

- Fig. 14. *Eoplychia fumata*, P. Z. S. 1867, p. 100.
 15. — *bysses*, P. Z. S. 1866, p. 490.
 16. — *periphas*, P. Z. S. 1866, p. 465.
 17. — *vestigata*, P. Z. S. 1867, p. 105.
 18. — *liturata*, P. Z. S. 1867, p. 107.
 19. — *ve-per*, P. Z. S. 1867, p. 108.
 20. — *pronophila*, P. Z. S. 1867, p. 107.
 21. — *armilla*, P. Z. S. 1867, p. 108.

4. Descriptions of Thirty-two New Species of Marine Shells from the Coast of New South Wales. By GEORGE FRENCH ANGAS, F.L.S., C.M.Z.S., &c.

(Plate XIII.)

1. TROPHON HANLEYI, n. s. (Pl. XIII. fig. 1.)

Shell fusiform, pale brown, with a narrow white band at the angle of the whorls; spire turreted; whorls angulated at the upper part, longitudinally distantly plicate, transversely ribbed, the ribs somewhat stronger on the plications and closely elevated sealed throughout, the last whorl produced into a moderately long open recurved beak; aperture small; columella arcuate, smooth, whitish; outer lip angulated near the middle, thin, crenated at the edge, and slightly denticulated within. Length 1 inch 2 lines, breadth 6 lines.

Adhering to the under surface of rocks at low water, Port Jackson (Coll. Angas).

2. CANTHARUS (TRITONIDEA) UNICOLOR, n. s. (Pl. XIII. fig. 2.)

Shell fusiform, thick, longitudinally plicately ribbed and transversely closely ridged, pale brown or whitish throughout; spire elevated; whorls seven, rounded; aperture ovate, ending in front in a short slightly recurved canal; columella arched; outer lip crenulated, thickened externally, and denticulated within. Length 6 lines, breadth 2 lines.

Found under stones at very low spring tides, at Camp Cove, Port Jackson (Coll. Angas).

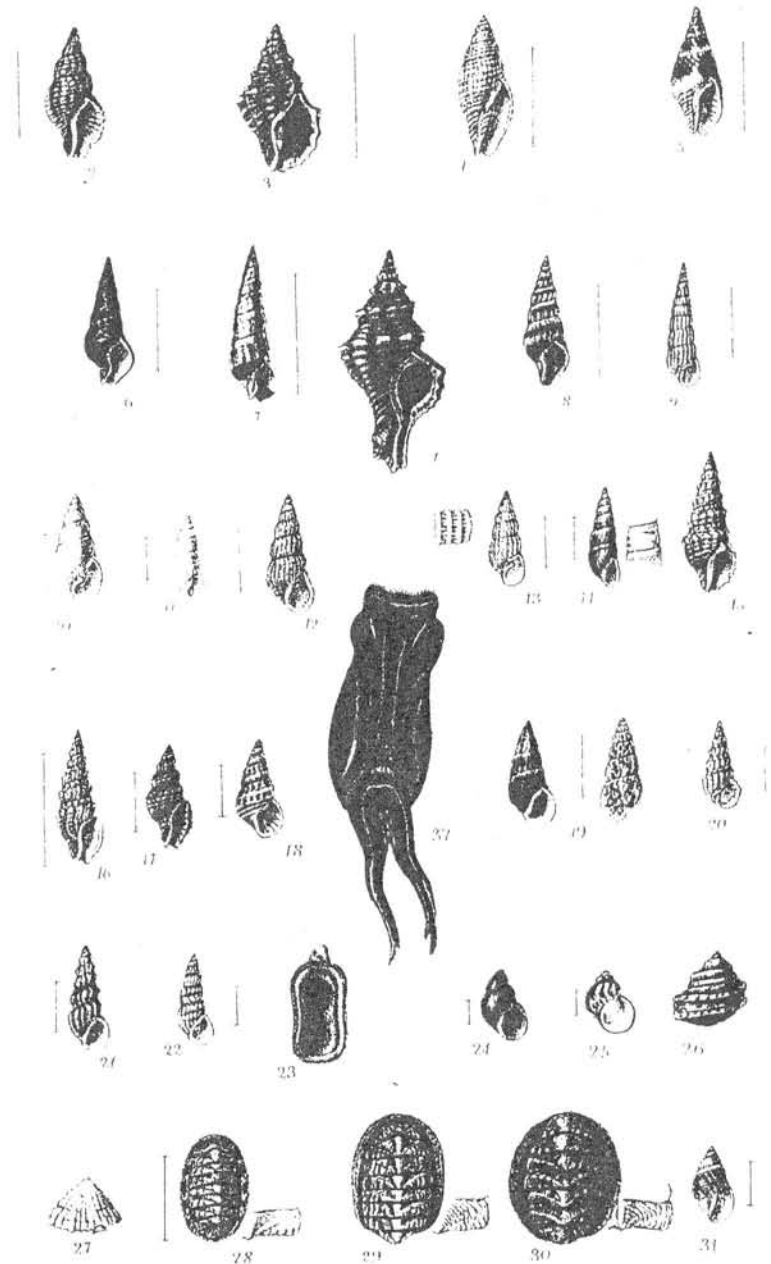
3. PURPURA (STRAMONITA) NEGLECTA, n. s. (Pl. XIII. fig. 3.)

Shell angularly ovate, longitudinally nodosely plicate, transversely rather broadly ribbed; ribs distant, the interstices filled with rows of muricated scales, pale brown, the transverse ribs yellowish spotted with black; spire elevated; whorls five, angulated, concave above; aperture angulately oval; columella arcuated and a little flattened; outer lip thin, simple; interior violet. Length 9 lines, breadth $4\frac{1}{2}$ lines.

Found under stones at low water outside Port Jackson Heads (Coll. Angas).

4. MITRA (CAUCILLA) STRANGEI, n. s. (Pl. XIII. fig. 4.)

Shell ovately fusiform, rather thin, white, spirally closely ridged,



the ridges on the last whorl alternately larger and smaller, crossed by very fine longitudinal lines; spire elevated; whorls eight, slightly rounded; aperture rather more than half the length of the shell, narrow; columella three-plaited, the upper plait the largest; outer lip thin. Length 7 lines, diam. $2\frac{1}{2}$ lines.

Dredged in Middle Harbour, Port Jackson (*Coll. Angas*).

Several specimens of this pretty little *Mitra* were also obtained at Moreton Bay by the late Frederick Strange, to whose memory I have dedicated it.

5. *COLUMBELLA (MITRELLA) ALBOMACULATA*, n. s. (Pl. XIII. fig. 5.)

Shell elongately fusiform, rather solid, whitish, tinged with violet; lower portion of the whorls faintly reticulated with chestnut, with broad brown flames, thickly spotted with white below the sutures; whorls eight, flattened, basal whorl spirally ridged anteriorly; aperture rather narrow, two-fifths the entire length of the shell; columella arcuated, callous, transversely finely ridged in front; outer lip sinuated posteriorly, edge thin, thickened exteriorly, and denticated within. Length $5\frac{1}{2}$ lines, breadth 2 lines.

Under stones at low water, Port Jackson (*Coll. Angas*).

6. *ÆSOPUS FILOSUS*, n. s. (Pl. XIII. fig. 6.)

Shell elongately fusiform, pale fulvous or brown, with spots of darker brown and white below the sutures; spire acuminately turreted, apex a little obtuse; whorls eight, slightly convex, transversely finely sulcated throughout, last whorl nearly one-third the length of the shell; aperture moderate, ovate; columella arched; outer lip slightly thickened externally and denticulated within. Length $5\frac{1}{4}$ lines, breadth 2 lines.

Dredged in Port Jackson in 5 fathoms (*Coll. Angas*).

7. *ACUS (ABRETIA) BICOLOR*, n. s. (Pl. XIII. fig. 7.)

Shell subulate, whitish, the lower half of the last whorl chocolate-brown; whorls nine, nearly straight, more or less nodulous below the sutures, thin, longitudinally ribbed, or very finely striated, the ribs on the last whorl ceasing at the periphery; columella arcuate; aperture small, ovately lunar; outer lip thin, rounded. Length 8 lines, breadth 2 lines.

Dredged in Middle Harbour, Port Jackson (*Coll. Angas*).

8. *ACUS (ABRETIA) ASSIMILIS*, n. s. (Pl. XIII. fig. 8.)

Shell elongately fusiform, rather solid, light fulvous, stained at the lower part of the whorls with purplish chocolate; whorls nine; a little rounded, longitudinally ribbed; ribs rather broad, arcuate, ceasing at the periphery of the last whorl, the interstices here and there irregularly longitudinally striated; columella arcuate, slightly twisted at the base; aperture small, contracted towards the front; outer lip thin, simple. Length $5\frac{1}{2}$ lines, breadth $1\frac{1}{2}$ line.

Dredged in Port Jackson (*Coll. Angas*).



Mr. Gould in the Society's 'Proceedings' for 1856 (p. 137). The typical specimen of this bird, now in the British Museum, obtained by Macgillivray during the voyage of the 'Herald,' was, I believe, previously unique. The living specimens in question were brought to this country in the ship 'Curagon,' and acquired by purchase for the Society on the 5th inst. I exhibit a sketch by Mr. Wolf (Pl. XVI.) representing this species.

I have already on more than one occasion spoken of the series of Cockatoos in the Society's Gardens, which is very full and complete*. In my last communication on this subject I proposed to divide the White Cockatoos into two sections, characterized by the form of the crest, which in the one case is pendent, in the other recurved at its extremity. In this it appears that, as I have lately become aware, I had been anticipated by Dr. Schlegel, although I have not yet been able to consult his original article upon this subject†. But in Dr. Schlegel's more recent paper upon the same subject‡, he has fallen into what every one who is acquainted with our living series of *Psittacidae* must allow is a very great error, in stating that *Cacatua ducorsii* and *Cacatua ophthalmica*, as described and figured by me in the articles above referred to, are mere varieties of *C. triton*! Dr. Schlegel is so kind as to add that my descriptions and figures of these birds are "de nulle utilité pour la science." To this I have only to reply that I regret to find he has not understood them better. It is true no exact dimensions are stated in my notes; but the birds described were (and still are, I am happy to say) alive, and it is not always easy to take exact measurements of living birds. But on reference to my second paper (P. Z. S. 1864, p. 188) it will be found that I have given what I must maintain is an exact and very recognizable diagnosis of *C. ophthalmica*, ending with "crassitie vix minore quam in *C. cristata*," which, I consider, is a sufficiently precise account of its size. And in the table above the diagnosis in the same paper I have classed *C. ducorsii* amongst the smaller section of the group, along with *C. sanguinea* and *C. philippinarum*, with which it agrees in size. No naturalist, in fact, after seeing specimens of *C. ophthalmica* and *C. ducorsii*, could regard these two birds as specifically identical. The former is a large species, closely allied to *C. cristata*, as I have already pointed out. The latter is a small species, very closely allied to *C. sanguinea* of Gould, and to be united to that species, if not allowed to stand alone. Neither do I in the least believe that there are any grounds for uniting *C. ophthalmica* to *C. triton*, whatever may be the length of Dr. Schlegel's "series" of specimens of this bird.

The fact is that in this, as in many other cases, Dr. Schlegel is misled by the idea that there are no other species of birds in existence except those represented in the Leyden Museum. In a similar frame of mind he has denied the existence of many other excellent

* See P. Z. S. 1862, p. 141, et 1864, p. 187.

† Jaarb. v. h. Genootschap Natura Artis Magistra v. h. j. 1861.

‡ "Notice sur les Cacatoes blancs a houppes jaunes," par H. Schlegel (Ned. Tijdschr. v. d. Dierk. 1865, p. 318).

species, until he has obtained examples of them, when their validity is readily acknowledged*.

As regards species of which our excellent Foreign Member has authenticated specimens, every one would wish to hear his views, and will respect them, although he may not agree with them. But it would be certainly more prudent not to condemn in this wholesale manner species with which he is not acquainted autoptically, and described by naturalists in other countries who occasionally have the advantage of examining specimens not yet possessed by the Leyden Museum.

4. A List of Species of Marine Mollusca found in Port Jackson Harbour, New South Wales, and on the adjacent Coasts, with Notes on their Habits, &c. By GEORGE FRENCH ANGAS, F.L.S., C.M.Z.S., &c.—Part I.

[Those species marked with an asterisk (*) have been described from specimens in my own collection.—G. F. A.]

Class CEPHALOPODA.

Fam. OCTOPODIDÆ.

Several species of *Octopus*, including one of very large size (together with species of *Cistopus*, *Pinnoctopus*, *Eledone*, &c.), are occasionally to be met with in Port Jackson. Unfortunately but little attention has hitherto been paid to animals of this class in Australia. A careful examination and description of all the existing species would, however, well repay the researches of a naturalist in that part of the world.

Fam. ARGONAUTIDÆ.

1. ARGONAUTA ARGO.

Argonauta argo, Linn.; Reeve, Conch. Syst. v. 2, pl. 300.

Very large shells of this species of Argonaut are occasionally washed on shore upon the sandy beaches along the coast of New South Wales. It seems to be identical with the *A. argo* of the Mediterranean. Length 10 inches.

2. ARGONAUTA ORYZATA.

Argonauta oryzata, Meusch. Mus. Gev. 252. n. 133.

A. tuberculata, Shaw, Nat. Misc. xxiii. t. 995.

Small examples of *A. oryzata* are now and then found about Port Jackson, and on the beach at Coodge and Botany Bay. It is in

* E. g. *Dacelo tyro*, G. R. Gray, stated (Musée d. P.-B. *Alcedines*, p. 20) to be = *D. gaudichaudi*! *Tanyptera nymphe* (L. c. p. 43) with *T. dea*! and both subsequently acknowledged to be valid (Ned. Tijdschr. 1865, pp. 250 et 339).

Deep water, Port Jackson. This species appears identical with *S. luteum*, Lam., from the Mediterranean. The only difference is that the spots on the sutural ridges are darker in the Australian specimens. Height $3\frac{1}{2}$ lines, breadth 6 lines.

Suborder TOXIFERA.

Fam. TEREBRIDÆ.

95. *ACUS (ABRETIA) BICOLOR.

Acus bicolor, Angas, P. Z. S. 1867, p. 111.

A whitish species, with the whorls more or less longitudinally ribbed, and the lower portion of the last whorl stained with violet chestnut. Dredged in Port Jackson. Length $7\frac{1}{2}$ lines.

96. *ACUS (ABRETIA) ASSIMILIS.

Acus assimilis, Angas, P. Z. S. 1867, p. 111.

In this species the whorls are more rounded, strongly ribbed, and shaded with brown towards the sutures. The last whorl has a white band, and is stained with dark brown below. Dredged in Port Jackson. Length 6 lines.

97. *ACUS (EURYTA) TRILINEATA.

Euryta trilineata, A. Adams & Angas, P. Z. S. 1863, p. 418, pl. 37. f. 13.

An elegant fusiform shell, with the whorls longitudinally plicate and encircled with two or three brown thread-like lines. Dredged in deep water, near Port Jackson Heads. Length 7 lines.

Fam. TURRITIDÆ.

Subfam. TURRITINÆ.

98. *BELA MITRALIS.

Bela mitralis, Ad. & Ang. P. Z. S. 1863, p. 420.

A pale yellow elongated species, ornamented with a band of red spots at the suture of the last whorl. Dredged in Port Jackson. Length 8 lines.

99. DRILLIA (CRASSISPIRA) OWENI.

Pleurotoma oweni, Gray, MSS.; Reeve, Conch. Icon. pl. 9. sp. 70.

An elegant species, of a pale ash-colour, with the whorls plicately nodulated at the upper part and the lower whorl beautifully nodulously cancellated. Dredged in Port Jackson in deep water. Length 1 inch 3 lines.

100. DRILLIA RADULA.

Pleurotoma radula, Hinds, Moll. Voy. Sulphur, pl. 5. f. 9.

Deep water, Port Jackson. Length 1 inch.

101. DRILLIA VEXILLUM.

Pleurotoma vexillum, Reeve, P. Z. S. 1845, p. 115; Conch. Icon. pl. 29. f. 264.

A fine species, with the whorls nodulously plicate, broadly banded with white on a chocolate ground. Middle Harbour, Port Jackson. Length 1 inch 2 lines.

102. *DRILLIA METCALFEI.

Drillia metcalfei, Angas, P. Z. S. 1867, p. 113.

Deep water. Length $7\frac{1}{2}$ lines.

103. *DRILLIA COXI.

Drillia coxi, Angas, P. Z. S. 1867, p. 113.

An elegant pale fulvous species, with the whorls nodulous and encircled with fine striæ. Dredged in Port Jackson. Length 9 lines.

104. *DRILLIA BERAUDIANA.

Pleurotoma beraudiana, Crosse, Journ. de Conch. 1863, p. 88, pl. 1. f. 6.

In this species the whorls are strongly nodulous. Dredged in Port Jackson in deep water. Length $7\frac{1}{2}$ lines.

105. *DRILLIA ANGASI.

Pleurotoma angasi, Crosse, Journ. de Conch. 1863, p. 87, pl. 1. f. 5.

Rather smaller and more slender than the preceding species, with the whorls stoutly plicate. Dredged in Port Jackson. Length 6 lines.

Subfam. CLATHURELLINÆ.

106. *CLATHURELLA RETICOSA.

Clathurella reticosa, Ad. & Ang. P. Z. S. 1863, p. 420.

A pretty cancellated species. Dredged in Middle Harbour. Length 6 lines.

107. *CLATHURELLA ZONULATA.

Clathurella zonulata, Angas, P. Z. S. 1867, p. 113.

Brownish, banded with ashy grey. Dredged in Port Jackson. Length 4 lines.

108. DAPHNELLA CREBRIPLICATA.

Pleurotoma crebriplicata, Reeve, Conch. Icon. pl. 34. f. 313.

An elegant fusiform shell, with the whorls finely reticulately cancellated. Dredged in Port Jackson. Length 8 lines.

109. DAPHNELLA LYMNÆFORMIS.

P. lymnæformis, Kiener; Reeve, Conch. Icon. pl. 35. f. 325.