

pressure I saw what seemed to me something like two or three lateral barblets appearing on one side of a barble.

When the ova arrived many of them were covered by a forest of minute fungi. I submitted these to Mr. Berkeley, who informs me that "the matter on the fish-ova is a *Saprolegnia*; there being only one kind of fruit, and that scarcely perfect. I cannot tell the species. The curious point is, that it is accompanied by a mucus, probably a condition of the *Saprolegnia* (or the reverse), with quadrate spores, which I never saw before."

2. Descriptions of thirty-four new Species of Shells from Australia. By GEORGE FRENCH ANGAS, Corr. Mem. Z.S.L., F.L.S., F.R.G.S., &c.

[Received December 5, 1870.]

(Plate I.)

1. TRITON (*CUMIA*) SPECIOSA, n. sp. (Plate I. fig. 1.)

Shell ovately fusiform, moderately solid, with from twenty to twenty-two conspicuous, erect, rounded varices; whitish, sometimes with a narrow zone of pale chestnut on the lower portion of the last whorl; whorls $5\frac{1}{2}$, encircled throughout with concentric ridges larger and smaller alternately, and decussated between the varices with sharp raised striae, forming bead-like nodules at the intersection of the ridges; spire pointed; aperture ovate, white within; outer lip arcuate, thickened by a varix; columellar margin covered with a shining white callus; canal short, recurved.

Length 8 lines, breadth 4 lines.

Hab. Green Point, Watson's Bay, Port Jackson, at very low spring-tides (*Brazier*).

This elegantly sculptured shell appears to belong to a somewhat aberrant group of *Triton*, to which the subgeneric title of *Cumia* has been given, and of which the *Triton convolutus*, Brod., may be regarded as the type.

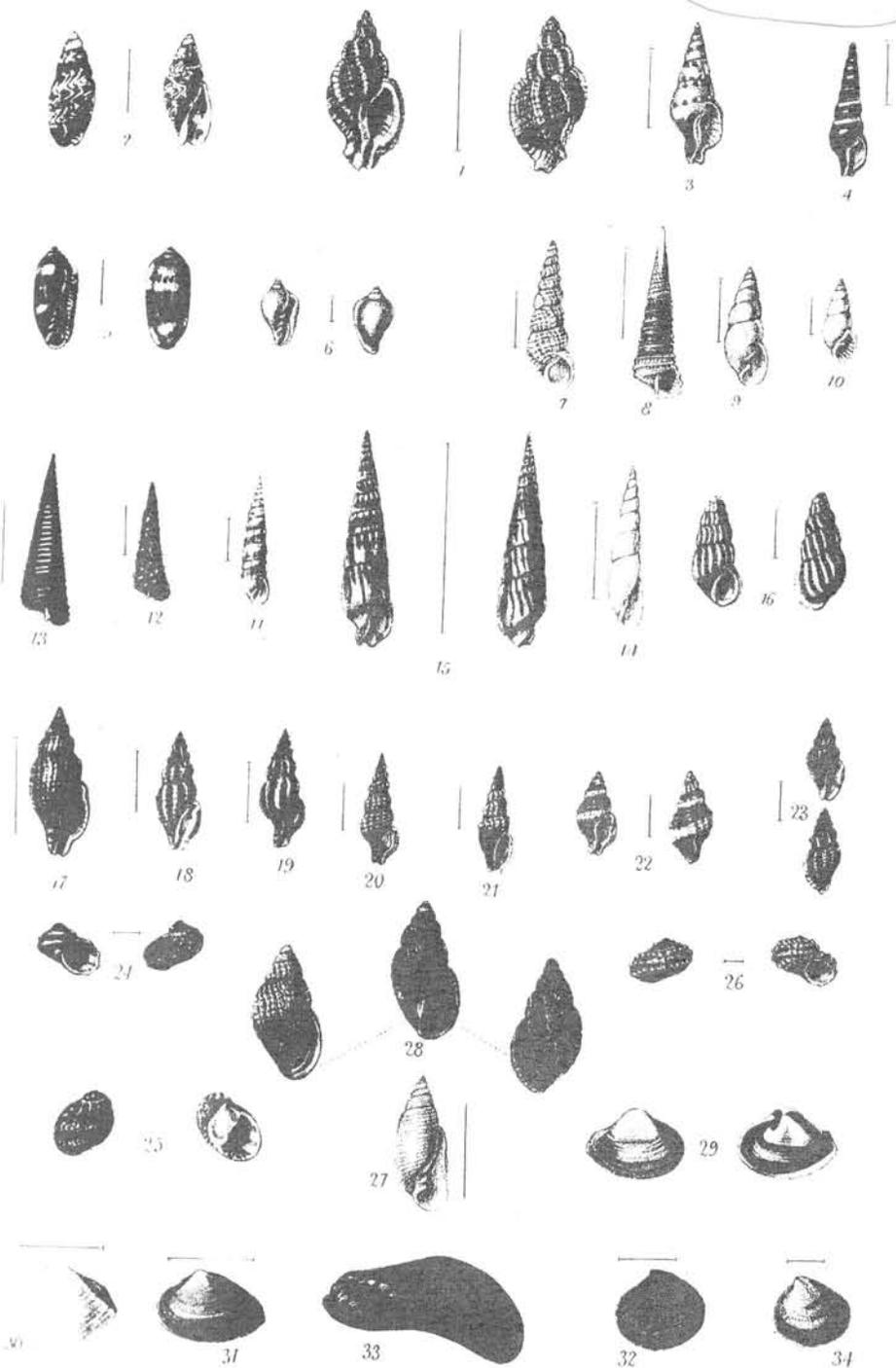
2. OLIVELLA EXQUISITA, n. sp. (Plate I. fig. 2.)

Shell ovately turreted, smooth, shining, pale brownish yellow, ornamented with three rows of irregular, rather distant, dark chestnut spots, one at the suture, the others near the centre and lower portion of the last whorl, and joined by fine pale chestnut undulating lines which are carried down to the base of the shell; whorls 5; sutures channelled; apex obtuse; outer lip a little thickened; columella slightly plicate anteriorly.

Length 4 lines, breadth $1\frac{1}{2}$ line.

Hab. Coodgee Bay, New S. Wales, in shell-sand (*Brazier*).

A very handsome little shell, the waved lines on the whorls reminding one of *Voluta undulata*.



deeply impressed; aperture ovate; outer lip thin; columellar plait rather prominent.

Length 3 lines, breadth $\frac{1}{2}$ line.

Hab. Dredged off "Sow and Pigs," Port Jackson (*Brazier*).

12. *CERITHIOPSIS CLATHRATA*, n. sp. (Plate I. fig. 12.)

Shell elongately acuminate, moderately thin, of a pale yellowish colour; whorls 12, encircled by three nearly equally distant rounded ribs, and decussated all over with close-set longitudinal, somewhat undulating raised striæ; sutures deeply impressed; base of last whorl finely radiately striated; nucleolar whorl sinistral; aperture subquadrate; outer lip thin; columella arcuate, scarcely produced in front.

Length 3 lines, breadth $\frac{3}{4}$ line.

Hab. Dredged near "Sow and Pigs" reef, Port Jackson (*Brazier*).

13. *CERITHIOPSIS CROCEA*, n. sp. (Plate I. fig. 13.)

Shell elongately acuminate, rather thin, orange-coloured throughout; whorls 14, encircled by rounded, close-set ribs, four to a whorl, nearly equal in size; the interstices, which are very narrow, finely longitudinally striated; last whorl flattened and smooth at the base; nucleolar whorl sinistral; aperture subquadrate; outer lip thin; columella tortuous, strongly arched and produced in front.

Length 5 lines, breadth $1\frac{1}{4}$ line.

Hab. Dredged off Camp Cove, Port Jackson (*Brazier*).

A species of a beautiful orange colour, with four ribs on each whorl, and the intercostal spaces very narrow and finely striated.

14. *LEIOSTRACA LESBIA*, n. sp. (Plate I. fig. 14.)

Shell aculeate, rather thin, smooth, shining, whitish, obscurely somewhat opaquely banded next below the sutures; whorls 12, nearly flat, suture distinct; spire sharply acuminate; aperture elongately ovate, slightly effuse in front; outer lip acute, simple; columella callous and slightly twisted.

Length 6 lines, breadth 1 line.

Hab. Dredged at "Sow and Pigs," Port Jackson.

15. *TEREBRA (HASTULA) BRAZIERI*, n. sp. (Plate I. fig. 15.)

Shell elongately turreted, narrow, acute at the apex, shining, pale straw-colour, irregularly painted with brownish orange longitudinal flames, strongest and most numerous next the suture, and with an interrupted zone of suffused brown spots near the base of the last whorl, above which the painting ceases abruptly, leaving a pale band above the zone; nucleolar whorls tinged with purplish brown; whorls 13, flat, obsolete distant plicate, rather nodose next the sutures; aperture narrowly ovate; outer lip thin, with the margin slightly sinuous; columella tortuous; canal short, somewhat everted.

Length 1 inch 2 lines, breadth 3 lines.

Hab. Brisbane Water, New South Wales (*Brazier*).

16. *RISSOINA CRASSA*, n. sp. (Plate I. fig. 16.)

Shell pyramidally ovate, thick, whitish, strongly distantly longitudinally plicate; whorls 7 to 8, slightly rounded, suture impressed, the last whorl with a rounded ridge at the base, over which the longitudinal plications are continued; aperture subovate, strongly and obliquely sinuate in front; outer lip sharp, thickly variced behind; inner lip thickened, sinuous.

Length $3\frac{1}{2}$ lines, breadth 1 line.

Hab. From the "Bottle and Glass" rocks, under stones, Port Jackson (*Brazier*).

17. *CLATHURELLA HAYESIANA*, n. sp. (Plate I. fig. 17.)

Shell ovately fusiform, rather solid, of a dull chalky-grey colour; whorls 7, angulated at the upper part, closely longitudinally ribbed and transversely ridged, forming flattened nodules at the points of intersection; spire sharp, apex purple; aperture elongately ovate, deep purple within; outer lip finely denticulated at the edge, contracted below; posterior sinus narrow and rather deep.

Length 6 lines, breadth $2\frac{1}{2}$ lines.

Hab. Dredged in Lane Cove, Port Jackson, New S. Wales (*Brazier*).

This elegant species differs from *C. reticosa*, A. Ad. & Angas, in having the whorls angulate at the upper part, with the latticed sculpture less nodulous at the crossings; it also wants the band, the channel is more contracted and produced, and the nodose liræ are absent within the outer lip.

18. *CLATHURELLA TENUILIRATA*, n. sp. (Plate I. fig. 18.)

Shell fusiformly turreted, solid, opaque, pale brown; whorls 8, convex, longitudinally ribbed with about eight somewhat compressed prominent ribs, crossed with distant narrow erect ridges that become sharply angular at the intersection, the entire spaces between them being very closely and regularly ornamented with fine hair-like concentric striæ; spire sharp; aperture narrowly ovate; outer lip thin at the edge, variced behind, the interior with a tubercle next the posterior sinus, which is broad and shallow.

Length 4 lines, breadth $1\frac{1}{4}$ line.

Hab. Goat Island, Port Jackson; dredged in 5 fathoms (*Brazier*).

19. *CLATHURELLA SCULPTILIS*, n. sp. (Plate I. fig. 19.)

Shell fusiformly turreted, moderately solid, pale brown; whorls 7, rounded, a little excavated next the sutures, longitudinally rather strongly costate, with about nine rounded ribs, between which are numerous fine erect longitudinal striæ, which become crescent-shaped on the flattened area below the sutures, and encircled with numerous concentric, somewhat irregular ridges, which are slightly nodulous at the intersections; aperture subpyriform; outer lip thin, slightly variced externally, slightly sulcate within; columella straight, slightly produced and everted; posterior sinus rather deep.

Length 4 lines, breadth $1\frac{1}{2}$ line.

Hab. Dredged near the "Sow and Pigs," Port Jackson.

the ear-coverts are not black, and the feathers in the middle of the throat are tipped with white.

The Smithsonian skin of this species is from Savanilla, collected by Mr. Ashurst.

2. ANABATES OCHROLÆMUS, Tschudi, Faun. Per. *Aves*, p. 240, tab. xx. fig. 2.

A typical specimen of this bird received by the Smithsonian Institution from Neuchâtel in exchange enables me to identify this species with *Anabates turdinus* of Natterer's MS. (Pelz. Orn. Bras. p. 41). It agrees very nearly with a Nattererian example in my own collection, and with a second specimen in the Smithsonian collection from the Huallaga. Mr. E. Bartlett obtained the same species on the Upper Ucayali (see Scl. et Salv. P. Z. S. 1866, p. 184).

This species must therefore now stand as *Philydor ochrolæmus* (Tsch.). I should remark that I have also one of Tschudi's original specimens of this species in my own collection (*Automolus ochrolæmus* of my C. A. B. p. 158), but had not previously recognized the identity of the two species.

3. ANABATES MONTANUS, Tsch. F. P. *Aves*, p. 240, tab. xx. fig. 1.

A typical example of this species acquired from the same source proves its identity with *Philydor striaticollis* of my American Catalogue. As the latter MS. name of Lafresnaye was only published by me in 1857, Tschudi again has priority, and the species must stand as *Philydor montanus*.

4. DENDROCOLAPTES CHUNCOTAMBO, Tsch. F. P. *Aves*, p. 241, tab. xxxii. fig. 1.

A typical specimen of this species is likewise in the Smithsonian collection. It is the same as *Dendrocolaptes ocellatus* of Spix (Av. Bras. i. p. 88). At least it agrees with the specimens now thus determined in my own collection, which are four in number, namely:—

- a. Gualaquiza, Ecuador (*Fraser*) } = *D. palliata*, Scl. Cat. A. B.
- b. R. Huallaga (*Hawxwell*) } p. 164.
- c. Rio Negro (*Natt.*) = *D. ocellata* of Pelzeln, Orn. Bras. p. 45.
- d. Xeberos (*Bartlett*).

Since I published my catalogue I have compared specimens *a*, *c*, and *d* with the marked types of *D. weddelli** in the Paris Museum and found them identical with it, and not with *D. palliata*, as I had formerly supposed.

It is with great satisfaction, therefore, that I am able to say that Tschudi's ugly name is merely a useless synonym of *Dendrornis ocellata*.

* Des Murs, in Castelnau's Voy. Ois. p. 46.

8. A List of Additional Species of Marine Mollusca to be included in the Fauna of Port Jackson and the adjacent Coasts of New South Wales. By GEORGE FRENCH ANGAS, F.L.S., F.R.G.S., C.M.Z.S., &c.

[Received January 11, 1871.]

In the year 1867 I published in these 'Proceedings'* a list of all the species of marine mollusks which up to that date had been ascertained by me to inhabit Port Jackson and the waters in its vicinity. Since then many additional forms have been obtained, a number of which were new to science and have lately been described; whilst others, though well known, had not hitherto been met with in the particular region towards which my researches have more especially been directed.

I am particularly indebted to Mr. John Brazier of Sydney for dredged specimens and *positive* information regarding the habitat of very many species; also to Dr. Cox of Sydney for notes on the localities of certain shells concerning which I had hitherto been in doubt.

As molluscan discoveries progress, many new species and even genera will doubtless be brought to light from so prolific a region; in the mean time I add the following list of 109 additional species, together with a few remarks on their characters, habits, and distribution, to form an appendix to my list of 1867.

Class GASTEROPODA.

Fam. TRITONIIDÆ.

1. TRITONIUM LABIOSUM.

Triton labiosus, Wood, Index Test. Supp. pl. 5. f. 18.
Tritonium rutilum, Menke, Moll. Nov. Holl.; Reeve, Conch. Icon. Triton, pl. 14. f. 52 a, b, c.

A small compact species, longitudinally ribbed, and transversely grooved, somewhat variable in form. Length about 10 lines.
Found alive on Shark Island, Port Jackson (*Brazier*).

2. TRITON (EPIDROMUS) BRAZIERI, Angas, P. Z. S. 1869, p. 46, pl. II. f. 3.

An elongately turreted shell with twelve varices. It is longitudinally ridged, and reticulated with irregular impressed striæ. There is a dark fascia on the middle of each whorl, and also a series of small spots at the lower edge of the fascia of the last whorl. Length 2 inches.

Lake Macquarie and Cape Solander, Botany Bay (*Brazier*).

* "A List of Species of Marine Mollusca found in Port-Jackson Harbour &c." (Part I., P. Z. S., 1867, p. 185; Part II., P. Z. S. 1867, p. 912).

Fam. ARCHITECTONIDÆ.

33. *TORINIA STRAMINEA*, Lam.; Chem. Conch. v. pl. 172. f. 1699.
Broken Bay (*Brazier*).

34. *PHILIPPIA HYBRIDA*.

Solarium hybridum, Lam. Encyc. Méth. pl. 446. f. 5, 6.
White, ornamented with broad pale-brown flames.
Lake-Macquarie beach, New South Wales (*Brazier*).

35. *PHILIPPIA LAYARDI*, A. Ad. P. Z. S. 1854, p. 317.

Flatter and more keeled than the preceding species, with the ground-colour rich brown, ornamented with white on the keel and round the umbilicus.

Lake-Macquarie beach (*Brazier*).

Fam. TEREBRIDÆ.

36. *TREBRA (HASTULA) BRAZIERI*, Angas, P. Z. S. 1871, Pl. I. f. 15.

This pretty species has the whorls obsoletely plicate and shining, and is irregularly painted with longitudinal orange flammæ. Length 13 lines.

Obtained at Brisbane Water by Mr. Brazier.

Fam. TURRITIDÆ.

37. *PLEUROTOMA VIOLACEA*, Hinds, Moll. Voy. Sulphur, pl. 5. f. 8.

A pale variety of this species occurs at Broken Bay (*Brazier*).

38. *CLATHURELLA HAYESIANA*, Angas, P. Z. S. 1871, Pl. I. f. 17.

A very beautiful species of a chalky-grey colour, and deep purple within; closely longitudinally ribbed, and transversely ridged throughout.

Dredged in Lane Cove, Port Jackson (*Brazier*).

39. *CLATHURELLA TENUILIRATA*, Angas, P. Z. S. 1871, Pl. I. f. 18.

Longitudinally ribbed and crossed with narrow, distant, erect ridges, the interstices of which are ornamented with very fine concentric striæ.

Dredged off Goat Island, Port Jackson, in 5 fathoms (*Brazier*).

40. *CLATHURELLA SCULPTILIS*, Angas, P. Z. S. 1871, Pl. I. f. 19.

This species is elaborately sculptured with strong longitudinal ribs alternating with fine erect striæ, and crossed by concentric somewhat nodulous ridges.

Dredged off the "Sow and Pigs" (*Brazier*).

41. *CLATHURELLA BICOLOR*, Angas, P. Z. S. 1871, Pl. I. f. 20.
Of a pale ash-colour, with the base of the last whorl chocolate-brown.

"Sow and Pigs" (*Brazier*).

42. *CLATHURELLA BILINEATA*, Angas, P. Z. S. 1871, Pl. I. f. 23.

A small ovate straw-coloured species, white at the aperture, with two narrow brown bands on the last whorl.

Dredged near the "Sow and Pigs" (*Brazier*).

43. *CLATHURELLA ALBOCINCTA*, Angas, P. Z. S. 1871, Pl. I. f. 22.

Ovately fusiform, with the last whorl stained with brown, having an opaque white band in the centre.

Dredged near the "Sow and Pigs" (*Brazier*).

44. *CLATHURELLA BRAZIERI*, Angas, P. Z. S. 1871, Pl. I. f. 21.

Narrowly elongately turreted, pale brown, darker on the lower whorl and at the apex, and with the channel sharply recurved.

Dredged near the "Sow and Pigs" (*Brazier*).

Fam. CONIDÆ.

45. *CONUS APLUSTRE*, Reeve, Conch. Icon. *Conus*, pl. 30. f. 170.

The figure of this Cone is so bad in Reeve's work as to be scarcely recognizable. The shell is of a light yellowish chestnut, profusely filleted with markings of a darker colour, and with a pale band round the middle of the last whorl. It averages 1 inch in length.

"Bungaree Nora," Broken Bay; Lake Macquarie; Cape Solander, Botany Bay; also from Port Fairy, Bass's Straits (*Brazier*).

46. *CONUS COOKI*, Brazier, P. Z. S. 1870, p. 109.

A species 10 lines long, marked with reddish, undulating, longitudinal lines, and somewhat resembling a small non-crowned specimen of the *C. princeps* from Gulf of California. Mr. Brazier found this new Cone amongst the rocks at the spot where Capt. Cook landed at Botany Bay.

47. *CONUS ROSSITERI*, Brazier, P. Z. S. 1870, p. 109.

Mr. Brazier says of this shell that it is allied to *C. gilvus* of Reeve. I have never seen the specimen; but, from his description, I take it to be in an immature state.

Cape Solander, Botany Bay.

48. *CONUS RUTILUS*, Menke, Moll. Nov. Holl. p. 57. no. 133.

This pretty little Cone varies in colour from brown to orange, red or purple, and is occasionally freckled with lines and spots. In the South-Australian gulfs I met with it frequently. Mr. Brazier obtained five specimens at Cape Solander, Botany Bay.