

4. ON THE MARINE MOLLUSCAN FAUNA OF THE PROVINCE OF SOUTH AUSTRALIA: WITH A LIST OF ALL THE SPECIES KNOWN UP TO THE PRESENT TIME; TOGETHER WITH REMARKS ON THEIR HABITATS AND DISTRIBUTION, ETC. BY GEORGE FRENCH ANGAS, C.M.Z.S., ETC.

(Part II.*)

CONCHIFERA.

Fam. PHOLADIDÆ.

1. BARNEA AUSTRALASIÆ.

Pholas australasiæ, Gray, MS. Brit. Mus.; Thesaurus Conchyliorum, pl. 107. f. 73.

Station. Burrowing in soft rock beyond tide-marks.

Hab. Spencer's Gulf.

2. BARNEA SIMILIS.

Pholas similis, Gray, MS. Brit. Mus.; Thesaurus Conchyliorum, pl. 103. f. 12, 13, 14.

Station. In soft rock.

Hab. St. Vincent's Gulf, Port Adelaide Bar.

Abundant also near Auckland, New Zealand.

Fam. SOLENIDÆ.

3. SOLEN VAGINOIDES.

Solen vaginoides, Lam. Anim. sans Vert. vi. p. 54.

Station. Burrowing in sandy flats in sheltered places.

Hab. Port Adelaide Creek; Nepean Bay, Kangaroo Island; also Tasmania.

A pretty species, slightly curved, and mottled with flesh-purple.

Fam. SAXICAVIDÆ.

4. SAXICAVA AUSTRALIS.

Saxicava australis, Lam. Anim. sans Vert. vi. p. 153.

Mactra crassa, Péron.

Station. Imbedded in sponges.

Hab. Rapid Bay, St. Vincent's Gulf.

5. *SAXICAVA ANGASI.

Saxicava angasi, A. Adams, MS. Col. Cuming.

Station. On oyster-banks, living in sandy mud at from 5 to 8 fathoms.

Hab. Port Lincoln.

This species resembles a gigantic *S. australis*, some specimens being $2\frac{1}{2}$ inches in length. Its difference of station would, however,

* For Part I. see P. Z. S. 1865, p. 155.

independently of its large size, induce me to regard it as a distinct species.

Fam. ANATINIDÆ.

6. *ANATINA ANGASI.

Periploma angasi, Crosse et Fischer, Journal de Conchyliologie, 1864, tome iv. no. 4, p. 349.

Station. In sandy mud in sheltered bays.

Hab. Hardwick Bay; Spencer's Gulf.

It has been also found at Oyster Bay, on the east coast of Tasmania.

This fine species, which has been described by Messrs. Crosse and Fischer as a *Periploma*, to which genus, on account of the inequality of its valves, it bears some resemblance, must nevertheless, from its gaping and beaked posterior extremity, be placed in the genus *Anatina* of Lamarck.

7. ANATINA CRECCINA.

Anatina creccina, Valenciennes.

Station. In sandy mud.

Hab. Hardwick Bay; Spencer's Gulf; Port Phillip; Illawarra Lake and Port Jackson, New South Wales.

8. ANATINA GRACILIS.

Anatina gracilis, Reeve, Conchologia Icon.

Station. In estuary mud.

Hab. Port Adelaide Creek.

9. MYODORA OVATA.

Myodora ovata, Reeve, Proc. Zool. Soc. 1844; Conch. Icon. pl. 1. f. 4.

Station. Dredged on sandy bottom at 2 fathoms.

Hab. Port Adelaide Creek, north arm; middle harbour, Port Jackson, New South Wales.

10. CHAMOSTREA ALBIDA.

Chama albida, Lam.

Cleidothærus chamoïdes, Stutchbury, Zool. Journal; Sowerby, Genera of Shells, f. 1-3.

Station. On oyster-banks.

Hab. Port Lincoln; Rapid Bay; Port Jackson, New South Wales.

Hitherto the locality of this peculiar shell was supposed to be exclusively Port Jackson. Fine large specimens have been obtained by the dredge from the oyster-banks near Port Lincoln.

Fam. MACTRIDÆ.

11. TRIGONELLA RUFESCENS.

Mactra rufescens, Lam. Anim. sans Vert. (Deshayes's edit.) vi. p. 102.

Station. Burrowing in sand, on shores exposed to the surf.

Hab. Encounter Bay, near the sea-mouth of the Murray; also Tasmania.

A solid, flexuously-wrinkled species.

12. TRIGONELLA POLITA.

Mactra polita, Chemnitz, Conch. Cab. vi. p. 222, f. 216, 217.

M. glabrata, Schröter.

M. australis, Lam.

Station. Burrowing on sandy shores, beyond tide-marks.

Hab. Spencer's Gulf and Encounter Bay.

This species is more or less banded with light ashy and violet.

13. TRIGONELLA PURA.

Mactra pura, Deshayes, Proc. Zool. Soc. 1853, p. 15.

Station. The same as the preceding.

Hab. Spencer's Gulf; Hardwick Bay.

A solid, ivory-white species, which ranges westward to Swan River.

14. *TRIGONELLA AMYGDALA.

Mactra amygdala, Crosse et Fischer, Journ. de Conch. 1864, p. 349.

Station. In sand, near tide-marks.

Hab. Head of Spencer's Gulf.

A small, white, oval species.

15. *SPISULA ADELAIDÆ.

Spisula adalaidæ, Angas, MS.

Station. In estuary mud, amongst mangrove-swamps.

Hab. Port Adelaide Creek.

16. *MULINIA PINGUIS.

Mactra (Mulinia) pinguis, Crosse et Fisch. Journ. de Conch. 1864, p. 349.

Station. Unknown.

Hab. Port Lincoln.

17. LUTRARIA RHYNCHÆNA.

Lutraria rhynchæna, Jonas, MS. (Mus. Cuming.); Reeve, Conch. Icon. (*Lutraria*) pl. 4. f. 16.

Station. Dredged on oyster-banks.

Hab. Port Lincoln.

A fine species, obliquely arched, with the anterior end beaked and openly gaping.

18. LUTRARIA PHILIPPINARUM.

Lutraria philippinarum, Deshayes, P. Z. S. 1854, p. 71.

Station. Same as the preceding.

Hab. Port Lincoln.

Fam. TELLINIDÆ.

19. HIATULA BIRADIATA.

Solen biradiatus, Wood, Gen. Conch. pl. 33. f. 1; Index Test. pl. 3. f. 26.

Station. In the sands at low-water mark.

Hab. St. Vincent's Gulf.

20. HIATULA EPIDERMIA.

Soletellina epidermia, Desh. MS. (Mus. Cuming.); Reeve, Conch. Icon. pl. 1. f. 3.

Station. Buried in sand at low water.

Hab. Port Lincoln; St. Vincent's Gulf; Swan River; Port Phillip; Tasmania and Port Jackson.

21. HIATULA NYMPHALIS.

Soletellina nymphaelis, Deshayes, MS. (Mus. Cuming.); Reeve, Conch. Icon. (*Soletellina*) pl. 1. f. 2.

Station. Same as the preceding species.

Hab. Hardwick Bay and St. Vincent's Gulf.

This may perhaps prove to be only an orange-coloured variety of *H. biradiata*.

22. HIATULA VITREA.

Sanguinolaria vitrea, Desh. P. Z. S. 1854, p. 326.

Station. In deeper water than the other *Hiatulæ*.

Hab. Port Lincoln; Spencer's Gulf; also Tasmania.

23. TELLINELLA DELTOIDALIS.

Tellina deltoidalis, Lam. Anim. sans Vert. vi. p. 206.

T. lactea, Quoy, Voyage de l'Astrol.

Station. In sandy mud, in estuaries.

Hab. Port Adelaide Creek.

This species has a wide range. It occurs not only in South Australia, Port Phillip, and Tasmania, but in Illawarra Lake and Botany Bay in New South Wales—and also in New Zealand, where it attains a larger size than in the other localities.

24. PERONÆODERMA ALBINELLA.

Tellina albinella, Lam. Anim. sans Vert. vi. p. 194.

Station. Buried in the sands at low water on shores exposed to the ocean surf.

Hab. Encounter Bay, along the beach towards the sea mouth of the Murray.

There are several varieties in colour of this beautiful shell,—the white variety (Lamarck's type) being the one most seldom met with, whilst those of a deep rose-colour and an orange flesh tint are comparatively abundant.

25. *MACOMA UMBONELLA.*

Tellina umbonella, Lam. no. 48 ; Hanley, Desc. Cat. p. 70 ; Sow. Thes. Conch. pl. 56. f. 13.

Station. In sandy bays.

Hab. Port Lincoln.

26. *ARCOPAGIA DECUSSATA.*

Tellina decussata, Lam. Anim. sans Vert. vi. p. 205.

Station. Amongst rocks and stones at low tides.

Hab. Rapid and Aldinga Bays ; Tasmania and Port Phillip.

27. *LATONA EPIDERMIA.*

Donax epidermia, Lam. Anim. sans Vert. vi. p. 243.

D. deltoides, Lam. ; Sow. Genera of Shells, no. 10.

D. lævigata, Dillwyn.

Station. In sand at low water.

Hab. Encounter Bay ; the Coorong.

This species is abundant on most of the sandy shores of the southern portion of Australia. On the coasts of New South Wales and along the Coorong it is eaten by the natives ; and large heaps of the shells may be seen about their old fires and camping-places.

28. *SEMELE EXIGUA.*

Semele exigua, H. Adams, P. Z. S. 1861, p. 385.

Station. In sand near tide-marks.

Hab. Spencer's Gulf.

This beautiful little species is an aberrant form of the genus, and has much the aspect of a *Tellina*.

29. **SEMELE ADA.*

Semele ada, Adams & Angas, P. Z. S. 1863, p. 426.

Station. Dredged in 3 fathoms water.

Hab. Port Adelaide Creek, north arm.

30. *DONACILLA PRÆCISA.*

Mesodesma præcisum, Desh. MS. (Mus. Cuming.) ; Reeve, Conch. Icon. pl. 4. f. 31.

Station. Sands at low water.

Hab. Salt Creek ; St. Vincent's Gulf ; Tasmania.

31. *DONACILLA ELONGATA.*

Mesodesma elongatum, Desh. MS. (Mus. Cuming.) ; Reeve, Conch. Icon. pl. 1. f. 5.

Station. Sands at low water.

Hab. On most sandy shores in both gulfs ; New South Wales ; Tasmania ; Bass's Straits ; Swan River.

32. *DONACILLA OBTUSA.

Mesodesma obtusum, Crosse et Fischer, Journ. de Conch. 1864,
p. 350.

Station. Sands at low water.

Hab. Port Lincoln and St. Vincent's Gulf.

33. ANAPA TRIQUETRA.

Mesodesma triquetrum, Hanley, P. Z. S. 1843, p. 101.

Anapa triquetra, Gray.

Station. In sand at low water.

Hab. Head of Spencer's Gulf; Tasmania.

34. ANAPA CUNEATA.

Mesodesma cuneatum, Desh. Anim. sans Vert. vi. p. 133.

Crassatella cuneata, Lam.

Station. In sand at low water.

Hab. St. Vincent's Gulf; New Zealand.

Fam. VENERIDÆ.

35. CHIONE (CIRCOMPHALUS) LAMELLATA.

Venus lamellata, Lam.; Reeve, Conch. Syst. pl. 68. f. 3.

Station. Deep water, on oyster-banks.

Hab. Port Lincoln.

This magnificent species, with its broad flesh-coloured lamellæ, is, when in good condition, one of the most beautiful of bivalve shells. It occurs likewise in Bass's Straits and on the coast of Tasmania.

36. CHIONE (CIRCOMPHALUS) TIARA.

Venus tiara, Dillwyn; Reeve, Conch. Syst. pl. 67. f. 3.

Station. Deep water; dredged from oyster-beds.

Hab. Port Lincoln.

This species occurs at Moreton Bay, on sandbanks.

37. CHIONE (CIRCOMPHALUS) ALTA.

Venus alta, Sow.

Station. Dredged from oyster-beds.

Hab. Port Lincoln.

Large specimens of this species are found at Shark's Bay, North-west Australia.

38. CHIONE (TIMOCLEA) AUSTRALIS.

Venus australis, Sow. Proc. Zool. Soc. 1835, p. 22.

Station. Deep water.

Hab. Port Lincoln and Kangaroo Island; Swan River; Tasmania; Port Jackson, New South Wales.

39. CHIONE (CHAMELEA) APHRODINA.

Venus aphrodina, Lam.; Delessert, Recueil, pl. 11. f. 1.

Station. In sand beyond tide-marks.

Hab. Port Lincoln ; Tasmania.

A chalky-white species, purple inside, with the valves transversely ridged or striated.

40. CHIONE (CHAMELEA) CONULARIS.

Venus conularis, Lam.

Station. On sandy beaches at low tide.

Hab. St. Vincent's Gulf ; Salt Creek ; York's Peninsula.

Similar in form and sculpture to the preceding, but with the valves stained with bluish purple and chestnut.

41. CHIONE (CHAMELEA) PERONI.

Venus peroni, Lam. Anim. sans Vert. vi. p. 369.

Station. In sandy bays at low tide.

Hab. Rapid Bay ; Aldinga Bay ; Salt Creek ; Tasmania and Port Phillip ; also King George's Sound (large specimens).

Like the preceding, but larger and more inflated, and frequently ornamented with zigzag brown lines and spots.

42. CHIONE (CHAMELEA) STRIGOSA.

Venus strigosa, Lam. Anim. sans Vert. vi. p. 368.

Station. Sandy bays at low tide.

Hab. York's Peninsula ; St. Vincent's Gulf ; Port Lincoln ; King George's Sound (very large) ; Port Phillip.

More elongated, with the ridges waved and crenated. The specimens from Port Phillip are beautifully ornamented with a network of dark lines and spots, especially near the ventral margin.

43. CHIONE (CHAMELEA) SCALARINA.

Venus scalarina, Lam. ; Deless. Recueil, pl. 10. f. 12.

Station. In sand at low-water mark.

Hab. Very abundant near the semaphore jetty outside Port Adelaide. It ranges westward to Swan River.

At the head of Spencer's Gulf a solid white variety occurs, beautifully tinged more or less with violet, and wanting the wavy spots which are so characteristic of the ordinary type of this species.

Another variety is remarkable in having the ridges wide apart, thin, and erect at the sides.

44. CHIONE (MARCIA) FABÆ.

Tapes faba, Reeve, Conch. Icon.

Station. In estuary mud.

Hab. Port Onkaparinga, St. Vincent's Gulf.

Somewhat resembling *V. lavigata*, Sow., but more gibbous and rounded at the sides.

45. *SUNETTA ALICIÆ.

Sunetta aliciaë, A. Adams & Angas, Proc. Zool. Soc. 1863, p. 425, pl. xxxvii. f. 18.

Station. Deep water.

Hab. Encounter Bay.

A very beautiful species, painted with blotches and rays of rose or purple on a flesh-coloured ground.

46. CIRCE RIVULARIS.

Cytherea rivularis, Born ; Menke, Moll. Nov. Holl. p. 42.

Station. Deep water ; dredged on oyster-banks.

Hab. Port Lincoln.

Found also at Moreton Bay, on the north-east coast of Australia.

47. *DOSINIA DIANA.

Dosinia diana, A. Adams & Angas, Proc. Zool. Soc. 1863, p. 424.

Station. Deep water.

Hab. Hardwick Bay ; Spencer's Gulf.

A fine species, of a pure white colour, gibbous, and very smooth towards the beaks.

48. TAPES (CUNEUS) GALACTITES.

Venus galactites, Lam. Anim. sans Vert. vi. p. 359.

Station. In deep water.

Hab. St. Vincent's and Spencer's Gulfs.

Of a uniform white colour, with the surface of the valves longitudinally striated.

49. RUPELLARIA CRENATA.

Venerupis crenata, Lam. Anim. sans Vert. vi. p. 164.

Station. In holes and crevices of rocks, and at the roots of mangrove trees.

Hab. Port Adelaide Creek ; Port Jackson, New South Wales.

50. RUPELLARIA CUMINGI.

Rupellaria cumingi, Deshayes.

Station. In crevices of rocks and hollow stones.

Hab. St. Vincent's Gulf, Rapid Bay, and Encounter Bay.

A reddish violet-coloured species, with the transverse ridges elegantly frilled.

51. RUPELLARIA OBESA.

Venerupis obesa, Desh. P. Z. S. 1853, p. 5.

Station. In rocks beyond low water.

Hab. Port Elliott ; Encounter Bay ; also Port Phillip and Tasmania.

Fam. PETRICOLIDÆ.

52. *NARANIO DIVARICATA.

Naranio divaricata, Chemnitz.

Station. Deep water.

Hab. Aldinga Bay, St. Vincent's Gulf.

Fam. CARDIADÆ.

53. CARDIUM (TRACHYCARDIUM) CYGNORUM.

Cardium cygnorum, Desh.

Station. Deep water.

Hab. Rapid Bay; Holdfast Bay, dredged in 5 fathoms; Swan River.

54. PAPYRIDEA TENUICOSTATA.

Cardium tenuicostatum, Lam. Anim. sans Vert. (Desh. edit.) vi. p. 372.

Station. Deep water.

Hab. Hardwick Bay; Spencer's Gulf; Kangaroo Island; Port Phillip; Port Jackson.

Fam. CHAMIDÆ.

55. CHAMA FRAGUM?

Chama fragum, Reeve, Conch. Icon. pl. 9. f. 48.

Station. Adhering to dead *Pinnæ* and *Malleus*.

Hab. Head of Spencer's Gulf.

56. CHAMA CRISTELLA?

Chama cristella, Lam. Anim. sans Vert. (Deshayes's edit.) vi. p. 585.

Station. On mussel-beds, adhering to one another.

Hab. Head of Spencer's Gulf.

Fam. LUCINIDÆ.

57. *LUCINA CONCENTRICA.

Lucina concentrica, A. Adams & Angas, Proc. Zool. Soc. 1863, p. 426, pl. xxxvii. f. 19.

Station. Deep water.

Hab. St. Vincent's Gulf.

58. *LUCINA (CYCLAS) CUMINGI.

Lucina (Cyclas) cumingi, A. Ad. & Angas, P. Z. S. 1863, p. 426, pl. xxxvii. f. 20.

Station. Deep water.

Hab. St. Vincent's Gulf.

A large handsome species, in which the divaricating ridges are acute and imbricate upwards, and are wider apart than in most of this group, which is the *Cyclas* of Klein.

59. LORIPES ICTERICA.

Lucina ictERICA, Reeve, Conch. Icon.

Station. In sandy bays.

Hab. St. Vincent's Gulf; Hobson's Bay, Victoria.

A small white shell, having the ligament in an oblique internal pit, as in the British *L. leucoma*.

Fam. LASEIDÆ.

60. PYTHINA DESHAYESI.

Lucina deshayesi, D'Orb.

Station. Deep water.

Hab. Rapid Bay, St. Vincent's Gulf.

A very beautiful little shell, in which the ribs divaricate from the centre of the valves, and form erect vaulted scales at the sides, leaving the umbones smooth.

Fam. SOLEMYIDÆ.

61. SOLEMYA AUSTRALIS.

Solemya australis, Lam. Anim. sans Vert. vi. p. 124.

Station. In sandy mud, 2 to 4 fathoms.

Hab. St. Vincent's Gulf.

This is the largest species of the genus. Its delicate shells, containing the animal, are frequently cast ashore at Holdfast Bay and on the semaphore beach after heavy gales.

Fam. ASTARTIDÆ.

62. CRASSATELLA CASTANEA.

Crassatella castanea, Reeve, Proc. Zool. Soc. 1842, p. 42.

Station. Deep water.

Hab. Port Lincoln.

This magnificent species is the largest *Crassatella* known. One of my specimens measures $4\frac{1}{2}$ inches in length.

63. MYTILICARDIA CRASSICOSTATA.

Cardita crassicostata, Lam. Anim. sans Vert. (Desh. edit.) p. 430.

Cardita tridacnoides, Menke.

Station. Amongst rocks and stones beyond tide-mark.

Hab. Rapid and Aldinga Bays; St. Vincent's Gulf.

This beautiful shell, which varies considerably in growth and distribution of colour, is also met with in the Philippines. Occasionally specimens occur of a bright rose-colour, or saffron-yellow.

64. *MYTILICARDIA (THECALIA) MACROTHECA.

Thecalia macrotheca, A. Ad. & Angas, P. Z. S. 1864, p. 39.

Station. Under stones at low tide.

Hab. Rapid Bay.

Fam. MYTILIDÆ.

65. MYTILUS (AULACOMYA) HIRSUTUS.

Mytilus hirsutus, Lam. Anim. sans Vert. vii. p. 38.

Station. Adhering to rocks and stones at low water.

Hab. Head of Spencer's Gulf.

This hairy species is also found in New South Wales and New Zealand.

66. MYTILUS (AULACOMYA) MENKEANUS.

Mytilus menkeanus, Phil. ; Dunker, MS. in Mus. Cuming.

Station. Adhering to stones in clusters.

Hab. St. Vincent's and Spencer's Gulfs.

67. MYTILUS (AULACOMYA) ROSTRATUS.

Mytilus rostratus, Dunker, MS. Mus. Cuming.

Station. In clusters on rocks.

Hab. Encounter and Guichen Bays.

68. *CRENELLA PAULUCCIÆ.

Crenella paulucciæ, Crosse, Journ. de Conch. 1863, p. 89, pl. 1. f. 8.

Station. Nestling amongst *Zostera* on sandy flats.

Hab. Head of Spencer's Gulf and St. Vincent's Gulf.

Varying in colour from bright green to orange.

69. CRENELLA (MODIOLARIA) CUMINGIANA.

Modiola cumingiana, Dunker, MS. Mus. Cuming.

Station. 1 to 3 fathoms, amongst *Zostera*.

Hab. St. Vincent's Gulf.

70. PERNA AUSTRALIS.

Modiola australis, Gray, Appendix to King's Voyage.

Station. Abundant at the roots of seaweed, and on *Zostera* flats in moderately shallow water.

Hab. St. Vincent's Gulf.

A large species somewhat resembling in colour *M. tulipa*, Lam., from the West Indies ; but of a more contracted growth on the posterior side, and convexly dilated anteriorly.

71. PERNA FLAVIDA.

Volsella flavida, Dunker, P. Z. S. 1856, p. 364.

Modiola flavida, Reeve, Conch. Icon. (*Modiola*) pl. 10. f. 77.

Station. With *P. australis*.

Hab. St. Vincent's Gulf ; Bay of Manilla (*Cuming*).

Fam. VULSELLIDÆ.

72. VULSELLA LIMÆFORMIS.

Vulsella limæformis, Reeve, Conch. Icon. (*Vulsella*) pl. 2. f. 10 a & b.

Station. Imbedded in sponges.

Hab. St. Vincent's Gulf.

73. VULSELLA RUDIS.

Vulsella rudis, Reeve, Conch. Icon. (*Vulsella*) pl. 2. f. 12.

Station. In sponge.

Hab. Port Lincoln.

Fam. AVICULIDÆ.

74. AVICULA SCALPTA.

Avicula scalpta, Reeve, Conch. Icon. pl. 11. f. 38.

Station. Attached to bunches of Zoophytes and Algæ.

Hab. St. Vincent's Gulf; Guichen Bay; Tasmania.

75. AVICULA PULCHELLA.

Avicula pulchella, Reeve, Conch. Icon. pl. 8. f. 22.

Station. Same as preceding.

Hab. St. Vincent's Gulf; Port Phillip.

76. AVICULA RUTILA.

Avicula rutila, Reeve, Conch. Icon. pl. 8. f. 19.

Station. Same as preceding.

Hab. St. Vincent's Gulf.

77. AVICULA PUNCTULATA.

Avicula punctulata, Reeve, Conch. Icon. pl. 12. f. 42.

Station. Same as preceding.

Hab. Port Lincoln and St. Vincent's Gulf.

All the foregoing are delicate, subtransparent species, varying considerably in colour and markings.

78. MARGARITIFERA MARGARITIFERA.

Mytilus margaritiferus, Linn. Syst. Nat. p. 1153.

Margarita sinensis, Leach.

Avicula meleagrina, De Blainv.

A. radiata, Leach.

Station. Deep water.

Hab. Spencer's Gulf; Coffin's Bay; and the Great Australian Bight.

This is the "Pearl Oyster," a species generally distributed throughout the Indo-Pacific marine molluscan province.

79. MALLEUS ALBUS.

Malleus albus, Lam. Anim. sans Vert. vii. p. 91.

Ostrea malleus-albus, Chemn.

Var. *Malleus normalis*, Lam.

Station. On oyster-banks, buried in the sand, in from 2 to 5 fathoms water.

Hab. Port Lincoln.

This species occurs also at Moreton Bay and the Philippines.

80. MALLEUS REGULUS.

Ostrea regula, Forsk. Desc. Anim. p. 124.

O. ocrea, Martini.

Vexillum moluccanum, Chemn.

Ostrea vulsella, Gmel.

Malleus vulsellatus, Lam.

Station. Same as preceding.

Hab. Head of Spencer's Gulf.

81. PINNA ZEYLANICA.

Pinna zeylanica, Gray, Appendix to Dieffenbach's Travels.

Station. Buried in sandy mud on flats in shallow water.

Hab. St. Vincent's Gulf; Kangaroo Island; New Zealand; Moreton Bay; Shark's Bay.

Fam. ARCADEÆ.

82. BARBATIA LIMA.

Arca lima, Reeve, Proc. Zool. Soc. 1844.

Station. Deep water.

Hab. St. Vincent's Gulf; Philippines (*Cuming*).

83. BARBATIA RADULA.

Barbatia radula, A. Ad.

Station. Deep water.

Hab. St. Vincent's Gulf.

Common in Port Phillip.

84. *BARBATIA (ACAR) LAMINATA.

Barbatia (Acar) laminata, Angas, MS.

Station. Deep water.

Hab. St. Vincent's Gulf.

In this species (which belongs to the same group as *A. divaricata*, Sow., and *A. gradata*, Brod. & Sow.) the sculpture consists of regular layers of frilled laminæ, overlapping each other like tiles on a roof.

85. AXINIA RADIANS.

Pectunculus radians, Lam. Anim. sans Vert. (Desh. edit.) vi. p. 495.

Station. Deep water.

Hab. Port Lincoln; Bass's Straits.

86. AXINIA OBLIQUA.

Pectunculus obliquus, Reeve, P. Z. S. 1843.

Station. Deep water.

Hab. St. Vincent's and Spencer's Gulfs; Swan River and King George's Sound.

Fam. LEDIDÆ.

87. LEDA CRASSA.

Nucula crassa, Hinds, P. Z. S. 1843, p. 99.

Station. Deep water.

Hab. St. Vincent's Gulf.

A very fine species, of great rarity.

Fam. PECTINIDÆ.

88. PECTEN AUSTRALIS.

Pecten australis, Sow. Thesaurus Conch. i. p. 76, pl. 19. f. 210 & 220.

? *P. asperrimus*, Lam.

Station. On sandy banks amongst ooze, and in sponge, 2 to 5 fathoms.

Hab. St. Vincent's and Spencer's Gulfs; at Hardwick Bay, large; also King George's Sound and Swan River, Western Australia.

Like many of the species of this genus, *P. australis* is very variable in colour: dark violet-brown or orange-rose are its prevailing tints, but occasionally specimens are found of a bright scarlet, and also of a peculiar vivid lemon-yellow. The large specimens from Hardwick Bay are curiously like *P. asperrimus*, Lam.; but after comparing a series I should hardly like to separate them, the tripartite character of the ribs being visible in all.

89. PECTEN (CHLAMYS) BIFRONS.

Pecten bifrons, Lam. Anim. sans Vert. (Desh. edit.) vii. p. 131.

Station. Deep water, on oyster-banks.

Hab. Port Lincoln, Port Adelaide, and Kangaroo Island.

This fine species is more or less of a lilac-bloom colour, ribbed with dark purple or rose, whilst the interior is universally of an intense purple throughout. The granular shagreen character of the valves is peculiar.

90. VOLA LATICOSTATA.

Pecten laticostatus, Gray, Yates's 'New Zealand,' Appendix.

Station. In deep sheltered bays.

Hab. Port Lincoln.

This species is without doubt the *P. laticostatus* of Gray, from New Zealand. The ribs of the right valve are broad, flatly convex, and smooth, as in *P. medius*, Lam., to which it is closely allied.

Fam. RADULIDÆ.

91. RADULA LIMA.

Ostrea lima, Linn.

Lima squamosa, Lam.; Sow. Thes. Conch. pl. 21. f. 17, 18.

Station. In sponges and clefts of rocks, deep water.

Hab. Rapid Bay.

92. RADULA (MANTELLUM) ANGULATA.

Lima angulata, Sow. Thesaurus Conch. p. 86, pl. 22. f. 39, 40.

Station. Deep water.

Hab. Port Lincoln.

93. RADULA (LIMATULA) BULLATA.

Lima bullata, Sow. Genera of Shells, f. 3.

Ostrea bullata, Born.

Lima fragilis (var. *b*), Lam.

Station. Deep water, and under rocks and stones at low spring tides.

Hab. St. Vincent's Gulf; Port Jackson, New South Wales.

Fam. SPONDYLIDÆ.

94. SPONDYLUS TENELLUS?

Spondylus tenellus, Reeve, Conch. Icon. pl. 18. sp. 67.

Station. Adhering to dead shells and stones in deep water.

Hab. Rapid Bay, South Australia.

This pretty red-tinted *Spnodylus* comes so near to the *S. tenellus* of Reeve, from the Pacific, that I am inclined to regard it as belonging to that species.

Fam. OSTREIDÆ.

95. OSTREA EDULIS?

Ostrea edulis, Linn. Syst. Nat. p. 1148.

Station. On mud-banks in moderately deep water.

Hab. St. Vincent's and Spencer's Gulfs.

This species, which is procured in abundance for the Adelaide market, approaches so closely to the European *O. edulis* as scarcely to be distinguished from it.

96. OSTREA CUCULLATA.

Ostrea cucullata, Born, Mus. Cæs. Vindob.

O. mordax, Gould's 'Otia.'

Station. On rocks between tide-marks.

Hab. Common everywhere on rocky shores, from King George's Sound to New South Wales. It is excellent eating and of a delicious flavour.

BRACHIOPODA.

Fam. TEREBRATULIDÆ.

97. WALDHEIMIA FLAVESCENS.

Terebratula flavescens, Lam. Anim. sans Vert. vii. p. 330.

T. dentata, Lam.

T. australis, Quoy.

T. recurva, Quoy.

Station. Attached to the under surface of shelving rocks partly exposed at low spring-tides.

Hab. St. Vincent's Gulf; South Australia.

This species is also found in comparative abundance in some parts of Sydney Harbour, New South Wales.