter, 1907

Suter, H., 1907, p. 316, 317, pl. 27, figs 6–8.

Paratypes: MA27663, three specimens collected by Captain J. Bollons, from 91 m (50 fathoms), off Bounty Islands, New Zealand.

Current name: *Radiacmea intermedia* (Suter, 1907) – MolluscaBase (2019).

Subclass VETIGASTROPODA LEPETELLIDAE

Tectisumen finlayi Powell, 1937

Powell, A.W.B., 1937, p. 189, pl. 49, figs 6, 7 (holotype).

Holotype: NHM 1962991

Paratype: MA72282, a single specimen, collected by A.W.B. Powell in 1932 from the type locality, station 934, R.R.S. Discovery II cruise, in 92 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Tecticrater finlayi* (Powell, 1937) – Spencer *et al.* (2016).

Tectisumen subcompressa Powell, 1937

Powell, A.W.B., 1937, pp. 188, 189, pl. 49, figs 4, 5 (holotype).

Holotype: NHM 1962990

Paratypes: MA72281, three specimens, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: All specimens affected by glass disease.

Current name: *Tecticrater subcompressus* (Powell, 1937) – Spencer *et al.* (2016).

SCISSURELLIDAE

Schismope iota Finlay, 1926

Finlay, H.J., 1926a, pp. 340, 341, not figured.

Holotype: MA70693, **Figures 2a, b**, collected from 91 m (50 fathoms) from The Snares, New Zealand.

Paratypes: MA72519, seven specimens, from the type locality.

Remarks: All specimens affected by glass disease.

Current name: *Sinezona iota* (Finlay, 1926) – Spencer *et al.* (2016).

†*Schismope koruahina* Laws, 1936

Laws, C.R., 1936, pp. 100, 101, pl. 15, figs 45–47 (holotype).

Holotype: MA70694, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Remarks: The holotype is badly affected by glass disease.

Current name: *Sinezona koruahina* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 239).

Schismope laqueus Finlay, 1926

Finlay, H.J., 1926a, p. 340, pl. 19, figs 30, 31 (holotype).

Holotype: MA70695, collected from 91 m (50 fathoms) from The Snares, New Zealand.

Remarks: The holotype is affected by glass disease.

Current name: *Sinezona laqueus* (Finlay, 1926) – Spencer *et al.* (2016).

Figure 2. *a, b.* *Schismope iota* Finlay, 1926, holotype, apertural and oblique views, the latter showing the slit; *c, d.* *Schismope lyallensis* Finlay, 1926, holotype, apertural and oblique views, the latter showing the slit; *e, f.* *Argalista impervia* Finlay, 1930, holotype, apertural and abapertural views; *g.* *Argalista kaiparaensis* Finlay, 1930, holotype, apertural view; *h, i.* *Argalista leniumbilicata* Laws, 1935, holotype, apertural and abapertural views; *j, k.* *Argalista nana* Finlay, 1930, holotype, apertural and abapertural views; *l, m.* *Herpetopoma mariae* Finlay, 1930, holotype, apertural and abapertural views. Unless otherwise stated, scale bars 0.4 mm.

***Schismope lyallensis* Finlay, 1926**

Finlay, H.J., 1926a, p. 340, not figured.

Holotype: MA70696, **Figures 2c, d**, from shell sand, Lyall Bay, Wellington, New Zealand.

Paratype: MA73331, a single specimen, from the type locality.

Remarks: Both specimens affected by glass disease.

Current name: *Sukashitrochus lyallensis* (Finlay, 1926) – Spencer *et al.* (2016).

†***Schismope ngatutura* Laws, 1936**

Laws, C.R., 1936, p. 100, pl. 15, figs 43, 44 (holotype).

Holotype: MA70697, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Remarks: The holotype is badly affected by glass disease.

Current name: *Sukashitrochus ngatutura* (Laws, 1936) – Maxwell in: Spencer *et al.* (2009: 239).

†***Scissurella apudornata* Laws, 1935**

Laws, C.R., 1935, p. 30, pl. 5, fig. 1 (holotype).

Holotype: MA70700, collected from the Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Remarks: In March 2009 only a jumble of amorphous white crystals, along with small salt-like grains, were found inside the cut-glass tube in which the specimen had been stored. As the sole known specimen of this species appears to have been destroyed by glass disease, the figure of the type in Laws (1935, fig. 1) must now stand as the iconotype.

Current name: *Scissurella apudornata* Laws, 1935 – Maxwell in: Spencer *et al.* (2009: 239).

***Scissurella bountyensis* Powell, 1933**

Powell, A.W.B., 1933a, pp. 34, 35, pl. 6, figs 1, 2 (holotype).

Holotype: CM M5318

Paratypes: MA72370, four specimens, collected by Captain J. Fairchild in 1893, from 310 m (170 fathoms), from Bounty Islands, New Zealand.

Remarks: All specimens have been affected by glass disease.

Current name: *Scissurella bountyensis* Powell, 1933 – Spencer *et al.* (2016).

***Scissurella fairchildi* Powell, 1933**

Powell, A.W.B., 1933a, p. 34, pl. 6, figs 3, 4 (holotype).

Holotype: CM M5316

Paratype: MA72369, 12 specimens, collected by Captain J. Fairchild in 1893, from 310 m (170 fathoms), from Bounty Islands, New Zealand.

Remarks: All specimens have been affected by glass disease.

Current name: *Scissurella prendrevillei* Powell, 1933 – Spencer *et al.* (2016).

***Scissurella manawatawhia* Powell, 1937**

Powell, A.W.B., 1937, pp. 175, 176, pl. 49, fig. 1 (holotype).

Holotype: NHM 1962951

Paratypes: MA72217, four specimens, collected by

A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: All specimens have been affected by glass disease.

Current name: *Scissurella manawatawhia* Powell, 1937 – Spencer *et al.* (2016).

***Scissurella prendrevillei* Powell, 1933**

Powell, A.W.B., 1933b, p. 193, pl. 33, fig. 6 (holotype).

Holotype: MA70701, collected by A.W.B. Powell and/or C.A. Fleming in February 1933, from 18 m (10 fathoms) off Owenga Beach, Rēkohu/Chatham Islands, New Zealand.

Paratype: MA71530, a single specimen, from the type locality.

Remarks: Both specimens have been affected by glass disease.

Current name: *Scissurella prendrevillei* Powell, 1933 – Spencer *et al.* (2016).

***Sinezona pauperata* Powell, 1933**

Powell, A.W.B., 1933b, p. 193, pl. 33, fig. 4 (holotype), fig. 5 (paratype).

Holotype: MA70710, collected by A.W.B. Powell and/or C.A. Fleming in February 1933, from 18 m (10 fathoms) off Owenga Beach, Rēkohu/Chatham Islands, New Zealand.

Remarks: According to an original label with the specimens both the holotype and the figured paratype were stored together in the same cut-glass tube. In March 2009 only two amber-coloured grains, along with small salt-like grains, were found inside the tube. No other remains were visible and it is assumed that both the holotype and paratype were destroyed by glass disease. No other specimens of this species are held in Auckland Museum's collections.

Current name: *Sinezona pauperata* Powell, 1933 – Spencer *et al.* (2016).

LAROCHEIDAE

***Larochea miranda* Finlay, 1927**

Finlay, H.J., 1927, p. 486, pl. 24, figs 6–8 (holotype).

Holotype: MA70386, dredged by W. La Roche from 22 m (12 fathoms) in Rangaunu [Awanui] Bay, Northland, New Zealand.

Paratypes: MA72305, 15 specimens, from the type locality.

Current name: *Larochea miranda* Finlay, 1927 – Spencer *et al.* (2016).

***Larochea secunda* Powell, 1937**

Powell, A.W.B., 1937, pp. 207, 208, pl. 50, fig. 7 (holotype).

Holotype: NHM 19621044

Paratypes: MA72286, six specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Larochea secunda* Powell, 1937 – Spencer *et al.* (2016).

ANATOMIDAE

***Schizotrochus aupouria* Powell, 1937**

Powell, A.W.B., 1937, p. 176, pl. 49, fig. 3 (holotype).

Holotype: NHM 1962952

Paratype: MA72218, a single specimen, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: The specimen has been affected by glass disease.

Current name: *Anatoma aupouria* (Powell, 1937) – Spencer *et al.* (2016).

***Schizotrochus finlayi* Powell, 1937**

Powell, A.W.B., 1937, p. 176, pl. 49, fig. 2 (holotype).

Holotype: NHM 1962953

Paratype: MA72219, a single specimen, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 934, R.R.S. Discovery II cruise, in 92 m off Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: The specimen has been affected by glass disease.

Current name: *Anatoma finlayi* (Powell, 1937) – Spencer *et al.* (2016).

HALIOTIDAE

†*Haliotis flemingi* Powell, 1938

Powell, A.W.B., 1938a, pp. 377, 378, pl. 39, fig. 18 (holotype).

Holotype: MA70349, collected by C.A. Fleming in 1934 from the Early Miocene (Otaian) Bostaquet Member of the Cape Rodney Formation on the east side of Bostaquet Bay, Kawau Island, New Zealand.

Current name: *Haliotis flemingi* Powell, 1938 – MolluscaBase (2019).

***Haliotis sorenseni* Bartsch, 1940**

Bartsch, P., 1940, pp. 50, 51, pl. 6.

Holotype: USNM 535688

Paratype: MA73099, a single specimen, collected by an abalone diver in September 1939, from 18 m (10 fathoms), slightly south of Point Conception, California USA.

Current name: *Haliotis sorenseni* Bartsch, 1940 – MolluscaBase (2019).

***Haliotis virginea morioria* Powell, 1938**

Powell, A.W.B., 1938b, pp. 165, 166, pl. 40 fig. 1 (holotype), fig. 2 (paratype).

Holotype: MA70350, collected from Owenga, Rēkohu/Chatham Islands, New Zealand.

Remarks: Powell (1938) also allocated two paratype specimens, but these are no longer identifiable within Auckland Museum collections.

Current name: *Haliotis virginea morioria* Powell, 1938 – MolluscaBase (2019).

†*Haliotis (Euhaliotis) mathesonensis* Eagle, 1996

Eagle, M.K., 1996, pp. 161–163, figs 2–6 (holotype).

Holotype: MA72925, collected by M.K. Eagle on 15 February 1996, from the Early Miocene (Otaian) Cape

Rodney Formation at Mathesons Bay, Auckland, New Zealand.

Current name: *Haliotis mathesonensis* Eagle, 1996 – MolluscaBase (2019).

†*Haliotis (Marinauris) hokiangaensis* Eagle, 2002

Eagle, M.K., 2002, pp. 25–30, figs 7–10 (holotype).

Holotype: MA73252, collected from the Early Miocene (Otaian) Waititi Formation, Otaua Group, Matihetihe Hill, Mitimiti, Northland, New Zealand.

Current name: *Haliotis hokiangaensis* Eagle, 2002 – Maxwell in: Spencer *et al.* (2009: 239).

†*Haliotis (Marinauris) matihetihensis* Eagle, 1999

Eagle, M.K., 1999, pp. 47–51, figs 2–5 (holotype).

Holotype: MA73135, collected by M.K. Eagle on 29 September 1996, from the Early Miocene (Otaian) Waititi Formation, Otaua Group, Matihetihe, Mitimiti, Northland, New Zealand.

Current name: *Haliotis matihetihensis* Eagle, 1999 – MolluscaBase (2019).

†*Haliotis (Notohaliotis) waitemataensis* Powell, 1938

Powell, A.W.B., 1938a, p. 377, pl. 39, fig. 19 (holotype).

Holotype: MA72068, collected by A.W.B. Powell from the Early Miocene (Otaian) Bostaquet Member of the Cape Rodney Formation on the east side of Bostaquet Bay, Kawau Island, New Zealand.

Current name: *Haliotis waitemataensis* Powell, 1938 – MolluscaBase (2019).

FISSURELLIDAE

†*Emarginula haweraensis* Powell, 1931

Powell, A.W.B., 1931a, pp. 96, 97, pl. 11, fig. 17 (holotype).

Holotype: MA72055, collected by A.W.B. Powell in January 1927, from Late Pliocene (Waipipian) Tangahoe Formation near the mouth of Waihi Stream, Hawera, New Zealand.

Paratypes: MA12290, two specimens, collected by A.W.B. Powell in January 1931 from the type locality.

Remarks: Based on Powell's (1931) type description where he referred to 'Two paratypes, one damaged and one half grown, in Auckland Museum' the paratype lot was rediscovered in the general fossil collection where it was stored as MA12290.

Current name: *Emarginula haweraensis* Powell, 1931 – Maxwell in: Spencer *et al.* (2009: 239).

†*Emarginula paucicostata* Laws, 1936

Laws, C.R., 1936, p. 101, pl. 15, fig. 48 (holotype).

Holotype: MA70260, collected from the Early Pliocene (Opotian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Paratype: MA72692, a single specimen, from the type locality.

Current name: *Emarginula paucicostata* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 239).

***Emarginula striatula valentior* Finlay, 1928**

Finlay, H.J., 1928, pp. 235, 236, pl. 42, figs 56, 57 (holotype).

Holotype: MA70261, a beach-worn shell presumed to have been collected in 1924 by a member of the Otago Institute Expedition, from Rēkohu/Chatham Islands, New Zealand.

Current name: *Emarginula striatula* Quoy & Gaimard, 1834 – Spencer *et al.* (2016).

***Monodilepas carnleyensis* Powell, 1955**

Powell, A.W.B., 1955, pp. 48–50, pl. 5, fig. 43 (holotype), text fig. A1.

Holotype: GNS TM431

Paratype: MA72379, three specimens, dredged by C.A. Fleming sometime during 1941–1945 from 11 m (6 fathoms) at Cape Expedition Dredge Station 1, from Emergency Bay, Carnley Harbour, Auckland Islands, New Zealand.

Current name: *Monodilepas monilifera carnleyensis* Powell, 1955 – Spencer *et al.* (2016).

***Monodilepas diemenensis* Finlay, 1930**

Finlay, H.J., 1930a, p. 222, not figured.

Holotype: MA70484, **Figures 3a–c**, collected from Cape Maria van Diemen, Northland, New Zealand.

Paratypes: MA73114, six specimens, from the type locality.

Current name: *Monodilepas diemenensis* Finlay, 1930 – Spencer *et al.* (2016).

***Monodilepas otagoensis* Finlay, 1930**

Finlay, H.J., 1930a, p. 222, pl. 42, fig. 6 (holotype).

Holotype: MA70485, collected from 91 m (50 fathoms), 16 km (10 miles) ENE of Taiaroa Head [Otago Heads], Dunedin, New Zealand.

Paratypes: MA73589, three specimens, from the type locality.

Current name: *Monodilepas otagoensis* Finlay, 1930 – Spencer *et al.* (2016).

***Monodilepas skinneri* Finlay, 1928**

Finlay, H.J., 1928, p. 236, pl. 43, fig. 59 (holotype).

Holotype: MA70486, a nearly fresh specimen collected by R.S. Allan in 1924 from the stomach of a cod, Rēkohu/Chatham Islands, New Zealand.

Current name: *Monodilepas skinneri* Finlay, 1928 – Spencer *et al.* (2016).

***Montfortula chathamensis* Finlay, 1928**

Finlay, H.J., 1928, p. 235, pl. 41, figs 34, 35 (holotype).

Holotype: MA70487, presumed to have been collected in 1924 by a member of the Otago Institute Expedition to Rēkohu/Chatham Islands, New Zealand.

Paratypes: MA72571, two specimens, from the type locality.

Current name: *Montfortula chathamensis* Finlay, 1928 – Spencer *et al.* (2016).

***Puncturella manawatawhia* Powell, 1937**

Powell, A.W.B., 1937, pp. 177, 178, pl. 48, figs 7, 8 (holotype).

Holotype: NHM 1962955

Paratypes: MA72221, five specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Fissurisepta manawatawhia* (Powell, 1937) – Spencer *et al.* (2016).

†*Scutus petrafixus* Finlay, 1930

Finlay, H.J., 1930b, p. 54, pl. 2, fig. 23 (holotype).

Holotype: MA70707, exact location unknown, except that the specimen came from Late Eocene/Early Oligocene Ototara [Oamaru] Limestone, Otago, New Zealand.

Current name: *Scutus* (?) *petrafixus* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 239).

***Tugali colvillensis* Finlay, 1926**

Finlay, H.J., 1926a, p. 345, not figured.

Holotype: MA70781, **Figures 3d–f**, collected from 37–46 m (20–25 fathoms) off Cape Colville, Coromandel, New Zealand.

Paratypes: MA72520, four specimens, from the type locality.

Current name: *Tugali colvillensis* Finlay, 1926 – Spencer *et al.* (2016).

†*Tugali navicula* Finlay, 1926

Finlay, H. J., 1926b, p. 227, pl. 59, figs 6, 7 (holotype), figs 8, 9 (paratypes).

Holotype: MA70782, Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Paratypes: MA71656, two specimens, from the type locality.

Current name: *Tugali navicula* Finlay, 1926 – Maxwell in: Spencer *et al.* (2009: 239).

†*Tugali pliocenica* Finlay, 1926

Finlay, H. J., 1926b, p. 227, pl. 59, figs 1, 2 (holotype), figs 3–5 (paratypes).

Holotype: MA70783, collected from the Pleistocene (Castlecliffian) at Castlecliff, Whanganui, New Zealand.

Paratypes: MA71655, two specimens, from the type locality.

Current name: *Tugali pliocenica* Finlay, 1926 – Maxwell in: Spencer *et al.* (2009: 239).

***Tugali stewartiana* Powell, 1939**

Powell, A.W.B., 1939, p. 227, pl. 50, fig. 7 (holotype), figs 8, 9 (paratypes).

Holotype: MA72154, collected by Mrs R.H. Harrison from Ringaringa Beach, Rakiura/Stewart Island, New Zealand.

Paratypes: MA71546, three specimens, from the type locality.

Remarks: Holotype and paratypes were stored together by A.W.B. Powell, and later separated on the basis of

published measurements and given different registration numbers. The material described by Powell (1939) came from Mrs R.H. Harrison, Augustus Hamilton and a field trip that Powell undertook in Oct/Nov 1934, which was hosted by Captain G.M. Turner. Often provenance cannot be determined from the labels or Powell (1939), including these type specimens, which were originally attributed to Powell as the collector. However, given that in his species description Powell specifically mentions Mrs Harrison – ‘Localities: Ringaringa (type) and Horse Shoe Bay, Stewart Island (Mrs R.H. Harrison)’ – it is here assumed that they were collected by Mrs Harrison and not Powell.

Current name: *Tugali stewartiana* Powell, 1939 – Spencer *et al.* (2016).

†***Tugali superba* Powell, 1934**

Powell, A.W.B., 1934b, p. 265, pl. 58, figs 10, 11 (holotype).

Holotype: MA70784, collected by A.W.B. Powell in August 1933 from the Late Pleistocene (Haweran) Te Piki Member, Waipaoa Formation, from a road cutting approximately 6 km east of Whangaparaoa (Cape Runaway), East Coast, New Zealand.

Current name: *Tugali superba* Powell, 1934 – Maxwell in: Spencer *et al.* (2009: 240).

Figure 3. *a-c.* *Monodilepas diemenensis* Finlay, 1930, holotype, dorsal, lateral and ventral views; *d-f.* *Tugali colvillensis* Finlay, 1926, holotype, dorsal, lateral and ventral views; *g, h.* *Anisodiloma lugubris lenior* Finlay, 1926, holotype, apertural and abapertural views; *i, j.* *Zediloma arida* Finlay, 1926, holotype, apertural and abapertural views. Scale bars 5 mm.

***Zeidora maoria* Powell, 1937**

Powell, A.W.B., 1937, p. 177, pl. 48, figs 9, 10 (holotype).

Holotype: NHM 1962954

Paratype: MA72220, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Zeidora maoria* Powell, 1937 – Spencer *et al.* (2016).

TROCHIDAE***Anisodiloma lugubris lenior* Finlay, 1926**

Finlay, H.J., 1926a, pp. 353, 354, not figured.

Holotype: MA70034, **Figures 3g, h**, 4 km (2.5 miles) south of Taieri River, Taieri Beach, Otago, New Zealand.

Remarks: The original locality description by Finlay (1926) was given as ‘Taieri Beach, 5 miles [11 km] south of Taieri River’. However, the distance is more like 2.5 miles [4 km].

Current name: *Diloma bicanaliculatum* (Dunker in Philippi, 1844) – Spencer *et al.* (2016).

†*Antisolarium conominolium* Laws, 1936

Laws, C.R., 1936, p. 102, pl. 15, fig. 50 (holotype).

Holotype: AUG G5835

Paratypes: MA72693, five specimens, from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Current name: *Antisolarium conominolium* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 240).

***Cantharidus opalus cannoni* Powell, 1933**

Powell, A.W.B., 1933b, p. 194, pl. 36, fig. 15 (holotype), fig. 16 (paratype).

Holotype: MA70133, from Kaingaroa Beach, Rēkohu/Chatham Islands, New Zealand.

Paratype: MA71963, collected by A.W.B. Powell and/or C.A. Fleming in February 1933, from Waitangi, Rēkohu/Chatham Islands, New Zealand.

Remarks: For the holotype, MA70133, Powell selected a specimen from the ‘Old Museum coll[ection] ex Miss Shand’, i.e. a specimen dating to before 1929 when Auckland Museum was located at Princes Street, Auckland.

Current name: *Cantharidus opalus* (Martyn, 1784) – Spencer *et al.* (2016).

†*Conominolia woodsi* Laws, 1933

Laws, C.R., 1933, pp. 320, 321, pl. 32, fig. 31 (holotype), pl. 33, fig. 39 (holotype).

Holotype: MA70198, collected from the Miocene (Altonian) of the Southburn Sandstone, Tengawai River, Sutherlands, South Canterbury, New Zealand.

Current name: *Conominolia woodsi* Laws, 1933 – Maxwell in: Spencer *et al.* (2009: 240).

†*Gibbula sytovae* Amitrov, 1961

Amitrov, O.V., 1961, pp. 37–49, figs 1–4.

Paratype: MA73226, from the Miocene, Ukraine.

Remarks: References are in Russian and taxonomic, geologic and locality data have not been verified for the paratype. The holotype is from the Middle Miocene of Sataniv, Khmelnytsky Region, western Ukraine.

Current name: *Gibbula sytovae* Amitrov, 1961 – unverified.

***Margarella hinemoa* Powell, 1955**

Powell, A.W.B., 1955, pp. 57, 58, pl. 1, fig. 5 (holotype).

Holotype: MA72205, collected by Captain J. Bollons from Antipodes Islands, New Zealand.

Current name: *Cantharidus antipodum* (Hombron & Jacquinot, 1848) – MolluscaBase (2019).

***Margarella puysegurensis* Powell, 1939**

Powell, A.W.B., 1939, p. 228, pl. 49, fig. 13 (holotype).

Holotype: MA70441, collected by A.W.B. Powell, November 1934, from seaweed in rock pools near low water, ‘Sealer’s Beach’, directly east of Puysegur Point, Fiordland, New Zealand.

Paratypes: MA71547, 50 specimens; MA70132, four specimens, all from the type locality.

Current name: *Cantharidus puysegurensis* (Powell, 1939) – MolluscaBase (2019).

***Margarella turneri* Powell, 1939**

Powell, A.W.B., 1939, pp. 227, 228, pl. 49, fig. 12 (holotype).

Holotype: MA70442, collected by A.W.B. Powell in October and November 1934, from seaweed-covered rocks at low tide, Ulva Island, Paterson Inlet, Rakiura/Stewart Island, New Zealand.

Remarks: Powell (1939) mentioned two paratypes, but these are either missing or part of lot MA11271, which consists of 19 specimens collected by Powell at the same time and from the same locality as the holotype specimen.

Current name: *Cantharidus turneri* (Powell, 1939) – MolluscaBase (2019).

***Micrelenchus oliveri* (Iredale, 1915)**

Powell, A.W.B., 1946, pp. 138, 139, pl. 11, fig. 8 (neotype).

Neotype: MA71319, collected from Takapuna Reef, Auckland, New Zealand.

Remarks: Powell (1946) stated that Iredale (1915) proposed the new name *Cantharidus oliveri* for the New Zealand taxon previously referred to as *Cantharidus pupillus*. The latter was a combination created by Hutton (1884, p. 362). He borrowed the species name from an unrelated North American taxon, but did not describe it as a new species. Iredale (1915, p. 438) referred to an interpretation by Suter (1913, p.), but did not nominate a type or type locality. As Powell wished to erect a subspecies of *Micrelenchus oliveri* (Iredale, 1915) he first chose to fix the species name to a unique name-bearing type by selecting a neotype.

Current name: *Micrelenchus sanguineus* (Gray, 1843) – Powell (1979: 57).

***Micrelenchus oliveri cryptus* Powell, 1946**

Powell, A.W.B., 1946, pp. 139, 140, pl. 11, fig. 7 (holotype).

Holotype: MA71040, collected by A.W.B. Powell on 22 January 1928 from beneath *Durvillea* kelp holdfasts, 6 km (4 miles) south of Clarence River, Marlborough, New Zealand.

Paratypes: MA63520, 23 specimens from the type locality.

Current name: *Micrelenchus sanguineus* (Gray, 1843) – Spencer *et al.* (2016).

***Micrelenchus parcipectus* Powell, 1946**

Powell, A.W.B., 1946, p. 138, pl. 11, fig. 1 (holotype).

Holotype: MA71041, collected by A.W.B. Powell, November 1934, from the underside of stones near low water, Sealer's Beach [*sic*], between Otago Retreat and Puysegur Point, Fiordland, New Zealand.

Paratypes: MA71450, nine specimens, from the type locality.

Current name: *Micrelenchus tenebrosus* (A. Adams, 1853) – Spencer *et al.* (2016).

***Micrelenchus sanguineus morioria* Powell, 1933**

Powell, A.W.B., 1933b, p. 194, pl. 36, fig. 10 (holotype), fig. 11 (paratype).

Holotype: MA70471, collected by A.W.B. Powell and/or C.A. Fleming in February 1933 from 18 m (10 fathoms) off Owenga, Rēkohu/Chatham Islands, New Zealand.

Paratypes: MA71531, three specimens, from the type locality.

Current name: *Roseaplagis mortenseni* (Odhner, 1924) – Spencer *et al.* (2016).

†*Pachydontella etiampecta* Marwick, 1948

Marwick, J., 1948, p. 28, pl. 6, figs 1, 6 (holotype).

Holotype: MA71075, collected from the Late Pliocene (Waipipian) of the Kaawa Formation 25–30 m (84–98 ft) below the surface in the Waitemata Brewery well, Otahuhu, Auckland, New Zealand.

Current name: *Pachydontella etiampecta* Marwick, 1948 – Maxwell in: Spencer *et al.* (2009: 240).

***Paraclanculus peccatus* Finlay, 1926**

Finlay, H.J., 1926a, p. 351, pl. 18, fig. 17 (holotype).

Holotype: MA70584, collected by W. La Roche from Tryphena, Aotea/Great Barrier Island, New Zealand.

Current name: *Clanculus* (*Paraclanculus*) *peccatus* (Finlay, 1926) – Spencer *et al.* (2016).

***Photinula decepta* Iredale, 1908**

Finlay, H.J., 1926a, pp. 357, 358, pl. 18, figs 3, 4 (neotype).

Neotype: MA70440, two specimens, from 'kelp roots', Otago Peninsula, New Zealand.

Remarks: This was originally described as *Photinula decepta* Iredale, 1908, and reassigned to *Margarella* Thiele, 1891 by Iredale (1915). Iredale did not figure the species and by 1924 the type appears to have been lost. Finlay (1926) stated that 'since the type of *decepta* has

been lost, I here select this figured topotype as neotype of the species'. However, there are two quite different specimens in MA70440, one of which appears to match Finlay's figure 3 and the other his figure 4. As the most conclusive match is with Finlay's figure 4 this specimen is accepted as Finlay's neotype. The other has been registered as MA125877 and integrated into the general Marine Collections.

Current name: *Cantharidus antipodum* (Hombron & Jacquinot, 1848) – Powell (1979: 51); MolluscaBase (2019).

***Talopena sublaevis* Finlay, 1924**

Finlay, H.J., 1924a, p. 520, fig. 3 (holotype).

Holotype: MA70756, from oyster scrapings, Bluff, Southland, New Zealand.

Current name: *Micrelenchus tessellatus* (A. Adams, 1853) – Powell (1979: 57); MolluscaBase (2019).

***Thoristella chathamensis benthicola* Finlay, 1926**

Finlay, H.J., 1926a, p. 350, pl. 18, figs 7–10 (holotype).

Holotype: MA70764, dredged from 110 m (60 fathoms) off Taiaroa Head [Otago Heads], Otago, New Zealand.

Paratype: MA72521, a single specimen, from the type locality.

Current name: *Coelotrochus chathamensis* (Hutton, 1873) – Powell (1979: 59); Spencer *et al.* (2016).

***Thoristella chathamensis cookiana* Powell, 1934**

Powell, A.W.B., 1934a, pp. 154, 155, pl. 2, figs 10, 11 (holotype).

Holotype: MA70765, collected by A.W.B. Powell from beneath stones at low tide, on 26 January 1927 from Island Bay, Wellington, New Zealand.

Current name: *Coelotrochus chathamensis* (Hutton, 1873) – Spencer *et al.* (2016).

†*Thoristella chathamensis fossilis* Finlay, 1926

Finlay, H.J., 1926a, pp. 350, 351, pl. 18, figs 11–14 (holotype).

Holotype: MA70766, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Paratypes: MA72522, one specimen; MA72523, nine specimens, all from the type locality.

Current name: *Coelotrochus fossilis* (Finlay, 1926) – Maxwell in: Spencer *et al.* (2009: 240).

***Trochus camelophorus* Webster, 1906**

Webster, W.H., 1906, p. 309, figs 1, 1a.

Holotype: MA70776, collected from Cape Maria van Diemen, Northland, New Zealand.

Paratype: MA72916, from the type locality.

Current name: *Trochus* (*Camelotrochus*) *camelophorus* Webster, 1906 – Spencer *et al.* (2016).

***Trochus carmesinus* Webster, 1908**

Webster, W.H., 1908, p. 256, pl. 10, figs 16–18.

Holotype: MA70777*, Russell, Bay of Islands, New Zealand.

* this specimen has not been sighted since at least 1993, and there is an older note in A.W.B. Powell's hand that the holotype specimen was lost.

Current name: *Coelotrochus carmesinus* (Webster, 1908) – Spencer *et al.* (2016).

***Trochus (Clanculus) takapunaensis* Webster, 1906**

Webster, W.H., 1906, pp. 309, 310, figs 2, 2a.

Holotype: MA70778, from shell sand, from Takapuna Beach, Auckland, New Zealand.

Current name: *Clanculus (Paraclanculus) peccatus* (Finlay, 1926) – Powell (1979: 60).

***Zediloma arida* Finlay, 1926**

Finlay, H.J., 1926a, p. 353, not figured.

Holotype: MA70869, **Figure 3**, collected from Lyttelton, Banks Peninsula, New Zealand.

Remarks: Suter (1913, p.114) described and figured a specimen from Lyttelton as *Monodonta coracina* (Troschel, 1851). Finlay disagreed with the identification and erected the new species *Zediloma arida* for “the species described and figured by Suter”. He did not provide a new type description, referring to Suter's instead. As Finlay had been informed by several people, including J. Marwick, that the original figured specimen was no longer recognisable within Suter's collection, he chose as name-bearing type for *Zediloma arida* a specimen from his own collection. He called this a neotype, but as Suter's specimen was never a designated name-bearing type in the first place, Finlay's specimen must stand as the holotype of *Zediloma arida* rather than the neotype.

Current name: *Diloma aridum* (Finlay, 1926) – Spencer *et al.* (2016).

***Zediloma digna* Finlay, 1926**

Finlay, H.J., 1926a, p. 352, figs 24, 25 (holotype).

Holotype: MA70870, collected from St Clair, Dunedin, New Zealand.

Paratype: MA73089, from the type locality.

Current name: *Diloma nigerrimum* (Gmelin, 1791) – Powell (1979: 53); Spencer *et al.* (2016).

***Zediloma (Fractermilla) corrosa zebrina* Powell, 1946**

Powell, A.W.B., 1946, p. 137, pl. 11, fig. 4 (paratype), fig. 5 (holotype).

Holotype: MA71156, collected by A.W.B. Powell in November 1934 from rocks scattered on an intertidal mud-flat, Beach Harbour, Breaksea Sound, Fiordland, New Zealand.

Paratype: MA71449, from the type locality.

Current name: *Diloma subrostratum* (Gray, 1835) – Spencer *et al.* (2016).

SOLARIELLIDAE

***Solariella kemp* Powell, 1951**

Powell, A.W.B., 1951, pp. 102, 103, pl. 5, fig. 6 (holotype); fig. G 11.

Holotype: NHM 1961367

Paratypes: MA71930, four specimens, collected by

the crew of the R.R.S. William Scoresby on 18 October 1931, from the type locality, station WS766, in 545 m west of the Falkland Islands, British Overseas Territory.

Current name: *Solariella kemp* Powell, 1951 – MolluscaBase (2019).

***Zeminolia benthicola* Powell, 1937**

Powell, A.W.B., 1937, p. 180, pl. 51, fig. 4 (holotype).

Holotype: NHM 1962963

Paratype: MA72224, collected by A.W.B. Powell on 17 August 1932 from station 934, R.R.S. Discovery II cruise, in 92 m off Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: The holotype was collected from station 933.

Current name: *Solariella benthicola* (Powell, 1937) – Spencer *et al.* (2016).

†*Zeminolia carinata* Laws, 1935

Laws, C.R., 1935, p. 31, pl. 5, fig. 3 (holotype).

Holotype: MA70880, collected from the Early Miocene (Altonian), Mount Harris Formation, Awamoa Creek, Oamaru, Otago, New Zealand.

Current name: *Solariella carinata* (Laws, 1935) – Maxwell in: Spencer *et al.* (2009: 240).

†*Zeminolia fossa* Laws, 1932

Laws, C.R., 1932, pp. 185, 186, pl. 26, figs 1–3 (holotype).

Holotype: MA70881, collected by C.R. Laws from Late Oligocene (Duntroonian) Wharekuri Greensand on the true left bank Waitaki River about 1.6 km (1 mile) below Wharekuri, Otago, New Zealand.

Paratype: MA72735, juvenile specimen from the type locality.

Remarks: The type locality is now submerged below Lake Waitaki.

Current name: *Solariella fossa* (Laws, 1932) – Maxwell in: Spencer *et al.* (2009: 240).

***Zeminolia luteola* Powell, 1937**

Powell, A.W.B., 1937, p. 179, pl. 51, figs 1, 2 (holotype).

Holotype: NHM 1962961

Paratypes: MA72222, two specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Solariella luteola* (Powell, 1937) – Spencer *et al.* (2016).

***Zeminolia tryphenensis* Powell, 1930**

Powell, A.W.B., 1930a, pp. 534–536, pl. 62, figs 16–18 (holotype).

Holotype: MA72175, dredged by W. La Roche in 1924 from 11 m (6 fathoms) at Tryphena, Aotea/Great Barrier Island, New Zealand.

Paratype: MA71393, from the type locality.

Current name: *Solariella tryphenensis* (Powell, 1930) – Spencer *et al.* (2016).

***Zeminolia vera* Powell, 1937**

Powell, A.W.B., 1937, pp. 179, 180, pl. 51, fig. 3 (holotype).

Holotype: NHM 1962962

Paratypes: MA72223, three specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Solariella vera* (Powell, 1937) – Spencer *et al.* (2016).

TROCHACLIDIDAE

Cirsonella simplex Powell, 1937

Powell, A.W.B., 1937, p. 185, pl. 50, fig. 12 (holotype).

Holotype: NHM 1962977

Paratype: MA72235, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Acremodontina simplex* (Powell, 1937) – Spencer *et al.* (2016).

Conjectura atypica Powell, 1937

Powell, A.W.B., 1937, p. 187, pl. 51, figs 10, 11 (holotype).

Holotype: NHM 1962985

Paratypes: MA72241, nine specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Acremodontina atypica* (Powell, 1937) – Spencer *et al.* (2016).

Conjectura carinata Powell, 1940

Powell, A.W.B., 1940, p. 223, pl. 28, fig. 8.

Holotype: MA72052, collected from 91 m (50 fathoms), between Spirits Bay and Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Acremodontina carinata* (Powell, 1940) – Spencer *et al.* (2016).

Conjectura poutama Smith, 1962

Smith, E.C., 1962, p. 50, figs 1, 1a (holotype).

Holotype: MONZ M.020251

Paratypes: MA72960, 21 specimens, collected by E. C. Smith from 55 m (30 fathoms), off Poutama Island, Rakiura/Stewart Island, New Zealand.

Current name: *Acremodontina poutama* (Smith, 1962) – Spencer *et al.* (2016).

Thoristella crassica Powell, 1937

Powell, A.W.B., 1937, pp. 178, 179, pl. 49, figs 14, 15 (holotype).

Holotype: NHM 1961659

Paratypes: MA71895, four specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Acremodontina crassica* (Powell, 1937) – Spencer *et al.* (2016).

CALLIOSTOMATIDAE

†*Calliostoma cancellatum* Finlay, 1923

Finlay, H.J., 1923, pp. 102, 103, pl. 10, fig. 3.

Holotype: MA70128, presumed to have been collected from the Early Miocene (Altonian) of the Mount Harris Formation, near Ardgowan, northwest of Oamaru, New Zealand.

Current name: *Fautor temporemutatus* (Finlay, 1924) – MolluscaBase (2019).

Calliostoma osbornei Powell, 1926

Powell, A.W.B., 1926a, pp. 591, 592, pl. 103, fig. 1 (paratype), fig. 2 (holotype).

Holotype: MA72037, collected by Mr C. Osborne in 1923–1924 from 49 m (27 fathoms) off Cape Barrier, Aotea/Great Barrier Island, New Zealand.

Paratypes: MA71406; MA73092, may have been collected from the stomachs of snapper, from the type locality.

Current name: *Maurea osbornei* (Powell, 1926) – Spencer *et al.* (2016).

†*Calliostoma suteri* Finlay, 1923

Finlay, H.J., 1923, pp. 101, 102, pl. 10, figs 1 a–c.

Holotype: MA70129, from the Early Miocene (Altonian) of the Mount Harris Formation near Ardgowan, northwest of Oamaru, New Zealand.

Paratypes: MA72517, three partial specimens, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Current name: *Maurea suteri* Finlay, 1923 – Maxwell *in*: Spencer *et al.* (2009: 240).

†*Calliostoma suteri fragile* Finlay, 1923

Finlay, H.J., 1923, p. 101, pl. 10, figs 2 a–c.

Holotype: MA70130, from the Early Miocene (Altonian) of the Mount Harris Formation near Ardgowan, northwest of Oamaru, New Zealand.

Paratypes: MA72439, 18 specimens and fragments; MA72518, two specimens, all from the type locality.

Current name: *Maurea fragilis* Finlay, 1923 – Maxwell *in*: Spencer *et al.* (2009: 240).

Margarella bouvetia Powell, 1951

Powell, A.W.B., 1951, pp. 97, 98, pl. 5, fig. 3 (holotype).

Holotype: NHM 1961349

Paratypes: MA73186, 15 specimens, collected on 18 October 1930, from the type locality, station 456, R.R.S. Discovery II Investigations, in 40–45 m, 1.6 km (1 mile) east of Bouvet Island, South Atlantic Ocean, Norway.

Current name: *Margarella bouvetia* Powell, 1951 – MolluscaBase (2019).

Margarella jason Powell, 1951

Powell, A.W.B., 1951, p. 97, pl. 5, fig. 1 (holotype).

Holotype: NHM 1961348

Paratypes: MA72387, two specimens, collected on 6

April 1926, from the type locality, station 45, R.R.S. Discovery Investigation, in 238–270 m, off Cumberland Bay, South Georgia, British Overseas Territory.
Current name: *Margarella jason* Powell, 1951 – MolluscaBase (2019).

***Margarella porcellana* Powell, 1951**

Powell, A.W.B., 1951, p. 98, pl. 5, fig. 2 (holotype).

Holotype: NHM 1961352

Paratype: MA71928, specimen collected in April 1935, from the type locality, station 1562, R.R.S. Discovery Investigation, in 97–104 m, off Marion Island, Prince Edward Islands, South Africa.

Current name: *Margarella porcellana* Powell, 1951 – MolluscaBase (2019).

***Maurea pellucida morioria* Powell, 1946**

Powell, A.W.B., 1946, p. 140, pl. 11, fig. 3 (holotype).

Holotype: MA71037, collected by A.W.B. Powell in 1937(?) from Owenga Beach, Rēkohu/Chatham Islands, New Zealand.

Remarks: According to Powell (1946) there are paratypes at AM, but the only other Rēkohu/Chatham Island specimens in the AM Collections which belong to this taxon have no collector and date recorded. There is doubt about the collecting date of the holotype specimen. Powell (1946) has it as 1937 in the type description, but his only known Rēkohu/Chatham Island trip was for three weeks in February 1933.

Current name: *Maurea waikanae* (Oliver, 1926) – Spencer *et al.* (2016).

***Maurea turnerarum* Powell, 1964**

Powell, A.W.B., 1964, pp. 11, 12, pl. 3, figs 1–3 (holotype).

Holotype: MA71239, collected from 366 m (299 fathoms), off Tuhua/Mayor Island, New Zealand.

Current name: *Maurea turnerarum* Powell, 1964 – Spencer *et al.* (2016).

†*Maurea (Mucrinops) granti* Powell, 1931

Powell, A.W.B., 1931a, pp. 97, 98, pl. 13, figs 34, 35 (holotype).

Holotype: MA70449, collected by A.W.B. Powell during an Auckland Museum fieldtrip in January 1931 from Late Pliocene (Waipipian) Tangahoe Formation near the mouth of Waihi Stream, Hawera, New Zealand.

Current name: *Maurea granti* Powell, 1931 – Spencer *et al.* (2016).

***Maurea (Mucrinops) punctulata ampla* Powell, 1939**

Powell, A.W.B., 1939, p. 229, pl. 50, fig. 6 (holotype).

Holotype: MA70450, collected from Mason Bay, Rakiura/Stewart Island, New Zealand.

Paratypes: MA71548, four specimens, from the type locality.

Current name: *Maurea punctulata* (Martyn, 1784) – Powell (1979: 62); Spencer *et al.* (2016).

†*Maurea (Mucrinops) waiareka* Laws, 1935

Laws, C.R., 1935, p. 32, pl. 5, fig. 5 (holotype).

Holotype: MA70451, Late Eocene (Kaiatan), Waiareka Volcanics, Whitstone [Lorne], Otago, New Zealand.

Current name: *Maurea waiareka* (Laws, 1935) – Maxwell in: Spencer *et al.* (2009: 240).

†*Modelia nukumaruensis* Laws, 1930

Laws, C.R., 1930, pp. 550, 551, pl. 90, fig. 8 (holotype).

Holotype: MA70483, collected from the Early Pleistocene (Nukumaruan) at Nukumarū, Taranaki, New Zealand.

Remarks: Possibly the Nukumarū Brown Sand, from the Early Pleistocene coastal section 7 km south east of Waiinu Beach, near the site of the former ‘Nukumarū boat-landing’, Manawatu-Whanganui.

Current name: *Maurea nukumaruensis* (Laws, 1930) – Maxwell in: Spencer *et al.* (2009: 240).

***Photinastoma taeniata nivea* Cooper & Preston, 1910**

Cooper, J.E. & H.B. Preston, 1910, pp. 112, not figured.

Paratypes: MA72775, two specimens, Falkland Islands, British Overseas Territory.

Current name: *Photinastoma taeniatum* (G.B. Sowerby I, 1825) – *Malacolog* Version 4.1.1

***Venustas blacki* Powell, 1950**

Powell, A.W.B., 1950, pp. 80, 81, pl. 7, figs 3, 4 (holotype).

Holotype: MA71168, collected by Captain A. Black from 91 m–128 m (50–60 fathoms) on the continental shelf, from the Nuggets north to the mouth of the Waitaki River, Otago, New Zealand.

Paratype: MA71454, from the type locality.

Current name: *Maurea blacki* (Powell, 1950) – Spencer *et al.* (2016).

***Venustas cunninghami regifica* Finlay, 1927**

Finlay, H.J., 1927, p. 485, pl. 24, fig. 9 (paratype), fig. 10 (holotype).

Holotype: MA70823, collected from 55 m (30 fathoms) off Taiaroa Head [Otago Heads], New Zealand.

Paratype: MA72550; MA72873, four specimens, all from the type locality.

Current name: *Maurea selecta* (Dillwyn, 1817) – Powell (1979: 61, 62); Spencer *et al.* (2016).

***Venustas punctulata multigemmata* Powell, 1952**

Powell, A.W.B., 1952, p. 173, 174, pl. 35, figs 2, 3.

Holotype: MA71185, trawled by Captain J. Black from 55–128 m (30–70 fathoms), off eastern Otago, New Zealand.

Paratype: MA71439, from the type locality.

Current name: *Maurea granti* Powell, 1931 – Spencer *et al.* (2016).

***Venustas punctulata urbanior* Finlay 1926**

Finlay, H.J., 1926a, pp. 361, 362, pl. 18, fig. 27 (holotype).

Holotype: MA70824, collected with oyster dredge, from 36 m (20 fathoms), Foveaux Strait, New Zealand.

Paratype: MA72524, from the type locality.

Remarks: As *Venustas punctulata urbanior* in the text and as *Venustas (Mucrinops) urbanior* in the figure caption.

Current name: *Maurea punctulata* (Martyn, 1784) – Spencer *et al.* (2016).

***Venustas tigris chathamensis* Dell, 1950**

Dell, R.K., 1950, pp. 43, 45, figs 26, 27 (holotype).

Holotype: MONZ M.002128

Paratype: MA72771, collected by C.J. Lindsay in January 1924, from Mangere Island, Chatham Islands, New Zealand.

Current name: *Maurea tigris* (Gmelin, 1791) – Spencer *et al.* (2016).

***Venustatrochus georgianus* Powell, 1951**

Powell, A.W.B., 1951, pp. 92, 93, pl. 10, fig. 68 (holotype).

Holotype: NHM 1961307

Paratype: MA72386, collected on 1 April 1926, from the type locality, station 42, R.R.S. Discovery Investigation, in 120–204 m, off the mouth of Cumberland Bay, South Georgia, British Overseas Territory.

Current name: *Venustatrochus georgianus* Powell, 1951 – MolluscaBase (2019).

LIOTIIDAE

***Liotina tryphenensis* Powell, 1926**

Powell, A.W.B., 1926a, pp. 592, 593, figs 4–6.

Holotype: MA72080, collected by A.W.B. Powell in January 1924 from beneath stones at low water, from Tryphena, Aotea/Great Barrier Island, New Zealand.

Paratype: MA71407, from the type locality.

Current name: *Munditia tryphenensis* (Powell, 1926) – Spencer *et al.* (2016).

***Munditia anomala* Powell, 1940**

Powell, A.W.B., 1940, pp. 219, 220, pl. 28, figs 16, 17 (holotype).

Holotype: MA72098, collected from shell sand, Tom Bowling Bay, Northland, New Zealand.

Current name: *Munditia anomala* Powell, 1940 – Spencer *et al.* (2016).

***Munditia aupouria* Powell, 1937**

Powell, A.W.B., 1937, p. 181, pl. 50, figs 3, 4 (holotype).

Holotype: NHM 1962965

Paratypes: MA71912, six specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Paratypes: MA72225, 14 specimens, collected by A.W.B. Powell on 17 August 1932 from station 934, R.R.S. Discovery II cruise, in 92 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Munditia aupouria* Powell, 1937 – Spencer *et al.* (2016).

***Munditia delicatula* Powell, 1940**

Powell, A.W.B., 1940, p. 219, pl. 28, figs 1, 2 (holotype).

Holotype: MA70491, collected from 91 m (50 fathoms), between Spirits Bay and Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: Specimen badly damaged by glass disease.

Current name: *Munditia delicatula* Powell, 1940 – Spencer *et al.* (2016).

***Munditia echinata* Powell, 1937**

Powell, A.W.B., 1937, p. 181, pl. 50, figs 5, 6 (holotype).

Holotype: NHM 1962966

Paratype: MA72226, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Munditia echinata* Powell, 1937 – Spencer *et al.* (2016).

***Munditia manawatawhia* Powell, 1937**

Powell, A.W.B., 1937, pp. 181, 182, pl. 50, figs 1, 2 (holotype).

Holotype: NHM 1962967

Paratypes: MA72227, four specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Munditia manawatawhia* Powell, 1937 – Spencer *et al.* (2016).

***Munditia owengaensis* Powell, 1933**

Powell, A.W.B., 1933b, p. 195, pl. 33, figs 9, 10.

Holotype: MA70492, collected by A.W.B. Powell and/or C.A. Fleming in February 1933, from 18 m (10 fathoms) off Owenga Beach, Rēkohu/Chatham Islands, New Zealand.

Remarks: Specimen damaged by glass disease.

Current name: *Munditia owengaensis* Powell, 1933 – Spencer *et al.* (2016).

†*Munditia proavita* Laws, 1936

Laws, C.R., 1936, pp. 102, 103, pl. 15, figs 49, 51 (holotype).

Holotype: MA70493, the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Paratypes: MA72694, two specimens, from the type locality.

Current name: *Munditia proavita* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 240).

TURBINIDAE

†*Astraea stirps* Laws, 1932

Laws, C.R., 1932, pp. 186, 187, pl. 26, figs 4, 7 (holotype), pl. 27, fig. 11 (holotype).

Holotype: MA70049, collected by F.J. Turner in 1930 from the Middle Miocene (Lillburnian) of the Park Bluff Sandstone [bed B] on the true left bank of the Waiau River, Clifden, Southland, New Zealand Southland.

Current name: *Astraea stirps* Laws, 1932 – Maxwell in: Spencer *et al.* (2009: 240).

***Astralium pyramidale* Webster, 1905**

Webster, W.H., 1905, pp. 276, 277, fig. 2a.

Holotype: MA70050, collected from Takapuna Beach, Auckland, New Zealand.

Current name: *Cookia sulcata* (Lightfoot, 1786) – Powell (1979: 67); Spencer *et al.* (2016).

†*Cookia kawauensis* Powell, 1938

Powell, A.W.B., 1938a, p. 378, pl. 39, fig. 15 (holotype).

Holotype: MA72053, collected in 1927 by A.W.B. Powell from the Early Miocene (Otaian) Bostaquet Member of the Cape Rodney Formation on the east side of Bostaquet Bay, Kawau Island, New Zealand.

Current name: *Cookia kawauensis* Powell, 1938 – Maxwell in: Spencer *et al.* (2009: 240).

***Tropidomarga biangulata* Powell, 1951**

Powell, A.W.B., 1951, pp. 101–102, pl. 5, fig. 5 (holotype).

Holotype: Powell, 1951 states type was lodged with NHM, but no record found through NHM Data Portal.

Paratype: MA71929, collected on 21 January 1927, from the type locality, station 159, R.R.S. Discovery Investigation, in 160 m, north east of Cumberland Bay, South Georgia, British Overseas Territory.

Current name: *Tropidomarga biangulata* Powell, 1951 – MolluscaBase (2019).

†*Turbo castaneus tiara* M. Smith, 1937

Smith, M., 1937, p. 66, pl. 6, fig. 9.

Holotype: Smith (1937) stated that the type is to be placed with the Museum of Comparative Zoology. A search of this Museum's Online database did not locate a type.

Paratype: MA73224, collected from the Pliocene, Clewiston, Florida, United States of America.

Remarks: No further peer-reviewed references were found for this taxon.

Current name: unverified

***Turbo (Lunella) radina* Webster, 1905**

Webster, W.H., 1905, p. 276, figs 1, a, b.

Holotype: MA70785, Takapuna, Auckland, New Zealand.

Paratype: MA71585, from the type locality.

Current name: *Lunella smaragda* (Gmelin, 1791) – Powell (1979: 66, 67); Spencer *et al.* (2016).

CONRADIIDAE***Crosseola cuvieriana* Mestayer, 1919**

Mestayer, M., 1919, pp. 132, 133, pl. 8, fig. 10

Holotype: MONZ M.001069

Paratypes: MA72914, one specimen; MA73199, one specimen, collected from the type locality by Captain J. Bollons in 1914, from 69–73 m (38–40 fathoms), off Repanga/Cuvier Island, New Zealand.

Current name: *Crosseola cuvieriana* (Mestayer, 1919) – Spencer *et al.* (2016).

***Crosseola errata* Finlay, 1926**

Finlay, H.J., 1926a, pp. 402, 403, pl. 19, fig. 33 (holotype).

Holotype: MA70219, dredged from 22 m (12 fathoms), from Rangaunu [Awanui] Bay, Northland, New Zealand.

Current name: *Crosseola errata* Finlay, 1926 – Spencer *et al.* (2016).

***Crosseola favosa* Powell, 1937**

Powell, A.W.B., 1937, pp. 186, 187, pl. 51, fig. 13 (holotype).

Holotype: NHM 1962983

Paratypes: MA72239, ten specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Crosseola favosa* Powell, 1937 – Spencer *et al.* (2016).

***Crosseola intertexta* Powell, 1937**

Powell, A.W.B., 1937, p. 187, pl. 51, fig. 12 (holotype).

Holotype: NHM 1962984

Paratypes: MA72240, two specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Crosseola intertexta* Powell, 1937 – Spencer *et al.* (2016).

†*Crosseola munditia* Laws, 1936

Laws, C.R., 1936, p. 104, pl. 16, fig. 57 (holotype).

Holotype: MA70220, the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Remarks: Affected by glass disease.

Current name: *Crosseola munditia* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 240).

†*Crosseola proerrata* Finlay, 1930

Finlay, H.J., 1930b, pp. 54, 55, pl. 1, fig. 11 (holotype), fig. 12 (paratype).

Holotype: MA70221, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Paratype: MA72444, from the type locality.

Current name: *Crosseola proerrata* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 240).

†*Crosseola sultan* Finlay, 1930

Finlay, H.J., 1930b, p. 55, pl. 1, fig. 6 (holotype).

Holotype: MA70222, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Current name: *Crosseola sultan* Finlay, 1930 – Maxwell in: Spencer *et al.* (2009: 240).

†*Crosseola tenuisculpta* Laws, 1936

Laws, C.R., 1936, pp. 104, 105, pl. 15, figs 30a, 30b, (holotype).

Holotype: MA70223, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek,

south of Port Waikato, Waikato, New Zealand.

Current name: *Crosseola tenuisculpta* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 240).

SKENEIDAE

†*Cirsonella aedicula* Laws, 1936

Laws, C.R., 1936, p. 104, pl. 15, figs 53, 54 (holotype).

Holotype: MA70171, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Paratypes: MA72696, three specimens, from the type locality.

Current name: *Cirsonella aedicula* Laws, 1936 – Maxwell in: Spencer *et al.* (2009: 240).

Cirsonella consobrina Powell, 1930

Powell, A.W.B., 1930a, p. 534, pl. 61, figs 13, 14 (holotype).

Holotype: MA70172, dredged by W. La Roche in 1922 from 11 m (6 fathoms) near Mangonui Heads [*sic*], Doubtless Bay, New Zealand.

Paratypes: MA71392, ten specimens, from the type locality.

Remarks: Holotype badly affected by glass disease

Current name: *Cirsonella consobrina* Powell, 1930 – Spencer *et al.* (2016).

Cirsonella laxa Powell, 1937

Powell, A.W.B., 1937, p. 184, pl. 50, figs 8, 9 (holotype).

Holotype: NHM 1962975

Paratypes: MA72233, two specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Cirsonella laxa* Powell, 1937 – Spencer *et al.* (2016).

Cirsonella paradoxa Powell, 1937

Powell, A.W.B., 1937, pp. 183, 184, pl. 50, figs 15, 16 (holotype).

Holotype: NHM 1962973

Paratypes: MA72231, eight specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Paradoxa paradoxa* Powell, 1937 – Spencer *et al.* (2016).

Cirsonella parvula Powell, 1926

Powell, A.W.B., 1926b, pp. 45, 46, pl. 5, figs 6, 7.

Holotype: CM M5217

Paratypes: MA72336, two specimens, collected by the New Zealand Government Trawling Expedition ('Nora Niven' Expedition) in 1907, from 183 m (100 fathoms) at 'Dredge Station C' 97 km (60 miles) east of Lyttelton, New Zealand.

Current name: *Cirsonella parvula* Powell, 1926 – Spencer *et al.* (2016).

Cirsonella pisiformis Powell, 1937

Powell, A.W.B., 1937, p. 184, pl. 50, figs 13, 14 (holotype).

Holotype: NHM 1962974

Paratypes: MA72232, 31 specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Cirsonella pisiformis* Powell, 1937 – Spencer *et al.* (2016).

Cirsonella variecostata Powell, 1940

Powell, A.W.B., 1940, pp. 220, 221, pl. 28, figs 9, 10.

Holotype: MA70173, off Manawatāwhi/Three Kings Islands, New Zealand.

Remarks: Specimen damaged by glass disease.

Current name: *Cirsonella variecostata* Powell, 1940 – Spencer *et al.* (2016).

Cirsonella waikukuensis Powell, 1937

Powell, A.W.B., 1937, pp. 184, 185, pl. 50, figs 10, 11 (holotype).

Holotype: NHM 1962976

Paratypes: MA72234, 14 specimens, collected by A.W.B. Powell on 16 August 1932 from the type locality, station 930, R.R.S. Discovery II cruise, in 29 m off Waikuku Beach, Northland, New Zealand.

Current name: *Cirsonella waikukuensis* Powell, 1937 – Spencer *et al.* (2016).

Crosseola cookiana Dell, 1952

Dell, R.K., 1952a, pp. 415, 416, pl. 85, fig. 4 (holotype).

Holotype: MONZ M.005502

Paratype: MA72765, collected by GS Matai on 6 Nov 1936 from 104 m, Mernoo Bank, Chatham Rise, New Zealand.

Current name: *Lodderia eumorpha cookiana* (Dell, 1952) – Spencer *et al.* (2016).

Liotella aupouria Powell, 1937

Powell, A.W.B., 1937, p. 182, pl. 51, fig. 9 (holotype).

Holotype: NHM 1962968

Paratype: MA72228, a single specimen, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Liotella aupouria* Powell, 1937 – Spencer *et al.* (2016).

Liotella rotuloides Powell, 1937

Powell, A.W.B., 1937, pp. 182, 183, pl. 51, fig. 8 (holotype).

Holotype: NHM 1961643

Paratypes: MA72229, 50 specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Liotella rotula* (Suter, 1908) – Powell (1979: 79); Spencer *et al.* (2016).

***Lodderena formosa* Powell, 1930**

Powell, A.W.B., 1930b, p. 541, pl. 87, figs 11, 12 (holotype).

Holotype: MA70420, collected by W. La Roche in 1922 from 11–18 m (6–10 fathoms), off ‘Mangonui Heads’, Doubtless Bay, New Zealand.

Current name: *Lodderena formosa* Powell, 1930 – Spencer *et al.* (2016).

***Lodderena nana* Powell, 1930**

Powell, A.W.B., 1930b, pp. 541, 542, pl. 87, figs 13, 14 (holotype).

Holotype: MA70421, collected by W. La Roche in 1922 from 11–18 m (6–10 fathoms), off ‘Mangonui Heads’ Doubtless Bay, New Zealand.

Current name: *Lodderena nana nana* Powell, 1930 – Spencer *et al.* (2016).

***Lodderia iota* Powell, 1940**

Powell, A.W.B., 1940, p. 220, pl. 28, fig. 6.

Holotype: MA70418, collected by W. La Roche from 22 m (12 fathoms), off Awanui River mouth [Awanui Heads], Rangaunu Bay, Northland, New Zealand.

Paratypes: MA71551, 21 specimens, from the type locality.

Remarks: Holotype destroyed by glass disease.

Current name: *Lodderia iota* Powell, 1940 – Spencer *et al.* (2016).

***Lodderia waitemata* Powell, 1940**

Powell, A.W.B., 1940, p. 220, pl. 28, fig. 7.

Holotype: MA70419, collected by C.A. Fleming on 19 July 1931, from seaweed washings, Takapuna Beach, Auckland, New Zealand.

Paratypes: MA71552, one specimen, from the type locality.

Remarks: Holotype destroyed by glass disease.

Current name: *Lodderia waitemata* Powell, 1940 – Spencer *et al.* (2016).

***Starkeyna maoria* Powell, 1937**

Powell, A.W.B., 1937, p. 185, pl. 49, figs 10, 11 (holotype).

Holotype: NHM 1961669

Paratypes: MA71896, two specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Cirsonella maoria* (Powell, 1937) – Powell (1979: 70); Spencer *et al.* (2016).

***Tasmocrossea benthicola* Dell, 1952**

Dell, R.K., 1952b, p. 105, fig. 2 (holotype).

Holotype: MONZ M.005559

Paratypes: MA72769, two specimens, collected from the type locality by the R.S.S. Discovery II on 24 October 1950 from 536 m, Lord Howe Rise, Tasman Sea.

Remarks: Specimens were probably incomplete when collected and have been further affected by glass disease.

Current name: *Tasmocrossea benthicola* Dell, 1952 – Spencer *et al.* (2016).

***Zalipais benthicola* Powell, 1927**

Powell, A.W.B., 1927, pp. 115, 116, pl. 21, fig. 12.

Holotype: CM M5377

Paratypes: MA72341, two specimens, collected by Prof. R. Speight in December 1908, from 311 m (170 fathoms) off Puysegur Point, Fiordland, New Zealand.

Current name: *Zalipais benthicola* Powell, 1927 – Spencer *et al.* (2016).

***Zalipais turneri* Powell, 1939**

Powell, A.W.B., 1939, p. 230, pl. 49, fig. 11 (holotype).

Holotype: MA70857, collected by A.W.B. Powell in October/November 1934 from seaweeds, Ocean Beach, Rakiura/Stewart Island, New Zealand.

Remarks: Material described by Powell (1939) came from Mrs R.H. Harrison, Augustus Hamilton and a field trip that Powell undertook in Oct/Nov 1934, which was hosted by Captain G.M. Turner. However, provenance often cannot be determined from the labels or Powell (1939). Given that this species was named after Captain Turner, it is assumed the specimen was collected by Powell on his 1934 trip.

Current name: *Zalipais turneri* Powell, 1939 – MolluscaBase (2019).

COLLONIIDAE**†*Argalista impervia* Finlay, 1930**

Finlay, H.J., 1930b, p. 57, not figured.

Holotype: MA70040, **Figures 2e, f**, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Paratypes: MA72449, 74 specimens, from the type locality.

Current name: *Eutinochilus impervius* (Finlay, 1930) – MolluscaBase (2019).

†*Argalista kaiparaensis* Finlay, 1930

Finlay, H.J., 1930b, pp. 56, 57, not figured.

Holotype: MA70041, **Figure 2g**, collected from Early Miocene (Late Otaian–Altonian) Pakaurangi Formation, Pakaurangi Point, Hukatere Peninsula, New Zealand.

Current name: *Argalista kaiparaensis* Finlay, 1930 – Beu & Raine (2009).

†*Argalista kingi* Powell, 1938

Powell, A.W.B., 1938c, p. 162, text figs 1, 2.

Holotype: MA70042, collected by A.W.B. Powell in 1924 from Early Pleistocene (Nukumaruan) Castlepoint Formation, Lighthouse Reef, Castle Point, Wairarapa, New Zealand.

Paratypes: MA71902, four specimens, from the type locality.

Current name: *Argalista kingi* Powell, 1938 – MolluscaBase (2019).

†*Argalista leniumbilicata* Laws, 1935

Laws, C.R., 1935, p. 33, not figured.

Holotype: MA70043, **Figures 2h, i**, collected from the

Late Eocene (Runangan) Totara Limestone at Trig M, Totara, Oamaru, New Zealand.

Paratypes: MA72676, four specimens, from the type locality.

Current name: *Argalista leniumbilicata* Laws, 1935 – MolluscaBase (2019).

***Argalista nana* Finlay, 1930**

Finlay, H.J., 1930a, p. 223, not figured.

Holotype: MA70044, **Figures 2j, k**, collected by W. La Roche, from 22 m (12 fathoms), Rangaunu [Awanui] Bay, Northland, New Zealand.

Paratype: MA72573, 12 specimens, from the type locality.

Current name: *Argalista nana* Finlay, 1930 – Spencer *et al.* (2016).

†*Argalista proimpervia* Laws, 1935

Laws, C.R., 1935, pp. 32, 33, pl. 5, fig. 6 (holotype).

Holotype: MA70045, collected from the Late Eocene (Runangan) Totara Limestone at Trig M, Totara, Oamaru, New Zealand.

Paratypes: MA72675, four specimens, from the type locality.

Current name: *Eutinochilus proimpervius* (Laws, 1935) – MolluscaBase (2019).

†*Argalista promicans* Laws, 1936

Laws, C.R., 1936, p. 105, pl. 16, figs 56, 58 (holotype).

Holotype: MA70046, the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Current name: *Argalista promicans* Laws, 1936 – MolluscaBase (2019).

†*Argalista proumbilicata* Finlay, 1930

Finlay, H.J., 1930b, p. 56, pl. 2, figs 20, 21 (holotype), fig. 22 (paratype).

Holotype: MA70047, collected from Early Miocene (Altonian) Target Gully Shellbed, Mount Harris Formation, Glen Creek, Oamaru, Otago, New Zealand.

Paratype: MA72447, one specimen; MA72448, 17 specimens; all from the type locality.

Current name: *Argalista proumbilicata* Finlay, 1930 – MolluscaBase (2019).

***Argalista rotella* Powell, 1937**

Powell, A.W.B., 1937, pp. 187, 188, pl. 50, figs 18, 19 (holotype).

Holotype: NHM 1962987

Paratypes: MA72242*, two specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

* specimens not sighted since 2016.

Current name: *Argalista rotella* Powell, 1937 – Spencer *et al.* (2016).

***Argalista umbilicata* Powell, 1926**

Powell, A.W.B., 1926b, p. 46, pl. 5, fig. 1, 2.

Holotype: CM M5217

Paratypes: MA72337*, collected by the New Zealand Government Trawling Expedition in 1907, from 182 m (100 fathoms) at 'Dredge Station C' 97 km (60 miles) east of Lyttelton, New Zealand.

* specimen not sighted since at least 1993.

Current name: *Argalista umbilicata* Powell, 1926 – Spencer *et al.* (2016).

***Argalista variecostata* Powell, 1937**

Powell, A.W.B., 1937, p. 188, pl. 50, fig. 17 (holotype).

Holotype: NHM 1962988

Paratypes: MA71907, 17 specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 934, R.R.S. Discovery II cruise, in 92 m off Manawatāwhi/Three Kings Islands, New Zealand.

Paratypes: MA72243, nine specimens, collected by A.W.B. Powell on 17 August 1932 from station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Argalista variecostata* Powell, 1937 – Spencer *et al.* (2016).

†*Risellopsis prisca* Powell, 1935

Powell, A.W.B., 1935, pp. 334, 335, pl. 78, figs 20, 21 (holotype).

Holotype: MA72128, collected from Early Miocene (Altonian) Nihotupu Formation (Powell's locality A), southern end of Maori Bay, south of Muriwai Beach, New Zealand.

Paratype: MA71380, one specimen, from the type locality.

Current name: *Cirsochilus priscus* (Powell, 1935) – MolluscaBase (2019).

CALLIOTROPIDAE

†*Calliotropis motutaraensis* Powell, 1935

Powell, A.W.B., 1935, pp. 333, 334, pl. 77, figs 12–14 (holotype).

Holotype: MA72038, collected from Early Miocene (Altonian) Nihotupu Formation (Powell's locality A), southern end of Maori Bay, south of Muriwai Beach, New Zealand.

Paratypes: MA71381, three specimens, from the type locality.

Current name: *Calliotropis motutaraensis* Powell, 1935 – Maxwell in: Spencer *et al.* (2009: 240).

CHILODONTAIDAE

†*Danilia neozelanica* Laws, 1935

Laws, C.R., 1935, p. 30, pl. 5, fig. 2 (holotype).

Holotype: MA70238, collected from the Late Eocene (Runangan) Totara Limestone at Trig M, Totara, Oamaru, New Zealand.

Current name: *Danilia neozelanica* Laws, 1935 – Maxwell in: Spencer *et al.* (2009: 240).

***Euchelus (Herpetopoma) larochei* Powell, 1926**

Powell, A.W.B., 1926c, p. 36, fig. P.37, fig. 2.

Holotype: MA72060, dredged live by W. La Roche, from

Taupo Bay, Whangaroa Bay, Northland, New Zealand.
Current name: *Herpetopoma larochei* (Powell, 1926) – Spencer *et al.* (2016).

***Herpetopoma benthicola* Powell, 1937**

Powell, A.W.B., 1937, p. 178, pl. 49, fig. 13 (holotype)

Holotype: NHM 1962957

Paratypes: MA71894, two specimens, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Herpetopoma benthicola* Powell, 1937 – Spencer *et al.* (2016).

***Herpetopoma larochei alacerrima* Dell, 1956**

Dell, R.K., 1956, pp. 34–36, fig. 34 (holotype).

Holotype: MONZ M.008833

Paratype: MA72753, collected by M.V. Alert on 2 September 1951 from the type locality, in 201 m (110 fathoms) off Stephens Island, Cook Strait, New Zealand.

Current name: *Herpetopoma alacerrimum* Dell, 1956 – Spencer *et al.* (2016).

***Herpetopoma mariae* Finlay, 1930**

Finlay, H.J., 1930a, p. 223, not figured.

Holotype: MA70357, **Figures 2l, m**, Cape Maria van Diemen, Northland, New Zealand.

Paratype: MA72572, one specimen from the type locality.

Current name: *Herpetopoma mariae* Finlay, 1930 – Spencer *et al.* (2016).

SEGUENZIIDAE

†*Notosetia tantilla* Laws, 1936

Laws, C.R., 1936, p. 106, pl. 16, fig. 59 (holotype).

Holotype: MA70543, collected from the Early Pliocene (Opoitian) of the Kaawa Formation at Kaawa Creek, south of Port Waikato, Waikato, New Zealand.

Current name: *Putilla tantilla* (Laws, 1936) – MolluscaBase (2019).

UNCERTAIN FAMILY

***Brookula annectens* Powell, 1937**

Powell, A.W.B., 1937, p. 183, pl. 51, fig. 14 (holotype).

Holotype: NHM 1962971

Paratypes: MA72230, 19 specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Brookula annectens* Powell, 1937 – Spencer *et al.* (2016).

***Brookula contigua* Powell, 1940**

Powell, A.W.B., 1940, pp. 222, 223, pl. 29, fig. 8.

Holotype: MA70106, presumed to have been collected by Captain J. Bollons from 179 m (98 fathoms) in 1914, 15°S of Great Island, Manawatāwhi/Three Kings Islands, New Zealand.

Paratypes: MA71565, four specimens, from the type locality
Current name: *Brookula contigua* Powell, 1940 – Spencer *et al.* (2016).

†*Brookula endodonta* Finlay, 1924

Finlay, H.J., 1924b, pp. 530, 531, pl. 53, figs 7a–c.

Holotype: MA70107, collected from the Early Miocene (Altonian) of the Mount Harris Formation, Pukeuri, Otago, New Zealand.

Paratypes: MA72514, five specimens, from the type locality.

Current name: *Brookula endodonta* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 240).

†*Brookula fossilis* Finlay, 1924

Finlay, H.J., 1924b, p. 527, pl. 53, figs 4a–c.

Holotype: MA70109, collected from Pleistocene (Castlecliffian), Castlecliff, Whanganui, New Zealand.

Paratypes: MA72508, seven specimens, from the type locality.

Current name: *Brookula fossilis* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 240).

†*Brookula funiculata* Finlay, 1924

Finlay, H.J., 1924b, p. 529, pl. 53, figs 5a–c.

Holotype: MA70110, collected from Pleistocene (Castlecliffian), Castlecliff, Whanganui, New Zealand.

Paratypes: MA72512, 23 specimens, from the type locality.

Current name: *Brookula funiculata* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 240).

†*Brookula iredalei* Finlay, 1924

Finlay, H.J., 1924b, pp. 527, 528, pl. 53, fig. 2a–c.

Holotype: MA70111, collected from the Early Miocene (Altonian) of the Mount Harris Formation, Pukeuri, Otago, New Zealand.

Paratypes: MA72511, five specimens, from the type locality.

Current name: *Aequispirella iredalei* Finlay, 1924 – MolluscaBase (2019).

***Brookula lincta* Powell, 1940**

Powell, A.W.B., 1940, p. 222, pl. 29, fig. 9.

Holotype: MA70112, collected from 182 m (100 fathoms) off Great Island, Manawatāwhi/Three Kings Islands, New Zealand.

Paratypes: MA71555, ten specimens; MA71983, eight specimens, all from the type locality.

Remarks: The holotype was destroyed by glass disease.

Current name: *Brookula prognata* Finlay, 1926 – Powell (1979: 77); Spencer *et al.* (2016).

†*Brookula pukeuriensis* Finlay, 1924

Finlay, H.J., 1924b, pp. 529, 530, pl. 53, figs 3a–c.

Holotype: MA70113, collected from the Early Miocene (Altonian) of the Mount Harris Formation, Pukeuri, Otago, New Zealand.

Paratypes: MA72513, 28 specimens, from the type locality.

Current name: *Brookula pukeuriensis* Finlay, 1924 – Maxwell in: Spencer *et al.* (2009: 240).

†*Brookula tenuilirata* Finlay, 1924

Finlay, H.J., 1924b, p. 528, pl. 53, figs 1a–c.

Holotype: MA70114, collected from the Early Miocene (Altonian) of the Mount Harris Formation, Pukeuri, Otago, New Zealand.

Paratypes: MA72510, three specimens, from the type locality.

Current name: *Aequispirella tenuilirata* (Finlay, 1924) – Maxwell in: Spencer *et al.* (2009: 240).

***Brookula (Aequispirella) enderbyensis* Powell, 1931**

Powell, A.W.B., 1931b, pp. 372, 373, pl. L1, fig. 6.

Paratype: MA72856, three specimens from the type locality, from 155 m (85 fathoms), 16 km (10 miles) north of Enderby Island, Auckland Islands, New Zealand.

Current name: *Aequispirella enderbyensis* (Powell, 1931) – Spencer *et al.* (2016).

***Brookula (Aequispirella) finlayi* Powell, 1933**

Powell, A.W.B., 1933b, pp. 195, 196, pl. 33, fig. 1.

Holotype: MA70108, collected by A.W.B. Powell in February 1933, from 18 m (10 fathoms) off Owenga, Rēkohu/Chatham Islands, New Zealand.

Paratypes: MA71532, two specimens, from the type locality.

Current name: *Aequispirella finlayi* (Powell, 1933) – Spencer *et al.* (2016).

***Lissotesta aupouria* Powell, 1937**

Powell, A.W.B., 1937, pp. 186, 187, pl. 51, fig. 7 (holotype).

Holotype: NHM 1962981

Paratype: MA72237, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Lissotesta aupouria* Powell, 1937 – Spencer *et al.* (2016).

***Lissotesta benthicola* Powell, 1927**

Powell, A.W.B., 1927, p. 115, pl. 21, fig. 7.

Holotype: CM M5375

Paratype: MA72340*, from the type locality by Prof. R. Speight in December 1908, from 311 m (170 fathoms) off Puysegur Point, Fiordland, New Zealand.

* the specimen has not been sighted since at least 1993.

Current name: *Lissotesta benthicola* Powell, 1927 – Spencer *et al.* (2016).

***Lissotesta bicarinata* Powell, 1940**

Powell, A.W.B., 1940, p. 222, pl. 28, fig. 12 (holotype).

Holotype: MA72082, collected from shell sand, Tom Bowling Bay, Northland, New Zealand.

Remarks: Specimen affected by glass disease.

Current name: *Lissotesta bicarinata* Powell, 1940 – Spencer *et al.* (2016).

***Lissotesta caelata* Powell, 1937**

Powell, A.W.B., 1937, pp. 185, 186, pl. 51, fig. 5 (holotype).

Holotype: NHM 1962979

Paratypes: MA72236, two specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality,

station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Lissotestella caelata* (Powell, 1937) – Spencer *et al.* (2016).

***Lissotesta conoidea* Powell, 1937**

Powell, A.W.B., 1937, p. 186, pl. 51, fig. 6 (holotype).

Holotype: NHM 1962982

Paratypes: MA72238, seven specimens, collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Lissotesta conoidea* Powell, 1937 – Spencer *et al.* (2016).

***Lissotesta consobrina* Powell, 1940**

Powell, A.W.B., 1940, p. 221, pl. 28, fig. 11 (holotype).

Holotype: MA72083, collected from 183 m (100 fathoms) off Great Island, Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Lissotestella consobrina* (Powell, 1940) – Spencer *et al.* (2016).

***Lissotesta decipiens* Powell, 1940**

Powell, A.W.B., 1940, p. 221, pl. 28, fig. 3 (holotype).

Holotype: MA70415, collected from 137 m (75 fathoms) off Otou/North Cape, New Zealand.

Paratypes: MA71553, five specimens, from the type locality.

Current name: *Lissotesta decipiens* Powell, 1940 – Spencer *et al.* (2016).

***Lissotesta errata* Finlay, 1926**

Finlay, H.J., 1926a, p. 366, pl. 19, figs 28, 29 (holotype).

Holotype: MA70416, dredged from 91 m (50 fathoms), near The Snares, New Zealand.

Paratype: MA72525, a single specimen from the type locality.

Current name: *Lissotesta errata* Finlay, 1926 – Spencer *et al.* (2016).

***Lissotesta oblata* Powell, 1940**

Powell, A.W.B., 1940, pp. 221, 222, pl. 28, fig. 13 (holotype).

Holotype: MA70417, collected from 183 m (100 fathoms) off Great Island, Manawatāwhi/Three Kings Islands, New Zealand.

Paratypes: MA71554, three specimens, from the type locality.

Current name: *Lissotesta oblata* Powell, 1940 – Spencer *et al.* (2016).

***Lissotesta rissoaformis* Powell, 1931**

Powell, A.W.B., 1931b, p. 373, pl. L2, fig. 11.

Holotype: CM M2782

Paratype: MA72357, a single specimen from the type locality, from 155 m (85 fathoms), 16 km (10 miles) north of Enderby Island, Auckland Islands, New Zealand.

Remarks: Specimen affected by glass disease.

Current name: *Lissotestella rissoaformis* (Powell, 1931) – Spencer *et al.* (2016).

***Lissotesta tenuilirata* Powell, 1931**

Powell, A.W.B., 1931b, p. 373, pl. L2, figs 9, 10.

Holotype: CM M2778

Paratypes: MA72356, two specimens, from the type locality, from 155 m (85 fathoms), 16 km (10 miles) north of Enderby Island, Auckland Islands, New Zealand.

Current name: *Lissotestella tenuilirata* (Powell, 1931) – Spencer *et al.* (2016).

***Lissotesta tryphenensis* Powell, 1931**

Powell, A.W.B., 1931b, p. 374, pl. L2, fig. 8.

Holotype: MA72084, collected by A.W.B. Powell in 1922 from 9–11 m (5–6 fathoms) in Tryphena Harbour, Aotea/Great Barrier Island, New Zealand.

Current name: *Lissotestella tryphenensis* (Powell, 1931) – Spencer *et al.* (2016).

***Notosetia aoteana* Powell, 1937**

Powell, A.W.B., 1937, p. 200, pl. 53, fig. 11 (holotype).

Holotype: NHM 19621022

Paratype: MA72272, two specimens collected by A.W.B. Powell on 17 August 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Notosetia aoteana* Powell, 1937 – Spencer *et al.* (2016).

***Zerotula crenulata* Powell, 1937**

Powell, A.W.B., 1937, pp. 209, 210, pl. 44, figs 6, 7 (holotype).

Holotype: NHM 19621049

Paratypes: MA72289, seven specimens, collected by A.W.B. Powell in 1932 from the type locality, station 933, R.R.S. Discovery II cruise, in 260 m off Manawatāwhi/Three Kings Islands, New Zealand.

Current name: *Adeuomphalus crenulatus* (Powell, 1937) – MolluscaBase (2019).

***Zerotula nautiliformis* Powell, 1927**

Powell, A.W.B., 1927, p. 118, pl. 21, fig. 5.

Holotype: CM5364

Paratype: MA72344*, collected by Prof. R. Speight in December 1908, from 311m (170 fathoms) off Puysegur Point, Fiordland, New Zealand.

* specimen not sighted since at least 1993.

Current name: *Palazzia nautiliformis* (Powell, 1927) – Powell (1979: 249); Spencer *et al.* (2016).

***Zerotula ramosa* Powell, 1940**

Powell, A.W.B., 1940, p. 237, pl. 29, fig. 3 (holotype).

Holotype: MA70894, collected from 137 m (75 fathoms) depth off Otou/North Cape, Northland, New Zealand.

Paratypes: MA71574, two specimens, from the type locality.

Remarks: The holotype is affected by glass disease.

Current name: *Palazzia ramosa* (Powell, 1940) – Powell (1979: 249); Spencer *et al.* (2016).

ACKNOWLEDGEMENTS

As for Parts 1 & 2, this part of the types catalogue was originally started in the early 1990s by the then staff and volunteers of Auckland Museum's Marine Department. For full acknowledgements of this work see Blom (2016).

For support with Part 3 I would like to specifically thank the following people: Martin Collett for sourcing correspondence, Peter Quin for the magnificent high-resolution images of type specimens and Hugh Grenfell for putting the figures together. The initial work was started with a Lottery Science grant (Sept 1993). Some of the later work was supported by New Zealand Lotteries Environment and Heritage Committee grants 253353 and 284872. The imaging work was supported by Lotteries Environment and Heritage Committee grant 310828.

I am very grateful to Alan Beu and Hugh Grenfell for helpful comments at various stages of the manuscript.

I would also like to thank Alan Beu and Bruce Hayward for refereeing this third part of the types catalogue.

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Wilma M. Blom, Auckland War Memorial Museum. wblom@aucklandmuseum.com

Submitted 29 July 2019; accepted 2 September 2019.