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LIST  
OF THE  
MOLLUSCA  
IN  
THE COLLECTION  
OF THE  
BRITISH MUSEUM.

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PART II.  
OLIVIDÆ.

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## P R E F A C E.

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THIS Catalogue contains a List of all the species of Mollusca belonging to the family *Olividae*, with the characters of the genera and sections into which the species are divided, indicating at the same time, by a *B.M.* in the margin, those contained in the British Museum.

To show the geographical distribution of the species, great attention has been paid to the evidence of the country inhabited by them.\*

JOHN EDWARD GRAY.

British Museum,  
Dec. 1864.

Recd  
10-35/1864

343164



LIST  
OF  
MOLLUSCA.

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Family OLIVIDÆ.

Siphon of mantle recurved. Head small. Foot with a cross groove on each side, in front very large, often enclosing a part of the shell and producing a polished coat on it. Mantle enclosed. Shell ovate cylindrical. Mouth linear, ovate; canal reduced to a notch. Operculum horny, small, often wanting.

Tribe I. OLIVINA.

Shell subcylindrical, smooth, polished; suture with a deep channel; pillar plaited in front. Mantle with an elongated posterior process enclosed in the groove of the spire. Lateral teeth of the tongue broad ovate. Operculum with subapical nucleus or wanting.

Linnæus divided the shells usually called *Olives* by the dealers into three species, viz. *Voluta porphyria*, *V. oliva*, and *V. ispidula*.

Gmelin added a few; and Lamarck, who published a monograph of the genus in the 'Annales du Muséum,' extended the number to sixty-two, which Dillwyn reduced to eighteen.

Duclos, who published the plates of a monograph of this genus in 1835, figures eighty-four recent species; and he considers twenty-two of the species which Lamarck described as only varieties of other species.



In 1850 Mr. L. Reeve, in his 'Conchologia Iconica,' published the figures of 100 species, but without any attention to their affinity to each other, and with scarcely sufficient care to the more important part of the shell on which the separation of the species depends. They are therefore inferior to those of M. Duclos.

I believe that it is the uncertainty with regard to the number of the species that has rendered these shells, which are certainly among the most beautiful in form, colour, and marking that we possess, so little attended to by the general collector. This is the more remarkable, as the shells are very extensively distributed over the globe and are easily collected, and therefore procurable by the conchologist at a moderate rate. Though it is very difficult to define the limits of many of the species on account of the great variation in the colour, and the extraordinary manner in which the marking gradually changes in its character, yet other species are easily distinguished.

All the species are easily separated into very distinct groups, defined by variations in the form and structure of the shell, which are evidently produced by important modifications in the structure of the animal. To point out these groups is the object of this List, for I believe that by dividing the species, or varieties which have been considered as species, into such groups, I shall do much to disentangle the subject, and at least confine the confusion to definite limits; for if the groups are properly defined, it is only the specimens belonging to one of these groups that can be varieties of each other.

M. Duclos, in his monograph, divides the species into four groups:—1. *Ancilloides* (twenty-nine species); 2. *Cylindroides* (fifty species); 3. *Glandiformes* (seventeen species); 4. *Volutelles* (seventeen species).

M. D'Orbigny, in his 'Voyage to South America,' formed M. Duclos's four sections into three genera, giving to the first section the name of *Olivina*, to the second and third sections that of *Oliva*, and to the fourth *Olivancillaria*, apparently founded on the form of the animal; but it is only necessary to compare his figures of the animals of the two species of the latter genus to show how little he attended to his own characters.

In the 'Zoology to Capt. Beechey's Voyage' I divided the genus into two, according to the structure of the animal, viz. *Oliva* and *Agaronia*, and observed that some *Olivæ* were furnished with an operculum not present in other species. More lately, in the text to Mrs. Gray's 'Figures of Molluscous Animals,' and in the 'Guide to the Collection of Mollusca in the Museum,' I have extended the number of genera to four; separating the operculated *Olivæ* under the name of *Olivella*, and giving to an

animal figured by D'Orbigny as *Oliva auricularia* the name of *Scaphura*.

These shells sometimes have an elevated shelly cross band. Lamarck had a specimen of *Oliva porphyria* (Hist. viii. 418) so marked. It is not uncommon in *O. guttata*, where it has been regarded as a specific character; but it is often found in other species.

A further study of the figures of the animals given by authors has induced me to revise this arrangement and propose the following

#### SYNOPSIS OF THE GENERA.

I. *Head exposed; tentacles elongate, subulate; eyes distinct, sub-basal. Foot elongate, dilated, front lobes semicircular. Operculum none. Shell with the front belt narrow.*

\* *Spire simple, with sutural groove open to the tip.*

Pillar lip simple, not covering the front belt; inner lip cross grooved. 1. STREPHONA.

Pillar lip simple, not covering the front belt; inner lip thickened the whole length, with two or three slight grooves in front. 2. ISPIDULA.

Pillar lip simple, not covering the front belt; inner lip with a series of transverse parallel grooves in front extending over the pillar. 3. RAMOLA.

Pillar lip expanded so far back as to cover the front belt, and with an oblique raised ridge in front; inner lip grooved. 4. CARMIONE.

\*\* *Spire callous, obliterating the sutural grooves, except on the last or lowest whorl.*

Shell ovate or obconic; aperture wide; pillar lip expanded; pillar twisted and grooved in front; front belt broad. 5. CLANOPHILA.

Shell subcylindrical; spire small; aperture linear; pillar lip simple, defined; inner lip grooved; front belt narrow. 6. GALEOLA.

II. *Head scarcely exposed; tentacles short; eyes none. Foot elongate, dilated in front, one-coloured. Shell with the sutural groove open.*

Shell subcylindrical or subovate; aperture oblong, thickened; front belt broad, double. 7. ANAZOLA.

Shell subovate; aperture ovate; pillar slightly thickened; front belt single, moderate. 8. AGARONIA.

III. *Head hidden; tentacles none; eyes none. Foot short, very broad, rounded on the sides, one-coloured. Operculum distinct.*

Spire conical; sutural groove open to the apex; aperture of shell moderate; operculum distinct; foot very short, front lobes linear. 9. OLIVINA.

Spire conical; sutural groove open to the apex; aperture of shell wide; pillar lip thick, smooth, with two grooves in front; operculum none?; foot large, front lobes very large, rounded. 10. SCAPHULA.

Spire callous; sutural groove only open on the last whorls; aperture moderate; operculum distinct. 11. MICANA.

I. *Head exposed; tentacles elongate, subulate; eyes distinct, sub-basal. Foot elongate, dilated, front lobes semicircular. Operculum none. Shell with the front belt narrow.*

\* *Spire simple, with sutural groove open to the tip.*

#### Genus 1. STREPHONA.

Shell subcylindrical; spire conical or flattish, small; aperture linear; pillar lip simple, only expanded in front, and not covering the callus; front belt narrow; inner lip cross grooved. Foot elongate, longer than the shell, broad, rounded behind, dilated on the sides, which are bent up and cover the shell; the front lobes nearly semicircular, rather produced, and acute at the hinder outer angles. Head exposed; tentacles elongate; eyes one-third from the base. Operculum none.

Adanson, in his 'Hist. Nat. du Sénégal,' regards all the specimens of this genus as belonging to one species, observing:—"La couleur de cette coquille est peu constante. J'en ai de blanches, de jaunes, de jaunes livids, de jaunes verd, & même de verdâtres sans aucun mélange. J'en ai aussi qui, sur ces différens fonds, sont tachées, tigrées, marbrées ou couvertes de zigzags, qui s'étendent tantôt sur leur longueur, tantôt sur leur largeur. Ces taches, ces points, ces bandes, et ces lignes sont cendrés, noir ou bleuâtre dans les unes; brun, rougeâtres ou pourpres dans les autres: enfin leur mélange est si varié, que ce seroit perdre son tems que de faire l'énumération de toutes celles qui ont été décrites ou figurées par leurs auteurs. Je me suis contenté de citer une vingtaine des principales variétés auxquelles on peut rapporter toutes les autres, dont plus de deux cent

sont parvenues à ma connoissance. Leur intérieur est aussi blanc, jaune, violet, ou pourpre foncé." (p. 63.)

It would appear either that the animals vary as much in colour as the shells, or, if permanent, they present good characters for the separation of the species, according to the specimens of the animal figured by Messrs. Quoy and Gaimard in the 'Voyage of the Astrolabe,' t. 46, which are copied and improved (?) by M. Duclos. The animal of the black variety of *O. maura* is black, minutely brown-dotted, and with a regular pale edge to the foot. *S. erythrostoma* and *S. textilina* are pale brown, with large brown spots. *S. elegans* and *S. sanguinolenta* are yellow, minutely black-dotted. It is interesting to observe that the shells which are allied in colour and form have animals also similarly allied.

### 1. STREPHONA PORPHYRIA.

B.M.

Reddish brown, spotted with angular reddish lines; spire and front of pillar violet, spire conical.

*Voluta porphyria*, Linn. *S. N.* ii. 87.

*Dillw. R. S.* 510.

*Oliva porphyria*, Lamk. *Monogr. Ann. du Mus. and Hist. des Moll.* no. 1; *E. M.* t. 361. f. 4.

*Duclos, Oliv.* t. 24. f. 15.

*Reeve, C. I.* t. 1. f. 2.

*Strephona porphyria*, Gray, *Proc. Zool. Soc.* 1858, 41.

*Hab.* Panama.

### 2. STREPHONA ANGULATA.

B.M.

Throat and pillar reddish.

*Voluta incrassata*, Soland. *MSS.*

*Dillw. R. S.* 516.

*Oliva angulata*, Lamk. no. 6; *E. M.* t. 363. f. 16.

*Duclos, Oliv.* t. 17. f. 9, 10.

*Reeve, C. I.* t. 1. f. 1.

*Oliva azemula*, Duclos, fide *Reeve* (see no. 7).

*Strephona angulata*, Gray, *Proc. Zool. Soc.* 1858, 41.

*Hab.* Gulf of Nicoya.

### 3. STREPHONA CRUENTA.

B.M.

Throat orange.

*Oliva guttata*, Lamk. no. 14; *E. M.* t. 368. f. 2, a, b.

*Voluta cruenta*, Solander, *MSS.*

*Dillw. R. S.* 514.

*Oliva maculata*, *Duclos*, *Oliv.* t. 15. f. 1-6.

*Reeve*, *C. I.* t. 14. f. 30.

*Voluta ispidula*, *Martini*, ii. f. 491, 492.

*Oliva mantichora*, *Duclos*, *Oliv.* t. 15. f. 7, 8.

*Strepshona cruenta*, *Gray*, *Guide B. M.* 24; *Proc. Zool. Soc.* 1858, 41.

*Var.* Subangular, with a raised rib behind.

*Voluta annulata*, *Gmelin*, *S. N.* 3441.

*Dillw. R. S.* 515.

*Voluta balteata*, *Soland. MSS.*

*Oliva leucophæa*, *Lamk.* no. 14; *E. M.* t. 363. f. 2.

*Hab.* Isle of France.

#### 4. STREPHONA MAURA.

B.M.

Black, yellow, or grey; throat and pillar lip white.

*Oliva maura*, *Lamk.* no. 7; *E. M.* t. 366. f. 1, 2, t. 365. f. 1, 3.

*Duclos*, *Oliv.* t. 23. f. 1-12.

*Reeve*, *C. I.* t. 7. f. 10.

*Oliva sepulchralis*, *Lamk.* no. 8; *E. M.* t. 365. f. 1.

*Voluta oliva*, vars. F, H, K, L, O, P, Q, S, *Dillw. R. S.* 512.

*Cylindrus nigellus*, *Meuschen.*

*Oliva fulminans*, *Lamk.* no. 9; *E. M.* t. 364. f. 4.

*Oliva funebris*, *Lamk.* no. 26.

*Martini*, f. 480, 481.

*Strepshona maura*, *Gray*, *Guide B. M.* 26; *Proc. Zool. Soc.* 1858, 42.

*Hab.* Indian Ocean.

Animal dark brown, minutely black-dotted, with a pale edge to the foot. (*Voy. Astrol.* t. 46. f. 20; *Duclos*, t. 30.)

#### 5. STREPHONA TRICOLOR.

B.M.

White, black, and yellow, mixed; front of pillar (and sometimes all the inner lip) yellow-brown.

*Oliva tricolor*, *Lamk.* no. 22; *E. M.* t. 365. f. 4.

*Duclos*, *Oliv.* t. 20. f. 9-13.

*Reeve*, *C. I.* t. 12. f. 22.

*Oliva sanguinolenta*, *Lamk.* no. 23.

*Duclos*, *Oliv.* t. 20. f. 14-16.

*Reeve*, *C. I.* t. 13. f. 25.

*Strepshona sanguinolenta*, *Gray*, *Guide B. M.* 24.

*Voluta oliva*, vars. C & F, *Dillw. R. S.* 512.

*Oliva zebra*, *Küster*, *C. C.* t. 5. f. 5, 6.

*Oliva philantha*, *Duclos*, *Oliv.* t. 20. f. 5, 6.

*Oliva evania*, *Duclos*, *Oliv.* t. 20. f. 3, 4.

- Oliva elegans*, *Lamk.* no. 11; *E. M.* t. 367. f. 3, t. 362. f. 3.  
*Duclos*, *Oliv.* t. 21. f. 1-6.  
*Reeve*, *C. I.* t. 12. f. 20.
- Strephona elegans*, *Gray*, *Guide B. M.* 24.
- Oliva glandiformis*, *Lamk.* no. 27.
- Oliva tigrina*, *Lamk.* no. 44.  
*Duclos*, *Oliv.* t. 21. f. 7-12, t. 32. f. 1, 2.  
*Reeve*, *C. I.* t. 12. f. 21.
- Oliva macleaya*, *Duclos*, *Oliv.* t. 21. f. 13-16.
- Strephona tricolor*, *Gray*, *Proc. Zool. Soc.* 1858, 42.  
*Hab.* Fejee Islands; Madagascar.  
 Animal yellow, minutely black-dotted. (*Voy. Astrol.* t. 46. f. 2-6; *Duclos*, t. 31.)
6. STREPHONA EPISCOPALIS. B.M.  
 Throat purple.
- Oliva episcopalis*, *Lamk.* no. 12.  
*Lister*, t. 719. f. 3.  
*Duclos*, *Oliv.* t. 10. f. 11, 12.  
*Reeve*, *C. I.* t. 13. f. 24.
- Voluta oliva*, var. D, *Dillw. R. S.* 512.
- Strephona episcopalis*, *Gray*, *Proc. Zool. Soc.* 1858, 42.  
*Hab.* Louisiade Archipelago.
7. STREPHONA ERYTHROSTOMA. B.M.  
 Throat saffron colour.
- Oliva erythrostoma*, *Lamk.* no. 3; *E. M.* t. 361. f. 3.  
*Duclos*, *Oliv.* t. 13. f. 1-7.  
*Reeve*, *C. I.* t. 5. f. 7.
- Cylindrus erythrostoma*, *Meuschen.*
- Voluta erythrostoma*, *Dillw. R. S.* 511.
- Oliva ponderosa*, *Duclos*, *Oliv.* t. 13. f. 8, 9.  
*Reeve*, *C. I.* t. 2. f. 4.
- Oliva tremulina*, *Lamk.* no. 5.  
*Duclos*, *Oliv.* t. 11. f. 1-9.  
*Reeve*, *C. I.* t. 4. f. 6.
- Oliva olympiadin*, *Duclos*, *Oliv.* t. 12. f. 10, 11, 12.  
*Reeve*, *C. I.* t. 3. f. 5.
- Oliva azemula*, *Duclos*, *Oliv.* t. 14. f. 1, 2, 3.
- Strephona erythrostoma*, *Gray*, *Guide B. M.* 24; *Proc. Zool. Soc.* 1858, 43.  
*Hab.* Mauritius and Philippines.  
 Animal reddish, with large brown spots. (*Voy. Astrol.* t. 46. f. 1; *Duclos*, t. 31.)

## 8. STREPHONA TEXTILINA.

B.M.

Mouth white.

*Oliva obtusaria*, Lamk. *Hist.* no. 53.*Oliva textilina*, Lamk. no. 2; *E. M.* t. 362. f. 5.*Duclos*, *Oliv.* t. 14. f. 2-9.*Reeve*, *C. I.* t. 6. f. 9.*Oliva pica*, Lamk. no. 4.*Oliva zeilanica*, Lamk. *Hist.* no. 54.*Oliva hepatica*, Lamk. no. 35.*Voluta oliva*, var. A, *Dillw. R. S.* 511.*Voluta erythrostoma*, var., *Dillw. R. S.* 511.*Oliva granitella*, Lamk. no. 18.*Oliva nobilis*, *Reeve*, *C. I.* t. 2. f. 3 (mouth pale reddish).*Oliva irisans*, part., *Reeve*, *C. I.* t. 6. f. 8. b, c, d (not e).*Strephona textilina*, *Gray*, *Guide B. M.* 24; *Proc. Zool. Soc.* 1858, 43.*Hab.* Mauritius.Animal reddish, with large brown spots. (*Voy. Astrol.* t. 46. f. 7a.)

## 9. STREPHONA SCRIPTA.

B.M.

*Oliva scripta*, Lamk. no. 21; *E. M.* t. 362. f. 4.*Duclos*, *Oliv.* t. 10. f. 13, 14; t. 30. f. 5, 6 (animal).*Reeve*, *C. I.* t. 14. f. 27.*Oliva mustelina*, Lamk. no. 24.*Duclos*, *Oliv.* t. 20. f. 1, 2.*Reeve*, *C. I.* t. 13. f. 23.*Strephona scripta*, *Gray*, *Proc. Zool. Soc.* 1858, 43.

## 10. STREPHONA LITTERATA.

B.M.

*Oliva litterata*, Lamk. no. 20; *E. M.* t. 362. f. 1.*Duclos*, *Oliv.* t. 10. f. 15, 16.*Reeve*, *C. I.* t. 11. f. 18.*Strephona litterata*, *Gray*, *Proc. Zool. Soc.* 1858, 43.*Hab.* West Indies.

Animal grey.

## 11. STREPHONA PERUVIANA.

B.M.

*Oliva senegalensis*, Lamk. no. 29; *E. M.* t. 364. f. 3.*Strephona senegalensis*, *Gray*, *Guide B. M.* 24.*Oliva peruviana*, Lamk. no. 28; *E. M.* t. 367. f. 4.*Duclos*, *Oliv.* t. 15. f. 9-16.*Reeve*, *C. I.* t. 9. f. 14.

*Strephona peruviana*, Gray, *Proc. Zool. Soc.* 1858, 43.

*Var.* Back of whorl more or less angular.

*Hab.* Peru; Central America.

12. STREPHONA RETICULARIS.

B.M.

Mouth white; suture with groups of radiating lines.

*Oliva fusiformis*, Lamk. no. 30; *E. M.* t. 367. f. 1.

*Duclos, Oliv.* t. 16. f. 12-16.

*Reeve, C. I.* t. 8. f. 11.

*O. araneosa*, Lamk. no. 19; *E. M.* t. 363. f. 1.

*O. reticularis*, Lamk. no. 16; *E. M.* t. 361. f. 1.

*Duclos, Oliv.* t. 9. f. 3-12.

*Reeve, C. I.* t. 10. f. 16.

*O. hepatica*, Lamk. no. 35.

*O. timoria*, *Duclos, Oliv.* t. 17. f. 11-13.

*O. candida*, Lamk. no. 42; *E. M.* t. 368. f. 4.

*O. harpularia*, Lamk. no. 34.

*Chemn.* x. f. 1376, 1377.

*Reeve, C. I.* t. 14. f. 28 (worn).

*O. ustulata*, Lamk. no. 36.

*O. venulata*, Lamk. no. 13; *E. M.* t. 361. f. 5.

*Duclos, t.* 16. f. 5, 6.

*O. obesina*, *Duclos, t.* 16. f. 9, 10.

*O. pindarina*, *Duclos, t.* 16. f. 7, 8.

*O. julietta*, *Duclos, t.* 16. f. 3, 4.

*Reeve, C. I.* t. 9. f. 15.

*Strephona reticularis*, Gray, *Proc. Zool. Soc.* 1858, 43.

*Hab.* Panama; California.

The following thirty species (?) are more or less allied to the last.

13. STREPHONA POLPASTA.

B.M.

*Oliva polpasta*, *Duclos, Oliv.* t. 16. f. 1, 2.

*Reeve, C. I.* t. 14. f. 29.

*Strephona polpasta*, Gray, *Proc. Zool. Soc.* 1858, 43.

*Hab.* Panama.

14. STREPHONA STAINFORTHII.

*Oliva stainforthii*, *Reeve, C. I.* t. 19. f. 40.

*Strephona stainforthii*, Gray, *Proc. Zool. Soc.* 1858, 44.

15. STREPHONA PINTAMELLA.

*Oliva pintamella*, *Duclos, Oliv.* t. 33. f. 7, 8.

*Strephona pintamella*, Gray, *Proc. Zool. Soc.* 1858, 44.



## 16. STREPHONA ATALINA.

Oliva atalina, *Duclos, Oliv. t. 9. f. 9, 10.*  
 Strephona atalina, *Gray, Proc. Zool. Soc. 1858, 44.*

## 17. STREPHONA QUERSOLINA.

Oliva quersolina, *Duclos, Oliv. t. 9. f. 7, 8.*  
 Strephona quersolina, *Gray, Proc. Zool. Soc. 1858, 44.*

## 18. STREPHONA NITIDULA.

Oliva nitidula, *Duclos, Oliv. t. 9. f. 3, 4.*  
 Strephona nitidula, *Gray, Proc. Zool. Soc. 1858, 44.*

## 19. STREPHONA ORIOLA.

B.M.

Oliva oriola, *Lamk. no. 41; E. M. t. 366. f. 3, t. 367. f. 2.*  
*Duclos, Oliv. t. 10. f. 1, 2.*  
 Voluta oliva, var. V, *Dillwyn, R. S. 513.*  
 Strephona oriola, *Gray, Proc. Zool. Soc. 1858, 44.*

## 20. STREPHONA PAXILLUS.

Oliva paxillus, *Reeve, C. I. t. 21. f. 56.*  
 Strephona paxillus, *Gray, Proc. Zool. Soc. 1858, 44.*

## 21. STREPHONA SPLENDIDULA.

B.M.

Oliva splendidula, *Sow. Tank. Cat. App. 32.*  
*Duclos, Oliv. t. 9. f. 1, 2.*  
*Reeve, C. I. t. 11. f. 17.*  
 Strephona splendidula, *Gray, Proc. Zool. Soc. 1858, 44.*  
*Hab. Panama.*

## 22. STREPHONA TIGRIDELLA.

Oliva tigridella, *Duclos, Oliv. t. 8. f. 13-16.*  
 Strephona tigridella, *Gray, Proc. Zool. Soc. 1858, 45.*

## 23. STREPHONA STELLATA.

Oliva stellata, *Duclos, Oliv. t. 8. f. 11, 12.*  
 Strephona stellata, *Gray, Proc. Zool. Soc. 1858, 45.*

## 24. STREPHONA LENTIGINOSA.

Oliva lentiginosa, *Reeve, C. I. t. 19. f. 45.*  
 Strephona lentiginosa, *Gray, Proc. Zool. Soc. 1858, 45.*

## 25. STREPHONA JASPIDEA.

B.M.

Oliva jaspidea, *Duclos, Oliv. t. 8. f. 9, 10.*

*Oliva Duclosii*, *Reeve, C. I. t. 19. f. 44.*  
*Strephona jaspidea*, *Gray, Proc. Zool. Soc. 1858, 45.*  
*Hab.* Philippines; Tahiti.

26. STREPHONA KALEONTINA.

B.M.

*Oliva kaleontina*, *Duclos, Oliv. t. 8. f. 7, 8.*  
*Reeve, C. I. t. 20. f. 49.*  
*Strephona kaleontina*, *Gray, Proc. Zool. Soc. 1858, 45.*  
*Hab.* Galapagos; Panama.

27. STREPHONA TRINGA.

*Oliva tringa*, *Duclos, Oliv. t. 8. f. 5, 6.*  
*Strephona tringa*, *Gray, Proc. Zool. Soc. 1858, 45.*

28. STREPHONA AUSTRALIS.

B.M.

*Oliva australis*, *Duclos, Oliv. t. 8. f. 3, 4.*  
*Reeve, C. I. t. 19. f. 42.*  
*Strephona australis*, *Gray, Proc. Zool. Soc. 1858, 45.*  
*Hab.* Swan River (*cab. Gray*).

29. STREPHONA ANOMINA.

*Oliva anomina*, *Duclos, Oliv. t. 8. f. 1, 2.*  
*Strephona anomina*, *Gray, Proc. Zool. Soc. 1858, 45.*

30. STREPHONA CUMINGII.

*Oliva Cumingii*, *Reeve, C. I. t. 11. f. 19.*  
*Strephona Cumingii*, *Gray, Proc. Zool. Soc. 1858, 45.*  
*Hab.* California.

31. STREPHONA FLAMMULATA.

B.M.

*Oliva flammulata*, *Lamk. no. 17; E. M. t. 367. f. 5.*  
*Duclos, Oliv. t. 8. f. 17-20; t. 30. f. 3, 4, animal (not Reeve,*  
*C. I. t. 19. f. 41).*  
*Voluta ispidula*, var., *Born.*  
*Voluta oliva*, var. T, *Dillw. R. S. 513.*  
*Strephona flammulata*, *Gray, Proc. Zool. Soc. 1858, 45.*  
*Hab.* Sierra Leone.

32. STREPHONA OLORINELLA.

*Oliva olorinella*, *Duclos, Oliv. t. 6. f. 15, 16.*  
*Strephona olorinella*, *Gray, Proc. Zool. Soc. 1858, 45.*

## 33. STREPHONA FLAVEOLA.

*Oliva flaveola*, *Duclos, Oliv. t. 6. f. 17-20.*

*Strephona flaveola*, *Gray, Proc. Zool. Soc. 1858, 45.*

## 34. STREPHONA LIGNEOLA.

*Oliva ligneola*, *Reeve, C. I. t. 21. f. 57.*

*Strephona ligneola*, *Gray, Proc. Zool. Soc. 1858, 46.*

## 35. STREPHONA SCHUMACHERIANA.

*Oliva schumacheriana*, *Beck.*

*Strephona schumacheriana*, *Gray, Proc. Zool. Soc. 1858, 46.*

*Hab.* California.

Front of pillar lip brown.

## 36. STREPHONA RUFULA.

*Oliva rufula*, *Duclos, Oliv. t. 19. f. 9, 10.*

*Reeve, C. I. t. 20. f. 50.*

*Strephona rufula*, *Gray, Proc. Zool. Soc. 1858, 46.*

Spire very short.

## 37. STREPHONA NEOSLINA.

*Oliva neoslina*, *Duclos, Oliv. t. 19. f. 11-16.*

*Strephona neoslina*, *Gray, Proc. Zool. Soc. 1858, 46.*

## 38. STREPHONA SIDELIA.

*Oliva sidelia*, *Duclos, Oliv. t. 19. f. 1, 2.*

*Strephona sidelia*, *Gray, Proc. Zool. Soc. 1858, 46.*

## 39. STREPHONA CAROLINIANA.

*Oliva caroliniana*, *Duclos, Oliv. t. 19. f. 3-8.*

*Oliva bulbiformis*, var., *Reeve.*

*Strephona caroliniana*, *Gray, Proc. Zool. Soc. 1858, 46.*

## 40. STREPHONA HAMILTONA.

*Oliva hamiltona*, *Duclos, Oliv. t. 19. f. 3, 4.*

*Strephona hamiltona*, *Gray, Proc. Zool. Soc. 1858, 46.*

## 41. STREPHONA MULTIPLICATA.

*Oliva multiplicata*, *Reeve, C. I. t. 20. f. 52.*

*Strephona multiplicata*, *Gray, Proc. Zool. Soc. 1858, 46.*

## 42. STREPHONA LUGUBRIS.

B.M.

*Oliva lugubris*, Lamk. no. 25.*Duclos*, *Oliv.* t. 10. f. 5, 6.*Strephona lugubris*, Gray, *Proc. Zool. Soc.* 1858, 46.

## Genus 2. ISPIDULA.

Shell cylindrical; spire conical, sutural groove open to the top; aperture linear; pillar lip simple, only dilated in front, not covering the front belt; inner lip thickened the whole length, with two or three oblique grooves in front.

Foot elongate, longer than the shell, acute behind, not dilated on the sides in front, not or only slightly covering the shell; front lobes moderate, broad, produced, and acute at the sides. Tentacles elongated, exposed; eyes one-third from the base. Operculum none.—*Duclos*, t. 7. f. 2.

## 1. ISPIDULA VARIABILIS.

B.M.

Throat brown; inner lip thickened, with two or three deep grooves in front.

*Oliva ispidula*, Lamk. no. 40; *E. M.* t. 366. f. 6.*Reeve*, *C. I.* t. 17. f. 84.*Duclos*, *Oliv.* t. 7. f. 1-14 (animal).*Strephona ispidula*, Gray, *Guide B. M.* 26.*Voluta oliva*, vars. R, S, *Dillw. R. S.* 513.*Ispidula variabilis*, Gray, *Proc. Zool. Soc.* 1858, 47.*Hab.* Indian Ocean.

## Genus 3. RAMOLA.

Shell subcylindrical; spire small, conical, sutural groove open to the tip; aperture narrow; anterior belt narrow, single. Pillar lip expanded in front, not covering the front belt, with numerous equal transverse grooves in front. Operculum none. "Foot large, covering the shell."—*Adams*.

*Olivella*, part., Gray, *Guide B. M.* 24.

## 1. RAMOLA VOLUTELLA.

B.M.

*Oliva volutella*, Lamk. no. 43.*Duclos*, *Oliv.* t. 6. f. 7-14.*Reeve*, *C. I.* t. 21. f. 54.*Oliva cœrulea*, Gray, in *Wood*, *Suppl.* t. 6. f. 36.*Olivella volutella*, Gray, *Guide Moll. B.M.* 24; *Fig. Moll.* t. 83 a. f. 2.

*Oliva razamola*, *Duclos*, *Oliv.* t. 6. f. 5, 6.

*Ramola volutella*, *Gray*, *Proc. Zool. Soc.* 1858, 47.

*Hab.* West coast of America.

#### Genus 4. CARMIONE.

Shell ovate, subcylindrical; spire small, sutural groove open to the tip; aperture linear, narrow. Pillar lip expanded sufficiently far back to cover the front callous belt, and furnished with a more or less distinct raised cross ridge; inner lip grooved.

##### 1. CARMIONE VENTRICOSA.

B.M.

*Voluta ventricosa*, *Soland.* *MSS.*

*Dillw. R. S.* 515.

*Oliva inflata*, *Lamk.* no. 32; *E. M.* t. 364. f. 5.

*Duclos*, *Oliv.* t. 22. f. 1-16.

*Reeve*, *C. I.* t. 15. f. 31.

*O. fabagina*, *Lamk. Ann.* no. 52; *Hist.* no. 56; *E. M.* t. 363. f. 5.

*O. bicincta*, *Lamk. Hist.* no. 33; *E. M.* t. 364. f. 1.

*O. undata*, *Lamk.* no. 31; *E. M.* t. 364. f. 7.

*O. bicingulata*, *Lamk. Ann.* no. 33.

*O. tigrina*, *Lamk.* no. 44.

*O. bulbiformis*, *Duclos*, t. 27. f. 10-12.

*Reeve*, *C. I.* t. 13. f. 26.

*Carmione ventricosa*, *Gray*, *Proc. Zool. Soc.* 1858, 47.

*Hab.* Moluccas.

\*\* *Spire callous, obliterating the sutural grooves, except on the last or lowest whorl.*

#### Genus 5. CLANEOPHILA.

Shell ventricose or obconic; spire callous, the sutural groove closed on all except the last whorl; aperture ample. Pillar lip expanded, swollen and callous behind, twisted and obliquely grooved in front. Foot elongate, about as long as the shell, broad, rather tapering behind, dilated in front, and covering the greater part of the shell; front lobes rather large, crescent-shaped, outer hinder angles acute. Tentacles elongate; eyes one-third from the base. Operculum none.—*Duclos*, t. 33. f. 6.

\* *Shell obconic; front belt rather narrow. Spire broad, depressed.*

##### 1. CLANEOPHILA BRASILIANA.

B.M.

*Oliva brasiliانا*, *Lamk. Ann.* no. 45.

*Duclos*, *Oliv.* t. 29. f. 1, 3; t. 33. f. 5, 6 (animal).

*Reeve*, *C. I.* t. 8. f. 13.

*Voluta pinguis*, *Soland. MSS.*

*Dillw. R. S.* 516.

*Oliva brasiliensis*, *Chemn. x. f.* 1367, 1368.

*Lamk. Hist.* no. 45.

*Claneophila brasiliiana*, *Gray, Proc. Zool. Soc.* 1858, 48.

*Hab.* Brazils.

•• *Shell ovate: front belt broad. Spire small, very callous.*

2. CLANEOPHILA AURICULARIA. B.M.

Shell ovate; pillar lip slightly expanded, moderate.

*Oliva auricularia*, *Lamk.* no. 47.

*Duclos, t.* 29. f. 47.

*Oliva aquatilis*, *Reeve, C. I. t.* 18. f. 37.

*Olivancillaria auricularia*, *D'Orb. Voy. Amér. Mérid.* 421. t. 59.  
f. 20, 22 (shell cop.).

*Duclos, Oliv. t.* 32. f. 1, 2.

*Oliva patula*, *Sow. Tank. Cat.* 33.

*Claneophila auricularia*, *Gray, Proc. Zool. Soc.* 1848, 48.

*Hab.* South America.

3. CLANEOPHILA GIBBOSA.

Shell ventricose, subangular; mouth very wide; pillar with a large tubercular callus in front.

*Oliva claneophila*, *Duclos, Oliv. t.* 29. f. 89.

*O. auricularia*, *Reeve, C. I. t.* 18. f. 39.

*Claneophila gibbosa*, *Gray, Proc. Zool. Soc.* 1858, 48.

*Hab.* West Africa. (Not Brazil, as said by Mr. Reeve.)

Genus 6. GALEOLA.

Shell subcylindrical; spire small, acute, callous, sutural groove of upper whorl obliterated; aperture linear. Pillar lip defined, expanded in front, not covering the front belt; inner lip thickened, cross grooved; front belt narrow. Operculum — ?  
Animal — ?

Lamarck observed the peculiarity of the spire of the genus in the specific character of *Oliva tessellata* (*Hist.* no. 38).

• *Spire conical, acute.*

1. GALEOLA IRISANS. B.M.

Spire conical, acute. Brown or yellow or greyish, uniform, or with angular marks and two interrupted bands; throat and pillar white.

*Oliva irisans*, Lamk. no. 10.

*Duclos*, *Oliv.* t. 28. f. 7, 8, 9, 10, 11, 12.

*Voluta oliva*, var. B, *Dillw. R. S.* 512.

*Galeola irisans*, Gray, *Proc. Zool. Soc.* 1858, 49.

## 2. GALEOLA CARNEOLA.

B.M.

Orange; tip of spire white.

*Voluta carneolus*, *Gmelin*, 3443. no. 24.

*V. carneola*, *Dillw. R. S.* 520.

*V. aurora*, *Soland. MSS.*

*Oliva carneola*, Lamk. no. 39; *E. M.* t. 365. f. 5.

*Duclos*, *Oliv.* t. 26. f. 3-16.

*Reeve*, *C. I.* t. 22. f. 60.

*Galeola carneola*, Gray, *Proc. Zool. Soc.* 1858, 49.

*Oliva athenia*, *Duclos*, *Oliv.* t. 26. f. 17-20.

*O. todosina*, *Duclos*, *Oliv.* t. 25. f. 9, 10.

*O. calosoma*, *Duclos*, *Oliv.* t. 26. f. 1, 2.

*Hab.* Feejee Islands.

*Var.* 1. Brown, with pale angular spots, or pale brown, with darker angular lines.

*Var.* 2. Subcentral angular belt.

## 3. GALEOLA TIGRINA.

B.M.

Yellow, dark-spotted; throat and tip of spire purple.

*Cylindrus tigrinus*, *Meuschen.*

*Voluta tigrina*, *Dillw. R. S.* 520.

*Duclos*, *Oliv.* t. 27. f. 1-4.

*Reeve*, *C. I.* t. 20. f. 53.

*Galeola tigrina*, Gray, *Proc. Zool. Soc.* 1858, 49.

*Oliva tessellata*, Lamk. no. 38; *E. M.* t. 368. f. 1.

*Voluta maculata*, *Soland. MSS.*

*V. ispidula*, var., *Gmelin.*

*V. oliva*, var., *Born.*

*Hab.* Philippines.

## 4. GALEOLA DACTYLIOLA.

*Oliva dactyliola*, *Duclos*, *Oliv.* t. 27. f. 3-9.

*O. bulbiformis*, *Duclos*, *Oliv.* t. 27. f. 10-13.

*Reeve*, *C. I.* t. 13. f. 26.

*O. leucostoma*, *Duclos*, *Oliv.* t. 27. f. 14-16.

*Galeola dactyola*, Gray, *Proc. Zool. Soc.* 1858, 49.

\*\* *Spire depressed.*

## 5. GALEOLA AVELLANA.

Spire short, blunt; throat white.

*Oliva avellana*, Lamk. no. 37.

*Duclos*, *Oliv.* t. 28. f. 1, 3.

*O. galeola*, *Duclos*, *Oliv.* t. 28. f. 4-6.

*O. irisans*, *Reeve*, *C. I.* t. 6. f. 8 a (only, not b, c, d).

*Galeola avellana*, *Gray*, *Proc. Zool. Soc.* 1858, 49.

## 6. GALEOLA LEPIDA.

*Oliva lepida*, *Duclos*, *Oliv.* t. 25. f. 15-20.

*Galeola lepida*, *Gray*, *Proc. Zool. Soc.* 1858, 49.

## 7. GALEOLA VOLVARIOIDES.

*Oliva volvarioides*, *Duclos*, *Oliv.* t. 25. f. 11-14.

*Reeve*, *C. I.* t. 22. f. 59.

*Galeola volvarioides*, *Gray*, *Proc. Zool. Soc.* 1858, 50.

## 8. GALEOLA ? PYGMÆA.

*Oliva pygmæa*, *Reeve*, *C. I.* t. 26. f. 75.

*Galeola ? pygmæa*, *Gray*, *Proc. Zool. Soc.* 1858, 50.

## 9. GALEOLA ? PICTA.

*Oliva picta*, *Reeve*, *C. I.* t. 26. f. 79.

*Galeola picta*, *Gray*, *Proc. Zool. Soc.* 1858, 50.

*Hab.* Philippines.

II. *Head scarcely exposed; tentacles short; eyes none. Foot elongate, dilated in front, one-coloured. Shell with the sutural groove open to the apex.*

## Genus 7. ANAZOLA.

Shell ovate or subcylindrical; spire conical, sutural groove open to the tip; aperture oblong, rather wide; pillar lip expanded; inner lip thickened the whole length, twisted and grooved in front; belt broad, with an anterior groove in the usual place of the narrow belt.

Foot (*A. subulata*) elongate, longer than the shell, acute behind; the front half dilated, reflected over and covering the front and sides of the shell; front lobes semicircular, hinder angle acute. Tentacles short, broad. Eyes none? Operculum none.—*Duclos*, t. 31. f. 1, 2.



## 1. ANAZOLA GIBBOSA.

B.M.

Pillar with a single groove in front, and several smaller behind it.

*Voluta gibbosa*, *Born, Mus.* 215.

*Dilh. R. S.* 517.

*Anazola gibbosa*, *Gray, Proc. Zool. Soc.* 1858, 50.

*Voluta utriculus*, *Gmel. S. N.* 3441.

*Oliva utriculus*, *Lamk.* no. 46; *E. M.* t. 365. f. 6.

*Duclos, Oliv.* t. 17. f. 1-8.

*Reeve, C. I.* t. 14. f. 32.

*O. cingulata*, *Chemn.* x. f. 1369, 1370.

*O. nebulosa*, *Lamk. Hist.* no. 55.

*Martini*, f. 539, 540.

*O. gibbosa*, *Reeve, C. I.* t. 8. f. 12.

*Hab.* West Africa.

## 2. ANAZOLA ACUMINATA.

B.M.

Suture pencilled.

*Voluta ispidula*, *Linn. S. N.* 1188.

*Dilh. Var. A, R. S.* 518.

*V. utriculus*, var., *Gmelin.*

*Oliva acuminata*, *Lamk.* no. 48; *E. M.* t. 368. f. 3.

*Duclos, Oliv.* t. 12. f. 1-4.

*Reeve, C. I.* t. 16. f. 33 a, c.

*Anazola acuminata*, *Gray, Proc. Zool. Soc.* 1858, 50.

*Hab.* West Africa.

## 3. ANAZOLA SUBULATA.

*Oliva subulata*, *Lamk.* no. 49; *E. M.* t. 368. f. 6.

*Duclos, Oliv.* t. 12. f. 5-9.

*Reeve, C. I.* t. 16. f. 33 d.

*Voluta ispidula*, var. B, *Dilh. R. S.* 518.

*Oliva luteola*, *Lamk.* no. 50.

*Martini*, f. 554.

*O. triticea*, *Duclos, Oliv.* t. 1. f. 5, 6.

*Reeve, C. I.* t. 27. f. 82.

*Anazola subulata*, *Gray, Proc. Zool. Soc.* 1858, 50.

*Hab.* West Africa.

These two may be only varieties of one species.

## 4. ANAZOLA LEUCOZONALIS.

*Oliva leucozonalis*, *Gray, Beechey's Voy.* 130. t. 36. f. 24.

*Reeve, C. I.* t. 24. f. 67.

*Anazola leucozonalis*, *Gray, Proc. Zool. Soc.* 1858, 50.

*Hab.* Senegal.

## 5. ANAZOLA UNDATELLA.

B.M.

*Oliva undatella*, Lamk. *Hist.* no. 58; *Ann.* no. 55.

*Gray*, *Beechey's Voy.* 131. t. 36. f. 23-27.

*Duclos*, *Oliv.* t. 5. f. 5-10.

*Reeve*, *C. I.* t. 25. f. 73.

*Anazola undatella*, *Gray*, *Proc. Zool. Soc.* 1858, 51.

*Voluta tenebrosa*, *Goodall*, *Wood*, *Ind. Suppl.* t. 4. f. 38.

*Oliva zonalis*, *Menke*.

*Olivella undatella*, *Gray*.

? *Oliva hieroglyphica*, *Reeve*, *C. I.* t. 24. f. 68.

*O. nodulina*, *Duclos*, *Oliv.* t. 5. f. 13, 14.

*O. ozodina*, *Duclos*, *Oliv.* t. 5. f. 19, 20.

*Hab.* West coast of South America.

## 6. ANAZOLA PULCHELLA.

*Oliva pulchella*, *Duclos*, *Oliv.* t. 5. f. 11, 12.

*Anazola pulchella*, *Gray*, *Proc. Zool. Soc.* 1858, 51.

## 7. ANAZOLA PANICULATA.

*Oliva paniculata*, *Duclos*, *Oliv.* t. 5. f. 15-18.

*Anazola paniculata*, *Gray*, *Proc. Zool. Soc.* 1858, 51.

## Genus 8. AGARONIA.

Shell ovate, subcylindrical; spire acute, sutural groove open to the tip; aperture rather wide, ovate; inner lip defined, thin; pillar obliquely twisted in front, with several oblique grooves; belt moderate, single. Foot (*A. hiatula*) elongate, longer than the shell, acute behind, wider in front, covering part of the front of the shell; front lobes semicircular, wider in front, acute at the outer hinder angles. Head hidden; tentacles very small; eyes none. Operculum — ? — *Duclos*, t. 4 bis.

\* *Anterior belt moderate.*

## 1. AGARONIA TESTACEA.

B.M.

Spire conical; suture linear, distinct to the tip; pillar white; belt brown or white, single, smooth.

*Oliva testacea*, Lamk. no. 51.

*Reeve*, *C. I.* t. 18. f. 36.

*Agaronia testacea*, *Adams*.

*Gray*, *Proc. Zool. Soc.* 1858, 51.

*Agaronia hiatula*, *Gray*, *Beechey's Voy.* 132.

*Oliva hiatula*, *Duclos, Oliv. t. 3. f. 13, 14.*

*Oliva steerii*, *Reeve, C. I. t. 18. f. 37.*

*Hab.* Pacific; Mexico (*Lamk.*).

## 2. AGARONIA INDUSICA.

Pillar white.

*Oliva indusica*, *Reeve, C. I. t. 19. f. 43.*

*Agaronia indusica*, *Gray, Proc. Zool. Soc. 1858, 51.*

*Hab.* Kurrachee.

## 3. AGARONIA CINCTA.

Pillar white; shell with two brown bands.

*Oliva cincta*, *Reeve, C. I. t. 20. f. 47.*

*Agaronia cincta*, *Gray, Proc. Zool. Soc. 1858, 51.*

*Hab.* — ?

## 4. AGARONIA CONTORTUPLICATA.

Pillar white; shell grey; throat dark red-brown.

*Oliva contortuplicata*, *Reeve, C. I. t. 20. f. 51.*

*Agaronia contortuplicata*, *Gray, Proc. Zool. Soc. 1858, 52.*

*Hab.* Senegal.

These may be all local varieties of the same species.

\*\* *Anterior belt broader.*

## 5. AGARONIA HIATULA.

B.M.

Pillar purple-brown in front; belt brown or white.

*Voluta hiatula*, *Gmelin, S. N. 3442.*

*Dillw. R. S. 518.*

*V. ringens*, *Soland. MSS.*

*Oliva hiatula*, *Lamk. no. 52; E. M. t. 368. f. 5.*

*Reeve, C. I. t. 18. f. 35.*

*Agaronia hiatula*, *Gray, Guide B. M. 25; Proc. Zool. Soc. 1858, 52.*

*Oliva hiatula*, var., *Duclos, Oliv. t. 3. f. 14, 15, t. 4 bis, f. 17-21.*

*Ancilla maculata*, *Schum.*

*Hiatula lamarekii*, *Swains.*

*Hab.* Mouth of Niger (*Adanson*); East coast of Africa (*Capt. Owen*).

## 6. AGARONIA NITELINA.

Pale brown; front belt rather wide; inner lip pale brown.

*Oliva nitelina*, *Duclos, Oliv. t. 3. f. 1, 2.*

*Oliva ancillarioides*, *Reeve, C. I. t. 21. f. 55.*

*Agaronia nitelina*, *Gray, Proc. Zool. Soc. 1858, 52.*

*Hab.* Kurrachee.

## 7. AGARONIA MEGALOSTOMA.

*Agaronia megalostoma*, *Adams, Gen. Moll. t. 15. f. 3.*

III. *Head hidden; tentacles none; eyes none. Foot short, very broad, rounded on the sides, one-coloured. Operculum distinct.*

## Genus 9. OLIVINA.

Shell subcylindrical; spire conical; sutural groove open to the tip; aperture linear or subovate; inner lip defined; pillar obliquely twisted in front and obliquely grooved; belt single, rather narrow. Foot (*Ol. puelchana*) short, much shorter than the shell; very broad, rounded at the sides, enveloping the front of the shell; front lobes very small, narrow, acute at the sides. Head almost hidden; tentacles none. Operculum distinct.—*D'Orb. Voy.*

*Olivella*, part., *Gray, Guide B.M. 24.*

\* *Shell white; aperture narrow.*

## 1. OLIVINA GRACILIS.

B.M.

Throat purplish.

*Oliva gracilis*, *Sow., Gray, Beechey's Voy. 130. t. 36. f. 1.*

*Duclos, Oliv. t. 1. f. 17, 18.*

*Reeve, C. I. t. 20. f. 46.*

*Olivina gracilis*, *Gray, Proc. Zool. Soc. 1858, 52.*

## 2. OLIVINA RAZAMOLA.

*Oliva razamola*, *Duclos, Oliv. t. 6. f. 3-6.*

*Olivina razamola*, *Gray, Proc. Zool. Soc. 1858, 52.*

## 3. OLIVINA CALDANIA.

*Oliva caldania*, *Duclos, Oliv. t. 6. f. 3, 4.*

*Olivina caldania*, *Gray, Proc. Zool. Soc. 1858, 52.*

B

## 4. OLIVINA TUNQUINA.

*Oliva tunquina*, *Duclos, Oliv. t. 6. f. 1, 2.*  
*Olivina tunquina*, *Gray, Proc. Zool. Soc. 1858, 53.*

## 5. OLIVINA PULCHELLA.

*Oliva pulchella*, *Duclos, Oliv. t. 5. f. 11, 12.*  
*Reeve, C. I. t. 30. f. 98.*  
*Oliva oryza*, *Lamk. Hist. no. 62; Ann. no. 59.*  
*Reeve, C. I. t. 27. f. 81.*  
*Oliva menilifera*, *Reeve, C. I. t. 27. f. 84.*  
*Oliva pellucida*, *Reeve, C. I. t. 27. f. 85.*  
*Olivina pulchella*, *Gray, Proc. Zool. Soc. 1858, 53.*

## 6. OLIVINA ANAZORA.

B.M.

*Oliva anazora*, *Duclos, Oliv. t. 5. f. 3, 4.*  
*Reeve, C. I. t. 25. f. 74.*  
*Olivina anazora*, *Gray, Proc. Zool. Soc. 1858, 53.*  
*Hab. Columbia.*

## 7. OLIVINA LANCEOLATA.

*Oliva lanceolata*, *Reeve, C. I. t. 30. f. 95.*  
*Olivina lanceolata*, *Gray, Proc. Zool. Soc. 1858, 53.*  
*Hab. Luzon.*

## 8. OLIVINA MIRIADINA.

B.M.

*Oliva miriadina*, *Duclos, Oliv. t. 5. f. 1, 2.*  
*Reeve, C. I. t. 30. f. 94.*  
*Olivina miriadina*, *Gray, Proc. Zool. Soc. 1858, 53.*  
*Hab. West Indies.*

## 9. OLIVINA BULLATA.

*Oliva bullata*, *Reeve, C. I. t. 30. f. 96.*  
*Olivina bullata*, *Gray, Proc. Zool. Soc. 1858, 53.*  
*Hab. West Indies.*

## 10. OLIVINA ALECTONA.

*Oliva alectona*, *Duclos, Oliv. t. 4 bis, f. 15, 16.*  
*Olivina alectona*, *Gray, Proc. Zool. Soc. 1858, 53.*

## 11. OLIVINA PUELCHANA.

B.M.

*Oliva puelchana*, *D'Orb. Amér. Mérid. 418. t. 49. f. 13-19.*  
*Desh., Lamk. no. 64.*  
*Duclos, Oliv. t. 4 bis, f. 1-6.*

*Olivina puelchana*, Gray, *Proc. Zool. Soc.* 1858, 53.

*Olivella puelchana*, Gray, *Guide B. M.* 25.

*Hab.* Patagonia ; St. Blas.

12. OLIVINA TEHUELCHANA.

B.M.

*Oliva tehuelchana*, *D'Orb. Amér. Mérid.* 418. t. 49. f. 7-12.

*Desh., Lamk.* no. 63.

*Duclos, Oliv.* t. 4 bis, f. 7-14.

*Olivina tehuelchana*, Gray, *Proc. Zool. Soc.* 1858, 53.

*Olivella tehuelchana*, Gray, *Guide B. M.* 25.

*Hab.* Patagonia ; St. Blas.

13. OLIVINA ESTHER.

*Oliva esther*, *Duclos, Oliv.* t. 3. f. 7, 8.

*Reeve, C. I.* t. 23. f. 65.

*Olivina esther*, Gray, *Proc. Zool. Soc.* 1858, 53.

14. OLIVINA COLUMBA.

*Oliva columba*, *Duclos, Oliv.* t. 3. f. 3, 4.

*Olivina columba*, Gray, *Proc. Zool. Soc.* 1858, 53.

15. OLIVINA STRIGATA.

*Oliva strigata*, *Reeve, C. I.* t. 25. f. 72.

*Olivina strigata*, Gray, *Proc. Zool. Soc.* 1858, 54.

*Hab.* West Indies.

16. OLIVINA DEALBATA.

*Oliva dealbata*, *Reeve, C. I.* t. 25. f. 71.

*Olivina dealbata*, Gray, *Proc. Zool. Soc.* 1858, 54.

17. OLIVINA CÆRULEA.

*Oliva cærulea*, *Reeve, C. I.* t. 24. f. 70.

*Olivina cærulea*, Gray, *Proc. Zool. Soc.* 1858, 54.

18. OLIVINA ZENOPIRA.

*Oliva zenopira*, *Duclos, Oliv.* t. 3. f. 11, 12.

*Reeve, C. I.* t. 24. f. 69.

*Olivina zenopira*, Gray, *Proc. Zool. Soc.* 1858, 54.

*Hab.* Madagascar.

## 19. OLIVINA SELASIA.

*Oliva selasia*, *Duclos, Oliv. t. 2. f. 19, 20.*

*Olivina selasia*, *Gray, Proc. Zool. Soc. 1858, 54.*

## 20. OLIVINA TERGINA.

B.M.

*Oliva tergina*, *Duclos, Oliv. t. 2. f. 13-16.*

*Reeve, C. I. t. 26. f. 80.*

*Olivina tergina*, *Gray, Proc. Zool. Soc. 1858, 54.*

*Hab.* Central America.

## 21. OLIVINA FULGIDA.

*Oliva fulgida*, *Reeve, C. I. t. 26. f. 78.*

*Olivina fulgida*, *Gray, Proc. Zool. Soc. 1858, 54.*

*Hab.* West Indies.

## 22. OLIVINA MUTICA.

B.M.

*Oliva mutica*, *Duclos, Oliv. t. 2. f. 5-8.*

*Reeve, C. I. t. 28. f. 86, t. 29. f. 93.*

*Olivina mutica*, *Gray, Proc. Zool. Soc. 1858, 54.*

*Hab.* Rio de Janeiro.

## 23. OLIVINA ZIGZAG.

*Oliva zigzag*, *Duclos, Oliv. t. 2. f. 1-4 (operc. a).*

*Olivina zigzag*, *Gray, Proc. Zool. Soc. 1858, 54.*

## 24. OLIVINA MANDARINA.

*Oliva mandarina*, *Duclos, Oliv. t. 1. f. 19, 20.*

*Olivina mandarina*, *Gray, Proc. Zool. Soc. 1858, 54.*

## 25. OLIVINA JASPIDEA.

B.M.

*Voluta jaspidea*, *Gmelin, S. N. 3442.*

*Dillw. R. S. 519.*

*Oliva eburnea*, *Lamk. Hist. no. 59; Ann. no. 56.*

*Duclos, Oliv. t. 1. f. 13-16.*

*Oliva conoidalis*, *Lamk. Hist. no. 57; Ann. no. 54.*

*Lister, t. 725. f. 13.*

*Duclos, Oliv. t. 2. f. 17, 18.*

*Voluta nivea*, *Gmelin.*

*Dillw. R. S. 519.*

*Oliva nivea*, *Desh., Reeve, C. I. t. 23. f. 64.*

*Oliva jaspidea*, *Desh., Reeve, C. I. t. 22. f. 58.*  
*Olivina jaspidea*, *Gray, Proc. Zool. Soc. 1858, 54.*  
*Hab.* Barbadoes (*Lister*); St. Vincent's, West Indies.

## 26. OLIVINA MICA.

*Oliva mica*, *Duclos, Oliv. t. 11, 12.*  
*Olivina mica*, *Gray, Proc. Zool. Soc. 1858, 54.*

## 27. OLIVINA GUILDINGII.

B.M.

*Oliva guildingii*, *Reeve, C. I. t. 28. f. 89.*  
*Olivina guildingii*, *Gray, Proc. Zool. Soc. 1858, 55.*  
*Hab.* West Indies.

## 28. OLIVINA FURA.

*Oliva fura*, *Reeve, C. I. t. 30. f. 97.*  
*Olivina fura*, *Gray, Proc. Zool. Soc. 1858, 55.*

## 29. OLIVINA LEPTA.

*Oliva lepta*, *Duclos, Oliv. t. 1. f. 7, 8.*  
*Olivina lepta*, *Gray, Proc. Zool. Soc. 1858, 55.*

## 30. OLIVINA FIMBRIATA.

*Oliva fimbriata*, *Reeve, C. I. t. 29. f. 92.*  
*Olivina fimbriata*, *Gray, Proc. Zool. Soc. 1858, 55.*  
*Hab.* West Indies.

It is very doubtful to my mind if the whole, or at least by far the greater part, of the preceding species are not all local varieties of the same species; but as they have been named, I do not consider it right to reduce them to varieties without good evidence.

## 31. OLIVINA LINEOLATA.

B.M.

*Oliva lineolata*, *Gray, in B. M. 1827, Beechey's Voy. 131.*  
*Oliva Dama*, *Goodall\**, *in Wood, Cat. Suppl. t. 6. f. 37.*  
*Duclos, Oliv. t. 3. f. 5, 6.*  
*Reeve, C. I. t. 23. f. 63.*

\* Many of the names of the shells in Wood's Suppl. were arbitrarily altered by the late Dr. Goodall as the work passed through the press, overlooking the fact that some of them had been established by prior publication; and the proper names were given to the species in the MS. which was submitted to Dr. Goodall's inspection.



- Oliva purpurata*, Swains. *Z. Ill.* t. 2. f. 1.  
*Oliva gracilis*, Duclos, *Oliv.* t. 1. f. 17, 18.  
*Olivella lineolata*, Adams, *Gray*.  
*Olivina lineolata*, Gray, *Proc. Zool. Soc.* 1858, 55.  
*Hab.* California.

\*\* *Shell grey, black-banded; aperture subovate.*

32. OLIVINA COLUMELLARIS.

B.M.

Shell smooth.

- Oliva columellaris*, Sow. *Tank. Cat.* 34.  
*Wood, Suppl.* t. 4. f. 34.  
*Duclos, Oliv.* t. 2. f. 11, 12.  
*Reeve, C. I.* t. 23. f. 62.  
*Olivella columellaris*, Gray, *Guide B. M.* 25.  
*Olivina columellaris*, Gray, *Proc. Zool. Soc.* 1858, 55.  
*Hab.* Peru.

33. OLIVINA ZONALIS.

B.M.

Shell smooth, small.

- Oliva zonalis*, Lamk. *Hist.* no. 61; *Ann.* no. 58.  
*Gray, Beechey's Voy.* 131. t. 36. f. 25.  
*Duclos, Oliv.* t. 1. f. 3, 4.  
*Reeve, C. I.* t. 29. f. 90.  
*Oliva attenuata*, *Reeve, C. I.* t. 29. f. 90.  
*Olivina zonalis*, Gray, *Proc. Zool. Soc.* 1858, 55.  
*Hab.* Mexico.

34. OLIVINA SEMISULCATA.

B.M.

Shell, hinder half of the last whorl longitudinally grooved.

- Oliva semisulcata*, Gray, *Beechey's Voy.* 130. t. 36. f. 10.  
*Reeve, C. I.* t. 33. f. 61.  
*Olivina semisulcata*, Gray, *Proc. Zool. Soc.* 1858, 55.  
*Olivella semistriata*, Gray, *Guide B. M.* 25.  
*Hab.* West Columbia.

35. OLIVINA ZANOËTA.

Blackish, with a subcentral white band.

- Oliva zanoëta*, Duclos, *Oliv.* t. 2. f. 9, 10.  
*Reeve, C. I.* t. 26. f. 76.  
*Olivina zanoëta*, Gray, *Proc. Zool. Soc.* 1858, 56.

## Genus 10. SCAPHULA.

Shell ovate, spire conical, sutural groove open to the apex; aperture ovate; inner lip rather expanded, thickened, defined, smooth, with two small plaits in front; anterior belt very narrow. Foot (*Oliva biplicata* or *auricularia*?) rather short, about the length of the shell, broad, much dilated on the sides and covering the whole of the shell; the front lobes very large, broad, oblong, rounded on the sides. Head hidden; tentacles none; eyes none. Operculum none. Animal pale grey-brown, not spotted.

## 1. SCAPHULA BIPLICATA.

B.M.

Grey-brown; inner lip white; spire conical; suture dark brown.

*Oliva biplicata*, Sow. *Tank. Cat.* 33.

*Duclos, Oliv. t.* 3. f. 9, 10.

*Reeve, C. I. t.* 20. f. 48.

*Oliva nux*, Goodall, *Wood, Cat. Suppl. t.* 4. f. 33.

*Olivancilla auricularia*, D'Orb. *Voy. Amér. Mérid.* 421. t. 59. f. 20-22, shell (animal?).

*Scaphula auricularia*, Gray, *Guide B. M.* 25, from D'Orb. *fig.*

*Scaphula biplicata*, Gray, *Proc. Zool. Soc.* 1858, 56.

*Hab.* Pacific Ocean; Coast of South America.

Though M. D'Orbigny in his text correctly described *Oliva auricularia* of Lamarck, yet in his figure of the animal he represents the shell of *Oliva biplicata*, which does not even answer to the character of the genus to which he refers it; M. Deshayes has referred both animal and shell to that species (see *Lamk. Hist.* ed. 2. x. 634).

M. Duclos to obviate the inconsistency—on what authority I do not know—in his enlarged copy of M. D'Orbigny's figure of the animal, places on it a figure of the shell of the true *Oliva auricularia* of Lamarck!

It must be left to succeeding naturalists to discover if the animal figured by M. D'Orbigny is that of *O. biplicata* or *O. auricularia*. My genus *Scaphula* was established on D'Orbigny's account of the animal.

## 2. SCAPHULA ROSALINA.

B.M.

White, with distant zigzag yellow lines; front of pillar rose-coloured.

*Oliva rosalina*, *Duclos, Oliv. t.* 1. f. 1, 2.

*Reeve, C. I. t.* 30. f. 99.

*Scaphula rosalina*, Gray, *Proc. Zool. Soc.* 1858, 56.

*Hab.* West Indies.

## Genus 11. MICANA.

Shell ovate or obconic; spire conical, callous; upper sutural groove obliterated; aperture ovate; inner lip thickened, expanded; pillar with two small grooves in front; anterior belt narrow, single. Animal —? Operculum half-ovate, horny.

## 1. MICANA NANA.

B.M.

*Voluta nitidula*, *Soland. MSS.*

*Dillw. R. S.* 521.

*V. utriculus*, var., *Gmelin, E. M. t.* 363. f. 4.

*Oliva nana*, *Lamk. Hist.* no. 60; *Ann.* no. 57; *E. M. t.* 363. f. 3.

*Duclos, Oliv. t.* 25. f. 5-8 (operc. A, B).

*Reeve, C. I. t.* 23. f. 66.

*Voluta ispidula*, var., *Born.*

*Micana nana*, *Gray, Proc. Zool. Soc.* 1858, 57.

*Oliva micans*, *Desh.*

*Voluta micans*, *Soland. MSS.*

*Dillw. R. S.* 521.

*Oliva millepunctata*, *Duclos, Oliv. t.* 25. f. 1-4.

*Reeve, C. I. t.* 28. f. 87.

*Oliva oryza*, *Duclos, Oliv. t.* 1. f. 9, 10.

*Voluta oryza*, *Dillw. R. S.* 522.

*Oliva rufifasciata*, *Reeve, C. I. t.* 28. f. 88.

*Hab.* West Indies.

The Olives are known from the *Ancillaria* by the sutural groove on the spire; but in some species which have a very distinct groove, it becomes obliterated and entirely hidden by a callous deposit on the spire, especially on the upper whorls.

Duclos regarded this deposition of shelly matter on the spire as a good character for the separation of the species, and I was induced to follow his opinion, and have, in the 'Proceedings of the Zoological Society,' given to his section a distinct generic name. I believe that it is a very permanent character in some species, but at the same time it is certainly not permanent in others: thus, in the British Museum there are four specimens of *Oliva mustelina*? received at the same time from China, two of which have the groove quite open to the tip, one with it partly closed, and the other with the grooves on the upper whorls quite obliterated and covered with a thick callosity; this latter specimen is considered by M. Duclos as another species and referred to a different section. In the same manner I am induced to believe, from a specimen in my cabinet, that his *Oliva irisans* is only a variety of *Oliva ispidula* with the spire covered with a callous deposit; and I have observed that several of the speci-

mens named *O. irisans* in the late Mr. Gaskoin's collection because they have a callous spire, are only varieties of *Oliva tremulina*; indeed some of the specimens which have not a callous spire are placed with them, under the name of *irisans*.

It is therefore evident that the character which has been regarded as of sectional or even generic importance, is not of permanent specific value in certain species, while it appears to be permanent and even one of the generic marks of other groups.

## Tribe II. ANCILLARINA.

Shell subcylindrical, polished; suture of spire callous. Mantle without any posterior beard. Lateral teeth of the tongue simple, curved. Shell more or less covered with an enamel coat; outer lip often with a tooth in front, leaving an impressed groove on the outer surface of the front of the last whorl.

In the late Mr. Gaskoin's collection there were two specimens of a large ovate fusiform shell, from Albany in South Africa, which are arranged with *Ancilla*; but the spire is not callous, with a simple suture. It is probably arranged with this genus because it possesses an anterior sunken groove caused by a labial tooth; but this tooth and groove are found in several other genera, as *Chorus*, *Concholepas*, *Acanthiza*, *Gastridia*, *Latirus*, *Murex*, &c.

\* *Shell partly covered with enamel.*

### Genus 12. ANCILLA.

Spire covered with an enamel coat, forming a narrow belt on the penultimate whorl, not reaching to the hinder part of the mouth, and leaving a naked space on the whorl; axis perforated; outer lip with a tooth in front. Operculum large, distinct, oblong, acute; nucleus subapical, near the front of the inner side.

I have only observed the operculum in *A. obtusa* and *A. australis*.

† *Spire distinct.*

#### 1. ANCILLA CINGULATA.

B.M.

*Ancillaria cingulata*, Sow. *Spec. Conch. Ancill.* 6. f. 36, 37.

*Kiener, Ancill.* 10. t. 4. f. 1, 1.

*Hab.* China (*Kiener*).

The apex rounded and rather large; the callous sutural band with a raised margin.

## 2. ANCILLA MARGINATA. B.M.

*Ancillaria marginata*, Lamk. *A. s. V.* vii. 413; *E. M.* t. 393.

*Sow. Spec. Conch. Ancill.* 7. f. 40, 41, 42, 43.

*Swains. Journ. Sci.* xviii. 280.

*Kiener, Ancill.* 11. t. 5. f. 1.

*Var. alba.* B.M.

*Hab.* Australia (*Kiener*); Van Diemen's Land.

Brown bands darker spotted, or more or less pure white.

†† *Spire of adult covered with a thick coat.*

## 3. ANCILLA RUBIGINOSA. B.M.

*Ancillaria rubiginosa*, *Swains. Journ. Sci.* xviii. 283; *Zool. Illustr.* 2nd series, t. 1.

*Sow. Spec. Conch. Ancill.* 8. f. 49, 50, 51, 52.

*Kiener, Ancill.* 6. t. 2. f. 2.

*Hab.* East coast of Africa (*cab. Gray*). China (*Kiener*).

## 4. ANCILLA OBLONGA. B.M.

*Ancillaria oblonga*, *Gray*.

*Sow. Spec. Conch. Ancill.* 7. f. 38, 39.

*Kiener, Ancill.* 13. t. 4. f. 2.

*Ancillaria lineata*, *Kiener, Ancill.* 16. t. 3. f. 2.

*Hab.* Australia; Port Jackson.

## 5. ANCILLA CAPENSIS. B.M.

Pale brown, with a brown-spotted sutural callous band, and with a series of brown spots in front of the whorl, just behind the brown edge of the frontal band.

*Hab.* South Africa.

The sutural band is much narrower than in the young of *A. obtusa*.

## 6. ANCILLA AUSTRALIS. B.M.

*Ancillaria australis*, *Sow. Spec. Conch. Ancill.* 7. f. 44, 45.

*Kiener, Ancill.* 9. t. 5. f. 2, 3.

*A. sillon blanc*, *Quoy, Voy. Astrol.* t. 49. f. 56.

*Ancilla australis*, *Gray, Guide B. M.* 25; *M. E. Gray, Figures of Mollusca*, t. 19. f. 5.

*Ancilla fusca*, *Gray*.

*Var. Paler.* *Ancillaria mucronata*, *Sow. Spec. Conch. Ancill.* 8. f. 47, 48.

*Kiener, Ancill.* 7. t. 3. f. 3.

*Hab.* New Zealand.

Operculum ovate, lanceolate, about two-thirds the length of the aperture of the shell.

#### 7. ANCILLA OBTUSA.

B.M.

*Ancillaria obtusa*, *Swains. Journ. Sci.* xviii. 282.

*Sow. Spec. Conch. Ancill.* 5. f. 24, 25.

*Hab.* Coast of Africa; Algoa Bay.

Operculum ovate, oblong, about one-half the length of the mouth of the shell.

### Genus 13. SANDELLA.

Shell ovate, covered with an enamel coat forming a broad belt on the back of the whorls, and reaching in the penultimate whorl to the back of the mouth; axis imperforate; outer lip with an obscure tooth in front. Operculum — ? Animal — ?

#### 1. SANDELLA TANKERVILLII.

B.M.

*Ancillaria tankervillii*, *Swains. Journ. Sci. & Arts*, xviii. 283.

*Tank. Cat.* no. 2285.

*Sow. Spec. Conch. Ancill.* 8. f. 53, 54, 55.

*Kiener*, 5. t. 3. f. 1.

*Sandella tankervillii*, *Gray, Guide B. M.* 26.

*Hab.* Columbia; Island of Margaretta.

### Genus 14. RUPERTIA.

Shell ovate, covered with an enamel coat forming a broad belt on the back of the whorls, not reaching to the back of the mouth; axis deeply perforated; outer lip with an obscure tooth in front. Operculum — ? Animal — ?

#### 1. RUPERTIA BALTEATA.

Pale yellow, or white.

*Eburna balteata*, *Sow. Gen.* no. 19. f. 3, 4.

*Ancillaria balteata*, *Swains. Journ. Sci.* xviii. 284.

*Sow. Spec. Conch. Ancill.* 9. f. 56, 57.

*Kiener, Ancill.* 13. t. 4. f. 4, 5.

- Var. Ancillaria nivea*, Swains. *Journ. Sci.* xviii. 285.  
*Sow. Spec. Conch. Ancill.* 9. f. 58, 59.  
*Kiener, Ancill.* 12. t. 4. f. 3.

\*\* *Shell entirely covered with an enamel coat.*

Genus 15. EBURNA.

Shell entirely covered with an enamel coat; spire conical; axis deeply perforated; outer lip with an obscure tooth in front. Animal —? Operculum —?  
 Eburna, Lamk.

1. EBURNA GLABRATA.

B.M.

*Buccinum glabratum*, Linn. *S. N.* 1208.

*Martini, Conch.* iv. 10. t. 122. f. 1127.

*Eburna glabrata*, Lamk. *A. s. V.* vii. 280; *E. M.* t. 401. f. 1.

*Voluta butyracea*, Soland. *MSS.*

*Sow. Gen. Shells*, f. 1.

*Eburna flavida*, Lamk. *A. s. V.* 78.

*Gray, Guide B. M.* 26.

*Ancillaria glabrata*, Swains. *Journ. Sci.* xviii. 285.

*Sow. Spec. Conch. Ancill.* 10. f. 60, 61, 62, 63, 64.

*Kiener, Ancill.* 3. t. 2. f. 1, 1.

Yelk yellow, orange, or white.

*Hab.* West Indies.

Dillwyn observes that this species bears a considerable affinity to the Olives (*R. Shells*, 621).

Genus 16. SPARELLA.

Shell entirely covered with an enamel coat; spire short, conical; axis not perforated; outer lip often marked with an obscure tooth in front. Operculum —?

† *Last whorl with a deep groove in front; outer lip with a tooth in front.*

1. SPARELLA CANDIDA.

B.M.

*Martini, Conch.* ii. t. 65. f. 722.

*Ancillaria candida*, Lamk. *A. s. V.* vii. 414.

*Swains. Journ. Sci.* xviii. 275.

*Sow. Spec. Conch. Ancill.* 3. f. 5, 6, 7.

*Kiener, Ancill.* 25. t. 5. f. 4.

*Var.* White, tip sometimes yellow.

B.M.

*Var.* Pale yellow, tip red. B.M.

*Sparella candida*, Gray, *Guide B. M.* 26.

*Var.* Pale brown, rather more ventricose (*Sow. l. c. f. 7*).

*Hab.* Mauritius; Ceylon (*Hayman*).

## 2. SPARELLA CINNAMOMEA. B.M.

Palish.

*Var. 1.* *Ancillaria cinnamomea*, Lamk. *A. s. V. vii.* 413; *E. M. t. 393. f. 8*?

*Sow. Spec. Conch. Ancill. 4. f. 10, 11, 12, 13.*

*Kiener, Ancill. 24. t. 1. f. 2.*

*Var.* *Ancillaria albifasciata*, Swains. *Journ. Sci.* xviii. 276.

*Var. 2.* *Ancillaria ventricosa*, Swains. *Journ. Sci.* xvii. 279 (not syn.).

*Ancillaria castanea*, *Sow. Spec. Conch. Ancill. 5. f. 20, 21, 22, 23* (not *Kiener*).

*Ancillaria cinnamomea*, *Children, Journ. Sci.* xvi. t. 5. f. 206.

*Sparella ventricosa*, Gray, *Guide B. M.* 26.

*Ancillaria ventricosa*, *Kiener, Ancill. 18. t. 6. f. 3.*

## 3. SPARELLA ALBISULCATA. B.M.

*Var. 3.* *Ancillaria cinnamomea*, Swains. *Journ. Sci.* xviii. 277 (not Lamk.).

*Ancillaria albisulcata*, *Sow. Spec. Conch. Ancill. 4. f. 14, 15, 16, 17, 18, 19.*

*Kiener, Ancill. 27. t. 6. f. 2.*

*Sparella albisulcata*, Gray, *Guide B. M.* 26.

*Ancilla marginata*, *Sow. Gen. f. 1.*

*Var.* Brown.

*Ancillaria achatina*, *Kiener, Ancill. 19. t. 3. f. 4.*

*Var.* *Ancillaria eburnea*, *Desh. Ency. Méthod.*

*Kiener, Ancill. 23. t. 7. f. 3* (not published).

*Hab.* Red Sea.

## 4. SPARELLA EFFUSA.

Tooth none in figure, but two grooves.

*Ancillaria effusa*, Swains. *Journ. Sci.* xviii. 275.

*Sow. Spec. Conch. Ancill. 4. f. 8, 9.*

*Kiener t. 6. f. 4.*

*Chemn Conch. x. t. 147. f. 1381.*

*Hab.* China? (*cab. Gray, from G. B. Sowerby*).

Fulvous; spire and sutural band white; spire very short.



†† *Last whorl smooth; outer lip without any tooth in front.*

5. SPARELLA VARIEGATA.

B.M.

*Ancillaria ventricosa*, *Sow. Spec. Conch. Ancill.* 6. f. 26–32 (not *Lamk. fide Kiener*).

*Ancillaria fulva*, *Swains. Journ. Sci.* xviii. 278.

*Ancillaria castanea*, *Kiener, Ancill.* 20. t. 6. f. 1.

*Var.* *Ancillaria variegata*, *Swains. Journ. Sci.* xviii. 278.

*Sparella ventricosa*, *Gray, Guide B. M.* 26.

*Hab.* Mozambique; Red Sea.

*Var.* Red-brown.

B.M.

*Var.* Pale brown.

B.M.

*Var.* Pure white.

B.M.

*Var.* Dwarf. *Ancillaria exigua*, *Sow. Spec. Conch. Ancill.* 6. f. 33, 34, 35.

6. SPARELLA APERTA.

B.M.

*Ancillaria aperta*, *Sow. Spec. Conch. Ancill.* 3. f. 3, 4.

*Sparella aperta*, *Gray, Guide B. M.* 26.

*Hab.* "Islands of the Pacific Ocean."

Dark orange-red; mouth very large; spire very short.

\*\*\* *Shell concentrically grooved, without any enamel coat; outer lip thin, not toothed.*

Genus 17. ANOLACEA.

Shell oblong, thin; spire short; outer lip thin, toothless; aperture large; axis imperforate. Operculum none. Foot very large, nearly burying the shell.

1. ANOLACEA MAURITIANA.

B.M.

Shell red, brown, pale yellow, or pure white.

*Ancillaria mauritiana*, *Sow. Spec. Conch. Ancill.* 3. f. 1, 2.

*Ancillaria volutella*, *Desh. Ency. Méth.?*

*Kiener, Ancill.* 28. t. 1. f. 1, 1.

*Anolacea mauritiana*, *Gray, Guide B. M.* 26.

*Var.* Red-brown.

B.M.

*Var.* Pale brown.

B.M.

*Hab.* Mauritius and Mozambique.

## Tribe III. HARPALINA.

Shell ventricose variced; pillar smooth. Operculum none.

## Genus 18. HARPA.

Shell ovate oblong, thin, striated, with numerous polished, acute, rib-like varices; spire short, acute, last whorl very large; mouth ovate, elongate, broadly notched in front; outer lip with a thickened external varix; pillar lip simple, smooth, rounded, pointed in front. Operculum none. Head large; proboscis elongate, conical. Teeth — ? Tentacles conical, close together over the mouth, with the eyes near their base. Foot very large, expanded, nicked on each side in front, elongate behind, often becoming truncate. The hinder part of the foot separates spontaneously when the animal is irritated, or killed in fresh water.

The varices have a strong spine at the hinder end near the suture, which is rarely rudimentary: some specimens have one or two other smaller spines in front of this spine; but one, and sometimes both are more or less completely obliterated: the three spines generally most distinct and equal-sized on *Harpa crenata*.

The number, form, thickness and thinness, and state of armature of the varices vary greatly in the individuals of the same species; but the character afforded by the structure of the outer lip, which has hitherto been but little attended to, seems to afford a good character for the separation of the kinds.

Kiener (the last writer on the subject) regards *H. conoidalis* as a mere variety of *H. ventricosa*, he unites a form of *H. conoidalis* with *H. nobilis* as a variety of that species, he considers *H. crenata* as the adult of *H. rosea*.

\* *Outer lip rounded, smooth.*

† *Varices with broad brown cross bands.*

## 1. HARPA VENTRICOSA.

B.M.

Buccinum harpa, *Linn. S. N.* 1201.

*Martini, Conch.* iii. t. 519. f. 1090.

Buccinum harpa, var. A, *Dillw. R. S.* ii. 607.

*Var.* Varices few, thick, far apart.

Buccinum testudo, *Soland. MSS.*

Harpa ventricosa, *Lamk. Syst.* 79; *Hist. A. s. V.* vii. No. 2.

*Kiener, Harpa,* t. 1. f. 1, t. 6. f. 10.

Harpa ventricosa, var. intermedia, *Kiener, Harpa,* t. 6. f. 9.

*Var. 2.* Varices crowded, thin.

*Buccinum costatum*, *Linn. S. N.* 1202.

*Martini*, iii. t. 119. f. 1093.

*Chemn. Conch.* x. t. 152. f. 1452.

*Harpa imperialis*, *Lamk. Hist. Moll.* No. 1.

*Harpa ventricosa*, var., *Kiener, Harpa*, t. 2. f. 1.

*Junior. Harpa cancellata*, *Chemn.* x. t. 152. f. 1453.

*Dillw. R. S.* ii. 608.

*Harpa striata*, *E. M.* t. 404. f. 4?

*Kiener*, t. 4. f. 7.

*Hab.* Indian Ocean; Mauritius; Philippines.

†† *Varices with small cross lines.*

## 2. HARPA LYRA.

B.M.

*Harpa conoidalis*, *Lamk. A. s. V.* vii.

*Harpa ventricosa conoidalis*, *Kiener, Harpa*, 7. t. 3. f. 4.

*Harpa articularis*, *Lamk. A. s. V.*

*Kiener, Harpa*, 8. t. 2. f. 3.

*Var.* Cross stripes of varices in pairs.

*Buccinum lyra*, *Solander, MSS.*

*Martini*, iii. t. 119. f. 1095 & 1097.

*Var.* Cross stripe on varices single, distant.

*Buccinum barbiton*, *Solander, MSS.*

*Martini*, iii. t. 119. f. 1092.

*Chemn.* x. t. 152. f. 1451.

*Harpa nobilis*, var., *Kiener, Harpa*, t. 6. f. 10.

*Hab.* Navigators' Islands.

## 3. HARPA MINOR.

B.M.

Shell subcylindrical; spire conic.

*Lister, Conch.* 994. f. 57.

*Harpa minor*, *Lamk.*

*Kiener, Harpa*, 10. t. 4. f. 6.

*Var.* *Harpa gracilis*, *Sow.*

*Hab.* Red Sea; Navigators' Islands.

\*\* *Outer lip rounded, crenated. Varices with broad pale cross bands.*

## 4. HARPA CRENATA.

B.M.

*Harpa crenata*, *Swains.*

*Harpa revoliana*, *Lesson, Illust. Zool.* t. 36.

*Harpa rosea*, adult, *Kiener, Harpa*, 12. t. 5. f. 8.

*Hab.* Panama.

## 5. HARPA ROSEA.

B.M.

*Martini, Conch.* t. 119. f. 1094.*Harpa rosea, Lamk.**Kiener, Harpa,* 11. t. 5. f. 8.*Buccinum testudo, var., Soland. MSS.**Buccinum harpa, var. B, Dilho. R. S. ii. 607.*\*\*\* *Outer lip acute, dentated.*

## 6. HARPA CITHARA.

B.M.

Shell *ventricose.**Buccinum cithara, Solander, MSS.**Martini,* iii. t. 119. f. 1091.*Harpa nobilis, Lamk.**Kiener, Harpa,* 9. t. 3. f. 5, t. 6. f. 11.*Harpa ventricosa, jun., Kiener, Harpa,* t. 1. f. 1 a.*Hab. Navigators' Islands.*

THE END.



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