

## Fam. CYCLOSTOMI.

92. *Heptatrema dombeyii*.—Lacépède, Cuv. Reg. An. 2, p. 405. (*Petromyzon cirrhatum*, G. Forster, fig. pict. 2, t. 251, Bl. Schn. 532.)

Inhabits Dusky Bay.

The preceding list is extracted from a Report on the Ichthyology of New Zealand, read at the Manchester Meeting of the British Association, and which will appear in the annual volume of that Body. To this has been added the description of the new species brought home by Dr. Dieffenbach.

IV.—CATALOGUE of the SPECIES of MOLLUSCA and their Shells, which have hitherto been recorded as found at NEW ZEALAND, with the Description of some lately discovered Species, by J. E. GRAY, F.R.S., &c.

Like the shells found in the other parts of the southern ocean, many of them are of a larger size and brighter colour than the species found in the same latitude in the seas of the northern hemisphere, and this is particularly the case with the terrestrial groups; some of them belong to genera which are only found in the warmer part of the northern half of the world. The genus *Struthiolaria* is peculiar to New Zealand. It is probable that some of the species which are inserted in this list, on the authority of Favanne, Chemnitz, and other of the older authors, may be found to have been placed in it erroneously; for before attention was paid to the geographical distribution of animals, persons were not so attentive to the particular habitats of the species, and many of these shells must have passed through several dealers' hands before they reached their describers. I have marked the more doubtful with an asterisk.

## Fam. STROMBIDÆ.

1. *Strombus Troglodytes*.

Inhabits New Zealand. *Dr. Sinclair*.

## Fam. MURICIDÆ.

2. *Ranella Argus*. Lam.—Var., whorls transversely plicated, sub-nodose.  
Inhabits New Zealand; Manukao, and Cook's Straits.  
*Dr. Dieffenbach.*
3. *Triton variegatum*, Lam. *Murex Tritonis*, Linn.  
Inhabits New Zealand; W. Coast of N. Island, near Cape Maria Van Diemen. *Dr. Dieffenbach.*
4. *Triton leucostomum*.  
Inhabits New Zealand; Cook's Straits. *Dr. Dieffenbach.*
5. *Triton Spengleri*. *Murex Spengleri*. Chemn., xi. 117, t. 191, f. 1839-40.  
Inhabits New Zealand. *Dr. Stanger.*
6. *Murex Zelandicus*. *Quoy et Gaim.*, Voy. Astrol., ii. 529, t. 36, f. 5-7.  
Inhabits Cook's Straits. *Quoy. B. M.*
7. *Murex octogonus*. *Quoy et Gaim.*, Voy. Astrol., ii. 531, t. 36, f. 8, 9.  
Inhabits Bay of Islands. *Quoy.*
8. *Murex foliatus*. *Gmelin*, 3329. *M. purpura alata*.  
*Chemn.* x., t. 169, f. 1538-39. *Wood*, Cat., f. 13.  
*Purpura foliata*. *Martyn*, *U. C.*, ii. 66.  
Inhabits New Zealand. *Humphreys*. King George's Sound. *Martyn.*
9. *Murex Lyratus*. *Gmelin*, 3531. *M. Glomus cereus*.  
*Chemn.* x., t. 169, f. 1634. *Buccinum lyratum*.  
*Martyn*, *U. C.*, ii., t. 43.  
Inhabits New Zealand, King George's Bay.—*Martyn.*
10. *Pollia lineæ*.—*Buccinum lineæ*. *Martyn*, *U. C.*, t. 48.  
*Murex lineatus*. *Chemn.*, x., 278, t. 164, f. 1572.  
*Murex lineatus*. *Dilwyn*, Cat., 105.  
Inhabits New Zealand. *Martyn.*  
*Fusus lineatus*, *Quoy et Gaim.*, t. 34, f. 78,—is perhaps only a slender variety of this species.

11. *Pollia lineolata*. Bucc. lineolatum, *Quoy et Gaim.* Voy., Astrol., ii. 419, t. 30, f. 14-16.  
Inhabits New Zealand. *Dr. Stanger. B. M.*  
The throat is grooved. Called Onareroa.
12. *Pleurotoma rosea*. *Quoy et Gaim.* Voy. Astrol., ii. 314, t. 35, f. 10, 11.  
Inhabits
13. *Fusus nodosus*.—Bucc. nodosum. *Martyn, U. C.* t. 5.  
*Murex raphanus. Chemn. x., f. 1558.* *Fusus raphanus. Lam. viii.* 128; *Encycl. Method., t. 435,* f. 1. *Bucc. raphanus. Quoy et Gaim. Voy. Astrol.* ii., 428, t. 31, f. 5, 6.  
Inhabits New Zealand. *Quoy et Gaim.* Cook's Straits.
14. *Fusus dilatatus*. *Quoy et Gaim.* Voy. Astrol. ii. 498, t. 34, f. 15, 16.  
Inhabits Bay of Islands. *Quoy.*
15. *Fusus Zealandicus*. *Quoy et Gaim.* Voy. Astrol. ii. 500, t. 34, f. 4, 5.  
Inhabits Tasman's Bay.
16. *Fusus Stangeri*.  
Inhabits New Zealand. *Dr. Stanger.*  
Shell small, ovate, fusiform; brown, regularly and closely centrally striated; spire acute, rather shorter than the body whorls; the upper whorl with 2, and the body whorl 1; with 8 continued distant spiral ribs,—the hinder ones farthest apart, and most raised; the mouth dark brown; the canal short, open; axis  $\frac{1}{4}$  of an inch.  
Like *Murex Lyratus* in miniature.
17. *Fusus caudatus*. *Quoy et Gaim.* Voy. Astrol. ii. 503, t. 34, f. 20, 21.  
Inhabits New Zealand.
18. *Fusus vittatus*. *Quoy et Gaim.* Voy. Astrol. ii. 504, t. 34, f. 18, 19.  
Inhabits Bay of Islands.
19. *Fusus duodecimus*.  
Shell ovate, fusiform, -pale yellow, longitudinal, costate, spire conical, acute, whorle rather rounded, last whorle about half the length of the shell, with twelve concentric rounded ribs, and a

central white band, with some spiral ridges in front, crossing the varices, and closer over the short open canal.

Inhabits New Zealand. *Dr. Sinclair.*

- \*20. *Conus fuscatus*. *Born. Mus.* 147; *Chemn.* ii. t. 62, f. 692-3; *Encyc. Meth.*, t. 319, f. 3. *Conus imperialis*,  $\beta$ , *Gmelin.*

Inhabits New Zealand. *Favanne.* Other authors say this species comes from India and Madagascar.

- \*21. *Conus hyæna*, *Brug.* *Chemn.*, xi., t. 181, f. 1750-51. *Enc. Meth.*, t. 327, f. 5 and 7.

Inhabits New Zealand. *Favanne.*

- \*22. *Conus fulmineus*. *Gmelin, Martini*, ii., t. 58, f. 644. *Conus fulgurans*. *Lam., H. N., Brug., E. M.*, t. 3376. *Conus Spectrum*. 2. *Gmelin.*

Inhabits New Zealand. *Favanne.*

- \*23. *Conus distans*. *Solander's MSS., Brug., E. M.*, 634, t. 321, f. 11. *Conus mennonitarum*. *Chemn.*, x., 24, t. 138, f. 1281.

Inhabits New Zealand. *Brug.* South Sea and Nicobar. *Chemn.*

- \*24. *Conus informis*. *Brug., E. M.*, t. 337, f. 8. *Conus spectrum* Sumatræ. *Chemn.*, x., 91, t. 144, a, f, g, and h. Var.  $\beta$ . *Conus rudis*. *Chemn.*, x., t. 144, a, f, e, f.

Inhabits New Zealand. *Favanne.* American Ocean. *Brug.*

25. *Conus eques*. *Brug.* *Enc. Meth.* t. 335, p. 9.

Inhabits New Zealand. *Favanne.*

26. *Struthiolaria vermis*. *Bucc. vermis. Martyn, U. C.*, t. 53. *Struth. crenulata. Lam.* viii. 148. *Quoy et Gaim.* *Voy. Astrol.* ii., 430, t. 31, f. 7 and 9. *Murex australis. Gmelin, Spengler, Naturfoscher*, xvii., t. 2, f, c, and d.

Inhabits New Zealand. *Martyn*, 1784. Tasman's Bay; called Takai. *Quoy.*

27. *Struthiolaria papillosa*. *Bucc. papillosum. Martyn, U. C.*, t. 54. *Murex stramineus. Gmel.* 3542.

*Wood's Cat.*, f. 62. *M. Pes. struthio—Cameli. Chemnitz*, x., t. 160, f. 1520-21. *Spengler, Naturf.*, xvii., 24, t. 2, f. A and B. *S. Nodulosa. Lam. S. Straminea. Sow., Gen.*

Inhabits New Zealand. *Martyn*, 1784. West coast N. Island. *Dieffenbach*.

They live in the sand like the olives, and have an exceedingly small operculum. The shell, before the mouth is formed, is very brittle; they are then usually longitudinally banded with purple.

28. *Struthiolaria scutulata. Bucc. scutulatum. Martyn, U. C.*, t. 55. *Wood's Cat.*, f. 81. *Struth. oblita. Sow., Chemn.*, and *Vig.* 21, f. C. and D.

Inhabits New Zealand. *Martyn*.

#### Fam. BUCCINIDÆ.

29. *Buccinum melo. Lesson. Rev. Zool.*, 1840, 355.

Inhabits New Zealand. *Lesson*.

30. *Buccinum Triton. Lesson. Rev. Zool.*, 1841, 37.

Inhabits New Zealand. *Lesson*.

Is this distinct from *Fusus Nodosus*?

31. *Purpura. Bucc. striatum. Martyn, U. C.*, t. 41.

Inhabits New Zealand. *Martyn*.

Perhaps only a young specimen of the next species.

32. *Purpura succincta. Lam. Bucc. succinctum. Martyn, U. C.*, t. 45. *Bucc. orbita. Chemn.*, x., 199, t. 154, f. 1471-72. *Wood's Cat.*, f. 75.

Inhabits New Zealand. *Martyn*.

*Purpura emarginata, Desh., Mag. Zool.*, 1841, t. 25, appears to be only a monstrosity of this species, with a notch in the outer lip.

Grows to a large size; the axis  $4\frac{1}{2}$  inches long, and  $1\frac{1}{2}$  in diameter. *Dr. Stangr.*

33. *Purpura textilosa. Lam. viii.*, 242. *Enc. Meth.*, t. 398, f. 4-6. *Quoy et Gaim., Voy. Astrol.*, ii., 552, t. 37, f. 1, 3.

Inhabits New Zealand. *Passe des Français. Quoy*.

A variety of the former, most probably.

34. *Purpura scobina*. *Quoy et Gaim.*, *Voy. Astrol.*, ii., 567, t. 38, f. 12, 13.  
Inhabits New Zealand. *Passé des Français*. *Quoy*.
- \*35. *Purpura crassilabrum*. *Lesson*, *Rev. Zool.*, 1842, 103.  
Inhabits New Zealand? *Lesson*.
36. *Purpura Novæ Zelandiæ*. *Lesson*, *Rev. Zool.*, 1841, 355.  
Inhabits New Zealand.
37. *Purpura tessellata*. *Lesson*. *Rev. Zool.*, 1840, 356.  
Inhabits New Zealand.
38. *Purpura rugosa*. *Quoy et Gaim.*, *Voy. Astrol.*, ii., 569, t. 38, f. 19-21.  
Inhabits New Zealand. *Quoy*.
39. *Purpura lacunosa*. *Bucc. striatum*. *Martyn*, *U. C.*, t. 7. *Bucc. orbita*. *Var. Dillw.*, ii. 618. *Bucc. orbita lacunosa*. *Chemn.*, x., 200, t. 154, f. 1473. *Bucc. lacunosum*. *Brug*.  
Inhabits New Zealand. *Martyn*.  
Perhaps only a slender variety of *B. succincta*.
40. *Purpura maculosa*. *Bucc. maculosum*. *Martyn*, *U. C.*, t. 8. *Bucc. testudineum*. *Chemn.*, x., f. 1454. *Lam*. 265. *Quoy et Gaim.*, 415, t. 30, f. 8-13.  
Inhabits New Zealand. *Martyn*.
41. *Purpura albo marginata*. *Desh.*, *Mag. Zool.*, 1841, t. 44.  
Inhabits New Zealand. *M. Deshayes*.
42. *Purpura haustum*. *Lam*. *Quoy et Gaim.*, *Voy. Astrol.*, t. 37, f. 4-8. *Bucc. haustum*. *Martyn*, *U. C.*, t. 9. *Bucc. hauritorium*. *Chemn.*, x., f. 1449-50. *Bucc. haustorium*. *Gmel*.  
Inhabits New Zealand. *Martyn*.
43. *Purpura lamellosa*. *Bucc. lamellosum*. *Gmel*. *Wood's Cat.*, f. 60. *Bucc. plicatum*. *Martyn*, *U. C.*, ii. t. 44. *Bucc. compositum*. *Chemn.*, x., 179. *Vign.*,

21, f. A, B. *Bucc. crispatum*. *Chemn.*, xi., 84, t. 187, f. 1802-3. *Murex crispatum*. *Lam.* 174.

Inhabits New Zealand, King George's Sound. *Chemn. Martyn.* Coast of Columbia.

44. *Purpura turgida*. *Bucc. turgidum*. *Gmel.*, 3490. *Chemn.*, x., t. 154, f. 1475-76. *Bucc. turgitum*. *Gmel.*, *Dillwyn*, ii. 621. *Bucc. maculatum*. *Martyn, U. C.*, ii. t. 49. *Bucc. auspersum*. *Brug.*, E. M. 265. *Chemn.*, x., 201, t. 154, f. 1475-76.

Inhabits New Zealand. *Martyn.*

We have three distinct varieties:—

Var. 1. Whorls regular, spire acute.

2. The hinder part of the body whorl swollen, ventricose.

3. The hinder part of the body whorl impressed, and rather irregular.

45. *Purpura catarracta*. *Bucc. catarracta*. *Chemn.*, x., 188, t. 152, f. 1455,

Inhabits New Zealand. *Chemn.* Cape of Good Hope. *Humphreys.*

46. *Purpura (ricinula) rodostoma*. *Lesson, Rev. Zool.*, 1840, 355.

Inhabits New Zealand. *Lesson.*

47. *Monoceros calcar*. *Bucc. calcar*. *Martyn, U. C.*, t. 90. *Monoc. imbricatus*. *Lam.*

Inhabits New Zealand.

48. *Monoceros tessellata*. *Lesson, Rev. Zool.*, 1840, 356.

Inhabits New Zealand. *Lesson.*

49. *Dolium variegatum*. *Lam.?*

Inhabits New Zealand; Cape Maria Van Diemen. *Dr. Dieffenbach.*

50. *Terebra spicatus*. *Limax spicatus*. *Martyn, U. C.*, t. 121, f.

Inhabits New Zealand. *Martyn.*

51. *Bullia Martinii*. *Limax fuscus*. *Martyn, U. C.*, t. 121, f. 2.

Inhabits

52. *Bullia? fuscus*. *Limax fuscus*. *Martyn, U. C.*, t. 121, f. 3.  
Inhabits
53. *Oliva erythrostroma*. *Lam.*  
Inhabits New Zealand. *Dr. Stanger.*
54. *Ancillaria albisulcata*. *Sow. Spec. Conch.* 1, t. 1, f. 14-19. *Quoy et Gaim.*, *Voy. Astrol.* iii. 19, t. 49, f. 5-12.  
Inhabits New Zealand ; Cook's Straits. *Quoy.*
55. *Ancillaria Australis*. *Sow. Spec. Conch.* 1, f. 44, 47.  
*Quoy et Gaim.*, *Voy. Astrol.* iii. 20, t. 49, f. 13-17.  
Inhabits River Thames.

## Fam. VOLUTIDÆ.

56. *Voluta arabica*. *Gmelin.* *Bucc. arabicum.* *Martyn, U. C.*, t. 52. *Vol. pacifica.* *Solander. Lam.* viii. 344. *Quoy et Gaim.*, *Voy. Astrol.* ii. 625, t. 44, f. 6. *Vol. insularis.* *Solander.*  
Variety small, slender, *Voluta gracilis.* *Swainson.*  
Inhabits New Zealand. *Martyn, 1784.* Cook's Straits, and Harbour of Manukao. *Dieffenbach.*  
These shells are often eroded, green, and worm-eaten while on the living animal. The variety is very small and slender.
- \*57. *Voluta magnifica.* *Chemn.*, xi. t. 174, 175.  
Inhabits New Zealand. *Chemn.* New Holland, New Caledonia.
58. *Voluta fusus.* *Quoy et Gaim.*, *Voy. Astrol.* ii. 627, t. 44, f. 7, 8.  
Inhabits Tasman's Bay.
- \*59. *Mitra aurantiaca.* *Lam., Desh., Mag. Zool.*, 1832. t. 6.  
Inhabits New Zealand. *Desh.*

## Fam. CYPRÆADÆ.

- \*60. *Cypræa aurora.* *Solander.* *Portl. Cat.* 10. *Chem.* xi. 34, t. 180, f. 1737-38. *C. aurantium.* *Martyn, U. C.* ii. t. 59. *Lam.*

Inhabits New Zealand. *Chemn.* Otaheite. *Solander.*  
Friendly Islands. *Martyn.*

I believe that Chemnitz is wrong in his habitat.

61. *Cypræa Caput. serpentis.* Linn.'

Inhabits New Zealand. *Dr. Sinclair.*

62. *Cypræa Arabica, var. maculata.* C. maculata.  
*Barnes.*

Inhabits New Zealand. *Dr. Sinclair.*

#### Fam. TURBINIDÆ.

63. *Imperator heliotropium.* Trochus heliotropium. *Martyn,* U. C. t. 30. Tr. Imperialis. *Lam.* viii. 10. *Quoy et Gaim.,* Voy. Astrol. iii. 224, t. 61, f. 1-4. Tr. Solaris imperialis. *Chemn.,* v. t. 173, f. 1714-15. *Wood,* Cat. f. 68. Imp. aureolatus. *De Montf.* ii. 199. Turbo echinatus, var. *Gmel.*

Inhabits New Zealand. *Martyn.*

64. *Imperator Cookii.* Trochus Cookii. *Gmel.,* 3582. *Wood's* Cat., f. 42. *Lam.,* vii. 17. Tr. Cooksianus. *Chemn.,* v., f. 1540-51. *Quoy et Gaim.,* Voy. Astrol. iii., 224, t. 60, f. 19-23. Tr. sulcatus. *Martyn,* U. C., t. —. Turbo sulcatus. *Gmel.,* 3592.

Inhabits New Zealand, Tasman's Bay. *Chemn.*

\*65. *Imperator inequalis.* Trochus inequalis. *Gmel.,* 3582. *Martyn,* U. C., t. 31. Tr. gibberosus. *Dillw., Chemn.,* x., 287. *Vig.,* 23, f. A, B.

Inhabits New Zealand. *Favanne.* Friendly Islands. *Martyn.*

66. *Turbo granosus.* Trochus granosus. *Martyn,* U. C., t. 37.

Inhabits New Zealand. *Martyn.* Cook's Straits. *Dr. Dieffenbach.*

67. *Turbo stramineus.* Helix stramineus. *Martyn,* U. C., t. 71. Turbo torquatus. *Gmel., Chemn.,* x., 293. *Vig.,* 24, f. A. A. *Lam.,* 40.

Inhabits New Zealand. *Martyn.*

68. *Turbo smaragdus*. Lam., viii., 45. *Quoy et Gaim.*, Voy. Astrol., iii., 219, t. 60, f. 6-8. *Wood's Cat.*, f. 22. *Helix smaragdus*. *Martyn, U. C.*, t. 73, 74. Inhabits New Zealand, Tory Channel, in Cook's Straits. *Dieffenbach*.
69. *Turbo argyrostomus*. *Gmel., Chemn.*, v., t. 165, f. 1562-63. *Trochus atramentarius*. *Callone*. Inhabits New Zealand. *Favanne*.
70. *Turbo Lagonkairii*. *Delphinula Lagonkairii*. *Desh.*, Mag. Zool., 1839, t. 6. Inhabits New Zealand. *M. Deshayes*.
- \* *Phasianella bulimoides*. *Buccinum Australe*, *Gmel.*, was formerly said to be a fresh-water shell from New Zealand.
- Fam. TROCHIDÆ.
- \*71. *Ziziphinus canaliculatus*. *Trochus canaliculatus*. *Martyn, U. C.*, t. 32. *Trochus dolarius*. *Chemn.*, x., f. 1579-80. *Wood's Cat.*, f. 96. Inhabits New Zealand. *Martyn*. California. *Capt. Belcher, R.N.*
- \*72. *Ziziphinus annulatus*. *Trochus annulatus*. *Martyn, U. C.*, t. 33. *Troch. virgineus*. *Chemn.*, x., f. 1581-82. *Wood's Cat.*, f. 98. *Troch. cælatus*, *β*. *Gmel.* Inhabits New Zealand. *Martyn*. California. *Capt. Belcher, R.N.*
73. *Ziziphinus Cunninghamsi*. Gray, Griffith, A. K. t. Inhab. New Zealand. *Allan Cunningham, F.L.S. &c.*
74. *Ziziphinus tigris*. *Trochus tigris*. *Martyn, U. C.*, t. 75. *Troch. diaphanus*. Lam. vii., 45. *Quoy et Guim.*, iii., 255, t. 64, f. 1-5. *Troch. granatum*. *Gmel.*, 3584. *Chemn.*, v., t. 170, f. 1654-55. Inhabits New Zealand. *Martyn*.
75. *Ziziphinus selectus*. *Trochus selectus*. *Chemn.*, xi., f. 1896-97. *Wood's Cat.*, f. 101. Inhabits New Zealand. *Chemn.* May be the young of the former.
76. *Ziziphinus punctulatus*. *Trochus punctulatus*. *Mar-*

*tyn*, *U. C.*, t. 36. *Troch. punctulatus*. *Gmel.* *Troch. diaphanus*. *Gmel.* *Troch. asper*. *Chemn.*, v. 26, t. 161, f. 1520-21. *Spengler*, *Naturf.*, ix., 152, t. 5, f. 2.

Inhabits New Zealand. *B. M.*

77. *Troch. (gibbium) sanguineus*, n. s.

Inhabits New Zealand. *Dr. Stanger.*

Shell top-shaped; white, with rows of numerous blood-red spots; whorls flattened, the last obscurely keeled; the front rather convex, with sharp-edged, low, spiral ridges.

78. *Rotella lineolata*.

Inhabits New Zealand, Kawia, W. Coast of N. Island.

*Dr. Dieffenbach.*

79. *Monodonta angulatum*. *Trochus angulatus*. *Quoy et Gaim.*, *Voy. Astrol.*, iii., 259, t. 64, f. 16-20.

Inhabits Bay of Islands.

80. *Monodonta reticularis*. *Gray*. *Yate's New Zealand*, App. *Trochus reticularis*. *Gray*; *Wood. Cat.*, Sup. f. 21. *Troch. Zelandicus*. *Quoy et Gaim.*, *Voy. Astrol.* iii. 257, t. 64, f. 12-15.

Inhabits Race of the Astrolabe; Cook's Straits. *Dr. Dieffenbach.*

81. *Monodonta tricarinata*. *Lam.* *Trochus asper*. *Chemn.* v., t. 166, f. 1582.

Inhabits New Zealand. *Favanne.*

82. *Monodonta subrostrata*. *Gray*; *Yate's New Zealand*, App.

Inhabits East Coast. *Yate.*

Shell conical, suborbicular, solid, black, with close wavy longitudinal yellow lines; spire short, whorls 5; last large, rounded, hinder part with 3 to 6 spiral keels; axis imperforated, throat smooth and silvery.

83. *Polyodonta elegans*. *Gray*; *Yate's New Zealand*, App. *Trochus tiaratus*. *Quoy et Gaim.*, *Voy. Astrol.*, iii., 256, t. 64, f. 6, 11.

Inhabits East Coast. *Yate*. Race of the Astrolabe. *Quoy*. Cook's Straits. *Dr. Dieffenbach.*

Shell conical, white, purple dotted; whorls flat, with an elevated upper edge, and 6 or 7 spiral rows of beads; base flat, closely beaded, and purple dotted; umbilicus conical, deep, smooth, opaque, white.

84. *Polydonta tuberculata*. n. s.

Inhabits New Zealand. *Dr. Dieffenbach*.

Shell conical, rather produced, whitish; whorls flat, with 4 series of large rounded tubercles; the front of the last whorl flat, with rather close spiral ridges, the inner ones the largest, and the outer ones very small; umbilicus conical, with three spiral ridges; opaque, white.

85. *Elenchus Iris*. *Humph.* Cal. Cat. 25, n. 434. *Limacon opalus*. *Martyn, U. C.*, t. 24. *Trochus Iris*. *Gmel.* 3580; *Chemn.*, v., f. 1522-23. *Turbo smaragdus*. *Gmel.*, 112. *Cantharidus Iris*. *Montf.*, ii.

Inhabits New Zealand. *Martyn*. Cook's Straits. *Dr. Dieffenbach*.

86. *Elenchus purpuratus*. *Limax purpuratus*. *Martyn, U. C.*, t. 68, f. 2.

Inhabits New Zealand. *Martyn*. Bay of Islands. *Dieffenbach*.

87. *Elenchus elegans*. *Trochus elegans*. *Gmel.*, 3581. *Zorn. Naturf.*, vii., 167, t. 2, f. D 1 and D 2.

Inhabits New Zealand. *Chemn.*

#### Fam. HALIOTIDÆ.

88. *Haliotis Iris*. *Martyn, U. C.*, t. 61. *Wood, Cat.*, f. 13; *Chemn.*, x., f. 1612-13.

Inhabits New Zealand. *Martyn*. Cook's Straits. *Dieffenbach*. East coast, abundant. *Dr. Sinclair*.

"The foot black when alive. The 'mutton-fish' of the colonists; eaten boiled, but very tough. Pieces of the shell are used as bait to fish-hooks."—*Dr. Sinclair*.

89. *Haliotis Virginia*. *Chemn.* x., 314, t. 166, f. 1607-8.

Inhabits New Zealand. *Chemn.*

\*90. *Haliotis Australis*. *Gmelin*. *H. rugosoplicata*. *Chemn.*, x., f. 1604-5.

Inhabits New Zealand, New Holland. *Chemn.*

## Fam. FISSURELLIDÆ.

91. *Emarginula striatula*. Quoy et Gaim., Voy. Astrol., iii., 332, t. 68, f. 21, 22.

Inhabits New Zealand.

92. *Emarginula fissurata*. Patella fissurata. Humph. Conch. 20, t. 4, f. 3. Chemn., xi., 188, t. 197, f. 19, 29, 30.

Inhabits New Zealand. Favanne.

93. *Tugali elegans*.

Inhab. New Zealand, Great Barrier Island. Dr. Sinclair.

Shell oblong, white with close radiating stria, and cancellated by a concentric ridge, which forms arched ribs across the striæ.

Nearly allied to *Emarginula Parmaphoroides* of Quoy, 342, t. 68, f. 15, 16, from New Holland, which appears also to belong to this genus.

In this genus the shell is oblong, narrower in front, and radiately striated, the apex conical, subposterior recurved, the margin of the shell deeply crenulated with a broad sinuosity in front, and no notch. It appears to be intermediabile between *Parmaphorius* and *Emarginula*; it has the front lobe of former, and the conical shape and radiated subcancellated surface of the latter.

## Fam. LOTTIADÆ.

94. *Lottia fragilis*. Patelloida fragilis. Quoy et Gaim., Voy. Astrol., iii., 351, t. 71, f. 28-30; Chemn., t. 197, f. 1921.

Inhabits New Zealand. Quoy.

95. *Lottia pileopsis*. Patelloida pileopsis. Quoy et Gaim., Voy. Astrol., iii., 359, t. 71, f. 25-27.

Inhabits New Zealand. Quoy.

## Fam. NERITIDÆ.

96. *Nerita nigra*. Quoy et Gaim.

Inhabits New Zealand. Quoy. Manukao, N. Island, W. coast. Dr. Dieffenbach.

*Nerita bidens* (from Favanne, t. 10, f. R. lower) is said to be found in New Zealand.

## Fam. JANTHINIDÆ.

97. *Janthina exigua*. Lam. Sow. Gen. f.

Inhabits New Zealand. Coast of Taranaki N. Island.

*Dr. Dieffenbach.*

## Fam. NATICIDÆ.

98. *Natica Zelandica*. Quoy et Gaim., Voy. Astrol., ii. 237, t. 66, f. 11, 12.

Inhabits New Zealand. E. coast, N. Island. *Dr. Dieffenbach.*

The operculum is shelly, rather concave externally. *Mr. Bidwell.*

## Fam. LITTORINIDÆ.

99. *Cerithium bicarinata*.

Inhabits New Zealand. *Dr. Stanger.* Bay of Islands.

*Dr. Sinclair.*

Shell turreted, brown; whorls rather convex, strongly spirally striated, and indistinctly transversely plicated; the body whorl, with two ridges on its outer edge, separated by a concave groove; mouth ovate, with a short canal in front.

100. *Cerithium australis*.

Inhab. New Zealand, Bay of Islands. *Dr. Sinclair.*

Shell ovate, rather turreted, black, slightly longitudinal plicated, whorls nearly flat, with two distant spiral grooves on the hinder half. The front of the last one with two distinct prominent spiral ridges, the hinder rather in front of the back edge of the inner lip, and the anterior one round the canal; mouth ovate, inner lip with a distinct ridge behind; canal short, open.

101. *Amnicola antipodanum*.

Inhabits New Zealand, in fresh water.

Shell ovate, acute, subperforated (generally covered with a brown earthy coat); whorls rather rounded, mouth ovate, axis 3 lines; operculum horny and subspiral: variety, spire rather longer, whorls more rounded.

This species is like *Paludina nigra* of Quoy and Gaimard, but the operculum is more spiral. Quoy described the operculum as concentric, but figured it subspiral. *Paludina ventricosa* of Quoy is evidently a *Nematura*.

102. *Amnicola ? Zelandiæ*.

Inhabits New Zealand, in fresh-water ditches.

Shell ovate, turreted, imperforated, pellucid greenish, generally covered with a brown earthy coat ; whorls convex ; mouth roundish ovate, rather reflexed ; operculum horny, subspiral ; axis  $\frac{1}{2}$  of an inch. Like the former, but smaller and more tapering.

103. *Littorina coccinea*.—*Limax coccinea*. *Martyn*, *U. C.*, t. 68, f. 1.

Inhabits New Zealand. *Martyn*.

104. *Littorina Diemenensis*. *Quoy et Gaim.*, *Voy. Astrol.*, ii. 479, t. 33, f. 8-11.

Inhabits New Zealand. *Quoy. Dr. Sinclair*.

With a white band in front of the mouth.

105. *Littorina cincta*. *Quoy et Gaim.*, *Voy. Astrol.*, ii., 481, t. 30, f. 20, 21.

Inhabits New Zealand.

106. *Turritella rosea*. *Quoy et Gaim.*, *Voy. Astrol.*, ii., 136, t. 55, f. 24-26.

Inhabits New Zealand. *Dr. Stanger*. Mangonui, E. coast, N. Island. *Dr. Dieffenbach*.

#### Fam. VERMETIDÆ.

107. *Vermetus cariniferus*. *Gray*.

Inhabits New Zealand, Parengarenga, N. Cape, N. Island. *Dr. Dieffenbach*.

Shell thick, irregularly twisted, opaque white, with a high compressed wavy-keel along the upper edge ; mouth orbicular, with a tooth above it, formed by the keel. Operculum orbicular, horny.

108. *Vermetus Zelandicus*. *Quoy et Gaim.*, *Voy. Astrol.*, iii., 293, t. 67, f. 16. 17.

Inhabits Bay of Islands.

109. *Vermetus roseus*. *Quoy et Gaim.*, *Voy. Astrol.*, iii., 300, t. 67, f. 20-24.

Inhabits River Thames.

#### Fam. CREPIDULIDÆ.

110. *Crepidula costata*. *Sow.*, , f. 3. *Deshayes*. *Quoy et Gaim.*, *Voy. Astrol.*, t. 72, f. 10-12.

Inhabits Bay of Islands, East coast of the N. Island. *Dr. Dieffenbach*. Great Barrier Island. *Dr. Sinclair*.

Are very difficult to be taken from the stones entire. They are found on stones in deep water. *Bidwell*.

This species is very variable in its shape, according to the form of the body to which it is attached. It is usually convex, with a deep cavity beneath, but it is often quite flat above, and the septum is raised above the margin of the cavity beneath; and lastly, the two ends of the shell are often bent towards each other below. The ribs are almost always present, as is also the dark colour, but sometimes the shell is quite white.

111. *Crepidula contorta*. Quoy et Gaim., Voy. Astrol., iii. 418, t. 72, f. 15, 16.

Inhabits Bay of Islands.

Always white and smooth; differs greatly in external form and the depth of the cavity.

112. *Calyptræa dilatata*. Sow., Gen., f. . *Crepidula maculata*. Quoy et Gaim., Voy. Astrol., iii., 422, t. 72, f. 6-9.

Inhabits New Zealand. *Yate*. Bay of Islands. *Dieffenbach*. Great Barrier Island. *Dr. Sinclair*.

The normal form of the shell is to have a round outline beneath, but in the smaller specimens, which have grown in a confined space, the front of the aperture is often produced, and the right side so contracted that the shell assumes an elongated shape like a *Crepidula*, from which it is chiefly to be distinguished by a small cavity on the axis, near the angle of the inner lip, and its more acute spire.

#### Fam. BULLIDÆ.

113. *Bulla Quoyii*. Gray, n. s. *Bulla striata*. Quoy et Gaim., Voy. Astrol., ii., 354, t. 26, f. 8, 9.

Inhabits New Zealand. *Quoy*. *Stanger*.

Shell ovate, smooth, marbled with purplish-grey and white dots; spire perforated.

Like *Bulla striata*, Lam., but quite distinct.

114. *Bulla Australis*. Gray. King's Voy. N. H. Quoy et Gaim., t. 26, f. 38, 39.

Inhabits New Zealand. *Yate*.

115. *Bulla Zelandiæ*. Gray, n. s.

Inhabits New Zealand. *Dr. Dieffenbach*.

Shell ovate, subglobose, imperforated, thin, pellucid, very slightly

concentrically striated, covered with a very thin greenish periostraca, the inner lip rather spread over the pillar in front, smooth.

Very like *B. hydatus* of England in size, but rather more ventricose.

Fam. PTEROTRACHEIDÆ.

116. *Carinaria Australis*. Quoy et Gaim., Voy. Astrol., ii., 394, t. 29, f. 9-16.

Inhabits sea between New Holland and New Zealand.

Fam. ARGONAUTIDÆ.

117. *Argonauta nodosa*. Solander. *A. tuberculata*. Shaw. *A. oryzata*. Musgrave.

Inhabits Great Barrier Island. Dr. Dieffenbach.

Fam. DORIDÆ.

118. *Doris carinata*. Quoy et Gaim., Voy. Astrol., ii., 254, t. 16, f. 10-14.

Inhabits New Zealand. River Thames.

Fam. TRITONIIDÆ.

119. *Eolidia longicauda*. Quoy et Gaim., Voy. Astrol., ii., 288, t. 21, f. 19, 20.

Inhabits New Zealand, Cook's Straits.

Fam. PATELLIDÆ.

120. *Patella denticulata*. Martyn, U. C., t. 65.

Inhabits New Zealand. Martyn.

121. *Patella radians*. Gmel., 3720. Chemn., x., 329, t. 168, f. 1618. *Patella argentea*. Quoy et Gaim, Voy. Astrol., iii., 345, t. 70, f. 16, 17.

Inhabits New Zealand.

122. *Patella stellularia*. Quoy et Gaim. Voy. Astrol., iii., 347, t. 70, f. 18-21.

Inhabits New Zealand. B. M.

123. *Patella inconspicua*. Gray, n. s.

Inhab. New Zealand.

Shell conical, oblong, with about 20 radiating ribs, the apex erect, disk white, rather greenish under the tip, length  $1\frac{1}{2}$  inch.

124. *P. stellifera*. *Gmel.* *P. stellata* seu *stellifera*.  
*Chemn.* x. 329, t. 168, f. 1607.  
Inhab. New Zealand and Friendly Islands.
125. *P. margaritaria*. *Chemn.* xi., t. 197, f. 1914-15.  
*P. ornata*. *Delwyn*, 1029.  
Inhab. New Zealand. *Chemn.*
126. *Patella Cochlear*. *Born Mus.* 420, t. 18, f. 3. *P.*  
*caudata*. *Mus. Lever.* 242.  
Inhab. New Zealand. *Favanne*. Cape of Good Hope.
127. *Patella nodosa*. *Hombrom et Jacquenot, Comp.*  
*Rend.*, 1841, 221.  
Inhab. New Zealand.
128. *Patella stermus*. *Hombrom*, l. c.  
Inhab. New Zealand.
129. *Patella radiatilis*. *Hombrom*, l. c.  
Inhab. New Zealand.
- These three species are only indicated, and not described.

## Fam. CHITONIDÆ.

130. *Acanthopleura nobilis*.

Inhab. New Zealand.

Mantle rugose, rough, with scattered long tapering brown bristles; valves brown, convex, evenly rounded, with very minute dots like shagreen, the lateral area slightly marked with 3 or 4 indistinct rays; inside white; length 3 inches.

131. *Acanthopleura aculeatus*. *Chiton aculeatus*. *Gmel.?*

*Quoy et Gaim. Voy. Astrol.* iii. 373, t. 74, f. 1-5.

Inhab. New Zealand.

32. *Acanthopleura longicymba*. *Chiton longicymba*.

*Blainv. Quoy et Gaim. Voy. Astrol.* iii. 390, t. 75, f. 1-6.

Inhab. New Zealand, Bay of Islands, and Great Barrier Island. *Dr. Sinclair*.

133. *Acanthopleura undulatus*. *Chiton undulatus*. *Quoy*

*et Gaim. Voy. Astrol.* iii. 393, t. 75, f. 19-24.

Inhab. Bay of Islands, Great Barrier Island, and Van Diemen's Land. *Dr. Sinclair*.

134. *Chiton canaliculatus*. Quoy et Gaim. Voy. Astrol. iii. 394, t. 75, f. 37-42.

Inhab. Tasman's Bay, New Zealand. Dr. Stanger.

135. *Chiton pellis-serpentis*. Quoy et Gaim., iii. 381, t. 74, f. 17-22.

Inhab. New Zealand, Bay of Islands, and Great Barrier Island. Dr. Sinclair.

136. *Chiton viridis*. Quoy et Gaim. Voy. Astrol. iii. 383, t. 74, f. 23-28.

Inhab. New Zealand. Quoy. Bay of Islands and Great Barrier Island, on shells, &c. Dr. Sinclair.

Variety pale reddish brown. Variety green brown, rayed.

137. *Amicula monticularis*. Chiton monticularis. Quoy et Gaim. Voy. Astrol., iii., 406, t. 73, f. 30-36.

Inhabits New Zealand, Bay of Tasman; called Karimon. Quoy.

138. *Acanthochætes biramosus*. Chiton biramosus. Quoy et Gaim. Voy. Astrol. iii. 378, t. 74, f. 12-16.

Inhab. New Zealand.

139. *Acanthochætes violaceus*. Chiton violaceus. Quoy et Gaim., Voy. Astrol., iii., 403, t. 73, f. 15-20.

Inhab. New Zealand, Bay of Islands, and Great Barrier Island. Dr. Sinclair.

140. *Chitonellus Zelandicus*. Chiton Zelandicus. Quoy et Gaim., Voy. Astrol., iii., 400, t. 73, f. 5-8.

Inhab. New Zealand.

#### Fam. HELICIDÆ.

141. *Limax bitentaculatus*. Quoy et Gaim., Voy. Astrol. ii., 149, t. 13, f. 1-3.

Inhabits New Zealand, Tasman's Bay.

142. *Helix Busbyi*. Gray, Ann. Nat. Hist., vi., 1841, 317.

Inhabits New Zealand. Mr. Busby.

Shell depressed, subdiscoidal, largely umbilicated, opaque white, covered with a very thick dark-green smooth periostraca, which is inflexed over the lips. The spire flattened, rather rugose, outer whorl smooth, depressed, rounded; the mouth large, bent down towards the axis.

It is much like *H. Cunninghamsi*, of New Holland, in form and

size, but is very peculiar, on account of the thickness and colour of the periostraca.

143. *Helix Dunnicæ*. Gray, Ann.Nat. Hist., vi., 1841, 317.

Inhabits New Zealand. Mr. Busby.

Shell depressed, large, umbilicated, pale-brown, outer whorl rather angular, smooth.

144. *Helix (carocolla) Zelandiæ*.

Inhab. New Zealand.

Shell rather depressed, top-shaped, perforated, pale horn-coloured, pellucid, varied with reddish-brown dots, and finely concentrically striated; spire convex, whorl scarcely raised, the outer one with a short ridge-like keel, front rounded, convex, umbilicus deep, narrow peristome, thin.

\*145. *Helix cornu*. Chemn. xi., f. 2051-52. *Helix vesicalis*. Lam.

Of the Cape; has been said to come from New Zealand.

\*146. *Achatina sultana*. *Helix sultana*. Wood, Cat. f. 75.

Of S. America; has been said to come from New Zealand.

147. *Bulimus antipodarum*

Inhab. Kaitaia, New Zealand. Dr. Dieffenbach.

Shell oblong, imperforated, smooth, pale-brown, covered with a pale-brown, rather opaque periostraca, varied with darker streaks, especially near the suture; apex reddish, bluntly rounded, whorls slightly convex, mouth

Described from a young specimen with only four whorls, and an unformed mouth, which has an axis 1 inch long, and the last whorl is 1 inch in diameter. It is very like in character to the *Bulimus fulgetans*, Brod., from the Philippine Islands.

148. *Bulimus fibratus*. *Helix aurantia*. Fergus, Prod.

47. Perry, t. 29, f. 1. *Bulimus bovinus*. Brug. Limax

fibratus. Martyn, Chemn. ix. t. 121, f. 1039-40. Vo-

luta australis. Diellwyn. Auricula auris bovina. Lam.

Inhab. Cape Maria Van Dieman. New Zealand. Dr.

Dieffenbach.

Two dead washed specimens, with the outer lip thickened internally, and broadly sinuated.

#### FAM. ONCHIDIADÆ.

149. *Onchidium patelloide*. Quoy et Gaim. Voy. Astrol. ii. 212, t. 15, f. 21-23.

Inhab. New Zealand, Tasman's Bay.

150. *Onchidium nigricans*. *Quoy et Gaim.* Voy. Astrol. ii. 214, t. 15, f. 24-26.

Inhab. New Zealand, "Anse de l'Astrolabe."

Fam. AMPHIBOLIDÆ.

151. *Amphibola avellana*. *Helix avellana*. *Gmel.* 3640. *Wood*, Cat. f. 46. *Chemn.* v. f. 1919-20. *Ampullaria avellana*. *Lam.* vi. *Ampullacera avellana*. *Quoy et Gaim.* Voy. Astrol. ii. 176, t. 15, f. 1-8.

Inhab. New Zealand. Sunk in the sand.

Eaten by the natives. *Quoy*, ii., 199.

They live on mud-flats where mangroves grow, and in such-like places. One specimen had the whorls nearly on a plane, and the ridges very much raised.

Fam. SIPHONARIADÆ.

152. *Siphonaria australis*. *Quoy et Gaim.* Voy. Astrol. ii. 329, t. 25, f. 32-34.

Inhab. New Zealand, Cook's Straits.

153. *Siphonaria Zelandica*. *Quoy et Gaim.* Voy. Astrol. ii. 344, t. 25, f. 17, 18.

Inhab. New Zealand. *Quoy*.

154. *Siphonaria scutellum*. *Desh.* Mag. Zool., 1841, t. 35.

Inhab. Chatham Island. *M. Desh.*

Fam. LYMNEADÆ.

155. *Physa variabilis*. *Gray.*

Inhab. rivers with *Ammnicola antipodarum*.

Shell ovate, spire conical, apex often eroded, whorls ventricose, swollen, and often flattened and keeled behind. The young shells have an acute spire.

These shells vary so much in appearance, that if I had not received them all in one parcel, as if from the same locality, I should be inclined to have regarded them as different species. They vary not only in size from  $\frac{3}{4}$  to  $\frac{1}{4}$  of an inch, with the same number of whorls, but also in the hinder part of the last whorl being rounded and in others flattened and edged with a distinct keel; in the height of the spire, which is generally about two-thirds the length of the mouth, and in others scarcely raised half that height; and, lastly, some, instead of being short and swollen, as is their general character, are elongated and tapering.

## Fam. VENERIDÆ.

156. *Arthemis subrosea*, Gray. Yate's New Zealand, App.  
Inhab. New Zealand, East Coast. Yate.

Shell orbicular, rather convex, opaque-white, rosy-purple on the umbones, with close, regular, minute, concentric grooves, crossed by a few very obscure radiating striæ, lunule short, cordate, inside white, disk opaque. *Var.* Lunule rather smaller.

Live sunk 9 inches in the sand, and are only to be got at spring-tides. They are not common, and only to be procured by industry.

157. *Arthemis Australis*. Venus Australis. Quoy et Gaim. Voy. Astrol. iii. 528, t. 84, f. 11-12.  
Inhabits New Zealand. Quoy.

158. *Dosina Zelandica*. Gray. Yate's New Zealand, App.  
Inhab. East Coast. Yate.

Shell ovate-cordate, ventricose, solid, brown, with close, regular, slightly elevated concentric laminæ, which are higher at each end; lunule large, ovate-cordate, inside dead-white; hinge margin moderate; hinder slope simple, without any flat shelving space on the left valve.

Very like *D. rugosa*, but the ridges are thinner, closer, the shell more oblong, the hinge margin thinner, and the lunule much longer and narrower in proportion.

The *Dosinæ* have a small anterior additional tooth on the hinge margin. Lamarck refers them to Venus; they are intermediate between Venus and Cytherea.

159. *Dosina oblonga*.  
Inhabits New Zealand; between stones in mud, or rather gravel.

Shell oblong, cordate, white with a few red rays near the umbo; very slightly radiantly striated, with numerous narrow, close, rather regular, high rounded edged concentric ridges, which are rather more laminar at each end; lunule cordate.

The edge is very finely crenulated, and the folds on the front side of the shell are rather crenulated by the radiated striæ, but all the rest of the shell is nearly smooth; the inside is white; the anterior lateral tooth is distinct but small. Varies in being rather more attenuated and produced behind.

160. *Venus Yateii*. Gray. *Yate's New Zealand*, App.  
Inhab. East Coast. *Yate*.

Shell ovate, rather truncated behind, solid, brown, with rather distant, thin, concentric laminae, which are higher behind and before, and waved; hinder slope depressed, lozenge-shaped; lunule laminar. Like *V. plicata*, but rather shorter; concentric plates higher, waved, and torn on the edge.

161. *Venus Dieffenbachii*. Gray.  
Inhabits New Zealand.

Shell trigonal, cordate, solid, thick, white; umbones brown, with broad radiating ribs and distinct, erect, sharp-edged concentric ridges; the front side with close concentric sharp-edged ridges; the hinder side smooth, with indistinct broad radiating ribs; the hinder slide flattened; the lunule cordate; the disk of young shell and the hinder edge and hinge of the adult shells purple.

The younger shell is sometimes more oblong, being produced behind.

162. *Venus Stutchburii*. Gray. *Wood's Cat. Supp.* f. .  
*Venus Costata*. *Quoy et Gaim. Voy. Astrol.* iii. 521,  
t. 84, f. 1-2.

Inhabits New Zealand. *Quoy*. B.M.

163. *Venus Zelandica*. *Quoy et Gaim. Voy. Astrol.* iii.  
522, t. 84, f. 5-6.

Inhabits New Zealand. *Quoy*. B.M.

164. *Venus crassa*. *Quoy et Gaim. Voy. Astrol.* iii. 523,  
t. 84, f. 7-8.

Inhabits New Zealand. *Quoy*. B.M.

165. *Venus intermedia*. *Quoy et Gaim. Voy. Astrol.* iii.  
526, t. 84, f. 9-10.

Inhabits New Zealand. *Quoy*. B.M.

166. *Venerupis reflexa*.

Inhab. Rocks, New Zealand.

Shell oblong, very irregular; rounded in front and truncated behind; surface with thin sharp-edged, reflexed, concentric ridges, which are highest and most bent over and back at the hinder edge, and they generally have two or three lower concentric ridges between them; hinge teeth, 3. 3.; inside yellowish, hinder half blackish purple, with a yellow edge.

Are sometimes oblong, elongate, and regular, but are generally distorted; the regular ones are rarely white within, and their teeth are always more oblique and less prominent than in the distorted specimens.

167. *Venus Mesodesma*. Quoy et Gaim. Voy. Astrol. iii., 532, t. 84, f. 17-18.

Inhabits New Zealand.

This shell varies in the degrees of its convexity, and the regularity and height of the concentric ridges.

168. *Venus violacea*. Quoy et Gaim. Voy. Astrol. iii., 533, t. 84, f. 19-20.

Inhabits New Zealand.

\*169. *Venus plumbea*. Gmel., 3280. *Crassatella incrasata*, Lam.

A Paris fossil; was figured by Chemnitz as coming from New Zealand.

#### Fam. MACTRIDÆ.

170. *Maetra discors*. Gray, Mag. N.H., i., 371.

Inhabits New Zealand, West Coast, N. Island. Dr. Dieffenbach.

171. *Spisula ovata*. Gray, n. s.

Inhabits New Zealand, West Coast, N. Island. Dr. Dieffenbach.

Shell ovate, ventricose, inequilateral, thin, slightly concentrically wrinkled; rounded in front, rather attenuated, and produced behind; white, covered with a thin pale brown periostraca, much produced beyond the edge behind; inside yellow; lateral teeth short, very high and subtriangular.

172. *Spisula elongata*. Gray, Mag. N.H., i., 271.

*Maetra elongata*. Quoy et Gaim. Voy. Astrol. iii., 518, t. 83, f. 1-2.

Inhabits New Zealand. Quoy.

173. *Lutraria acinaces*. Quoy et Gaim. Voy. Astrol. iii., 545, t. 83, f. 5-6.

Inhabits New Zealand. Quoy.

## Fam. MESODESMIDÆ.

174. *Mesodesma Chemnitzii*. *Desh.*, Enc. Méth. ii., 443.  
*Quoy et Gaim.* Voy. Astrol. iii., 504, t. 82, f. 9-11.  
*Mya Novæ Zelandiæ.* *Chemn.* vi., t. 3, f. 19-20.  
*Paphies roissyana.* *Lesson*, Voy. Coq. ii., 424, t.  
 15, f. 4. *Mya Australis.* *Gmel.*, 3221. *Mactra*  
*Australis.* *Wood's Cat.*, f. 24. *Machæna ovata*, and  
*M. subtriangulata.* *Leach*, MSS., Brit. Mus.

Inhabits New Zealand. *Chemn.* Tasman's Bay. *Quoy*.

Called *Pipæ* by the natives, who eat them as food. They are very abundant at the Bay of Islands, in brackish water. *Dr. Sinclair*.—Everywhere. *Dr. Dieffenbach*.

175. *Mesodesma ventricosa.* *Gray*, n. s.

Inhabits New Zealand, North Shore, Cook's Straits.

*Dr. Dieffenbach*.

Shell ovate, wedge-shaped, truncated behind, thin, ventricose, opaque-white, smooth, slightly concentrically striated; covered with a thin, nearly transparent, horn-coloured periostraca, edge thin. The lateral teeth short, smooth, compressed, close to the cartilage pit, the front one of the left valve the largest. The syphonal inflection does not reach to quite the centre of the disk.

Like the American cuneiform species, but shorter, higher, thinner, and more ventricose, and the teeth different.

176. *Mesodesma subtriangulata.* *Erycina subtriangulata.* *Gray*. Ann. Phil.

Inhabits New Zealand, West Coast, N. Island. *Dr. Dieffenbach*.

## SAXICAVIDÆ.

177. *Hiatella Minuta.* *Solen minutus.* *Linn.*  
*Lam.* *Hiatella arctica.* *Lam.* *Donax rhomboides.*  
*Poli.* *Saxicava rhomboides.* *Desh.*

Inhabits New Zealand.

I can see no character by which I can separate the two New Zealand specimens I have seen from the English specimens. It appears to differ from *S. Australis*, *Lam.*

## Fam. CARDIADÆ.

178. *Cardium pulchellum.* *Gray*, n. s.

Inhabits New Zealand, East Coast, N. Island. *Dr. Dieffenbach.*

Shell subcordate, rather ventricose, thin, rosy white, varied with red; hinge, margin, and two central rays bright, with numerous, 60 or 65 narrow, rather nodulose ribs, hinder slope slightly flattened; inside white, varied with bright red.

Described from a single valve; probably young.

Fam. TELLINIDÆ.

179. *Psumnobia Stangeri.* Gray, n. s.

Inhab. New Zealand.

Shell oblong, solid, rounded in front, and rather obliquely truncated behind; greyish, with purple rays, slightly concentrically striated, more deeply in front, inner surface and fulcrum of hinge purple; teeth large.

Very like *P. vespertina* in appearance; the hinder slope of both valves are equally smooth, the syphonal inflection reaches to some distance before the umbo.

The younger shells are covered with a smooth brown periostraca and are generally deeper purple within, and redder externally; some are orange, and others whitish within.

Named in honour of my friend Dr. Stanger, who kindly presented these and other New Zealand specimens to the Museum, and who is well known for the arduous duties that devolved on him during the return of the expedition of the African Society.

I have seen this shell named *B. Tongana, Quoy*, but it is much higher than his figure.

180. *Psammotia nitida.*

Inhab. New Zealand.

Shell oval, oblong, thin, pellucid, porous, rounded in front and rather tapering behind, covered with a hard polished horn-coloured periostraca; inner surface purplish white, or purple; hinge teeth small.

This shell is allied to *Psammotia flavicans, Lam.* (which is also *Sanguinolaria livida* and *P. alba, Lam.*), but is not so high nor produced below, and is thinner, and the syphonal inflection is not quite so much produced towards the front edge.

181. *Psammobia lineolata.* Gray. *Yate's New Zealand,*  
App. *P. livida. Lam. 17?*

Inhab. East Coast. *Yate.*

Shell oblong, transverse, compressed, obliquely truncated be-

hind, purplish rosy, with rather darker concentric belts, and very thin anastomosing, radiating lines.

182. *Tellina alba*. *Quoy et Gaim.* Voy. Astrol. iii. 500, t. 81, f. 1-3.

Inhab. Tasman's Bay.

183. *Tellina lactea*. *Quoy et Gaim.* Voy. Astrol. iii. 501, t. 81, f. 14-16.

Inhab. Tasman's Bay. *Quoy.* Waingaroa, N. Island. *Dr. Dieffenbach.*

This shell, often rosy externally and yellow within, and covered with a pale brown periostraca; it differs considerably in the height, width, and convexity of the specimens.

There are two distinct varieties from different parts of the island: one short, high, and swollen in front, like Quoy's figure; the other comparatively longer, and more compressed.

"They live among stones about low-water mark, and at least as far as three fathoms deep.

"The animal is very small, and has a small foot. The tubes are 6 or 8 inches long, reaching to the surface of the sand. They lie horizontally in the sand with the left or flattest valves beneath."—*Dr. Stanger.*

#### Fam. PHOLADÆ.

184. *Barnia similis*. *Gray.* *Pholas similis, Gray.* *Yate's* New Zealand, App.

Inhab. East Coast. *Yate.*

Shell oblong, rather elongate, acute in front, tapering behind, with rather close concentric laminæ; the anterior part with rather close and radiating grooves; hinge margin reflexed, simple beneath; dorsal plate single, elongate, acute in front, truncated behind; very like *Pholas parvus*, but larger, broader, and more acute in front.

185. *Talona tridens*. *Gray.*

Inhab. New Zealand, in limestone. *Bidwell.*

Shell ovate, with a deep central groove; the front half with closed, waved, concentric ridges; the hinder half with distant regular concentric grooves. The front gape large, broad, ovate, at length closed up; the two hinder processes forming together a cup about as long as broad, each furnished with a submarginal and central rib.

This genus, which is characterized by having the abductor muscles enclosed in a shelly case formed by the reflexed edge of the valve, furnished at its hinder end with two small additional valves, has the faculty of closing its anterior opening, and of forming a cup-shape process for the protection of its tubes at its hinder end when it arrived at its full growth. Other species are found in England, as *Talona papyracea*; in Africa, as *T. clausa*; and I have seen another from South America.

186. *Teredo* ?

Inhab. New Zealand. *Dr. Stanger.*

This species forms, at distances in its tube, close imperfect septa, pierced with a large central, simple, oblong hole, surrounded by a reflexed edge; the tube is thin, of a prismatic crystalline texture. I have not seen the valves or pallettes.

Fam. SOLENIDÆ.

187. *Panopea Zelandica.* *Quoy et Gaim.* Voy. Astrol. iii. 547, t. 83, f. 7-9.

Inhab. New Zealand. *Quoy. Yate.*

Fam. ANATINIDÆ.

188. *Panopea Solandri.* *Gray, n. s.*

Inhab. New Zealand, Turanga. *Dr. Dieffenbach.*

Shell oblong, ventricose, rounded in front, rather narrower and truncated behind, smooth, white.

Very like the European *P. Aldrovandi*, but smaller and more contracted behind; much more ventricose than the *P. Zelandicæ*.

Named in honour of Dr. Solander, who accompanied Captain James Cook in his expedition, and who did much to illustrate the natural history of New Zealand and other parts of the world.

189. *Myadora striata.* *Pandora striata.* *Quoy et Gaim.* Voy. Astrol. iii. 537, t. 83, f. 10.

Inhab. New Zealand.

The periostraca is beautifully marked, thin, transparent, and covered with many series of small oblong scales, divided into groups by the radiating lines; it is reflexed into the edge of the mantles within the edge of the valves.

“It is extremely difficult to separate the valves of these shells. The foot is small and square when contracted.”—*Bidwell.*

## Fam. CORBULIDÆ.

190. *Corbula Zelandica*. *Quoy et Gaim.* Voy. Astrol. iii. 511, t. 85, f. 12-14.

Inhab. River Thames.

## Fam. SOLENOMYADÆ.

191. *Solenomya australis*. *Lam. ?*

Inhab. New Zealand, Tauranga, Bay of Plenty. *Dr. Dieffenbach.* Common. *Bidwell.*

Shell oblong, brown, paler rayed, rounded in front, and rather more truncated behind; periostraca dark brown, much produced.

This species is very like the one found in the Mediterranean; but it appears rather shorter, higher, and more ventricose.

Length  $1\frac{2}{8}$  in., height  $\frac{7}{8}$  in.; periostraca extends beyond the margin of the shell for 3 or 4 lines.

“The foot is very curious: it is divided at the end and fringed; when the animal puts it forth, which it can do to full two-thirds of its own length, it opens and turns back like an umbrella or mushroom anchor; it serves for the purpose of taking a greater hold than would be permitted to the common sort of foot.

“They live at the verge of the extreme low-water, and below, in greasy mud about 6 inches beneath the surface, and are in all sorts of positions.” *Bidwell.*

## Fam. CARDITIDÆ.

192. *Venericardia*. *Quoy.* *Venericardia australis.* *Quoy et Gaim.*; ii. 480, t. 78, f. 11-14.

Inhab. New Zealand. *Quoy.* Turanga, *Dr. Dieffenbach.* B. M.

Ovate, with 22 rounded nodulose ribs; inside rosy, the hinder part brown.

## Fam. LUCINIDÆ.

193. *Lucina Zelandica*. *Gray.* *Yate's New Zealand,* App.

Inhab. East Coast. *Yate.*

Shell suborbicular, rather compressed, rather solid, opaque white, smooth, very slightly concentrically striated, and covered with a thin, smooth periostraca. Like *L. lactea*, but more compressed and opaque. Ligament linear, external, marginal.

194. *Lucina divaricata*. Lam. 27. *Tellina divaricata*.  
Linn.

Inhab. New Zealand.

"They live about a spade deep (10 inches) in the sand on the coast, and are not common." *Bidwell*.

This is one of the generally-spread species of Mollusca, being found on the shores of Europe, India, Africa, America, and Australia.

Fam. UNIONIDÆ.

195. *Unio Menziesii*. Gray, n. s.

Inhab. New Zealand. Rivers in the N. Island and  
Lake Taupo. *Dr. Dieffenbach*.

Shell oblong, high, compressed, thin, obliquely truncated behind; covered with a thin olive periostraca, and much excoriated near the umbo. The hinder lateral teeth elongated, only elevated on their hinder extremity, where they are crowded; the inner anterior tooth of the right valve large, thick, ovate, rugose; the rest small, compressed; the disk of the shell brown, varied.

Var.—Shell elongate, lower, rather produced, and rounder behind; the hinder part of the posterior lateral teeth straight.

Named in honour of the late Mr. Archibald Menzies, F.L.S., who accompanied Captain Vancouver, as surgeon, in his expedition.

196. *Unio Aucklandica*.

Inhab. New Zealand, Bay of Islands, and Auckland,  
in the Bay of Amabrusa. *Dr. Sinclair*.

Shell oblong and rather thick, rounded in front, and rather obliquely truncated behind, covered with a thick olive periostraca; umbo black, decorticated, cardinal teeth low, blunt, oblique, hinder lateral teeth laminar, far off; the inner surface pearly, purplish near the umbo, greenish on the hinder edge.

The inner surface of the shell (dead ones?) is often so exfoliated that scarcely any thing but the periostraca remains, so that the shells can be bent about in any direction when wet.

Fam. ARCADÆ.

197. *Pectunculus laicostatus*. *Quoy et Gaim. Voy.*  
Astrol. iii. 466, t. 77, f. 4-6. *Pectunculus ovatus*.  
*Quoy et Gaim. Voy. Astrol. iii. 467, t. 77, f. 1-3.*

Inhab. New Zealand.

Regular when young, becoming thicker, higher, and more or less

truncated on the hinder side. Hence they have been considered as two species by Quoy and Gaimard.

198. *Pectunculus*.

Dr. Sinclair has brought me a series of specimens of another species of this genus, found in a fossil state near East Cape, in company with a *Cardium?* a *Nucula*, an *Ostrea*, and three species of Univalves: two of them are probably *Fusi*, and the other is quite a new form to any I have hitherto seen.

"It has been stated that fossil shells are not found in the islands." *Dr. Sinclair*.

199. *Nucula australis*. *Quoy et Gaim. Voy. Astrol.*  
iii. 471, t. 78, f. 5-10.

Inhab. New Zealand.

Fam. MYTILIDÆ.

200. *Mytilus canaliculatus*. *Martyn, U. C.* t. 78.  
*Wood, Cat.* f. 47. *Mytilus latus*. *Chemn.* viii. 167,  
t. 84, f. 747. *Dillwyn, R. S.*, 311. *M. durus*.  
*Solander*.

Inhab. New Zealand. *Martyn*. Cook's Straits. *Dr.*  
*Dieffenbach*.

This species, like the common *Mytilus* of the English sea, appears to vary in size, form, and thickness of the shell, according to the locality in which it happens to be placed.

The one variety is elongated, white within, with a purplish tint on the submarginal muscular impression; and the younger specimens are thin, and covered with a thin periostraca: but this variety sometimes grows to a large size, as, for example, to 7 inches in length, and 3 inches in width. The periostraca of these specimens is blackish, and bright verditer green on the edge.

The second variety is thicker, more solid, much broader, and rounded. The valves are covered with a dark-olive periostraca, paler on the ventral side, purplish brown, and pearly near the hinder muscular scar. Some specimens of this variety have the hinder edge of the valves purplish black.

Inhab. the North of the Thames and East Cape, New Zealand.  
*Dr. Sinclair*.

It differs from *M. smaragdus* of China in the young shells being more ventricose, thinner, and rayed with brown.

201. *Mytilus polyodontes*. Quoy et Gaim. Voy. Austral. iii. 462, t. 78, f. 15, 16.

Inhabits New Zealand.

202. *Modiola albicosta*. Lam. ?

Inhab. New Zealand, Cook's Straits. Dr. Dieffenbach ;  
and Van Diemen's Land. R. Gunn, Esq.

203. *Modiola securis*. Lam. ?

Inhab. New Zealand. Dr. Dieffenbach.

Only a single small valve has yet been sent.

204. *Lithodomus truncatus*.

Inhab. New Zealand, in stones. Dr. Stinger.

Shell oblong, subcylindrical, thin, short, and roundly truncated in front, contracted in the middle, and rather produced and tapering behind, covered with a dark brown periostraca ; umbones rather prominent, inflexed ; inner side purplish, rather pearly.

Easily known by the truncated appearance of the front end and the prominence of the umbo. The hinder half of the shell is covered with a coat formed of green regular laminæ, perhaps *algæ*. Common in the Greywakke rocks on the East Coast. Dieffenbach.

205. *Modiolarca impacta*. Mytilus cor. Martyn, U. C. t. 77. Myt. impactus. Hermann, Naturf. xviii. 147, t. 3, f. 5-8, xix. 183. Wood, Cat. 59, f. 40. M. discors. Australis. Chemn. viii. f. 768. Modiola discor, Lam. vi. p. 16. Myt. lanatus. Calonne. Cat. 43.

Inhab. New Zealand. Dr. Solander. Bay of Islands.  
Dr. Sinclair. East Cape. Dr. Dieffenbach.

#### Fam. PINNIDÆ.

206. *Pinna Zelandica*. Gray. Yate's New Zealand, App. Gmel. 3166. Wood, Cat. 60, f. 10. P. adusta. Gmel. ?

Inhab. East Coast. Yate. Bay of Islands. Dr. Dieffenbach.

Shell triangular, elongate, blackish ; inside purplish pearly ; valves convex, with rather close longitudinal ribs, armed with close, short, semi-cylindrical, hollow spines. Differs from *P. squamosa*, in being smaller, black, and in the end being more truncate.

It may be *Pinna adusta*, Chemn. viii. 237, t. 91, f. 782. P. exusta, Gmelin, said to come from New Zealand, by Humphreys, and Manilla, by Chemnitz.

The gigantic mussels, *Cook*, Third Voy. ii., Polack, i. 324, are probably *Pinnæ*, as they have the habit he describes.

Fam. PECTINIDÆ.

207. *Pecten Zelandia*. Gray, n. s.

Inhab. New Zealand.

Shell with numerous (about 40) close unequal sharp-edged squamose ribs; purplish; the ears unequal, with radiate scaly ribs. The valves subequal; the right most convex.

Like *P. varius*, but the ribs are more numerous.

208. *Pecten laticostatus*. Gray. *Yate's* New Zealand, App.

Inhab. East Coast. *Yate*. Bay of Islands. *Dieffenbach*.

Shell inequivalve, with 16-18 radiating ribs, purplish white; right valve convex, ribs smooth, the larger one depressed with one or two interrupted longitudinal grooves; left valve rather concave, smoothish, purple brown, and purple near the umbo; the ribs distant, narrow.

"Taken with a landing-net from the bottom of the bays. The flavour is very excellent, and the oculiform tentacles are extremely like eyes.

"It is impossible to get the scallops perfect; the edges are so thin, that they generally break." *Bidwell*.

209. *Lima linguatula*. Lam. vi. 157. *Quoy et Gaim*.

Voy. Astrol. iii. 453, t. 76, f. 11, 12.

Inhab. New Zealand. *Quoy et Gaim*.

Fam. OSTREIDÆ.

210. *Ostræa* ?

Inhab. New Zealand, Waitamata, East Coast of N. Island. *Dr. Dieffenbach*. B. M.

A solid plicated species; not in sufficiently good state to describe.

211. *Ostræa* ?

Inhab. New Zealand. *Dr. Sinclair*.

A small species, much like *O. edulis*, scarcely to be distinguished. The two species are most abundant; they cover the shores everywhere from East Cape northward. "The one like *O. Edulis* are better flavoured than the cock-combs." *Dr. Sinclair*.

Fam. ANOMIADÆ.

212. *Anomia Zelandica*. Gray, n. s.

Inhab. New Zealand, on the inside of mussel-shells.

The shell suborbicular, whitish, smooth, with distant radiating ridges near the edge; internally dark green; the notch in the lower valve large, ovate, triangular; the plug thin, shelly, near the apex, and formed of parallel horny lamellæ for the greater part of its length.

The animal has the power of absorbing the surface of the shell to which it is attached before it enlarges the size of the plug. The plug is evidently only a modification of the kind of laminal beard formed by the end of the foot of the arcs, for, like it, it is formed of numerous parallel, erect, longitudinal, horny laminae, placed side by side, extending from the apex to the margin, and it is on these plates that the calcareous matter is deposited when the attachment assumes its shelly substance. The same structure is to be observed in the plugs of the European *Anomia Ehippium*.

“The specimen was taken up with the dredges affixed to a piece of *Mytilus*. While alive the animal kept opening and shutting its upper valves, with a snap just like the *Pectens*. Rare.” *Bidwell*.

Fam. TEREBRATULIDÆ.

213. *Terebratula recurva*. *Quoy et Guim.* Voy. Astrol. iii. 554, t. 85, f. 10, 11.

214. *Terebratula sanguinea*. *Leach.* Zool. Miscel. 76, t. 33. *Lam.* vi. 247. *Quoy et Gaim.* Voy. Astrol. iii. 556, t. 85, f. 6, 7. *T. Zelandica*, *Desh.* Mag. Zool. 1841, t. 42. *Anomia sanguinea*. *Solander's MS.* *Calonne*, Cat. 45; not *Chemn.* *A cruenta*. *Dillwyn*, *R. S.*, 295.

Inhab. New Zealand. *Humphreys.* Tasman's Bay. *Quoy.* Turanga, East Coast of N. Island. *Dieffenbach.*

215. *Terebratula lenticularis*. *Desh.* Mag. Zool., 1841, t. 41.

Inhab. New Zealand. *Desh.*

Perhaps only a smaller variety of the former.

Fam. OCTOPODIDÆ.

216. *Octopus cordiformis*. *Quoy et Gaim.* Voy. Astrol. ii. 87, t. 6, f. 3.

Inhab. New Zealand, Bay of Tasman. *Quoy.*

Fam. SEPIADÆ.

217. The *Sepia*, or *Cuttlefish*, forms an article of native food. *Polack*, i. 326.

## Fam. SPIRULIDÆ.

218. *Spirula fragilis*. Lam. Syst. Nautilus spirula.  
Linn.

Inhab. New Zealand, West Coast of N. Island. Dr.  
Dieffenbach.

219. *Venus intermedia*.

“Called ‘Pēpā’ by the natives; they are extremely abundant, and are eaten as food by the natives. The name appears generic for this edible bivalve.” Dr. Sinclair.

“East Coast; much eaten by the natives; called *Pipī*.” Dr.  
Dieffenbach.

220. *Nanina*? *Kivi*.

Inhab. New Zealand. Dr. Sinclair.

Shell top-shaped, imperforate, thin, white; spire subconic, blunt, whorls slightly raised, strongly concentrically striated with short, irregular, oblique, purple brown cross streaks; last whorl rounded; front rounded, white, smooth; mouth broad, lunate, with the outer lip slightly reflected over the axis. Diameter  $\frac{1}{4}$  of an inch, axis  $\frac{1}{8}$  of an inch.

221. *Nanina Mariæ*.

Inhab. New Zealand. Dr. Sinclair.

Shell trochiform, slightly perforated, pale brown, with oblique, close, transverse bands; spire short, conic; whorls nearly flat, sharply keeled, front convex.

The brown bands are sometimes crossed, leaving small square, pale spots, especially on the front side of the last whorl.

Differs from *N. Zelandiæ* in being more depressed and strongly keeled, and in the axis being very narrow.

*N. Zelandiæ* is pale brown, the whorls have opaque white, wavy, cross bands near the suture.

222. *Acanthochætes Hookeri*.

Inhab. New Zealand, Great Barrier Island, Bay of Islands; and Van Diemen's Land. Dr. Sinclair.

Valves half ovate, covered with crowded flat-topped granules, gray and green striped; the central ridge olive, smoother. The interior valve evenly granulated, without any ridges. The mantles hirsute, the tufts of spines large and green.

This species is most like *Acanthochætes fasciculatus* of the English coast; it differs from *A. violaceus* in the size of the tuft, and

the front valve not being rayed. I have dedicated this to my young friend Dr. Joseph Hooker, the assistant-surgeon to H.M.S. Erebus, in whose company Dr. Sinclair collected it.

223. *Chiton Sinclairi*.

Inhabits New Zealand, Great Barrier Island. *Dr. Sinclair*.

Pale brown, polished, the terminal valves with many, and the lateral area with few indistinct broad nodulose ridges, the central area polished, with pale longitudinal streaks, and with a few short, deep, irregular longitudinal grooves on the hinder edge of the sides.

This species is very like *C. pellis serpentis*, but is polished, and the central plates are smooth, except at the outer angles.

I have dedicated it to my friend Dr. Sinclair, of the Royal Navy, who, during the passing of the list through the press, has presented to the British Museum a series of shells from New Zealand, which were collected during his stay in those islands in company with Capt. James Ross, of the Antarctic expedition.

224. *Zonites coma*.

Inhabits New Zealand. *Dr. Sinclair*.

Shell depressed, largely umbilicated, pale brown, whorls rounded, with close, sharp-edged, elevated, concentric ridges; spire nearly flat, with broad brown, concentric bands, umbilicus conical, showing the whorls; mouth rather small, peristoma thin; diameter 3 lines.

225. *Melanopsis trifasciatus*.

Inhab. New Zealand, Bay of Islands, Waitanga Falls.

Shell ovate, thin, dark olive; spire short, conical, about one-third the length of the body whorl; the last whorl with three equidistant chestnut bands; the callosity of the inner lip yellow.

TUNICATA.

226. *Salpa costata*. *Quoy et Gaim*. *Voy. Uranie*, 504, t. 73, f. 2. *Voy. Astrol.* iii. 570, t. 86, f. 1-5.

Inhab.

227. *Salpa infundibuliformis*. *Quoy et Gaim*. *Voy. Uranie*, 508, t. 7, f. 13. *Voy. Astrol.* iii. 587, t. 89, 6, 7.

Inhab.

228. *Ascidia erythrostroma*. *Quoy et Gaim*. *Voy. Astrol.* iii. 609, t. 91, f. 4, 5.

Inhab. River Thames.

229. *Ascidia janthinoctoma*. Quoy et Gaim. Voy. Astrol. iii. 610, t. 91, f. 6, 7.  
Inhab. River Thames.
230. *Ascidia cœrulea*. Quoy et Gaim.. Voy. Astrol. iii. 611, t. 91, f. 8, 9.  
Inhab. Bay of Islands.
231. *Botryllus racemosus*. Quoy et Gaim. Voy. Astrol. iii. 620, t. 92, f. 7, 8.  
Inhab. River Thames.

## RADIATA.

“Medusæ, or marine gelatine, is thrown in animated masses on the rocky shores.”—Polack, i. 309-325.

232. *Stephanomia imbricata*. Quoy et Gaim. Voy. Astrol. iv. 71, t. 3, f. 13-15.  
Inhab. New Zealand.
233. *Actinia viridula*. Quoy et Gaim. Voy. Astrol. iv. 161, t. 13, f. 15-21.  
Inhab. Sea between New Zealand and Friendly Islands.
234. *Actinia striata*. Quoy et Gaim. Voy. Astrol. iv. 164.  
Inhab. Bay of Islands.
235. *Turbinolia rubra*. Quoy et Gaim. Voy. Astrol. iv. 188, t. 14, f. 5-9.  
Inhab. Cook's Straits.
236. *Dendrophyllia rubeola*. Quoy et Gaim. Voy. Astrol. iv. 197, t. 15, f. 12-15.  
Inhab. River Thames.
237. *Alcyonium aurantium*. Quoy et Gaim. Voy. Astrol. iv. 277, t. 22, f. 16-18.  
Inhab. River Thames.
238. *Pennatulæ*, or *Sea Pen*. Polack, i. 327.
239. *Echini*, or *Sea Hedge-hogs*. Polack, i. 326.
240. *Echinarachnius Zelandiæ*. Gray, n. s.  
Inhab. Western Coast, Northern Island, New Zealand.  
Dr. Dieffenbach.

Body depressed, with a slightly elevated centre, with the inter-ambulacral area rather more depressed, the ambulacral and inter-ambulacral area nearly equal, the ambulacra not converging together at the end.

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LIST of the ANNULOSE ANIMALS hitherto recorded as found in NEW ZEALAND, with the Descriptions of some New Species by Messrs. ADAM WHITE and EDWARD DOUBLEDAY, Assistants in the Zoological Department of the British Museum.

Class CRUSTACEA.

1. *Paramithrax Gaimardii*. *M. Edwards*. Hist. Nat. des Crust., i., p. 325.  
Inhabits New Zealand. *M. Edwards*.
2. *Chlorodius eudorus*. *M. Edw.*, l. c. i., p. 402. *Cancer eudora*. Herbst. iii., pl. 51, f. 3.  
Inhabits New Zealand. *M. Edwards*.
3. *Portunus catharus*. *White*, n. s.  
Inhabits New Zealand. Collection of the British Museum. *Dr. Andrew Sinclair*, R.N.

This species comes near *P. marmoreus*, *Leach* (Malac. Pod. Brit. Tab. viii., f. 1, 3), differing from the European species in being wider, in having 4 teeth in front of the carapace, the intermediate pair close together. There are 5 teeth on the sides of the carapace, and 1 tooth on the outer part of the sinus over the eye. The carapace is very smooth, has two impressed lines converging behind, and widest in front. The colour of the carapace is brownish yellow, spotted with minute brown dots; the dots forming a lunated line between the impressions on back the most distinct; the penultimate joint of the tail the largest and narrowed in front. Breadth of carapace of a male specimen, 1 inch 2 lines. Length 10½ lines.

“*Common Crab*.” *Polack* (New Zealand, i., p. 326) speaks of this as inhabiting New Zealand.

4. *Grapsus strigilatus*. *White*. In *Gray's Zool. Misc.*, 1842, p. 78.

Inhabits New Zealand. *Dr. Dieffenbach*.

Carapace with the front part depressed, horizontal, and occupy-

ing more than half its breadth in front, measuring from spine to spine; lateral margins in front with three teeth; many striæ on the sides; hands large, swollen; sides very smooth; upper edge with a few wart-like excrescences.—Colour: sides of carapace red, slightly mottled with yellow; in front and on the back black, with large yellow marks; legs reddish, tinged with blue.

A species in form, &c. agreeing with *G. varius*.

5. *Cyclograpsus sexdentatus*. *M. Edw.*, l. c. ii., p. 79.  
Inhabits New Zealand. *M. Edw.*
6. *Plagusia clavimana*. *Latr. Desm. Consid.*, p. 127.  
*M. Edw.*, l. c. ii., p. 92. "Cancer planissimus.  
Herbst, pl. 59, fig. 3." Var. *Pl. serripes*. *Lam.*  
*Seba*, t. iii., pl. 19, fig. 21.  
Inhabits New Zealand. *M. Edw.* British Museum.  
*Dr. Sinclair*, R.N.
7. *Leucosia?* *orbiculus*. *Cancer orbiculus*. *Fabr. Ent.*  
*Syst.* 402, 13.  
Inhabits New Zealand. *Fabr.*
8. *Pagurus cristatus*. *M. Edw.*, l. c. ii., p. 218. *Edw.*,  
*Ann. des Sc. Nat.*, ser. 2, vi., p. 269.  
Inhabits New Zealand. *M. Edw.* Brit. Museum *Dr.*  
*Sinclair*.
9. *Pagurus pilosus*. *M. Edw.*, l. c. ii., p. 233. *Ann. Sc.*  
*Nat.*, vi., p. 282, pl. 14, f. 1.  
Inhabits New Zealand. *M. Edw.*
10. *Porcellana elongata*. *M. Edw.*, l. c. ii., p. 251.  
Inhabits New Zealand. *M. Edw.*
11. *Palinurus?* sp. "Lobster, or Sea Cray-fish." *Cook.*  
"Cancer homarus, L." *Forster, Voy.*, i. p. 144.  
"Kohuda, or cray-fish," *Kohura. Dieffenbach.*  
*Polack*, i. p. 326.

"The highest luxury which the sea afforded us was the lobster, or sea cray-fish, which are probably the same that, in the account of Lord Anson's Voyage, are said to have been found at the island of Juan Fernandez, except that, although large, they are not quite equal in size. They differ from ours in England in several particulars: they have a greater number of prickles on their backs, and they are red when first taken out of the water. These we

also bought everywhere to the northward, in great quantities, of the natives, who catch them by diving near the shore, and finding out where they lie with their feet."—*Hawkesworth*, Voyage of Lieut. Cook, iii., p. 440, and vol. ii., pp. 325 and 328.

Captain Cook called a place where he and his party partook of these cray-fish "Luncheon Cove." i., p. 78 (London edition, 1777).

12. *Paranephrops planifrons*. *White*, in Gray's Zool. Miscell., p. 79.

Inhabits New Zealand, R. Thames. *Dr. Dieffenbach*.

The eyes are large, as in *Nephrops*: the sides of the second thoracic segment, in the middle in front, with a spine, as in *Potamobius*, and a shorter one beneath it: the lamellar appendage of the outer antennæ extends considerably beyond the thickened basal joints of these antennæ, and on the inside is nearly straight, and margined with longish hairs: the first two joints of the outer "foot-jaws" are spined within: the sides of the abdominal segments are not nearly so acutely angulated as in *Nephrops*: the middle plate of the tail is of one piece, as in *Nephrops*, and has the spine removed further back from the much-rounded extremity: the first pair of legs is rather more slender than in *Nephrops*; the claws inside are nearly straight, and furnished with moderate-sized teeth; the hands are but slightly grooved, and have a few rows of spines, largest on the inside: the second pair of legs is the shortest of the four hind pair (while in *Nephrops* the fifth are so), the second are the longest, the fourth and fifth being nearly equal in length.

This species, from the River Thames in New Zealand, connects the two genera *Potamobius* and *Nephrops*, in having the habit of the former, and combining the characters of both.

The carapace of this species is almost cylindrical; the beak reaches beyond the pedicel of the inner pair of antennæ, is straight, broad, flattened, and somewhat hollowed out above; the sides have three teeth; at the base to the side are two teeth, one placed before the other; at the base of the beak, in the middle, there is a slight longitudinal abbreviated ridge; the sides of the carapace, outside the outer jaw-feet, have many short bent spines; the abdominal segments are smooth above; the caudal appendages are finely striated at the end, and tinged with pinkish-red; the thorax covered with minute hairs; the abdomen is of a yellowish, somewhat mottled colour; each segment behind with a very narrow

edge of pink. Length of largest specimen, 3 inches 8 lines, from the end of the tail to the end of the beak; length of smallest 2 inches 8 lines.

13. *Hippolyte spinifrons*. *M. Edw.*, l. c. ii., p. 377.

Inhabits New Zealand. *M. Edw.*

14. *Palæmon Quoianus*, *M. Edw.*, l. c. ii. p. 393.

Inhabits New Zealand. *M. Edw.*

“*Shrimps.*”

The quantities of shrimps and their families are unbounded. *Po-lack*, i., 326.

15. *Talitrus brevicornis*. *M. Edw.*, l. c. iii., p. 15.

Inhabits New Zealand. *M. Edw.*

16. *Orchestia Quoyana*. *M. Edw.*, l. c. iii., p. 19.

Inhabits New Zealand. *M. Edw.*

17. *Cilonera MacLeayi*, *Leach*?

This, or an allied species, was found by Dr. Sinclair on the New Zealand coast. Dr. Leach's specimen exists in the British Museum Collection, but whether he described it or not I have not been able to ascertain. It will come after the genus *Olencira* of Leach (*Dict. des Sc. Nat.* xii., p. 350).

18. *Æga seu Sphæroma?* *Oniscus imbricatus*. *Fabr.*, *Syst. Ent.* 296. 2.

Inhabits New Zealand. *Fabr.*

19. *Sphæroma armata*. *M. Edw.* l. c. iii., p. 210.

Inhabits N. Zealand. *M. Edw.*

20. *Dinemoura affinis*. *M. Edw.*, l. c. iii., p. 465, pl. 38, f. 15-18.

Inhabits New Zealand. *M. Edw.*

- \*20. *Cypris Novæ Zelandiæ*. *Baird*. MSS.

“Shell ovate, elongated, both extremities of the same size; somewhat turgid, and slightly sinuated in centre of anterior margin; white, smooth and shining, perfectly free from hairs. Approaches *Cyp. detecta* of Müller, but differs in the shell not being flat, as in that, but turgid or rounded, being less sinuated on anterior margin, and more rounded on dorsal surface. The shell does not appear to be transparent.” *Baird*.

Inhabits New Zealand. British Museum. *Dr. Stanger*.

## (CIRRHIPIDES.)

21. *Anatifa spinosa*. Quoy et Gaim., Voy. Astrol., iii., 629, t. 93, f. 17.  
Inhabits New Zealand.
22. *Anatifa elongata*. Quoy et Gaim., Voy. Astrol., iii., 635, t. 93, f. 6.  
Inhabits Bay of Islands.
23. *Anatifa tubulosa*. Quoy et Gaim., Voy. Astrol., iii., 643, t. 93, f. 5.  
Inhabits New Zealand.
24. *Lepas balænaris*. Gmelin. Chemn. viii., t. 99, f. 845-6. *Balanus circulus*. Mus. Genev.  
Inhabits New Zealand. Dr. Dieffenbach.
25. *Tubicinella trachealis*. *Lepas trachealis*. Shaw, N. Miscel. xvii., t. 726. *L. tracheæformis*. Wood. Conch. 31, t. 10, f. 1-3. *Tubicinella major* et *T. minus*. Lam., Ann. Mus. H. N., vi. 461, t. 30, f. 1-2.  
Inhabits the Skin of Whales. New Zealand.
26. *Elminius plicatus*. Gray, n. s.  
Inhabits New Zealand. Mr. Yate and Dr. Dieffenbach.  
"Valves yellow, strongly plicated and folded, especially at the base; opercular valves thick.  
The apical part of the valves are generally much worn; like *E. Kingii*, the valves are solid and not cellular. When young the valves of these shells are purplish white and low. There is another species of this genus found on the *Concholepas*, which is folded below like this, but purple and depressed." *E. Peruviana*. Gray.
27. *Conia depressa*. Gray.  
Inhabits New Zealand, on *Haliotis Iris*, Bay of Islands. Dr. Sinclair
28. *Balanus*. —?  
Inhabits New Zealand, on *Mytilus smaragdus*.
29. *Balanus*. —?  
Inhabits New Zealand.

## Class MYRIAPODA.

30. *Scolopendra rubriceps*, ♂. *Newport*. MSS.

Inhabits New Zealand. British Museum. *Dr. Dieffenbach*.

“Head, labium, and mandibles very dark red; body blackish brown, somewhat flattened; very much narrowed in the anterior, but dilated in the posterior segments. Antennæ and legs reddish olive. Posterior pair of legs, on the under surface, with 7 spines arranged in two oblique lines, and 3 spines on the internal superior margin. Length  $4\frac{3}{4}$  inches.” *Newport*.

Polack (i. p. 322) speaks of a species of “innocuous” centipede as occurring in New Zealand.

31. *Spirotreptus antipodarum*. *Newport*. MSS.

Inhabits New Zealand. British Museum. *Dr. Sinclair*.

“Brown, with the head smooth, and deeply excavated at the sides behind the antennæ; first segment with the sides triangular, subacute without plicæ; anterior portion of each segment substriated diagonally, and mottled with orange; posterior portion almost smooth, with very faint longitudinal striæ. Preanal scale short, rounded.”

“These specimens are in their immature state, and have but 35 segments to the body, the adult number being about 50, and the length of the individual from  $1\frac{1}{2}$  to 2 inches.” *G. Newport*.

## Class ARACHNIDA.

A spider in New Zealand (at Mawi) is named *pouwerewere*. *Walckenaer*, Apt. ii., p. 519.

32. *Mygale antipodiana*. *Walck*. Apt. i., p. 230.

Inhabits New Zealand. *Walck*.

33. *Segestria saeva*. *Walck*. Apt. i., p. 269.

Inhabits New Zealand. *Walck*.

34. *Lycosu nautica*. *Walck*. Apt. i., 340.

Inhabits N. Zealand. *Walck*.

“*Aranea viatica*—the wandering spider.” Polack speaks of this being met with continually in New Zealand (i. p. 321). It may be some species of the genus *Lycosa*.

35. *Dolomedes mirificus*. *Walck*. Apt. i., 355.

Inhabits New Zealand. *Walck*.