MOLLUSCAN TYPES OF THE ALBATROSS EXPEDITIONS TO THE EASTERN PACIFIC DESCRIBED BY W. H. DALL (1908)

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ABSTRACT. This paper documents the type material of 215 species of mollusks described by W. H. Dall in his 1908 monograph on the shelled mollusks and brachiopods collected by Alexander Agassiz during the three cruises of the *Albatross* in the tropical Pacific. The division of type specimens between Harvard University (Museum of Comparative Zoology) and the Smithsonian Institution (U.S. National Museum), as well as other curatorial problems, has resulted in some errors and omissions in the subsequent literature. These are here rectified.

INTRODUCTION

Alexander Agassiz [1835–1910], the founder of oceanographic research in the United States and second director of the Museum of Comparative Zoology (MCZ) at Harvard College, had three major series of expeditions to his name: first, the three cruises of the Blake (1877-80) in the western Atlantic, primarily in the Caribbean Sea and Gulf of Mexico; second, several cruises (on various small steamers) in the western Pacific and the Indian Ocean at the turn of the century; and third, the three cruises of the Albatross in the tropical eastern Pacific (1891, 1899–1900, 1904–05). Specifically, the first Albatross cruise went from Panama to the Galápagos Islands, to Acapulco, and then to the Gulf of California: the second went from San Francisco to the Marquesas and thence westward through Polynesia, eastern Melanesia, and through Micronesia to the Ladrone (Marianas) Islands; and the third went from San Francisco to Panama, then

to the Galápagos, then to Peru, then westward to Easter Island, back to the Galápagos, westward again to Mangareva (Gambier Islands), and then northward to Acapulco and San Diego. Although the *Albatross* was owned by the U.S. Fish Commission (USFC), the actual costs of these expeditions, not the least being the advance transport of coal to remote destinations, were covered by Agassiz.

All three Albatross cruises resulted in numerous publications on the systematics of the various organisms, mostly deep-sea, collected during the expeditions, as well as narrative volumes and descriptions of the coralreef habitats by Agassiz himself (Agassiz, 1892, 1902, 1903, 1905, 1906). These publications, with their often sumptuous plates, appeared in the *Bulletin* and *Memoirs* of the MCZ, with the publication costs subsidized by Agassiz^{*} through his fortunes derived from copper mines in Michigan.

Today these expeditions are best known by marine zoologists for their extensive discoveries of the deep-sea fauna, often from areas not well covered by previous expeditions, such as those of the *Challenger* in 1872–76. It is perhaps ironic that the Pacific and Indian Ocean expeditions of Agassiz were intended actually to allow him to collect data on the structure and formation of coral reefs in order to confirm his theories on this subject. Most zoologists are aware of the conclusions of

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[•] Agassiz (1912: 58) complained of the neglect by the U.S. government in not helping with the publication expenses.

Charles Darwin on the development of coral reefs, which today have received wide acceptance, albeit with some modifications. However, during the late 1800s there was not as strong a consensus concerning Darwin's views, with other hypotheses actively advanced by their proponents (Daly, 1916; Davis, 1928).

It will be recalled that Louis Agassiz [1807–73] was a vehement opponent of Darwin's theory of evolution by natural selection, so it is poignant to note that his son, Alexander, was to be just as opposed to Darwin's theory of coral-reef formation. That both father and son were wrong indicates their inflexible mentality (see also Winsor, 1991). In any case, the younger Agassiz, during his oceanographic cruises, certainly visited and studied far more coral reefs than had Darwin, James Dwight Dana (another key figure in this controversy), or indeed any other marine zoologist of those times. Yet Agassiz's approach to the coral-reef problem was strictly empirical: the accumulation of numerous observations that could, by inadequately explicated reasoning, be made to fit his own hypotheses.

Eventually, Darwin's views were confirmed for nearly all coral reefs, with Agassiz's hypotheses applying only to a few coral reefs that had formed on secondarily elevated platforms (as opposed to reefs around volcanic islands or barrier reefs). Indeed, Agassiz's voluminous research (1903) is scarcely if at all noted by modern historians of the coral-reef problem (e.g., Kühlmann, 1982; Stoddart, 1994), notwithstanding their doughty defenses in several hagiographic accounts of Agassiz's life (G. R. Agassiz, 1913; Mayer, 1910). In addition to studying the coral-reef problem, the Albatross expeditions were also intended to analyze the relationships of the deep-water fauna on either side of the Panamanian isthmus (Hedgpeth, 1945: 11; Wourms, 1992: 6) and the existence of the planktonic biota at intermediate oceanic depths (Mills, 1980); the former study was not completed by Agassiz, and the results

of the latter study were disproven by other researchers.

Despite the fact that the primary rationale for Agassiz's Pacific and Indian Ocean expeditions has long since been rejected by marine zoologists, the specimens themselves and the systematic publications thereto remain of importance today in documenting the marine fauna of these regions.

For the Mollusca, the material from the Albatross expeditions of Agassiz was divided among several malacologists. The Cephalopoda of the first two expeditions were monographed by Hoyle (1904). The Nudibranchia and other shell-less Opisthobranchia of the first expedition were monographed by Bergh (1894). The discovery of a single specimen of *Dolabella* at Easter Island prompted an elaborate report on the "Dolabellinae" by MacFarland (1918) entailing a complete dissection of the holotype. The remaining shelled mollusks, as well as the brachiopods, were turned over to William Healey Dall [1845-1927] at the Smithsonian Institution (U.S. National Museum [USNM]). As Dall had previously treated the shelled mollusks of the Blake expeditions (Kabat, in press), Agassiz could confidently expect Dall to produce a work of similar quality on the Albatross Pacific material.

Dall's 1908 monograph on the shelled mollusks remains of fundamental importance in documenting and describing the (mostly) deep-sea biota of the eastern Pacific, along with a few taxa from Easter Island (Isla de Pascua) and nearby Isla Sala y Gómez. Many of these species are still known only from their original description and have not since been re-collected. Dall's monograph was largely based on the first and third Albatross cruises of Agassiz, together with some material from Mexico and southern California collected in 1888 by the Albatross during its earlier coastal surveys. The second Albatross cruise, which covered much of Polynesia and Micronesia, collected few benthic taxa (as the ocean floor in those regions was primarily composed of manganese nodules), and only a small number of mollusk species were recorded by Dall.

The following two paragraphs are modified from Kabat (in press) concerning the *Blake* expedition mollusks, as the same principles and problems apply to the *Albatross* mollusks.

The majority of these species were based on several specimens, often coming from different stations, and holotypes were seldom specified by Dall in the original description. Although Dall often gave the USNM number for one lot under each species, he did not indicate the type status of that lot, and sometimes there were several specimens included in the lot. Numerous problems of interpretation of the type material by subsequent revisers have arisen over the past century. In the absence of a specified holotype, the presence of more than one specimen in the type material for a species means that these specimens are actually syntypes ["cotypes" in the older literature]. One specimen, usually the figured specimen, can be selected as the **lectotype** upon revision of the taxon. The remaining syntype(s) from the type lot(s) then automatically become paralectotype(s) (ICZN Articles 72–74).

Unfortunately, these principles concerning syntypes and lectotypes were often overlooked by malacologists in their taxonomic monographs. What frequently has occurred are statements that a given specimen (or lot) is the "holotype" and, sometimes, a statement that the remaining specimens are "paratypes." This, in fact, represents an inadvertent selection of a lectotype and paralectotypes by the subsequent author (ICZN Article 74).

Another problem concerning the *Albatross* material (as for that of the *Blake*) is that often the specimen lots were divided between the USNM (National Museum of Natural History, Smithsonian Institution) and the Museum of Comparative Zoology [MCZ] (Harvard University), although Dall did not explicitly note any MCZ records in his monograph. It is possible that

the MCZ material was still at the Smithsonian at the time Dall's paper was completed. In researching the secondary literature, a lack of mention by authors of the MCZ material was noticed, sometimes with erroneous statements that the USNM specimen was the unique holotype when in fact syntypes were extant at the MCZ.

Also, as Kabat (in press) has discussed, during the Second World War the "type collections" of the USNM were stored at Luray in the Shenandoah Valley of central Virginia in order to protect them during possible bombing of the nation's capital. However, the haste necessitated by identifying and packing these specimens meant that no time could be devoted to researching their type status when they were removed from the general collection. After the war, at which time the type collection was kept separate, little curatorial attempt was made either to identify additional syntypes in the general collection or, indeed, to verify the type status of the material in the type collection itself. These problems are herein rectified, but they have assuredly led to confusion in the past as researchers often have assumed that a single specimen in the USNM type collection was per force the holotype.

One issue unique to the eastern Pacific marine mollusks in the USNM collection needs to be addressed as it too has caused problems. Several decades ago researchers with a special interest in this fauna undertook well-intentioned projects of carefully working through the USNM type collection, examining the type lots from the eastern Pacific, and then "recurating" those lots containing more than one specimen. In essence, what these researchers did was to determine which specimen (in a syntype series) was the "figured" or "measured" type, label that specimen as the "holotype" or "type," and then have the remaining syntype(s) recataloged under a new USNM number as "paratypes." The good intentions of these researchers to clarify taxonomic problems notwithstanding, these curatorial actions have no valid

standing under the ICZN for which only a published lectotype designation has standing. The relabeling of type material in this manner has no nomenclatural status and interferes with correct understanding of the actual type status of these syntypes. This author has identified numerous such "paratype" lots, some of which did indeed become paralectotypes in the subsequent literature, but most of which are really syntypes and have now been returned to the USNM type collection.

In contrast to the mollusks from the *Blake* publications, which had resulted in a vast subsequent literature containing numerous lectotype selections (the majority inadvertent), the mollusks from these *Albatross* expeditions have, as noted earlier, seldom been restudied, and most are still known only from the type material. Thus, the secondary literature is much smaller for this fauna.

There are, however, three publications that contain innumerable lectotype designations (nearly all inadvertent): Oldroyd's (1925-27) treatise on the marine mollusks of the northeastern Pacific and the two editions (1958, 1971) of Myra Keen's book on the marine mollusks of the tropical eastern Pacific. Although Oldroyd's treatise was judged to represent "essentially non-critical compilations of original descriptions" (Coan and Kellogg, 1990: 175), she did include for many of Dall's species a statement that a certain lot was "Type" (albeit without further restriction). One of the major assets of Keen's books is that they include photographs of type specimens for many of the species treated. Few malacologists in recent years have noticed that in the back of these books, in the section titled "Sources of Illustrations," Keen (1958: 541-555; 1971: 935-966) provided not only the museum source of the figured specimen but also, for many type lots, the supposed type status.

It is obvious, however, that neither Oldroyd nor Keen researched the type status for the species described by Dall from the eastern Pacific. In many cases, Oldroyd or

Keen cited a USNM specimen as "holotype" when in fact it was one of a syntype series. Therefore, their action constitutes a lectotype selection (ICZN Article 74) and has been so cited for numerous taxa in this catalog. This author has discussed these problems with several malacologists specializing in the eastern Pacific fauna. A review of the literature indicated that Jung (1989: 165) is the only source to have explicitly acknowledged this issue for a species described in Dall (1908). It is recommended that the curatorial staff of the museums whose type specimens were illustrated by Oldroyd or Keen, as well as researchers interested in the tropical eastern Pacific mollusk fauna, carefully check the relevant citations by Keen for other such inadvertent lectotype selections. Bieler (1993: 95) documented a similar problem for Architectonica valenciennesii Mörch, 1859.

An interesting point concerning Oldroyd's putative type statements is that our interpretation must be based on whether the USNM lot in fact had only one syntype specimen at the time of Oldroyd's publication. It will be recalled that in the 1950s-60s several researchers had "recataloged" certain USNM syntype lots. Suppose that a certain lot was one that Oldroyd had said to be "type"—today that lot might indeed contain only one specimen, but that might be a curatorial artifact of this subsequent recataloging process. If in Oldroyd's time that lot had instead comprised more than one specimen, then her "type" statement would not represent a valid lectotype selection.

It is obvious that the retroactive application of various ICZN provisions concerning the interpretation of type status to research or recuration done in good faith at the time represents a case of *ex post facto* judgment. One must consider that these researchers certainly could not have expected that their actions would be viewed in a different light by subsequent researchers following revised rules.

Note that despite the diverse technical

problems discussed here, there have been relatively few misinterpretations of taxa. This is ascribed to the general excellence of Dall's original descriptions and to the competence in discernment and interpretation of various subsequent authors.

One last point of some historical interest, which has not been noted in print previously, is brought out by a letter from Dall to Alexander Agassiz, dated October 10, 1896:

Dear Professor, Yours of the 8th is at hand.... You may remember that there were two or three jars of the marines which did not turn up. A year or so later somebody sold some material in London which must have come from the *Albatross*, as I was informed by one of the London dealers; and I learned from Townsend that one of the employees [of the USFC] was suspected of stealing specimens, though it was not at the time capable of proof.*

The "London dealers" were presumably Sowerby & Fulton; one wonders whether or not any European conchologist was able to describe presumed new species from the stolen material or, indeed, whatever became of those specimens.

MATERIALS AND METHODS

The taxa described by Dall in his 1908 monograph were recorded and sorted into systematic sequence, by molluscan family. For each species, the citation to the original description is given, together with the type localities (mostly Albatross stations) as given by Dall. If Dall stated that a certain lot was "the type" (or similar wording), that is herein indicated. This listing was then carefully checked against the USNM type and general collections and the MCZ collection (in which types are housed together with the nontype material). Recognition of certain lots as types was facilitated by external evidence (ICZN Recommendation 72B). In addition, type specimens had been exchanged with S. S. Berry [1887–1984], a Californian malacologist who had a large private collection. The Berry collection is now in the Santa Barbara Museum of Natural History; Scott et al. (1990) documented the nongastropod types therein and P. H. Scott (email, July 19, 1995) kindly provided this author with a listing of the gastropod types described by Dall and now housed in that institution.

Also, researchers should be aware that later publications by Dall and various other authors have described new taxa from the three *Albatross* expeditions of Agassiz. In addition, the *Albatross* made numerous other cruises elsewhere in the northern Pacific (not sponsored by Agassiz) that have resulted in diverse systematic publications.

The 1908 report by Dall, in addition to comprising material from the three *Albatross* expeditions, also included specimens from various other collections, including several individual shell collectors. In the catalog, the name of these collectors, when given by Dall, is in all capitals, to distinguish it from the locality.

In some cases, it was not possible to find type material from all the stations as cited by Dall; either the specimens were lost or, more likely, they were subsequently reidentified as representing a different species, possibly in a different genus.

Dall (1908: 446–476) listed the Albatross dredging stations (3353–3437, 4567– 4743) from the first and third expeditions; data from the earlier 1888 cruise can be found in Townsend (1901: 403ff.). For the reader's convenience, geographical data for those stations that represent type localities are given in the Appendix to this paper. Kabat (in press) discussed various problems concerning the localization of the Blake stations and the potential mixture of specimens and station data; these problems do not seem to have arisen for the Albatross material.

The subsequent literature on this fauna was checked for lectotype designations and illustrations of previously unfigured specimens, although as mentioned previously the two books of Keen (1958, 1971)

Letter from Dall to Alexander Agassiz, October 10, 1896, MCZ Library Archives, bAg 241.10.1(100).

were the only major source of such citations. I have made no new lectotype designations herein, as such a task is best left for revisers of individual taxa.

This catalog was then re-sorted into a single alphabetical sequence by original binomen, with the current family name, as curated in the USNM collection, indicated for each species. There are inevitably some differences in the familial classification between the recently recurated collections of the USNM and the various older arrangements as used at the MCZ and other mollusk collections. For the reader's convenience, a Generic Index is placed at the end of this paper.

Abbreviations Used

- ANSP Academy of Natural Sciences of Philadelphia
- CAS California Academy of Sciences
- DMNH Delaware Museum of Natural History
- fm fathoms (1 fm = 6 feet = circa1.83 meters)
- MCZ Museum of Comparative Zoology, Harvard University
- SBMNH Santa Barbara Museum of Natural History
- USNM U.S. National Museum (now the National Museum of Natural History, Smithsonian Institution) disarticulated (loose) valve (for the Bivalvia).

Note Regarding Types of Bivalvia

For the Bivalvia, many type lots consist of disarticulated (loose) valves. Specialists can best determine whether these valves represent matched pairs or different specimens. A further complication is that some bivalve families, notably the Propeanussiidae, have significant dimorphism in left/right valve size and/or sculpture. Unless otherwise specified, each bivalve lot has one specimen (= paired valves); others have either multiple specimens, or multiple loose valves, or a single valve.

CATALOG OF SPECIES-LEVEL TAXA

- abbreviatus, Lepidopleurus halistreptus Dall, 1908: 354. Albatross 3417 [7 syntypes, USNM 223498; 1 syntype, MCZ 27959; 3 syntypes, SBMNH 34461]. Type material not mentioned by Ferreira (1979b: 153, 157). Leptochitonidae.
- acrita, Leda (Jupiteria) Dall, 1908: 374– 375. Albatross 2799 [1 syntype, USNM 110690; numerous syntypes (100+ v), USNM 610320; syntypes (3 specimens + 5v), MCZ 27821; 1 syntype, CAS 66509; syntypes (9 specimens + 4v), SBMNH 34057]; Albatross 2794 [1 syntype (1v), USNM 122761]; Albatross 2801 [1 syntype, USNM 96389]; Albatross 2803 [syntypes (11 specimens + 4v), USNM 96974]. Nuculanidae.
- agapea, Leda (Jupiteria) Dall, 1908: 373– 374, plate 6, figures 4, 5. Albatross 3360 [Lectotype, USNM 122911, selected by Knudsen, as "the type" (1970: 26); 1 paralectotype, MCZ 27819]; Albatross 3398 [1 paralectotype (2v), USNM 122912]. Nuculanidae.
- agassizii, Borsonia (Borsonella) Dall, 1908: 275, plate 1, figure 5. Albatross 3361 [Lectotype, USNM 123107, selected by McLean in Keen, as "holotype" (1971: 959, caption to fig. 1759); 1 paralectotype, USNM 697375]. Turridae.
- agassizii, Cocculina Dall, 1908: 340. Albatross 4630 [Holotype, USNM 110660 (figured by McLean in Keen, 1971: fig. 173)]. Cocculinidae.
- agassizii, Solemya (Acharax) Dall, 1908: 365–366, plate 16, figure 10. Albatross 3360 [Lectotype (2v), USNM 106885 (broken), selected by Oldroyd, as "Type" (1925: 10); 1 paralectotype (2v), MCZ 27814 (broken)]; Albatross 3381 [paralectotypes (4v), USNM 106886 (broken); 1 paralectotype (2v), MCZ 27815 (broken)]; Albatross 3382 [1 paralectotype (1v), USNM 122945 (broken); 1 paralectotype (2v), MCZ

27816 (broken)]; *Albatross* 3399 [**not found**]; *Albatross* 3434 [**not found**]; *Albatross* 4654 [**1 paralectotype** (**1**v), **USNM** (uncataloged)]. The type material from *Albatross* 3399 and 3434 could not be found; possibly it was in the old USNM alcohol collection? Solemvidae.

- agujana, Nucula Dall, 1908: 370, plate 10, figures 6, 7. Albatross 4654 [syntypes (3 specimens + 4v), USNM 110571; 1 syntype, MCZ 27808]. Nuculidae.
- *agujanus, Polinices (Euspira)* Dall, 1908: 334, plate 9, figure 2. *Albatross* 4643 [Holotype, USNM 110566 (figured by Marincovich, 1977: 291–292, pl. 25, fig. 7)]. Naticidae.
- altina, Pleurotomella (Gymnobela) agonia Dall var. Dall, 1908: 278–279, plate 14, figure 9. Albatross 3366 ("type") [Holotype, USNM 123137]. Dall also recorded this species from Albatross 3365 (even giving the number, USNM 123136), but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Turridae.
- amabilis, Volutopsius "?" Dall, 1908: 305, plate 11, figure 9. Albatross 3392 [Holotype, USNM 123008 (figured by Keen, 1971: fig. 1152)]. Buccinidae.
- arciformis, Malletia (Minormalletia) Dall, 1908: 385–386, plate 15, figures 5, 6. Albatross 3417 [2 syntypes, USNM 122926; 1 syntype, MCZ 27833, 2v]. Malletiidae.
- *armilda, Turris (Surcula)* Dall, 1908: 262–263. *Albatross* 3017 [1 syntype, USNM 110601; 2 syntypes, USNM 697380]. Turridae.
- atahualpa, Cylichnella (Cylichnium) Dall, 1908: 243, plate 11, figure 2. Albatross 3354 [Holotype, USNM 123081]. Cylichnidae.
- atossa, Tindaria Dall, 1908: 388, plate 15, figures 3, 4. Albatross 3392 ("the type") [Holotype, USNM 122920]. Dall also recorded this species from Albatross 3393, but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Nuculanidae.

balaenorum, Terebra (Strioterebrum) Dall,

1908: 252. Albatross 2835 [Lectotype, USNM 110599, selected by Keen, as "holotype" (1958: 554, caption to fig. 957; see also Bratcher and Cernohorsky, 1987: 151, fig. 151b); **3 paralectotypes**, USNM 610318]; W. J. FISHER, La Paz, Gulf of California [not found]. Terebridae.

- bathymetrae, Stilifer (Mucronalia) Dall, 1908: 318. On a species of Bathymetra [Crinoidea; = Antedon?], Albatross 3381. This specimen was not seen by Dall but was cited from Hartlaub (1895: 146–147, pl. 4, fig. 25), who stated "An dem Exemplar sitzt als Schmarotzer festgeheftet ein Stylifer verwandte Schneckenart (nach Prof. v. Martens wahrscheinlich eine Mucronalia)." Warén (1980: 199) stated "Type material lost. I consider this a nomen dubium." Eulimidae.
- benthima, Gemmula Dall, 1908: 267, plate 1, figure 7; plate 13, figure 4. Albatross 3392 [Lectotype, USNM 123089, selected by McLean in Keen, as "holotype" (1971: 958, caption to fig. 1650); 2 paralectotypes, USNM 537854; I paralectotype, MCZ 27894]; Albatross 2807 [3 paralectotypes, USNM 96485; 1 paralectotype, MCZ 27892]; Albatross 3360 [1 paralectotype, USNM 123087]; Albatross 3365 [1 paralectotype, USNM 123092]; Albatross 3366 [3 paralectotypes, USNM 123093; 2 paralectotypes, MCZ 27893]; Albatross 3376 [1 paralectotype, USNM 123088]; Albatross 3413 [1 paralectotype, USNM 123090]. Turridae.
- benthima, Malletia (Minormalletia) Dall, 1908: 386, plate 15, figures 1, 2. Albatross 3417 [Holotype, USNM 122927]. Malletiidae.
- blanda, Daphnella (Surculina) Dall, 1908:
 291, plate 3, figure 1. Albatross 3366
 [Holotype, USNM 123119]. Turbinellidae.
- borniana, Aligena Dall, 1908: 413, plate 10, figure 2. Albatross 4732 [Holotype,

USNM 110585 (figured by Harry, 1969: 176–177, figs. 30, 31)]. Kelliidae.

- bridgesi, Terebra (Strioterebrum) Dall, 1908: 253. BRIDGES, Panama [Lectotype, USNM 9404, selected by Keen, as "holotype" (1971: 956, caption to fig. 1526, right; see also Bratcher and Cernohorsky, 1987: 144, pl. 42, figs. 162a, b); 7 paralectotypes, USNM 610319; 1 paralectotype, SBMNH 34779]. Terebridae.
- brunneopictum, Epitonium (Ferminoscala) Dall, 1908: 316–317, plate 8, figure 10. Albatross 2835 [Holotype, USNM 97084 (figured by Keen, 1971: fig. 670)]. Epitoniidae.
- calcar, Leda (Spinula) Dall 1908: 378, plate 10, figures 1, 10. Albatross 4658 [1 syntype, USNM 110573 (broken) (as "type" in Knudsen, 1970: 39); syntypes (2 specimens + 1v), USNM 683589 (broken); 1 syntype, MCZ 27825 (broken)]. Nuculanidae.
- *calcarella, Leda (Spinula)* Dall, 1908: 378– 379. *Albatross* 4656 [**1 syntype, USNM 110694; 3 syntypes, USNM 110575** (**not found**)]. Nuculanidae.
- calcipicta, Bursa (Lampadopsis) Dall, 1908: 320–321. Albatross 3368 [Holotype, USNM 123027 (figured by Keen, 1958: fig. 328)]. Bursidae.
- californica, Cancellaria (Admete?) Dall, 1908: 296–297, plate 4, figure 4. Albatross 2980 [1 syntype, USNM 110626; 2 syntypes, USNM 635739]; Albatross 3346 [20+ syntypes, USNM 110624; 3 syntypes, MCZ 27928]; Albatross 3194 [2 syntypes, USNM 110625]; Albatross 2839 [1 syntype, USNM 122817]; Albatross 2923 [50+ syntypes, USNM 110627]; Albatross 2936 3 syntypes, USNM 106823; 2 syntypes, USNM 110628]; Albatross 4339 [1 syntype, USNM 110629]. Oldroyd (1927: 160) cited USNM 110626 as "Type," but this lot actually comprised more than one specimen at that time. Cancellariidae.
- californica, Liotia (Arene) Dall, 1908: 344– 345. Albatross 2984 [1 syntype, USNM

110662; 5 syntypes, USNM 635457; 1 syntype, SBMNH 34780]. Turbinidae.

- californicus, Ptychatractus Dall, 1908:
 299–300. Albatross 2923 [1 syntype,
 USNM 193650; 1 syntype, USNM 635736]. Turbinellidae.
- callimene, Leda (Jupiteria) Dall, 1908: 372–373, plate 17, figures 3, 4. Albatross 3396 [1 syntype, USNM 122910; numerous syntypes (30 + v), USNM 604252; syntypes (3v), MCZ 27818; 1 syntype (1v), CAS 66408; syntypes (1 specimen + 1v), SBMNH 34058]; Tome, Chile, in 14 fm [numerous syntypes (20 + v), USNM 110689]. Nuculanidae.
- catallus, Alectrion (Hima) Dall, 1908: 307, plate 11, figure 11. Albatross 3355 [Lectotype, USNM 123013, selected by Keen, as "holotype" (1971: 954, caption to fig. 1292, left; see also Cernohorsky, 1975: 126–127, figs. 16, 17); 1 paralectotype, USNM 630936; 1 paralectotype, MCZ 27938]. Nassariidae.
- cetolaca, Mangilia Dall, 1908: 286. Replacement name for Columbella (Aesopus) oldroydi Arnold, 1903, non Mangilia oldroydi Arnold, 1903. Dall transferred C. (A.) oldroydi to the genus Mangilia at which it became a junior homonym. Turridae.
- chilenica, Yoldia (Yoldiella) Dall, 1908: 380–381. Albatross 2781 [2 syntypes, USNM 96923; syntypes (2 specimens + 8v), USNM 604253; 1 syntype, MCZ 27837]; Albatross 2782 [syntypes (6v), USNM 96614]. Nuculanidae.
- chilensis, Capulus Dall, 1908: 329–330. Albatross 2781 [1 syntype, USNM 96926; 1 syntype, USNM 678708].
 Capulidae.
- chilensis, Poromya (Dermatomya) Dall, 1908: 430. Albatross 2785 [Holotype, USNM 97135 (figured by Bernard, 1974: 90–91, pl. 25, figs. 1, 2)]. Poromyidae.
- chrysocoma, Nucula Dall, 1908: 370–371, plate 18, figures 3, 4. Albatross 4656 [syntypes (3 specimens + 2v), USNM

110572; 1 syntype (2v), MCZ 27810]; Albatross 2792 [1 syntype (2v), USNM 122757]; Albatross 3418 [1 syntype, USNM 122899]. Nuculidae.

- chrysogona, Tellina (Moerella) Dall, 1908: 420–421, plate 10, figures 4, 8. Albatross 4642 [syntypes (3v), USNM 110581; 1 syntype (2v), MCZ 27855]. Tellinidae.
- citricus, Trophon (Pascula) Dall, 1908: 311–312. On the reefs at Easter Island [Lectotype, USNM 110767, selected by Rehder (1980: 74–75, pl. 9, fig. 11);
 2 paralectotypes, USNM 633986]. Muricidae.
- clarinda, Pleurotomella (Phymorhynchus?) Dall, 1908: 285, plate 1, figure 3. Albatross 3381 [Lectotype, USNM 123097, selected by McLean in Keen, as "holotype" (1971: 961, caption to fig. 1863); 1 paralectotype, USNM 697423]. Turridae.
- clionella, Leucosyrinx "?" Dall, 1908: 270, plate 14, figure 3. Albatross 2792 ("types") [4 syntypes, MCZ 27903; 2 syntypes, SBMNH 35488 (formerly USNM 97069)]. Dall also recorded this species from Albatross 3394, even providing the number USNM 123125 (which was cited as "holotype" by Mc-Lean in Keen, 1971: 958, caption to fig. 1666), but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Turridae.
- cocosensis, Pecten (Cyclopecten) Dall, 1908: 405, plate 6, figures 1, 3. Albatross 3369 [Lectotype, USNM 122870, selected by Grau, as "holotype" (1959: 30– 31, pl. 9, fig. 2); 1 paralectotype (2v), USNM 610126; 1 paralectotype, MCZ 27852]. Propeamussiidae.
- colombiana, Nucula Dall, 1908: 371–372. Albatross 2799 [1 syntype, USNM 110686; numerous syntypes (30 + v), USNM 619714 (figured by Olsson, 1961: 57, pl. 1, fig. 3); 3 syntypes, MCZ 27812]; Albatross 2805 [not found]; Albatross 2792 [1 syntype (2v), USNM 606808]; Albatross 2784 [1 syntype, USNM 122743]; Albatross 2783 [1

syntype (2v), USNM 96917]. Nuculidae.

- complicatus, Petaloconchus Dall, 1908: 326. Albatross 3368 [numerous syntypes, USNM 123035]. Both Oldroyd (1927: 654-655) and Keen (1958: 548, caption to fig. 199; 1971: 947, caption to fig. 495) have stated that USNM 123035 was the "type" or "holotype," but in fact this lot is an aggregate consisting of numerous tubes, each representing an individual specimen. A valid lectotype designation would necessitate the labeling of a single tube as the lectotype. Vermetidae.
- compressa, Tindaria Dall, 1908: 387, plate 15, figures 7, 8; plate 17, figures 15, 16.
 Albatross 3360 [1 syntype, USNM 122921 (broken) (as "type" in Knudsen, 1970: 56)]; Albatross 3414 [2 syntypes, USNM 122923; 1 syntype (2v), MCZ 27826]. Tindariidae.
- constrictus, Polinices (Euspira) Dall, 1908: 337. Albatross 2780 [Holotype, USNM 97065]. Naticidae.
- corbicula, Cancellaria (Merica) Dall, 1908: 294–295, plate 1, figure 4. Albatross
 2936 [4 syntypes, USNM 106878; 2
 syntypes, USNM 206430; 2 syntypes, USNM 635740; 1 syntype, MCZ
 27906]; Albatross 4382 [1 syntype, USNM 110620]; Albatross 4407 [1
 syntype, USNM 110621]; Albatross
 4425 [1 syntype, USNM 110662]. Oldroyd (1927: 153) stated "Type in United States National Museum," but she did not restrict this to any one specimen. Cancellariidae.
- cordyla, Leda (Leda) Dall, 1908: 375–376, plate 6, figures 6, 7. Albatross 3354 [1 syntype, USNM 122915]; Albatross 2792 [syntype (2v), USNM 122755]. Nuculanidae.
- coronadoi, Borsonia (Borsonella) Dall, 1908: 277–278, plate 14, figure 2. Albatross 2931 [Holotype, USNM 110608 (see also Oldroyd, 1927: 91)]. Turridae.
- cortezi, Daphnella (Surculina) Dall, 1908: 292. Albatross 2919 [Lectotype, USNM 110613; selected by Oldroyd, as "Type"

(1927: 168–169)]; *Albatross* 4353 [**1 paralectotype, USNM 204050** (figured by Dall, 1925: 23, pl. 1, fig. 7)]. Turbinellidae.

- crawfordianus, Polinices (Euspira) Dall, 1908: 335–336, plate 11, figure 7. Albatross 3356 [Lectotype, USNM 123044, selected by Marincovich, as "holotype" (1977: 292–293, pl. 25, fig. 9)]; Albatross 3407 [not found]; Albatross 3431 [1 paralectotype, USNM 123051]; Albatross 4654 [1 paralectotype, USNM 110659]; DR. CRAW-FORD, southern Chile [1 paralectotype, USNM 102586]. Naticidae.
- crebristriata, Irenosyrinx "?" Dall, 1908: 272–273, plate 13, figure 10. Albatross 2859 [Holotype, USNM 122563 (see also Oldroyd, 1927: 68)]. Turridae.
- cylindrellus, Scaphander Dall, 1908: 239, plate 8, figure 1. Albatross 4672 [Holotype, USNM 110563]. Cylichnidae.
- decapitatus, Scaphander Dall, 1908: 240. Albatross 3683 [Holotype, USNM 110746]. Cylichnidae.
- decenna, Drillia Dall, 1908: 265. Albatross 2798 [Holotype, USNM 110603]. Turridae.
- delicata, Hipponix Dall, 1908: 331. Albatross 3355 [Holotype, USNM 123041 (figured by Keen, 1971: fig. 764)]. Hipponicidae.
- diazi, Limopsis Dall, 1908: 397, plate 18, figure 7. Albatross 3418 [10 syntypes, USNM 122892; 1 syntype (2v), MCZ 27847]. Limopsidae.
- dicella, Yoldia (Yoldiella) Dall, 1908: 382. Albatross 3418 [syntypes (4v), USNM 122917 (as "type lot" in Keen, 1971: 936, caption to fig. 61)]. Nuculanidae.
- diegensis, Borsonia (Borsonella) Dall, 1908: 275–276, plate 13, figure 11. Albatross 2923 [1 syntype, USNM 122573; 1 syntype, USNM 697372]. Oldroyd (1927: 92) cited USNM 122573 as "Type," but this lot actually comprised more than one specimen at that time. Turridae.
- diegensis, Limopsis Dall, 1908: 395, plate

15, figures 13, 15. F. W. KELSEY, off San Diego, 80 fm [1 syntype, USNM 110699]; Albatross 2923 [syntypes (1 specimen + 2v), USNM 122585; numerous syntypes (20+ specimens), USNM 111422; 1 syntype, MCZ 27844; numerous syntypes (20+ specimens), MCZ 187523; syntypes, ANSP 190954; syntypes (1 specimen + 2v), DMNH 20487; 4 syntypes, DMNH 43614; 5 syntypes, SBMNH 34060]. Oldroyd (1925: 44) cited USNM 122585 as "Type," but this lot actually comprises more than one specimen. Limopsidae.

- dinora, Pleurotomella (Pleurotomella) Dall, 1908: 281. Albatross 2807 [Holotype, USNM 96479 (figured by Mc-Lean in Keen, 1971: fig. 1856)]. Turridae.
- diomedae, Cocculina Dall, 1908: 341, plate 16, figures 4, 7. Albatross 3393 [Holotype, USNM 123052]. Cocculinidae.
- diomedae, Lima (Acesta) Dall, 1908: 407– 408, plate 7, figure 2. Albatross 3404 [Holotype, USNM 122875]. Limidae.
- diomedaeus, Murex (Tritonalia) Dall, 1908: 313–314, plate 12, figures 4, 5. Albatross 3397 [Holotype, USNM 123020 (figured by Keen, 1971: fig. 985, upper)]. Muricidae.
- dolenta, Turris (Surcula) Dall, 1908: 262. Albatross 2804 ("type") [Holotype, USNM 96645 (figured by Keen, 1958: fig. 902)]. Dall also recorded this species from Albatross 3389, but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Turridae.
- donacia, Vesicomya Dall, 1908: 417, plate 17, figures 9, 13. Albatross 3392 [Holotype (1v), USNM 122929]. Vesicomyidae.
- dotella, Turris (Surcula) Dall, 1908: 263– 264. Albatross 2823 [Holotype, USNM 96731 (figured by Keen, 1958: fig. 842)]. Turridae.
- edentula, Strombina Dall, 1908: 310–311. Albatross 2830 [Lectotype, USNM 96578, selected by Keen, as "holotype" (1971: 954, caption to fig. 1286; see also

Jung, 1989: 165–170, figs. 216–1–216– 6), **1 paralectotype, USNM 859116**]. Columbellidae.

- egregia, Pleurotomella (Gymnobela) Dall, 1908: 279. Albatross 4656 [Holotype, USNM 110610 (figured by McLean in Keen, 1971: fig. 1851)]. Turridae.
- eldorana, Gemmula Dall, 1908: 268, plate 14, figure 8. Albatross 3392 [Lectotype, USNM 123120, selected by McLean in Keen, as "holotype" (1971: 958, caption to fig. 1651); 1 paralectotype, USNM 537856; 1 paralectotype, MCZ 27897]; Albatross 2807 [1 paralectotype, USNM 96491; 1 paralectotype, USNM 537587]. Turridae.
- elegans, Solenosteira Dall, 1908: 300–301, plate 5, figure 6. Albatross 3355 [5 syntypes, USNM 123003; 1 syntype, SBMNH 34667]. A junior secondary homonym of Cantharus elegans Gray in Griffith and Pidgeon, 1834; renamed Cantharus rehderi Berry, 1962 (page 130). Buccinidae.
- elevata, Oocorys Dall, 1908: 322–323, plate 8, figure 9. Albatross 4649 [Holotype, USNM 110569]. Cassidae.
- encella, Mangilia Dall, 1908: 287–288, plate 14, figure 11. Albatross 3366 [Lectotype, USNM 123113, selected by McLean in Keen, as "holotype" (1971: 961, caption to fig. 1852); 1 paralectotype, USNM 697376]. Turridae.
- endemica, Arca (Cucullaria) Dall, 1908: 399, plate 17, figure 8. Albatross 4721
 [1 syntype, USNM 110578]; Albatross 4685 [1 syntype, USNM 110707]. Arcidae.
- enora, Mangilia Dall, 1908: 286, plate 4, figure 6. Albatross 3376 [Holotype, USNM 123121 (figured by McLean in Keen, 1971: fig. 1857)]. Turridae.
- equatorialis, Poromya (Dermatomya) Dall, 1908: 429-430, plate 5, figures 1, 2. Albatross 3360 [Lectotype (2v), USNM 122942; selected by Bernard, as "holotype" (1974: 91-92, pl. 22, figs. 2-4)]; Albatross 2793 [1 paralectotype (2v), MCZ 27859]. Poromyidae.

equatorialis, Solariella Dall, 1908: 351-

352, plate 5, figure 11. Albatross 3376 Lectotype, USNM 122964 ("125964"), selected by McLean in Keen, as "holotype" (1971: 944, caption to fig. 65); 4 paralectotypes, USNM 635471; 1 paralectotype, MCZ 27955; 1 paralectotype, SBMNH 34776]; Albatross 3375[2 paralectotypes, USNM 122963]; Albatross 3366 [2 paralectotypes, USNM 122962]. Oldroyd (1927: 796–797) cited USNM "125964" [= 122964] as "Type," but this lot actually comprised more than one specimen at that time; much later it was recurated into two lots, allowing for McLean's lectotype selection. Trochidae.

- erosina, Leucosyrinx Dall, 1908: 269, plate
 2, figure 1. Albatross 3360 [Lectotype,
 USNM 123106, selected by McLean in Keen, as "holotype" (1971: 960, caption to fig. 1763); 2 paralectotypes, USNM 697374; 2 paralectotypes, MCZ 27902]. Turridae.
- esilda, Pleurotomella (Pleurotomella) Dall, 1908: 282. Albatross 3395 [Holotype, USNM 123126 (figured by McLean in Keen, 1971: fig. 1668)]. Turridae.
- estuarinus, Acteon (Microglyphis) Dall, 1908: 238. Albatross 3194 [Lectotype, USNM 110598, selected by Keen, as "holotype" (1971: 962, caption to fig. 2232); 2 paralectotypes, USNM 678736]. Oldroyd (1927: 27) stated "Type in the United States National Museum" without specifying a lot or specimen; at that time, USNM 110598 actually comprised three syntypes. Acteonidae.
- esuriens, Gemmula Dall, 1908: 265–266. Albatross 3392 [1 syntype, USNM 123128]; Albatross 3407 [1 syntype, MCZ 27895 (formerly USNM 123129)]. Turridae.
- exopleura, Cancellaria (Narona) Dall, 1908: 294. Albatross 2804 [Lectotype, USNM 96638, selected by Keen, as "holotype" (1958: 552, caption to fig. 701); 1 paralectotype, MCZ 27926]; DR. JONES, Payta, Peru [1 paralectotype, USNM 46286]. Cancellariidae.

- exsarcus, Alectrion (Tritia) Dall, 1908: 308, plate 11, figure 12. Albatross 4642 [Holotype, USNM 110565 (figured by Keen, 1971: fig. 1297; see also Cernohorsky, 1975: 146, figs. 52, 53)]. Nassariidae.
- ferminianum, Epitonium (Ferminoscala) Dall, 1908: 316, plate 8, figure 8. Albatross 2834 ("figured type") [Holotype, USNM 96818]. Dall also recorded this species from Albatross 2804, 3391, and 3034, but such records are excluded from the type series. Epitoniidae.
- fluctigera, Téllina (Phyllodina) Dall, 1908: 419–420. Albatross 3355 [Holotype (1v), USNM 122935 (figured by Keen, 1958: fig. 407; 1971: fig. 545)]. Tellinidae.
- fragillissimus, Fusinus Dall, 1908: 301– 302, plate 12, figure 6. Albatross 3398 [Holotype, USNM 123007 (figured by Keen, 1971: fig. 1347)]. Transferred from Fasciolariidae to Buccinidae by Olsson (1971: 57–58, figs. 12, 24, 25). Buccinidae.
- fusidens, Columbella (Anachis) Dall, 1908: 309, plate 11, figure 13. Albatross 4642 [1 syntype, USNM 110616; 1 syntype, USNM 678719; 1 syntype, MCZ 27944]. Columbellidae.
- fusinella, Turris (Surcula) Dall, 1908: 261– 262, plate 14, figure 7. Albatross 3391 [1 syntype, USNM 123086]; Albatross 3017 [1 syntype, USNM 110600; 1 syntype, MCZ 27900]. Turridae.
- galapagana, Solariella Dall, 1908: 350– 351, plate 4, figure 2. Albatross 3413 [Holotype, USNM 122959 (figured by McLean in Keen, 1971: fig. 66)]. Trochidae.
- garretti, Myonera Dall, 1908: 434–435, plate 5, figure 4. Albatross 3380 [Holotype, USNM 122941 (figured by Bernard, 1974: 70–71, pl. 19, fig. 1)]. Cuspidariidae.
- genilda, Mangilia "?" Dall, 1908: 286–287, plate 13, figure 3. Albatross 3392 [1 paralectotype, USNM 123131]; Albatross 3393 [Lectotype, USNM 123132, selected by McLean in Keen,

as "holotype" (1971: 958, caption to fig. 1644); **2 paralectotypes, USNM 517974; 1 paralectotype, MCZ 27910**]. Turridae.

- goniopleura, Alectrion (Tritia?) Dall, 1908: 308–309. Albatross 4641 [Holotype, USNM 110630 (figured by Keen, 1971: fig. 1301)]. Nassariidae.
- granula, Yoldia (Yoldiella) Dall, 1908: 382. Albatross 2778 [Holotype, USNM 110693]. Nuculanidae.
- herilda, Gemmula Dall, 1908: 266–267. Albatross 3360 [Holotype, USNM 123091 (figured by McLean in Keen, 1971: fig. 1670; however, the catalogue number is given on page 958 as USNM 123130, which is actually that of the following species in the book, monochorda)]. Turridae.
- hesperus, Macoma (Psammacoma) Dall, 1908: 421–422. Albatross 3355 ["2355"]
 [Holotype (1v), USNM 122936 (figured by Keen, 1971: fig. 564)]. Tellinidae.
- hupeana, Macoma Dall, 1908: 421. Replacement name for *Tellina inornata* Hupé in Gay, 1854, non Hanley, 1844. Tellinidae.
- immaculata, Glyphostoma Dall, 1908: 289–290. plate 1, figure 9. Albatross 3391 [Lectotype, USNM 123115, selected by McLean in Keen, as "holotype" (1971: 960, caption to fig. 1786);
 1 paralectotype, USNM 697378]. Turridae.
- imparella, Daphnella (Eubela) Dall, 1908: 291, plate 2, figure 2. Albatross 3392
 [Lectotype, USNM 123114, selected by McLean in Keen, as "holotype" (1971: 961, caption to fig. 1853); 7 paralectotypes, USNM 697377; 2 paralectotypes, MCZ 27924]. Turridae.
- inca, Cylichnella (Bullinella) Dall, 1908: 242, plate 11, figure 3. Albatross 3392 [Holotype, USNM 123080]. Cylichnidae.
- incongruus, Lepidopleurus Dall, 1908: 355. Albatross 3354 [Lectotype, USNM 122969, selected by Ferreira, as "holotype" (1979b: 157–158, fig. 29; see

also Kaas and van Belle, 1985: 88–89, figs. 1–8); **1 paralectotype, MCZ 27957** (overlooked by Ferreira, 1979b)]. Leptochitonidae.

- indolens, Yoldie [sic = Yoldia] (Yoldiella) Dall, 1908: 381. Albatross 2784 [syntypes (20 + v), USNM 122740; syntypes (1 specimen + 2v), MCZ 27838]; Albatross 2785 [syntypes (5 specimens + 9v), USNM 96908]. Nuculanidae.
- *inequalis, Malletia* Dall, 1908: 383–384. *Albatross* 2772 [**syntype (2v), USNM 193350**]; *Albatross* 2778 [**1 syntype** (**1v), USNM 193349**]. Malletiidae.
- infrequens, Yoldia (Yoldiella?) Dall, 1908: 381. Albatross 2784 [1 syntype (1v), USNM 110692]; Albatross 2783 [1 syntype, USNM 96908]. Nuculanidae.
- ira, Corbula (Cuneocorbula) Dall, 1908:
 423. Albatross 3355 [syntypes (3v),
 USNM 122944 (as "holotype" in Keen,
 1971: 943, caption to fig. 687, but all three valves were figured!)]. Corbulidae.
- *isogonia, Pleurotomella (Gymnobela)* Dall, 1908: 279–280, plate 4, figure 3. *Albatross* 3393 [Holotype, USNM 123112 (figured by McLean in Keen, 1971: fig. 1866)]. Turridae.
- *juarezi, Limopsis* Dall, 1908: 396, plate 18, figure 8. *Albatross* 3360 [syntypes (4 specimens + 6v), USNM 122891; 1 syntype, MCZ 27846; 1 syntype, SBMNH 34680]; *Albatross* 3418 [1 syntype, USNM 110559]. Limopsidae.
- leonilda, Yoldia (Yoldiella) Dall, 1908: 382–383. Albatross 3360 [Holotype, USNM 122909 (broken)]. Nuculanidae.
- leonis, Irenosyrinx persimilis Dall var.? Dall, 1908: 272. Albatross 3074 [1 syntype, USNM 110605; 1 syntype, USNM 697418; 1 syntype, MCZ 27919]. Oldroyd (1927: 66) cited USNM 110605 as "Type," but this lot actually comprised more than one specimen at that time. Turridae.
- liriope, Pecten (Pseudamusium) Dall, 1908: 402. Albatross 3392 [Lectotype, USNM 122869, selected by Grau as

"holotype" (1959: 27–28, pl. 8, fig. 1; see also Keen, 1971: fig. 189); **1 paralectotype (2v), USNM 609941**; **1 paralectotype, MCZ 27850**]. Propeamussiidae.

- litorinus, Polinices (Euspira) Dall, 1908: 337–338. Albatross 2807 [Lectotype, USNM 96481, selected by Marincovich, as "holotype" (1977: 293–294, pl. 25, fig. 10); 4 paralectotypes, USNM 678712; 2 paralectotypes, MCZ 27948]. Marincovich (1977: 294) incorrectly stated that this species was "... known from a single specimen ..."; in fact, six other type specimens are extant. Naticidae.
- lobula, Leda (Jupiteria) Dall, 1908: 375.
 Albatross 3422 [Holotype, USNM 122918 (figured by Keen, 1958: fig. 21)]. Nuculanidae.
- *loshka, Leda (Leda)* Dall, 1908: 376, plate 17, figure 2. *Albatross* 3392 [2 syntypes, USNM 122916; 1 syntype (2v), MCZ 27823]. Nuculanidae.
- lucana, Terebra (Strioterebrum) Dall, 1908: 252–253. Albatross 2830 [Lectotype, USNM 96567, selected by Keen, as "holotype" (1971: 956, caption to fig. 1548, left; see also Bratcher and Cernohorsky, 1987: 134, pl. 38, fig. 149a); 6 paralectotypes, USNM 610317; 1 paralectotype, SBMNH 34778]. Terebridae.
- mabillei, Rochefortia Dall, 1908: 413–414. Albatross 2778 [syntypes (4v), USNM 110714]. Leptonidae.
- mabilliana, Limopsis Dall, 1908: 395–396. Albatross 2780 [Holotype, USNM 110703]. Limopsidae.
- magellanicus, Corneocyclas Dall, 1908: 411. Albatross 2778, "a single right valve evidently washed into the sea from some stream" [Holotype (1v), USNM 110712]. Sphaeriidae.
- malpelonium, Amusium (Propeamusium) Dall, 1908: 405–406, plate 6, figure 9. Albatross 3360 [syntypes (7 specimens + 9v), USNM 122871]; Albatross 3374 [numerous syntypes (20+ specimens), USNM 122873]; Albatross

3381 [6 syntypes, USNM 122874]; Albatross 3361 [syntypes (8 specimens + 9v), USNM 122872]; Albatross 3684 [not found]. Grau (1959: 14, pl. 2, fig. 1) referred to "Holotype: U.S. National Museum. Type locality: Albatross station 3360 " However, Grau did not specify which of numerous specimens from USNM 122871 (Albatross 3360) was the "holotype" (i.e., the lectotype), and the figured specimen is actually from Albatross 3374 (captioned by Grau as a "paratype"). Knudsen (1970: 96) also referred to "the type from Albatross St. 3360" but again did not specify a lectotype. Propeamussiidae.

- mantana, Yoldia (Yoldiella?) Dall, 1908: 381–382. Albatross 2792 [Holotype, USNM 122756 (figured by Keen, 1971: fig. 63)]. Nuculanidae.
- mariana, Turritella Dall, 1908: 327, plate 11, figure 14. Albatross 3427 [Holotype, USNM 123036 (see also Oldroyd, 1927: 656–657)]. Turritellidae.
- mazatlanicus, Acteon (Microglyphis) Dall, 1908: 237, plate 5, figure 7. Albatross 3431 [Holotype, USNM 123075]. Acteonidae.
- *mexicana, Tindaria* Dall, 1908: 389, plate 17, figures 11, 14. *Albatross* 3418 [**Holotype, USNM 122925** (see also Oldroyd, 1925: 40–41)]. Nuculanidae.
- mexicana, Xylophaga Dall, 1908: 425. Albatross 3422 ("two right valves") [Lectotype (1v), USNM 122947, selected by Turner, as "holotype" (1955: 150–151, pl. 90); 1 paralectotype (1v), USNM 887577]. Oldroyd (1925: 215) stated "Type in U.S.N.M.," but she did not indicate the lot or specimen. Pholadidae.
- microsoma, Cancellaria (Merica?) Dall, 1908: 296, plate 11, figure 10. Albatross 3418 [Lectotype, USNM 122997, selected by Oldroyd, as "Type" (1927: 157); 1 paralectotype, MCZ 27927]. Cancellariidae.
- minuscula, Pholadidea (Penitella) Dall, 1908: 425. Albatross 3392 [syntypes (1 specimen + 3v + 2 mesoplaxes),

USNM 122946]. Turner (1955: 113, pl. 66, fig. 1) stated that USNM 122946 was the "holotype," but she did not specify which of the syntypes was the holotype. Turner's figure is of the mesoplax of the "holotype," but this is not sufficient to determine the holotype itself. Pholadidae.

- miser, Alectrion (Hima) Dall, 1908: 307–308, plate 4, figure 1. Albatross 3355 [1
 syntype, USNM 123014; 2 syntypes,
 USNM 678729; 1 syntype, MCZ
 27939]; Albatross 3354 [9 syntypes,
 USNM 123012; 2 syntypes, MCZ
 27940; 1 syntype, SBMNH 34775];
 Albatross 3387 [1 syntype, USNM 123015]; Albatross 3389 [1 syntype,
 USNM 106894]; Albatross 3391 [1
 syntype, USNM 123016]; Albatross
 3396 [8 syntypes, USNM 123017]; Albatross 3422 [1 syntype, USNM 123018]. Nassariidae.
- miser, Pecten (Pallium) Dall, 1908: 401, plate 8, figure 6. Albatross 3355 ("two upper valves") [1 syntype (1v), USNM 122862; 1 syntype (1v), MCZ 27849]. Pectinidae.
- monochorda, Clinura Dall, 1908: 292–293, plate 13, figure 1. Albatross 3393 [Holotype, USNM 123130 (figured by Mc-Lean in Keen, 1971: fig. 1671)]. Turridae.
- mörchii, Troschelia (Thalassoplanes) Dall, 1908: 303–304. Albatross 3684 [Holotype, USNM 110750]. Buccinidae.
- morgana, Bullaria (Leucophysema) Dall, 1908: 244, plate 11, figure 4. Albatross 3392 [1 syntype, USNM 123082; 1 syntype, MCZ 27920]. Bullidae.
- movilla, Mangilia Dall, 1908: 285–286, plate 14, figure 6. Albatross 3418 [Lectotype, USNM 123118, selected by McLean in Keen, as "holotype" (1971: 958, caption to fig. 1672); 1 paralectotype, MCZ 27911]. Turridae.
- nassa, Cocculina Dall, 1908: 341, plate 16, figures 3, 6. Albatross 3392 [1 syntype, USNM 123053; 4 syntypes, USNM 678688; 1 syntype, MCZ 27905; 1

syntype, SBMNH 34781]. Cocculinidae.

- neoceanicus, Pecten (Pseudamusium) Dall, 1908: 402–403, plate 9, figure 4. Albatross 4721 [Holotype, USNM 110579 (figured by Grau, 1959: 56–57, pl. 2, fig. 2)]. Pectinidae.
- nesiotes, Thais Dall, 1908: 311. Easter Island (shore) [Lectotype, USNM 110766, selected by Rehder, as "holotype" (1980: 73–74); 2 paralectotypes, USNM 633987]. Thaididae.
- notilla, Turris (Surcula) Dall, 1908: 263. Albatross 3017 [Holotype, USNM 110602 (figured by Keen, 1958: fig. 906)]. Turridae.
- nucleator, Arca (Bathyarca) Dall, 1908: 397–398, plate 18, figure 9. Albatross 3392 [syntypes, USNM 122876 (1 specimen + 1v); 1 syntype, MCZ 27848]. Oldroyd (1925: 46) cited USNM 122876 as "Type," but this lot actually comprises more than one specimen. Arcidae.
- occidentalis, Cavolina Dall, 1908: 233, pl. 12, figs. 1, 1b, 1c. Type locality not given [1 syntype, USNM 110591; 5 syntypes, USNM 734213 (both lots from North Pacific Ocean, 38°N, 137°W) (see also Spoel, 1967: 95)]. Cavoliniidae.
- occidentalis, Seguenzia Dall, 1908: 325. Albatross 3418 [Lectotype, USNM 123033, selected by McLean in Keen, as "holotype" (1971: 945, caption to fig. 177); 1 paralectotype, MCZ 27941]. Seguenziidae.
- oceanica, Pleurotomella (Phymorhynchus) Dall, 1908: 284–285. Albatross 3681 [Holotype, USNM 110751]. Turridae.
- opacus, Lepidopleurus Dall, 1908: 354– 355. Albatross 4647 [Lectotype, USNM 110664, selected by Smith and Ferreira, as "holotype" (1977: 84, fig. 3; see also Ferreira, 1979b: 153, 154); 1 paralectotype, USNM 887578 (disarticulated; figured in Smith and Ferreira, 1977: fig. 4); 1 paralectotype, SBMNH 34460]; Albatross 3392 [1 paralectotype, USNM 122970; 2 paralecto-

types, USNM 122972; 1 paralectotype, MCZ 27960]. Leptochitonidae.

- ophioderma, Ischnochiton Dall, 1908: 356. On the shore at Perico Island, Panama Bay [Lectotype, USNM 110764, selected by Smith (1977: 229); 1 paralectotype, USNM 880053]. A senior homonym and a senior synonym of Ischnochiton ophioderma Dall, 1919 (see also Baker, 1937). Ischnochitonidae.
- orariana, Clathurella Dall, 1908: 288, plate 14, figure 12. Albatross 3392 [Holotype, USNM 123117 (figured by Mc-Lean in Keen, 1971: fig. 1859)]. Pleurotomella oceanida Dall, 1919 is based on the same type specimen (fide Mc-Lean in Keen, 1971: 764). Turridae.
- othello, Natica (Cochlis) Dall, 1908: 332– 333. STEARNS, Panama ("types") [Lectotype, USNM 46446, selected by Marincovich, as "holotype" (1977: 377– 379, pl. 37, fig. 1), 2 paralectotypes, USNM 678715]. Dall also recorded this species from Albatross 2799, 2800, 2801, 2803, 2804, 3354, and 3392, but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Naticidae.
- pacifica, Cerithioderma Dall, 1908: 324–325. Albatross 3392 [Lectotype, USNM 123032, selected by Warén and Bouchet (1986: 161–162, figs. 4, 17; also figured by Keen, 1971: fig. 836); 1 paralectotype, USNM 887576]. Provannidae.
- pacifica, Leucosyrinx "?" Dall, 1908: 270–271, plate 12, figure 3. Albatross 2859
 [Holotype, USNM 122590 (see also Oldroyd, 1927: 67)]. Buccinidae.
- pacifica, Lyonsiella Dall, 1908: 428. Albatross 4693 [Holotype, USNM 110583 (figured by Bernard, 1974: 111–112, pl. 28, figs. 1, 2)]. Verticordiidae.
- pacificum, Bathysciadium Dall, 1908: 339–340, plate 9, figures 1, 3, 7. Albatross 4656 [1 syntype, USNM 110570; 1 syntype, USNM 678690]. Bathysciadiidae.
- pacis, Liotia (Arene) Dall, 1908: 345. Albatross 2996 [Lectotype, USNM

110663, selected by McLean in Keen, as "holotype" (1971: 945, caption to fig. 136); **1 paralectotype, USNM 635451**]. Turbinidae.

- panamella, Clathurella Dall, 1908: 288– 289, plate 14, figure 1. Albatross 3391
 [1 syntype, USNM 123104]; Albatross 2804 [6 syntypes, USNM 122771]. Turridae.
- panamense, Dentalium megathyris Dall, 1908: 358. Albatross 3360 [1 syntype, USNM 122982]; Albatross 3361 [7 syntypes, USNM 122977; 1 syntype, USNM 594263; 1 syntype, SBMNH 35019]; Albatross 3381 [16 syntypes, USNM 122975; 3 syntypes, MCZ 27967 (broken)]. Dentaliidae.
- panamensis, Acteon Dall, 1908: 236–237, plate 11, figure 6. Albatross 3392 [Holotype, USNM 123074]. Acteonidae.
- panamensis, Cuspidaria Dall, 1908: 432, plate 16, figure 2. Albatross 3394 [Holotype, USNM 122937 (see also Bernard, 1974: 40–41, pl. 13, figs. 5, 6)]. Cuspidariidae.
- panamensis, Fusinus Dall, 1908: 301. Albatross 3391 [Holotype, USNM 123004]. Fasciolariidae.
- panamensis, Leptothyra Dall, 1908: 342– 343, plate 5, figure 9. Albatross 3358
 [Holotype, USNM 123055 (figured by McLean in Keen, 1971: fig. 140)]. Turbinidae.
- panamensis, Lyonsia Dall, 1908: 427, plate 18, figure 12. Albatross 4630 [Holotype (1v), USNM 110584]. Lyonsiidae.
- panamensis, Pecten (Pseudamusium) Dall, 1908: 404, plate 6, figures 8, 10. Albatross 3354 [syntypes (9v), USNM 122865; syntypes (4v), MCZ 27851]; Albatross 3389 [numerous syntypes (20 + v), USNM 106895]; Albatross 3396 [syntypes (16v), USNM 122866]; Albatross 3407 [1 syntype (1v), USNM 122867]; Albatross 3422 [1 syntype, USNM 122868]. A junior homonym (non Dall, 1898); renamed Pecten (Delectopecten) zacae Hertlein, 1935 (pages 321–322). However, Hertlein used his own specimens (in the CAS) as the "ho

lotype" and "paratypes" of *zacae*, which is incorrect, as the type material remains that of the original name! Grau (1959: 51) stated "Holotype: U.S. National Museum," but the exact lot was not specified. Pectinidae.

- panamensis, Protocardia Dall, 1908: 415, plate 18, figure 1. Albatross 3355 [Lectotype, USNM 122928, selected by Olsson, as "holotype" (1961: 254, pl. 39, fig. 4); paralectotypes (3 specimens + 10v), USNM 609954; paralectotypes (1 specimen + 2v), MCZ 27862; 1 paralectotype, CAS 64429]. Cardiidae.
- panamensis, Solemya (Petrasma) Dall, 1908: 366. Albatross 2799 [Lectotype, USNM 110678 (broken), selected by Oldroyd, as "Type" (1925: 11; see also Keen, 1958: 547, caption to fig. 605)]; Albatross 2973 [1 paralectotype, USNM 110679 (not found)]. Although Oldroyd cited "110679," the station given by her was 2799 and her catalog number appears to be a typographical error. Solemyidae.
- panamensis, Terebra (Strioterebrum) Dall, 1908: 250–251, plate 5, figure 10. Albatross 3391 ["3291"] [Lectotype, USNM 123084, selected by Keen, as "holotype" (1971: 957, caption to fig. 1555, right; see also Bratcher and Cernohorsky, 1987: 148, 150, pl. 44, figs. 168a–c); 5 paralectotypes, USNM 678732; 1 paralectotypes, USNM 6787732; Albatross 2834 [1 paralectotype, USNM 96714]. Terebridae.
- panamensis, Tindaria Dall, 1908: 388, plate 17, figures 10, 12. Albatross 3392 [syntypes (3 specimens + 4v), USNM 122922; 1 syntype (2v), MCZ 27827]. Tindariidae.
- panamensis, Yoldia (Orthoyoldia) Dall, 1908: 380. Albatross 3354 [Lectotype, USNM 122900, selected by Keen, as "holotype" (1971: 936, caption to fig. 59); 1 paralectotype, MCZ 27836]; Albatross 3355 [1 paralectotype (2v), USNM 122901 (broken)]. Nuculanidae.

- panamina, Nucula Dall, 1908: 368, plate
 6, figure 11. Albatross 3360 [syntypes
 (3 specimens + 4v), USNM 122894
 (as "type" in Knudsen, 1970: 19)]. Nuculidae.
- pardoanus, Polinices (Euspira) Dall, 1908:
 336. Albatross 3361 [Lectotype,
 USNM 123046, selected by Keen, as "holotype" (1971: 950, caption to fig.
 887; see also Marincovich, 1977: 294–295, pl. 25, fig. 11)]; Albatross 3407 [1
 paralectotype, USNM 123050]; Albatross 3366 [1 paralectotype, USNM 123047]. Naticidae.
- parella, Pleurotomella (Pleurotomella)
 Dall, 1908: 282–283, plate 14, figure 4.
 Albatross 3376 [Holotype, USNM 123135 (figured by McLean in Keen, 1971: fig. 1860)]. Turridae.
- pasca, Pecten (Chalmys) [sic = Chlamys]
 Dall, 1908: 401-402. Easter Island (beach) [Holotype (1v), USNM 110765 (figured by Rehder, 1980: 109, pl. 13, fig. 6)]. Pectinidae.
- patagonicus, Phaseolus (Silicula) Dall, 1908: 392. Albatross 2783 [Holotype (1v), USNM 96914]. Phaseolidae.
- pedroana, Terebra (Strioterebrum) Dall, 1908: 251. STEARNS, San Pedro, California [1 paralectotype, USNM 32772 (not found)]; Mrs. BURTON WILLIAMSON, San Pedro, California [Lectotype, USNM 118806, selected by Bratcher and Cernohorsky, as "holotype" (1987: 154, pl. 46, figs. 179a, b]. Oldroyd (1927: 60) cited both USNM lots as "Type" without further restriction. Terebridae.
- periconis, Callistochiton Dall, 1908: 355– 356. Perico Island, Panama Bay, on the reefs [Holotype, USNM 110763 (see also Ferreira, 1979a: 458–460; Kaas and van Belle, 1994: 176–178)]. Ischnochitonidae.
- perla, Poromya Dall, 1908: 428–429, plate 18, figures 2, 5. Albatross 3392 [Holotype, USNM 122930 (figured by Bernard, 1974: 82–83, pl. 22, figs. 1, 2)]. Poromyidae.
- pernodata, Gemmula esuriens Dall var.

Dall 1908: 266. *Albatross* 3414 [Holotype, USNM 123127 (see also Oldroyd, 1927: 77–78)]. Turridae.

- peruviana, Clinura Dall, 1908: 293, plate 13, figure 2. Albatross 4654 [Holotype, USNM 110564 (figured by McLean in Keen, 1971: fig. 1673)]. Turridae.
- peruviana, Leda (Leda) "nom. prov." Dall, 1908: 377. Albatross 4654 [Holotype (1v), USNM 110691]. This name is a junior primary homonym of Leda peruviana Dall, 1898 (which was proposed as a replacement name for Leda acuminata Nelson, 1870, non Buch, 1845!). Nuculanidae.
- peruviana, Malletia Dall, 1908: 384, plate 10, figures 3, 5. Albatross 4654 [syntypes (1 specimen + 1v), USNM 110574 (as "holotype" in Scott et al., 1990: 9); numerous syntypes (30 + v), USNM 110576; syntypes (6v), MCZ 27834; syntypes (1 specimen + 2v), SBMNH 34678]. The "holotype" citation of Scott et al. (1990) is not a valid lectotype selection because a single specimen was not specified. Malletiidae. peruvianum, Dentalium Dall, 1908: 358.
- Albatross 4656 ("the type specimen") [Holotype, USNM 110667]; Albatross 4649 [1 paratype, USNM 110666 (fragment)]. Dentaliidae.
- peruvianus, Cadulus (Gadila) Dall, 1908: 361. Albatross 4654 [Lectotype, USNM 110671; selected by Keen, as "holotype" (1971: 965, caption to figure 21); 2 paralectotypes, USNM 602250;
 1 paralectotype, MCZ 27972]; Albatross 2807 [1 paralectotype, USNM 122806]. Siphonodentaliidae.
- pigafettae, Nucula Dall, 1908: 369–370. Albatross 2780 [syntypes (1 specimen + 2v), USNM 96243; syntypes (4 specimens + 8v), USNM 604256; syntypes (1 specimen + 3v), MCZ 27807]. Nuculidae.
- pisum, Aligena Dall, 1908: 413. Albatross
 2778 [Holotype, USNM 110715].
 Transferred from Kelliidae to Thyasiridae by Harry (1969: 177–178, figs. 32, 33). Thyasiridae.

- pizarro, Cylichnella (Cylichnium) Dall, 1908: 243, plate 11, figure 1. Albatross 3392 [Holotype, USNM 123079]. Cylichnidae.
- planetica, Cuspidaria (Cardiomya) Dall, 1908: 433. Albatross 2925 ("types") [Lectotype, USNM 110720, selected by Oldroyd, as "Type" (1925: 99-100; see also Keen, 1971: 944, caption to fig. 783); paralectotypes (5v), USNM 887579 (broken)]. Bernard (1974: 66) referred to USNM 110720 as "holotype" but then stated that "the type material consists of four syntypes," which is an inexplicable contradiction by Bernard. Dall also recorded this species from Albatross 3400, 3059, and 3609 and Captain's Harbor, Alaska, but such records are excluded from the type series [ICZN] Article 72(b)(vi)]. Cuspidariidae.
- planeticus, Scaphander (Sabatina) Dall, 1908: 241. Albatross 3684 [Holotype, USNM 110748]. Cylichnidae.
- *plicatella, Clathurella* Dall, 1908: 289. *Albatross* 2799 [Holotype, USNM 110604 (figured by Dall, 1919: 7, pl. 20, fig. 4)]. Turridae.
- polyleptus, Pecten (Pseudamusium) Dall, 1908: 403, plate 10, figure 9. Albatross 4642 [Holotype (1v), USNM 110586 (figured by Grau, 1959: 43–44, pl. 16, fig. 1)]. Dall recorded a left valve from Albatross 2781, "which probably belongs to the same species ...," but this tentative statement did not specify that this latter lot represented type material. Pectinidae.
- polystephanus, Pleurotomella (Pleurotomella) Dall, 1908: 281. Albatross 2808 [Holotype, USNM 96498 (figured by McLean in Keen 1971: fig. 1652)]. Turridae.
- pompholyx, Arca (Bathyarca) corpulenta Smith var.? Dall, 1908: 398. Albatross
 4390 [Lectotype, USNM 110704, selected by Oldroyd, as "Type" (1925: 47)]; Albatross 4396 [paralectotype (2v), USNM 602596]; Albatross 4709
 [paralectotype (2v), USNM 110705 (broken)]; Albatross 4721 [1 paralec-

totype (1v), USNM 110706 (broken)]; Albatross 4740 [not found]. Arcidae.

- pseustes, Cuspidaria (Cardiomya) Dall, 1908: 431–433. Albatross 3392 [Holotype, USNM 122939 (figured by Keen, 1971: fig. 784; Bernard, 1974: 68–69, pl. 18. figs. 3, 4)]. Cuspidariidae.
- *radialis, Architectonica* Dall, 1908: 327– 328. *Albatross* 3392 [Holotype, USNM 123037 (figured by Keen, 1971: fig. 432; Bieler, 1993: 164–167, fig. 133)]. Architectonicidae.
- resina, Turris (Surcula) Dall, 1908: 264.
 Albatross 3354 [Holotype, USNM 123103 (figured by Dall, 1919: 16, pl. 2, fig. 4)]. Turridae.
- *rhytida, Leda* (*Leda*) Dall, 1908: 376–377. *Albatross* 3422 [Holotype, USNM 122918]. Nuculanidae.
- rochebrunei, Rochefortia Dall, 1908: 414, plate 17, figure 5. Albatross 2778 [Holotype (1v), USNM 110713]. Leptonidae.
- rotunda, Oocorys Dall, 1908: 322, plate 4, figure 9. Albatross 3360 [Holotype, USNM 123029]. Cassidae.
- rotundus, Pecten (Cyclopecten) Dall, 1908: 404–405. Albatross 2799 [2 syntypes (3v), USNM 110708 (cited as "holotype" by Grau, 1959: 33)]; Albatross 2784 [1 syntype (1v), USNM 122744].
 A junior homonym (non Hagenow, 1842); renamed Pecten (Cyclopecten) pernomus Hertlein, 1935 (pages 320– 321). Propeamussiidae.
- rubidus, Clanculus (Panocochlea) Dall, 1908: 346–347, plate 8, figures 3, 4, Albatross 3355 [Lectotype, USNM 122953, selected by McLean in Keen, as "holotype" (1971: 945, caption to fig. 143)]; Albatross 3396 [1 paralectotype, USNM 122954]. Turbinidae.
- saccoi, Borsonia (Borsonella) Dall, 1908:
 277. Albatross 3354 [Holotype, USNM 123105 (figured by McLean in Keen, 1971: fig. 1761)]. Turridae.
- salaria, Tindaria Dall, 1908: 387–388. Albatross 4693 [syntypes (5v), USNM 110695 (broken)]. Nuculanidae.

scethra, Natica (Cochlis) Dall, 1908: 333,

plate 11, figure 5. *Albatross* 3391 [Lectotype, USNM 123048, selected by Marincovich, as "holotype" (1977: 382– 383, pl. 37, fig. 7), 1 paralectotype, USNM 678716; 2 paralectotypes, MCZ 27953]. Naticidae.

- sedillina, Mangilia Dall, 1908: 287, plate 13, figure 8. Albatross 3392 [Lectotype, USNM 123116, selected by McLean in Keen, as "holotype" (1971: 961, caption to fig. 1854); 1 paralectotype, USNM 887594; 1 paralectotype, MCZ 27909]. Turridae.
- serilla, Gemmula Dall, 1908: 269, plate 13, figure 6. Albatross 3392 [Lectotype, USNM 123123, selected by McLean in Keen, as "holotype" (1971: 958, caption to fig. 1674); 1 paralectotype, MCZ 27898]. Turridae.
- similaris, Lima (Limatula) Dall, 1908: 408. Albatross 2799 [syntype, USNM 109034 (lost); syntype, USNM 129319 (also lost!)]. Dall noted that "[o]nly one valve of this little shell was obtained, and that was unfortunately crushed by accident after the above diagnosis had been prepared. A second specimen, somewhat smaller, was obtained at [Albatross] 2983 . . . "; however, this latter specimen is lost (there is an empty vial in the tray for that lot). Keen (1971: 938, caption to fig. 218) stated that USNM 109034 was the "holotype" figured in her book; this is certainly incorrect, as that lot was crushed. Presumably it was USNM 129319 that was actually illustrated by Keen. Limidae.
- smirna, Tindaria Dall, 1908: 389, plate 17, figures 6, 7. Albatross 3360 [Holotype, USNM 122919]. Nuculanidae.
- smithii, Cetoconcha Dall, 1908: 431, plate
 18, figure 10. Albatross 3415 [Holotype, USNM 122943 (broken) (figured by Bernard, 1974: 85–86, pl. 26, fig. 5)].
 Poromyidae.
- stephanica, Seguenzia Dall, 1908: 325– 326. Albatross 3431 [Lectotype, USNM 123034, selected by McLean in Keen, as "holotype" (1971: 945, caption

to fig. 178); **1 paralectotype, MCZ 27932**]. Seguenziidae.

- stimpsoni, Limopsis Dall, 1908: 396. Albatross 3392 [Lectotype, USNM 122881, selected by Keen, as "holotype" (1971: 936, caption to fig. 108)]; Albatross 3393 [1 paralectotype, USNM 122882]. Limopsidae.
- strebeli, Polinices (Euspira) Dall, 1908: 338. Albatross 2783 ("type") [Holotype, USNM 97093]. Dall also recorded this species from Albatross 2777 and 2808, but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Naticidae.
- stylus, Terebra (Perirhoe?) Dall, 1908: 253. STEARNS, Panama Bay [Holotype, USNM 32773 (figured by Keen, 1958: fig. 954; 1971: fig. 1546)]. Bratcher and Cernohorsky (1987: 52, 54, pl. 8, fig. 25b) questioned the type locality and synonymized this taxon with the Indo-Pacific Terebra laevigata Gray, 1834. Terebridae.
- subequalis, Sphenia Dall, 1908: 422–423. Albatross 2779 [Holotype (1v), USNM 110719]. Myidae.
- suteri, Limia [sic = Lima] (Limatula) Dall, 1908: 410. H. SUTER, Stewart Island, New Zealand, 18 fm [1 syntype (1v), USNM 195290; syntypes (3v), USNM 679270]. Limidae.
- taeniolata, Nucula Dall, 1908: 368–369, plate 7, figures 3, 5. Albatross 3417
 [syntypes (6v), USNM 122897; syntypes (1 specimen + 2v), USNM 153319; syntypes (1 specimen + 1v), MCZ 27805]. Nuculidae.
- tanneri, Nucula Dall, 1908: 367. Albatross 2780 [1 syntype, USNM 96243; 1 syntype, USNM 604255; syntypes (4v), MCZ 27813]; Albatross 2781 [syntypes (6v), USNM 96222]; Albatross 2783 [syntypes (1 specimen + 2v), USNM 96909]; Albatross 2784 [syntypes (1 specimen + 2v), USNM 122737]; Albatross 2787 [syntypes (2 specimens + 2v), USNM 96938]. Nuculidae.
- thalassoma, Glyphostoma Dall, 1908: 290. Albatross 3017 [Holotype, USNM

110612 (figured by by McLean in Keen, 1971: fig. 1784)]. Turridae.

- thea, Tindaria Dall, 1908: 390. Albatross 4654 [1 syntype, USNM 110577 (broken); 1 syntype, MCZ 27830]. Nuculanidae.
- truncata, Malletia Dall, 1908: 384–385, plate 17, figure 1. Albatross 3374 [1 syntype, USNM 122906]; Albatross 3361 [1 syntype, USNM 122905]; Albatross 3381 [syntype (2v), USNM 122907 (broken)]. Malletiidae.
- turbinum, Epitonium (Sthenorhytis) Dall, 1908: 317, plate 9, figures 5, 6, 8. Albatross 4642 [Holotype, USNM 110568 (broken) (figured by Keen, 1971: fig. 665)]. Epitoniidae.
- vaginatus, Polinices (Euspira) Dall, 1908: 336–337. Albatross 2778 [6 syntypes, USNM 96231; 1 syntype, USNM 106873]; Albatross 2779 [1 syntype, USNM 97126; 2 syntypes, USNM 678711; 1 syntype, MCZ 27947]; at Laredo Bay in the [Magellan] strait [1 syntype, USNM 110658]. Naticidae.
- vexillata, Tritonoharpa Dall, 1908: 320, plate 8, figure 7. Albatross 4642 [Holotype, USNM 110580 (figured by Keen, 1971: fig. 973)]. Transferred from Buccinidae to Cancellariidae by Beu and Maxwell (1987: 47, pl. 25, figs. a–g, j). Cancellariidae.
- vicella, Gemmula Dall, 1908: 268–269, plate 14, figure 5. Albatross 3392 [Holotype, USNM 123122 (figured by Mc-Lean in Keen, 1971: fig. 1867)]. Turridae.
- vincula, Yoldia (Katadesmia) Dall, 1908: 379, plate 5, figure 5. Albatross 3360
 [syntypes (1 specimen + 2v), USNM 122903; 1 syntype (2v), MCZ 27835
 (broken)]; Albatross 3354 [1 syntype (2v), USNM 122902]; Albatross 3361
 [1 syntype (1v), USNM 122904]. Nuculanidae.
- xylona, Pleurotomella (Gymnobela) Dall, 1908: 280, plate 2, figure 3. Albatross 3413 [Holotype, USNM 123111 (figured by McLean in Keen, 1971: fig. 1868)]. Turridae.

zonalis, Limopsis Dall, 1908: 393–394, plate 7, figures 6, 9. Albatross 3356 ("type") [Holotype, USNM 122878; numerous paratypes (9 specimens + 4v), USNM 887595; 2 paratypes, SBMNH 34679 (ex USNM 122878)]. Dall also recorded this species from Albatross 3357, 3358, and 4630, but such records are excluded from the type series [ICZN Article 72(b)(vi)]. Limopsidae.

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GENERIC INDEX

Bivalvia

Aligena borniana pisum Amusium (Propeamusium) malpelonium Arca (Bathyarca) nucleator pompholyx Arca (Cucullaria) endemica Cetoconcha smithii Corbula (Cuneocorbula) ira Corneocyclas magellanicus Cuspidaria panamensis Cuspidaria (Cardiomya) planetica pseustes Leda (Jupiteria) acrita agapea callimene lobula Leda (Leda) cordula loshka peruviana rhytida Leda (Spinula) calcar calcarella Lima (Acesta) diomedae Lima (Limatula) similaris suteri Limopsis diazi diegensis iuarezi mabilliana stimpsoni zonalis Luonsia panamensis Lyonsiella pacifica Macoma hupeana Macoma (Psammacoma) hesperus Malletia inequalis

peruviana truncata Malletia (Minormalletia) arciformis benthima Myonera garretti Nucula aguiana chrusocoma colombiana panamina pigafettae taeniolata tanneri Pecten (Chlamys) pasca Pecten (Cyclopecten) cocosensis rotundus Pecten (Pallium) miser Pecten (Pseudamusium) liriope neoceanicus panamensis polyleptus Phaseolus (Silicula) patagonicus Pholadidea (Penitella) minuscula Poromya perla Poromya (Dermatomya) chilensis equatorialis Protocardia panamensis Rochefortia mabillei rochebrunei Solemya (Acharax) agassizii Solemya (Petrasma) panamensis Sphenia subequalis Tellina (Moerella) chrysogona Tellina (Phyllodina) fluctigera Tindaria atossa compressa mexicana panamensis salaria smirna thea Vesicomua donacia

Xylophaga mexicana Yoldia (Katadesmia) vincula Yoldia (Orthoyoldia) panamensis Yoldia (Yoldiella) chilenica dicella granula indolens infrequens leonilda mantana

Gastropoda

Acteon panamensis Acteon (Microglyphis) estuarinus mazatlanicus Alectrion (Hima) catallus miser Alectrion (Tritia) exsarcus goniopleura Architectonica radialis Bathysciadium pacificum Borsonia (Borsonella) agassizii coronadoi diegensis saccoi Bullaria (Leucophysema) morgana Bursa (Lampadopsis) calcipicta Cancellaria (Admete) californica Cancellaria (Merica) corbicula microsoma Cancellaria (Narona) exopleura Capulus chilensis Cavolina occidentalis Cerithioderma pacifica Clanculus (Panocochlea) rubidus Clathurella orariana panamella plicatella

Clinura monochorda peruviana Cocculina agassizii diomedae nassa Columbella (Anachis) fusidens Cylichnella (Bullinella) inca Cylichnella (Cylichnium) atahualpa pizarro Daphnella (Eubela) imparella Daphnella (Surculina) blanda cortezi Drillia decenna Epitonium (Ferminoscala) brunneopictum ferminianum Epitonium (Sthenorhytis) turbinum Fusinus fragillissimus panamensis Gemmula benthima eldorana esuriens herilda pernodata serilla vicella Glyphostoma immaculata thalassoma Hipponix delicata Irenosyrinx crebristriata leonis Leptothyra panamensis Leucosyrinx clionella erosina pacifica Liotia (Arene) californica pacis Mangilia cetolaca encella enora genilda movilla sedillina

Murex (Tritonalia) diomedaeus Natica (Cochlis) othello scethra Oocorys elevata rotunda Petaloconchus complicatus Pleurotomella (Gymnobela) altina egregia isogonia xylona Pleurotomella (Phymorhynchus) clarinda oceanica Pleurotomella (Pleurotomella) dinora esilda parella polystephanus Polinices (Euspira) agujanus constrictus crawfordianus litorinus vardoanus strebeli vaginatus Ptychatractus californicus Scaphander cylindrellus decapitatus Scaphander (Sabatina) planeticus Seguenzia occidentalis stephanica Solariella equatorialis galavagana Solenosteira elegans Stilifer (Mucronalia) bathymetrae Strombina edentula Terebra (Perirhoe) stulus Terebra (Strioterebrum) balaenorum bridgesi lucana panamensis vedroana

Thais nesiotes Tritonoharpa vexillata Trophon (Pascula) citricus Troschelia (Thalassoplanes) mörchii Turris (Surcula) armilda dolenta dotella fusinella notilla resina Turritella mariana Volutopsius amabilis

Polyplacophora

Callistochiton periconis Ischnochiton ophioderma Lepidopleurus abbreviatus incongruus opacus

Scaphopoda

Cadulus (Gadila) peruvianus Dentalium panamense peruvianum

APPENDIX: DATA FOR ALBATROSS STATIONS THAT REPRESENT TYPE LOCALITIES OF DALL (1908) SPECIES

Dall (1908: 446–476) provided data for stations 3353–3437 and 4567–4743; for the remaining stations, see *Albatross* (1903, 1906), Fassett (1904), and Townsend (1901). For all stations, I have added a generalized geographical description for the reader's convenience. For five stations (4339, 4353, 4382, 4407, and 4425), Townsend gave "bearings" (instead of latitude and longitude), which I converted into approximate geographical indications. My editorial additions should not be used for navigational purposes.

DATE	January 17, 1888	January 19, 1888	January 23, 1888	Ianuary 23, 1888	Fehrnary 9 1888	Echnicar (1999	r ebi uai y 4, 1000	February 6, 1888	February 6, 1888	February 8, 1888	February 8 1888	Fehrmany 0, 1888		March 2, 1888	March 3, 1888	1 1 1000	March 5, 1888	March 5, 1888	March 6. 1888		March 30, 1555	March 30, 1888	March 30 1888		March 30, 1555	March 30, 1888	1000	April 4, 1888
LOCALITY	52°16'00"S, 68°13'00"W	Off Cabo Virgins, east entrance of Magellan Strait 52°38′00°S, 70°10′30°W	Magellan Strait, Chile 53°1'00"S, 70°42'15"W	Magellan Strait, Chile 53°6'00"S, 70°40'30"V	Magellan Strait, Chile 5391'00"S 73°49'30"W	Archipiélago de la Reina Adelaida, Chile	Off W coast of Patagonia, Chile	51°12'00''S, 74°13'30''W Off W coast of Pataconia. Chile	51°2'30"S, 74°8'30"W	48°41'00''S, 74°24'00''W	Canal Messer, southern Chile 48°9'00"S. 74°36'00"VV	Canal Messer, southern Chile 46°4.77°30°S, 75°15′00°4V	Off Peninsula de Talteco, Chile	0°37'00°S, 81°00'00°W Off Monta Foundar	1°3'00"N, 80°15'00"N	Off Punta Galera, Ecuador	7-37.00°N, 78-46/30°W Golfo de Panama	8°10'30"N, 78°50'30"W	Golfo de Panama 8°44'00"N, 79°9'00"W	Golfo de Panama	0.01 N, 79.01 SU W Colfo de Panama	8°47'00"N, 79°29'30"W	Golfo de Panama 8°27'00"N. 79°35'00"W	Golfo de Panama	0 10 30 N, 19 37 45 W	Golio de Faltania 7°56'00"N, 79°41'30"W	Golfo de Panama	0 24 00 5, 59 00 00 W E of Isla San Cristóbal, Galápagos
FATHOMS	31.5	19.75	61	77.5	369	878	010	258	122	194	944	61 61		401	741	60	20	18	29.5	t	-	14	26	ţ	41	51.5	010	210
STATION	2772	2777	2778	2779	2780	1826		2782	2783	2784	2785	2787		2792	2793	1010	16/2	2798	2799	0000	2000	2801	2803	1000	1007	2805	2000	2001

DATE	April 4, 1888	April 30, 1888	May 1, 1888	May 3, 1888	Mav 4, 1888	May 8, 1888	August 29, 1888	Ianuary 17, 1889	anuary 19, 1889	January 19, 1889	Ianuary 26. 1889		February 4, 1889	February 11, 1889	February 12, 1889	February 28, 1889	March 16. 1889	March 24, 1889	March 27, 1889		June 29, 1889	April 5, 1890
LOCALITY	0°36'30"S, 89°19'00"W	E of Isla San Cristóbal, Galápagos 24°18'00'N, 110°22'00'VV	Bahia de La Paz, Baja California, Mexico (Gulf of California) 23°33'00″N, 110°37'00″W	W of Todos Santos, Baja California, Mexico 2614'00"N, 113°13'00"W	SE of Punta Abreojos, Baja California, Mexico 26°42'30'N. 113°34'15''V	SE of Punta Abreojos, Baja California, Mexico 33°5'00"N 118°40'00"W	NW of San Clemente Island, California, USA 55°20'00'N 136°20'00'W	SV of Sitka, Alaska, USA 32°17'00'N, 119°17'00'V	SW of San Clemente Island, California, USA 32°40'30'N, 117°31'30'W	W of San Diego, California, USA 32°32'30'N, 117°24'00'W	W of San Diego, California, USA 3995:30°N 117°16/45°W	Off Los Coronados Islands, NW of Rosarito, Baja California,	Mexico 32°49'00"N, 117°27'30"W	W of San Diego, California, USA 34°19'30'N, 119°44'15'W	SW of Santa Barbara, California, USA 33°49'45"N, 119°24'30"W	S of Anacapa Island, California, USA 98°57'15"N 118°15'45"W	Off Guadalupe Island, Mexico 9430157N 110299(007W	Bahia de la Paz, Baja California, Mexico (Gulf of California) 2954307 11301100740	W of Cabo Lobos, Sonora, Mexico (Gulf of California) 30°36'30"N, 114°27'45"W	S of Punta Estrella, Baja California, Mexico (Gulf of California)	47°22'00"N, 125°48'30"W	W of tanoah, Olympic Fennisula, Washington, USA 35°2530°N, 121°2/30°N W of Morro Bay, California, USA
FATHOMS	634	26.5	66	48	ις L	414	1 569	984	822	339	34	2	359	68	603	113	112	2 2 2 2 2 2 2	24		887	92
STATION	2808	2823	2830	2834	2835	9839	9859	6166	2923	2925	1599		2936	2973	2980	5984	9006	3017	3034		3074	3194

DATE	September 22, 1890		r ebruary 23, 1891	February 23, 1891	February 23, 1891		February 24, 1891	February 24, 1891	Fohmmer 04 1001	reducity 24, 1001	February 25, 1891	Fehniary 97 1891	1001 (17 6 1000 -	February 27, 1891	February 28–1891		February 26, 1891	March 3. 1891	-	March 4, 1891	March 5, 1891		March 0, 1891	March 7, 1891		March 8, 1891	March 9, 1891		March 9, 1891	March 10 1891	
LOCALITY	45°30'00"N, 124°52'00"W	W of Cape Meares, Oregon, USA	S of Cabo Cambutal, Panama	$7^{\circ}12'20'N, 80^{\circ}55'00'W$ S of Coho Combuttel Barrows	7°9'30"N, 81°8'30"W	SW of Cabo Cambutal, Panama	6°35'00'N, 81°44'00'W S of Isla licarón Panama	6°30'00"N, 81°44'00"W	S of Isla Jicarón, Panama 6°17'00'N 83°5'00'W	SW of Isla Jicarón, Panama	6°10'00"N, 83°6'00"W	S of Punta Burica, Panama 5°31′00″N, 86°31′00″W	SW of Cabo Blanco, Costa Rica	5°30'00"N, 86°45'00"W	SW of Cabo Blanco, Costa Rica 5°32'45"N, 86°54'30"W	SW of Cabo Blanco, Costa Rica	0 02 70 (N, 00 00 20 W SW of Cabo Blanco Costa Bica	2°35'00"N, 83°53'00"W	SW of Isla De Malpelo, Colombia	3 9 00 N, 52 5 00 W SW of Isla de Mahelo. Colombia	4°3'00″N, 81°31'00″W	Ott Isla de Malpelo, Colombia	4 20 VO IN, 20 22 30 W NE of Isla de Malnelo Colombia	6°21'00″N, 80°41'00″W	Golfo de Panama	7°40'00"N, 79°17'50"W	Colto de Fanama 7°16'45'N, 79'56'30'VV	Golfo de Panama	7°33'40"N, 79°43'20"W	Gofto de Panama 7°5'30''N, 79°40'00''W	Golfo de Panama
FATHOMS	786	300		182	546		782	555	1.672	I	1,471	1,010		1,067	66	с И	10	1,823	001 1	1,132	899	1 779		1,793		127	210		153	1,270	
STATION	3346	135.4	F COCO	3355	3356	1	3357	3358	3360		3361	3365		3366	3368	0922	2000	3374	2276	0100	3380	3381	1000	3382		3387	3389		3391	3392	

DATE	March 10, 1891	March 10, 1891	Maurh 11 1601	Match 11, 1031	March 11, 1891	March 11, 1891	March 93–1891	March 20, 1001	March 24, 1891	March 28, 1891		April 3, 1891	Anril 5, 1891		April 8, 1891	Anril 10 1891		April 11, 1891	April 11, 1891	April 12. 1891		April 18, 1891	April 20, 1891		April 21, 1691	August 27, 1891	Sentember 5, 1891	acheminar of 1001	September 10, 1891	
LOCALITY	7°15'00''N, 79°36'00'W	Golfo de Panama 7°21'00°N, 79°35'00°W	Golfo de Panama	r 30 30 N, ro 33 00 W Golfo de Panama	7°32'00"N, 78°36'30"W Colfo do Borroro	7°33'00"N, 78°34'20"W	Golfo de Panana 1°7'00"N_80°91'00"W	NW of Punta Galera, Ecuador	1°7'00'N, 81°4'00'W	NW of Punta Galera, Ecuador 1°3'00''S, 89°25'00''V	S of Can Cristóbal, Galápagos	$0^{\circ}4'00''S, 90^{\circ}24'30''V$	N of Isla San Salvador, Galápagos 2234'00''N 92°6'00''V	NW of Isla Culterner. Calánagos	10°14'00"N, 96°28'00"V	East Guatemala Basin (SW of Tehuantepec, Mexico) 14546700701 98540700700	SE of Acapulco, Guerrero, Mexico	16°32'00″N, 99°48'00″W	SE of Acapulco, Guerrero, Mexico 16°33'00"N, 99°52'30"VV	S of Acapulco, Guerrero, Mexico 16°47'30''N, 99°59'30''VV	S of Acapulco, Guerrero, Mexico	21°22'15''N, 106°25'00'W S of Islas Marrias Navarit Mevico	23°59'00"N, 108°40'00"W	NE of Punta Arena, Baja California, Mexico (Gulf of California)	25 29 30 N, 109 45 00 W E of Isla Santa Cruz, Baia California, Mexico (Gulf of California)	28°23'00"N, 126°57'00"W	W of Isla Guadalupe, Mexico 9557/00/11-1379.47/00/10	o 1 00 18, 151 41 00 W Clinperton Fracture Zone, mid-Pacific	0°50'00''N, 137°54'00'W	S of Clipperton Fracture Zone, mid-Pacific
FATHOMS	1,020	511	COL.	007	259	85	1 573	L'OLD	1,740	385		885	1.360	00001	2,232	1 879		493	660	141		80	995	1 100	000,1	2,368	9 600	050,4	2,463	
STATION	3393	3394	1000	0200	3396	3397	3308	0000	3399	3404		3407	3413		3414	3415		3417	3418	3422		3427	3431	1010	9434	3681	1683	0000	3684	

DATE	March 10, 1904	March 14, 1904	March 18, 1904	March 28, 1904	March 31 1904		April 9, 1904	April 13, 1904	November 3, 1904	November 7 1004		November 7, 1904	1	November 7, 1904	November 9–1904		November 10, 1904	November 12, 1904	November 13. 1904		November 14, 1904		November 21, 1904	December 10, 1904	1001 11 1	December 14, 1904	December 30–1904		January 15, 1905		January 21, 1905	1000	February 11, 1905	
LOCALITY	SW of Point Loma, San Diego, California, USA		oronado, San Diego, California, USA		W of San Nicolas Island, California, USA	d California USA	ISA	land, California, USA		S of Isla Jicarón, Panama	Galánaros		Calápagos		S of Isla Espanola, Galápagos	4 33	W	Μ.	W of Punta Aguja, Peru 6º54/36‴S, 32º34/18™V	SW of Chiclavo Peru	8°29'30''S, 85°35'36''W	W of Trujillo, Peru	13°11'36"S, 78°18'18"W	SW of Lima, Peru 21 ³ 6(12 [°] S, 94 [°] 56′—"W	Peru Basin	26°30′6″S, 105°45′12″W	SW of Isla Sala y Gomez	to 12 3, 30 40 40 W	10/30″W	E of East Pacific Ridge		W of East Pacific Ridge	9°2′6″S, 123°20′6″W	W of East Pacific Ridge
FATHOMS	287-369	628-640	6.42 - 666	1,350-2,182	0.000	077,7	478 - 600	1,084-1,100	556	000	000	300		100	0 005	c00,2	2,235	1,036	0000	متعا فعط فعط المعالم	2,370		2,845	2,205		1,142	0 005	2,000	2,084		2,012		2,422	
STATION	4339	4353	4382	4390	9069	060+	4407	4425	4630		4041	4642		4643	114.04	4047	4649	4654	AGEG	DC:DE	4658		4672	4685		4693	1700	4103	4721		4732		4740	