

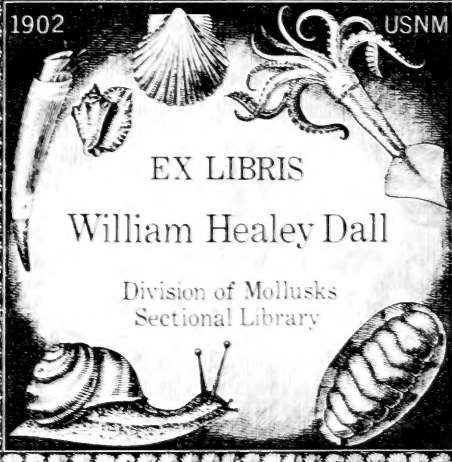
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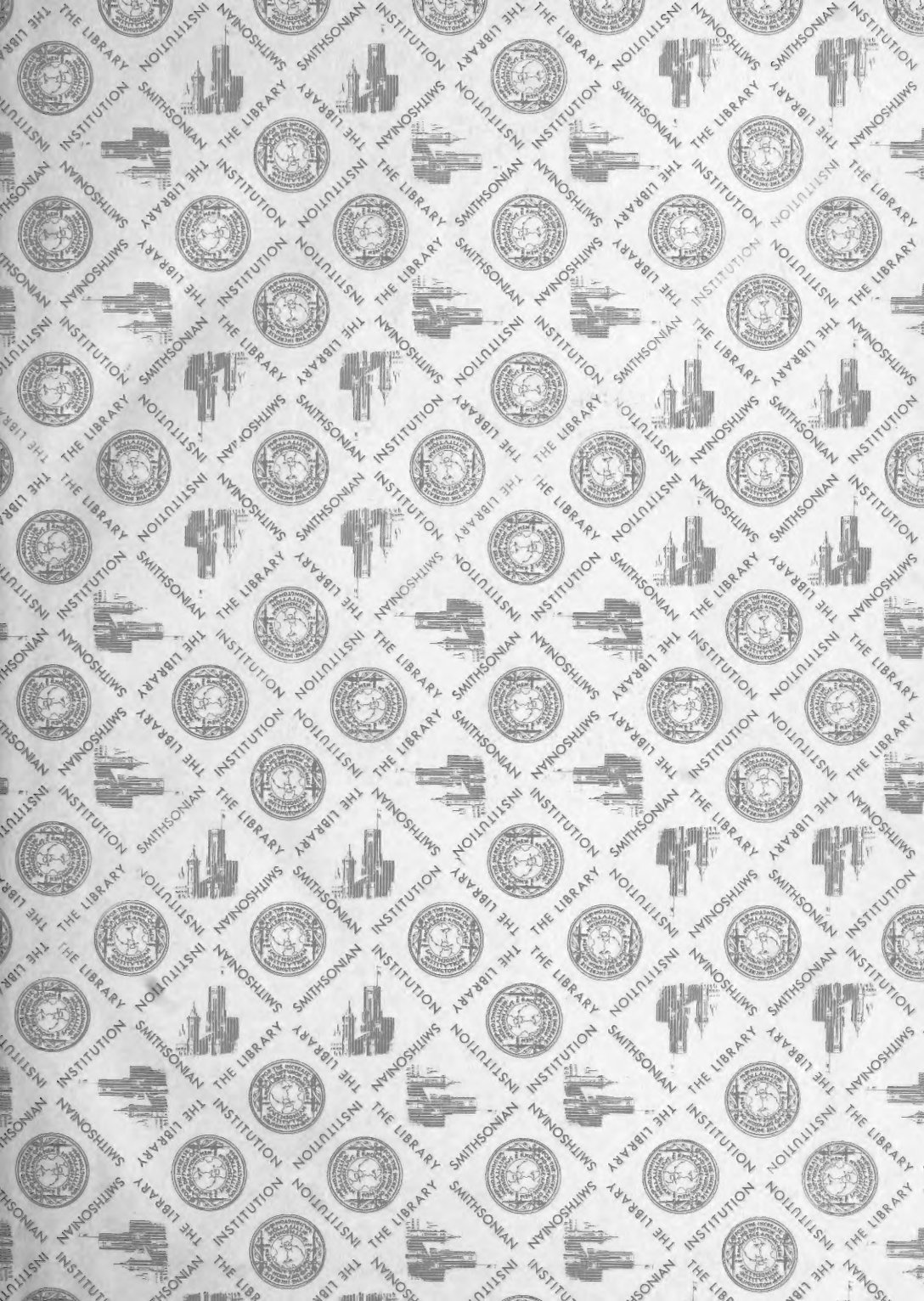
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K-1-a Turton



QL  
425  
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Moll.

CONCHYLIA DITHYRA  
INSULARUM BRITANNICARUM.

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Division of Mollusks  
Sectional Library

THE  
BIVALVE SHELLS  
OF  
THE BRITISH ISLANDS,  
*Systematically arranged.*

BY  
WILLIAM TURTON, M. D.

---

CASSEL :  
THEODOR FISCHER.  
1848.

*mill*



*#32*

*K-l-a TURTON*



ILLUSTRISSIMO ET SERENISSIMO PRINCIPI  
LEOPOLDO GEORGIO FREDERICO,  
DUCI SAXONÆ,  
MARCHIONI MISNÆ,  
LANDGRAVIO THURINGÆ,  
PRINCIPI COBURGI SAALFELDENSIS,  
EXERCITUUM REGALIU MARESCALLO,  
AUGUSTISSIMO ET POTENTISSIMO MONARCHÆ,  
INSULARUM BRITANNICARUM  
A CONSILIIS SECRETIORIBUS,  
NOBILISSIMI ORDINIS PERISCÉLIDIS  
ET HONORATISSIMI ORDINIS MILITARIS  
DE BALNEO EQUITI:  
TENTAMEN HOC  
DAT DICAT DEDICAT,  
GULIELMUS TURTON.

TORQUAY DANMONIORUM,  
IDUS FEBRUARII,  
ANNO REDEMPT.  
1822.

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
LABORATORY OF ORGANIC CHEMISTRY  
CHICAGO, ILLINOIS

1950

RESEARCH REPORT NO. 100

BY

J. H. GOLDEN

AND

R. M. WATSON

WITH

CONTRIBUTIONS BY

J. H. GOLDEN AND R. M. WATSON

ON

THE REACTION OF

METHYL LITHIUM WITH

METHYL IODIDE

IN

METHYL LITHIUM

SOLVENT

BY

J. H. GOLDEN AND R. M. WATSON

CHICAGO, ILLINOIS

1950

## P R E F A C E.

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A THOUSAND years ago it was remarked by one of the early fathers of natural history, that "much labor yet remains, and much is likely to remain; nor will opportunities of adding something be wanting to him who shall be born after a thousand ages." *Multum adhuc restat operis, multumque restabit; nec ulli nato post mille secula præcludetur occasio aliquid adjiciendi.*

He that brings to its place in system, an individual hitherto undiscovered or unnoticed, produces an additional testimony of the unbounded power of HIM, who in all His works is *maximus in maximis, maximus in minimis*; mightiest in the mightiest, and mightiest in the minutest.

The materials of natural history, in their various compartments, are of such huge accumulation, as to occasion no small difficulty in the formation of distinctive catalogues, founded on scientific and classical distribution.

The illustrious writers of the French school have come boldly forth, and broken the trammels by which the science of Conchology

has been confined to the very imperfect bounds of the last edition of the *Systema Naturæ*.

And as, like the division of labor, classical arrangement pretends to nothing more than that, by clear and consecutive deduction, the several distinct subjects should be brought to nominative identity, passing through the direct genealogy of their several kingdoms, tribes, orders, and families : whether these ends be effected through natural alliances or artificial combinations, it does not appear to be of much importance, supposing them to be equally comprehensive, communicable, and demonstrable.

But in pursuit of a natural arrangement, the neoteric writers of the French school have constituted the organs of the animal as the primary and essential base, making the shell a secondary object of consideration, and absorbing Conchology into a minor branch of Helminthology ; a connexion which must suppose more of tradition and gratuitous admission than of demonstration, and which in our present very imperfect knowledge of the Vermes, we consider to be unnecessary if it were possible, and impossible if it were necessary.

We have attempted an arrangement upon principles easily communicable, and strictly demonstrable, which, like the systems of Botany and Zoology, are certainly artificial, but which, on a comparison with the natural connexions of Lamarck and Cuvier, will be found to coincide with singular "semblable coherence."



Among the other means of our research, we have twice dredged the British Channel, from Berry Head to the Guernsea islands: and it may be objected to us that we have enumerated as British, some few individuals found on their shores. Like the products of Ireland, and the remote islands of Scotland, although they are not strictly English, they may justly be denominated British. Da Costa, Donovan, and Montagu have admitted them as such, Lister has marked them as English, and the President of the Linnæan Society has included in his *Flora Britannica* the plants peculiar to Guernsey and Jersey.

Far removed from learned books and learned men, with no friendly glance to check our exuberances or supply our deficiencies, some few errors have questionless eluded our detection; and we submit our endeavours to render this interesting study classically intelligible, to the correction of such as have better means and better authority.

**CONCHYLIA.**  
**SHELLS.**

**Ordo ii. Dithyra.**  
**Order ii. Bivalves.**

*Testa bivalvis, accessorüs difförmibus rariüs instructa.*

Shell with two valves, sometimes, but rarely, furnished with differently shaped accessorial ones.

**SYNOPSIS****A.***Ligamentum nullum.*

Without permanent ligament.

**B.***Ligamentum externum.*

Ligament external.

\* *Cardo edentulus.*

Hinge without teeth.

\*\* *Cardo dentibus primariis, lateralibus nullis.*

Hinge with primary teeth, but no lateral ones.

\*\*\* *Cardo dentibus primariis et lateralibus.*

Hinge with both primary and lateral teeth.

**C.***Ligamentum internum.*

Ligament internal.

\* *Cardo edentulus.*

Hinge without teeth.

\*\* *Cardo dentibus primariis, lateralibus nullis.*

Hinge with primary teeth; but no lateral ones.

\*\*\* *Cardo dentibus primariis et lateralibus.*

Hinge with both primary and lateral teeth.



***Character generic essentialis.***  
**Essential generic character.**

**A.**

*Ligamentum nullum.*

Ligament none.

---

1. PHOLAS.—*Testa transversa, ovata.*  
Shell transverse, oval.
2. TEREDO.—*Testa orbicularis, hemisphærica.*  
Shell orbicular, hemispherical.

**B.**

*Ligamentum externum.*

Ligament external.

---

- \* *Cardo edentulus.*  
Hinge without teeth.
4. SAXICAVA.—*Testa transversa, latere antico hiante.*  
Shell transverse, open at the anterior end.
  53. ANODON.—*Testa transversa, sinu marginali antico.*  
Shell transverse, with a marginal depression on the anterior side.

44. **MODIOLA.**—*Testa sublongitudinalis, umbonibus subterminalibus.*  
Shell somewhat longitudinal, with the beaks nearly terminal.
49. **PINNA.**—*Testa cuneiformis, apice dilatato hiante.*  
Shell wedge-form, dilated and open at the top.
47. **LIMA.**—*Testa basi auriculatâ.*  
Shell with auricles at the base.

---

\*\* *Cardo dentibus primariis, lateralibus nullis.*

Hinge with primary teeth, but no lateral ones.

25. **SOLEN.**—*Testa transversim linearis, cardine subterminali.*  
Shell transversely linear, with the hinge near the end.
43. **MYTILUS.**—*Testa longitudinalis, umbonibus terminalibus rectis.*  
Shell longitudinal, with the beaks terminal and straight.
3. **GASTROCHÆNA.**—*Testa hiantissima, dentibus obsoletis transversim lamellosis.*  
Shell very open, with the teeth obscure and transversely laminar.
48. **AVICULA.**—*Testa basi transversim caudatâ.*  
Shell with a transverse projection at the base.

32. CAPSA.—*Testa cuneata, ligamento ad latus brevissimum.*  
Shell wedge-shaped, with the ligament at the shortest side.
17. AGINA.—*Testa transversa, dente conico in utrâque valvâ.*  
Shell transverse, with a single conic tooth in each valve.
30. CRYPTODON.—*Testa trigono-globosa, dente unico obsoleto in utrâque valvâ cum foveâ transversâ.*  
Shell triangular-globular, with a single obscure tooth in each valve and a transverse cavity.
26. PSAMMOBIA.—*Testa oblonga vel ovata, lateribus subhiantibus, dentibus subbinis.*  
Shell oblong or oval, a little open at the sides, with two teeth in one or both the valves.
5. HIATELLA.—*Testa inæquivalvis, medio vel latere antico hiante, dente unico inter duos penetrante.*  
Shell inequivalve, open in the middle or at the anterior end, with a single tooth in one valve closing between two in the other.
33. CRASSINA.—*Testa clausa, dentibus duobus in utrâque valvâ.*  
Shell closed, with two teeth in each valve.
28. LUCINA.—*Testa clausa, dentibus duobus vel tribus cum foveolâ laterali transversâ.*  
Shell closed, with two or three teeth and a lateral transverse hollow.

6. PETRICOLA.—*Testa subhians, dentibus duobus inter tres penetrantibus.*  
Shell somewhat open, with two teeth in one valve closing between three in the other.
36. VENUS.—*Testa clausa, dentibus tribus infernè approximatis supernè divergentibus.*  
Shell closed, with three teeth which are close together at their base and divergent at their tips.
7. VENERUPIS.—*Testa anticè hians dentibus tribus approximatis parallelis.*  
Shell open at the anterior end, with three teeth all close together and parallel.
37. CYTHEREA.—*Dentes quatuor in valvâ alterâ, unico remotiusculo.*  
In one valve four teeth, one of them rather remote.
14. ANATINA.—*Dentes cochleariformes, mutici.*  
Teeth spoon-shaped without additional denticle.
15. LISTERA.—*Dentes cochleariformes, cum denticulis adjectis.*  
Teeth spoon-shaped with additional denticles.
54. UNIO.—*Dentes subconici, striato-tuberculati.*  
Teeth somewhat conic, striate or tubercled.
13. PANOPÆA.—*Dentes conici, et hinc callum breve.*  
Teeth conic, and a callosity on one side.
38. ARCA.—*Cardo rectilinearis, dentibus numerosis.*  
Hinge in a straight line, with numerous teeth.

39. PECTUNCULUS.—*Cardo arcuatus, dentibus numerosis.*  
Hinge in a curved line, with numerous teeth.
- 
- \*\*\* *Cardo dentibus primariis et lateralibus.*  
Hinge with both primary and lateral teeth.
16. AMPHIDESMA.—*Dentes primarij cochleariformes.*  
The primary teeth spoon-shaped.
56. CYCLAS.—*Dentes primarij minuti divergentes, lateralibus valvæ alterius didymis.*  
The primary teeth minute and divergent, with the lateral teeth of one valve double.
55. MYSCA.—*Dentes primarij transversi crenulati, lateralibus valvæ alterius didymis.*  
The primary teeth transverse and notched, with the lateral teeth of one valve double.
34. MYRTEA.—*Valva altera unidentata cum laterali utrinque, altera bidentata lateralibus obsoletis.*  
In one valve a single tooth and a lateral one each side, in the other valve two teeth with the lateral ones obscure.
35. CYPRINA:—*Dentes primarij duo vel tres, laterali remoto.*  
The primary teeth two or three, and a remote lateral one.
31. DONAX.—*Testa cuneata, ligamento ad latus brevissimum.*  
Shell wedge-shaped, with the ligament at the shortest side.

29. STRIGILLA.—*Testa bifariam anguloso-striata.*  
Shell with angular striæ in opposite directions.
27. TELLINA.—*Testa anticè flexuosa, dentibus subbinis.*  
Shell flexuous at the anterior side, with two teeth in one or both valves.
41. CARDIUM.—*Testa cordata, umbonibus contiguïs, dentibus duobus cum lateralibus in utrâque valvâ.*  
Shell heart-shaped, the beaks close together, with two teeth and two lateral ones in both valves.
42. ISOCARDIA.—*Testa cordata, umbonibus remotis convolutis, dentibus duobus cum laterali unico antico in utrâque valvâ.*  
Shell heart-shaped, the beaks remote and convolute, with two teeth and a single lateral tooth on the anterior side in each valve.

## C.

*Ligamentum internum.*

Ligament internal.

---

\* *Cardo edentulus.*

Hinge without teeth.

50. ANOMIA.—*Valva inferior basi perforatâ.*  
The under valve perforated at the base.

52. DISCINA.—*Testa discoidea, valvâ superiori medio mamillato-productâ.*  
Shell disk-shaped, with the upper valve protuberant in the middle.
46. PECTEN.—*Testa basi auriculatâ, foveâ cardinali trigonâ.*  
Shell auricled at the base, with a triangular hollow at the hinge.
45. OSTREA.—*Testa basi inauriculatâ, fovea cardinali trigonâ.*  
Shell without auricles at the base, with a triangular hollow at the hinge.

\*\* *Cardo dentibus primariis, lateralibus nullis.*

Hinge with primary teeth; but no lateral ones.

8. MYA.—*Testa æquivalvis, dente elevato transverso in valvâ sinistrâ, dextrâ muticâ.*  
Shell equivalve, with an elevated transverse tooth in the left valve, and none in the right.
10. SPHENIA.—*Testa inæquivalvis, dente elevato transverso in valvâ sinistrâ, dente concavo in valvâ dextrâ.*  
Shell inequivalve, with an elevated transverse tooth in the left valve, and a concave tooth in the right.
9. LYONSIA.—*Testa inæquivalvis, dente mobili communi valvas coadunante foveolâ utrinquè obliquâ.*  
Shell inequivalve, with a common moveable tooth uniting the valves together by an oblique cavity in each.

22. LUTRARIA.—*Cardo dente cochleariformi, cum dente trigono adjecto.*  
Hinge with a spoon-shaped tooth, and an additional triangular one.
20. MONTACUTA.—*Testa æquivalvis, dentibus duobus cum foveâ interpositâ.*  
Shell equivalve, with two teeth in each valve and a cavity between them.
18. ERVILIA.—*Testa æquivalvis, dente unico inter duos obsoletos penetrante.*  
Shell equivalve, with a single tooth closing between two obscure ones.
12. PANDORA.—*Valva altera dente longitudinali et foveolâ, altera foveolis duabus longitudinalibus.*  
In one valve a longitudinal tooth and cavity, in the other two longitudinal cavities.
11. CORBULA.—*Valva altera dente conico, altera dente cochleariformi.*  
In one valve a conic tooth, and a spoon-shaped tooth in the other.
51. TEREBRATULA.—*Valva superior umbone producto apice perforato.*  
The upper valve with the beak elongated and perforated at the extremity.

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\*\*\* *Cardo dentibus primariis et lateralibus.*

Hinge with both primary and lateral teeth.



23. **MACTRA.**—*Dentes laterales transversim laminosi, valvæ alterius didymi.*  
The lateral teeth transverse and laminar, those of one valve double.
21. **LEPTON.**—*Dentes laterales valvæ alterius transversim bipartiti.*  
The lateral teeth of one valve deeply cloven transversely.
40. **NUCULA.**—*Dentes primarü cochleariformes, lateralibus numerosis.*  
The primary teeth spoon-shaped, with numerous lateral ones.
19. **KELLIA.**—*Valva altera [dentibus duobus approximatis, altera dente erecto concavo.*  
In one valve two teeth close together, and a single erect concave tooth in the other.
24. **GOODALLIA.**—*Valva altera dente unico, altera dentibus duobus cum foveâ trigonâ interpositâ.*  
In one valve a single tooth, in the other two teeth with a triangular cavity between them.

***Character specificus essentialis.***  
**Essential specific character.**

A. *TESTÆ MARINÆ.* 1—52.

**SEA SHELLS.**

---

1. PHOLAS.

\* *valvis sulco longitudinali divisis.*  
 the valves divided by a longitudinal groove.

1. papyracea, *annulo producto, postico.*  
 with a produced ring at the hinder end.
2. lamellata, *lamellâ erectâ supra dentes.*  
 with an erect lamina above the teeth.
3. tuberculata, *tuberculo scabro supra dentes.*  
 with a rough tubercle above the teeth.
4. crispata, *marginè supra dentes mutico.*  
 with the margin above the teeth smooth.

---

\*\* *valvis medio indivisis.*  
 the valves undivided in the middle.

5. Dactylus, *marginè postico celluloso.*  
 cellular at the hinder margin.

6. *parva, tuberculo lævi supra dentes.*  
with a smooth tubercle above the teeth.
7. *candida, denticulo curvo supra dentem.*  
with a curved denticle above the tooth.
8. *striata, laminâ planatâ recurvâ externâ.*  
with a flat recurved external lamina.

## 2. TEREDO.

1. *navalis, denticulo curvo supra dentem.*  
with a curved denticle above the tooth.
4. *nana, denticulo conico obliquo supra dentes.*  
with an oblique conic denticle above the teeth.
2. *bipennata, costâ obliquâ supra dentes.*  
with an oblique rib above the teeth.
3. *dorsalis, costâ longitudinali internâ.*  
with a longitudinal rib on the inside.

## 3. GASTROCHENA.

1. *pholadia, lævis umbonibus subterminalibus.*  
smooth, with the beaks nearly terminal.

## 4. SAXICAVA.

1. *rugosa, anticè subangulata truncata.*  
somewhat angular and truncate at the anterior end.
2. *Pholadis, extremitatibus rotundatis.*  
rounded at both the sides.

3. *plicata, lamelloso-plicata, anticè dilatata.*  
with laminar plaits, dilated at the anterior end.

## 5. HIATELLA.

1. *minuta, posticè truncata areolata.*  
truncate with an impression at the hinder end.
2. *oblonga, posticè rotundata, areolá nullá.*  
rounded at the hinder end, without impression.

## 6. PETRICOLA.

1. *Irus, Petricola.*

## 7. VENERUPIS.

1. *perforans, Venerupis.*

## 8. MYA.

1. *truncata, anticè truncata, dente mutico.*  
truncate at the anterior end, with the tooth simple.
3. *ovalis, anticè rotundata, dente flexuoso.*  
rounded at the anterior end, with the tooth flexuous.
2. *arenaria, anticè rotundata, dente denticulato.*  
rounded at the anterior end, with a denticle on the tooth.

## 9. LYONSIA.

1. *striata, Lyonsia.*

## 10. SPHENIA.

1. Binghami, *cuneata, dente concavo obliquo inflexo.*  
wedge-shaped, with the concave tooth oblique and inflected.
2. Swainsoni, *ovata, dente concavo horizontali-protenso.*  
oval, with the concave tooth projecting horizontally inwards.
3. *decussata, decussatim striata.*  
with decussate striæ.

## 11. CORBULA.

1. Nucleus, *Corbula.*

## 12. PANDORA.

1. *margaritacea, Pandora.*

## 13. PANOPÆA.

1. Glycymeris, *Panopæa.*

## 14. ANATINA.

\* *Cochlearibus obliquis.*

with the spoon-shaped teeth oblique.

1. *convexa, oblonga, cochlearibus integerrimis.*  
oblong, with the teeth very entire.
2. *pubescens, oblonga cochlearibus emarginatis.*  
oblong, with a notch on the teeth.
3. *truncata, cuneata umbonibus subterminalibus.*  
wedge-shaped, with the beaks nearly terminal.

\*\* *Cochlearibus horizontali-protensis*,  
with the teeth projecting horizontally.

4. *declivis, latere antico truncato.*  
the anterior end truncate.
5. *prætenuis, latere antico rotundato.*  
the anterior end rounded.
7. *arctica, latere postico truncato.*  
the hinder end truncate.
6. *distorta, margine sinuato.*  
the margin indented.

15. *LISTERA*.

1. *compressa, Listera.*

16. *AMPHIDESMA*.

1. *prismaticum, valvâ alterâ denticulo simplici et lateralibus.*  
in one valve a simple denticle and lateral teeth.
2. *tenue, valvâ alterâ denticulo fisso et lateralibus.*  
in one valve a cloven denticle and lateral teeth.
3. *Boysii, valvâ alterâ denticulis duobus et lateralibus.*  
in one valve two denticles and lateral teeth.

17. *AGINA*.

1. *purpurea, Agina.*

18. *ERVILIA*.

1. *nitens, Ervilia.*

## 19. KELLIA.

1. *suborbicularis, subrotunda, æquilateralis, alba.*  
roundish, equilateral, and white.
2. *rubra, ovata, inæquilateralis, rubra.*  
oval, inequilateral, and red.

## 20. MONTACUTA.

1. *substriata, costulis longitudinalibus obscuris.*  
with obscure longitudinal ribs.
2. *bidentata, dente altero obliquo cochleariformi.*  
one of the teeth oblique and spoon-shaped.
3. *ferruginosa, dente altero inflexo concavo.*  
one of the teeth inflected and concave.
4. *oblonga, dentibus erectis.*  
with all the teeth erect.

## 21. LEPTON.

1. *squamosum, squamoso-punctatum.*  
punctured in a scale-like manner.
2. *nitidum, substriatum nitidum.*  
slightly striate and glossy.

## 22. LUTRARIA.

1. *oblonga, latere antico truncato.*  
truncate at the anterior end.

2. elliptica, *lateribus rotundatis*.  
rounded at both ends.

## 23. MACTRA.

\* *dentibus lateralibus striatis*.  
the lateral teeth striate.

1. solida, *ovato-trigona, æquilateralis, læviuscula*.  
oval-triangular, equilateral, and smooth.
2. truncata, *trigona, æquilateralis, lateribus truncatis*.  
triangular, epilateral, truncate at the sides.
3. crassa, *trigona, inæquilateralis læviuscula*.  
triangular, inequilateral, nearly smooth.
4. subtruncata, *ovato-trigona, inæquilateralis, transversim sulcata*.  
oval-triangular, inequilateral, grooved transversely.
5. deaurata, *oblonga, inæquilateralis, transversim rugosa*.  
oblong, inequilateral, transversely wrinkled.  
\*\* *dentibus lateralibus lævibus*.  
with the lateral teeth smooth.
6. Stultorum, *æquilateralis, transversim substriata*.  
equilateral, and slightly striate transversely.
7. cinerea, *subæquilateralis, læviuscula*.  
nearly equilateral and smooth.
8. glauca, *inæquilateralis, transversim striata*.  
inequilateral and striate transversely.



9. *fragilis, flexurá longitudinali anticá.*  
with a longitudinal flexure at the anterior side.
10. *radiata, striis minutis longitudinalibus, reticulata.*  
reticulate by minute longitudinal striæ.

## 24. GOODALLIA.

1. *triangularis, margine interno denticulato.*  
with the inner margin toothed.
2. *minutissima, margine interno integerrimo.*  
with the inner margin very entire.

## 25. SOLEN.

- \* *valvis unidentatis.*  
with a single tooth in each valve.
1. *Vagina, dentibus complanatis.*  
with the teeth flattened.
2. *Novacula, dentibus conico-acuminatis*  
with the teeth rather conic and pointed.  
\*\* *valvâ alterâ bidentatâ.*  
with two teeth in one valve.
3. *Siliqua, rectus, dente solitario hastato-acuminato.*  
straight, with the single tooth spear-shaped and pointed.
4. *Ligula, rectus, dente solitario obtuso fisso.*  
straight, with the single tooth obtuse and cloven.
5. *Ensis, subarcuatus, dentibus simplicibus.*  
slightly curved, with the two teeth simple.

6. *pellucidus, subarcuatus, dente altero bipartito.*  
slightly curved, with one of the two teeth deeply  
cloven.

## 26. PSAMMOBIA.

\* *valvâ alterâ bidentatâ.*  
with two teeth in one of the valves.

1. *tæniata, dente altero planato-rotundato.*  
one of the two teeth flattened and rounded.
2. *florida, striis minimis longitudinalibus reticulata.*  
reticulate by minute longitudinal striæ.
3. *costulata, anticè costulis obliquis.*  
with oblique ribs on the anterior side.
4. *fragilis, striis transversis lamellatis.*  
with transverse laminar striæ.
5. *Laskeyi, foveâ transversâ elongatâ cardinali.*  
with a transverse elongated cavity at the hinge.  
\*\* *valvis bidentatis.*  
with two teeth in each valve.
- 9! *Legumen, linear-oblonga, dente altero bipartito.*  
linear-oblong, with one of the teeth deeply cloven.
7. *declivis, oblonga, dente altero concavo.*  
oblong, with one of the teeth concave.
8. *antiquata, reniformis, dentibus conico-erectis.*  
kidney-shaped, with the teeth conic and erect.

9. *vespertina*, *anticè subangulata*, *dente altero laminari obliquo*.  
somewhat angular at the anterior end, with one of  
the teeth laminar and oblique.
10. *deflorata*, *anticè subangulata*, *striis decussatis*.  
somewhat angular, with decussate striæ.
11. *Ferroensis*, *anticè flexurâ angulari*, *areâ anguli reticulatâ*.  
with an angular flexure at the anterior side, and  
the area of the angle reticulate.
12. *solidula*, *subtrigona*, *dentibus minutis obtusis*.  
somewhat triangular, with the teeth small and  
obtuse.
13. *polygona*, *suborbicularis*, *marginè subundato*.  
somewhat orbicular, with the margin a little  
irregular.
14. *strigilata*, *anticè bifariâ striata*, *dente altero laminari obliquo*.  
striate in two directions at the anterior side, with  
one of the teeth laminar and oblique.
15. *Scopula*, *anticè bifariâ striata*, *dentibus erectis*.  
striate in two directions at the anterior side, with  
all the teeth erect.

## 27. TELLINA.

\* *valvâ alterâ bidentatâ*.

one valve with two teeth.

1. *lineata*, *valvâ unidentatâ absque lateralibus*.  
the single toothed valve without lateral teeth.

2. *punicea*, *valvâ unidentatâ cum laterali*.  
the single toothed valve with a lateral tooth.
3. *Fabula*, *valvâ alterâ lævi, alterâ obliquè striatâ*.  
one valve smooth, the other striate obliquely.
4. *similis*, *valvis obliquè striatis*.  
both valves striate obliquely.
5. *Donacina*, *latere antico obtusissimo*.  
the anterior extremity very obtuse.
6. *bimaculata*, *ovato-trigona, maculata*.  
oval-triangular, and spotted.
7. *depressa*, *ovato-oblonga, anticè rostrata*.  
oval-oblong, produced to a point at the anterior end.  
\*\* *valvis bidentatis, ovatæ*.  
both valves with two teeth, and the shell oval.
8. *striata*, *valvâ utrâque dentibus lateralibus*.  
with lateral teeth in each valve.
9. *tenuis*, *valvâ unicâ dentibus lateralibus*.  
with lateral teeth in one valve only.  
\*\*\* *valvis bidentatis, snborbiculares*.  
with two teeth in each valve, and the shell somewhat orbicular.
10. *maculata*, *valvâ utrâque dentibus lateralibus.*]   
with lateral teeth in each valve.
11. *crassa*, *valvâ unicâ dentibus lateralibus*.  
with lateral teeth in one valve only.

## 28. LUCINA.

\* *foveá interná obliquá.*

with the internal cavity oblique.

1. *lactea, orbicularis, striis transversis irregularibus.*  
orbicular, with irregular transverse striæ.
2. *Leucoma, subobliqua subflexuosa, striis crebris regularibus.*  
somewhat oblique and flexuous, with crowded regular striæ.

\*\* *foveá interná rectiusculá.*

with the internal cavity nearly straight.

3. *alba, valvâ alterâ unidentatâ.*  
a single tooth in one valve.
4. *rotundata, valvis bidentatis, lævis.*  
the valves two toothed, smooth.
6. *Radula, valvis bidentatis, striis crebris laminatis.*  
the valves two-toothed, with crowded laminar striæ.
5. *undata, valvâ alterâ tridentatâ.*  
one of the valves with three teeth.

## 29. STRIGILLA.

1. *carnaria, striis hinc flexuoso-angulosis.*  
with the striæ angularly flexuous on one side.
2. *pisiformis, striis hinc acutangulosis.*  
the striæ acutangular on one side.

3. *divaricata*, *striis utrinque rectangularibus*.  
the striæ rectangular on both sides.

## 30. CRYPTODON.

1. *flexuosus*, *Cryptodon*.

## 31. DONAX.

\* *marginè interno denticulato*.  
with the inner margin toothed.

1. *Trunculus*, *striis longitudinalibus lævibus*.  
with the longitudinal striæ smooth.
2. *denticulata*, *striis longitudinalibus punctatis*.  
with the longitudinal striæ punctured.  
\*\* *marginè interno integerrimo*.  
with the inner margin very entire.
3. *complanata*, *vittâ albâ longitudinali*.  
with a single white longitudinal band.
4. *plebeia*, *vittis duabus fulvis longitudinalibus*.  
with two fulvous longitudinal bands.
5. *rubra*, *vinacea immaculata lævis*.  
of an uniform pale claret-color and smooth.

## 32. CAPSA.

1. *castanea*, *castaneo-rubra*, *vittâ longitudinali saturatiori subarcuatâ*.  
bright chesnut, with a deeper and somewhat curved longitudinal band.

## 33. CRASSINA.

\* *marginè interno integerrimo.*  
with the inner margin very entire.

1. subrhomboidea, *anticè truncata, transversim rugosa.*  
truncate at the anterior side, and wrinkled  
transversely.
2. Scotica, *orbicularis, costis transversis rotundatis.*  
orbicular, with rounded transverse ribs.

\*\* *marginè interno denticulato.*  
with the inner margin toothed.

3. sulcata, *orbicularis, costis transversis rotundatis.*  
orbicular, with rounded transverse ribs.

## 34. MYRTEA.

1. spinifera, *Myrtea.*

## 35. CYPRINA.

1. Islandica, *areâ obsoletâ, dentibus tribus cum laterali remoto.*  
the area obscure, with three teeth and a remote  
lateral one.
2. compressa, *transversim costata, dentibus duobus cum laterali.*  
transversely ribbed, with two teeth and a lateral  
one.
3. triangularis, *lævis, valvâ alterâ tridentatâ.*  
smooth, with three teeth in one valve.

4. *minima, maculis quatuor sanguineis.*  
with four scarlet spots.
  5. [*orbiculata, decussatim striata.*  
with decussate striæ.
36. VENUS.
- \* *marginè interno crenulato.*  
with the inner margin notched.
  - † *orbiculo-cordatæ.*  
orbicular heart-shaped.
1. *verrucosa; subglobosa, lateribus verrucosis.*  
nearly globular, warty at the sides.
  2. *Casina, orbicularis, laminis subimbricatis.*  
orbicular, with somewhat imbricate plates.
  3. *reflexa, anticè subangulata laminis reflexis.*  
a little angular at the anterior end, where the  
plates are reflected.
  4. *cancellata, laminis remotis crebrò cancellatis.*  
with remote plates which are closely cancellated.
  5. *subcordata, stris remotis longitudinalibus lamellas remotiores  
decussantibus.*  
with remote longitudinal striæ decussating the  
more remote plates.
  6. *granulata, granulatim decussata.*  
decussate in a granular manner.
  7. *fasciata, costis latis planatis lævibus.*  
with broad flat smooth ribs.



†† *trigono-cordatæ.*

triangular heart-shaped.

8. *Dysera, lamellis remotis crebro cancellatis.*  
with remote plates which are closely cancellated.
9. *laminosa, lamellis membranaceis confertis, crebro cancellatis.*  
with crowded membranaceous plates, which are closely cancellated.
10. *Gallina, striis sublaminosis imbricatis lævibus.*  
with somewhat laminar imbricate smooth striæ.
11. *pallida, costulis obtusis remotis reticulatis.*  
with obtuse remote reticulate rib-like striæ.
12. *ovata, costis longitudinalibus transversim squamosis.*  
with longitudinal ribs which are transversely scaly.  
\*\* *marginè interno integerrimo.*  
with the inner margin very entire.
- † *ovatæ.*  
oval.
13. *substriata, rugis transversis obsoletè undatim reticulatis.*  
with transverse ridges which are obscurely reticulate in an undulate manner.
14. *ænea, anticè attenuata, obsoletè reticulata.*  
tapering at the anterior side, and obscurely reticulate.
15. *Sarniensis, latere antico tumido obtuso.*  
obtuse and tumid at the anterior end.

16. *sinuosa*, *sinu longitudinali ab umbone*.  
with a longitudinal sinuosity from the beak.
17. *aurea*, *medio tumido, lateribus attenuatis*.  
tumid in the middle, and tapering to the sides.  
†† *latere antico angulato*.  
angular at the anterior side.
18. *virginea*, *striis transversis planatis anticè latioribus*.  
with flat transverse striæ which are broader at  
the anterior side.
19. *nitens*, *medio tumido, striis obsolete reticulatis*.  
tumid in the middle, and obscurely reticulate.
20. *decussata*, *striis decussatis anticè tuberculis, dentibus duobus  
fissis*.  
with decussate striæ which are tubercular at the  
anterior side, and two of the teeth cloven.
21. *Pullastra*, *striis decussatis minutis anticè rugosis, dente unico  
fisso*.  
with minute decussate striæ which are rough at  
the anterior side, and one of the teeth cloven.

## 37. CYTHEREA.

1. *Chione*, *ovato-cordata nitida*.  
oval heart-shaped and polished.
2. *Guineensis*, *obliquè cordata, lamina transversis subimbricatis*.  
obliquely heart-shaped, with transverse and some-  
what imbricate plates.

3. *exoleta, orbiculo-cordata depressa, striis transversis capillaceis*.  
orbicular heart-shaped and flattish, with transverse capillary striæ.
4. *sinuata, obovato-cordata tumida, striis transversis capillaceis*.  
oboval heart-shaped tumid, with transverse capillary striæ.
5. *Tigerina, orbiculo-cordata, striis decussatis*.  
orbicular heart-shaped, with decussate striæ.

## 38. ARCA.

\* *marginè interno crenulato*.  
with the inner margin toothed.

1. *Noæ, angulo marginis superi productioni*.  
with the angle of the upper margin longer.
2. *fusca, angulo marginis superi breviori*.  
with the angle of the upper margin shorter.
3. *tetragona, subtetragona, costâ longitudinali*.  
nearly square, with a longitudinal rib.
4. *reticulata, costis longitudinalibus barbatis decussatis*.  
with bearded decussate longitudinal ribs.

\*\* *marginè interno integerrimo*.  
the inner margin very entire.

5. *perforans, latere antico angulato*.  
angular at the anterior side.

## 39. PECTUNCULUS.

1. *Glycymeris, inæquilateralis, maculis longitudinalibus.*  
inequilateral, with the colored marks disposed longitudinally.
2. *pilosus, æquilateralis maculis longitudinalibus.*  
equilateral, with the colored marks disposed longitudinally.
3. *undatus, maculis transversis undatis.*  
with the colored marks transverse and undulate.
4. *decussatus, decussatim striata, maculis nebulosis.*  
with decussate striæ and clouded marks.
5. *nummarius, umbonibus tumidis, maculis sanguineis punctatus.*  
the beaks tumid, covered with scarlet dots.

## 40. NUCULA.

- \* *marginè interno crenulato.*  
the inner margin toothed.
1. *Nucleus, obliquè ovata nitida.*  
obliquely oval and glossy.  
\*\* *marginè interno integerrimo.*  
the inner margin very entire.
  2. *tenuis, obliquè cordata læviuscula.*  
obliquely heart-shaped and nearly smooth.
  3. *rostrata, ovata, anticè rostrata arcuata rotundata.*  
oval, with the anterior side produced curved and rounded.
  4. *minuta, ovata, anticè rostrata arcuata truncata.*  
oval, with the anterior side produced curved and truncate.

## 41. CARDIUM.

\* *costis spinosis vel tuberculatis.*

the ribs armed with spines or tubercles.

1. *aculeatum*, *costis 21, anticis spinosis posticis tuberculatis.*  
with 21 ribs, the anterior ones spinous and the  
hinder ones tubercled.
2. *tuberculatum*, *costis 21, anticis tuberculatis posticis subsquamosis.*  
with 21 ribs, the anterior ones tubercled and the  
hinder ones somewhat scaly.
3. *echinatum*, *costis 18, spinis numerosis inflexis.*  
with 18 ribs, armed with numerous inflected spines.
4. *elongatum*, *ovatum elongatum, costis 25 aculeatis.*  
oval and elongated, with 25 prickly ribs.
5. *nodosum, orbiculare, costis 26 crebro tuberculatis.*  
orbicular, with 26 closely tubercled ribs.
6. *exiguum, subtrigonum, costis 20 tuberculatis.*  
somewhat triangular, with 20 tubercled ribs.  
\*\* *costis transversim squamosis.*  
the ribs armed with transverse scales.
7. *edule, subglobosum antiquatum opacum.*  
somewhat globular antiquated and opaque,
8. *fasciatum, orbiculare depressum subpellucidum.*  
orbicular flat and semitransparent,  
\*\*\* *costis muticis.*  
the ribs unarmed.

9. medium, *orbiculare, costis numerosis transversim striatis.*  
orbicular, with numerous transversely striate ribs.
10. *lævigatum, obovatum nitidum, costis obsoletis.*  
obovate and glossy, with the ribs obscure.
11. *serratum, obovatum nitidum sulphureum glaberrimum.*  
obovate glossy and sulphur yellow, with the ribs quite obliterated.

## 42. ISOCARDIA.

1. Cor, *Isocardia.*

## 43. MYTILUS.

1. *ungulatus, transversim rugosus, subquadridentatus.*†  
transversely wrinkled, with four or five teeth.
2. *edulis, lævis, subquadridentatus.*  
smooth, with four or five teeth.
3. *incurvatus, crassus opacus incurvatus, subbidentatus.*  
thick opaque and incurved, with two or three teeth.
4. *pellucidus, diaphanus radiatus rectus subbidentatus.*  
transparent radiate and straight, with two or three teeth.

## 44. MODIOLA.

1. *Modiolus, oblonga solida, anticè obliquè dilatata.*  
oblong and solid, obliquely dilated at the anterior side.
2. *Gibsi, foliaceo-barbata, foliis hinc serratis.*  
bearded with foliations which are serrate on one side.

3. *discors*, *convexa*, *lateribus costatis*, *umbonibus terminalibus*.  
convex, ribbed at the sides, with the beaks terminal.
4. *discrepans*, *depressa*, *lateribus costatis*, *umbonibus sub-terminalibus*.  
flattish, ribbed at the sides, with the beaks not quite terminal.

## 45. OSTREA.

1. *Crista Galli*, *transversim squamosa*, *marginè trigono-plicato*.  
with transverse scales, and triangular plaits at the margin.
2. *edulis*, *transversim squamosa*, *marginè lævi integerrimo*.  
with transverse scales, and the margin smooth and quite entire.
3. *parasitica*, *læviuscula*, *parasitica*.  
nearly smooth, and fixed to other substances.

## 46. PECTEN.

- \* *auriculis subæqualibus*.  
with the auricles equal or nearly so.
1. *maximus*, *valvâ superiori planatâ*, *radiis rotundatis*.  
the upper valve flat, with the rays rounded.
  2. *Jacobæus*, *valvâ superiori planatâ*, *radiis angulatis*.  
the upper valve flat, with the rays angular.
  3. *opercularis*, *radiis subviginti scabris*.  
with about 20 rough rays.

4. *subrufus*, *radiis subviginti lævibus*.  
with about 20 smooth rays.
5. *sinuosus*, *variè distortus*, *striis numerosis echinatis*.  
variously distorted, with numerous prickly rays.
6. *glaber*, *striis transversim minutissimis*.  
with very minute transverse striæ.
7. *tumidus*, *glaberrimus*, *latere altero producto*.  
quite smooth, produced at one of the sides.  
\*\* *auriculis inæqualibus*.  
with the auricles unequal.
8. *lævis*, *planatus*, *pellucidus*, *glaberrimus*.  
flattish, transparent, and quite smooth.
9. *obsoletus*, *striis minutissimis longitudinalibus subundatis*.  
with very minute longitudinal undulate striæ.
10. *varius*, *radiis 28 echinatis*.  
with about 28 prickly rays.
11. *Pusio*, *radiis 40*, *alternis minoribus*.  
with about 40 rays which are alternately smaller.
12. *Islandicus*, *radiis numerosis bifidis*.  
with numerous doubled rays.

## 47. LIMA.

1. *bullata*, *convexa*, *striis subundatis intermediis minoribus*.  
convex, with somewhat undulate striæ and smaller ones between them.



2. *subauriculata, depressa, striis rectis uniformibus.*  
flattish, with straight uniform striæ.

## 48. AVICULA.

1. *Hirundo, caudâ longitudine alæ.*  
the tail as long as the wing.

## 49. PINNA.

1. *ingens, arcuatim striata, posticè truncata recta.*  
with curved striæ, truncate and straight at the  
hinder side.
2. *fragilis, arcuatim striata, posticè producta rotundata.*  
with curved striæ, produced and rounded at the  
hinder side.
3. *pectinata, costis 16 confertis squamosis.*  
with 16 close-set scaly ribs.
4. *papyracea, costis 9 remotis muticis.*  
with 9 remote unarmed ribs.
5. *muricata, carnea, costis 7 concavo-spinosis.*  
pale red, with 7 ribs armed with concave spines.

## 50. ANOMIA.

1. *electrica, pellucida succinea.*  
transparent and amber-colored.
2. *Ephippium, suborbicularis, margine undato.*  
somewhat orbicular, undulate at the margin.
3. *Cepa, obovata planiuscula, intus rosea.*  
oboval flattish, rosy on the inside.
4. *Squamula, suborbicularis lævis pellucida.*  
somewhat orbicular smooth and transparent.

5. undulata, *striis longitudinalibus undulatis.*  
with longitudinal undulate stræ.
6. aculeata, *striis longitudinalibus aculeatis.*  
with longitudinal prickly striæ.
7. punctata, *suprà punctis elevatis, infrá concavis.*  
with raised dots above, and concave ones beneath.
8. cylindrica, *ovata, transversim rugosa, umbone recurvo.*  
oval, transversely wrinkled, with the beak recurved.
9. striolata, *ovata, longitudinalitèr substriata: umbone recurvo.*  
oval, striate longitudinally, with the beak recurved
10. fornicata, *valvâ superiori sub umbonem fornicatâ.*  
the upper valve vaulted under the beak.
11. tubularis, *valvæ inferioris foramine cylindrico-tubulari.*  
the perforation of the under valve cylindrical and tubular.

## 51. TEREBRATULA.

1. Cranium, *striis minutis decussatis.*  
with minute decussate striæ.
2. Psittacea, *striis longitudinalibus.*  
with longitudinal striæ.

## 52. DISCINA.

1. ostreoides, *Discina.*

**B. *Testæ aquarum dulcium.* 53--56.**  
**Fresh water Shells,**

Independently of their general systematic classification, the fresh water bivalve shells form a series naturally distinct from those of the ocean, by their locality and habits. They have therefore been brought together, as exhibiting a division, the separate study and arrangement of which may be rendered of more easy and simple accomplishment.

All the natives of the British Islands have the Ligament external, and are comprehended in four genera, whose essential characters may be thus exemplified :

53. ANODON, *Cardo edentulus, sinu antico marginali.*  
 Hinge without teeth, with a marginal depression at the anterior side.
54. UNIO, *Cardo dentibus primariis, lateralibus nullis.*  
 Hinge with primary teeth, but no lateral ones.
55. MYSCA, *Cardo dentibus primariis, lateralibus anticis.*  
 Hinge with primary teeth, and lateral ones on the anterior side only.
56. CYCLAS, *Cardo dentibus duobus primariis, lateralibus utrinque.*  
 Hinge with two primary teeth, and lateral ones on each side.

## 53. ANODON.

1. *Cygneus, inæquilateralis, anticè angustato-acuminatus.*  
inequilateral, narrowed to a point at the anterior side.
2. *paludosus, subæquilateralis, anticè sinuato-subangulatus.*  
nearly equilateral, sinuous and somewhat angular at the anterior side.
3. *Anatinus, anticè alatus, umbonibus erosis.*  
winged at the anterior side, and eroded about the beaks.
4. *Avonensis, lateribus rotundatis, umbonibus subterminalibus.*  
rounded at the sides, and the beaks nearly terminal.

## 54. UNIO.

1. *margaritiferus, subarcuatus, epidermide nigra.*  
slightly arched, and clothed with a black skin.

## 55. MYSCA.

1. *Batava, extremitatibus rotundatis.*  
rounded at both sides.
2. *Pictorum, oblonga, anticè acuminata, margine coarctato.*  
oblong, pointed at the anterior end, with the margin contracted.
3. *ovata, ovata, margine subarcuato.*  
oval, with the margin slightly curved.
4. *solida, crassa subcylindrica, anticè acuminata.*  
thick somewhat cylindrical, and pointed at the anterior end.

## 56. CYCLAS.

\* *suborbiculares, æquilaterales.*

nearly orbicular, and equilateral.

1. *rivicola, opaca, striis, transversis regularibus.*  
opaque, with regular transverse striæ.
  2. *cornea, subdiaphana, transversim substriata.*  
somewhat transparent, with irregular transverse  
striæ.
  3. *lacustris, pellucida, lævis, umbonibus tuberculosus.*  
transparent and smooth, with the beaks tubercular.  
\*\* *obliquæ, inæquilaterales.*  
oblique, and inequilateral.
  4. *amnica, transversim sulcata, umbonibus tumidis.*  
transversely grooved, with the beaks prominent.
  5. *pusilla, transversim substriata, umbonibus depressis.*  
irregularly striate transversely, with the beaks  
depressed.
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— *si quid novisti rectius istis  
candidus imperti, si non his utere mecum.*

# CONCHYLIA—*DITHYRA*. 1.

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## 1, PHOLAS—LINNE.

*Testa transversa, ovata, æquivalvis, inæquilateralis, hinc hians, accessorius difformibus sæpius instructa. Cardo dente longo curvo sub marginem inserto, in utráque valvâ: lateralibus nullis. Ligamentum nullum.*

Shell transverse, oval, equivalve, inequilateral, open at one or both the sides, and often furnished with differently shaped accessorial valves. Hinge with a long curved tooth in each valve, inserted under the margin: lateral teeth none. Ligament none.

**T**HIS genus, and that of the *Teredo*, are remarkable in being destitute of permanent ligament to connect the two valves; a support which their natural and constant lodgement in stone and wood, seems to render less necessary than to the free bivalves, which are exposed to external agitation and accidents.

Some of them, however, have the valves strengthened by accessorial ones, placed about the hinge or in front; and some are merely united by a strong elastic membrane.

These accessorial valves form no part of the necessary generic character, as some of the species are entirely without them, and in others they vary both in number and shape.

From the *Teredo* this genus differs, both in the shape of the shell, which is transversely elongated and oval, and in wanting the cylindrical tube with its accessorial appendages.

\* *Valvis sulco longitudinali divisis. 1-4.*

The valves divided by a longitudinal groove.

Papyracea. PHOLAS *testá clavata, latere antico clauso obtusissimo, postico hiante truncato accessorio producto annulari.*

Shell club-shaped, closed and very obtuse at the anterior end, open and truncate at the other end, which is furnished with a produced accessorial ring.

*Tab. nost. 1. fig. 1 to 4.*

Pholas papyraceus. *Solander, Manuscripts.*

*Portland Catalogue, p. 82, lot 1828.*

Pholadidea Loscombiana. *Turton, Conch. Dict. p. 147.*

*Mus. nost. In Torbay.*

Shell three quarters of an inch long, and an inch and three quarters wide including the ring, in color and appearance resembling whitish brown paper: the anterior end inflated, very obtuse and rounded, closed when the valves are shut, and quite smooth for about half its surface: the hinder half marked with close-set



rather oblique crenate ribs: near the middle is a somewhat oblique longitudinal groove, beyond which it is striate in a coarser manner and more straight direction: the smaller end is open, truncate, and invested with a very thin ring, which extends more than a quarter of an inch beyond the truncated termination, gradually dilating itself outwards in diameter.

This ring, or circular appendage, is divisible into two equal parts, the segments of which are united by thin elastic membranes. The back has two accessorial appendages, with the edges of the valves reflected at the anterior end, so as to form a kind of double obtuse keel which reaches as far as the longitudinal groove, near the end of which is a kind of raised joint, where the accessorial valves are fixed: inside dull white, with a longitudinal rib corresponding with the outside groove: teeth rather short, flat, and on the margin, above the teeth, is an erect somewhat triangular and rather concave plate, which in one of the valves is much larger, and contains a portion of the animal fold, but no distinct permanent ligament.

This rare and very singular species appears to have been known to Solander, and the late dutchess of Portland. Mr. Swainson, of Elm-Grove, near Liverpool, who has lately obtained some specimens from Torbay, informs us, that he is in possession of a very small pair, presented to him by the Dutchess, from which he had drawings made by Agnew, her Grace's gardener. And there appears very little doubt but that it is the species alluded to in the manuscripts of Solander, and from these manuscripts quoted in the Portland Catalogue. Mr. Humphrey purchased the lot.

A single specimen was found on the strand near Exmouth, by Mr. Loscombe. And it has since been discovered to inhabit the

soft calcareous sandstone and submarine peat in Torbay, whence we have taken it alive at the lowest equinoctial tides.

lamellata. PHOLAS *testá latere antico hiantissimo, postico rotundato subclauso, margine supra dentes lamellá erectá, accessorüs nullis.*

Shell very open at the anterior end, rounded and nearly closed at the other, with an erect laminar process on the margin above the teeth, and without accessorial valves.

*Tab. nost. 1. fig. 5 and 6.*

*Mus. nost.* Found with the last.

Shell more than half an inch long, and an inch broad, oval, white, without accessorial valves, with a very large oval opening on the anterior side, where the margins of the valves are flattened and a little reflected, and produced into a short beak, covered entirely with close-set rather oblique transverse crenate ribs, which beyond the longitudinal groove are coarser and straighter; the smaller end rounded and nearly closed: inside with a longitudinal rib in the middle; the teeth long, slender, and flat, and on the margin above them is a triangular process, as in the last.

It has been suggested to us, that a belief is entertained of this shell being the young of *Pholas papyracea*. But as we have opportunities of examining each of them in every stage of their growth, both perfect and with the valves separated, we can with confidence assert, that no two species of the same genus are more dissimilar, and distinct in their essential characters.

Independently of the total want of the ring, and the large

frontal gape, the smaller end is rounded, and not as in the last species truncate, and it has no accessorial valves. In addition, also, to the other marks of discrimination, it may be observed, that the valves of the *Pholas papyracea* are closed in front by a fine elastic membrane, in the middle of which, near the base or rounded extremity, is a small orifice or spiracle, which can be closed at pleasure, and through which water is often ejected.

Mrs. Griffiths, who has herself taken them from their native rocks, and given much attention to the subject, observes that the animals are quite different.

*PHOLAS testâ latere antico hiante, margine supra dentes tuberculo Tuberculata scabro, accessorio unico cardinali.*

Shell open at the anterior end, with a rough tubercle on the margin above the teeth, and a single accessorial valve at the hinge.

*Tab. nost. 1, fig. 7 and 8.*

*Mus. nost.* Found with the last, though very rarely.

Shell three quarters of an inch long, and an inch and a half broad, oval, white, with a single oblong accessorial valve at the back, which reaches to the anterior termination, where the valves meet together and are scarcely elongated into a beak; the opening or gape nearly orbicular.

The surface of the anterior end is covered with close-set oblique transverse rough ribs, which are straighter beyond the longitudinal groove, and gradually disappear towards the smaller end which is rounded and nearly closed: inside with a longitu-

dinal rib, and on the margin above the teeth is a large rough wrinkled tubercle.

In its outline this species has a great resemblance to the *Pholas parva*, but differs in the following particulars.

The shell is thicker and stronger; the valves are divided in the middle by a longitudinal groove, and have a corresponding rib on the inside; the transverse ribs are more numerous, and rougher; the gape is more obicular, not produced into a beak, and in consequence the extremities of the valves meet close together behind; the tubercles on the inside are rough with wrinkles; and the accessorial valve at the back is truncate and not pointed at the end, and reaches to the anterior extremity of the shell.

*Crispata*

*PHOLAS testâ ovato-oblongâ, extremitatibus hiantissimis, margine supra dentes mutico.*

Shell oval oblong, very open at both ends, the margin above the teeth smoth and without laminar process.

*Pholas crispata.* *Linn. Syst. Nat.* p. 111.

*Gmelin, Syst.* p. 3216.

*Turton, Linn. Syst.* iv. p. 173.

*Pennant, Brit. Zool.* iv. p. 157, tab 43. fig. 2.

*Chemnitz, viii.* p. 369, tab. 102, fig. 872 to 874.

*Montagu, Test. Brit.* p. 23.

*Donovan, Brit. Shells* ii. tab. 62.

*Turton, Brit. Fauna,* p. 145.

*Linn. Trans.* viii. p. 32.

*Dorset Catal.* p. 27, tab. 3, fig. 4.

*Wood*, Conch. p. 81, tab. 15, fig. 3 to 5.

*Dillwyn*, Descript. Catal. p. 40.

*Turton*, Conch. Dict. p. 146.

*Pholas bifrons.* *Da Costa*, Brit. Conch. p. 243, tab. 16, fig. 4.

*Pholas latus.* *Lister*, Conch. tab. 436. fig. 279, and Append.  
tab. 19, fig. 3.

*Mus. nost.* In rocks and hard clay.

Shell usually an inch and a half long, and two in breadth, whitish or ferruginous, much thicker and stronger than the other species, rounded at the hinder end and produced into a short beak at the other: from the middle of the hinge runs a longitudinal groove, dividing the valves into two nearly equal portions, the anterior or more produced portion marked with strong transverse muricate striæ on the outer surface, the other part marked with plain and rather obscure ones: hinge smooth, and without any elevated process on the margin above the teeth. In consequence of the length being nearly equal to the breadth, the valves have a somewhat triangular appearance, causing both the extremities to be very open.

*Lister*, in his appendix ad *Hist. Anim. Angl.* p. 44, observes, that there is a small accessorial valve at the hinge: "*huic quod imprimis notandum est, etiam tertia testa exigua est ad valvarum cardinem.*" And *Linne Mus. Reg. Lud. Ulr.* p. 469, makes the same remark, taking *Lister* for his authority: "*accessoria tertia ad cardinem exigua, Lister, hujus ideoque generis.*" We have not as yet been fortunate enough to find it in its native lodgement.

## CONCHYLIA—DITHYRA. 1.

\*\* *Valvis medio indivisis.* 5. 8.

The valves not divided by a groove.

**Dactylus** *PHOLAS testâ oblongo-ovatâ, latere antico hiantissimo rostrato, margine postico reflexo celluloso, accessorüs quatuor.*

Shell oval-oblong, very open and produced into a beak at the anterior end, the back margin reflected and divided into cells, with four accessorial valves.

*Pholas Dactylus.* *Linn.* Syst. Nat. p. 1110.

*Gmel.* Syst. p. 3214.

*Turton*, *Linn.* Syst. iv. p. 172

*Pennant*, *Brit. Zool.* iv. p. 156, tab. 42, fig. 1.

*Chemnitz*, viii. p. 353, tab. 101, fig. 859.

*Montagu*, *Test. Brit.* p. 20 and 558.

*Donovan*, *Brit. Shells* iv. tab. 118

*Turton*, *British Fauna.* p. 145.

*Dorset Catal.* p. 27, tab. 3, fig. 2.

*Linn Trans.* viii. p. 30.

*Wood*, *Conch.* p. 77, tab. 13, fig. 1 to 3

*Dillwyn*, *Descript. Catal.* p. 35.

*Turton*, *Conch. Dict.* p. 143.

*Pholas muricatus.* *Da Costa*, *Brit. Conch.* p. 244, tab. 16 fig. 2.

*Pholas striatus.* *Lister*, *Conch.* tab. 433, fig. 276, and *Append.* tab. 19, fig. 1 and 2.

*Mus. nost.* Inhabits rocks and submarine stumps of trees.

The most common of our British species, and may be immediately distinguished by the cells, which are placed in a trans-

verse series in each valve under the reflected margin of the hinge at the back, and which are covered when alive by a fold of the animal mantle and the cardinal accessorial plates.

It is subject to much variation in shape, and often distorted, being sometimes as long as it is broad. When lodged in the stumps of old trees covered by the sea, and exposed only at the lowest tides, it attains a very considerable size, as some specimens in our cabinet measure full two inches long and seven in breadth.

*PHOLAS testá ovatá, latere antico hiantissimo rostrato, margine supra parva. dentes tuberculo lævi, accessorio unico cardinali.*

Shell oval, very open and produced in a beak at the anterior end, with a smooth tubercle on the margin above the teeth, and a single accessorial valve at the hinge.

*Pholas parva.* Pennant, Brit. Zool. iv. p. 157, tab. 43, fig. 1.  
 Montagu, Test. Brit. p. 22, tab. 1. fig. 7 and 8.  
 Turton, British Fauna, p. 145.  
 Linn. Trans. viii. p. 33.  
 Wood, Conch. p. 38.  
 Dillwyn, Descript. Catal. p. 82.  
 Turton, Conch. Dict. p. 143.

*Mus. nost.* Plentifully in the rocks in Torbay.

A very elegant species, growing to about three quarters of an inch in length, and an inch and a half broad, but is usually less, and may be readily known by the wide and oval opening which extends into a beak, by the want of cells under the reflected margin at the back, and the round smooth tubercle placed upon the

margin of the hinge on the inside of each valve just over the teeth; the accessorial valve at the back is lanceolate, being produced to a point at both ends.

candida.

*PHOLAS testá obovatá, latere antico subclauso obtuso, valvá alterá laminá curvâ marginali supra dentem, accessorio unico cardinali.*

Shell oboval, obtuse and nearly closed at the anterior end, with a curved lamina in one valve above the tooth, and a single accessorial valve at the hinge.

- Pholas candida.* *Linn. Syst. Nat.* p. 1111.  
*Gmelin, Syst.* p. 3215.  
*Turton, Linn. Syst. iv.* p. 173.  
*Pennant, Brit. Zool. iv.* p. 156, tab. 42, fig. 2.  
*Da Costa, Brit. Conch.* p. 246.  
*Chemnitz, viii.* p. 358, tab. 101, fig. 861 and 862.  
*Montagu, Test. Brit.* p. 24.  
*Donovan, Brit. Shells, iv.* tab. 132.  
*Linn. Trans. viii.* p. 31.  
*Turton, Brit. Fauna,* p. 145.  
*Wood, Conch.* p. 79, tab. 14, fig. 3 and 4.  
*Dillwyn, Descript. Catal.* p. 36.  
*Turton, Conch. Dict.* p. 144, fig. 79.
- Pholas parvus.* *Lister, Conch.* tab. 453, 278.  
*Mus. nost.* Inhabits marine rocks.

Shell about an inch long, and nearly two wide, extremely thin and almost transparent, with rather remote prickly striæ at the larger end; and may be distinguished by the larger end



being nearly closed when the valves are shut, where it is well rounded and not produced into any kind of beak-like elongation, giving the outline a club-shaped appearance: the accessorial valve at the back is of an oblong shape.

*PHOLAS testá subconicá hiantissimá, latere antico angulosostrato, striata posticè laminá compressá recurvá, intús costá longitudinali.*

Shell somewhat conic and very open, angular and beaked at the anterior end, with a flat recurved process behind, and a longitudinal rib on the inside of the valves.

- Pholas striata*      *Linn. Syst. Nat. p. 1111.*  
                          *Gmelin, Syst. p. 3215.*  
                          *Turton, Linn. Syst. iv. p. 172.*  
                          *Pennant, Brit. Zool. iv. p. 157.*  
                          *Chemnitz, viii. p. 364, tab. 102, fig. 864 to 871.*  
                          *Montagu, Test. Brit. p. 26.*  
                          *Linn. Trans. viii. p. 32.*  
                          *Turton, Brit. Fauna, p. 146.*  
                          *Donovan, Brit. Shells ii. tab. 117.*  
                          *Dillwyn, Descript. Catal., p. 37.*  
                          *Wood, Conch. p. 83, tab. 16, fig. 1 to 4 and fig. 8.*  
                          *Turton, Conch. Dict. p. 147.*

*Mus. nost.* Taken from an old yardarm on Brixham pier, and which had been drifted in from the bay.

Shell three-eighths of an inch long and about half an inch broad, of a conical or rather wedge-form shape, with the gape

very wide, and reaching nearly to the smaller end which terminates in a rounded point, sloping suddenly at the anterior end into a short rounded beak, giving that part an angular appearance: the anterior part furnished with regular echinated striæ separated by a fine depressed line from the smaller part, which is marked with smooth and rather distant striæ: the hinge at the back covered with a long flat process, reflecting backwards, and nearly in contact with the back in each valve: on the inner or concave surface of the valves is a short longitudinal rib, crossed by rough points, growing stronger as it reaches the outer margin: this interior rib, which is always visible in consequence of the very wide gape, will at all times distinguish the species.

The accessorial valves are five in number: two shield-like ones in front, which nearly close up the vast gape, and a narrow one down the middle; a heart-shaped one behind covering the hinge, and a narrow one beneath it which connects the valves.

It is probable that the presence or absence of the two shield-like valves in front, occasioned Linnè to form two species, and to cause such uncertainty of identity among subsequent authors.

Mrs. Griffiths has procured a dead specimen of the *Pholas crispata* from the rocks in the neighbourhood of Torquay, and ourselves have taken the seven others; so that the whole of the eight British species have been found in the highly productive shores of Torbay.

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## 2. TEREDO—LINNÉ.

*Testa orbicularis, hemisphærica, æquivalvis, tubo longo cylindræo cum accessorüs variüs posticè terminata. Cardo dente longo curvo sub marginem inserto, in utrâque valvâ: lateralibus nullis. Ligamentum nullum.*

Shell orbicular, hemispherical, equivalve, terminating behind in a long cylindrical tube with its various appendages. Hinge with a long curved tooth in each valve, inserted under the margin: lateral teeth none. Ligament none.

Besides the long cylindrical tube, which is gradually formed for protection in the passage of the animal through the wood, the valves of this genus may be distinguished from those of the Pholas by the triangular projection at the anterior end of each. They are all inhabitants of the ocean, ministers of the decomposition and destruction of timber, the calamity of ships and driven piles.

Linné, and the subsequent writers on systematic conchology, have formed the characters of this genus from the cylindrical tube. Lamarck has made his specific characters from the differences of the appendages placed near the smaller end of the tube. In conformity, however, with the other bivalves, we consider the primary valves as offering the most decided and natural basis of specific distinction.

Lamarck has also placed this genus and that of the Pholas in his division with the ligament external. They have, however, no permanent ligament, as we observed of the Pholas tribe, but the valves are merely connected together by a fold of the animal

mantle, or by an outer cuticle or membrane which invests the whole animal: and this fold perishes with the animal, leaving the valves to fall asunder, or to be connected by a mere film.

navalis  
1,

**TEREDO** *valvis posticè auriformibus, alterâ denticulo curvo marginali supra dentem.*

Shell with the valves ear-shaped behind, one of them with a curved denticle on the margin above the teeth.

*Tab nost.* 2. fig. 1 to 3.

**Teredo navalis.**

*Linn. Syst. Nat.* p. 1267.

*Gmelin. Syst.* p. 3747.

*Turton, Linn. Syst.* iv. p. 609.

*Pennant, Brit. Zool.* iv. p. 367.

*Montagu, Test. Brit.* p. 27 and suppl. p. 7.

*Home, Phil. Trans.* 1806, p. 276, tab. 12 and 13.

*Turton, British Fauna.* p. 202.

*Linn Trans.* viii. p. 249.

*Donovan, Brit. Shells* v. tab. 145.

*Dorset-Catal.* p. 60, tab. 18, fig 12.

*Dillwyn, Descript. Catal.* p. 1089.

*Turton, Conch. Dict.* p. 183.

**Serpula Teredo.**

*Da Costa, Brit. Conch.* p. 21.

*Mus nost.* In timber exposed to their action in salt water.

Shell about three quarters of an inch in diameter, with the valves triangular and forming a circular hemisphere when closed together, elegantly striate in various directions, each with a triangular projection in front bending a little inwards, and with an

ear-shaped process behind, the edges of which are not detached round the whole of the circumference.

The tube is more or less flexuous and tapering, semiconcamerated near the smaller end. The supplemental valves, seated on the inside of the tube and near the smaller extremity, are spoon-shaped, convex on the outside and concave within, terminating at one end in a linear elongation which is straight or a little flexuous, and truncate at the other.

Fig. 2 of our plate represents a section of the lower end of the tube, to shew its semiconcamerated structure: and fig. 3 one of the spoon-shaped appendages.

*TEREDO valvis posticè auriformibus auriculis reflexis, costâ obliquâ bipennata. marginali supra dentes.*

Shell with the valves ear-shaped behind and the auricles reflected, an oblique rib on the margin above the teeth.

*Teredo bipennata.* Turton Conch. Dict. p. 184, fig. 38 to 40.

*Mus. nost.* From timber drifted into Exmouth.

Shell something larger than the last, with the ear-shaped processes of an oblong shape, reflected on their outer margin and detached all round the circumference on the under side.

The tube is thicker and stronger, without the transverse semiconcamerated partitions, and instead of the spoon-shaped valves furnished with two very long slender appendages, somewhat curved and feathered on each side.

dorsalis.

**TEREDO** *valvis posticè rotundatis inauriculatis clausis, costâ longitudinali internâ.*

Shell with the valves rounded without auricles and closed behind, furnished with a longitudinal rib on the inside.

*Tab. nost. 2, fig. 4 and 5.*

*Teredo dorsalis.* Turton, Conch. Dict. p. 185.

*Mus. nost.* From a piece of wood in Torbay.

Shell less than the *T. navalis*, and is distinguished by the want of the reflected ear-shaped processes on the hinder side, where the end is plain and rounded; by the valves closing together at that part; and by the longitudinal jointed rib on the inside of the valves, with a corresponding groove on the outside. On the margin is a raised curved process in one valve and a small slightly cloven one in the other.

From the circumstance of the valves being enabled to close together at the hinder end, we doubt if it can be furnished with a tube. It merits a better investigation than the few specimens we possess can give it.

nans.

**TEREDO** *valvis posticè rotundatis inauriculatis, margine cardinali dente conico valido.*

Shell with the valves rounded and without auricles behind, a strong conic tooth on the margin above the teeth.

*Tab. nost. 2, fig. 6 and 7.*

*Mus. nost.* From a piece of wood in Torbay.

Shell hardly the eighth of an inch in diameter; something resembling the young of *Teredo dorsalis*; but the valves are destitute of the jointed internal longitudinal rib. The specimens were

collected from the fragment were all of the same size, and all distinguished by the strong conical tooth on the margin above the hinge, pointing in a rather oblique direction.

### 3. GASTROCHÆNA—SPENGLER.

*Testa transversa, ovata, æquivalvis, inæquilateralis, hiatu maximo.*

*Cardo dente unico transverso sublaminate obsoleto, in utràque valvâ: lateralibus nullis. Ligamentum externum.*

Shell transverse, oval, equivalve, inequilateral, with a vast opening.

Hinge with a single transverse somewhat laminar obscure tooth in each valve: lateral teeth none. Ligament external.

In its habits this genus approaches very near to that of the *Pholas*, living in the interior of rocks and stones covered by the sea, where it forms an outer testaceous coat, in which the shell itself is imbedded, surrounded by a slimy mucus: and this outer case, which is formed upon the inner surface of the decomposed rock, is quite smooth, extending beyond the rock itself, and is partly divided at the end, like the tube of the *Teredo navalis*, for the protrusion of the two terminal lobes of the animal. In the middle of the wide opening of the shell, the animal is furnished

with a tube of adhesion, by which it attaches itself firmly to the outer case.

The principal points of discrimination between this genus and that of the *Pholas* are, not merely the want of accessorial valves, as has been usually supposed, but the essential difference of the teeth, and in being furnished with a strong permanent coriaceous ligament uniting the valves together.

pholadia.  
1,

*GASTROCHÆNA valvis latere antico posticè conniventibus, umbonibus subterminalibus prominulis.*

Shell with the valves closing together behind at the anterior end, the beaks nearly terminal and rather prominent.

*Tab. nost.* 2, fig. 8 and 9

*Gastrochæna cuneiformis.* *Spengler*, ii. p. 179, fig. 8 to 11.

*Pholas hians.* *Chemnitz*, x. p. 364, tab. 172, fig. 1678. and 1679.

*Mya dubia* *Pennant*, Brit. Zool. iv. p. 165, tab. 47.

*Turton*, Linn. Syst. iv. p. 179.

*Dorset Catal.* p. 27, tab. 1, fig. 11.

*Linn. Trans.* viii. p. 33.

*Donovan*, Brit. Shells, iii. tab. 108.

*Turton*, Brit. Fauna, p. 146.

*Wood*, Conch. p. 102, tab. 25, fig. 2 and 3.

*Turton*, Conch. Dict. p. 104.

*Mya pholadia.* *Montagu*, Test. Brit. p. 28 and 559, and suppl. p. 20.

*Mytilus ambiguus.* *Dillwyn*, Descript. Catal. p. 304.

*Chama parva.* *Da Costa*, Brit. Conch. p. 234.

*Mus. nost.* In rocks and stones, Torbay.



Shell half an inch long, and nearly an inch broad, oval, wedge-shaped, thin and brittle, but not transparent, white or covered with a blackish coat, not glossy, very open in front, with the edges of the margin thin and sharp, irregularly wrinkled transversely: beaks rather prominent and obtuse, placed near the larger end, where the valves meet close together at the back to the extremity of the shell: hinge with an obscure laminar transverse tooth in each valve.

A variety of about half the size, but in no other respect different is found buried in the back of old oyster-shells.

#### 4. SAXICAVA—LAMARCK.

*Testa transversa, æquivalvis, inæquilateralis, hinc hians. Cardo edentulus. Ligamentum externum.*

Shell transverse, equivalve, inequilateral, open at one or both ends. Hinge without teeth. Ligament external.

This, and some of the subsequent genera, from their inhabiting the interior of rocks, and their attachment to marine substances seem naturally allied to the *Pholas* tribe, and to each other, The individuals of this genus are so variable and irregular in their shape, that it is extremely difficult to reduce them to distinct and

definite species. Very numerous specimens are now in our cabinet, collected from their native positions, and comparing them together, we think that the following preserve habits and characters sufficiently permanent to entitle them to specific distinction.

rugosa.  
1.

*SAXICAVA testá oblongá, transversim rugosá, latere antico subangulato truncato hiante.*

Shell oblong wrinkled transversely, somewhat angular open and truncate at the anterior end.

*Tab nost.* 2. fig. 10.

*Mytilus rugosus* *Linn. Syst. Nat.* p. 1156.

*Gmelin, Syst.* p. 3352.

*Turton, Linn. Syst.* iv. p. 290.

*Pennant, Brit. Zool.* iv. p. 235, tab. 66, fig. 1.

*Da Costa, Brit. Conch.* p. 223.

*Montagu, Test. Brit.* p. 164.

*Donovan, Brit. Shells* iv. tab. 141.

*Turton, British Fauna.* p. 164.

*Linn Trans.* viii. p. 105.

*Dorset Catal.* p. 39, tab. 13, fig 5.

*Dillwyn, Descript. Catal.* p. 304.

*Turton, Conch. Dict.* p. 113.

*Mytilus lithophagus.* *Linn. Trans.* viii. p. 270, tab. 6, fig. 3, 4.

*Chamae pholas angusta.* *Lister, Conch.* tab. 426, fig. 267.

*Mus nost.* From rocks in Torbay.

Shell sometimes half an inch or more long, and an inch and a half broad, but is usually about half the size, white or covered with a brown skin, coarse and rough with transverse wrinkles:

hinge near one end where it is rounded: the other end truncate and open nearly half way across, with often three or four longitudinal laminar ridges on the inside: this side is also more or less angular, in consequence of a raised ridge extending from the beak to the end, and which is often a little rough like the *Hiatella minuta*.

The valves are sometimes pressed close together at the truncated end, causing the opposite or rounded side to open widely, in which state it has much the appearance of the *Gastrochæna pholadia*, and we have observed it marked as such in cabinets; but attention to the following particulars will always distinguish it. The elongated side is truncate; it wants the small laminar teeth in the valves; and on the back part at the rounded end the valves do not meet together.

*Saxicava testâ ovatâ, transversim striatâ, extremitatibus rotundatis* Pholadis.  
*subhiantibus* 2.

Shell oval, transversely striate, rounded and somewhat open at both the ends.

*Tab. nost. 2, fig. 11.*

*Mytilus Pholadis.* *Linn. Mant. p. 548.*

*Linn. Iter. Westgoth. tab. 5, fig. 2.*

*Gmelin. Syst. p. 3352.*

*Turton, Linn. Syst. iv. p. 95.*

*Muller, Zool. Dan. iii. p. 12, tab. 87, fig. 1 to 3.*

*Mya byssifera.* *Fabricius, Faun. Grœnl. p. 408.*

*Mus. nost.* Rocks in Torbay.

Shell nearly an inch long, and an inch and a half broad, white covered with a yellowish brown skin, regularly striate transversely, with one of the valves generally much more tumid than the other: beaks nearer the middle than in the last species.

This species is subject to much variation of figure, being frequently nearly globular, but always rounded and somewhat open at the ends. Sometimes it is found attached to clefts in the rocks, but not embedded in them, when there is a considerable opening in the front margin for the issue of the byssus of attachment.

It was observed in great abundance, in Melville Island, in the Polar regions, three miles distant from the shore, where it had probably been cast by the agitation of the sea, and when deprived of the inhabitant driven inwards by the violence of the winds, by Mr. Griffiths, an officer in Capt. Parry's late northern expedition.

The specimens we examined, in no respect differed from our native ones, being regularly striate transversely, with both the extremities rounded and a little gaping: but they were larger.

plicata.  
3.

*SAXICAVA testâ ovatâ, transversim striatâ, extremitatibus rotundatis subhiantibus.*

Shell oblong, dilated and open at the anterior end, and transversely laminar.

*Mytilus plicatus.* Chemnitz, viii. p. 153, tab. 82, fig. 733.

*Gmelin*, Syst. p. 3358.

*Pennant*, Brit. Zool. iv. p. 242

*Turton*, Linn. Syst. iv. p. 295.

*Montagu*, Test. Brit. Suppl. p. 70.

*Dillwyn*, Descript. Catal. p. 306.

*Turton*, Conch. Dict. p. 114.

In rocks in the Isle of Sky.

We are unacquainted with this shell, except from the description of Montagu. It appears to resemble the *Saxicava rugosa*, but the anterior side is more dilated, and the striæ are more or less raised into ridges.

#### HIATELLA—DAUDIN.

*Testa transversa inæquivalvis, inæquilateralis, margine supero vel latere antico hiante. Cardo dente unico inter duos obsoletos penetrante: lateralibus nullis. Ligamentum externum.*

Shell transverse, inequivalve, inequilateral, open at the upper margin or anterior end. Hinge with a single tooth in one valve closing between two obscure ones in the other: lateral teeth none. Ligament external.

Of the two subsequent species we have not thought it necessary to form different genera, merely from the variation in their habitats and openings. The first is, we believe, generally attached to the rugged cavities of oysters, and the roots of Fuci, by a strong byssus issuing from the opening in the upper or front margin. The other is imbedded in rocks, and like most of the rock shells opens at the anterior or smaller end.

minuta.  
1.

*HIAELLA testâ latere postico truncato arcôlâ impressâ, angulis binis transversis spinosis, margine supero hiante.*

Shell truncate with an impression at the hinder end, with two transverse spinous angles, and open at the upper margin.

*Tab. nost. 2, fig. 12.*

*Solen minutus.* *Linn. Syst Nat p. 1115.*

*Gmelin, Syst. p. 3226.*

*Turton, Linn. Syst. iv. p. 182.*

*Chemnitz, vi. p. 67, tab. 6, fig. 51 and 52.*

*Montagu, Test. Brit. p. 53, tab. 1, fig. 4.*

*Pennant, Brit. Zool. iv. p. 175.*

*Linn. Trans. viii. p. 47.*

*Turton, Brit. Fauna, p. 148.*

*Wood, Conch. p. 139, tab. 34, fig. 5 and 6.*

*Dillwyn, Descript. Catal. p. 69.*

*Turton, Conch. Dict. p. 161.*

*Mytilus præcisus.* *Montagu, Test p. 165, tab 4, fig. 2.*

*Mus. nost.* From oysters and the roots of Fuci.

Shell from a quarter to half an inch long, and nearly twice as broad, dull white covered with a brown skin, irregularly striate transversely, with one of the valves generally extending beyond the other at the anterior margin: hinge close to one end, behind which is a deep impression; the other end angular and truncate: from the beaks to the anterior end run two transverse angles which are mostly rough with vaulted spines, one along the margin at the base, and another obliquely to the angle of the upper margin: hinge with a conic tooth in one valve, and in the other a deep cavity, with an obscure tooth on each side of it.

*HIATELLA testá latere postico rotundato areolá nullá, antico subangu-  
lato hian-<sup>oblonga</sup>te. 1.*

Shell rounded at the hinder end without impression, truncate and somewhat angular at the anterior.

*Tab. nost. 2, fig. 13.*

*Mus. nost.* From rocks in Dublin bay and Torbay.

Shell three-eighths of an inch long, and about an inch broad, oblong, whitish, transversely striate, rounded at one end, somewhat truncate and much open at the other; the valves rather unequal, with an obscure, oblique, and nearly smooth angle from the beaks to the anterior end: beaks prominent: teeth as in the last.

The specimens which we have collected, both in Ireland and Torbay, preserve the regular distinction of having the hinder extremity well rounded and without impression, and the anterior much gaping, with the beaks not terminal, and the transverse angles rather obscure, and generally smooth.

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## 6. PETRICOLA—LAMARCK.

*Testa subtransversa, æquivalvis, inæquilateralis, latere antico hian-  
te.*

*Cardo dentibus duobus inter tres penetrantibus: lateralibus nullis.*

*Ligamentum externum.*

Shell transverse, equivalve, inequilateral, open at the anterior end. Hinge with two teeth in one valve closing between three in the other: lateral teeth none. Ligament external.

The individuals of this family, like most of the inhabitants of rocks, are exceedingly variable in their figure and outline. In the structure of the teeth they much resemble the genus *Venus*; but we believe that there are uniformly only two in one of the valves, with sometimes the obscure rudiment of a third, and three in the other: the gape also, or opening at the anterior end, materially distinguishes them. With the *Donax* tribe they have no relative connexion. They are imbedded in rocks, or found wedged in the interstices.

IRUS,  
1.

*PETRICOLA testâ polymorphâ, lamellis transversis reflexis, interstitiis longitudinaliter striatis.*

Shell variously shaped, with transverse reflected plates, the interstices of which are striate longitudinally.

*Tab. nost. 2, fig. 14.*

*Donax Irus.*

*Linn. Syst. Nat. p. 1128.*

*Gmelin, Syst. p. 3265.*

*Turton, Linn. Syst. iv. p. 216.*

*Pennant, Brit. Zool. iv. p. 200.*

*Chemnitz, vi. p. 571, tab. 26, fig. 268 to 270.*

*Montagu, Test. Brit. p. 108 and 573.*

*Donovan, Brit. Shells, i. tab. 29, fig. 2.*

*Linn. Trans. viii. p. 77.*

*Turton, British Fauna, p. 156.*

*Dorset Catal. p. 34, tab. 12, fig. 6, left hand.*



*Dillwyn*, *Descript. Catal.* p. 156.

*Turton*, *Conch. Dict.* p. 43.

*Cuneus foliatus.* *Da Costa*, *Brit. Conch.* p. 204, tab. 15, fig. 6,  
left hand.

*Mus. nost.* From rocks in Torbay.

Shell half an inch long, and three quarters of an inch broad, brownish-white, generally of an oblong or oval shape, but varying much in its outline, being sometimes truncate at the anterior end, and sometimes, rounded, with rather distant thin transverse plates or foliations, which reflect a little, and marked with regular close longitudinal striæ between them; the anterior end mostly gaping, rarely nearly closed: inside white, with frequently a chocolate blotch at one end, with the margin plain: hinge near one end.

From the varieties in their figure Lamarck has instituted several species, and has even placed it in the genus *Venerupis*: but the teeth of this tribe are essentially different, approaching more to the *Venus*, being usually connivent at their base and divaricate at their tips: whereas the *Venerupis* has the teeth long and slender, somewhat curved backwards, and all parallel and equidistant.

What ideas of contempt Linné had attached to this shell when he denominated it *Irus*, it would now be useless to enquire; perhaps from its solitary confinement in rocks, like *Diogenes* in his tub, or from the meagerness of its colours. *Irus* was the pander of *Penelope's* suitors, and whom *Ulysses* upon his return killed with his fist; so beggarly, that like *Job*, his name became pro-

verbial for poverty and synonymous with wretchedness, *Iro pauperior*, "as poor as Job: and so the poet—

"*Irus et est subito qui modo Cræsus erat*"—He is suddenly become as poor as Job, who was lately as rich as Cræsus.



#### 7. VENERUPIS—LAMARCK.

*Testa transversa, æquivalvis, inæquilateralis, latere antico hiante. Cardio dentibus tribus elongatis approximatis parallelis, unico minore: lateralibus nullis. Ligamentum externum.*

Shell transverse, equivalve, inequilateral, open at the anterior end. Hinge with three elongated teeth in each valve, all close together and parallel, one of them smaller: lateral teeth none. Ligament external,

The tribes which are exclusively the inhabitants of the interior of submarine rocks, or which are closely attached to them, we have been induced to bring together, as preserving among themselves a kind of natural alliance. To the Venus family this is certainly very similar in many respects, but the teeth are different, and it most generally gapes at the anterior end.

We cannot, as yet, agree with Lamarck and the French naturalists, that mere difference in shape or outline are always sufficient grounds for strict specific character, circumstances often necessarily occasioned by their confinement, and where the different component parts of the rock they inhabit may be of more difficult solution or decomposition.

A competent knowledge of the rock shells seems at present by no means to be fully attained or clearly understood: and we feel a conviction that much valuable information remains to be disclosed by an attentive investigation and comparison of the inhabitants of submarine masses. Our cabinet contains many curious anomalies of whose determinate generic and specific fixture we are yet in doubt, and which we have consequently forborne to record.

Quartz, and the more compact kinds of granite, seem to resist their action, as we have searched in vain for any traces of what are denominated borers, in Guernsey and the adjacent islands.

*VENERUPIS testá polymorphá, strüs transversis anticè lamellatis longitudinalibusque minutis.* perforans  
1.

Shell variously shaped, with transverse striæ which become lamellar at the anterior end, and minute longitudinal ones.

*Tab. nost. 2, fig. 15 to 18.*

Venus perforans. *Montagu, Test. Brit. 127, tab. 3, fig. 6.*

*Linn. Trans. viii. p. 89.*

*Turton, Brit. Fauna, p. 159.*

*Pennant, Brit. Zool. iv. p. 211.*

*Dillwyn, Descript. Catal. p. 206.*

## CONCHYLIA—DITHYRA. 7.

*Turton*, Conch. Dict. p. 245.

*Mus. nost.* From rocks at Teignmouth and Torbay.

Shell nearly an inch long, and more than two and a half broad, brownish or yellowish white, with sometimes a few purple broken rays and zig-zag lines, generally of an oblong shape angularly truncate at one end, sometimes rounded at both ends, or kidney-shaped and indented: beaks nearer one end, a little prominent and recurved, without any distinct heart-shaped impression under them: inside white, glossy, with mostly a purple blotch at the larger end: the margin plain: hinge with three erect long and somewhat recurved teeth in each valve, two of them cloven; the lower one in the right valve, and the upper one in the left valve plain and much smaller than the others.

The young shells are flattish, white variously marked with purple blotches at the anterior end, and may be easily mistaken for the young of *Venus pullastra*; but besides the difference of the teeth, the latter are much more angular, and rough at the anterior end.

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8. MYA.—LINNÉ.

*Testa transversa, æquivalvis, lateribus hiantibus. Cardo valvæ sinistrae dente elevato transversim dilatato, valvâ dextrâ muticâ: lateralibus nullis. Ligamentum internum.*

Shell transverse, equivalve, open at the sides. Hinge with a single elevated transversely dilated tooth in the left valve, and none in the right: lateral teeth none. Ligament internal.

The shells of this genus are generally found buried in gravel or hard clay, and are furnished with a long contractile and extensile tube of suction at the anterior end.

*MYA testá oblongá convexá, latere antico truncato, dente rotundato truncata.*  
*simplici.* <sup>1.</sup>

Shell oblong convex. truncate at the anterior end, with the tooth rounded and simple.

- Mya truncata* Linn. Syst Nat p. 1112.  
*Gmelin.* Syst. p. 3217.  
*Turton,* Linn. Syst. iv. p. 174.  
*Pennant,* Brit. Zool. iv. p. 159, tab. 44.  
*Chemnitz,* vi. p. 8, tab. 1, fig. 1 and 2.  
*Montagu,* Test. Brit. p. 32.  
*Donovan,* Brit. Shells, iii. tab. 92.  
*Linn. Trans.* viii. p. 35.  
*Turton,* Brit. Fauna, p. 146.  
*Dorset Catal.* p. 27, tab. 3, fig. 1.  
*Wood,* Conch. p. 90, tab. 17, fig. 1 and 2.  
*Dillwyn,* Descript. Catal. p. 42.  
*Turton,* Conch. Dict. p. 97.
- Chama truncata.* *Da Costa,* Br. Conch, p. 233, tab. 16, fig. 1.  
*Chamæ Pholas latus.* *Lister,* Conch. tab. 428, fig. 269.  
*Mus. nost.* Gravelly and muddy shores.

Shell nearly two inches long, and three broad, oblong-oval, convex, abruptly cut off at the anterior end, and rounded at the other, wrinkled transversely, covered with a tough brown or ochraceous skin, which in perfect specimens extends three or four inches beyond the truncated end: inside white.

It is distinguished by the abrupt end, and the rounded tooth which is slightly flexuous, but has no lateral projection or denticle.

arenaria.  
2.

*MYA testâ ovatâ, latere antico rotundato, dente rotundato cum denticulo laterali.*

Shell oval, rounded at the anterior end, with the tooth rounded and furnished with a lateral denticle.

*Mya arenaria.*

*Linn. Syst. Nat. p. 1112.*

*Gmelin, Syst p. 3218.*

*Turton, Linn. Syst. iv p. 175.*

*Chemnitz, vi. p. 10, tab. 1. fig. 3 and 4.*

*Pennant, Br Zool. iv. p. 161, tab. 45.*

*Montagu, Test. Brit. p. 30.*

*Linn Trans. viii. p. 35.*

*Turton, British Fauna. p. 146.*

*Donovan, Brit. Shells iii. tab. 8.*

*Dorset Catal. p. 28, tab. 4, fig 2.*

*Wood, Conch. p. 91, tab. 17, fig. 3.*

*Dillwyn, Descript. Catal. p. 42.*

*Turton, Conch. Dict. p. 98.*

*Chama arenaria*

*Da Costa, Br. Conch. p. 232.*

*Chama lata.*

*Lister, Conch. tab. 418, 419, fig. 262, 263.*

*Mus. nost.* Sand and gravelly shores.

Shell reaching to two inches and a half long, and four or five broad: and is distinguished from the last species, by the anterior end tapering to a rounded point, and by the tooth having a small projection or denticle on one side.

*MYA testá ovatá, latere antico rotundato reflexo, dente fastigiato flexuoso.* ovalis.

Shell oval, rounded and reflected at the anterior end, with the tooth flattened at the top and flexuous.

*Mus: nost.* Dublin bay, at Clontarf.

Shell three quarters of an inch long, and an inch and a half broad, convex, yellowish-white, thin, striate transversely, obtusely rounded at the anterior end, where the valves reflect a little: hinge near the middle; with the tooth of the left valve truncate at top, running in a straight line, the anterior extremity curving inwards, and the hinder extremity outwards, and without additional denticle.

The specimen represented in our plate, was dug up at Clontarf, a few days previous to our leaving Ireland. It has the convexity of the *Mya truncata*, with the rounded anterior end of the *Mya arenaria*, but not so much produced. The tooth is also very different from either of them.

## 9. LYONSIA—TURTON.

*Testa transversa, inæquivalvis, inæquilateralis, latere antico hiante.*

*Cardo dente transverso cordato mobili communi, valvas foveolis transversis coadunante: lateralibus nullis. Ligamentum internum.*

Shell transverse, inequivalve, inequilateral, open at the anterior end.

Hinge with a transverse heart-shaped moveable tooth, common to both the valves, and uniting them by a transverse cavity in each: lateral teeth none. Ligament internal.

This genus is remarkable for the peculiar structure of the hinge, which consists of a single tooth placed on the inside equally between the two valves, uniting them by a transverse ligament in each, which is seated in a narrow and rather oblique cavity on the anterior side.

This tooth is not a fixed projection from either of the valves, nor formed from the substance of the shell itself, as in all other known shells furnished with teeth; but is an independent process, moveable with the ligament, and may be entirely detached from either or both the valves: consequently when the valves are opened, it is found sometimes in the right valve and sometimes in the left, as the ligament may casually loosen, exhibiting the form of a somewhat elevated transverse tooth.

It is of an oblong heart-shaped figure, appearing like a piece of enamel fixed to the point of junction between the valves, with the pointed end directly under the beaks.

We have dedicated it to our worthy correspondent, Mr. Lyons of Tenby, who first presented it to the notice of the British naturalist



LYONSIA

striata.  
1.

*Tab. nost.* 3, fig. 6 and 7..

- Mya striata.* *Montagu*, Linn Trans. xi. p. 188, tab. 13, fig. 1, A.  
*Turton*, Conch. Dict. p. 105, fig. 99.
- Mya pellucida.* *Brown*, Wern. Soc. ii. p. 105, tab. 24, fig. 1.
- Mya Norwegica.* *Gmelin*, Syst. p. 3222.  
*Turton*, Linn. Syst. iv. p. 178.  
*Chemnitz*, x. p. 345, tab. 170, f. 1647, 1648.  
*Wood*, Conch. p. 98, tab. 18, fig. 4 and 5.  
*Dillwyn*, Descript. Catal. p. 48.  
*Turton*, Conch. Dict. p. 100, fig. 100.
- Mus. nost.* Tenby, Ireland and the western coasts.

Shell more than half an inch long, and an inch broad, oblong, running in a nearly straight direction from the beaks to the anterior end, and prominently rounded at the opposite margin, thin, semitransparent, covered with a pale brown skin, which is wrinkled and very rugged at the anterior end, where it is truncate open and reflected; the valves finely and closely striate longitudinally: beaks near the rounded end, sometimes decorticated; inside perlaceous with a rich metallic lustre.

The decortication about the hinge seems not to be a fixed, but rather an accidental character: for *Chemnitz* has observed that they are generally so: *natibus plerumque decorticatis*.



## 10. SPHENIA—TURTON.

*Testa transversa, inæquivalvis, inæquilateralis, latere antico hiante. Cardo valvæ sinistrae dente elevato transversim dilatato, dextræ dente concavo cum denticulo postico: lateralibus nullis. Ligamentum internum.*

Shell transverse, inequivalve, inequilateral, open at the anterior end. Hinge of the left valve with an elevated transversely dilated tooth, of the right valve with a concave tooth and small denticle behind it: lateral teeth none. Ligament internal.

This new and interesting genus, which in the Linnéan arrangement would rank with the *Myæ*, is sufficiently defined by its own fixed and peculiar characters.

From the *Mya* it differs, in having the valve which contains the tooth smaller, and received within the opposite one; in being closed at the hinder extremity; and in being furnished with a concave tooth in the larger valve, behind which is a small denticle. The valves are also very unequal.

And from the *Corbula*, in having the tooth of the left valve flat and transversely extended, with the anterior extremity a little open.

The outline is subject to some variation; but all of them have a flattish or wedge-shaped form: and inhabit the interior of rocks and the inside of dead bivalves.

Binghami.  
1.

SPHENIA *testâ cuneatâ, dente concavo obliquè inflexo.*

Shell wedge-shaped, with the concave tooth oblique and inflected.

*Tab. nost. 3, fig. 4 and 5, and 19, fig. 3.*

*Mus. nost.* Rocks in Torbay.

Shell a quarter of an inch long, and half an inch broad, covered with a brown wrinkled skin which extends beyond the anterior end, wedge-form, truncate at the hinge, with the upper margin often a little contracted about the middle, gradually tapering to the anterior end which is slightly open; beaks rather prominent, with the points not quite opposite but divaricating from each other: inside glossy white with a purplish tint, the margin sharp and plain; the elevated tooth running in a gradually narrower and wedge-shaped manner nearly half way along the back margin.

Except for the very distinct and visible teeth, we should be much inclined to think that this is the *Mytilus præcisus* of Montagu, p. 165, tab 4, fig. 2. He speaks of his shell as not being uncommon among rocks, subject to much variety of shape; and some of our specimens much resemble his figure.

Named from General Bingham, our diligent fellow-labourer among the rocks in Torbay.

*SPHENIA testá ovato-cuneatá, dente concavo horizontali-protenso.* Swainsoni.

Shell oval-wedge-form, with the concave tooth projecting horizontally inwards.

*Tab. nost.* 2, fig. 3, and tab. 19, fig. 2.

*Mus. nost.* From rocks in Torbay.

Shell about the size of the last: but is of a more oval form, with the anterior end rounded, the beaks not so near the end, and the concave tooth projects inwards like those of *Anatina prætenuis*.

Named from Mr. Swainson, of Elm Grove, near Liverpool, long known in the annals of British Conchology.

decussata.  
3.

*SPHENIA testâ ovatâ decussatim striatâ, margine undato.*

Shell oval, with decussate striæ, and the margin undate.

*Mya decussata* Montagu, Suppl. p. 20, tab. 28, fig. 1.

Pennant, Brit. Zool. iv. p. 167.

Wood, Conch. p. 99.

Dillwyn, Descript. Catal. p. 46.

Turton, Conch. Dict. p. 102.

Taken in the Frith of Forth, by Capt. Laskey.

We are unacquainted with this shell, but conclude from Montagu's description, that it falls into this genus. It is said to be half an inch long, and rather more in breadth, oval, white, undulate at the margin, with irregular transverse ridges which are crossed by regular longitudinal striæ, forming tubercles at the anterior end. In the hinge a broad erect tooth in one valve, and a projecting plate with a small indentation in the other.

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## 11. CORBULA—BRUGUIERE.

*Testa subtrigona, inæquivalvis, inæquilateralis, clausa. Cardo valvæ sinistrae dente conico cum foveolâ adjectâ, valvæ dextræ dente cochleariformi cum foveolâ: lateralibus nullis. Ligamentum internum.*

Shell somewhat triangular, equivalve, inequilateral, closed. Hinge with a single conic tooth and adjacent hollow in the left valve, and a spoon-shaped tooth with a hollow in the right: lateral teeth none. Ligament internal.

Lamarck, in his character of this genus, affirms that there is a

conical tooth in each of the valves; but in the smaller and flat valve, there is evidently only an oval projecting hollow plate for the reception of the ligament.

COREULA.

Nucleus.  
1.

*Tab. nost.* 3, fig. 8 to 10.

*Mya inæqualvis.* *Montagu*, Test. Brit. p. 38, tab. 26, fig. 7.

*Pennant*, Brit. Zool. iv. p. 166.

*Linn. Trans.* viii. p. 40, tab. 1 fig. 6.

*Turton*, Brit. Fauna, p. 147.

*Wood*, Conch. p. 113.

*Dillwyn*, Descript. Catal. p. 55.

*Turton*, Conch. Dict. p. 107.

*Cardium striatum* *Walker*, Test. Minut. p. 24, fig. 85.

*Mus. nost.* Dredged in Torbay, and other coasts.

Shell about a quarter of an inch long, and nearly half an inch broad, of a somewhat triangular figure, strong and opaque, generally covered with a brown skin, under which it is whitish or flesh-color: the larger or right hand valve convex, regularly striate transversely, inclosing the lesser valve, over which the beak projects and curves inwards; the lesser valve flattish, with a few longitudinal raised striæ: inside smooth, polished round the margin.

The specific name *inæquivalvis*, originally given to this and the *Tellina inæquivalvis*, is now quite inapplicable in consequence of its forming an essential part of the generic character. We have therefore, after Lamarck, been induced to exchange them for names more appropriate.

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12. PANDORA—LAMARCK.

*Testa transversa, æquivalvis, inæquilateralis, latere antico hiante. Cardo valvæ planatæ dente unico cum foveolâ longitudinali; valvæ convexæ foveolis duabus longitudinalibus: lateralibus nullis. Ligamentum internum.*

Shell transverse, inequivalve, inequilateral, open at the anterior end. Hinge of the flat valve with a single tooth and longitudinal cavity, of the convex valve with two longitudinal cavities: lateral teeth none. Ligament internal.

margaritacea PANDORA  
1.

*Tab. nost.* 3, fig. 11 to 14.

*Tellina inæquivalvis.* *Linn. Syst. Nat.* p. 1118.

*Gmelin. Syst.* p. 3233.

*Turton, Linn. Syst.* iv. p. 189.

*Chemnitz, vi.* p. 115, tab. 11, fig. 106.

*Montagu, Test. Brit.* p. 75, suppl. 27.

*Pennant*, Br. Zool. iv. p. 178.

*Donovan*, Brit. Shells ii. tab. 41, fig. 1.

*Linn Trans.* viii. p. 50.

*Turton*, British Fauna. p. 151.

*Wood*, Conch. p. 201, tab. 47, fig. 2 to 4.

*Dillwyn*, Descript. Catal. p. 86.

*Turton*, Conch. Dict p. 172.

*Mus. nost.* . From Dawlish and Guernsea.

Shell more than half an inch long, and twice as broad, oval-oblong, white with a pearly gloss, smooth or marked with a few transverse ridges, sloping to the anterior end in a rather curved manner; the convex valve angular down the slope; beaks near the larger end, curving over the flat valve which is slightly striate transversely on the outside, and longitudinally within: the tooth is prominent and obtuse, placed rather longitudinally.

Young shells have the cardinal margin nearly straight, with the anterior end obtuse and rounded; and in this state are the Solen Pinna of Pennant, p. 175, tab. 67, fig. 3, and of Montagu, p. 566, and Suppl. 27, tab. 15, fig. 3.

## 13. PANOPÆA—LAMARCK.

*Testa transversa, æqualvis, lateribus inæqualitèr hiantibus. Cardo dente unico conico in utràque valvâ et hinc callum breve ascendens non exsertum: lateralibus nullis. Ligamentum externum, callis affixum.*

Shell transverse, equi-valve, unequally open at the sides. Hinge with a single conic tooth in each valve, and a short ascending callosity on one side which is not exserted: lateral teeth none. Ligament external, fixed to the callosities.

Glycymeris. PANOPÆA.  
1.

- Mya Glycymeris.* *Gmelin*, Syst. p. 3222.  
*Turton*, Linn. Syst. iv. p. 178.  
*Chemnitz*, vi. p. 33, tab. 3, fig. 25.  
*Pennant*, Brit. Zool. iv. p. 160.  
*Donovan*, Brit. Shells, iv. tab. 143.  
*Montagu*, Test. Brit. Suppl. p. 19.  
*Linn. Trans.* viii. p. 34.  
*Turton*, Brit. Fauna, p. 146.  
*Wood*, Conch. p. 114, tab. 25, fig. 1.  
*Dillwyn*, Descript. Catal. p. 41.  
*Turton*, Conch. Dict. p. 107.

*Chama Glycymeris.* *Lister*, Conch. Dict. tab. 414, fig. 258.

Admitted among the British shells, by Donovan, in consequence of its having been taken once on the Dogger bank. And after a severe gale, we once found, on the beach at Teignmouth, the fragment of a large valve, which from its tooth and ligament appeared to belong to this genus.



Shell four inches long, and twice as much broad, coarse, wrinkled transversely in a laminar manner, of a yellowish or ochraceous color, obliquely truncate at the anterior end, and irregular at the margin.



#### 14. ANATINA.—LAMARCK.

*Testa transversa vel suborbicularis, inæquivalvis, utrinque vel latere antico hiante. Cardo dente dilatato concavo internè prominulo in utràque valvâ: lateralibus nullis. Ligamentum externum, breve.*

Shell transverse or somewhat orbicular, inequivalve, open at the anterior or both ends. Hinge with a dilated concave tooth projecting a little inwards in each valve: lateral teeth none. Ligament external, short.

This is a very natural genus, and well merits the attention of such conchologists as may have opportunities of examining carefully the rocky parts of our coasts; as we are inclined to think, that some very distinct species may yet remain to be discovered.

And for the purpose of clearer and more decided discrimination, a careful examination of the teeth or spoon-shaped cavities, may offer much facility; some of them being placed in an oblique

or rather transverse position; and others projecting inwards in an horizontal direction, having an independent marginal circumference nearly all round.

Many of them lie buried deep under the sand, and rarely come to us in a living state; others inhabit the interior of sub-marine rocks, from which we have taken them alive.

All of them have a rough shagreen-like surface; and they are generally of an uniform dead white color, occasionally mixed with an ochraceous or muddy contamination.

The ligament in this and some few other genera, is double; a short external one, and an internal one in the hollow of the spoon-shaped teeth. But in conformity with our general arrangement, we consider the ligament to be generically external, when it is externally visible.

Lamarck has made the oblique internal rib, which proceeds from the insertion of the teeth on the anterior side, an essential part of his generic character. This however is by no means a constant mark, and apparent only in such as have that side more strongly angulated.

From the genus *Listera* it differs, in having no distinct teeth in addition to the spoon-shaped ones; and from *Amphidesma*, in wanting the lateral teeth.

\* *Dentibus transversim obliquis.* 1-3.

With the teeth transversely oblique.

convexa.  
1.

*ASATINA testá convexá ovato-oblongá, latere antico angulatá subtrun-*  
*ca, dentibus angustis integerrimis.*

Shell convex oval-oblong, angular, and slightly truncate at the anterior end, with the teeth narrow and very entire.

*Tab. nost.* 4, fig. 1 and 2.

*Mya convexa.* *Wood, Conch. p. 92, tab. 18, fig. 1.*

*Turton, Conch. Dict. p. 100.*

*Donovan, British Shells iii. tab. 82.*

*Mus. nost.* From Paington sands.

Shell an inch and a half long, and nearly two and a half broad, and an inch and a quarter in height, very convex light and brittle, of a whitish ferruginous color, irregularly striate transversely: the spoon-shaped teeth very narrow in proportion to those of the *Anatina pubescens*, and without the notch on the broader or hinder part: the beaks meet close together at their points.

Full grown shells are of rare occurrence: the finest which we have seen, exceeding the proportions above described, was found by our young and ardent friend Miss Hill, of Down-house, near Bristol.

We believe that the large very convex and light shell described by Montagu, in his *Suppl. p. 166*, under the name of *Ligula distorta*, as a remarkable specimen of his *Mya distorta*, was this species. He does not notice the teeth, which in every form and variety in the *Anatina distorta* are projecting horizontally inwards; and placed laterally oblique in all the sizes of growth of the *Anatina convexa*.

*ANATINA testa depressâ oblongâ, latere antico angulato truncato, den-* pubescens.  
*tibus posticè emarginatis.* 2.

Shell oblong, angular and truncate at the anterior end, with a notch on the teeth at the the broader end.

*Tab. nost.* 4, fig. 3. The young shell.

- Mya pubescens.* *Montagu*, Test. Brit. p. 40.  
*Turton*, Conch. Dict. p. 99, fig. 35.
- Mya declivis.* *Linn.* *Trans.* viii. p. 36.  
*Dorset Catal.* p. 27, tab. 4, fig. 6.  
*Wood*, Conch. p. 93, tab. 18, fig. 3.
- Mus. nost.* Torbay and Plymouth.

Shell when full grown two inches and a half long and three and a half broad, much flatter than the *Anatina convexa*, rough, striate transversely, brownish white: beaks nearly central, with the points not opposite, but crossing each other at the tips: teeth projecting and running obliquely to the anterior side, with a cavity or notch behind and small erect denticle: inside with an oblique rib from the tooth towards the truncated end.

We have been fortunate enough to procure the intermediate sizes of this species, by which we are enabled to clear up all difficulties with respect to the young of the present shell; and the *Mya declivis* of Montagu.

This has the teeth oblique, as may be observed in our plate; and the *Mya declivis* has the teeth projecting inwards and oval, as may be seen in Montague's plate 1, fig. 2.

truncata,  
3.

*ANATINA testá convexá cuneatá, latere postico truncato, umbonibus subterminalibus.*

Shell convex wedge-shaped, truncate at the hinder end, with the beaks nearly terminal.

*Tab. nost. 4, fig. 6.*

*Mus. nost.* The interior of rocks in Torbay.

Shell half an inch long, and three quarters of an inch broad, rough, striate transversely, slightly angular and truncate at the anterior end, and rather abruptly truncate at the other: teeth projecting a little inwards, but running obliquely, by which it is distinguished from all the varieties of *Anatina distorta*: the front margin forming nearly a straight line.

\*\* *Dentibus horizontalitèr protensis.* 4-7

With the teeth projecting horizontally inwards.

*ANATINA testâ depressâ ovato-oblongâ, latere antico angulato truncato declivis. hiante, dentibus ovato-protensis.* 4.

Shell flattish, oval-oblong, angular truncate and open at the anterior end, with the teeth oval and projecting.

*Mya declivis.* *Montagu, Test. Brit. tab. 1, fig. 2.*

*Wood, Conch. p. 93, tab. 18, fig. 3.*

*Turton, Conch. Dict. p. 98.*

*Mus. nost.* Dredged up in Torbay.

Shell nearly an inch long, and an inch and a half broad, flat, rough, and of a darker color at the truncated side. It very much resembles the young of *Anatina pubescens*; but is known by the large oval projecting teeth, which extend forwards and have no lateral attachment.

Montagu has given a good figure of this shell, but his description is that of the *Anatina prætenuis*. "This shell is not truncated."

prætenuis. ANATINA testá depressá ovatá, latere antico rotundato hiante, dentibus  
5. ovato-protensis.

Shell flat oval, rounded and open at the anterior side, with the teeth oval and projecting.

Tab. nost. 4, fig. 4.

Mya prætenuis. Pennant, Brit. Zool. iv. p. 160, tab. 50, fig. 1.

Montagu, Test. Brit. p. 41.

Linn. Trans. viii. p. 37.

Turton, British Fauna, p. 147.

Donovan, Brit. Shells, v. tab. 176.

Wood, Conch. p. 94, tab. 24, fig. 7 to 9.

Dorset Catal. tab. 4, fig. 7.

Turton, Conch. Dict. p. 101.

Mus. nost. Dredged up in Torbay.

Shell an inch long, and an inch and a half broad: distinguished from the last species, the *Anatina declivis*, by the oval-shape, running at the anterior end into a rounded instead of a truncate termination, where it is also less angular.

distorta. ANATINA testá convexá polymorphá subclausá, margine plerumqué  
6. sinuato, cochlearibus rotundato-protensis.

Shell convex variously shaped, nearly closed, with the margin generally indented, and the teeth rounded and projecting inwards.

Tab. nost. 4, fig. 5.

Mya distorta. Montagu, Test. Brit. p. 42, tab. 1, fig. 1.

Pennant, Brit. Zool. iv. p. 161.

Linn. Trans. viii. p. 37.

*Turton*, Brit. Fauna, p. 147.

*Wood*, Conch. p. 98.

*Dillwyn*, Descript. Catal. p. 45.

*Turton*, Conch. Dict. p. 101.

*Mus. nost.* From rocks in Torbay.

Shell from half an inch to an inch in diameter, very variable in shape, orbicular, oblong, or kidney-form, with the margin variously indented, rarely entire: but all the varieties may be known by the projecting teeth.

*ANATINA testâ convexâ oblongâ, angulis binis transversis, latere antico* arctica.  
*truncato, umbonibus terminalibus, cochlearibus rotundato-protensis.* <sup>4.</sup>

Shell convex oblong, with two transverse angles, truncate at the hinder end, the beaks terminal, and the teeth rounded and projecting inwards.

*Tab. nost. 4, fig. 7 and 8.*

*Mya arctica.* *Linn. Syst. Nat. p. 1113.*

*Gmelin*, Syst. p. 3220.

*Turton*, Linn. Syst. iv. p. 177.

*Wood*, Conch. p. 95.

*Turton*, Conch. Dict. p. 104.

*Mus. nost.* From a mass of Sertularia, in Dublin bay.

Shell half an inch long and rather more than three quarters of an inch broad, with the beaks prominent and close to the hinder end, from which run two transverse ridges, one along the back margin, and the other obliquely to the angle of the front margin:

hinge with a projecting round spoon-shaped tooth in each valve, and a cavity close to it.

This shell so very much resembles some specimens of the *Hiatella minuta*, that without an examination of the hinge it might be easily overlooked for it. That Linné knew them to be distinct is evident, from his having placed them in two different genera, on account of the differences in the hinge.

15. LISTERA—TURTON.

*Testa transversa, ovata, æquivalvis, lateribus subhiantibus. Cardo dente cochleariformi cum denticulis adjectis: lateralibus nullis. Ligamentum externum.*

Shell transverse, oval, equivalve, a little open at the sides. Hinge with a spoon-shaped tooth and additional denticles: lateral teeth none. Ligament external.

This family differs from the *Anatina*, in having a small tooth or two in addition to the spoon-shaped ones: and from the genus *Amphidesma* in wanting the lateral teeth.

It is named from Dr. Martin Lister, the Coryphæus of all systematic conchology.



LISTERA

compressa  
1.

- Tab. nost.* 5, fig. 1 and 2.
- Mactra Listeri. *Gmelin*, Syst. p. 3261.  
*Turton*, Linn. Syst. iv. p. 213.  
*Pennant*, Brit. Zool. iv. p. 194.  
*Linn. Trans.* viii. p. 71.  
*Dorset Catal.* p. 33, tab. 7, fig. 1.  
*Turton*, Conch. Dict. p. 83.
- Mactra compressa. *Montagu*, Test. Brit. p. 96.  
*Turton*, British Fauna, p. 155.
- Tellina plana. *Donovan*, Brit. Shells ii. tab. 64, fig. 1.
- Mactra piperita. *Dillwyn*, Descript. Catal. p. 142.
- Mya Hispanica. *Chemnitz*, vi. p. 31, tab. 3, fig. 21.
- Trigonella plana. *Da Costa*, Br. Conch, p. 200, tab. 13, fig. 1.
- Pectunculus latus. *Lister*, Conch. tab. 253, fig. 88.
- Mus. nost.* The mouths of rivers and muddy shores.

Shell an inch and a half long, and nearly two inches broad, thin, flat, semitransparent, whitish with sometimes transverse colored bands, of a somewhat oval triangular figure and rounded at both ends: beaks small, nearly central: hinge with a single additional denticle in one valve closing between two in the other.

We believe that the *Mactra dealbata* of *Montagu*, p. 95, tab. 5, fig. 1, and the *M. pellucida* of *Chemnitz*, vi. tab. 24, fig. 234, is this species: one of the sides being occasionally a little more elongated, as is represented in our plate.

## 16. AMPHIDESMA—LAMARCK

*Testa ovata, æquivalvis, subclausa. Cardo dente cochleariformi cum denticulis adjectis, et lateralibus. Ligamentum externum.*

Shell oval, equivalve, mostly closed. Hinge with a spoon-shaped tooth and adjacent denticles, and lateral teeth. Ligament external.

All the British species, hitherto discovered of this genus, have a lateral tooth on each side in one of the valves only.

<sup>1</sup>prismaticum. AMPHIDESMA *testâ ovata-oblongâ, latere antico attenuato, valvâ alterâ denticulo simplici et dentibus lateralibus.*

Shell oval-oblong, tapering at the anterior side, with a plain denticle and lateral teeth in one of the valves.

*Tab. nost. 5, fig. 3.*

Ligula prismatica *Montagu, Suppl. p. 23, tab. 26, fig. 3.*

*Penant, Brit. Zool. iv. p. 169.*

Mya prismatica. *Wood, Conch. p. 101.*

*Dillwyn, Descript. Catal. p. 47.*

*Turton, Conch. Dict. p. 103.*

*Mus. nost.* Western coasts, British Channel, Scotland.

Shell nearly half an inch long, and twice as broad, thin transparent, glossy white reflecting metallic colors, elegantly tapering to a point at one end and rounded at the other: beaks small, pointing towards the longer side: inside smooth, glossy.



*Mactra alba.* Linn. *Trans.* vi. tab. 18, fig. 9 to 12.

*Mus. nost.* English and Irish coasts.

Shell more than half an inch long, and three quarters broad, thin flat, glossy white, a little angular at one of the sides when full grown: beaks not quite central: inside smooth glossy white.

17. AGINA—TURTON.

*Testa, transversa, ovata, æquivalvis, inæquilateralis, latere antico hiante. Cardo dente unico erecto conico penetrante in utráque valvâ: lateralibus nullis. Ligamentum externum.*

Shell transverse, oval, equivalve, inequilateral, open at the anterior end. Hinge with a single erect conic penetrating tooth in each valve: lateral teeth none. Ligament external.

*purpurea.* AGINA.  
1.

*Tab. nost. 4, fig. 9.*

*Mya purpurea.* Montagu, *Test. Brit. Suppl.* p. 21.

*Mus. nost.* From rocks in Torbay.

Shell the eighth of an inch long, and a quarter of an inch broad, convex, opaque, transversely oval, obliquely truncate at the anterior end, covered with a glossy white skin under which it is chalky white, irregularly striate transversely; beaks prominent, close to the larger side which is abrupt; inside glossy white; hinge with strong conic teeth, one in each valve penetrating into a cavity of the opposite valve.

Whether this be the shell mentioned by Montagu, as having been taken among corallines, his short description will hardly allow us to determine. Our specimens were taken from the inside of stones dredged in Torbay, varying a little in the outline, but all preserving their generic character. They have not however the purple tinge, probably in consequence of their internal habitation and want of light: or it is possible that an undiscovered species still remains.

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### 18. ERVILIA—TURTON.

*Testa ovata, æquivalvis, inæquilateralis, clausa. Cardo dente unico erecto inter duos minutos valvæ alterius penetrante: lateralibus nullis. Ligamentum internum.*

Shell oval, equivalve, inequilateral, closed. Hinge with a single erect tooth closing between two small divergent ones in the opposite valve: lateral teeth none. Ligament none.

nitens,  
1.

ERVILIA:

*Tab. nost.* 19, fig. 4.

*Mya nitens.*

*Montagu*, Test. Brit. Suppl. p. 165

*Laskey*, Wern. Soc. i. p. 375, tab. 8 fig. 4.

*Wood*, Conch. p. 101.

*Dillwyn*, Descript. Catal. p. 47.

*Pennant*, Brit. Zool. iv. p. 168.

*Turton*, Conch. Dict. p. 103.

*Mus. nost.* On the Scotch coasts.

Shell nearly a quarter of an inch long, and a little more in breadth, of a glossy pink color, more or less softened down to white, flattish, oval, a little tapering at the longer side and rounded at both, finely and regularly striate transversely; beaks rather prominent, not central: inside colored like the outside, but not so glossy, with the margin entire: hinge with a single strong erect cloven tooth in one valve, closing into a deep cleft between two small laminar divergent elevations in the other, besides an adjacent cavity for the ligament in both valves.

The Genus seems allied to the *Crassatella* of Lamarek.

19. KELLIA.—TURTON.

*Testa subglobosa, æquivalvis, clausa. Cardo valvæ alterius dentibus duobus approximatis cum laterali remoto, alterius dente concavo cum laterali remoto. Ligamentum internum.*

Shell somewhat globular, equivalve, closed. Hinge with two approximate teeth and a remote lateral tooth in one valve, and a concave tooth and remote lateral one in the other. Ligament internal.

The genus is denominated from our worthy and scientific fellow-student in this department of science J. M. O'Kelly, Esq., of Dublin.

*KELLIA testá suborbiculari æquilaterali albá.*

suborbicularis.  
1.

Shell somewhat orbicular equilateral and white.

*Tab. nost. 11, fig. 5 and 6.*

*Mya suborbicularis. Montagu, p. 39, 564, tab. 26, fig. 6.*

*Linn Trans. viii. p. 41.*

*Turton, British Fauna. p. 167.*

*Pennant, Br. Zool. iv. p. 166.*

*Wood, Conch. p. 111.*

*Dillwyn, Descript. Catal. p. 55.*

*Tellina suborbicularis. Turton, Conch. Dict. p. 179.*

*Mus. nost. In limestone and old bivalves.*

Shell nearly half an inch long, and a little broader, very convex, yellowish-white, very slightly striate transversely, the front margin running nearly straight: beaks central, prominent, obtuse: hinge with a single recurved concave tooth in one valve and two small teeth in the other, and a lateral tooth in each valve in the opposite side of the primary ones.

*KELLIA testá ovatá inæquilaterali rubrá.*

rubra.

Shell oval inequilateral and red.

*Tab. nost.* 11, fig. 7 and 8.

*Cardium rubrum.* *Montagu*, Test. Brit. p. 83, tab. 27, fig. 4.

*Linn. Trans.* viii. p. 66.

*Pennant*, Brit. Zool. iv. p. 189.

*Turton*, British Fauna, p. 153.

*Wood*, Conch. p. 213.

*Dillwyn*, Descript. Catal. p. 131.

*Cardium læve.* *Walker*, Test. Minut. p. 24, fig. 86.

*Tellina rubra.* *Turton*, Conch. Dict. p. 168.

*Mus. nost.* In the crevices of marine rocks.

Shell about the tenth of an inch in diameter, smooth, or appearing as if very finely shagreened, of an uniform rich crimson, often paler or covered with a rough green or brown coat: inside glossy purple: beaks near one end, prominent, under which the margin slopes in an incurved manner towards the smaller end: teeth minute, as in the last.

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#### 20. MONTACUTA—TURTON.

*Testa ovata vel oblonga, æquivalvis, inæquilateralis, subclausa. Cardo dentibus duobus in utraq̄ue valvâ, cum foveâ interpositâ: lateralibus nullis. Ligamentum internum.*



Shell oval or oblong, equivalve, inequilateral, mostly closed. Hinge with two teeth in each valve, and a cavity between them: lateral teeth none. Ligament internal.

In this genus there is a vacant space in both the valves between the teeth, causing them to be rather remote from each other. One of the teeth is generally concave or inclining to spoon-shaped.

We have dedicated it to the memory of Montagu, whose premature death all lovers of this interesting science must sincerely lament.

*MONTACUTA testá ovatá, costis longitudinalibus obsoletis.*

substriata.  
1.

Shell oval, with obscure longitudinal ribs.

*Tab. nost. 11, fig. 9 and 10.*

Ligula substriata. *Montagu, Test. Suppl. p. 25.*

*Pennant, Brit. Zool. iv. p. 169.*

Mya substriata. *Dillwyn, Descript. Catal. p. 47.*

*Wood, Conch. p. 102.*

*Turton, Conch. Dict p. 103.*

*Mus. nost.* Abundantly on the spines of the *Echinus purpureus*, to which they are attached by slender filaments issuing from the middle of the margin.

The detection of this singular habitat we owe to the researches of our young conchological friend, Mr. Edw. Harington.

Shell the eighth of an inch long, and a little more in breadth, oval, convex, slightly contracted in the middle, white or yellowish white and semitransparent, with obscure and rather remote

longitudinal raised striæ: beaks prominent, not quite central: the teeth in one valve obscure.

bidentata.  
2.

**MONTACUTA testâ ovatâ lævi, dente altero obliquo cochleariformi.**

Shell oval smooth, with one of the teeth oblique and spoon-shaped.

**Mya bidentata** *Montagu, Test. Brit. p. 44, tab. 26, fig. 5.*

*Linn. Trans. viii. p. 41.*

*Turton, Brit. Fauna, p. 147.*

*Pennant, Brit. Zool. iv. p. 166.*

*Wood, Conch. p. 99.*

*Dillwyn, Descript. Catal. p. 45.*

*Turton, Conch. Dict. p. 102.*

*Mus. nost.* Fine sand, and in the back of old oyster-shells.

Shell hardly the eighth of an inch long, rather produced at one end, whitish but not glossy, and frequently covered with a rough coat: beaks near the broader end.

ferruginosa.  
3.

**MONTACUTA testâ oblongâ, transversim substriatâ, dente altero incurvo cochleariformi.**

Shell oblong, slightly striate transversely, with one of the teeth incurved and spoon-shaped.

**Mya ferruginosa.** *Montagu, Suppl. p. 22, tab. 26, fig. 2.*

*Pennant, Brit. Zool. iv. p. 167.*

*Wood, Conch. p. 100.*

*Dillwyn, Descript. Catal. p. 46.*

*Turton, Conch. Dict. p. 102.*

*Mus. nost.* Scotch and western coasts.

Shell a quarter of an inch long, and nearly half an inch broad, white, but often covered or blotched with an ochraceous coat, obscurely wrinkled transversely: beaks placed near one end, obtuse; one of the teeth in each valve erect, the other much bent inwards and sloping downwards.

*MONTACUTA testâ oblongâ lævi dentibus erectis.*  
Shell oblong smooth, with all the teeth erect.

oblonga.  
4.

*Tab. nost. 11, fig. 11 and 12.*

*Mus. nost.* From sand in Torbay.

Shell resembling the last, but is about half the size, smooth or very obscurely striate transversely, glossy. It has probably been overlooked for a half-grown specimen of the former shell, but differs essentially in having all the teeth erect.

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## 21. LEPTON.—TURTON.

*Testa compressa, suborbicularis, æquivalvis, æquilateralis, lateribus subhiantibus. Cardo valvæ alterius dente unico et laterali utrinquè lineari transverso; alterius foveâ mediâ et dente utrinquè laterali transverso bipartito, segmentis ab umbone divaricatis. Ligamentum internum.*

Shell flat, nearly orbicular, equivalve, inequilateral, a little open at the sides. Hinge of one valve with a single tooth and a transverse linear lateral one each side; of the other valve with a cavity in the middle and a transverse deeply cloven lateral tooth, each side the segments of which divaricate from the beak. Ligament internal.

Montagu had seen only one valve of this extremely rare and valuable shell, and was consequently unacquainted with the whole of the internal structure.

In one of the valves is a central erect primary tooth between two hollows; and on both sides from the hinge runs a nearly straight transverse rib a little within the margin, upon each of which is placed a small tooth-like prominence not very remote from the hinge; the rib also on one of the sides is furnished with a small internal oblique cavity, not unlike the spoon-shaped tooth of the *Anatina convexa*.

In the other valve there is no primary tooth, but a large triangular cavity for the reception of the tooth of the opposite valve: and the lateral teeth are transverse and divided from their origin, forming acute angles, the points of which are close to the cardinal cavity, with the inner limb continued by a rib like that in the opposite valve.

squamosum. LEPTON *testâ squamoso-punctatâ*.

1.

Shell punctured in a scale like manner.

*Tab. nost.* 6, fig. 1 to 3.

Solen squamosus. *ontagu*, *Test. Brit.* p. 365.

*Linn. Trans.* viii. p. 48.

*Turton*, British Fauna, p. 149.

*Wood*, Conch. p. 140.

*Pennant*, Brit. Zool. iv. p. 175.

*Dillwyn*, Descript. Catal. p. 70.

*Turton*, Conch. Dict. p. 164.

*Mus. nost.* Taken in Torbay in the spring of 1820, and lately by Mr. Lyons, at Tenby.

Shell four-tenths of an inch long, and half an inch broad, a little inclined to oblong, very slightly constricted at the upper or front margin, equally rounded at both the ends, clear white and transparent; very closely punctured all over: beaks quite central: inside glossy-white with very fine ray-like longitudinal striæ from the hinge.

*LEPTON testâ nitidâ, transversim substriatâ.*

Shell glossy, slightly striate transversely.

*Mus. nost.* From coralline, in Torbay.

nitidum.  
2.

Shell half the size of the last, which it resembles in shape and hinge, but is of a lucid pale glossy horn-color, without punctures.



## 22. LUTRARIA—LAMARCK.

*Testa transversa, oblonga, æquivalvis, lateribus hiantibus. Cardo dente cochleariformi, dente trigono adjecto: lateralibus nullis. Ligamentum internum.*

Shell transverse, oblong, equivalve, open at both the sides. Hinge with a spoon-shaped tooth and an adjacent triangular one: lateral teeth none. Ligament internal.

This genus has been very judiciously made distinct from the *Mactra*, both on account of the absence of lateral teeth, and the more considerable gape at one or both of the sides. The general outline is also transversely oblong; and the habitat is about the entrance of rivers.

oblonga.  
1.

LUTRARIA *testâ oblongâ, inæquilaterali transversim rugoso-striatâ, latere antico elongato angulato-truncato.*

Shell oblong inequilateral with rough transverse striæ, elongated and angularly truncated at the anterior end.

*Tab. nost. 5, fig. 6.*

*Mactra hians.*

*Montagu, Test. Brit. p. 101.*

*Pennant, Brit. Zool. iv. p. 196.*

*Donovan, British Shells, iii. tab. 140.*

*Linn. Trans. viii. p. 74.*

*Turton, Brit. Fauna, p. 155.*

*Dorset Catal. p. 33, tab. 2, fig. 4.*

*Dillwyn, Descript. Catal. p. 146.*

*Turton, Conch. Dict. p. 85, fig. 41.*

- Mya oblonga. Chemnitz, vi. p. 27, tab. 2, fig. 12.  
 Chama magna. Da Costa, p. 230, tab. 17, fig. 4.  
 Mus. nost. On the western coasts.

Shell two inches and three quarters long, and five inches and a half broad, thick opaque and strong, of a dull white or reddish yellow color: beaks near one end, from which runs a curved slope, giving the shell an elegant scymetar-like form, and an oblique depression: the shorter end is rounded, and the longer side truncate and somewhat angular.

LUTRARIA *testâ ellipticâ subæquilaterali læviusculâ, lateribus rotundatis.* elliptica.  
 Shell elliptical nearly equilateral and almost smooth, rounded at 2.  
 both ends.

- Mactra Lutraria. Linn. Syst. Nat. p. 1126.  
 Gmelin, Syst. p. 3259.  
 Turton, Syst. Nat. iv. p. 211.  
 Pennant, iv. p. 195, tab. 55, fig. 3.  
 Chemnitz, vi. p. 239, tab. 24, fig. 240, 241.  
 Montagu, Test. Brit. p. 100.  
 Donovan, Brit. Shells ii. tab. 58.  
 Linn. Trans. vi. tab. 16, fig. 3 and 4.  
 Linn. Trans. viii. p. 73.  
 Turton, British Fauna, p. 155.  
 Dorset Catal. p. 32, tab. 5, fig. 11.  
 Dillwyn, Descript. Catal. p. 146.  
 Turton, Conch. Dict. p. 84.  
 Chama magna. Da Costa, Brit. Conch. p. 230, Descript.

*Chama fusca.* Lister, Conch. tab. 415. fig. 259.

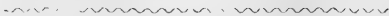
*Mus. nost.* On sandy and muddy shores.

Shell two inches and a half long, and four and a half broad, thin, brittle, nearly equally rounded at both the ends, covered with a greenish or brownish wrinkled skin which projects three or four inches beyond the extremity of the shell, and covers the elongated tube of suction: both the sides slope nearly equally from the hinge.

Young shells are sometimes very much produced transversely, but in all other respects similar.

A singular variety, perhaps a distortion, is in our cabinet, in which the valves are very unequal; one of them being greatly convex and larger, inclosing the other which is flat; both of them furnished with transverse plaits and striæ, and on the inside of the flat or smaller valve are raised laminar plates, especially under the hinge: the cardinal margin runs in a nearly straight direction; the hinge is nearer to the more pointed end; and it is barely an inch in length and two in breadth.

It may possibly be the *Mactra planata* of Chemnitz, iv. p. 238, tab. 24, fig. 238 and 239, who describes it as being furnished with unequal plaits both inside and outside, and very finely striated. It was dredged up in Torbay.





## 23. MACTRA—LINNE.

*Testa subtrigona, æquivalvis, lateribus subhiantibus. Cardo dente cochleariformi, cum dente trigono adjecto: lateralibus laminatis, valvæ alterius didymis. Ligamentum internum.*

Shell somewhat triangular, equivalve, a little open at the sides.

Hinge with a spoon-shaped tooth and an adjacent triangular one: the lateral teeth laminar, double in one of the valves. Ligament internal.

The shells confined to the above generic character form a very natural family, remarkable for the number strength and position of the teeth. In one valve there is a single elongated lateral plate on each side, which closes between two in the other. And in this respect they resemble the fresh-water shells of the genus *Mysca*, but the primary teeth are very different, and the ligament is internal.

Those of the first division, or such as have the lateral teeth striate in a direction opposite to their transverse extension, are usually thick and solid: and such as have the lateral teeth quite plain, are thin and semitransparent.

They inhabit the sandy parts of our coasts.

\* *Dentes laterales striati.* 1-5.

The lateral teeth striate.

MACTRA *testâ ovato-trigona læviusculâ æquilaterali, lateribus obliquis, umbonibus incurvis.* solida.  
1.

Shell oval-triangular nearly smooth and equilateral, with the sides oblique, and the beaks incurved.

- Mactra solida.* Linn. Syst. Nat. p. 1126.  
 Gmelin. Syst. p. 3259.  
 Turton, Linn. Syst. iv. p. 211.  
 Pennant, Brit. Zool. iv. p. 193, tab. 55, fig. 2.  
 Chemnitz, vi. p. 230, tab. 23, fig. 229, 230.  
 Donovan, British Shells, ii. tab. 61.  
 Montagu, Test. Brit. p. 92.  
 Linn. Trans. viii. p. 70.  
 Turton, British Fauna, p. 154.  
 Dorset Catal. p. 32, tab. 6, fig. 6.  
 Dillwyn, Descript. Catal. p. 140.  
 Turton, Conch. Dict. p. 81.
- Trigonella Gallina.* Da Costa, p. 199, tab. 14, fig. 6.  
*Mus. nost.* On most sandy coasts.

Shell an inch and a half long and two inches broad, strong and solid, nearly smooth or with a few antiquated ridges, equally sloping obliquely at the sides, so as to make the front margin longer than the lateral angles: color yellowish-white, often marked with deeper transverse zones.

<sup>truncata.</sup>  
<sup>2.</sup> **MACTRA** *testá* *trigoná læviusculá æuilaterali, lateribus truncatis, umbonibus productis rectis.*

Shell triangular nearly smooth and equilateral, with the sides truncated, and the beaks elongated and straight.

- Mactra truncata.* Montagu, Test. Brit. Suppl. p. 34.  
 Pennant, Brit. Zool. iv. p. 196, tab. 54, fig. 1.  
 Dorset Catal. p. 34, tab. 12, fig. 1.

*Dillwyn*, Descript. Catal. p. 140.

*Turton*, Conch. Dict. p. 81.

*Maetra subtruncata*. *Donovan*, British Shells, iv. tab. 126.

*Trigonella zonaria*. *Da Costa*, p. 197, tab. 15, fig. 1.

*Pectunculus crassiusculus*. *Lister*, Conch. tab. 253, fig. 87.

*Mus. nost.* From Teignmouth and Scotland.

Shell the size of the last, but is hardly as broad at the margin as it is long at the sides which are more truncated, and the beaks more elongated and erect.

MAETRA *testâ ovato-trigona inæquilaterali, latere altero truncato, altero producto incurvo, umbonibus incurvis.* crassa.  
3.

Shell oval-triangular equilateral, one side truncate, the other produced and incurved, beaks incurved.

*Tab. nost.* 5, fig. 7.

*Lister*, Anim. Angl. p. 174, tab. 4, fig. 24.

*Mus. nost.* Dredged up in the Irish Channel.

Shell two inches long and broad, and more than an inch high, very thick strong and solid, nearly smooth with a few antiquated ridges about the margin, of a brownish color, abruptly truncate on one side where there is a deep impression under the hinge which is strongly and regularly striate obliquely, the other end much produced and rounded with an incurved slope from the hinge: beaks pointed, much turned inwards and inclining towards the longer side: teeth strong and prominent.

*Lister* appears to have been well acquainted with this shell, from the very exact description he has given of it—“*Hæc testa*

*pro magnitudine crassa et valida est. Ex alterâ parte ab umbone ad rectam lineam procedit, ex alterâ rotundior est, quâ solâ notâ abundè distinguitur ab aliis*" This shell for its size is thick and strong. On one side it runs in a straight line from the beak; on the other it is rounded, by which mark alone it may be sufficiently distinguished from all others.

subtruncata. *MACTRA testâ ovato-trigonâ inæquilaterali transversim striatâ, umbonibus tumidis rectis.*  
4.

Shell oval-triangular inequilateral striate transversely, with the beaks tumid and straight.

*Mactra subtruncata*, *Montagu*, Test. Brit. p. 93, and Suppl. p. 34, tab. 27, fig. 1.

*Linn. Trans.* viii. p. 71, tab. 1, fig. 11.

*Pennant*, iv. p. 194, tab. 55, fig. 1.

*Turton*, British Fauna. p. 154.

*Dorset Catal.* p. 38, tab. 5, fig. 10.

*Dillwyn*, Descript. Catal. p. 141.

*Turton*, Conch. Dict. p. 82.

*Trigonella subtruncata*. *Da Costa*, Br. Conch. p. 198.

*Mus. nost.* Western coasts, and Ireland.

Shell three quarters of an inch long and more than an inch broad, thin and convex, of a yellowish horn-color, rough and brown at the produced end, regularly striate transversely: one side truncate, the other produced in a straight line to a rather acute point; beaks not central, tumid and prominent, without curvature.

A variety is found, especially in Ireland, much stronger, more convex and opaque, of a more regularly triangular shape, not

being so much produced at one end: but they gradually run into each other, and may be readily known from all the species of this division, by the regular transverse striæ, which grow gradually fainter and disappear towards the hinge.

*MACTRA testâ oblongâ depressâ inæquilaterali, latere producto rotundato altero subtruncato, umbonibus incurvis.*

deaurata.  
5.

Shell oblong flattish inequilateral, rounded at the elongated side and somewhat truncate at the other, with the beaks incurved.

*Tab. nost. 5, g. 8.*

*Mus. nost.* Dredged up in the offing of Exmouth.

Shell five-eighths of an inch long, and an inch and a quarter broad, opaque and strong; one side elongated, sloping from the beaks, and rounded; the other shorter and somewhat angular, where it is a little open: color dull greyish-white, covered with a shining bronzed skin reflecting metallic lustres; coarsely and irregularly striate transversely, with a few coarser ridges towards the hinge: inside glossy greyish-white, with the margin plain: beaks rather prominent and pointed, a little inclining to the longer side.

Of this very beautiful shell we know neither description nor figure. In the outline it something resembles the *Mactra deal-bata* described in the eighth vol. of the Linnéan Transactions, p. 68, tab. 1, fig. 10, and the Dorset Catalogue, tab. 7, fig. 7. But that shell is represented as thin and transparent, and somewhat angular at the longer side: the teeth also appear to be different.

\*\* *Dentes laterales læves.* 6-10.

The lateral teeth smooth.

Stultorum.  
6. *MACTRA testâ trigonâ diaphanâ convexâ æquilaterali transversim substriatâ, latere antico rugoso.*

Shell triangular transparent convex equilateral slightly striate transversely, rough on one of the sides.

*Mactra Stultorum.* *Linn. Syst. Nat.* p. 1126.

*Gmelin, Syst.* p. 3258.

*Turton, Linn. Syst.* iv. p. 211.

*Pennant, iv.* p. 103, tab. 52, fig. 1.

*Chemnitz, vi.* p. 226, tab. 23, fig. 224 to 227.

*Montagu, Test. Brit.* p. 94.

*Donovan, British Shells,* iii. tab. 106.

*Linn. Trans.* viii. p. 69.

*Turton, British Fauna,* p. 154.

*Dorset Catal.* p. 32, tab. 8, fig. 3.

*Dillwyn, Descript. Catal.* p. 138.

*Turton, Conch. Dict.* p. 81.

*Trigonella radiata.* *Da Costa,* p. 196, tab. 12, fig. 3.

*Mus. nost.* On most sandy coasts.

Shell an inch and a half long, and an inch and three-quarters broad, very thin and brittle, white grey or pale brown, covered with a fine wrinkled skin which is rough at one of the extremities, radiate more or less from the hinge with paler stripes, and sometimes of a purplish cast about the beaks, rarely glossy white and without rays.

*MACTRA testá trigoná diaphaná convexá subæquilateralí, lateribus truncatis, umbonibus prominulis incurvis.* cinerea.  
7.

Shell triangular transparent convex and nearly equilateral, truncate at the sides, with the beaks prominent and incurved.

*Mactra cinerea.* *Montagu*, Test. Brit. Suppl. p. 35.  
*Pennant*, Brit. Zool. iv. p. 196.

Found at Weymouth, by Mr. Bryer.

Montagu is of decided opinion that this is a very distinct species, presenting the same difference from the *Mactra Stultorum* as there is between the *Mactra solida* and *Mactra truncata*, with respect to the depth of the shell, prominence of the beaks, and flatness of the truncated sides.

The valves of this *Mactra*, he observes, are more concave than of the *Mactra Stultorum*, more angulated, and rather broader in proportion to their length; the beak slightly turned to one side, beneath which is a depression or subarcuation in its contour, on the opposite side much compressed laterally: it is nearly destitute of markings, there being only one or two obsolete pale rays, and the margin only covered with an epidermis, which is brown inclining to ferruginous at one end: inside pale with a tinge of blush.

Specimens answering to this distinction are not unfrequently cast on the Paington sands after an eastern gale.

*MACTRA testá ovatá planiusculá inæquilateralí transversim striatá, umbonibus incurvis.* glausa.  
8.

Shell oval flattish inequilateral and striate transversely, with the beaks incurved.

- Mactra glauca.* Gmelin, Syst. p. 3260.  
 Turton, Linn. Syst. iv. p. 212.  
 Montagu, Test. Brit. p. 571.  
 Donovan, British Shells, iv. tab. 125.  
 Pennant, Brit. Zool. iv. p. 192.  
 Linn Trans. viii. p. 68.  
 Dillwyn, Descript. Catal. p. 144.  
 Turton, Conch. Dict. p. 80.
- Mactra helva.* Chemnitz, vi. p. 234, tab. 23, fig. 232, 233.

Found by Miss Pocock on Hale sands, in Cornwall; from which neighbourhood some single valves have been lately procured by General Bingham.

Shell nearly two inches and a half long, and three and a half broad, of a pale color marked with faint irregular glaucous rays, flattish and finely striate transversely: the beaks recurved, not quite central, with a narrow gape under them.

fragilis.  
9.

**MACTRA** *testá ovato-oblongá planiusculá subæquilaterali lævi, anticè anguloso flexuosá.*

Shell oval-oblong flattish nearly equilateral and smooth, with an angular flexure at the anterior side.

*Tab. nost. 4, fig. 10.*

- Mactra fragilis.* Gmelin, Syst. p. 3261.  
 Turton, Linn. Syst. iv. p. 213.  
 Chemnitz, vi. p. 236, tab 24, fig. 235.

*Mus. nost.* Dredged in the Channel, near Guernsea.



Shell an inch and a quarter long, and nearly two broad, pale yellowish-white, transparent, smooth except a few irregular obscure transverse ridges, angular at the more produced side by a rib which runs obliquely from the hinge to the margin: beaks pointed not quite central, with a depression under them on the shorter side: teeth as in this division.

The discovery of this species, of which we have as yet found only a few single valves, will we trust set at rest all doubts concerning the two species of Chemnitz, the *Mactra pellucida*, and the *Mactre fragilis*.

Our specimens correspond exactly with his figure and description: *testá ovali-oblongá, subcompressá, albá, diaphaná, lævi, cum flexurá notabili et manifestá in parte anticá.* "Shell oval-oblong, flattish, white, transparent, smooth, with a singular and evident flexure at the anterior side." He remarks also, that it has the figure of a *Tellina*, but the hinge of a *Mactra*.

*MACTRA testá subtrigoná, strüss transversis longitudinalibusque minutis.* radiata.  
Shell somewhat triangular, with transverse striæ and minute lon- 10.  
gitudinal ones.

*Mactra radiata.* Donovan, British Shells, v. tab. 161.

*Linn. Trans.* viii. p. 61.

*Turton*, British Fauna, p. 154.

*Dillwyn*, Descript. Catal. p. 138.

*Turton*, Conch. Dict. p. 80.

*Cardium edentulum.* Montagu, Test. Brit. Suppl. p. 29.

Found by Captain Laskey, at Portsmouth.

## CONCHYLIA—DITHYRA. 24.

Shell two inches and a half long, and nearly three broad, thin brittle, dirty white with a rufous tinge, and marked with regular pale testaceous rays: beaks prominent, rather oblique: hinge with a depression in the middle, and the rudiment of a small oblique denticle, with a small lateral tooth on each side.

We are unacquainted with this shell, and have consequently no means of determining its proper place in our present arrangement.



## 24. GOODALLIA—TURTON.

*Testa trigona, æquivalvis, inæquilateralis, clausa. Cardo valvæ alterius dentibus duobus cum foveâ trigonâ interpositâ, alterius dente unico: lateralibus obsoletis. Ligamentum internum.*

Shell triangular, equivalve, inéquilateral, closed. Hinge with two teeth in one valve and a triangular cavity between them, in the other valve a single tooth: lateral teeth obscure. Ligament internal.

The minute shells of this genus differ materially from the *Mactra*, both in the form and disposition of the teeth; the lateral ones consisting of a rather remote simple tooth in each valve on the more produced side: the valves are also closed.

This well marked genus, exclusively the discovery of Montagu, is respectfully dedicated to the learned Dr. Goodall, the Provost of Eton.

*GOODALLIA margine interno denticulato.*

triangularis.  
1.

Shell with the inner margin toothed.

*Tab. nost.* 6, fig. 14.

*Mactra triangularis.* *Montagu*, Test. Brit. p. 99, tab. 3, fig. 5

*Pennant*, Brit. Zool. iv. p. 195.

*Linn. Trans.* viii. p. 72.

*Turton*, British Fauna, p. 155.

*Dillwyn*, Descript. Catal. p. 143.

*Turton*, Conch. Dict. p. 82.

*Mus. nost.* Western coasts, and Ireland.

Shell two lines long and three broad, strong, smooth, white or brown, a little produced on one side, with the beaks very prominent; inside white but not much glossed, and strongly toothed on the margin: in one valve a large cloven tooth; in the other two small teeth with a triangular cavity between them.

*GOODALLIA margine interno integerrimo.* †

minutissima.  
2.

Shell with the inner margin quite entire.

*Tab. nost.* 6, fig. 10.

*Mactra minutissima.* *Montagu*, Test. Brit. Suppl. p. 37.

*Pennant*, Brit. Zool. iv. p. 197.

*Dillwyn*, Descript. Catal. p. 143.

*Turton*, Conch. Dict. p. 83.

*Mus. nost.* From Cornwall.

In size and form it exactly resembles the *Goodallia triangularis*, among which it has doubtless been overlooked, but presents the same differences as are observed between the *Crassina sulcata* and *Crassina Scotica*, the margin being thinner and without the least appearance of crenulations.

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25. SOLEN—LINNÉ.

*Testa transversim lineari-producta, æquivalvis, inæquilateralis, lateribus hiantibus. Cardo subterminalis, umbonibus obsoletis, dentibus numero et formâ variis: lateralibus nullis. Ligamentum externum.*

Shell transversely produced and linear, equivalve, inequilateral, open at the sides, Hinge near one end, with the beaks obscure, and the teeth varying in number and shape: lateral teeth none. Ligament external.

We have confined this genus to those of the Linnéan family of the Solen which have a linear and elongated form, as affording a more simple and definite discrimination.

The processes which extend along the cartilage edge of most of them, can hardly be considered as lateral teeth, being attached in a rib-like manner to the valves.

\* *Valvis unidentatis*. 1-2.

With a single tooth in each valve.

SOLEN *testâ rectâ, extremitate anticâ constricto-marginatâ, dentibus complanato-rotundatis.* Vagina.  
1.

Shell straight, margined by a stricture at the anterior end, with the teeth flat and rounded.

*Tab nost.* 6, fig. 4.

Solen Vagina.

*Linn. Syst. Nat.* p. 1113.

*Gmelin. Syst.* p. 3223.

*Turton, Linn. Syst.* iv. p. 180.

*Pennant,* iv. p. 171, tab. 49, fig. 1.

*Chemnitz,* vi. p. 40, tab. 4, fig. 26, 27.

*Montagu,* p. 48 and 565, and *Suppl.* p. 25.

*Linn. Trans.* viii. p. 42.

*Turton, British Fauna,* p. 148.

*Dorset Catal.* p. 28, tab. 4, fig. 8.

*Wood, Conch.* p. 119, tab. 27, fig. 1.

*Dillwyn, Descript. Catal.* p. 57.

*Turton, Conch. Dict.* p. 159.

Solen marginatus. *Donovan, Brit. Shells* iv. tab. 110.

Solen rectus brevior. *Lister,* tab. 410, and 1056, fig. 5.

*Mus. nost.* Western and Irish coasts.

Shell hardly an inch long, and four or five broad, of a nearly cylindrical form, covered with a yellowish skin which extends nearly an inch beyond the hinder end, not divided diagonally like most of the species: at the hinge end is a strong indenture or ligature, and a thickened rib-like elevation on the inside.

The teeth are flattened at the surface where they meet together when closed, and rounded in the circumference, each of them supported by a short lateral rib: and there is no transverse cardinal process.

Novacula.  
2.

*SOLEN testá rectá, dentibus conicis obtusis subarcuatis.*

Shell straight, with the teeth conic obtuse and slightly curved.

Solen Novacula.

*Montagu*, Test. Brit. p. 47.

*Pennant*, Brit. Zool. iv. p. 172.

*Linn. Trans.* viii. p. 44.

*Turton*, British Fauna. p. 148.

*Wood*, Conch. p. 119.

*Dillwyn*, Descript. Catal. p. 58.

*Turton*, Conch. Dict. p. 159.

A very doubtful species, said to resemble the Solen Siliqua, except in having a single tooth in each valve, and wanting the rib-like appendages under the teeth.

Some small specimens, answering to the above character, were presented to us as having been collected at the North Bull, in Dublin bay.

\*\* *Valvá alterá bidentatá.* 3-6.

With two teeth in one of the valves.

Siliqua.  
3.

*SOLEN testá rectá, valvá alterá dente conico hastato-acuminato, alterá bidentatá.*

- Tab. nost. 6, fig. 5.*
- Solen Siliqua. *Linn. Syst. Nat.* p. 1113.  
*Gmelin, Syst.* p. 3223.  
*Turton, Linn. Syst.* iv. p. 180.  
*Pennant, iv.* p. 171, tab. 48, fig. 1.  
*Montagu, Test. Brit.* p. 46.  
*Donovan, British Shells,* ii. tab. 46.  
*Da Costa, p.* 535, tab. 17, fig. 5.  
*Linn. Trans.* viii. p. 43.  
*Turton, British Fauna,* p. 147.  
*Dorset Catal.* p. 28, tab. 2, fig. 5.  
*Wood, Conch.* p. 118, tab. 26, fig. 1, 2.  
*Dillwyn, Descript. Catal.* p. 58.  
*Turton, Conch. Dict.* p. 158.
- Solen major. *Lister, Conch.* tab. 409, fig. 225.  
 Var. *testá subarcuatá.*  
 Shell slightly curved.  
*Chemnitz, vi.* p. 44, tab. 4, fig. 29.
- Mus. nost.* Common on all sandy coasts.

Shell often an inch in length, and seven or eight in breadth, a little obliquely sloping at one end and rounded at the other, divided diagonally into two triangles, one of which is faintly striate transversely and the other longitudinally and marked with purple bands.

The variety resembles the Solen Ensis, but is much flatter and larger, and longer in proportion in the breadth.

SOLENS *testá rectá, valvá alterá dente unico compresso obtuso subfisso,* Ligula.  
*alterá bidentatá.* 4.

Shell straight, in one valve a single compressed obtuse slightly cloven tooth, and two in the other.

*Tab nost.* 6, g. 6.

*Mus. nost.* From the sands in Torbay.

Shell resembling the Solen Siliqua in every respect, except in the teeth, which preserve a constant character. In the species under consideration, the single tooth is compressed, rounded and obtuse at the top where it is slightly cloven.

In the Solen Siliqua the tooth is depressed or flattened in a contrary direction, with a strong rib in the middle ending in an extremely sharp acicular point answering to its description by Linné in the *Mus. Lud. Ulr.* p. 473, "*Cardo dente unico subulato in alterá testá.*" Hinge with a single subulate tooth in one of the valves.

On the sands at Tor Abbey, at low water mark, this species may be dug up in great abundance, mixed with the Solen Siliqua and *S. Vagina*, and is probably equally common on all sandy shores: but the differences may not have been remarked, as cabinet specimens in general are dead shells, with the teeth shed or much defaced.

*Ensis.*  
5.

SOLENS *testá subarcuatá, valvâ alterâ unidentatâ, alterâ bidentatâ dentibus simplicibus.*

Shell somewhat curved, with a single tooth in each valve and two in the other, all undivided.

Solen *Ensis.*

*Linn. Syst. Nat.* p. 1114.

*Gmelin, Syst.* p. 3224.

*Turton, Linn. Syst. iv.* p. 180.

*Pennant, Brit. Zool. iv.* p. 172, tab. 48, fig. 2.



- Da Costa*, Brit. Conch. p. 237.  
*Chemnitz*, vi. p. 46, tab. 4, fig. 30.  
*Donovan*, British Shells, ii. tab. 50.  
*Montagu*, Test. Brit. p. 48.  
*Linn. Trans.* viii. p. 44.  
*Turton*, British Fauna, p. 148.  
*Dorset Catal.* p. 28, tab. 4, fig. 3.  
*Wood*, Conch. p. 122, tab. 28, fig. 1, 2.  
*Dillwyn*, Descript. Catal. p. 59.  
*Turton*, Conch. Dict. p. 160.

*Solen curvus.* *Lister*, Conch. tab. 411, fig. 257.

*Mus. nost.* On most sandy coasts.

Shell about half an inch long, and three or four inches broad, linear and very narrow in proportion to its length, diagonally divided, with one of the triangles marked with purple and white bands: both the extremities rounded.

Linné doubted whether this species were not a mere variety of *Solen Siliqua*. And in his description of it in the *Mus. Lud. Ulr.* p. 473, he has committed a small oversight, making the extremities rounded in one part of the description and truncate in another: *utrâque extremitate truncatâ*, and *extremitas utraque rotundato*.

SOLENS *testâ subarcuatâ, valvâ alterâ bidentatâ, alterâ tridentatâ dente medio bipartito.* pellucidus.  
6.

Shell slightly curved, in one valve two teeth, in the other three, the middle one of which is deeply divided.

- Solen pellucidus.* *Pennant*, iv. p. 173, tab. 49, fig 2.  
*Turton*, Syst. Nat. p. 181.  
*Montagu*, Test. Brit. p. 49, and 565.  
*Donovan*, British Shells, v. tab. 153.  
*Chemnitz*, xi. p. 205, tab. 198, fig. 1940.  
*Linn. Trans.* viii. p. 44.  
*Turton*, British Fauna, p. 148.  
*Wood*, Conch. p. 123, tab. 28, fig. 3.  
*Dillwyn*, Descript. Catal. p. 160.  
*Turton*, Conch. Dict. p. 160.
- Mus. nost.* Common in Torbay.

Shell a quarter of an inch long, and an inch broad, of an oblong linear shape, rounded at the ends, and not diagonally divided, but of an uniform greenish brown color.

The teeth of this shell are remarkable. In one valve are two teeth, one of which is erect, and the other inclining towards the cartilage. In the other valve are three teeth, close together at their base, the middle one deeply divided with the segments divaricate and pointing in opposite directions.

The terminal ones can hardly be considered as lateral processes, having no attachment to the margin, but originating from a common base. The points of all are obtuse and very slightly cloven.



## 26. PSAMMOBIA—LAMARCK.

*Testa transversa, oblonga vel ovata, æquivalvis, lateribus subhiantibus.*

*Cardo dentibus subbinis: lateralibus nullis. Ligamentum externum.*

Shell transverse, oblong or oval, equivalve, mostly open at the sides.

Hinge with two teeth in one or both the valves: lateral teeth none. Ligament external.

This genus comprehends such species of the Linnéan Tellina as have no lateral teeth, and of the Solen as have not a linear form with the hinge close to one end.

From other genera which resemble it in the structure or number of the teeth, it differs in gaping more or less at the sides.

\* *Valvâ alterâ bidentatâ. 1-5.*

With two teeth in one of the valves only.

PSAMMOBIA *testâ ovato-oblongâ lævi, costâ longitudinali internâ, dente altero apice complanato.*

teniata.  
1.

Shell oval-oblong smooth, with a longitudinal rib on the inside, and one of the teeth flattened at the top.

*Tab nost. 8, fig. 3.*

Solen fragilis.

*Montagu, Test. Brit. p. 51, Suppl. p. 26.*

*Pennant, Brit. Zool. iv. p. 174*

*Dorset Catal. p. 28, tab. 4, fig. 5.*

*Wood, Conch. p. 126, tab. 29, fig. 4, 5.*

*Dillwyn, Descript. Catal. p. 65.*

*Turton*, Conch. Dict. p. 163.

*Solen bidens*. *Chemnitz*, vi. p. 203, tab 198, fig. 1939.

*Mus. nost.* From Dublin bay, and Exmouth.

Shell nearly half an inch long, and nearly an inch broad, thin and transparent, rounded at both ends and a little contracted in the middle, pale horn-color or covered with a greenish skin, with a reddish longitudinal stripe from the hinge growing fainter and broader towards the margin: inside with a longitudinal rib in the middle; in one valve two erect teeth, one of which is pointed, the other broad and flattened at the top.

As both the *Solen fragilis* and the *Telina fragilis* of former authors fall into this genus, it was necessary that the specific name of one of them should be changed: and as the *Telina fragilis* is a Linnéan and a prior appellation, we have denominated this species from the red fillet which proceeds from the hinge in both valves.

florida.  
2.

*PSAMMOBIA testá ovato-oblongá, struüs transversis crebris longitudinalibusque minimis.*

Shell oval-oblong, with close-set transverse striæ and minute longitudinal ones.

*Tab. nost.* 6, fig. 9.

*Mus. nost.* Western coasts, and Ireland.

Shell half an inch long, and an inch broad, rather convex, nearly equally rounded at both ends, variously marked with purple red or yellow zones and longitudinal rays, and colored on

the inside from pale yellow to the richest purple; hinge with a single cloven tooth in one valve, and a cavity on each side for the reception of the two teeth of the opposite valve.

Montagu considered this shell to be the young of the *Solen vespertinus*, probably from not having met with the latter in its various stages of growth. We have a complete series of the *Solen vespertinus*, from less than a quarter of an inch to two and a half in breadth, and are satisfied that this is very distinct, as may be seen by comparing the figure above quoted, with the figure 10, of the same plate.

The *Solen vespertinus*, when of the same size is flatter, more angular at the anterior end, of a paler color both inside and outside, with the rays of a pale violet: in the hinge are also two teeth in each valve, one of them rather oblique and laminar; the transverse striæ are stronger, with only a few very indistinct longitudinal ones at one end in full grown shells.

*PSAMMOBIA testá ovato-oblongá, strüs transversis longitudinalibusque minimis, latere antico costulis obliquis longitudinalibus.* costulata.  
3.

Shell oval-oblong, with transverse striæ and minute longitudinal ones, and oblique longitudinal ribs at the anterior end.

*Tab. nost. 6, g. 8.*

*Mus. nost.* Dredged in Torbay, and the Channel.

Shell about half an inch long, and an inch broad, thin, slightly angular at the anterior end where there are about twelve fine oblique longitudinal ribs radiating from the hinge; finely striate

transversely, and longitudinally in a minute manner; color varying from pale yellow to deep purple, and marked with crimson blotches or stripes: beaks nearly central, a little prominent, not inclining to either side: inside colored like the outside and generally more vivid; in one valve a slightly cloven tooth closing between two in the other, one of which is slightly cloven.

Of this nondescript and most beautiful shell we have taken by the dredge four fine specimens, three of which were living ones.

fragilis.  
4.

*PSAMMOBIA testá obovatá tumidá, anticè flexuosá subrostratá, stris transversis lamellatis longitudinalibusque minimis.*

Shell oboval tumid, flexuous and produced at the anterior end, with transverse laminar striæ and minute longitudinal ones.

*Tab. nost. 7 fig. 11 and 12.*

*Linn. Syst. Nat. p. 1117.*

*Gmelin. Syst. p. 3230.*

*Turton, Linn. Syst. iv. p. 185.*

*Chemnitz, vi. p. 95, tab. 9, fig. 84.*

*Wood, Conch. p. 148.*

*Dillwyn, Descript. Catal. p. 78.*

*Turton, Conch. Dict. p. 166, fig. 18.*

*Tellina jugosa. Brown, Wern. Soc. ii. p. 506, tab. 24, fig. 2.*

*Tellina lata. Lister, Conch. tab. 390, fig. 229.*

*Mus. nost. Dublin, Valentia, and Bantry bays.*

Shell an inch or more long, and an inch and a half wide, thin, brittle, white or brownish, very tumid at the larger end, and

sloping to a rough flexuous point at the other, with numerous thin raised unequal striæ the interstices of which are minutely striate longitudinally: beaks near the swollen end: teeth strong, elevated, in one valve a cloven tooth with a cavity on each side for the reception of the two teeth of the opposite valve: lateral teeth none.

PSAMMOBIA *testá ovato-oblongá lævi, cardinis foveá transversá elongatá*  
Shell oval-oblong smooth, with a transverse elongated hollow at the hinge.

Laskeyi.  
5.

Tellina Laskeyi. *Montagu, Suppl. p. 28, tab. 28, fig. 3.*

*Pennant, Brit. Zool. iv. p. 178.*

*Wood, Conch. p. 179.*

*Turton, Conch. Dict. p. 173.*

Tellina angusta. *Dillwyn, Descript. Catal. p. 90.*

Found by Captain Laskey, in the Frith of Forth.

Shell half an inch long, and three quarters of an inch broad, rounded at one end and obtusely pointed at the other, of a purplish color and more or less clouded, covered when fresh with an olive-yellow skin; inside white round the margin; and in one valve is a marginal channel from the teeth almost to the end of the longer side: in one valve a single tooth, and two approximate slightly cloven ones in the other.

We are unacquainted with this shell, but from the above description, extracted from Montagu, in which no mention is made of lateral teeth, suspect it to belong to this genus.

\*\* *Valvis bidentatis*. 6-14.

With two teeth in each valve.

Legumen. **PSAMMOBIA** *testá lineari-oblongá lævi, dente altero bipartito segmentis*  
6. *divaricatis.*

Shell narrow-oblong smooth, one of the teeth deeply cloven with the segments divaricate.

Solen Legumen. *Linn. Syst. Nat.* p. 1114.

*Gmelin, Syst.* p. 3224.

*Turton, Linn. Syst.* iv. p. 181.

*Pennant, iv.* p. 173, tab. 49, fig. 3.

*Da Costa, Brit. Conch.* p. 238.

*Montagu, Test Brit.* p. 50.

*Chemnitz, vi.* p. 49, tab. 5. fig. 32-34.

*Donovan, British Shells, ii.* tab. 53.

*Linn. Trans.* viii. p. 45.

*Turton, British Fauna,* p. 148.

*Dorset Catal.* p. 29, tab. 4, fig. 4.

*Wood, Conch.* p. 124, tab. 28, fig. 4, 5.

*Dillwyn, Descript. Catal.* p. 60.

*Turton, Conch. Dict.* p. 162.

*Chama fusca.* *Lister, Conch.* tab. 420, fig. 264.

*Mus. nosti* North of Devon, Swansea, Ireland, &c.

Shell three quarters of an inch long, and nearly four inches broad, a little tapering and sloping at one end, rounded at both, white or covered with a greenish-yellow skin, smooth or very faintly striate transversely: hinge nearly central: in one valve



one of the teeth is cloven, with one of the segments pointing towards and nearly in a line with the cartilage; and between the teeth in each valve is a short white longitudinal rib.

*PSAMMOBIA testá oblongá lævi, latere antico ab umbone declivo, dente altero concavo.* declivis.  
7.

Shell oblong smooth, sloping from the beak on the anterior side, with one of the teeth concave.

Solen declivis. *Turton*, *Conch. Dict.* p. 164, fig. 80.

Chama angustior. *Lister*, *Conch. tab.* 421, fig. 265.

*Mus. nost.* From Scilly.

Shell three quarters of an inch long, and two inches broad, thin, white or covered with a dark brown skin, irregularly striate transversely, rounded and nearly equal at both ends, sloping from the hinge on the anterior side, and very slightly contracted in the middle: beaks nearly central, small, pointed: in each valve two teeth, one of them concave, and in one valve one of them oblique.

*PSAMMOBIA testá oblongá reniformi, strüs transversis ad latera subla-* antiquata.  
*mellatis, dentibus erectis.* 8.

Shell oblong kidney-form, with transverse striæ which become a little laminar at the sides, and all the teeth erect.

Solen antiquatus. *Pennant*, *iv.* p. 174, tab. 49, fig. 4.

*Montagu*, *Test. Brit.* p. 52.

*Linn. Trans.* viii. p. 46.

*Donovan*, *Brit. Shells*, *iv.* tab. 114.

*Turton*, *British Fauna*, p. 148.

- Wood, Conch. p. 125, tab. 29, fig. 3.*  
*Turton, Conch. Diet. p. 162.*  
 Solen Chama. *Du Costa, Brit. Conch. p. 238.*  
 Solen angustior. *Chemnitz, vi. p. 62, tab. 6, fig. 45.*  
 Solen coarctatus. *Gmelin. Syst. p. 3227.*  
*Turton, Linn. Syst. p. 183.*  
*Dillwyn, Descript. Catal. p. 64.*  
*Mus. nost.* From the Western Coasts.

Shell about an inch long, and two and a half broad, white covered with a brown wrinkled skin, somewhat kidney-shaped, rounded at both ends with a slight longitudinal impression from the hinge, and strong raised transverse striæ at each of the sides, but nearly smooth in the middle: teeth two in each valve, all somewhat conic and erect and extending beyond the margin.

vespertina: *PSAMMOBIA testâ ovato-oblongâ, latere antico subangulato, strîs trans-*  
 9. *versis anticè crassioribus, dente altero laminari obliquo.*

Shell oval-oblong, a little angular at the anterior side where the transverse striæ are thicker, with one of the teeth laminar and oblique.

- Tab. nost. 6, fig. 10.* Young.  
 Solen vespertinus. *Gmelin, Syst. p. 3228.*  
*Pennant, iv. p. 174, tab. 50, fig. 2, and tab 38,*  
*fig. 3.*  
*Montagu, Test. Brit. p. 54.*  
*Linn. Trans. viii. p. 47.*  
*Turton, British Fauna. p. 148.*

- Dorset Catal.* p. 29, tab. 5, fig. 1.  
*Wood*, Conch. p. 135, tab. 32, fig. 2, 3.  
*Turton*, Conch. Dict. p. 163.  
 Tellina depressa. *Donovan*, British Shells, ii. tab. 41.  
 Tellina albida. *Dillwyn*, Descript. Catal. p. 78.  
 Lux vespertina: *Chemnitz*, vi. p. 72, tab. 7, fig. 59. 60.  
 Chama lutescens. *Lister*, Conch. tab. 417, fig. 261.  
*Mus. nost.* Western coasts, Dublin bay, Guernsea.

Shell growing to an inch and a half long, and nearly three inches in breadth, opaque, covered when fresh with a dark brown skin, pale straw-color with purplish longitudinal rays which are usually visible on the inside, with transverse striæ which grow thicker towards the anterior end, and sometimes crossed with a few very minute and obscure longitudinal ones: in one valve are two teeth, and the same in the other, but one of them is thin laminar and oblique, and not always visible except in fresh specimens.

PSAMMOBIA *testâ ovato-oblongâ, latere antico subangulato, striis trans-* deflorata.  
*versis longitudinalibusque subundatis.* 10.

Shell oval-oblong, a little angular at the anterior side, with transverse striæ and undulate longitudinal ones.

- Venus deflorata. *Linn.* Syst. Nat. p. 1133.  
*Gmelin*, Syst. p. 3274.  
*Turton*, Linn. Syst. iv. p. 224.  
*Pennant*, iv. p. 207, tab. 60, lower fig.  
*Montagu*, p. 123, tab. 3, fig. 4.  
*Linn. Trans.* viii. p. 85.  
*Turton*, British Fauna, p. 158.

*Dillwyn*, Descript. Catal. p. 186.

*Turton*, Conch. Dict. p. 240.

*Tellina anomala*. *Chemnitz*, vi. p. 93, tab 9, fig. 79-83.

*Chama diffusior*. *Lister*, Conch. tab. 425, fig. 273.

Western coasts; very rare.

Shell an inch long, and an inch and three quarters broad, yellowish-white or purplish, faintly radiate, reticulate in a stronger manner at the cartilage side; inside purplish, with the rays often visible in each valve two teeth, one of them small.

Ferroensis. PSAMMOBIA *testá ovato-oblongá transversim striatá, latere antico flexuoso-angulato, areá anguli reticulatá.*  
11.

Shell oval-oblong striate transversely, with an angular flexure at the anterior end, and the surface of the angle reticulate.

*Tab nost.* 8, fig. 1.

*Tellina Ferroensis*. *Gmelin*, Syst. p. 3235.

*Turton*, Linn. Syst. iv. p. 191.

*Pennant*, iv. p. 177, tab. 50, fig. 3.

*Chemnitz*, vi. p. 99, tab. 10, fig. 91.

*Montagu*, Test. Brit. p. 55.

*Linn. Trans.* viii. p. 49.

*Turton*, British Fauna, p. 149.

*Dorset Catal.* p. 29, tab. 6, fig. 1.

*Wood*, Conch. p. 164, tab. 45, fig. 1.

*Dillwyn*, Descript. Catal. p. 77.

*Turton*, Conch. Dict. p. 171.

*Tellina radiata*. *Da Costa*, p. 209, tab. 14, fig. 1.

*Tellina trifasciata.* *Donovan*, British Shells, ii. tab. 60.

*T. ex rufo maculata.* *Lister*, Conch. tab. 394, fig. 241.

*Mus. nost.* Western and other coasts.

Shell three quarters of an inch long, and nearly two inches broad, flattish, more or less of a deep red color which becomes paler towards the hinge, marked with pale longitudinal rays which are generally disposed in sets of three each: from the hinge runs a raised oblique ridge forming a separate angular space which is strongly decussate: hinge nearly central; inside white.

*PSAMMOBIA testá trigono-orbiculari convexá transversim substriatá, latere antico subflexuoso.* *solidula.*  
12.

Shell roundish-triangular convex and slightly striate transversely, with the anterior side a little flexuous.

*Tab. nost.* 8, fig. 2.

*Tellina solidula.* *Montagu*, Test. Brit. p. 63.

*Pennant*, iv. p. 184, tab. 52, g. 2, and 2. A

*Linn. Trans.* viii. p. 58.

*Turton*, British Fauna, p. 150.

*Dorset Catal.* p. 31, tab. 8, fig. 4.

*Turton*, Conch Dict. p. 177.

*Tellina rubra.* *Da Costa*, p. 211, tab. 12, fig. 4.

*Tellina zonata.* *Dillwyn*, Descript. Catal. p. 100.

*Tellina parva.* *Lister*, Conch. tab. 405, fig. 250.

*Mus. nost.* On gravelly and sandy shores.

Shell three quarters of an inch long, and rather more in breadth, thick, convex, of an angular roundish shape, generally of a dull red color both outside and inside, with usually transverse zones of different hues, rarely of an uniform yellow or white: beaks nearly central, with two small blunt teeth in each valve.

polygona.  
13.

PSAMMOBIA *testá suborbiculari, striis transversis longitudinalibusque minutis, latere antico subangulato, margine subundato.*

Shell somewhat orbicular, with transverse and minute longitudinal striæ, somewhat angular at the anterior side, and undulate at the margin.

Tellina polygona. *Montagu, Suppl. p. 27, tab. 28, fig. 4.*

*Pennant, Brit. Zool. iv. p. 185.*

*Wood, Conch. p. 190.*

*Turton, Conch. Dict. p. 180.*

Tellina Guinaica. *Dillwyn, Descript. Catal. p. 96.*

*Chemnitz, x. p. 348, tab. 170, fig. 1651-53.*

Found by Captain Laskey, in the Frith of Forth.

Shell half an inch long, and rather more in breadth, dirty white, somewhat truncate and angular at one end and rounded at the other, with fine transverse striæ and minute longitudinal ones: the margin uneven: beaks not quite central; in one valve two large distant teeth, in the other a large cloven triangular tooth and a small one near it.

PSAMMOBIA *testâ oblongâ, latere antico bifariâ striato, dente altero* strigilata.  
*obliquo laminari.* 14.

Shell oblong, striate in two directions on the anterior side, with one of the teeth oblique and laminar.

*Tab. nost. 6, fig. 13.*

Solen strigilatus. *Linn. Syst. Nat. p. 1115.*

*Gmelin, Syst. p. 3225.*

*Turton, Linn. Syst. iv. p. 181.*

*Chemnitz, vi. p. 57, tab. 6, fig. 41-44.*

*Wood, Conch. p. 127. tab. 30, fig. 1.*

*Dillwyn, Descript. Catal. p. 64.*

*Turton, Conch. Dict. p. 161, fig. 53.*

Chama angusta. *Lister, Conch. tab. 416, fig. 260.*

*Mus. nost.* Dredged in Torbay: and we observed a small specimen among the shells collected by General Bingham, in his late visit to Cornwall.

Shell an inch long and two broad, of an oblong shape becoming a little narrower at the anterior extremity, yellowish-white with a slight rosy tinge, but without the longitudinal stripes observed in foreign specimens: the front margin running in a straight line without contraction in the middle: the anterior side marked with about thirty longitudinal striæ radiating from the hinge in an oblique direction so as to cover three fourths of the surface, and becoming gradually more distant as they recede towards the opposite extremity; and at the termination of the striated side are other raised oblique striæ passing in an opposite direction: hinge central, with two teeth in each valve, one of which is very oblique and laminar,

Scopula,  
15.

*PSAMMOBIA testā reniformi, latere antico bifariādm striato, dentibus erectis.*

Shell kidney-shaped, striate in two directions on the anterior side, with all the teeth erect.

*Tab nost. 6, fig. 11 and 12.*

*Chemnitz, xi. p. 203, tab. 198, fig. 1983.*

*Mus. nost.* Dredged near Exmouth.

Shell three eighths of an inch long, and as much again in breadth, clear glossy white inside and outside resembling the last in its markings, but is distinguished by the following particulars, independent of the size.

The sides are more open, where the valves are a little reflected: in the middle there is an evident contraction giving it a kidney-like form: the oblique striæ are not more than twenty in number, extending over about half the surface: the beaks are more prominent; and the teeth most essentially distinguish it from the young of the last, all of them being erect and close together, one subulate and a little recurved, the other flat.

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## 27. TELLINA—LINNÉ.

*Testa transversa vel suborbicularis, planiuscula, inæquilateralis, latere antico flexuoso-plicato. Cardo dentibus subbinis: lateralibus sæpe remotis. Ligamentum externum, ad latus brevius.*



Shell transverse or somewhat orbicular, flattish, inequilateral, with a flexuous plait at the anterior side. Hinge with two teeth in one or both of the valves; and lateral ones which are generally remote. Ligament external, on the shorter side.

Like the *Donax* and the *Capsa*, this genus has the ligament placed on the shorter side of the shell; a circumstance, however, by no means peculiar, as the same may be observed in the *Amphidesma* *Boysii* and some of the *Anatina* tribe. But the general flatness of the shell, with the flexuosity more or less observeable on the shorter or cartilage side, and the disposition of the teeth, will at all times present sufficient marks of character.

The teeth are variable in number and position, and afford much assistance in specific distinction.

\* *Valvá alterá bidentat, ovata, 1-7.*

With two teeth in one valve, and the shell oval.

TELLINA *testá ovata, strüs transversis crebris, valvá alterá bidentatá cum lateralibus, alterá unidentatá muticá.* lineata.  
1. —

Shell oval, with crowded transverse striae, one valve two-toothed with a lateral one each side, the other valve with a single tooth and no lateral ones.

*Tab nost. 7, fig. 1.*

*Turton, Conch. Dict. p. 168, fig 16.*

*Mus. nost.* Dredged in Teignmouth bay .

Shell five eights of an inch long, and seven eights broad, thin, semitransparent, white with a pale red longitudinal stripe

down the rounded side, sloping from the beaks on the anterior end, and marked with numerous fine transverse striæ which grow stronger towards the extremities: beaks not quite central, straight and pointed: hinge with two primary teeth and a lateral laminar one on each side in one valve, one of the primary teeth cloven; in the other a single cloven tooth, without lateral ones.

punicea.  
2.

**TELLINA** *testâ ovato-oblongâ, strüs transversis longitudinalibusque minimis, valvâ alterâ bidentatâ cum laterali; alterâ dente unico cum laterali.*

Shell oval-oblong, with transverse striæ and minute longitudinal ones, one valve two-toothed with a single lateral one, the other with a single primary and lateral tooth.

*Tellina punicea* Gmelin, Syst. p. 3239.

Turton, Linn. Syst. iv. p. 194.

Pennant, Brit. Zool. iv. p. 179.

Linn. Trans. viii. p. 50.

Dorset Catal. p. 30, tab. 7, fig. 5.

Wood, Conch. p. 170, tab. 39, fig. 1.

Dillwyn, Descript. Catal. p. 90.

Turton, Conch. Dict. p. 171.

*Tellina læta.* Montagu, Test. Brit. p. 57.

Turton, British Fauna, p. 149.

*Tellina inæquistriata.* Donovan, British Shells, iv. tab. 123.

*Tellina striata.* Chemnitz, x. p. 349, tab. 170. fig. 1654, 1655.

*Mus. nost.* From Guernsea.

Shell three quarters of an inch long, and more than an inch broad, rather thick and strong, deep red growing paler towards

the hinge, with often pale and irregular longitudinal rays, and a few minute longitudinal striæ which are usually visible at the anterior side only: beaks nearly central.

It is a much stronger and more opaque shell than the *Tellina lineata*, and is distinguished in having a single lateral tooth in each of the valves.

*TELLINA testá ovatá, antice flexuoso-acuminatá, valvâ alterâ obliquè striatá, alterâ lævi.* Fabula.  
3.

Shell oval, flexuous and pointed at the anterior side, with one of the valves obliquely striate and the other smooth.

- Tellina* Fabula. *Gmelin*, Syst. p. 3239.  
*Turton*, Linn. Syst. iv. p. 194.  
*Donovan*, British Shells, iii. tab. 97.  
*Montagu*, Test. Brit. p. 61.  
*Pennant*, Brit. Zool. iv. p. 179.  
*Linn. Trans.* viii. p. 52.  
*Turton*, British Fauna, p. 150.  
*Dorset Catal.* p. 30, tab. 12, fig. 3 and 3 a.  
*Wood*, Conch. p. 156, tab. 45, fig. 4.  
*Dillwyn*, Descript. Catal. p. 91.  
*Turton*, Conch. Dict. p. 170.

*Mus. nost.* On most sandy coasts.

Shell half an inch long and three quarters of an inch broad, thin, transparent, glossy white reflecting metallic colors, tapering to a point and flexuous at one end: the right valve smooth, or only marked with faint irregular transverse striæ; the left with fine regular oblique longitudinal lines: in the smooth valve is a

single primary tooth without lateral one on either side; the obliquely striated valve has two primary teeth and a single lateral one.

similis.  
4.

*TELLINA testá ovata, valvis obliquè striatis.*

Shell oval, with both the valves obliquely striate.

*Tellina similis.* Sowerby, British Miscellany, tab. 75.

Montagu, Test. Brit. Append. p. 167.

Penman, Brit. Zool. iv. p. 178.

Turton, British Fauna, p. 150.

Turton, Conch. Dict. p. 170.

*Mus. nost.* From Paington sands.

A few valves only of this rare shell have come under our notice: it is evidently distinct from the last, both in form and the disposition of the teeth: in breadth it is hardly a quarter of an inch; with the anterior side somewhat angularly pointed, but not flexuous: the outside has no metallic gloss, but is of a clear dead white; and there is a lateral tooth in each of the valves: the oblique striæ are finer and more remote, most visible near the margin, both inside and outside, and have not the curdled appearance which mark the *Tellina Fabula*.

Donacina.  
5.

*TELLINA testá ovata, transversim striatá, latere antico obtusissimo, valvâ alterâ bidentatâ cum lateralibus, alterâ unidentatâ muticâ.*

Shell oval, transversely striate, very obtuse at the anterior end, in one valve two teeth and a lateral tooth each side, in the other a single primary tooth.

*Tab. nost. 8, fig. 4.*

- Tellina Donacina. *Linn. Syst. Nat.* p. 1118.  
*Gmelin, Syst.* p. 3234.  
*Turton, Linn. Syst.* iv. p. 190.  
*Montagu, Test. Brit.* p. 58, tab. 27, fig. 3.  
*Pennant, Brit. Zool.* iv. p. 178.  
*Linn. Trans.* viii. p. 50, tab. 1, fig. 7.  
*Turton, British Fauna,* p. 149.  
*Dorset Catal.* p. 29, tab. 12, fig. 3. b.  
*Wood, Conch.* p. 161, tab. 45, fig. 5.  
*Dillwyn, Descript. Catal.* p. 89.  
*Turton, Conch. Dict.* p. 170.
- Mus. nost.* From the Devonshire and Irish coasts.

Our largest specimen of this beautiful shell measures three quarters of an inch in length, and an inch and a quarter in breadth; but in general it is not much above half the size: color yellowish, with red longitudinal rays which are irregularly disposed, and often interrupted, appearing in a fainter manner on the inside: beaks close to the abrupt end: hinge with a single cloven tooth in one valve, and lateral ones; in the other two teeth, one of them cloven, and a strong rather remote lateral tooth on each side.

TELLINA *testâ ovato-trigonâ transversim striolatâ, latere antico sub-*  
*angulato, valvâ alterâ bidentatâ cum lateralibus, alterâ unidentatâ*  
*cum lateralibus.* bimaculata.  
6

Shell oval-triangular, slightly striate transversely, a little angular at the anterior end, in one valve two teeth and lateral ones, in the other a single tooth and lateral ones.

*Tab. nost.* 8, fig. 5.

1. *maculis binis sanguineis oblongis sub umbones.*  
with two oblong red spots under the hinge.

2. *maculis violaceis radiato-sagittatis.*

*Tellina bimaculata.* *Linn. Syst. Nat.* p. 1120.

*Gmelin, Syst.* p. 3240.

*Turton, Linn. Syst.* iv. p. 196.

*Chemnitz, vi.* p. 132, tab. 13, fig. 127-132.

*Da Costa, Brit. Conch.* p. 213.

*Pennant, Brit. Zool.* iv. p. 183.

*Montagu, Test. Brit.* p. 69.

*Linn. Trans.* viii. p. 57.

*Turton, British Fauna,* p. 151.

*Donovan, British Shells,* i. tab. 19, fig. 1.

*Dorset Catal.* p. 31, tab. 5, fig. 7.

*Wood, Conch.* p. 192, tab. 45, fig. 6 and 7.

*Dillwyn, Descript. Catal.* p. 101.

*Turton, Conch. Dict.* p. 178.

*Mus. nost.* From the Western Coasts.

Shell half an inch long, and a little more in breadth, flat, slightly and irregularly striate transversely, somewhat truncate and angular at the anterior end, rounded at the other: hinge with a single tooth and two lateral ones in one valve, and two primary and two lateral teeth in the other.

The two varieties exactly agree with each other in their outline and specific marks, but constantly preserve their separate colors. One is depicted on the inside with a deep red oblong spot

on each side the hinge, and which is visible in a fainter degree on the outside: the other is whitish, cream-color, or violet, without the red spots, but covered more or less with purple arrow-shaped marks usually disposed in rays. We have also specimens without the spots, but marked with fawn-colored rays.

Linné has properly remarked, that in this species the flexure on the anterior side is scarcely distinguishable: there is, however, a slight constriction or indenture of the margin at that end.

**TELLINA** *testá ovato-oblongá, latere antico subrostrato, valvá alterá bidentatá cum laterali, alterá unidentatá cum lateralibus.* depressa.  
7.

Shell oval-oblong, with the anterior side much produced and pointed, in one valve two teeth and a single lateral one, in the other a single tooth and two lateral ones.

*Tab. nost. 8, fig. 6.*

- Tellina depressa.** *Gmelin, Syst. p. 3238.*  
*Turton, Linn. Syst. iv. p. 186.*  
*Pennant, Brit. Zool. iv. p. 179.*  
*Donovan, British Shells, v. tab. 163.*  
*Linn. Trans. viii. p. 51.*  
*Dorset Catal. p. 30, tab. 5. fig. 2.*  
*Wood, Conch. p. 171, tab. 45, fig. 3.*  
*Dillwyn, Descript. Catal. p. 91.*  
*Turton, Conch. Dict. p. 171.*
- Tellina squalida.** *Montagu, Test. Brit. p. 56.*  
*Turton, British Fauna, p. 149.*

*Tellina pallidé rosea.* *Chemnitz*, vi. p. 105, tab 10, fig. 96.  
*Mus. nost.* From the Western and Irish coasts.

Shell an inch or more in length, and two inches broad, elegantly tapering on the cartilage side to a flexuous and sharp angular point, of a more or less deep uniform orange color: hinge nearly central, with a single tooth and a lateral one each side in one valve, and two teeth and a single lateral one in the other.

\*\* *Valvis bidentatis, ovatae.* 8-9.

With two teeth in each valve, and the shell oval.

striata.  
6.

*TELLINA testá oato- trigoná, strüs crebris transversis longitudinalibus- que minimis, valvis bidentatis cum lateralibus.*

Shell oval-triangular, with crowded transverse striæ and minute longitudinal ones, each valve with two teeth and two lateral ones.

*Tellina striata.* *Gmelin*, Syst. p. 3238.

*Turton*, Linn. Syst. iv. p. 194.

*Montagu*, Test. Brit. p. 60, tab. 27, fig. 2.

*Pennant*, Brit. Zool. iv. p. 180.

*Linn. Trans.* viii. p. 53.

*Turton*, British Fauna, p. 150.

*Wood*, Conch. p. 175.

*Dillwyn*, Descript. Catal. p. 92.

*Turton*, Conch. Dict. p. 169.

*Mus. nost.* From Guernsea.



Shell an inch long, and three quarters of an inch broad, roundish-angular, finely and regularly striate transversely, and longitudinally in a very minute manner, of a rosy-white color both inside and out, deeper towards the hinge

*TELLINA testá ovato-trigoná, transversim striolatá, valvis bidentatis, alterá lateralibus.* tenuis.  
9.

Shell oval-triangular, irregularly striate transversely, each valve with two teeth, and one of them with lateral teeth.

*Tellina tenuis.* *Da Costa*, Brit. Conch. p. 210.  
*Chemnitz*, vi. p. 124, tab. 12, g. 117.  
*Donovan*, i. tab. 19, three lower figures.  
*Pennant*, Brit. Zool. iv. p. 180, tab. 51, g. 2.  
*Montagu*, Test. Brit. p. 59.  
*Linn. Trans.* viii. p. 52.  
*Turton*, British Fauna, p. 150.  
*Dorset Catal.* p. 30, tab. 5, g. 3.  
*Wood*, Conch. p. 155, tab. 44, g. 3 and 4.  
*Turton*, Conch. Dict. p. 169.

*Tellina balaustina.* *Dillwyn*, Descript. Catal. p. 93.

*Tellina lævis.* *Lister*, Conch. tab. 405, g. 251. •

*Mus. nost.* Common on all shores.

Shell about half an inch long, and three quarters of an inch broad, very flat thin and glossy, a little angular at one end, and rather pointed at the other, of various colors and shades, often banded.

There may be frequently observed some very minute and fine longitudinal white lines, from which circumstance it has been

often mistaken for the *Tellina striata*: but the lateral teeth will at all times distinguish it, there being two small lateral teeth in one of the valves only.

We believe that the *Tellina balaustina*, and the *T. planata* of Linné, are among the numerous varieties of this species.

\*\*\* *Valvis bidentatis, suborbiculares.* 10-11

In each valve two teeth, and the shell somewhat orbicular.

maculata. *TELLINA testâ ovato-orbiculari æquivalvi, strüs transversis scabris lon-*  
10. *gitudinalibusque minutis, valvis bidentatis cum lateralibus.*

Shell round-oval and equivalve, with rough transverse striæ and minute longitudinal ones, each valve with two teeth and two lateral ones.

*Tab. nost. 6, fig. 7.*

*Tellina maculata.* *Turton, Conch. Dict. p. 173, fig. 13.*

*Tellina scabra.* *Chemnitz, vi. p. 102, tab. 10, fig. 94.*

*Mus. nost.* Taken in Bantry-bay.

Shell an inch long, and an inch and a quarter broad, flat, thin, whitish-brown covered with darker spots irregularly disposed, and marked with numerous transverse raised striæ, which give a roughness to the surface, the interstices of which are crossed with minute longitudinal ones; inside yellowish-white, glossy: hinge with two primary teeth in each valve, and a strong remote lateral one on each side.

On the anterior side there is hardly any apparent flexuosity. And Linné, in a note at p. 116, of the *Systema Naturæ*, has

made the remark, that in the suborbicular species this distinction is not always present: "*in suborbiculatis vix plica manifesta.*"

Chemnitz considers it as a variety of the *Tellina Gari*; but that shell is described as either wanting the lateral teeth, or having them in a very obscure manner.

**TELLINA** *testá ovato-orbiculari inæquivalvi, strüs transversis longitudinalibusque obsolete, valvis bidentatis, alterá dentibus lateralibus.*

crassa.  
11.

Shell round-oval inequivalve, with transverse striæ and obscure longitudinal ones, each valve with two teeth, and one of them with lateral teeth.

*Tab. nost. 7, fig. 2.*

*Tellina crassa.* Pennant, Brit. Zool. iv. p. 182, tab. 51, fig. 1.

Turton, Linn. Syst. iv. p. 186.

Montagu, Test. Brit. p. 65.

Linn. Trans. viii. p. 55.

Turton, British Fauna, p. 150.

Wood, Conch. p. 186, tab. 40, fig. 1.

Dillwyn, Descript. Catal. p. 96.

Turton, Conch. Dict. p. 173.

*Tellina reticulata.* Linn. Trans. viii. p. 54, tab. 1, fig. 9.

Pennant, Brit. Zool. iv. p. 181.

Turton, British Fauna, p. 150.

Dorset Catal. p. 30, tab. 5, fig. 4.

Dillwyn, Descript. Catal. p. 95.

Turton, Conch. Dict. p. 173.

*Tellina proficua.* Montagu, Test Brit. p. 66.



sometimes nearly equilateral, and sometimes much produced and sloping from the hinge on the hinder side; sometimes quite plain and coarse, with a strong flexuosity, often radiate with blood red of a greater or less degree of intensity.

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28. LUCINA—BRUGUIERE.

*Testa suborbicularis, æquivalvis, clausa. Cardo dentibus duobus vel tribus in alterâ valvâ, cum foveâ internâ transversâ anticâ: laterali-bus nullis. Ligamentum externum*

Shell somewhat orbicular. equivalve, closed. Hinge with two or three teeth in one of the valves, and an internal transverse cavity on the anterior side: lateral teeth none. Ligament external.

Lamarck has, we think, made his character of this genus so diffuse, as to comprehend species very discordant, and according to our present ligamentous arrangement, essentially distinct. Such, for example, as have primary teeth, and such as have none; some that are furnished with lateral teeth, and some that are without them.

His character also of the teeth becoming evanescent by age, can hardly be received as a precise and certain mark: nor are the muscular impressions, which he points out as being very

remote and lateral, with the hinder one produced into a very long band, be considered as a constant and unerring distinction.

From the *Tellina* genus it differs in many essential and natural characters. It is of a more orbicular shape, closed at the sides, and without lateral teeth; the beaks are very prominent, with a deep curvature under them, and on this side there is more or less of a flexuosity, being on the opposite side to the flexuosity of the *Tellina*: the cartilage also is much less prominent, having an internal additional ligament fixed in the transverse cavity.

From the *Venus* tribe it is distinguished, in never possessing three teeth in both the valves, and in the elongated internal cavity on the anterior side of the teeth.

\* *Foveâ internâ obliquâ.* 1-2.

With the internal cavity oblique.

lactea.  
1. *LUCINA testâ orbiculari, æquilaterali, striolis transversis irregularibus.*  
Shell orbicular equilateral, with fine irregular transverse striæ.

*Tab. nost. 7, fig. 4 and 5.*

*Tellina lactea.*

*Linn. Syst. Nat. p. 1119.*

*Gmelin, Syst. p. 3240.*

*Turton, Linn. Syst. iv. p. 195.*

*Chemnitz, vi. p. 130, tab. 13, fig. 125.*

*Pennant, Brit. Zool. iv. p. 182.*

*Montagu, Test. Brit. p. 70. tab. 2, fig. 4.*

*Linn. Trans. viii. p. 56.*

*Turton, British Fauna, p. 151.*

*Dorset Catal. p. 30, tab. 5, fig. 9.*

*Wood, Conch. p. 187.*

*Dillwyn, Descript. Catal. p. 99.*

*Turton, Conch. Dict. p. 176.*

*Mus. nost.* Torbay and the British Channel.

Shell three quarters of an inch in diameter, thin, rather flat, white or yellowish, irregularly striate transversely: beaks central, prominent, pointed and curved, with a small heart-shaped impression under them; inside white, polished round the area of the margin, where it is slightly striate longitudinally: in one valve a single plain tooth, closing between two plain ones in the other.

*LUCINA testâ subobliquâ inæquilaterali, strüs transversis regularibus longitudinalibusque minimis.* *Leucoma.*  
2.

Shell rather oblique and inequilateral, with regular transverse striæ and minute longitudinal ones.

*Tab nost. 7, fig. 8.*

*Mus. nost.* Torbay, British Channel, and Guernsea.

Shell five eighths of an inch in diameter, convex, orbicular but a little produced and angular on the anterior side, and generally a little flexuous under the beaks on the other side, of a chalky white color, and marked with regular crowded transverse raised striæ and deeper wrinkles; these are crossed by extremely fine and close-set longitudinal lines: beaks prominent, with a curvature under them: inside and hinge as in *Lucina lactea*.

The longitudinal striæ are not always very evident, especially in the younger shells; but its greater convexity and regular transverse striæ at all times distinguish it.

In some specimens also we have remarked a small remote tubercle on each side the hinge, like obscure lateral teeth.

\*\* *Foveâ intern rectiusculâ.* 3-6.

The internal cavity nearly straight.

alba.  
3. **LUCINA testâ orbiculari convexâ, strüs transversis regularibus remotiusculis, valvâ alterâ bidentatâ, alterâ unidentatâ.**

Shell orbicular convex, with rather remote regular transverse striæ, hinge with two teeth in one valve and one in the other.

*Tab. nost. 7, fig. 6 and 7.*

*Mus. nost.* British Channel, and shores about Guernsea.

Shell about three eighths of an inch in diameter; and differs from the *Lucina Leucoma*, in being of a more regularly rounded form, of a more glossy white, with the striæ rather distant and about half the size of the interstices between them, without the deeper ridges or the least appearance of longitudinal lines, and the internal cardinal cavity is narrow and nearly in a straight direction.

rotundata.  
4. **LUCINA testâ convexâ læviusculâ, margine subundato, valvis bidentatis.**

Shell convex and nearly smooth, a little undulate in the circumference, with two teeth in each valve.

*Tab. nost. 7, fig. 3.*

*Tellina rotundata.* *Montagu, Test. Brit. p. 71, tab. 2, fig. 3.*

*Pennant, Brit. Zool. iv. p. 182.*

*Linn. Trans. viii. p. 56.*

*Turton, British Fauna, p. 151.*



*Dorset Catal.* p. 30, tab. 5, fig. 8.

*Wood, Conch.* p. 187.

*Dillwyn, Descript. Catal.* p. 99.

*Turton, Conch. Dict.* p. 176.

*Pectunculus tenuis.* *Lister, Conch.* tab. 297, fig. 134.

*Mus. nost.* Western coasts, and Ireland.

Shell an inch or rather more in diameter, convex, very obscurely striate transversely in an irregular manner, a little oblique and irregular round the circumference, yellowish-white or pale horn-color and transparent: beaks not quite central, rather prominent; inside white but not glossy, except the area round the margin which is faintly striate longitudinally: hinge with two teeth in each valve, one cloven, the other diverging; the lateral cavity narrow and nearly straight.

*LUCINA testâ convexâ transversim striolatâ, margine undato, valvâ alterâ tridentatâ, alterâ bidentatâ.*

undata.  
5.

Shell convex slightly striate transversely, undulate in the circumference, with three teeth in one valve and two in the other.

*Venus undata.* *Pennant, Brit. Zool.* p. 209, tab. 58, fig. 3.

*Turton, Linn. Syst.* iv. 233.

*Linn. Trans.* vi. p. 169, tab. 17. fig 17 and 18.

*Montagu, Test. Brit.* p. 117.

*Donovan, British Shells,* iv. tab. 121.

*Linn. Trans.* viii. p. 86.

*Turton, British Fauna,* p. 157.

*Dillwyn, Descript. Catal.* p. 197.

*Turton, Conch. Dict.* p. 241, fig. 54.

*Mus. nost.* Common on most sandy shores.

Shell more than an inch in diameter, very thin and brittle, yellowish white, irregularly striate transversely, a little undulate in the circumference: beaks nearly central, without impression under them, inside glossy yellowish-white: hinge with three teeth in one valve, the middle one cloven.

Radula.  
6.

*LUCINA testâ lentiformi, strüs transversis crebris laminatis, valvis bidentatis.*

Shell lenticular, with close-set transverse laminar striæ, and two teeth in each valve.

*Tellina Radula.* *Montagu, Test. Brit. p. 68. tab. 2, fig. 1, 2.*

*Linn. Trans. viii. p. 54.*

*Penant, Brit. Zool. iv. p. 181.*

*Turton, British Fauna, p. 151.*

*Wood, Conch. p. 183, tab. 42, fig. 4, 5.*

*Turton, Conch. Dict. p. 175.*

*Venus borealis.* *Donovan, British Shells, iv. tab. 130.*

*Venus spuria.* *Dillwyn, Descript. Catal. p. 194.*

*Cognata Veneris Pensylvanicæ.* *Chemnitz, vii. p. 16, tab. 38, fig. 399.*

*Pectunculus subfuscus.* *Lister, Conch. tab. 293, fig. 129.*

*Mus. nost.* Western and Irish coasts.

Shell an inch and a half in diameter, rather convex, running in a straight line on each side the beaks, giving that end of the shell a rather truncated appearance, white or covered with a pale brown skin and marked with numerous rough raised concentric ridges: inside dull chalky white, except round the area of the margin, which is polished and furnished with longitudinal lines, as in many species of

this genus: beaks central, pointed and a little curved, with a small impression under them: hinge with two teeth in each valve, one of them cloven.

29. STRIGILLA—TURTON.

*Testa ovata vel subglobosa, æquivalvis, clausa, bifariam arcuato-striatâ.*

*Cardo dentibus subbinis, et laterali in utraqve valvâ. Ligamentum externum, ad latus longius.*

Shell oval or somewhat globular, equivalve, closed, with striæ curving in different directions. Hinge with one or two teeth, and a lateral one in each valve. Ligament external, at the longer side.

These shells differ from the *Tellina*, in having the ligament placed on the longer side; from the *Lucina* in having lateral teeth; and from both in the remarkable arched striæ with which they are furnished, and which we have adopted as a constituent part of their generic character.

STRIGILLA *testâ ovatâ inæquilaterali, strüs longitudinalibus obliquis hinc flexuoso-angulosis.* carnaria. 1

Shell oval inequivalve, with oblique longitudinal striæ which on one side form flexuous angles.

*Tab. nost.* 7, fig. 15.

*Tellina carnaria.* *Linn. Syst. Nat.* p. 1119.

*Gmelin, Syst.* p. 3240.

*Turton, Linn. Syst.* iv. p. 195.

*Chemnitz, vi.* p. 130, tab. 13, fig. 126.

*Pennant, Brit. Zool.* iv. p. 183.

*Montagu, Test. Brit.* p. 73.

*Donovan, British Shells,* ii. tab. 47.

*Linn. Trans.* viii. p. 57.

*Turton, British Fauna,* p. 151.

*Dorset Catal.* p. 31, tab. 5, fig. 6.

*Wood, Conch.* p. 189, tab. 40, fig. 4, 5.

*Dillwyn, Descript. Catal.* p. 100.

*Turton, Conch. Dict.* p. 177.

*Cardium carneosum.* *Da Costa, Brit. Conch.* p. 181.

*Pectunculus tenuis.* *Lister, Conch.* tab. 339, fig. 176.

*Mus. nost.* Supposed to be from the Western coasts.

Shell about half an inch long, and a little more in breadth, more or less deeply tinged with a fine rose-color, with often an oblong rosy spot on each side of the hinge, of a roundish-oval form and rather flat, marked in the middle with oblique longitudinal striæ, which at the shorter end are curved and flexuous, and at the produced end with straight striæ which meet with the oblique ones and form angles: beaks near one end: hinge with two teeth in each valve, one of them cloven.

A comparison of this shell with the *Tellina bimaculata* will illustrate the relative positions of the cartilage. In the *Strigilla* it is placed on the longer side, in the *Tellina* on the shorter; a

distinction which as an artificial as well as a natural arrangement is worthy of consideration.

STRIGILLA *testâ subglobosâ subæquilateralî, strüs longitudinalibus obli-* pisiformis.  
*quis hinc acutangulosis.* 2.

Shell somewhat globular and nearly equilateral, with oblique longitudinal striæ which on one side form acute angles.

Tellina pisiformis. *Linn. Syst. Nat.* p. 1120.

*Gmelin. Syst.* p. 3241.

*Turton, Linn. Syst. iv.* p. 196.

*Wood, Conch.* p. 194.

*Dillwyn, Descript. Catal.* p. 102

*Turton, Conch. Dict.* p. 178.

Cardium discors. *Montagu, Test Brit.* p. 84.

*Linn. Trans.* viii. p. 67.

*Turton, British Fauna,* p. 153.

*Pennant, Brit. Zool. iv.* p. 190.

*Wood, Conch.* p. 214.

A single specimen of this rare shell was found by Montagu, in Falmouth harbour.

Shell nearly globular, glossy white, with numerous striæ which on the anterior side bend in acute angles towards the hinge: beaks small, nearly central, inclining a little to one side: hinge with a single plain tooth in one valve closing between two in the other, one of which is small; the lateral teeth remote and prominent

STRIGILLA *testâ orbicularî subæquilateralî, strüs arcuatis utrinquè rec-* divaricata.  
*tangulosis.* 3.

Shell orbicular and nearly equilateral, with arched striæ which form right angles at both the sides.

*Tellina divaricata*. *Linn. Syst. Nat.* p. 1120.

*Gmelin, Syst.* p. 3241.

*Turton, Linn. Syst. iv.* p. 196.

*Chemnitz, vi.* p. 134, tab. 13, fig. 129.

*Wood, Conch.* p. 195, tab. 46, fig. 6.

*Dillwyn, Descript. Catal.* p. 102.

*Turton, Conch. Dict.* p. 178.

*Cardium arcuatum*. *Montagu, p.* 85, tab. 3, fig. 2.

*Pennant, Brit. Zool. iv.* p. 190.

*Linn. Trans. viii.* p. 67.

*Turton, British Fauna, p.* 153.

*Pectunculus parvus*. *Lister, Conch.* tab. 301, fig. 142.

*Mus. nost.* South of Devon, Teignmouth beach.

Shell half an inch in diameter, white, thin, brittle, orbicular with a slight flexuosity on the hinder side, rather convex, with regular but not very close striæ which form rather oblique curved lines and turn off at both the sides nearly in right angles: beaks central, very prominent: hinge with a single cloven tooth in one valve, closing between two plain ones in the other; the lateral teeth remote and small.

The few specimens which we collected on the shores at Teignmouth, answer exactly to the above character and description, and differ materially from the *Tellina digitaria* of Linné.

This latter shell has very fine and uniform obliquely arched striæ, like the lines at the ends of the fingers, with a slight angular curvature on one side only; the lateral teeth are obscure, consisting of

a tubercle near the beaks in each valve, and in one valve a remote one at the end of the groove which receives the ligament.



## 30. CRYPTODON—TURTON.

*Testa trigono-globosa, æquivalvis, subæquilateralis, clausa. Cardo dente unico obsoleto penetrante cum foveâ angustâ laterali: laterali-bus nullis. Ligamentum externum.*

Shell triangularly globular, equivalve, nearly equilateral, closed. Hinge with a single obscure penetrating tooth, and a narrow lateral cavity: lateral teeth none. Ligament external.

This genus in many respects resembles the *Lucina*, but the peculiarity of the hinge necessarily separates it.

## CRYPTODON

flexuosus:  
1.

*Tab. nost. 7, fig. 9, and 10.*

*Tellina flexuosa.* *Montagu, Test. Brit. p. 72.*

*Pennant, Brit. Zool. iv. p. 183.*

*Linn. Trans. viii. p. 56.*

*Turton, British Fauna, p. 151.*

*Wood, Conch. p. 188, tab. 47, fig. 7, 8.*

*Dillwyn, Descript. Catal. p. 99,*

*Turton*, onch. Dict. p. 177.

*Venus sinuosa*. *Donovan*, British Shells, ii. tab. 42, fig. 2.

*Mus. nost.* From the Western coasts, and Ireland.

Shell hardly half an inch in diameter, somewhat orbicular but produced at the hinge, very convex, thin, white, transparent, finely but irregularly striate transversely: from the beaks, on the anterior side, runs a longitudinal furrow which forms a flexure at the margin, and a prominent angle half way towards the hinge: beaks prominent, slightly curved, with a small heart-shaped impression under them on the side opposite to the flexure: teeth extremely minute, and so obscure as hardly to be distinguished by a very considerable magnifying power.



### 31. DONAX—LINNE.

*Testa transversa, æquivalvis, inæquilateralis; latere antico obtuso, brevissimo. Cardo dentibus duobus: lateralibus remotiusculis. Ligamentum externum, ad latus brevius.*

Shell transverse, equivalve, inequilateral; with the anterior side obtuse and very short. Hinge with two teeth in both valves; lateral teeth rather remote. Ligament external, at the shorter side.



This genus and the next, as in the *Tellina*, have the ligament placed on the shorter side; but they want the flexuosity at the produced end, and are also distinguished by their wedge-shaped and somewhat triangular contour, in consequence of the abrupt termination on the cartilage side.

Some of them have a single lateral tooth, and others have a lateral tooth on each side of the primary ones.

\* *Margine interno denticulato.* 1-2.

With the internal margin toothed.

*DONAX testá oblongo-cuneatá, strüs longitudinalibus minutis lævibus, Trunculus.*  
*ared anticá lævi.* 1

Shell oblong and wedge-shaped, with minute smooth longitudinal striæ, and the anterior slope smooth.

*Donax Trunculus.* *Linn. Syst. Nat.* p. 1227.

*Gmelin, Syst.* p. 3263.

*Turton, Linn. Syst.* iv. p. 214.

*Chemnitz, vi.* p. 259, tab. 26, fig. 253, 254.

*Pennant, iv.* p. 198, tab. 58, fig. 1.

*Montagu, Test. Brit.* p. 103.

*Linn. Trans.* viii. p. 74.

*Turton, British Fauna,* p. 156.

*Dorset Catal.* p. 33, tab. 6, fig. 3.

*Donovan, I.* tab. 29, fig. 1.

*Dillwyn, Descript. Catal.* p. 150.

*Turton, Conch. Dict.* p. 41.

*Cuneus vittatus.* *Da Costa,* p. 107, tab. 14, fig. 3.

*Tellina subfusca.* *Lister*, *Conch. tab.* 376, *fig.* 217.

*Mus. nost.* On most sandy shores.

Shell half an inch long, and more than an inch broad, rather truncate at one end, produced and rounded at the other where it gapes a little, covered with a brown or olive skin, with fine longitudinal striæ which are not punctured in the interstices, and a little contracted at the margin near the elongated end, of a yellowish, white color under the epidermis, with often one or two whitish longitudinal rays; inside rich purple: hinge with two teeth in each valve and a single lateral one.

denticulata. *DONAX testâ cuneatâ, striis longitudinalibus punctulatis, arcâ anticâ utrinquè transversim rugoso-striatâ.*

Shell wedge-shaped, with longitudinal punctured striæ, and the anterior slope with transverse striæ on both sides.

*Donax denticulata.* *Linn. Syst. Nat.* p. 1127.

*Gmelin, Syst.* p. 3263.

*Turton, Linn. Syst.* iv. p. 215.

*Pennant, iv.* p. 199, *tab.* 58, *fig.* 2.

*Chemnitz, vi.* p. 262, *tab.* 26, *fig.* 256, 257.

*Montagu, Test. Brit.* p. 104.

*Linn. Trans.* viii. p. 76.

*Turton, British Fauna,* p. 156.

*Dorset Catal.* p. 34, *tab.* 5, *fig.* 12.

*Dillwyn, Descript. Catal.* p. 151.

*Turton, Conch. Dict.* p. 41, *fig.* 19.

*Donax crenulata.* *Donovan, British Shells,* i. *tab.* 24.

*Cuneus truncatus.* *Da Costa, Brit. Conch.* p. 205.

*Tellina crassa.* Lister, Conch. tab. 376, fig. 218.

*Mus. nost.* Dawlish and Teignmouth sands, generally single valves :  
fine and perfect from Guernsea.

Shell about half an inch long, and nearly an inch broad, whitish with purple rays, much thicker and more abrupt at the broader end than the *Donax Trunculus*; and may be known by the punctures in the interstices of the longitudinal striæ, and the rough ridges on the truncated slope, which is elevated in the middle into a kind of keel: inside white, with a lateral tooth on each side the primary ones.

\*\* *Margine interno integerrimo.* 3-5

With the inner margin very entire.

*DONAX testá ovato-oblongá lævi, vittá albá longitudinali, dentibus complanata.*  
*lateralibus in utrâque valvâ.* 3.

Shell oval oblong smooth, with a single white longitudinal band, and lateral teeth in both valves.

*Tab nost.* 7, fig. 13, 14.

*Donax complanata.* Montagu, p. 106, tab. 5, fig. 4.

*Linn. Trans.* viii. p. 75.

*Turton, British Fauna,* p. 156.

*Pennant, Brit. Zool.* iv. p. 198.

*Dorset Catal.* p. 34.

*Dillwyn, Descript. Catal.* p. 150.

*Turton, Conch. Dict.* p. 42.

*Pectunculus tenuis.* Lister, Conch. tab. 384, fig. 227.

*Mus. nost.* Torbay, and Guernsea.

Shell three quarters of an inch long, and nearly an inch and a half broad, smooth and glossy, yellowish or purplish, generally variegated with paler spots and irregular markings, but always distinguished by a white and rather oblique broad longitudinal fillet from the hinge on the shorter side, and which widens as it approaches the margin; rounded at the lengthened side, and obliquely pointed at the other: beaks nearer the more pointed end; inside whitish or purple: hinge with two teeth in each valve, one of them cloven; and a single lateral tooth in both valves.

plebeia. <sup>4.</sup> *DONAX testá ovato-oblongá lavi, vittis duabus fulvis longitudinalibus, dente laterali in utrâque valvâ.*

Shell oval-oblong smooth, with two longitudinal fulvous bands, a single lateral tooth in each valve.

*Donax plebeia.* *Montagu*, p. 107. tab. 5, fig. 2.

*Linn. Trans.* viii. p. 76.

*Turton*, British Fauna, p. 156.

*Pennant*, Brit. Zool. iv. p. 199.

*Dorset Catal.* p. 38, tab. 5, fig. 13.

*Dillwyn*, Descript. Catal. p. 102.

*Turton*, Conch. Dict. p. 42.

*Tellina parva.* *Lister*, Conch. tab. 389, fig. 228.

*Mus. nost.* From the beach at Teignmouth.

Shell about half an inch long, and three quarters of an inch broad, thick and strong, smooth, of a dull yellowish horn-color, with the teeth large and strong, and a single lateral one in each valve.

The fulvous bands are not always present; but this species may be distinguished from the *Donax complanata* by its color, and the want of the pale band, which in that shell is always more or less distinctly visible.

*DONAX testâ cuneatâ lævi vinaceâ immaculatâ, dente laterali in utraqve valvâ.*

rubra.  
5.

Shell wedge-shaped, smooth, of an uniform pale claret color, with a single lateral tooth in both valves.

*Tab. nost. 10, fig. 14.*

*Donax rubra.* *Montagu, Test. Brit. Suppl. p. 38.*

*Pennant, Brit. Zool. iv. p. 200.*

*Turton, Conch. Dict. p. 43.*

*Mus. nost.* In fine shelly sand from Tenby, abundantly.

Shell hardly the eighth of an inch in diameter, wedge-shaped and gradually sloping to the hinder extremity, quite smooth glossy and semitransparent, of a pale claret color, which as in the *Kellia rubra* often changes nearly to white, except about the hinge; inside glossy, paler than the outside, with the margin plain: beaks prominent, very near the truncated end; the lateral teeth one in each valve on each side, near the primary ones.



## 32. CAPSA—LAMARCK.

*Testa transversa, æquivalvis, inæquilateralis; latere antico obtuso, brevissimo. Cardo dentibus duobus: lateralibus nullis. Ligamentum externum, ad latus brevius.*

Shell transverse, equivalve, inequilateral; with the anterior side obtuse and very short. Hinge with two teeth in both valves: lateral teeth none. Ligament external, at the shorter side.

The individuals of this genus differ in no respect from the *Donax*, except in wanting the lateral teeth.

castanea.  
1.

CAPSA *testá ovato-oblongá lævi castaneá, vittá longitudinali saturatori subarcuatá, dente altero mínimo.*

Shell oval-oblong smooth pale chesnut, with a deeper slightly curved longitudinal band, and one of the teeth very small.

*Tab. nost. 10, fig. 13.*

*Donax castanea.* *Montagu*, p. 573, tab. 17, fig. 2.  
*Pennant*, Brit. Zool. iv. p. 199.  
*Linn. Trans.* viii. p. 77.  
*Turton*, British Fauna, p. 156.  
*Dillwyn*, Descript. Catal. p. 152.  
*Turton*, Conch. Dict. p. 42.

*Mus. nost.* From Penzance.

Shell a quarter of an inch long, and nearly half an inch broad, strong, glossy, of a reddish chesnut color, with a deeper longitudinal band from the hinge which curves a little towards the longer

side; inside chesnut, with the margin plain: hinge with two teeth in each valve, one of them large and the other small.

33. CRASSINA—LAMARCK.

*Testa suborbicularis, æquivalvis, subæquilateralis, clausa. Cardo dentibus duobus in utráque valvâ: lateralibus nullis. Ligamentum externum, ad latus longius.*

Shell somewhat orbicular, equivalve, nearly equilateral, closed. Hinge with two teeth in each valve: lateral teeth none. Ligament external, at the longer side.

The general outline of this genus, more especially the position of the ligament, will sufficiently distinguish it from the *Capsa* and the *Psammobia*.

\* *Margine interno integerrimo. 1-2.*

With the inner margin very entire.

*CRASSINA testâ orbiculo-rhombéâ, anticè truncatâ, strîis transversis rugosis longitudinalibusque confertis.* subrhomboidæ.  
1.

Shell orbicular-rhombic, truncate at the anterior side, with rough transverse striæ and close longitudinal ones.

Venus subrhomboidea. *Montagu*, Suppl. p. 49, tab. 28, fig. 2.

*Pennant*, Brit. Zool. iv. p. 211.

*Turton*, Conch. Dict. p. 246.

Found by Captain Laskey, in the Firth of Forth.

Shell half an inch long, and three quarters broad, rounded at one end and truncate at the other, irregularly wrinkled transversely, and crossed by fine longitudinal lines: color white, with a rufous tinge at the truncated side: beaks small, nearly central: hinge with two strong plain teeth in each valve, one of them very oblique.

*Montagu* was of decided opinion that this shell is very distinct from any of the varieties of the *Petricola Irus*, both from the circumstances of the teeth being quite plain, and of the transverse striae being more obtuse and not so laminar. Whether it be an inhabitant of rocks we are unacquainted. It is at present a very obscure species.

Scotica.  
2.

*CRASSINA testá cordato-orbiculari subcompressá, costis transversis parallelis rotundatis, umbonibus prominentibus.*

Shell round heart-shaped, rather flat, with transverse parallel rounded ribs, and the beaks prominent.

*Tab. nost. 11, fig. 3, 4.*

Venus Scotica. *Montagu*, Test. Brit. Suppl. p. 44.

*Linn. Trans. viii. p. 81, tab. 2, fig. 3.*

*Turton*, British Fauna, p. 159.

*Pennant*, Brit. Zool. iv. p. 204.

*Dillwyn*, Descript. Catal. p. 167.



*Turton*, Conch. Dict. p. 236.

*Mus. nost.* Western and Scotch coasts.

Shell an inch long, and an inch and a quarter broad, white covered with a chesnut or olive skin, very slightly angular and produced at the anterior side, with numerous regular equidistant rounded transverse ribs, which grow fainter and indistinct towards the sides, especially the anterior side, and having the interstices smooth and broader than the ribs themselves: beaks somewhat triangularly prominent pointed and slightly curved, with a heart-shaped deep impression under them on the hinder side, and a glossy lanceolate one on the anterior side, both of them smooth; inside glossy white or cream-color: hinge with two strong teeth in each valve.

A suggestion has been hinted to us that this species may be the young of the *Crassina sulcata*, before the crenulations of the margins show themselves: but we have both the species from the size mentioned above to less than a quarter of an inch, and in all their stages of growth can readily distinguish the present species, even when the valves are shut close, by the flatness and sharpness of the margin, which in *Crassina sulcata* is always obtuse.

\*\* *Margine interno denticulato.*

With the internal margin finely notched.

*CRASSINA testâ cordato-orbiculari subcompressâ, costis transversis parallelis rotundatis, umbonibus prominentibus.*

*Sulcata.*  
3.

Shell round heart-shaped, rather flat, with transverse parallel rounded ribs, and the beaks prominent.

- Tab. nost. 11, fig. 1. 2.*
- Venus sulcata      *Montagu, Test. Brit. p. 131.*  
                          *Linn. Trans. viii. p. 81, tab. 2, fig. 2.*  
                          *Turton, British Fauna, p. 159.*  
                          *Pennant, Brit. Zool. iv. p. 203,*  
                          *Dillwyn, Descript. Catal. p. 166.*  
                          *Turton, Conch. Dict. p. 235.*
- Venus Danmonia. *Montagu, Suppl. p. 45, tab. 29, fig. 4.*  
                          *Pennant, Brit. Zool. iv. p. 212.*  
                          *Dillwyn, Descript. Catal. p. 167.*
- Pectunculus truncatus. *Da Costa, Brit. Conch. p. 195.*  
*Mus. nost. Devonshire, and Irish coasts.*

Shell in size shape and marking exactly resembling the *Crassina Scotica*, except that the inner margin is edged with fine teeth, giving an obtuse outline to the circumference.

Among the polar shells presented to us by Mrs. Griffiths, and collected by her son, an officer in Captain Parry's late most interesting voyage of discovery, we have two species much corresponding with our *Venus Scotica* and *Venus sulcata*. The teeth are similar, and one has the margin plain, the other notched: but the striæ are finer and more numerous, somewhat laminar and not so regular; the beaks not so much produced, and generally decorticated: they are covered with a blackish-brown epidermis. They are the *Venus borealis* of Linné, and Chemnitz, vii. p. 26, tab. 39, fig. 412 to 414.

## 34. MYRTEA—TURTON.

*Testa ovato-trigona, æquivalvis, subæquilateralis, clausa. Cardo valvæ alterius dente unico cum laterali utrinquè; alterius dentibus duobus, lateralibus obsoletis. Ligamentum externum.*

Shell oval-triangular, equivalve, nearly equilateral, closed. Hinge of one valve with a single tooth and a lateral one on each side; of the other valve with two teeth, the lateral ones obscure. Ligament external.

From the structure of the hinge in this shell, it cannot be included in any of the genera into which the original Venus tribe is now divided, without a latitude of character inconsistent with the precision of classical arrangement.

We have examined a very fine pair, taken from the stomach of a large sole; and they exactly correspond with the description and figure of Montagu.

## MYRTEA.

spinifera.  
1.

- Venus spinifera. *Montagu*, p. 577. tab. 17, fig. 1.  
*Pennant*, Brit. Zool. iv. p. 201.  
*Linn. Trans.* viii. p. 78.  
*Turton*, British Fauna, p. 160.  
*Dillwyn*, Descript. Catal. p. 163.  
*Turton*, Conch. Dict. p. 231.

On the Western coasts; very rare.

Shell half an inch long, and rather more in breadth, yellowish-white, somewhat oval and rather triangular, with numerous fine laminar equidistant transverse ridges, which reflect a little, and in both valves, at the cartilage side, become confluent in pairs, extending beyond the edges so as to form a fringe of short obtuse spines, which turn back and form a cavity for the cartilage: beaks small, nearly central, inclining a little to one side, with a long narrow impression under them; inside smooth, white, with the margin plain.

Young shells of the Venus Gallina something resemble it, the transverse striae often shooting forward a little at the anterior edges, as do those of Venus fasciata; but the difference of the teeth and the laminar ridges distinguish them.



### 35. CYPRINA—LAMARCK.

*Testa subcordata, æquivalvis, subæquilateralis, clausa. Cardo dentibus duobus vel tribus, supernè divergentibus, cum laterali antico. Ligamentum externum.*

Shell somewhat heart-shaped, equivalve, nearly equilateral, closed.

Hinge with two or three teeth, divergent at their tops, and a lateral one at the anterior side. Ligament external.

The shells answering to this generic character are with much propriety separated from the Venus, in consequence of their being furnished with a lateral tooth in each valve, and which is generally placed on the anterior or cartilage side. All the British species have the internal margin very entire.

CYPRINA *testá obliquè cordatá, transversim striatá, areolá posticá ob-* Islandica.  
*soletá, dentibus tribus.* 1.

Shell obliquely heart-shaped, striate transversely, with the hinder impression obscure, and three teeth.

Venus Islandica. *Linn. Syst. Nat. p. 1131.*

*Gmelin, Syst. p. 3271.*

*Turton, Linn. Syst. iv. p. 221.*

*Pennant, iv. p. 205, tab. 56.*

*Chemnitz, vi. p. 340, tab. 33. fig. 341, 342.*

*Montagu, Test. Brit. p. 114.*

*Donovan, British Shells, iii. tab. 77.*

*Turton, British Fauna, p. 157.*

*Linn. Trans viii. p. 83.*

*Dorset Catal. p. 35, tab. 6. fig. 5.*

*Dillwyn, Descript. Catal. p. 176.*

*Turton, Conch. Dict. p. 238.*

*Pectunculus crassus. Da Costa, p. 183, tab. 14, fig. 5.*

*Pectunculus maximus. Lister, Conch. tab. 272, fig. 108.*

Var. *rugis crassis transversis.*

with thick transverse ridges.

*Mus. nost.* On most open coasts.

Shell growing to four inches or more in diameter, strong, thick, covered with a glossy brown or olive skin, under which it

is chalky white, rounded, a little sloping and produced on the cartilage side, finely striate transversely: beaks pointed, curving to one side, without any impression under them: inside chalky white but not glossy, with the margin plain and very sharp edged.

triangularis. *CYPRINA testâ subtrigonâ lævi, areolâ posticâ lanceolatâ, valvâ alterâ tridentatâ.*  
2.

Shell somewhat triangular smooth, with the hinder impression lanceolate, and three teeth in one of the valves.

*Tab nost.* 11, fig. 19, 20.

Venus triangularis. *Montagu*, p. 577, tab. 17, fig. 3.

*Linn. Trans.* viii. p. 83.

*Turton*, British Fauna, p. 160.

*Pennant*, Brit. Zool. iv. p. 205.

*Dillwyn*, Descript. Catal. p. 173.

*Turton*, Conch. Dict. p. 238.

*Mus. nost.* Western coasts, and Dublin bay.

Shell about half an inch in diameter, strong, roundish with a triangular outline towards the beaks which are produced and equally sloping on both sides; the surface smooth, or marked with a few transverse lines of annotation: in one valve two teeth and a curved lateral one; in the other three teeth and a lateral one.

compressa. *CYPRINA testâ trigono-orbiculari subcompressâ, costulis transversis remotiusculis, areolâ posticâ elongatâ, dentibus duobus.*  
3.

Shell roundish triangular a little compressed, with rather remote transverse rib-like striæ, the hinder impression elongated, and two teeth.

*Tab. nost. 11, fig. 20-23*

Venus compressa. *Montagu*, Suppl. p. 43, tab. 26, fig. 1.

*Pennant*, Brit. Zool. iv. p. 209.

Venus Montagui. *Dillwyn*, Descript. Catal. p. 167.

Venus Montacuti. *Turton*, Conch. Dict. p. 243.

*Mus. nost.* From the Dunbar coast.

Shell about half an inch in diameter, strong, thick, flattish, marked with rather remote, rounded rib-like striæ, white or covered with a yellowish brown skin: beaks prominent, giving that part a rather triangular outline; inside white, with the margin flat thin and entire.

It something resembles the very young of *Cyprina Islandica*; but in that shell the beaks are not so prominent, and the transverse striæ are rather laminar and not rounded, and it wants the impression under the beaks, which in the present species is narrow but very distinct.

CYPRINA *testá orbiculo-cordatá subcompressá, costis transversis latis lævibus, dentibus duobus.* minima.  
4.

Shell round heart-shaped a little compressed, with broad smooth transverse ribs, and two teeth.

Venus minima. *Montagu*, p. 121, tab. 3, fig. 3.

*Linn. Trans* viii. p. 81.

*Turton*, British Fauna, p. 158,

*Pennant*, Brit. Zool. iv. p. 208.

*Dillwyn*, Descript. Catal. p. 166.

*Turton*, Conch. Dict. p. 236.

*Mus. nost.* Devonshire coast, and British Channel.

Shell a quarter of an inch long, and a little more in breadth, whitish or flesh-color, with four red spots and generally two white lines connecting the two upper ones with the two lower ones, so as to form a triangle, with broad smooth transverse rather obscure ribs.

The red spots, two of which are near the hinge and closer together, and two near the margin and more asunder, will distinguish it from the young of *Venus fasciata*, besides the lateral teeth in the hinge.

orbiculata. *CYPRINA testá suborbiculari decussatim striatá, dentibus duobus.*

5.

Shell somewhat orbicular, with decussate striæ, and two teeth.

*Venus orbiculata.* *Montagu*, Suppl. p. 42, tab. 29, fig. 7.

*Pennant*, Brit. Zool. iv. p. 208.

*Turton*, Conch. Dict. p. 241.

Dredged by Captain Laskey, near Dunbar.

Shell five-eighths of an inch in diameter, flattish, white; coarsely striate both transversely and longitudinally: beaks very small, with a minute heart-shaped impression under them.



The outline of this shell appears to resemble that of the *Cytherea Tigerina*; but from the description of *Montagu* the teeth are different, and the reticulations are coarser.

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36. VENUS—LINNE.

*Testa transversa vel suborbicularis, æquivalvis, inæquilateralis, clausa.*

*Cardo dentibus tribus, exterioribus infernè approximatis supernè divergentibus: lateralibus nullis. Ligamentum externum.*

Shell transverse or somewhat orbicular, equivalve, inequilateral, closed. Hinge with three teeth, the outer ones close together at the base and divergent at their tips: lateral teeth none. Ligament external.

The *Venus* tribe, pre-eminent for the elegance of their figure and splendor of colors, formerly so numerous and difficult of discrimination, are now very properly confined to the simple characters which are exhibited above: with three strong teeth in each valve, one or two of which are generally cloven, all close together at their insertion, and the outer ones spreading obliquely in opposite directions, with the middle one straight.

In this respect they differ from the *Venerupis*, which has all the teeth parallel and erect. The beaks are prominent and

turned towards the hinder side, giving the shell a somewhat heart-shaped appearance, with generally a heart-shaped impression under the curvature of the beaks; and the ligament is almost uniformly placed in the excavated slope of the anterior or opposite side.

And that the specific characters of this still multitudinous family may be more clearly contrasted and understood, attention to the following definitions will afford much facility and prevent misconception: *cancellate*, when longitudinal lines or striæ are placed in the interstices of the transverse ones, but do not pass over or cut through them: *reticulate*, when longitudinal lines pass over transverse ones, but do not cut through them: *decussate*, when longitudinal lines cut through the transverse ones.

The heart shaped depression under the curvature of the beaks is denominated the *areola*: and the excavated slope on the opposite or anterior side, in which the cartilage is deposited, is called the *area*; the two sides of which are the *lips*.

\* *Margine interno crenulatò. 1-12.*

With the inner margin notched.

† *orbiculo-cordatæ.*

orbicular heart-shaped.

verrucosa. 1. VENUS *testá globoso-cordatá, laminiis transversis undulatis, lateribus verrucosis, areolá cordatá.*

Shell globular heart-shaped, with transverse jagged plates, warty at the sides, and the areola heart-shaped.

Venus verrucosa. *Linn. Syst. Nat. p. 1130.*

*Gmelin. Syst. p. 3269.*

- Turton*, Linn. Syst. iv. p. 219.  
*Chemnitz*, vi. p. 303, tab. 29, fig. 299, 300.  
*Donovan*, British Shells, ii. tab. 44.  
*Montagu*, Test. Brit. p. 112.  
*Pennant*, iv. p. 201, tab. 57, fig. 1.  
*Turton*, British Fauna, p. 157.  
*Linn. Trans.* viii. p. 78  
*Dorset Catal.* p. 34, tab. 8, fig. 1.  
*Dillwyn*, Descript. Catal. p. 163.  
*Turton*, Conch. Dict. p. 231.

*Pectunculus strigatus*. *Da Costa*, p. 185, tab. 12, fig. 1.

*Pectunculus crassissimus*. *Lister*, Conch. tab. 284, fig. 122.

*Mus. nost.* English and Irish coasts.

Shell two inches and a half in diameter, of a brownish-white color, strong and heavy, almost globular like a ball, with transverse undulate plates which break into wart-like protuberances at the sides. especially the anterior part: there are also some longitudinal lines which are chiefly distinguishable about the hinge.

VENUS *testá orbiculo-cordatá convexá, laminis transversis subimbricatis lævibus, areolá cordatá.*

Casina.  
2.

Shell orbicular heart-shaped convex, with transverse somewhat imbricated smooth plates, and the areola heart-shaped.

*Tab. nost.* 9, fig. 1.

Venus Casina. *Linn. Syst. Nat.* p. 1130.

*Gmelin*, Syst. p. 3269.

*Turton*, Linn. Syst. iv. p. 220

*Chemnitz*, vi. p. 306, tab. 29, fig. 301, 302.

*Pennant*, iv. p. 202, tab. 57 fig. 2.

*Montagu*, Test. Brit. Suppl. p. 47.

*Linn. Trans.* viii. p. 79, tab. 2. fig. 1.

*Turton*, British Fauna, p. 157.

*Dillwyn*, Descript. Catal. p. 165.

*Turton*, Conch. Dict. p. 232.

*Pectunculus membranaceus.* *Da Costa*, Brit. Conch. p. 193, tab. 13, fig. 4, left hand

*Mus. nost.* Western and Irish coasts.

Shell two inches in diameter, whitish or rusty brown, finely rounded in the circumference, with thin transverse plates curving towards the hinge, and nearly meeting each other in an imbricate manner; but not reflected at the sides nor breaking into tubercles: one of the lips of the area carinate and striate.

We have a variety dredged at Liverpool, in which the margin is extremely obtuse and nearly half an inch thick, with the crenatures or notches on the outside.

reflexa,  
3. *VENUS testá suborbiculari compressiusculá, latere antico subtruncato, laminis transversis anticè reflexis, areolá lanceolatá carinatá.*

Shell somewhat orbicular and rather compressed, a little truncate at the anterior side where the transverse plates are reflected, and the areola lanceolate and carinate.

*Tab nost.* 10, fig. 1, 2.

*Venus reflexa.* *Montagu*, Suppl. p. 40. and 168

*Laskey*, Wern. Soc. i. p. 384, tab. 8, fig. 1,

*Pennant*, Brit. Zool. iv. p. 208.

*Dillwyn*, Descript. Catal. p. 168.

*Turton*, Conch. Dict. p. 233.

*Venus foliaceo-lamellosa*. *Chemnitz*, vi. p. 299, tab. 28. fig. 295 to 297.

*Mus. nost.* Scotland, South of Devon, and Bantry bay.

A fine series of this very beautiful species is now before us, from a quarter of an inch to two inches and a half in diameter. In some there are very faint traces of longitudinal striæ in the interstices of the plates, and upon the plates themselves; others have no appearance of them; and in the larger specimens we perceive, that the laminæ or plates themselves are exquisitely decussated when examined by a good glass.

The color is of a brownish-white, and most of our Devonshire specimens have two or three broken longitudinal rays of red or purple, of greater or less degree of intensity: some very richly colored.

It is a flatter shell than the *Venus Casina*, angulated on the anterior side, where the transverse ridges become very thin and are reflected: and the impression under the beaks is more elongated, and elevated in the middle into a sharp ridge

Like many of the massive species, there is a small tubercle on the posterior side of the teeth under the areola, in the right valve, with a correspondent impression in the left.

The figures of *Chemnitz* which we have quoted, appear to correspond with it.

cancellata. *VENUS testá orbiculo-cordatá, anticè angulatá, lamellis transversis re-*  
 4. *motis crebró cancellatis, areolá cordatá.*

Shell round heart-shaped, angular on the anterior side, with remote transverse plates which are closely cancellated, and the areola heart-shaped.

*Tab. nost. 10, fig. 3*

Venus cancellata. *Linn. Syst. Nat. p. 1130.*

*Gmelin, Syst. p. 3270.*

*Turton, Linn. Syst. iv. p. 220.*

*Chemnitz, vi. p. 309, tab. 29, fig. 304 and 305.*

*Mus. nost.* From the shores of Guernsea.

Shell about half an inch long, white with sometimes a slight rosy tinge, with nine or ten rather remote membranaceous ridges, the stronger of which have a raised transverse line between them, and are slightly tubercled on the anterior side; the interstices marked with close-set rib-like longitudinal striæ: the anterior side abruptly cut off from the beaks, forming an angle about the middle: beaks near one end, prominent and recurved.

This species, which is not uncommon in the seas about Guernsea, answers exactly to the figures of Chemnitz, and is easily distinguishable from the young of *Venus verrucosa*; for the laminar plates are much more remote, and the marks between them are regular and rib-like, not crossing the plates.

subcordata. *VENUS testá orbiculato-cordatá, costulis remotiusculis, longitudinally-*  
 5. *busque lamellas transversas remotiores decussantibus.*

Shell round heart-shaped, with rather distant longitudinal rib-like striæ crossing the more distant transverse ridges.

Venus subcordata. *Montagu*, Test. Brit. p. 121, tab. 3, fig. 1.

*Pennant*, Brit. Zool. iv. p. 204.

*Linn. Trans* viii. p. 82.

*Turton*, British Fauna, p. 158.

*Dillwyn*, Descript. Catal. p. 166.

*Turton*, Conch. Dict. p. 237.

Found by *Montagu*, in sand from Falmouth harbour.

Shell a quarter of an inch in diameter, rather convex, white, running nearly straight down the cartilage side, with remote transverse ridges and strong raised longitudinal striæ.

From the *Venus cancellata* it differs, in the longitudinal ribs passing over and cutting the transverse ones, giving it a regular net-like appearance, the meshes of which are parallelograms or long squares; the anterior side also slopes from the beaks to the point, without forming an angle.

VENUS *testâ orbiculo-cordatâ convexâ, granulatim decussatâ, areâ* granulata,  
*incisâ, labiis substriatis.* 6.

Shell round heart-shaped convex with granular decussations, the anterior slope deeply cut and the lips slightly striate.

Venus granulata. *Gmelin*, Syst. p. 3277.

*Turton*, Linn. Syst. iv. p. 226.

*Montagu*, Test. Brit. p. 122.

*Donovan*, British Shells, iii. tab. 83.

*Pennant*, Brit. Zool. iv. p. 207.

*Turton*, British Fauna, p. 158.

*Linn. Trans.* viii. p. 85.

*Dillwyn, Descript. Catal.* p. 171.

*Turton, Conch. Dict.* p. 240.

Venus Marica spuria. *Chemnitz*, vi. p. 314, tab. 30, fig. 313.

Pectunculus parvus. *Lister, Conch.* tab. 338, fig. 175.

Falmouth harbour, and North Britain.

Shell seven-eighths of an inch long, and an inch broad, thick, convex, strongly ribbed both longitudinally and transversely, forming a distinctly granulated surface: color white, with chocolate-brown spots and streaks, inside dark purple: beaks prominent, much curved, with an oval areola under them.

fasciata.  
7.

VENUS testá orbiculo-cordatá compressá, costis transversis latis planatis lævibus.

Shell round heart-shaped compressed, with broad flat transverse smooth ribs.

*Tab nost.* 8. fig. 9.

Venus fasciata. *Donovan, British Shells*, iv. tab. 170.

*Pennant, Brit. Zool.* iv. p. 203.

*Linn. Trans.* viii. p. 80.

*Turton, British Fauna*, p. 156.

*Dorset Catal.* p. 34, tab. 7, fig. 3.

*Dillwyn, Descript. Catal.* p. 159.

*Turton, Conch. Dict.* p. 234.

Venus Paphia. *Montagu, Test. Brit.* p. 110.

Pectunculus fasciatus. *Da Costa*, vi. p. 188, tab. 13, fig. 3.

*Mus. nost.* Common on sandy shores.



Shell nearly an inch long, and rather more broad, with broad flat ribs of unequal size, the edges of which generally project a little beyond the anterior margin, forming a double row of tubercles; color whitish or fulvous, with broad or narrow longitudinal rays or fine lines of white red yellow or purple: beaks central, with the areola broad heart-shaped.

†† *Trigono-cordatæ.*

Triangular heart-shaped.

*Venus testá trigono-cordatá, lamellis transversis remotis crebró cancellatis, areolá cordatá sulcis curvis.*

Dysera.  
8.

Shell triangular heart-shaped, with remote transverse plates which are closely cancellated, the areola heart-shaped with curved grooves.

*Tab. nost. 9, fig. 4.*

*Venus* Dysera.

*Linn. Syst. Nat. p. 1130.*

*Gmelin. Syst. p. 3268.*

*Turton, Linn. Syst. iv. p. 219.*

*Chemnitz, vi. p. 294, tab. 28, fig. 287-290.*

*Montagu, Test. Brit. Suppl. p. 42.*

*Pennant, Brit. Zool. iv. p. 204.*

*Turton, Conch. Dict. p. 237.*

*Venus cingendá. Dillwyn, Descript. Catal. p. 161.*

*Pectunculus maculatus. Lister, Conch. tab. 277, and 278.*

*Mus. nost.* From the shores round Guernsea.

Shell rather more than an inch in diameter, convex, grey or ivory white, variously marked with brown or chesnut blotches,

with about twelve remote and somewhat undulate laminar ridges, and close-set raised rib-like-striæ beteen them, and which longitudinal striæ are themselves crossed by fine transverse lines, especially towards the beaks, where it slopes on the anterior side in a rather projecting curved line: the area is equally deep on both sides, and with the areola of a chesnut color.

It has something the outline of the Venus cancellata; but the ridges are more remote and less numerous; there is no angularity on the anterior side, but a regular slope; and it may be distinguished from that shell and the Venus laminosa, by the regular rib-like semicircular striæ on the areola, which is heart-shaped.

<sup>laminosa.</sup>  
9.

VENUS testâ trigono-cordatâ, auticè acuminato-productâ, laminis membranaceis confertis crebro cancellatis, areolâ striatâ.

Shell triangular heart-shaped, produced and pointed at the anterior end, with crowded transverse membranaceous plates, the interstices of which are closely striate longitudinally, and the areola striate.

*Tab. nost.* 10, fig. 4.

*Laskey*, Wern. Soc. i. p. 384, tab. 8, fig. 16.

*Montagu*, Test. Brit. p. 38.

*Pennant*, Brit. Zool. iv. p. 202.

*Turton*, Conch. Dict. p. 233.

*Mus. nost.* Scotch, Irish, and Devonshire coasts.

Shell in size and outline much resembling the Venus Gallina, but the transverse striæ are laminar thin and more remote, and

the interstices between them are finely striate longitudinally. It is also much thinner, and of an uniform pale brown color.

VENUS *testá trigono-cordatá, anticé productá, strüs transversis confertis incurvis, areolá striatá.*

Gallina.  
10.

Shell triangular heart-shaped, produced at the anterior end, with crowded transverse incurved striæ, and the areola striate.

*Tab. nost.* 9, fig. 2.

Venus Gallina. *Linn. Syst. Nat.* p. 1130.

*Gmelin, Syst.* p. 3270.

*Turton, Linn. Syst.* iv. p. 220.

*Chemnitz, vi.* p. 311, tab. 30, fig. 308, 309.

*Pennant, iv.* p. 205, tab. 59, fig. 2.

*Linn. Trans.* vi. tab. 17, fig. 7 and 8.

*Linn. Trans.* viii. p. 82.

*Turton, British Fauna,* p. 157.

*Dorset Catal.* p. 35, tab. 8, fig. 2.

*Dillwyn, Descript. Catal.* p. 168.

*Turton, Conch. Dict.* p. 234.

Venus striatula. *Montagu, Test. Brit.* p. 113.

*Donovan, British Shells,* ii. tab. 68.

*Pectunculus strigatus.* *Da Costa,* p. 191, tab. 12, fig. 2.

*Pectunculus fuscus.* *Lister, Conch.* tab. 282, fig. 120.

*Mus. nost.* On most sandy coasts.

Shell about an inch long, and an inch and a quarter broad, obliquely produced at the cartilage side in a nearly straight line to an angular point; white, yellowish or fawn-color, rarely without marks, mostly with white or pale broad longitudinal rays, and minute zig-

zag brown lines; the heart-shaped impression is deep, elongated, and finely striate longitudinally.

Pallida.  
11.

VENUS *testâ trigono-cordatâ, anticè productâ, costis trnsversis parallelis obsoletis confertim reticulatis, areolâ lævi.*

Shell triangular heart-shaped, produced at the anterior side, with obscure transverse paralld ribs which are crossed by fine close longitudinal lines, and the areola smooth.

*Tab. nost. 10, fig. 5*

*Mus. nost.* Found at Dawlish.

Shell about an inch long, and nearly two broad, thin, semitransparent, of an ivory or yellowish-white color without marks, with somewhat irregular and rather obscure transverse rib-like striae, crossed by fine longitudinal lines; beaks prominent, pointed, a little curved; both the slopes quite smooth: the margin thin, with the notches visible on the outside.

ovata.  
12.

VENUS *testâ ovato-trigonâ, costis longitudinalibus transversim squamosis, areâ convexâ decussatâ sine labiis.*

Shell oval-triangular, with longitudinal ribs which are transversely scaly, the anterior slope convex decussate and without lips.

*Tab. nost. 9, fig. 3.*

Venus ovata. *Pennant, Zool. iv. p. 206, tab. 59, fig. 3.*

*Montagu, Test. Brit. p. 120.*

*Linn. Trans. viii. p. 85, tab. 2. fig. 4.*

*Turton, British Fauna, p. 158.*

*Dorset Catal. p. 35, tab. 1, fig. 15.*

*Dillwyn*, Descript. Catal. p. 171.

*Turton*, Conch. Dict. 239.

*Cardium striatum*. *Walker*, p. 23, fig. 82.

*Pectunculus parvus, albidus*. *Lister*, Conch. tab. 311. fig. 147.

*Mus. nost.* Western and Irish coasts.

Shell about half an inch long, and a little more in breadth, opaque, of a pale brown color with sometimes a few darker bands, with numerous strong longitudinal ribs which are clothed with scale-like prominences disposed transversely; inside glossy-white or flesh color, with sometimes a purple blotch in the middle: beaks nearly central, prominent, a little curved, with a faint heart-shaped impression under them.

This species is very singular in its genus, in having no distinct area or slope on the anterior margin; and so much resembles a *Cardium*, that we have sometimes seen it in cabinets marked as the *Cardium exiguum*.

\*\* *Margine interno integerrimo*. 13-21

With the inner margin very entire.

† *ovatæ*.

oval.

*VENUS testâ ovatâ tenui semipellucidâ, transversim rugosâ, striis longitudinalibus obsoletis undatis.* substriata.  
13.

Shell oval thin semitransparent, with transverse wrinkles and obscure undulate longitudinal striæ.

Venus substriata. *Montagu*, Suppl. p. 48. tab. 29, fig. 6.

*Pennant*, Brit. Zool. iv. p. 211.

*Turton*, Conch. Dict. p. 245,

Dredged up in the Firth of Forth

Shell half an inch long, and rather more in breadth, transversely oval, white, thin, with concentric wrinkles and obscure waved longitudinal striæ: beaks nearer to one end, small, turning a little to one side.

ænea.  
14.

VENUS *testa ovatâ, anticè elongato-attenuatâ, strâs transversis crebris longitudinalibusque obsoletis, dentibus duobus fissis.*

Shell oval, taper and elongated at the anterior side, with crowded transverse striæ and obscure longitudinal ones, two of the teeth cloven.

*Tab. nost. 10, fig. 7.*

Venus ænea. *Turton*, Conch. Dict. p. 248, fig. 20.

*Mus. nost.* From Clontarf, in Dublin bay.

Shell an inch long, and an inch and a half broad, white covered with a shining bronzed skin, oval, convex, rounded at one end, regularly tapering and much produced at the other without forming any angle; with regular close-set transverse striæ, and minute longitudinal lines: beaks much pointed, curved, near the larger end, with an elongated areola under them: teeth strong, two of them cloven in one valve, and one in the other.

*VENUS testá ovatá, anticè rotundatá tumidâ strüs confertis transversis regularibus, areolâ cordatâ.* Sarniensis.  
15.

Shell oval, rounded and tumid at the anterior side, with crowded transverse regular striæ, and the areola heart-shaped.

*Tab. nost. 10, fig. 6*

*Tellina lata.* *Lister, Conch. tab. 385, fig. 232.*

*Mus. nost.* From Guernsea.

Shell about two inches long, and rather more in breadth, thick, convex, yellowish-white, mostly marked with numerous red or purplish zigzag lines, which are often disposed in interrupted longitudinal rays, rarely of an uniform chocolate or fawn-color; and extremely variable in the disposition of its marks and colors.

The transverse striæ are very numerous and rounded, not becoming broader at the anterior side, and usually interrupted by strong transverse lines of annotation; the anterior side is very obtuse and swollen: the margin obtuse, and in full grown specimens a little flexuous towards the anterior end; beaks prominent, recurved, with a purple heart-shaped areola under them; inside white, purple, or greenish-white: two of the teeth cloven.

Lister appears to be the only author who has noticed this species. We have before us a fine series, from a quarter of an inch to more than two and a half in length, taken alive out of the sand at low spring tides in Guernsea. It is much longer in proportion to its breadth than *Venus virginea*; the striæ are much more numerous and compact: and it is easily recognised by the remarkable tumidity of the anterior end.

sinuosa.  
16.

VENUS *testâ ovato-orbiculari, sinu longitudinali ab umbonibus, striis transversis planatis longitudinalibusque obsoletis.*

Shell roundish-oval, with a longitudinal sinuosity from the beaks, and flat transverse striæ and obscure longitudinal ones.

*Tab. nost. 10, fig. 9.*

Venus sinuosa. *Penant, iv. p. 213, tab. 58, fig. 4.*

*Turton, Linn. Syst. iv. p. 227.*

*Montagu, Test. Brit. p. 120.*

*Linn. Trans. viii. p. 90.*

*Turton, British Fauna, p. 158.*

*Turton, Conch. Dict. p. 248.*

*Mus. nost.* From Dublin bay.

Shell five eighths of an inch long, and about as much broad, rounded at both the sides, but much longer or deeper at the anterior one, and produced at the other, with a rather oblique indenture from the beaks to the margin which is a little irregular: beaks nearly central, with a heart-shaped slightly carinate areola under them; inside rich glossy yellow: in one valve two of the teeth are cloven, and one in the other.

This singular shell seems nearest to approach to the *Venus virginea*, but the transverse striæ are crossed by fine longitudinal ones. From *Venus decussata*, and *V. Pullastra* it differs, in not having the striæ more strongly decussate at the anterior side: and from the *Venerupis perforans* in the teeth being exactly characteristic of its genus, and not erect and parallel.

aurea.  
17.

VENUS *testâ ovato-cordatâ, lateribus declivis, medio tumido, striis transversis crebris longitudinalibusque obsoletis, dente medio fisso.*



Shell oval heart-shaped, tumid in the middle and sloping to each side, with crowded transverse striæ and obscure longitudinal ones, the middle tooth cloven.

*Tab. nost.* 9, fig. 7 and 8.

Venus aurea.

*Gmelin*, Syst. p. 3288.

*Turton*, Linn. Syst. iv. p. 236.

*Pennant*, Brit. Zool. iv. p. 212, tab. 60, fig. 1.

*Montagu*, Test. Brit. p. 129.

*Linn. Trans* viii. p. 90, tab. 2, fig. 9.

*Turton*, British Fauna, p. 159.

*Dorset Catal.* p. 36, tab. 13, fig. 3.

*Dillwyn*, Descript. Catal. p. 207.

*Turton*, Conch. Dict. p. 247.

Venus geographica. *Gmelin*. Syst. p. 3293.

*Turton*, Linn. Syst. iv. p. 241.

*Chemnitz*, vii. p. 45, tab. 42, fig. 440.

*Dillwyn*, Descript. Catal. p. 203.

Tellina fasciata. *Lister*, Conch. tab. 404, fig. 249.

*Mus. nost.* Devonshire and Cornish coasts.

Shell an inch long, and an inch and a quarter broad, thin, convex in the middle, and rounded at both the ends, but more produced at the anterior side, thickly striate transversely, and very obscurely in a longitudinal direction; the margin sometimes a little flexuous near the anterior end: color yellowish-white, more or less deeply tinged with golden yellow, and marked with blackish brown or blueish zig-zag lines or stripes, variously disposed and sometimes confluent or crossing each other: beaks nearer one end, with a broad areola under them.

There is very little doubt but that the *Venus aurea* and *Venus geographica* of authors, are the same species under different varieties of colors, as we possess them in their intermediate states, the remotest of which are figured in our plate.

†† *latere antico angulato*.

angular at the anterior end.

virginea.  
18.

*VENUS testá ovato-rhombeá, strüs transversis planatis anticè latioribus, areolá lanceolatá, dentibus duobus fassis.*

Shell rhombic-oval, with transverse flat striæ which are broader at the anterior end, the areola lanceolate, and two of the teeth cloven.

*Tab. nost. 8, fig. 8.*

*Venus virginea.*

*Linn. Syst. Nat. p. 1136.*

*Gmelin, Syst. p. 3294.*

*Turton, Linn. Syst. iv. p. 241.*

*Pennant, Brit. Zool. iv. p. 212, tab. 58, fig. 5.*

*Montagu, Test. Brit. p. 128.*

*Linn. Trans. viii. p. 89, tab. 2, fig. 8*

*Turton, British Fauna, p. 159.*

*Dorset Catal. p. 36, tab. 13, fig. 1.*

*Dillwyn, Descript. Catal. p. 207.*

*Turton, Conch. Dict. p. 246.*

*Venus edulis.*

*Chemnitz, vii. p. 60. tab. 43, fig. 457, 458.*

*Cuneus fasciatus.*

*Da Costa, Brit. Conch. p. 204.*

*Tellina fasciata.*

*Lister, Conch. tab. 403, 404, fig. 247, 248.*

Var. *latere antico attenuato-elongato.*

elongated and tapering at the anterior side.

*Venus punctata.* Chemnitz, vii. p. 42, tab. 41, fig. 436, 437.

*Mus. nost.* Devonshire, Cornwall, and Guernsea.

Shell an inch and a half long, and nearly two in breadth, generally obliquely angular at the anterior end, yellowish-white or pale reddish brown, rarely plain, but mostly variegated marbled or radiated with rosy or rich purple, sometimes spotted, or with broad oblique rays: inside white, with generally a rosy tinge; beaks near one end.

The variety is much larger, without the angle at the anterior side, but sloping gradually to an elongated point from the beaks.

From the total want of the angle, which we have also observed in some of the young specimens, we are inclined to think that it is a distinct species, and one of the numerous varieties of the *Venus literata*.

*VENUS testá ovato-rhombeá, medio tumido strüs transversis crebris longitudinalibusque obsoletis, dente medio fisso.*

*nitens.*  
19.

Shell rhombic-oval, tumid in the middle, with crowded transverse striæ and obscure longitudinal ones, and the middle tooth cloven.

*Tab. nost. 10, fig. 8.*

*Venus nitens.* Turton, Conch. Dict. p. 247.

*Mus. nost.* From Clontarf, in Dublin bay.

Shell hardly three quarters of an inch long, and a little more in breadth, resembling the *Venus aurea* in its outline, but there

is an evident angle at the anterior side, and the color is transparent horny, with some few scattered longitudinal marks.

From *Venus virginea* it differs, in having obscure longitudinal lines, in the transverse striæ not becoming broader at the anterior end, and in having only one of the teeth cloven.

decussata. *VENUS testá ovato-rhombeá, strüs decussatis anticè tuberculis, areolá*  
20. *obsoletá, dentibus duobus fissis.*

Shell rhombic-oval, with decussate striæ which become tubercular at the anterior end, the areola obscure, and two of the teeth cloven.

*Tab. nost. 8, fig. 10.*

*Venus decussata.* *Linn. Syst. Nat. p. 1135.*

*Gmelin, Syst. p. 3294.*

*Turton, Linn. Syst. iv. p. 241.*

*Pennant, p. 210, tab. 60, middle fig.*

*Donovan British Shells, ii. tab. 67.*

*Linn. Trans. vi. p. 168. tab. 17, fig. 11. 12.*

*Montagu, Test. Brit. p. 124.*

*Chemnitz, vi. p. 58, tab. 43, fig. 455, 456.*

*Linn. Trans. viii. p. 88, tab. 2, fig. 6.*

*Turton, British Fauna, p. 159.*

*Dorset Catal. p. 36, tab. 6. fig. 4.*

*Dillwyn, Descript. Catal. p. 205.*

*Turton, Conch. Dict. p. 244.*

*Cuneus reticulatus.* *Da Costa, p. 202, tab. 14, fig. 4.*

*Chama fusca.* *Lister, Conch. tab. 423, fig. 271.*

*Mus. nost.* On all gravelly coasts.

Shell two inches long, and three broad, angularly truncate at the anterior side which is tubercled, brown, grey, or yellow, with often darker rays or spots: inside glossy white or yellowish, purple about the cartilage: beaks with the areola wanting or very obscure.

Pullastra.  
21.

VENUS *testá ovato-rhombéá, strüs decussatis minimis anticè subasperis, areolá obsoletá, dente medio fisso.*

Shell rhombic-oval, with minute decussate striæ which are a little rough at the anterior end, the areola obscure, and the middle tooth cloven.

Venus Pullastra. *Linn. Trans.* vi. tab. 17, fig. 13, 14.  
*Linn. Trans.* viii. p. 88, tab. 2, fig. 7.  
*Pennant, Brit. Zool.* iv. p. 210.  
*Montagu, Test. Brit.* p. 125.  
*Turton, British Fauna,* p. 159.  
*Dorset Catal.* p. 36, tab. 1, fig. 8.  
*Turton, Conch. Dict.* 244.

Venus Senegalensis. *Dillwyn, Descript. Catal.* p. 206.  
*Mus. nost.* English and Irish coasts.

¶ Shell resembling the last, but is more delicate, generally of an ivory white with purple blotches, rarely grey with dark rays, and the decussations are much finer. It is also generally of a more oblong shape, and the young ones are not so angular.



## 37. CYTHEREA—LAMARCK.

*Testa suborbicularis seu transversa, æquivalvis, inæquilateralis, clausa. Cardo valvæ dextræ dentibus quatuor, tribus basi approximatis, unico remotiusculo sub areolâ; valvæ sinistræ dentibus tribus, rariùs quatuor, basi approximatis, cum foveâ anticâ remotiusculâ: lateralibus nullis. Ligamentum externum.*

Shell somewhat orbicular or transverse, equivalve, inequilateral, with four teeth in the right valve, three of them close together at the base, and one remote under the areola; in the left valve three teeth, rarely four, close together at the base, with a remote hollow on the anterior side: lateral teeth none. Ligament external.

From the Venus tribe this family is separated by sufficiently distinctive characters: the four teeth in one or both the valves; and when there are but three in one valve, a remote oval hollow parrallel with the margin. All the British species, as far as they are yet known, have the internal margin very entire.

Chione.  
1.

CYTHEREA *testâ ovato-cordatâ nitidâ transversim substriatâ, areolâ lanceolatâ.*

Shell oval heart-shaped glossy and slightly striate transversely, with the areola lanceolate.

*Tab nost. 8. fig. 11.*

Venus Chione.

*Linn. Syst. Nat. p. 1131.*

*Gmelin, Syst. p. 3272.*

*Turton, Linn. Syst. iv. p. 222.*

*Pennant, Brit. Zool. iv. p. 206. tab 54, fig. 2.*

- Donovan*, British Shells, i. tab. 17.  
*Montagu*, Test. Brit. p. 115.  
*Linn. Trans.* vi. tab. 17, fig. 1, 2.  
*Linn. Trans.* viii. p. 84.  
*Turton*, British Fauna, p. 157.  
*Dorset Catal.* p. 35, tab. 6, fig. 7.  
*Dillwyn*, Descript. Catal. p. 178.  
*Turton*, Conch. Dict. p. 239.  
*Chemnitz*, vi. p. 344, tab. 32, fig. 343.

*Pectunculus glaber.* *Da Costa*, p. 184, tab. 14, fig. 7.

*Mus. nost.* On the Western coasts.

Shell three inches long, and nearly four broad, oblique, strong, covered with a smooth glossy chesnut skin, very slightly striate, generally marked with darker rays and bands; beaks nearer one end, oblique and curved, with both the impressions smooth: inside glossy white.

*Lister's* figure 105, at plate 269, is fossil.

*CYTHEREA testâ obliquè cordatâ, lamellis transversis subimbricatis, Guineensis.*  
*areolâ cordatâ.* 2.

Shell obliquely heart-shaped, with transverse somewhat imbricate plates, and the areola heart-shaped.

- Venus Guineensis* *Gmelin*, Syst. p. 3270.  
*Turton*, Linn. Syst. iv. p. 220.  
*Montagu*, Suppl. p. 48 and 168.  
*Pennant*, Brit. Zool. iv. p. 207.  
*Dorset Catal.* p. 35.  
*Turton*, Conch. Dict. p. 237.

*Venus circinata.* *Chemnitz*, vi. p. 312, tab. 30, fig. 311, 312.

*Dillwyn*, Descript. Catal. p. 169.

*Peetunculus ruber*. *Lister*, Conch. tab. 306, fig. 139.

Dredged in the Firth of Forth, and Weymouth.

Shell an inch and a quarter long, and one and a half broad, convex, sloping to one end, with numerous close-set sharp concentric ridges, of a greyish-white color with two or three purplish-brown longitudinal rays; inside white, inclining to purple towards the margin: both the slopes purple.

Its contour is much that of the *Venus Gallina*, but the teeth are different, the margin is plain, and the slope on the anterior side is not so well defined.

exoleta.  
3. *CYTHEREA testâ orbiculo-cordatâ depressâ, striis transversis crebris capillaceis, areâ lineari, areolâ sublamellatâ.*

Shell orbicular heart-shaped and flattish, with crowded transverse capillary striæ, the area linear and the areola somewhat lamellar.

*Tab. nost. 8, fig. 7.*

*Venus exoleta.*

*Linn. Syst. Nat. p. 1134.*

*Gmelin, Syst. p. 3284.*

*Turton, Linn. Syst. iv. p. 233.*

*Pennant, iv. p. 209, tab. 57, fig. 3.*

*Donovan, ii. tab. 42, fig. 1.*

*Montagu, Test. Brit. p. 116*

*Linn. Trans. vi. tab. 17, fig. 9, 10.*

*Linn. Trans. viii. p. 87, tab. 3, fig. 1.*

*Turton, British Fauna, p. 157.*

*Dorset Catal. p. 35, tab. 8, fig. 5.*

*Dillwyn, Descript. Catal. p. 195.*



*Turton*, Conch. Dict. p. 241.

*Chemnitz*, vii. p. 18, tab. 38, fig. 402, 404.

*Pectunculus capillaceus*. *Da Costa*, p. 187, tab. 12, fig. 5.

*Pectunculus densé fasciatus*. *Lister*, tab. 291. fig. 127.

*Mus. nost.* English, Irish, and Guernsea coasts.

Shell growing to two inches and a half in diameter, whitish or dull reddish, with broken red or purple longitudinal rays, broad stripes, or fine lines, rather flat, nearly orbicular, with the beaks much curved and a deep excavation under them.

*CYTHEREA testá obovato-cordatá convexá, latere antico ad umbones attenuato, strüs transversis crebris capillaceis.* sinuata.  
4.

Shell oboval and heart-shaped convex, tapering to the beaks at the anterior side, with crowded transverse capillary striæ.

*Tab. nost.* 10, fig. 10. and 11.

*Venus sinuata.* *Gmelin*. Syst. p. 3285.

*Turton*, Linn. Syst. iv. p. 233.

*Turton*, Conch. Dict. p. 242.

*Venus lineta.* *Dorset Catal.* p. 35, tab. 1, fig. 13.

*Venus lactea.* *Donovan*, British Shells, v. tab. 149.

*Montagu*, Test. Brit. Suppl. p. 46.

*Linn. Trans.* viii. p. 79.

*Turton*, British Fauna, p. 157.

*Venus exoleta.* *Pennant*, iv. p. 209, tab. 59, fig. 1.

*Venus exoleta*, Var. *Linn. Trans.* viii. p. 87, tab. 3, fig. 2.

*Venus excisa.* *Dillwyn*, Descript. Catal. p. 195.

*Chemnitz*, vii. p. 17, tab. 38, fig. 400, 401.

*Pectunculus rostro productiore.* *Lister*, *Conch.* tab. 289, fig. 125,  
and tab. 290, fig. 126.

The young shell. *Lister*, *Conch.* tab. 295, fig. 132.

*Mus. nost.* On the Western coasts.

Shell an inch and a half long, and not quite so much in breadth, thick, convex, narrowed towards the beaks on the cartilage side, causing them to be much produced, generally of a clear polished white color, sometimes yellowish or with a flesh-color tinge towards the narrowed end, very rarely marked with broad longitudinal fawn-colored stripes, as represented in our plate: glossy round the margin.

We have specimens from Panama, which in every respect correspond with those of our own coasts, but are about double the size.

Tigerina.  
5

*CYTHEREA testá suborbiculari depressá, strüs decussatis, areolá subtrigoná minutá.*

Shell somewhat orbicular and flattish, with decussate striæ, and the areola somewhat triangular and minute.

*Tab. nost.* 10, fig. 12.

Venus Tigerina. *Linn. Syst. Nat.* p. 1133, 1134,

*Gmelin, Syst.* p. 3283.

*Turton, Linn. Syst.* iv. p. 231.

*Montagu, Test.* p. 119, tab. 4, fig. 1.

*Pennant, Brit. Zool.* iv. p. 208.

*Linn. Trans.* viii. p. 86, tab. 2, fig. 5.

*Turton, British Fauna,* p. 158.

*Dorset Catal.* p. 35, tab. 1, fig. 14.

*Dillwyn, Descript. Catal.* p. 191.

*Turton, Conch. Dict.* p. 240.

*Chemnitz, vii.* p. 6, tab. 37, fig. 390, 391.

*Pectunculus magnus.* *Lister, Conch.* tab. 337, fig. 174.

*Mus. nost.* From Guernsea.

Shell nearly an inch in diameter, flattish and rounded in the outline, strongly decussate, yellowish-white, with generally a crimson or purple tinge about the margin near the beaks which are small and pointed: inside smooth, glossy white.

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### 38. ARCA—LINNÉ.

*Testa transversa, subæqualvis, inæquilateralis; umbonibus remotis, areâ transversâ intermediâ. Cardò rectilinearis, dentibus numerosis obtusis alternatim insertis, exterioribus majoribus: lateralibus nullis. Ligamentum externum.*

Shell transverse, mostly equivalve, inequilateral, with the beaks remote and separated by a transverse area. Hinge in a straight line, with numerous obtuse teeth alternately closing together, gradually enlarging from the centre: lateral teeth none. Ligament external.

The species of this genus are now confined to such as are comprehended in the above character. From the *Pectunculus* they differ, in having the teeth disposed in a straight line. They are inhabitants of rocky coasts, and are generally attached to crevices in the rocks by a filament or byssus which issues from the centre of the upper margin.

\* *Margine interno crenulato*. 1-4.

With the inner margin toothed.

Noë.  
1.

*ARCA testâ oblongâ punctato-decussatâ, anticè angulatâ, margine supero transversim productiori sinuato hiante.*

Shell oblong decussate in a punctured manner, angular at the anterior side, with the upper margin transversely elongated sinuous and open.

Arca Noë.

*Linn. Syst. Nat.* p. 1140.

*Gmelin, Syst.* p. 3306.

*Turton, Linn. Syst.* iv. p. 250.

*Montagu, Test. Brit.* p. 139.

*Pennant, Brit Zool.* iv. p. 215.

*Linn. Trans.* viii. p. 91.

*Donovan British Shells*, v. tab. 158, fig. 1, 2.

*Turton, British Fauna*, p. 161.

*Dillwyn, Descript. Catal.* p. 226.

*Turton, Conch. Dict.* p. 9, fig. 58.

*Chemnitz*, vii. p. 177 tab. 53. fig. 529 to 531.

*Musculus striatus.* *Lister, Conch.* tab. 368, fig. 208.

*Mus. nost.* Western coasts and Guernsea.

Shell about half an inch long, and rather more in breadth, of a pale rufous color with darker oblique bands, rounded at one end and somewhat angular at the other, strongly striate longitudinally and crossed with finer lines: beaks near one end, very remote from each other, incurved, with a broad smooth space between them; the upper margin sinuous and gaping in the middle; inside whitish or tinged with chocolate-brown.

*Arca testâ oblongâ decussatâ, anticè angulatâ, margine supero transversim breviori recto subclauso.*

fusen.  
2.

Shell oblong decussate, angular at the anterior side, with the upper margin shorter straight and nearly closed.

*Donovan*, v. tab. 158, fig. 3, 4.

*Montagu*, Suppl. p. 51, tab. 4, fig. 3.

*Pennant*, Brit. Zool. iv. p. 215.

*Turton*, Conch. Dict. p. 10.

*Arca imbricata.* *Dillwyn*, Descript. Catal. p. 226.

*Arca Noæ*, Var. *Chemnitz*, vii. p. 183, tab. 54, fig. 532.

*Balanus Bellonii.* *Lister*, Conch. tab. 367, fig. 207.

Western coasts.

Shell resembling the last species, but is narrower in proportion to its length, in consequence of the upper angle being shorter than the lower; it is also more convex, with finer decussations, and the margin is nearly straight: the beaks are very remote, and it wants the oblique zigzag bands

*Arca testâ rhombêâ granuloso-decussatâ, costâ obliquâ longitudinali, margine hiante.* tetragona.  
3.

Shell rhombic with granular decussations and an oblique longitudinal rib, open at the margin.

*Tab. nost.* 13, fig. 1.

*Arca tetragona.* *Lamarck*, *Hist.* vi. p. 37.

*Mus. nost.* A single specimen, found on the islands called the Calves, so dangerous of access, in the west of Ireland.

Shell seven eighths of an inch long, and an inch broad, of an oblique square figure, tumid at the beaks, from which proceed a nearly central rib to the angular point of the opposite margin: hinge not quite straight, in consequence of the marginal slope: color whitish-brown, inside white with a purple blotch at one end.

reticulata.  
4.

*ARCA testá oblongá, costis longitudinalibus barbatis stris minutis decussatis, margine recto subclauso.*

Shell oblong, with longitudinal bearded ribs decussate by minute striæ, the margin straight and nearly closed.

*Arca reticulata.* *Gmelin*, *Syst.* p. 3211.

*Turton*, *Linn. Syst.* iv. p. 254.

*Dillwyn*, *Descript. Catal.* p. 237.

*Turton*, *Conch. Dict.* p. 7.

*Chemnitz*, vii. p. 193, tab. 54, fig. 540.

*Arca barbata.* *Brown*, *Wern. Soc.* ii. p. 512, tab. 24, fig. 3.

*Lister*, *Conch. tab.* 233, fig. 67.

Found in Lough Strangford, by Dr. Magee.

Shell half an inch long, and something more than an inch broad, rather flat, oblong, rounded at one end and a little angular at

the other, white covered with an olive-brown skin, with numerous nearly equidistant flat longitudinal ridges which are covered with a fine brown downy pile: beaks nearer one end, rather close together; inside glossy with pale rays.

\*\* *Margine interno integerrimo.* 5, 6.

With the inner margin very entire.

*ARCA testá oblongá decussatá barbatá, latere antico angulato, margine subhiante.* perforans.  
5.

Shell oblong decussate and bearded, angular at the anterior end, and slightly open at the margin.

*Tab. nost. 13, fig. 2, 3.*

*Arca perforans.* *Turton, Conch Dict. p. 9.*

*Arca lactea.* *Pennant, iv. p. 216, tab. 61, fig. 2.*

*Da Costa, p. 171, tab. 11, fig. 5.*

*Montagu, Test. Brit. p. 138.*

*Donovan, British Shells, iv. tab. 135.*

*Linn. Trans. viii. p. 92.*

*Turton, British Fauna, p. 160.*

*Dorset Catal. p. 36, tab. 11, fig. 5.*

*Dillwyn, Descript. Catal. p. 236.*

*Pectunculus exiguus.* *Lister, Conch. tab. 235, fig. 69.*

*Mus. nost.* Wedged in the interstices of rocks on the western coasts, and sometimes inclosed in the interior of stones.

Shell three quarters of an inch long, and rather more in breadth, convex and sloping to the margin, angular on the anterior side, white covered with a fine downy skin which fringes the margin: beaks

distant, with a black striate oblong space between them; inside blueish-white, ribbed longitudinally.



### 39. PECTUNCULUS—LAMARCK.

*Testa suborbicularis, æquivalvis, subæquilateralis, clausa; umbonibus conniventibus, ætate gradatim remotioribus. Cardo arcuatus, dentibus numerosis obtusis alternatim insertis, centralibus obsoletis: lateralibus nullis. Ligamentum externum.*

Shell mostly orbicular, equivalve, generally equilateral, closed; the beaks close together, but becoming gradually more remote by age. Hinge in a curved line, with numerous obtuse teeth alternately closing together, the central ones obliterated: lateral teeth none. Ligament external.

The rounded outline of this genus, causing the hinge to form the segment of a circle, instead of being placed in a straight line, naturally separates it from the Arca. The species are all inhabitants of the deeps, far more remote from the shores than the Cardium and Venus tribes, and are not attached by a byssus, like most if not all of the Arca family. All have the inner margin notched.



The beaks appear to separate and become gradually more distant at their points, as they advance in age, exhibiting the marks of their annotation, or annual growth, by transverse lines or wrinkles in the hollow space between them, and not on the external surface, as in most other bivalves.

*PECTUNCULUS testâ obliquâ inæquilaterali, anticè subangulatâ.*

Glycymeris.  
1.

Shell oblique and inequilateral, a little angular at the anterior side.

*Tab. nost. 12, fig. 1.*

Arca Glycymeris. *Linn. Syst. Nat. p. 1143.*

*Gmelin, Syst. p. 3313.*

*Turton, Linn. Syst. iv. p. 256. 3.*

*Pennant, Brit. Zool. iv. p. 216.*

*Linn. Trans. viii. p. 93, tab. 3. fig. 3.*

*Turton, British Fauna, p. 160.*

*Dillwyn, Descript. Catal. p. 241.*

*Turton, Conch. Dict. p. 7.*

*Chemnitz, vii. p. 229, tab. 57, fig. 564.*

*Pectunculus maximus. Lister, Conch. tab. 240, fig. 77.*

*Mus. nost.* Western coasts and British Channel.

Shell growing to more than three inches in diameter, rather convex, but not so tumid as the *Pectunculus pilosus*, very finely decussate, and when fresh clothed round the margin with a dark brown silky skin, under which it is greyish-white with obscure longitudinal reddish marks: the outline is oblique, with a slight angularity at the produced side.

pilosus.  
2.

*PECTUNCULUS testá orbiculari convexá æquilaterali, maculis longitudinalibus.*

Shell orbicular convex equilateral, with the colored marks disposed longitudinally.

*Tab. nost. 12, fig. 2.*

*Arca pilosa.*

*Linn. Syst. Nat. p. 1143.*

*Gmelin, Syst. p. 3314.*

*Turton, Linn. Syst. iv. p. 256.*

*Pennant, p. 217, tab. 61, fig. 1.*

*Montagu, p. 136, and Suppl. p. 53.*

*Linn. Trans. viii. p. 94, tab. 3, fig. 4.*

*Turton, British Fauna, p. 160.*

*Dorset Catal. p. 36, tab. 11, fig. 2.*

*Dillwyn, Descript. Catal. p. 242.*

*Turton, Conch. Dict. p. 6.*

*Chemnitz, vii. p. 231, tab. 57, fig. 565, 566.*

*Arca minima.*

*Turton, Conch. Dict. p. 8. Young.*

*Arca Glycymeris. Donovan British Shells, ii. tab. 37.*

*Glycymeris orbicularis. Da Costa, p. 168, tab. 11, fig. 2.*

*Pectunculus ingens. Lister, Conch. tab. 247, fig. 82.*

*Mus. nost. Western coasts, and British Channel.*

Shell from one to three inches in diameter, thick, strong and convex, quite round and exactly equilateral, white or rufous, with zigzag red or purplish streaks disposed longitudinally, more or less clothed with a dark brown silky skin.

Through the kindness of Dr. Goodall we have conviction, that the *Arca minuta* of our Conchological Dictionary is the very fry

of this species. But the specimen he presented to us was of such minuteness as to elude our powers of detection, without an examination of intermediate sizes.

*PECTUNCULUS testá orbiculari subdepressá æquilaterali, maculis transversim undatis.* undatus.  
3.

Shell orbicular rather flat and equilateral, with the colored marks disposed in transverse undulate bands.

*Tab. nost. 12, fig. 3, 4.*

*Arca undata.* *Linn. Syst. Nat. p. 1142.*

*Gmelin, Syst. p. 3312.*

*Turton, Linn. Syst. iv. p. 255.*

*Dillwyn, Descript. Catal. p. 241.*

*Chemnitz, vii. p. 224 tab. 57. fig. 560.*

*Mus. nost.* British Channel and Guernsea.

Shell an inch and a half in diameter, and differs only from the last, in the colored marks being disposed in transverse undulate bands of deep red or morone.

*PECTUNCULUS testá orbiculari depressá decussatá, maculis nebulosis.* decussatus.  
4.

Shell orbicular flat decussate, with clouded colored marks.

*Tab. nost. 12, fig. 5.*

*Arca decussata.* *Linn. Syst. Nat. p. 1142.*

*Gmelin, Syst. p. 3310.*

*Turton, Linn. Syst. iv. p. 253.*

*Dillwyn, Descript. Catal. p. 239.*

*Chemnitz, vii. p. 226, tab. 57, fig. 561.*

Var. *nebulis angulatis*.

with the clouded marks disposed in angles.

*Arca marmorata*. Chemnitz, vii. p. 228, tab. 57, fig. 563.

*Mus. nost.* Dredged in the British Channel.

Shell an inch in diameter, quite orbicular, flattish, with numerous fine raised decussate lines which are clothed with a short silky brown pile: color yellowish-white, with purple and crimson clouded patches, which are often disposed in zigzag angles, giving the shell a beautifully marbled appearance: inside glossy white, with frequently a dark red blotch near the centre: the margin very strongly serrate.

nummarius. PECTUNCULUS *testâ lenticulari, umbonibus tumidis, punctis confertis*  
5. *rotundatis sanguineis.*

Shell lenticular, with the beaks prominent, covered with numerous rounded red dots.

*Tab. nost.* 12, fig. 6.

*Arca nummaria*. Linn. Syst. Nat. p. 1143.

Gmelin, Syst. p. 3314.

Turton, Linn. Syst. iv. p. 257.

Chemnitz, vii. p. 239, tab. 58, fig. 572.

Dillwyn, Descript. Catal. p. 243.

*Pectunculus exiguus, lævis, rufis maculis punctim depictus.*

Lister, Conch. tab. 239, fig. 81.

*Mus. nost.* Torbay, and the British Channel.

Shell about half an inch in diameter, rather convex, very finely decussate, yellowish-white or cream-color with numerous

round red dots, which very rarely become confluent about the margin and form short lines: beaks tumid and prominent, causing the margin on each side of them to appear a little projecting, or as it were slightly eared like a Pecten.

Whether the species above described, and which were considered by Linné to be distinct, will hereafter be fixed as such, better decision than our own must determine. The bed of the British Channel abounds with them, some leagues from the land, where we have dredged them all in a living state, and whence they are occasionally wafted to the shores of Guernsea and Cornwall.

The *Pectunculus decussatus* and *P. nummarius* seem to preserve very constant characters: the first being flatter than the others of the same diameter, more regular decussate and downy; the last being always more tumid and prominent at the beaks; and as far as we know have not yet been discovered on the shores.

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#### 40. NUCULA—LAMARCK.

*Testa ovato-trigona vel oblonga, æquivalvis, inæquilateralis, clausa; umbonibus contiguis. Cardo dente cochleariformi obliquè producto, in utràque valvâ: lateralibus utrinque numerosis, acicularibus, recurvis, alternatim insertis. Ligamentum internum.*

Shell oval-triangular or oblong, equivalve, inequilateral, closed; with the beaks close together. Hinge with an oblique projecting spoon-shaped tooth in each valve: lateral teeth on each side numerous, sharp-pointed, inclining outwards, and alternately closing together. Ligament internal.

Except in its numerous teeth, this genus has nothing in common with the *Arca* and the *Pectunculus*. The primary tooth consists of an oblique hollow projecting inwards horizontally, in which the ligament is fixed: and the lateral ones of slender sharp teeth, like the pectinations of a comb, the middle ones longer.

\* *Margine interno crenulato. 1.*

The inner margin finely notched.

Nucleus: *NUCULA testá obliquè ovatá subtrigoná, læviusculá nitidá.*

1.

Shell obliquely heart-shaped and somewhat triangular, glossy and nearly smooth.

*Tab nost. 13. fig. 4.*

*Arca Nucleus.*

*Linn. Syst. Nat. p. 1143.*

*Gmelin, Syst. p. 3314.*

*Turton, Linn. Syst. iv. p. 257.*

*Pennant, Brit. Zool. iv. p. 217.*

*Donovan, British Shells, ii. tab. 63.*

*Montagu, Test. Brit. p. 141.*

*Linn. Trans. viii. p. 95.*

*Turton, British Fauna, p. 161.*

*Dorset Catal. p. 37, tab. 12. fig. 6.*

*Dillwyn*, Descript. Catal. p. 244.

*Turton*, Conch. Dict. p. 8.

*Chemnitz*, vii. p. 241. tab. 58, fig. 574.

*Glycymeris argentea*. *Da Costa*, p. 170, tab. 15, fig. 6. r. hand.

*Mus. nost.* On most coasts.

Shell half an inch long, and not quite so broad, produced on one side, covered with a smooth blackish or dark olive-green skin, with often some yellowish rays and very minute striæ, beaks near one end, inclining to the shorter side, with an oval impression under them; inside silvery white: teeth about twenty on the elongated side, and half the number on the other.

\*\* *Margine interno integerrimo*. 2-4.

The inner margin very entire.

*NUCULA testâ obliquâ cordatâ rotundatâ leviusculâ.*

Shell obliquely heart-shaped roundish and nearly smooth.

*Montagu*, Suppl. p. 56, tab. 29, fig. 1.

*Pennant*, Brit Zool. iv. p. 218.

*Dillwyn*, Descript. Catal. p. 246.

*Turton*, Conch. Dict. p. 11.

On the Scotch coasts.

Shell a quarter of an inch long, and rather more in breadth, white or covered with a thin olive skin, produced and rounded at one end; inside white, a little perlaceous, with the margin plain.

rostrata.  
3. *NUCULA testá ovatá transversim striatá, latere antico rostrato arcuato rotundato.*

Shell oval, striate transversely, with the anterior side produced curved and rounded.

Arca rostrata. *Gmelin, Syst. p. 3308.*  
*Turton, Linn. Syst. iv. p. 251.*  
*Montagu, Suppl. p. 55, tab. 27, fig. 7.*  
*Pennant, Brit. Zool. iv. p. 217.*  
*Dillwyn, Descript. Catal. p. 245.*  
*Turton, Conch. Dict. p. 11.*  
*Chemnitz, vii. p. 206, tab. 55, fig. 550, 551.*

Dredged off St. Abb's head, Scotland.

Shell half an inch long, and three quarters wide, of a glossy pale horn-color, sloping from the beaks in a curved manner with the extremity rounded, and along the curvature or slope is a marginal angle, which is slightly reticulate.

minuta.  
4. *NUCULA testá ovatá transversim striatá, latere antico rostrato arcuato truncato.*

Shell oval transversely striate, with the anterior side produced curved and truncate.

Arca minuta. *Gmelin, Syst. p. 3309.*  
*Turton, Linn. Syst. iv. p. 252.*  
*Pennant, Brit. Zool. iv. p. 216.*  
*Montagu, Test. Brit. p. 140.*  
*Linn. Trans. viii. p. 92.*  
*Turton, British Fauna, p. 161.*



*Dorset Catal.* tab. 1, fig. 16.

*Dillwyn*, *Descript. Catal.* p. 245.

*Turton*, *Conch. Dict.* p. 11, fig. 98.

*Chemnitz*, x. p. 351, tab. 170, fig. 1657, 1658.

*Arca caudata.* *Donovan*, *British Shells*, iii. tab. 78.

*Arca Modiolus.* *Walker*, *Minute Shells*, p. 23, fig. 81.

Sandwich, Tenby, and Scotland. It is also abundant at Melville Island, and in the polar seas.

Shell a quarter of an inch long, and rather more broad, white or yellowish, with a few ridges crossing the transverse striæ: and is distinguished from the last by the truncated smaller end, and the angle of the marginal slope being not reticulate.

#### 41. CARDIUM—LINNE.

*Testa subcordata, æquivalvis, costis plerumque longitudinalibus; umbonibus prominulis, contiguis. Cardo dentibus duobus approximatis, obliquis, penetrantibus: lateralibus utrinque remotis, insertis. Ligamentum externum.*

Shell somewhat heart-shaped, equivalve, mostly ribbed longitudinally; the beaks prominent and close together. Hinge with two approximate penetrating teeth: and on each side a remote lateral inserted tooth. Ligament external.

This genus forms a very natural family, distinguished by the heart-shaped form, the longitudinal ribs which are in general strongly marked and prominent, and by the four teeth in each valve, two of them close together and a little oblique, and a remote lateral one on each side in each valve, all locking together. In some of them one of the cardinal teeth in one of the valves is minute and nearly obliterated; and some have an oblique rib-like denticle in addition to the lateral tooth on the hinder side in the right valve, as if this tooth were doubled.

They are in general inhabitants of sandy coasts, where they lie imbedded at no great distance from the shores, and are easily rooted up by any violence of surf.

\* *Valvis spinosis aut tuberculatis*. 1-6.

The ribs armed with spines or tubercles.

aculeatum. 1. *CARDIUM testâ tumidâ tenui obliqua, anticè subangulatâ, costis 21, anticis spinosis posticis papillois, sulcis transversim striatis.*  
Shell tumid thin and oblique, a little angular on the anterior side, with 21 ribs, the anterior ones of which are spinous and the hinder ones warty, the interstices striate transversely.

*Tab. nost. 13, fig. 6, 7.*

*Cardium aculeatum.* *Linn. Syst. Nat. p. 1122.*

*Gmelin, Syst. p. 3247.*

*Turton, Linn. Syst. iv. p. 201.*

*Pennant, iv. p. 187, tab. 53, fig. 1.*

*Da Costa, Brit. Conch. p. 175.*

*Donovan, British Shells, i. tab. 6.*

*Montagu*, Test. Brit. p. 77.

*Linn. Trans.* viii. p. 62.

*Turton*, British Fauna, p. 152.

*Wood*, Conch. p. 207, tab 51, fig. 1.

*Dillwyn*, Descript. Catal. p. 115.

*Turton*, Conch. Dict. p. 28.

*Chemnitz*, vi. p. 161, tab. 15, fig. 155, 156.

*Cardium spinosum*. *Sowerby*, Brit. Miscell. tab. 32. Younger.

*Pectunculus magnus*. *Lister*, Conch. tab. 321, fig. 158.

*Mus. nost.* On the western coasts .

Shell nearly four inches broad, very tumid, light in comparison with its size, with about 21 ribs ; those on the cartilage side clothed with a row of long sharp spines, which are lancet-shaped in the half grown and young shells, and round in the aged ones ; those on the opposite side furnished with rather flattened obtuse tubercles ; the grooves between them closely and regularly striate transversely, but these striæ do not extend across the ribs : the anterior side projecting a little under the beaks, so as to form a small angle, from which it extends in a nearly straight line, and where it gapes : inside white or tinged with purple, with the ribs continuing the whole length of the shell.

The individual represented in our plate, and which we dredged in Torbay, is remarkable for its oblique outline, and the singularity of the primary teeth, all of which are deeply cloven.

*CARDIUM testâ subgloboâ solidâ, anticè subtruncatâ, costis 21, anticis tuberculatum tuberculatis posticis subsquamosis sulcisque rugosostriatis.*<sup>2.</sup>

Shell somewhat globular and ponderous, a little truncate on the anterior side, with 21 ribs, the anterior ones tubercular and the hinder ones somewhat scaly, and together with the interstices rough with wrinkled striæ.

*Cardium tuberculatum.* Linn Syst. Nat. p. 1122.

*Gmelin*, Syst p. 3248.

*Turton*, Linn Syst. iv. p. 202.

*Pennant*, Brit. Zool. iv. p. 188.

*Donovan* British Shells, iii. tab. 107, fig. 2.

*Montagu*, Test. Brit. p. 568.

*Linn. Trans.* viii. p. 64.

*Turton*, British Fauna, p. 152.

*Wood*, Conch. p. 210, tab. 50. fig. 1, 2.

*Dorset Catal.* p. 31, tab. 2. fig. 2.

*Dillwyn*, Descript. Catal. p. 117.

*Turton*, Conch Dict. p. 28, fig. 12.

*Chemnitz*, vi. p. 179, tab. 17, fig. 173.

*Pectunculus major.* Lister, Conch. tab. 329, fig. 166.

*Mus. nost.* On the western coasts .

Shell growing to the size of the last, from which it differs in the following particulars, and by which they may be easily distinguished.

It is more solid and ponderous, of a more globular shape, and running in a nearly straight line on the cartilage side from the beaks; the ribs are narrower, and the grooves are deeper, both marked with strong irregular transverse striæ: the cartilage side is clothed with rather sharp tubercles which never extend into

spines, and which at the opposite side form thick transverse scale-like plates: the color is of a deeper chesnut, and more regularly zoned; and the ribs on the inside extend only half way towards the beaks.

Both the species abound on the Paignton sands, in Torbay, where at low spring tides they may be observed with the fringed tubes appearing just above the surface. The neighbouring cottagers gather them in baskets and panniers, and after cleansing them a few hours in cold spring water, fry the fish in a batter made of crumbs of bread, producing a wholesome and savory dish. The inhabitants call them red noses.

*CARDIUM testâ convexâ tenui suborbiculari, costis 18, spinis numerosis* echinatum.  
*inflexis, sulcis striatis.* 3.

Shell convex thin and somewhat orbicular, with 18 ribs armed with numerous inflected spines, the grooves striate.

*Cardium echinatum.* Linn. Syst. Nat. p. 1122.

*Gmelin*, Syst. p. 3247.

*Turton*, Linn. Syst. iv. p. 201.

*Pennant*, Brit. Zool. iv. p. 187.

*Da Costa*, p. 176, tab. 14, fig. 2.

*Donovan*, iii. tab. 107, fig. 1.

*Montagu*, Test. Brit. p. 78.

*Linn. Trans.* viii. p. 63.

*Turton*, British Fauna, p. 152.

*Dorset Catal.* p. 31, tab. 6, fig. 2.

*Wood*, Conch. p. 208, tab 49, fig. 1, 2.

*Dillwyn*, Descript. Catal. p. 116.

*Turton*, Conch. Dict. p. 29.

*Chemnitz*, vi. p. 165, tab. 15, fig. 158.

*Pectunculus orbicularis*. *Lister*, Conch. tab. 324, fig. 161.

*Cardium ciliare*. *Linn. Syst. &c.* The young shell.

*Mus. nost.* On most sandy coasts.

Shell two inches in diameter, a little oblique, of a brown or whitish color, clothed with numerous sharp white spines which curve towards the cartilage side; those on the opposite side thicker and more obtuse.

The young of this species, and of the *Cardium aculeatum*, are in many respects so similar, that it is hardly possible to fix with any decision, which of them should be considered as the *Cardium ciliare* of Linné and subsequent authors.

Both of them are thin and brittle, and have the spines lance-shaped or longitudinally dilated at the base.

The young of *Cardium echinatum* are entirely white, with the grooves regularly striate transversely. They are abundant in Dublin bay, where the *Cardium aculeatum* has never been found to inhabit.

The young of *Cardium aculeatum* are extremely fragile and transparent, more dilated at the sides from the beaks, of a fine glossy fawn-color, and irregularly striate in the grooves: they are of rare occurrence, but found occasionally on the sands at Paington. It is figured in *Chemnitz*, vi. tab. 17. fig. 171, 172.

The young of *Cardium tuberculatum* are of a stronger consistence, of a deeper chocolate brown with white blotches or rays, and clothed with rather obtuse raised tubercles.

CARDIUM *testá ovatá obliquá, anticé elongatá subangulatá, costis 25* <sup>elongatum.</sup>  
*aculeatis.* <sup>4.</sup>

Shell oval and oblique, elongated and somewhat angular at the anterior side, with 25 prickly ribs.

*Tab. nost. 13, fig. 8.*

Cardium elongatum. *Montagu, Test. Brit. p. 82.*

*Linn. Trans. viii. p. 67.*

*Turton, British Fauna, p. 153.*

*Pennant, Brit. Zool. iv. p. 190.*

*Wood, Conch. p. 214.*

*Dillwyn, Descript. Catal. p. 131.*

*Turton, Conch. Dict. p. 31.*

*Mus. nost.* Dredged in Torbay.

Shell a quarter of an inch long, and about a third less in breadth, pale rufous with some obscure darker spots on the lengthened side, somewhat oval, produced and a little angular at the cartilage side, tumid in the middle and sloping to the sides; the middle rib flattened and separated by a fine line: beaks very prominent, not central, giving the shell a considerably oblique outline.

Montagu has observed of this very elegant shell, that the posterior side is somewhat angulated, a circumstance which we believe never takes place in this genus, supposing this side to mean that which is opposite to the cartilage. Perfect specimens are clothed with short sharp prickles, which appear to be very caducous, as in general they are smooth with a few raised wrinkles on the hinder side.

nodosum.  
7. *CARDIUM testá orbiculari depressiusculá, costis 26, tuberculis numerosis obtusis.*

Shell orbicular and rather flat, with 26 ribs armed with numerous obtuse tubercles.

*Tab. nost. 13, fig. 9.*

*Cardium nodosum. Montagu, Test. Brit. p. 81.*

*Linn. Trans. viii. p. 66.*

*Turton, British Fauna, p. 153.*

*Pennant, Brit. Zool. iv. p. 189.*

*Wood, Conch. p. 212.*

*Mus. nost. Dredged in Torbay.*

Shell hardly half an inch long, and a very little more in breadth, brown or whitish, very slightly angular at the anterior side, with about 26 close-set rounded ribs thickly clothed with obtuse round tubercles, which on the anterior side project into very short spines, beaks central: inside white, with generally a chesnut stripe on the anterior side of the hinge reaching half way down the shell; the margin strongly serrate.

It has much the appearance of the young of *Cardium edule*, but is distinguished by its rounded and tubercled ribs: and from the young of *Cardium tuberculatum* in being flatter, with the tubercles not nearly so much raised. Like the next species, the old shells lose the tubercles and become wrinkled or scaly all over.

exiguum.  
6. *CARDIUM testá tumidá subtrigoná, anticè subtruncatá, costis 20 tuberculatis, sulcis transversim striatis.*

Shell tumid and nearly triangular, somewhat truncate at the



anterior side, with 20 tubercled ribs, the grooves between which are striate transversely.

*Cardium exiguum.* *Gmelin*, Syst p. 3255.

*Montagu*, Test. Brit. p. 82.

*Pennant*, Brit. Zool. iv. p. 186.

*Linn.* Trans. viii. p. 61.

*Turton*, British Fauna, p. 153.

*Dorset Catal.* p. 31, tab. 2, fig. 11.

*Wood*, Conch. p. 212.

*Dillwyn*, Descript. Catal. p. 114.

*Turton*, Conch. Dict. p. 31.

*Cardium pygmæum.* *Donovan*, i. tab. 32, fig. 3.

*Turton*, Linn. Syst. iv. p. 207.

*Cardium subcordatum.* *Walker*, Test. Minut. p. 23, fig. 83.

*Cardium muricatum.* *Walker*, fig. 84.

*Pectunculus exiguus.* *Lister*, Conch. tab. 317, fig. 154.

*Mus. nost.* Western coasts and Ireland; sometimes imbedded in hard clay: and both Mrs Griffiths and ourselves have taken them from the interior of the hardest stone in Torbay.

Shell about half an inch in diameter, whitish with sometimes a rosy tinge, triangular and produced at the anterior side, with from 20 to 22 ribs clothed with rounded obtuse tubercles, especially about the shorter side, the grooves of which are not always very distinct, but towards the hinge transversely striate: inside often rosy, with one of the teeth minute.

\*\* *costis transversim squamosis.*

the ribs armed with transverse scales,

<sup>edule.</sup>  
<sub>7.</sub> *CARDIUM testâ subglobosâ antiquatâ opacâ, costis 26 transversim squamosis.*

Shell somewhat globular antiquated and opaque, with 26 ribs which are rough with transverse scales.

- Cardium edule.* Linn Syst. Nat. p. 1124.  
 Gmelin, Syst. p. 3252.  
 Turton, Linn. Syst. iv. p. 205.  
 Pennant, iv. p. 189, tab. 53, fig. 3.  
 Montagu, Test. Brit. p. 76.  
 Linn. Trans. viii. p. 65.  
 Turton, British Fauna, p. 153.  
 Dorset Catal. p. 32, tab. 11, fig. 1.  
 Wood, Conch. p. 226, tab. 55, fig. 4.  
 Dillwyn, Descript. Catal. p. 127.  
 Turton, Conch. Dict. p. 30.  
 Chemnitz, vi. p. 198, tab. 19, fig. 194.
- Cardium vulgare.* Da Costa, p. 180, tab. 11, fig. 1.
- Cardium rusticum.* Donovan, iv. tab. 124, fig. 1, 2.
- Pectunculus capite minore.* Lister, Conch. tab. 334, fig. 171.
- Mus. nost.* Common on all sandy shores.

A species every where well known, and subject to much variation in size and outline; being sometimes nearly orbicular, sometimes a little truncate at the anterior end, which is occasionally much elongated.

Mr. Wood remarks that great abundance of the shells are collected and regularly brought to London, from spring to autumn, for the sake of the fish, which are regarded as a wholesome nourishment. Martin Lister and Da Costa knew their season

better: the first of these authors observing, *gratissimi saqoris sunt, et a nostris ad victum colliguntur, ab autumno ad ultimum usque ver*; and the latter, "The season for them is from autumn to spring."

CARDIUM *testá orbiculari depressá subpellucidá, costis 26 transversim fasciatum.*  
*squamosis.* 8.

Shell orbicular flattish and semitransparent, with 26 ribs, which are are rough with transverse scales.

Cardium fasciatum. *Montagu, Suppl. p. 30, tab. 27, fig. 6.*

*Pennant, Brit. Zool. iv. p. 191.*

*Wood, Conch. p. 215.*

*Dillwyn, Descript. Catal. p. 130.*

*Turton, Conch. Dict. p. 32.*

*Mus. nost.* On the Western, Welch, and Irish coasts.

Shell hardly half an inch in diameter, yellowish or pale rufous, glossy, with a few dark transverse bands, often disposed in spots on the ribs, and more deeply tinged on the anterior side and within: the ribs are crossed with regular transverse scales, which are more strongly marked at the shorter side and about the margin.

\*\*\* *costis muticis.*

the ribs unarmed.

CARDIUM *testá tumidá suborbiculari, latere antico subtruncato, costis numerosis transversim striatis.* medium.  
9.

Shell tumid and somewhat orbicular, rather truncate at the anterior side, with numerous transversely striate ribs.

- Cardium medium.* *Linn. Syst. Nat.* p. 1122.  
*Gmelin, Syst.* p. 3246.  
*Turton, Linn. Syst. iv.* p. 200.  
*Pennant, Brit. Zool. iv.* p. 168.  
*Donovan, i. tab. 32, fig. 1.*  
*Montagu, Test. Brit.* p. 83.  
*Linn. Trans. viii.* p. 61.  
*Turton, British Fauna,* p. 153.  
*Wood, Conch.* p. 211, tab. 50, fig. 3.  
*Dillwyn, Descript. Catal.* p. 113.  
*Turton, Conch. Dict.* p. 32.

*Pectunculus subrufus,* *Lister, Conch. tab. 316, fig. 153.*

*Mus. nost.* A very small specimen taken alive at Livermead, near Torquay.

Shell yellowish-white with reddish-brown blotches; ribs about fifty, rather obscure in the middle but stronger at the sides especially the shorter one, where they are crossed by fine striæ which pass over but do not cut the ribs: one of the primary teeth minute or obliterated in each valve.

lævigatum. *CARDIUM testá obovatá nitidá, costis obsoletis, latere antico glaberrimo.*  
 10. Shell oboval glossy, with the ribs very obscure, and quite obliterated at the anterior end.

- Cardium lævigatum.* *Linn. Syst. Nat.* p. 1123.  
*Gmelin, Syst.* p. 3251.  
*Turton, Linn. Syst. iv.* p. 201.  
*Pennant, iv.* p. 188, tab. 54, fig. 1.

- Da Costa*, p. 178, tab. 13, fig. 6.  
*Donovan*, British Shells, ii. tab. 54.  
*Montagu*, Test. Brit. p. 80.  
*Linn. Trans.* viii. p. 65.  
*Turton*, British Fauna, p. 152.  
*Dorset Catal.* p. 31, tab. 7. fig. 6.  
*Wood*, Conch. p. 222, tab. 54, fig. 1.  
*Dillwyn*, Descript. Catal. p. 123.  
*Turton*, Conch. Dict. p. 31.  
*Chemnitz*, vi. p. 191, tab. 18, fig. 185, 186.

*Pectunculus subfuscus*. *Lister*, Conch. tab. 332, fig. 169.

*Mus. nost.* English and Irish coasts.

Shell growing to two inches and a half long, and two inches broad, covered with a brownish-olive glossy skin, often marbled with white and various hues of red, with very obscure longitudinal striæ and remote transverse ones, flattish and much produced on one side where the striated marks become totally obliterated.

This shell, in its decay, offers a good exemplification of the remark of Brard, in his note on the *Succinea amphibia*, p. 75, that many species, after long exposure to the air in a dead state, become thickened in their substance, either generally or partially; occasioned, as he supposes, by a sort of relaxation in their testaceous texture; or probably by the absorption of oxygen, and their gradual conversion into lime: and in this manner he accounts for the thickness and distortion of most fossil shells.

We have in our cabinet some specimens, which appear to have

been long exposed to the sun and air, bleached to an ivory whiteness, considerably thickened, deeply and beautifully reticulate in long squares, where the interstices or softer parts appear to have been decomposed, and absorbed into the lines of reticulation or harder parts.

The exposed bones of animals undergo a process similar to this: and the antiquary well knows, that in ancient sculpture on certain stones, probably modifications of lime, the engraved or indented parts gradually fill up, and at length become level with, or even raised above the surrounding surface.

serratum. *CARDIUM testá obovatá nitidá sulphureá glaberrimá.*

11. Shell oboval glossy and sulphur yellow, with the ribs quite obliterated.

*Tab. nost. 13, fig. 5.*

*Cardium serratum.* *Linn. Syst. Nat. p. 1123.*

*Gmelin, Syst. p. 3251.*

*Turton, Linn. Syst. iv. p. 204.*

*Dillwyn, Descript. Catal. p. 124.*

*Cardium citrinum.* *Wood, Conch. p. 223, tab. 54, fig. 3.*

*Chemnitz, vi. p. 193, tab. 18, fig. 189.*

*Pectunculus lævis.* *Lister, Conch. tab. 249, fig. 83.*

*Mus. nost.* Dredged on the western coasts.

Shell nearly an inch and a half long, and an inch and a quarter broad, very nearly allied to the last, of which it may possibly be only a variety; but is of an uniform rich sulphur yellow, with occasionally an orange stain about the anterior margin; the inside strongly

serrate: the longitudinal striæ quite invisible, except when examined by a high magnifying power, when they appear to be equally distributed over the whole surface.

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42. ISOCARDIA—LAMARCK.

*Testa æquivalvis, cordata, ventricosa; umbonibus remotis, convolutis, posticè secundis. Cardo dentibus duobus compressis obliquis penetrantibus, unico sub umbonem subrecurso: laterali remoto, antico. Ligamentum externum.*

Shell equivalve, heart-shaped, very tumid; with the beaks remote, convolute, and both pointing to the hinder side. Hinge with two flat oblique penetrating teeth, one of them placed under the beak and a little recurved: and a remote lateral tooth on the anterior side. Ligament external.

ISOCARDIA *testá globoso-cordatá læviusculá.*

Cor  
1.

Shell globular heart-shaped, and nearly smooth.

*Tab. nost. 14.*

Chama Cor. *Linn. Syst. Nat. p. 1137.*  
*Gmelin, Syst. p. 3299.*  
*Turton, Linn Syst. iv. p. 244.*  
*Pennant, Brit. Zool. iv. p. 214.*  
*Montagu, p. 134, and Suppl. p. 50.*

*Linn. Trans.* viii. p. 91.

*Turton*, *British Fauna*, p. 160.

*Dillwyn*, *Descript. Catal.* p. 212.

*Turton*, *Conch. Dict.* p. 32, fig. 17.

*Laskey*, *Wern. Soc.* i. p. 385, tab. 8. fig. 7.

*Chemnitz*, vii. p. 101, tab. 48, fig. 483.

*Bucardia*. *Lister*, *Conch.* tab. 275, fig. III. lower fig.

*Mus. nost.* From Dublin bay: found also at Bantry bay, Belfast; and St. Abbs' Head in Scotland.

Shell four inches long, and three and a half wide, of a blackish or tawny color, whitish about the beaks, nearly smooth, or with some fine irregular striæ: the beaks twisted into a single flat volution, both fronting the hinder side.



#### 43. MYTILUS—LINNÉ,

*Testa longitudinalis, æquivalvis, medio plerumquè bysso fixa; umbonibus acutis, rectiusculis, terminalibus, Cardo denticulis obtusis, numero variis, alternatim insertis: lateralibus nullis. Ligamentum marginale, externum.*

Shell longitudinal, equivalve, generally fixed by a byssus issuing from the middle; with the beaks acute, nearly straight, and terminal. Hinge with small teeth, varying in number, and alter-



nately closing together: lateral teeth none. Ligament marginal, external.

All the species of the Mussel, properly so called, are confined to the above generic character, and as far as we know them, are furnished with small obtuse teeth under the points of the beaks; a circumstance sufficient to distinguish them from the Modiola, which is always destitute of them.

*MYTILUS testá semiovatá transversim rugosá, anticè curvatá, umbonibus subquadridentatis.* ungulatus.  
1.

Shell semioval with transverse plaits, curved on the anterior side, with four or five teeth in the hinge.

*Mytilus unguulatus.* Linn. Syst. Nat. p. 1157.

Gmelin, Syst. p. 3354.

Turton, Linn. Syst. iv. p. 592.

Chemnitz, viii. p. 176, tab. 85, fig. 756.

Donovan, British Shells, iv. tab. 128, fig. 2.

Linn. Trans. viii. p. 107.

Pennant, Brit. Zool. iv. p. 238.

Dillwyn, Descript. Catal. p. 310.

Turton, Conch. Dict. p. 111.

*Mytilus unguinus.* Montagu, Test. Brit. p. 582.

Turton, British Fauna, p. 164.

*Musculus major.* Lister, Conch. tab. 360, fig. 199.

*Mus. nost.* From Cornwall, but probably French.

Shell four or five inches long, and nearly two broad, covered with a purplish or blackish skin, and resembles the common Mussel,

except in size, and in being furnished with rough transverse ridges.

edulis.  
2. **MYTILUS** *testá ovato-oblongá lævi, anticè curvatá subcarinatá, umbonibus subquadridentatis.*

Shell oval-oblong smooth, curved and somewhat carinate on the anterior side, with four or five teeth in the hinge.

**Mytilus edulis.** *Linn. Syst. Nat. p. 1157.*  
*Gmelin, Syst. p. 3353.*  
*Turton, Linn. Syst. iv. p. 291.*  
*Chemnitz, viii. p. 169, tab. 84, fig. 750.*  
*Pennant, iv. p. 236, tab. 66, fig. 2.*  
*Donovan, iv. tab. 128, fig. 1.*  
*Montagu, Test. Brit. p. 159.*  
*Linn. Trans. vi. tab. 18, fig. 13, 14.*  
*Linn. Trans. viii. p. 105.*  
*Turton, British Fauna, p. 163.*  
*Dorset Catal. tab. 12, fig. 5, left hand.*  
*Dillwyn, Descript. Catal. p. 309.*  
*Turton, Conch. Dict. p. 109.*

**Mytilus vulgaris.** *Da Costa, p. 216, tab. 15, fig. 5, left hand.*

**Musculus subcæruleus.** *Lister, Conch. tab. 362, fig. 200.*

**Mus. nost.** Common.

A well-known species, subject to much variety of shape, generally of a rich blue when the outer coat is taken off, sometimes with an indenture or fold near the beak, as in the variety of *Modiola Modiolus*.

**MYTILUS** *testá ovatá crassá opacá tumidá, anticè incurvatá umbonibus* incurvatus.  
*divaricatis subbidentatis.* 3.

Shell oval thick opaque and tumid, incurved on the anterior side, the beaks divaricate with two or three teeth.

*Mytilus incurvatus.* Pennant, iv. p. 237, tab. 67, fig. 1.

Montagu, Test. Brit. p. 160.

Linn. Trans. viii. p. 106, tab. 3, fig. 7.

Turton, Linn. Syst. iv. p. 192.

Turton, British Fauna, p. 163.

Turton, Conch. Dict. p. 109.

*Mytilus edulis.* Var. Dillwyn, Descript. Catal. p. 309.

*Musculus parvus.* Lister, Conch. tab. 362, fig. 201, 202.

*Mus. nost.* Western coasts and Ireland.

Shell hardly an inch and a half long, strong, tumid, much curved, of a blueish-grey color, with the beaks separated, and two or three teeth only under them.

**MYTILUS** *testá ovatá diaphaná cæruleá radiatá, anticè rectá, um-* pellucidus.  
*bonibus conniventibus subbidentatis.* 4.

Shell oval transparent blue and radiate, straight on the anterior side, the beaks close together with two or three teeth.

Tab. nost. 15, fig. 1 and 2.

Pennant, iv. p. 237, tab. 66, fig. 3.

Turton, Linn. Syst. iv. p. 292.

Montagu, Test. Brit. p. 160.

Donovan, British Shells, iii. tab. 81.

Linn. Trans. viii. p. 107.

Turton, British Fauna, p. 163.

## CONCHYLIA—DITHYRA. 44.

*Dillwyn*, Descript. Catal. p 310.

*Turton*, Conch. Dict. p. 110.

*Mytilus edulis*. Var. *Chemnitz*, viii. p. 169, tab. 84, fig. 751.

*Mus. nost.* On the western coasts.

A very elegant shell both in color and figure, seldom reaching to two inches in length, covered when fresh with a dark olive skin, under which it is blue with white rays; and is distinguished from the radiated variety of the common Mussel in its younger state, by having only two or three tubercular teeth under the beaks.



## 44. MODIOLA—LAMARCK.

*Testa subtransversa, æquivalvis, latere postico brevissimo; umbonibus subterminalibus, ad latus brevius. Cardo edentulus. Ligamentum marginale, externum.*

Shell somewhat transverse, equivalve, with the hinder side very short; the beaks nearly terminal, and placed at the shorter side. Hinge without teeth. Ligament marginal, external.

This genus is separated from the *Mytilus* by sufficiently clear characters; the want of teeth in the hinge, and the lateral but nearly terminal position of the beaks. The species are sometimes

solitary and free, sometimes attached by a byssus; and reside in deep waters, or among rocks and under stones.

*MODIOLA testâ oblongâ levi, latere antico obliquè dilatato, umbonibus tumidis obtusè angulatis.* Modiolus.  
1.

Shell oblong smooth, with the anterior side obliquely dilated, the beaks tumid and obtusely angular.

*Tab. nost. 15, fig. 3.* Young.

*Mytilus Modiolus.* *Linn Syst. Nat.* p. 1158.

*Gmelin, Syst* p. 3354.

*Turton, Linn. Syst.* iv. p. 293.

*Pennant, iv.* p. 238, tab. 69.

*Da Costa, p.* 219, tab. 15, fig. 5.

*Donovan, British Shells, i.* tab. 23.

*Montagu, Test. Brit.* p. 163.

*Linn. Trans.* viii. p. 107.

*Turton, British Fauna,* p. 164.

*Dorset Catal.* p. 40, tab. 12, fig. 5.

*Dillwyn, Descript. Catal.* p. 314.

*Turton, Conch. Dict.* p. 111.

*Chemnitz, viii.* p. 178, tab. 85, fig. 757, 759.

*Lister, Conch. tab.* 1057, fig. 5.

Var. a. *radüs violaceis vel rubescentibus.*

with violet or pale red rays.

*Chemnitz, viii.* p. 182, tab. 85, fig. 758.

Var. b. *marginè postico intorto.*

with the hinder margin curling inwards.

*Mytilus umbilicatus.* *Pennant, iv.* p. 228, tab. 68.

*Donovan, British Shells, ii.* tab. 40.

Var. c. *dimidiatim foliaceo-barbata, foliolis integerrimis.*

half clothed with foliations which are entire on both the edges.

*Mytilus barbatus.* Linn Syst. Nat. p. 1156.

*Chemnitz*, viii. p. 168, tab. 84, fig. 749.

*Pennant*, iv. p. 238, tab. 67, fig. 2.

*Donovan* British Shells, ii. tab. 70.

*Mus. nost.* The various seas of the British coasts.

Shell when full grown four or five inches long, thick coarse, covered with a blackish skin which is frequently clothed with some scattered glossy hairs, and has a tendency to curve inwards near the beaks opposite the hinge; and when about half grown is thinner, of a horn color, and frequently clothed more or less with long leaf-like filaments, which uniformly differ from those which cover the *Modiola Gibsii*, in having no serratures down the edges: the very young are usually marbled or radiate.

Gibsi.  
2.

*MODIOLA testá subtrigoná, transversim striatá, foliaceo-barbatá foliolis hinc serratis.*

Shell somewhat triangular, striate transversely, clothed with foliations which are serrated on the edge.

*Modiola Gibsii.* Leach, Miscell. ii. p. 34, tab. 72, fig. 2.

*Mus. nost.* On the western coasts.

Shell about two inches long, and one and a half broad, very flat and angular at the anterior side, regularly striate transversely, white and opake under the skin, covered more or less with long foliations which are constantly notched down one of the sides.

*MODIOLA testá ovatá ventricosá, anticè subacuminatá, umbonibus terminalibus subconvolutis, extremitatibus longitudinalitèr costulatis.*

discors.  
3.

Shell oval very tumid, rather pointed at the anterior side, beaks terminal and somewhat convolute, and slightly ribbed longitudinally at both ends.

*Tab. nost. 15, fig. 4.*

*Mytilus* Discors. *Linn Syst. Nat.* p. 1159.

*Gmelin, Syst* p. 3356.

*Turton, Linn. Syst.* iv. p. 294.

*Chemnitz, viii.* p. 191, tab. 86, fig. 764, 765.

*Da Costa, p.* 221, tab. 17, fig. 1.

*Montagu, Test. Brit.* p. 167.

*Pennant, Brit. Zool.* iv. p. 240.

*Linn. Trans.* viii. p. 111, tab. 3, fig. 8.

*Turton, British Fauna,* p. 164.

*Dorset Catal.* p. 40, tab. 2, fig. 1.

*Dillwyn, Descript. Catal.* p. 319.

*Turton, Conch. Dict.* p. 112.

*Walker, Test. minut.* p. 22, fig. 79.

*Mus. nost.* Western coasts and Ireland.

Shell hardly an inch long, greenish or brownish horn-color, often spotted, semitransparent, a little constricted at the margin towards the pointed end, and divided into three compartments; the extremity at the beaks marked with about sixteen longitudinal ribs, and the opposite or pointed extremity with numerous similar ribs, with the middle part between these ribs slightly striate transversely: beaks quite terminal, very obtuse, and twisted into a single flat volution.

discrepans.  
4. *MODIOLA testá ovatá depressá, anticè rotundatá, umbonibus subterminalibus, extremitatibus longitudinalitèr costulatis.*

Shell oval flattish, rounded at the anterior side, beaks not quite terminal, and slightly ribbed longitudinally at both ends.

*Montagu*, Test. Brit. p. 119. and

Suppl. p. 65, tab. 26, fig. 4.

*Turton*, British Fauna, p. 164.

*Linn. Trans.* viii. p. III. tab. 3, fig. 9.

*Pennant*, Brit. Zool. iv. p. 241.

*Dillwyn*, Descript. Catal. p. 319.

*Turton*, Conch. Dict. p. 112.

*Mus. nost.* Western and Irish Coasts.

Shell marked like the last, but is much flatter, broader and rounder at the end opposite the hinge, where the ribs are only eight in number: the beaks are more pointed and not quite terminal; and the color is usually of a more opaque brown.



#### 45. OSTREA—LINNÉ.

*Testa fixa, inæqualvis, irregularis; umbonibus subdivaricatis, ætate inæqualibus. Cardo edentulus, fossulá semiexterná ætate gradatim elongatá in valvâ inferiori. Ligamentum internum.*



Shell fixed, inequivalve, irregular; with the beaks more or less separated from each other and becoming unequal by age. Hinge without teeth, with a cavity which is partly external and in the lower valve becomes gradually elongated. Ligament internal.

This well-known tribe is always parasitical, being fixed to rocks and other marine substances by their under valve. The individuals or species are subject to much irregularity of figure, and are generally coarse and rough. The hinge of the under valve becomes much elongated by age, when the points of the beaks recede from each other, and leave a gap between them. Most of them have some minute granular denticulations on each side about the hinge.

*OSTREA testâ suborbiculari foliaceo-squamosâ trigono-plicatâ, margine interno crenulato.* Crista Galli.  
1.

Shell somewhat orbicular with scaly foliations and triangular plaits, and the inner margin crenulate.

*Mytilus* Crista Galli *Linn. Syst. Nat.* p. 1155.

*Gmelin, Syst.* p. 3350.

*Turton, Linn. Syst.* iv. p. 289.

*Pennant, Brit. Zool.* iv. p. 235.

*Montagu, Test. Brit.* p. 166.

*Linn. Trans.* viii. p. 104.

*Turton, British Fauna.* p. 164.

*Dillwyn, Descript. Catal.* p. 299.

*Turton, Conch. Dict.* p. 109.

*Chemnitz, viii.* p. 52, tab. 75, fig. 683, 684.

*Mus. nost.* Of foreign importation upon the bottoms of vessels, from which our specimens were taken, with some small living young ones attached.

Shell about two inches in diameter, greyish white or purplish, rough with foliations; the under valve shooting at the base into irregular claw-like ramifications round the margin, by which it fixes itself to any hard substance: the sharp triangular plaits at the margin close alternately within each other, like the dovetail of joiners' work: inside honey yellow, with the inner margin finely tubercled.

*edulis.*  
2.

*OSTREA testá ovato-rotundatá foliaceo-squamosá, valvá superiore minore planatá, margine interno integerrimo.*

Shell roundish oval, with scaly foliations, the upper valve less and flattened, and the inner margin very entire.

- Ostrea edulis.* *Linn. Syst. Nat.* p. 1148.  
*Gmelin, Syst.* p. 3334.  
*Turton, Linn. Syst.* iv. p. 274.  
*Pennant, iv.* p. 225, tab. 65, fig. 2.  
*Montagu, Test. Brit.* p. 151.  
*Linn. Trans.* viii. p. 101.  
*Turton, British Fauna,* p. 162.  
*Dorset Catal.* p. 38, tab. 11, fig. 6.  
*Dillwyn, Descript. Catal.* p. 280.  
*Turton, Conch. Dict.* p. 133.  
*Chemnitz, viii.* p. 48, tab. 74, fig. 682.  
*Ostreum vulgare.* *Da Costa,* p. 154, tab. 11, fig. 6.  
*Ostrea major.* *Lister, Conch.* tab. 193, fig. 194.  
*Mus. nost.* Common on rocks and in vast beds.

Shell very irregular, sometimes growing to a large size, when the beak of the under valve becomes much elongated, and transversely striate in the ligamentous cavity.

*OSTREA testá subrotundá vel oblongá leviusculá parasiticá, valvá superiorí convexá.* parasitica.  
3.

Shell roundish or oblong nearly smooth and fixed to other substances, with the upper valve convex.

*Tab. nost. 17, fig. 6 and 7.*

*Ostrea parasitica.* *Chemnitz*, viii. p. 19, tab. 71, fig. 660.

*Turton*, *Conch. Dict.* p. 134, fig. 8.

*Ostrea orientalis.* *Dillwyn*, *Descript. Catal.* p. 274.

*Mus. nost.* On bivalves, crabs, and submarine substances.

Shell from half an inch to two inches in diameter, very variable in figure and substance, sometimes very thin and radiate with black or brown, when attached to the *Pecten opercularis*: sometimes thick, with the upper valve semicylindrically tumid, and the under valve concave underneath, as if it had accommodated its shape to a piece of stick of the size of the fore-finger, with the beaks much incurved on one side and not extending beyond the margin: the surface is nearly smooth, of a greenish color with occasionally some dark longitudinal marks; inside perlaceous, with fine crenulations on each side the hinge.

A small variety is found fixed to *Serpulæ*, the inside of old Oyster-shells, and sometimes in the cavities of rocks, with the upper valve flat and a little scaly; the under valve very concave and hollow, especially under the hinge; the beaks of the concave or under valve often much lengthened, an evidence of age; and it is fre-

quently deformed and distorted by contact with harder objects. It may perhaps be a distinct species; as it answers to the character given by Lamarck, Hist. Nat. vi. p. 209, to his *Ostrea deformis*.



#### 46. PECTEN—LISTER.

*Testa libera seu fixa, suborbicularis, basi transversim auriculatá; umbonibus contiguís æqualibus. Cardo edentulus, foveá interná, triangoná. Ligamentum internum.*

Shell free or fixed, somewhat orbicular, transversely dilated into auricles at the base; with the beaks equal and close together. Hinge without teeth, with an internal triangular cavity. Ligament internal.

The ear-like appendages at the sides of the beaks distinguish this family from that of the *Ostrea*. These auricles have generally one of the edges fringed with minute internal crenatures on each side the hinge. They are mostly ribbed longitudinally, and with the exception of *Pecten sinuosus* and *P. Pusio*, are free, and capable of considerable locomotion: and they exhibit a more splendid and varied display of colors than any of our native genera.

\* *auriculis subæqualibus*. 1-7.

with the ears equal or nearly so.

PECTEN *testâ inæqualivi, valvâ superiori planatâ infernè concavo-de-* maximus:  
*pressâ, radiis rotundatis longitudinalitèr striatis.* 1.

Shell inequivalve, the upper valve flat with a depression near the hinge, the rays rounded and striate longitudinally.

*Ostrea maxima.* *Linn. Syst. Nat.* p. 1144.  
*Gmelin, Syst.* p. 3315.  
*Turton, Linn. Syst.* iv. p. 258.  
*Donovan, British Shells,* ii. tab. 49.  
*Linn. Trans.* viii. p. 96.  
*Dorset Catal.* p. 37, tab. 9. fig. 3.  
*Dillwyn, Descript. Catal.* p. 247.  
*Turton, Conch. Dict.* p. 128.

*Pecten maximus.* *Pennant,* iv. p. 219, tab. 62.  
*Chemnitz,* vii. p. 268, tab. 60, fig. 585.  
*Montagu, Test. Brit.* p. 143.  
*Turton, British Fauna,* p. 161.

*Pecten vulgaris.* *Da Costa,* p. 140, tab. 9, fig. 3.

*Pecten magnus.* *Lister, Conch.* tab. 163, fig. 1.

*Mus. nost.* At the estuaries of large rivers.

Shell four or five inches in diameter, white brown or marbled with pink and dark chocolate brown, with 14 or 15 rounded ribs ; inside white with a broad deep purple margin.

PECTEN *testâ inæqualivi, valvâ superiori planatâ infernè concavo-de-* Jacobsens.  
*pressa, radiis angulatis valvæ inferioris longitudinalitèr sulcatis.* 2.

Shell inequivalve, the upper valve flat with a depression near the hinge, the rays angular and in the under valve longitudinally grooved.

*Ostrea Jacobæa.* *Linn Syst. Nat.* p. 1144.  
*Gmelin, Syst.* p. 3316.  
*Turton, Linn. Syst.* iv. p. 258.  
*Donovan, British Shells,* iv. tab. 137.  
*Linn. Trans.* viii. p. 97.  
*Dorset Catal.* p. 37, tab. 13, fig. 2.  
*Dillwyn, Descript. Catal.* p. 248.  
*Turton, Conch. Dict.* p. 128.

*Pecten Jacobæus.* *Pennant,* iv. p. 220, tab. 63, fig. 1.  
*Da Costa, Brit Conch.* p. 143.  
*Montagu, Test. Brit.* p. 144.  
*Turton, British Fauna,* p. 161.

*Pecten Jacobi.* *Chemnitz,* vii. p. 273, tab. 60, fig. 588, 589.

*Pecten magnus.* *Lister, Conch.* tab. 155, 156, fig. 2, 3.

Supposed to have been found in Dorsetshire.

Shell about three inches in diameter, of a rufous brown color, with the under valve white and very concave, where the ribs are more flattened and angular.

This shell has its specific name from the circumstance of its being worn on the cap or shoulder of votaries, in evidence of their having performed a pilgrimage of adoration to the shrine of Saint James, in the city of Compostella, or Saint Iago, in Spain, where his relicts are preserved.

The authors who speak of this shell as not very uncommon on the Dorsetshire, Cornish, and Yorkshire coasts, have mistaken for it, as we suspect, some of the varieties of the *Pecten maximus*.

PECTEN *testá subobliquá longitudinalitèr striatá, valvá superiori con-* opercularis.  
*teriori, radiis 18 ad 20 subcarinatis scabris.* 3.

Shell rather oblique and striate longitudinally, the upper valve more convex, with 18 to 20 rays which are somewhat carinate and rough.

Ostrea opercularis. *Linn Syst. Nat.* p. 1146.  
*Gmelin, Syst* p. 3325.  
*Turton, Linn. Syst.* iv. p. 266.  
*Linn. Trans.* viii. p. 98.  
*Dorset Catal.* p. 38, tab. 9. fig. 1, 2, 4, 5.  
*Dillwyn, Descript. Catal.* p. 266.  
*Turton, Conch. Dict.* p. 129.

Pecten opercularis. *Pennant, iv.* p. 221, tab. 63, fig. 2.  
*Chemnitz, vii.* p. 341, tab. 67, fig. 646.  
*Montagu, Test. Brit.* p. 145.  
*Turton, British Fauna,* p. 161.

Pecten pictus. *Da Costa,* p. 144, tab. 9, fig. 1, 2, 4, 5.

Pecten mediocris. *Lister, Conch. tab.* 190, 191, 192.

Var. *radiis lineá sanguineá longitudinali pictis.*  
 the rays marked each with a longitudinal red line.

Ostrea lineata. *Donovan British Shells,* iv. tab. 116.  
*Linn. Trans.* viii. p. 99.  
*Dorset Catal.* p. 38, tab. 10, fig. 8.  
*Dillwyn, Descript. Catal.* p. 266.

Pecten lineatus. *Da Costa,* p. 147, tab. 10, fig. 8.  
*Montagu, Test. Brit.* p. 147.  
*Pennant, Brit. Zool.* iv. p. 222.  
*Turton, British Fauna,* p. 161.  
*Lister, Conch. tab.* 170. fig. 7.

*Mus. nost.* Common to most sandy coasts,

Shell about two inches in diameter, infinitely varying in colors, shades and markings, with the surface very rough to the touch: the outline is a little oblique, and the under valve is flatter.

- subrufus.  
4. PECTEN *testá æquivalvi æquilaterali glabrâ, radüs 20 rotundatis lævibus.*  
Shell equivalve equilateral and smooth, with 20 rounded smooth rays.

*Tab. nost. 17, fig. 1.*

- Ostrea subrufa.* *Donovan, British Shells, i. tab. 12.*  
*Turton, Linn Syst. iv. p. 264.*

*Mus. nost.* From Torbay.

Shell about an inch in diameter, of a uniform rufous-brown color, and entirely smooth except a few transverse scaly marks towards the margin: the valves are equal, and it has not the oblique outline always observable in the *Pecten opercularis*, and the ribs are rounded and smooth.

- sinuosus.  
5. PECTEN *testá suborbiculari inæquivalvi, variè distortâ, radüs numerosis echinatis.*  
Shell somewhat orbicular inequivalve, variously distorted, with numerous prickly rays.

*Tab. nost. 9, fig. 5.*

- Ostrea sinuosa.* *Gmelin, Syst. p. 3319.*  
*Turton, Linn. Syst. iv. p. 261.*  
*Linn. Trans. viii. p. 99.*  
*Dorset Catal. p. 38, tab. 10, fig. 3 and 6.*  
*Dillwyn, Descript. Catal. p. 262.*



- Turton*, Conch. Dict. p. 130.
- Pecten distortus. *Da Costa*, p. 148, tab. 10, fig. 3 and 6.  
*Montagu*, Test. Brit. p. 148.
- Pecten sinuosus. *Pennant*, Brit. Zool. iv. p. 222, tab. 64, fig. 2.  
*Donovan*, British Shells, i. tab. 34.  
*Turton*, British Fauna, p. 161.
- Pecten minor. *Lister*, Conch. tab. 172, fig. 9.
- Mus. nost.* From rocks on the western coasts.

Shell about an inch and a half long, orbicular or inclining to oval, variously mishapen and distorted, of a pink or brownish color irregularly marbled or marked with chocolate brown; the lower valve generally much more convex, with the figure and ribs of the shell occupying about half the surface, the other part shooting into foliations or spines; sometimes the upper valve more convex and the under one flat: the fine ribs are about forty in number, and more or less clothed with spines or scales.

PECTEN *testâ æquivalvi, strâs transversim minutissimis, radiis 7 ad 10* glaber,  
*obsoletis rotundatis, intus sulcis numerosis.* 6.

Shell equivalve, with very minute transverse striæ, and from 7 to 10 obscure rounded rays, and numerous grooves in the inside.

- Ostrea glabra. *Turton*, Conch. Dict. p. 132.
- Pecten glaber. *Pennant*, Brit. Zool. iv. p. 223.  
*Montagu*, p. 150, Suppl. 59, tab. 28, fig. 6,  
*Turton*, British Fauna, p. 112.

On the Scotch coast, near Dunbar.

Shell about three quarters of an inch in diameter, yellow mottled with rufous brown, and marked on the inside with numerous slender rays.

We expect that this is one of the endless varieties of the *Pecten obsoletus*, with the auricles more equal than are generally observed among our English specimens; and that the *Pecten glaber* of Linné, as figured in plate 67 of Chemnitz, and our *Pecten obsoletus* are one and the same species.

tumidus. *PECTEN testá æquivalvi inæquilaterali glaberrimá, latere altero pro-*  
7. *ducto.*

Shell equivalve inequilateral quite smooth, with one of the sides produced.

*Tab. nost. 17. fig. 3.*

*Ostrea tumida.* Turton, Conch. Dict. p. 132.

*Mus. nost.* Taken from the *Serpula tubularia*, in Torbay.

Shell a quarter of an inch in diameter, orbicular, glossy white, transparent, and without striæ ribs or marks of any kind: the sides not equal, in consequence of one of them being prominent in a rounded manner: ears very nearly equal.

\*\* *auriculis inæqualibus.* 8-12.

with the ears unequal.

lævis. *PECTEN testá æquivalvi æquilaterali, planiusculá, semipellucidá, glaber-*  
4. *rimá.*

Shell equivalve equilateral, flattish, semitransparent and quite smooth.

- Pecten lævis. *Pennant*, Brit. Zool. iv. p. 223.  
*Montagu*, p. 150. Suppl. p. 61, tab. 4, fig. 4.  
*Turton*, British Fauna, p. 162.
- Ostrea lævis. *Turton*, Conch. Dict. p. 131.  
*Turton*, Linn. Syst. iv. p. 266.
- Ostrea similis. *Laskey*, Wern. Soc. i. tab. 8, fig. 8.  
 Anglesea and the western coasts.

Shell about an inch in diameter, orbicular, thin, smooth except a few transverse wrinkles, yellowish white often marbled with brown : one ear large, the other small.

Some specimens which we have examined in the cabinet of Mr. Gordon, dredged up by himself in Torbay, appeared to have the ears nearly equal, much more so than they are represented in *Montagu's* figure. It may be therefore that this species is subject to much irregularity, and that our *Pecten* is a variety only.

PECTEN *testâ æquivalvi, strüs numerosisimis minutissimis longitudinalibus subundatis.* obsoletus.  
9.

Shell equivalve, with very numerous and minute slightly undulate longitudinal striæ.

*Tab. nost. 9, fig. 6.*

- Pecten obsoletus. *Pennant*, Brit. Zool. iv. p. 222, tab. 64, fig. 3.  
*Donovan*, British Shells, i. tab. 1, fig. 2.  
*Montagu*, Test. p. 149, and Suppl. p. 57.  
*Turton*, British Fauna, p. 162.
- Pecten parvus. *Da Costa*, Brit. Conch. p. 153.
- Ostrea obsoleta. *Turton*, Linn. Syst. iv. p. 266.  
*Linn. Trans.* viii. p. 100.

*Dillwyn*, Descript. Catal. p. 263.

*Turton*, Conch. Dict. p. 133.

*Ostrea lævis*. *Linn. Trans.* viii. p. 100, tab. 3, fig. 5.

*Mus. nost.* From Torbay and the English Channel.

Shell about an inch in diameter, roundish-oval or oblong, purple, reddish, or yellowish, rarely clear white, often variously marbled or spotted: the surface generally marked with raised ribs towards the broader end, more or less in number, and which are sometimes defined by a deep transverse line separating them from the plain part, but always marked with the fine and almost invisible longitudinal irregular and somewhat undulate striæ over the whole surface.

varius.  
10.

*PECTEN testá oblongá subæquivalvi, strüs 26 ad 30 compressis echinatis.*

Shell oblong nearly equivalve, with from 26 to 30 compressed prickly striæ.

*Ostrea varia*. *Linn. Syst. Nat.* p. 1146.

*Gmelin*, Syst. p. 3324.

*Turton*, Linn Syst. iv. p. 265.

*Donovan*, British Shells, i. tab. 1. fig. 1.

*Linn. Trans.* viii. p. 97.

*Dorset Catal.* p. 38, tab. 10. fig. 1, 2, 4, 5, 7, 9.

*Dillwyn*, Descript. Catal. p. 260.

*Turton*, Conch. Dict. p. 130.

*Pecten varius*. *Pennant*, iv. p. 221, tab. 64, fig. 1.

*Montagu*, Test. Brit. p. 146.

*Turton*, British Fauna, p. 162.

*Chemnitz*, vii. p. 331, tab. 66, fig. 633, 634.

Pecten Monotis. *Da Costa*, p. 151, tab. 10, fig. 1, 2, 4, 5, 7, 9.

Pecten subrufus. *Lister*, tab. 180, fig. 17, 181, fig. 18.

Shell nearly two inches long, and rather less in breadth, varying much in colors and markings: the ribs are clothed with concave spines more or less.

PECTEN *testá oblongo-ovatá æquivalvi, strüs 40 rotundatis læviusculis, alternis minoribus.*

Pusio.  
11.

Shell oblong-oval equivalve, with 40 rounded and nearly smooth striæ which are alternately smaller.

*Tab. nost. 17, fig. 2.*

Ostrea Pusio. *Linn. Syst. Nat.* p. 146.

*Gmelin, Syst.* p. 3424.

*Dillwyn, Descript. Catal.* p. 261.

*Turton, Linn. Syst. iv.* p. 266.

Palliolum. *Chemnitz*, vii. p. 333, tab. 67, fig. 635, 636.

Pecten parvus, ex croceo variegatus, tenuitèr admodum striatus, alternis ferè strüss paulò minoribus. *Lister*, *Conch.* tab. 189, fig. 23.

*Mus. nost.* From the rocks in Torbay.

Shell five-eighths of an inch long, and half an inch broad, brownish white with chocolate transverse zigzag bands, often saffron or crimson, but variable in colors; the under valve usually clear white; with about 40 fine rounded striæ which are mostly alternately larger and smaller, and very slightly muricate about the margin.

This beautiful little shell, which seems to have been known to Lister as an inhabitant of our islands, but has since been overlooked, we found imbedded among the rocks in the neighbourhood of Torquay, to which they are slightly attached.

The surface is always regular and never distorted: the valves are equal; and one of the auricles is nearly obliterated. The figure is also different from the *Pecten distortus* of the same size, being more regularly oval-oblong.

The number of its rays, and their being alternately larger and lesser, distinguish it from the *Pecten varius*, independently of its constant habitation in rocks.

- Islandicus. *PECTEN testâ subæquivalvi, striis numerosis rotundatis bifidis scabris.*  
21.  
Shell nearly equivalve, with numerous rounded cloven rough striæ.  
*Ostrea Islandica.* *Gmelin*, Syst. Nat. p. 3326.  
*Turton*, Linn. Syst. iv. p. 267.  
*Turton*, Conch. Dict. p. 258.  
*Ostrea cinnabarina.* *Dillwyn*, Descript. Catal. p. 256.  
*Pecten Islandicus.* *Chemnitz*, vii. p. 314, tab. 65, fig. 615, 616.  
*Lister*, Conch. tab. 1057, fig. 4.

Some specimens have, we understand, been taken on the northern shores of the Scottish islands. Those from which we drew the description in the Conchological Dictionary, appear to have been brought from Newfoundland.



## 47. LIMA—BRUGUIERE.

*Testa longitudinaliter oblonga, æquivalvis, inæquilateralis, basi transversim auriculatâ, umbonibus remotiusculis. Cardo edentulus, foveâ externâ et dissepimento transverso sub umbones Ligamentum externum.*

Shell longitudinally oblong, equivalve, inequilateral, with the auricles at the base, and the beaks rather remote. Hinge without teeth, with an external cavity and a transverse dissepiment under the beaks. Ligament external.

The character of this genus sufficiently distinguishes it both from the *Ostrea* and the *Pecten*. From the first it differs in being furnished with small auricles at the sides of the hinge; from the latter in having the beaks distant, between which the ligament is placed externally, as in the *Pectunculus*, and separated from the interior of the valve by a strong transverse parietal dissepiment, and from both in its general outline, which is longitudinally oblong, with one of the sides nearly straight, and the opposite one produced in an arcuated manner, not unlike the common Mussel.

All of them are thin, transparent, white colorless and without gloss, generally free, but occasionally fixed to the Flustra and the Alcyonium.

LIMA testâ tumidâ, striis numerosis longitudinalibus subundatis minoribusque interpositis, auriculis obliquis. bullata.  
1.

Shell tumid, with numerous longitudinal somewhat undulate striæ and lesser ones between them, and the auricles oblique.

*Tab. nost.* 17, fig. 4, 5.

- Pecten fragilis. *Montagu*, Test. Brit. Suppl. p. 62.  
*Pennant*, Brit. Zool. iv. p. 223.
- Pecten bullatus. *Chemnitz*, vii. p. 348, tab. 68, fig. 649, b.
- Ostrea fasciata. *Dillwyn*, Descript. Catal. p. 269.
- Ostrea fragilis *Turton*, Conch. Dict. p. 131.
- Mus. nost.* Devonshire coast, and Bray in Ireland.

Shell three quarters of an inch long, and barely half an inch broad, very convex, and much curved outwards on one side, with numerous raised longitudinal striæ which are a little undulated, with three or four lesser ones between each of them: the cardinal margin rather oblique.

subauricu-  
lata.  
1.

LIMA *testá compressá subæquilateralí, striis longitudinalibus rectis æqualibus, auriculis subrectilinearibus.*

Shell flattish and nearly equilateral, with longitudinal straight striæ which have no lesser ones between them, and the auricles nearly rectilinear.

Pecten subauriculatus. *Montagu*, Suppl. p. 63, tab. 29, fig. 2.  
*Pennant*, Brit. Zool. iv. p. 224.

Pecten fragilis *Chemnitz*, vii. p. 349, tab. 68, fig. 650.

Ostrea subauriculata. *Turton*, Conch. Dict. p. 131.

Ostrea bullata. *Dillwyn*, Descript. Catal. p. 270.

*Mus. nost.* From the western coasts.

Shell much flatter and more elongated than the *Lima bullata*, a little unequal at one of the sides, but not so much as in that shell, with the cardinal margin in a nearly straight line: the



longitudinal lines are more remote, in a nearly straight direction, and have no lesser ones between them.

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48. AVICULA—LAMARCK.

*Testa depressa, obliqua, inæquivalvis, inæquilateralis; basi transversim rectilineari, utrinquè lobatâ; umbonibus remotiusculis. Cardo linearis, dente unico subpenetrante: lateralibus nullis. Ligamentum lineare, externum.*

Shell flat, oblique, inequivalve, inequilateral; transversely produced in a straight line at the base, where the sides are lobed; the beaks rather remote. Hinge linear, with a single slightly penetrating tooth: lateral teeth none. Ligament linear, external.

The general outline of this genus is rather singular. From a straight and elongated base rises obliquely the rounded or oval body of the shell: and when the valves are expanded, with the lengthened processes downwards, it has some sort of resemblance to a bird on the wing; the valves representing the wings, as at letter *b* of our figure, and the elongated processes the tail, as at the letter *a*. Hence it has been denominated the swallow-tail Mussel.

They inhabit the deeps of the ocean, and are attached by a byssus which issues from a sinuosity or notch near the base of the under valve. We have examined a small living specimen attached to the *Gorgonia viminalis*.

We are inclined to consider the genus, as far as it is yet known, to possess three well defined species: **1**, where the tail, or anterior elongated process is longer than the wing or body, and curved at the end, as is represented in *Chemnitz*, viii. tab. 81, fig. 723. **2**, where the tail is about as long as, or reaching parallel with the wing, as in our European species: and **3**, where the tail is shorter than the wing, or where the processes at the base are of nearly equal length; as is represented in *Chemnitz*, viii. tab. 81, fig. 726.

Hirundo. *AVICULA caudá longitudine alæ.*

1. With the tail as long as the wing.

*Tab. nost.* 16, fig. 3 and 4.

*Mytilus Hirundo.* *Linn Syst. Nat.* p. 1159.

*Gmelin, Syst* p. 3357.

*Turton, Linn. Syst.* iv. p. 295.

*Dillwyn, Descript. Catal.* p. 320.

*Turton, Conch. Dict.* p. 108, fig. 7.

*Chemnitz*, viii. p. 142, tab. 81, fig. 724, 725.

*Pecten tenuis.*

*Lister, Conch. tab.* 220, fig. 55.

*Mus. nost.* Dublin bay, Torbay and the western coasts.

Shell nearly two inches long, and as much in breadth, including the lobes, smooth or furnished with a few scales about the margin, generally of an uniform dull greenish color, but sometimes brown

with pale rays: beaks separated by a linear transverse cavity: inside perlaceous, glossy except round the margin, which is extremely thin: hinge with a single small tooth under the beak, which forms a slight indentation in the opposite valve.

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49. PINNA—LINNÉ.

*Testa longitudinalis cuneiformis æquivalvis, basi acutâ rectiusculâ, apice dilatato hiante. Cardio edentulus. Ligamentum externum, prælongum.*

Shell longitudinal, wedge-shaped, equivalve, pointed and nearly straight at the base, dilated and open at the top. Hinge without teeth. Ligament external, and very long.

These shells have a wedge-form or somewhat triangular shape, and are fixed in gravelly and sandy parts of the ocean by the pointed end, near the termination of which issues a strong hair-like byssus of attachment.

PINNA *testâ ovato-trigonâ, striis transversis arcuatis, apice fastigiato,* ingens.  
*latere postico truncato recto.* 1.

Shell oval-triangular, with transverse arched striæ, flat at top, truncate and straight at the hinder side.

*Tab. nost. 20, fig. 1.*

- Pinna ingens. *Pennant*, Brit. Zool. iv. p. 244.  
*Montagu*, p. 180, 583, and Suppl. p. 72.  
*Linn. Trans.* viii. p. 112.  
*Turton*, British Fauna, p. 165.  
*Dillwyn*, Descript. Catal. p. 325.  
*Turton*, Conch. Dict. p. 148.
- Pinna lævis. *Donovan*, British Shells, v. tab. 152.
- Mus. nost.* From the Devonshire coast.

Shell growing to a foot or more in length, and half as much in breadth, horn color and semitransparent, rather flattened at the broader extremity, from which it runs down on the open side in a nearly straight line for about half its length, and then slopes suddenly towards the pointed end; the surface is marked with about eleven obscure longitudinal ribs which extend over three-fourths from the anterior margin.

*fragilis.* PINNA *testâ ovatâ, striis transversis arcuatis, apice rotundato, latere*  
*postico producto rotundato.*

Shell oval, with transverse arched striæ, rounded at top, produced and rounded at the hinder side.

*Tab. nost. 20, fig. 2.*

- Pinna pectinata. *Pennant*, British Zool. iv. tab. 72.  
*Mus. nost.* From the Devonshire coast.

Shell about six or seven inches long, and is marked like the last, but is of a darker horn-color, and more flattened: it differs also much in the outline, being broader in proportion to its

length, with the upper part rounded and produced, giving it a more ham-like appearance; the smaller end also runs in a more straight direction.

The different outlines of these two species are constant, and, as we are inclined to think, sufficiently point out specific distinction: both of them, when young, have a few spines on the ribs, which ribs however are indistinct, and fewer in number than those of the next species.

*PINNA testá trigoná cornéá, costis 18 confertis squamosis.*  
Shell triangular horn-color, with 18 close-set scaly ribs.

pectinata.  
3.

*Tab. nost. 19, fig. 1.*

- Pinna pectinata.* *Linn. Syst. Nat. p. 1160.*  
*Gmelin, Syst. p. 3363.*  
*Turton, Linn. Syst. iv. p. 301.*  
*Chemnitz, viii. p. 213, tab. 87, fig. 770.*  
*Montagu, Test. Brit. p. 178.*  
*Linn. Trans. viii. p. 113*  
*Turton, British Fauna, p. 165.*  
*Pennant, British Zool. p. 243.*  
*Dorset Catal, p. 41, tab. 3, fig. 3.*  
*Dillwyn, Descript. Catal. p. 325.*  
*Turton, Conch. Dict. p. 148.*  
*Pinna muricata.* *Da Costa, p. 240, tab. 16, fig. 3.*  
*Donovan, British Shells, i. tab. 10.*

*Mus. nost.* From the western coasts.

Shell three or four inches long, and two inches wide, pale horn-color, thin and brittle, with about 18 crowded ribs, which

cover nearly the whole surface, and are clothed with numerous concave scales: the top flat, and running in a nearly straight line down the open side, whence it slopes to a slightly curved point.

papyracea. PINNA *testâ ovato-trigonâ corneâ, costis 9 remotis muticis.*  
4. Shell oval triangular horn-color, with 9 remote unarmed ribs.

*Tab. nost. 20, fig. 3.*

Pinna papyracea. *Chemnitz, viii. p. 243, tab. 93, fig. 786.*

*Dillwyn, Descript. Catal. p. 331.*

*Mus, nost. Dredged off Torbay.*

Shell four inches and a half long, and two and a quarter wide, thin, brittle, horn-color, purplish towards the pointed end, and marked with a blotch of the same color about the middle of the cartilage side; with 9 remote broad rounded and prominent ribs which cover nearly the whole surface: the broader end nearly flat, but rounded at the open side; the pointed end runs quite straight and without incurvation.

The Pinna vitrea of *Chemnitz, p. 216. tab. 87, fig. 772*, is a very good representation of the shell, and is probably the same in a younger and more delicate state.

muricata. PINNA *testâ trigonâ carneolâ, costis 7 concavo-spinosis.*  
5. Shell triangular pale carnation, with 7 ribs armed with concave spines.

Pinna muricata. *Montagu, p. 183, tab. 5, fig. 3.*

*Linn. Trans. viii, p. 113.*

*Turton, British Fauna, p. 165.*

*Pennant, Brit. Zool. iv. p. 244.*

*Dorset Catal.* p. 39.

*Turton, Conch. Dict.* p. 149.

*Pinna carnea.* *Dillwyn, Descript. Catal.* p. 326.

*Mus, nost.* Sent to us from Dorsetshire.

Shell about four inches long, and two wide: but whether it be the *Pinna haud ignobilis* of Chemnitz, tab. 87, fig. 779, or his *P. muricata*, tab. 91, fig. 781, it is not worth much enquiry to the British conchologist, as we believe both our own specimen and that of Montagu to be foreign.

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50. ANOMIA—LINNÉ.

*Testa inæquivalvis, irregularis; valvâ inferiori sub umbonem perforatâ, et operculo vel tendine fixâ. Cardo edentulus. Ligamentum internum, sub umbone transversum.*

Shell inequivalve, irregular; with the under valve perforated near the beak, and fixed by an operculum or tendon. Hinge without teeth. Ligament internal, placed transversely under the beak.

Like the Mussel and the Oyster, the individuals of this tribe have a fixed and stationary locality, from which they are never

removed without destructive violence. And this attachment is effected, either by a solid elliptic testaceous appendage, which pierces and fits the perforation in the lesser or under valve, and is dilated and firmly adhesive at its base, as is represented in our plate 17, fig. 10; or is a mere tough tendinous plug, as is the case with most of those which are attached to Fuci.

The great irregularity of figure and substance in many of the species, occasions such difficulty of discrimination, that we do not think the genus has as yet been well understood, or clearly elucidated.

Montagu confines the British species to *Anomia Ehippium*, *A. undulata*, *A. aculeata*, and *A. cylindrica*: but our own researches, chiefly among the rocky shores of Devonshire, have led us to the belief, that much curious matter yet remains for further development, and a more accurate investigation of this hitherto obscure genus: and we submit our own conclusions, respecting the determination of species, to the correction of better experience.

In our figures, all drawn from specimens taken alive, it has been our wish to present them in their less known stages of growth, or to exhibit their remote and more dissimilar appearances and alliances. And it may be proper to remark, that in our specific description, we consider the lesser valve, or that which is perforated, as the under one.

electricæ. *ANOMIA testâ suborbiculari, subundatâ, pellucidâ, succinâ.*

1.

Shell somewhat orbicular, with the surface a little undulate, transparent, and amber-color.



*Tab. nost.* 17, fig. 8, 9.

*Anomia electrica.* *Linn. Syst. Nat.* p. 1151.

*Gmelin, Syst.* p. 3341.

*Turton, Linn. Syst.* iv. p. 281.

*Chemnitz, vii.* p. 79, tab. 76, fig. 691.

*Turton, Conch. Dict.* p. 1, fig. 67.

*Ostrea lævis.* *Lister, Conch.* tab. 205, fig. 39.

*Mus. nost.* From the west of Ireland.

Shell an inch and a quarter in diameter, of a bright transparent amber or sulphur yellow inside and out, a little irregular in the surface but not rough plaited nor scaly; beak pointed, not quite terminal; the under valve flat and scale-like, with a large interrupted perforation.

*ANOMIA testâ orbiculari-ovatâ scabriusculâ, margine rugosoplicato, Ephippium.*  
*intus margaritaceâ.* 2.

Shell orbicular oval rather rough, wrinkled and plaited at the margin, and pearly within.

*Tab. nost.* 18, fig. 1-3.

*Tab.* 17, fig. 10, the operculum.

*Anomia Ephippium.* *Linn. Syst. Nat.* p. 1150.

*Gmelin, Syst.* p. 3340.

*Turton, Linn. Syst.* iv. p. 280.

*Chemnitz, viii.* p. 81, tab. 76, fig. 692, 693.

*Pennant, iv.* p. 232, tab. 65, upper fig.

*Donovan, British Shells,* i. tab. 26.

*Montagu, Test. Brit.* p. 155.

*Linn. Trans.* viii. p. 102.

*Turton*, British Fauna, p. 162.

*Dorset. Catal.* p. 38, tab. 11, fig. 3.

*Dillwyn*, Descript. Catal. p. 286.

*Turton*, Conch. Dict. p. 2.

*Anomia Tunica* Cepæ. *Da Costa*, p. 165, tab. ii, fig. 3.

*Lister*, Conch. tab. 204, fig. 38.

*Mus. nost.* On most rocky coasts.

Shell growing to nearly three inches in diameter, often produced at one side, irregularly wrinkled and plaited; in the full grown state rough and scaly on the outside, which is dirty white and brownish: beak terminal; the inside rich perlaceous, mostly white but often mixed with a greenish or dirty brown stain: operculum oval, large, thick, rough.

Young shells are very irregular and generally angular at the margin, with the undulations putting on the shape of ribs or scaly folds, always preserving a rough surface, and of a yellowish or fine purple color; and when fixed to bivalves, especially the *Pecten*, partaking the figure and marks, as in our fig. 1.

Cepa. 3. *ANOMIA testâ obovatâ planiusculâ, scabrâ, intus rosâ.*

Shell oboval flattish rough, rosy red within.

*Tab. nost.* 18, fig. 4, young.

*Anomia* Cepa. *Linn Syst. Nat.* p. 1151.

*Gmelin*, Syst. p. 3341.

*Turton*, Linn. Syst. iv. p. 281.

*Chemnitz*, viii. p. 85, tab. 76, fig. 694, 695.

*Dillwyn*, Descript. Catal. p. 287.

*Mus. nost.* Rocks in Torbay.

Shell nearly two inches long, and one and a half broad, oblong inclining to oval, rather flat, with a rough but not an undulating surface; inside more or less of a rose color, but not pearly as in the *Anomia Ehippium*; beaks terminal; the under valve thin but not scaly.

Young shells have a triangular appearance, the sides being cut down to an obtuse point, as in our plate; but in surface and dirty white color resemble the full grown ones.

The figures of Chemnitz, above quoted, give an exact resemblance of the full grown shell. We have as yet found only a few of them, at the very lowest spring tide, near Broadsands in Torbay, where their collection is of momentary opportunity, and attended with some personal risk.

*ANOMIA testâ suborbiculari, lævi, pellucidâ, cornedâ.*

Shell somewhat orbicular, smooth, transparent, and horn-color.

Squamula.  
4.

*Tab. nost.* 18, fig. 5, 6, 7.

*Anomia Squamula.* *Linn. Syst. Nat.* p. 1151.

*Gmelin, Syst.* p. 3341.

*Turton, Linn. Syst.* p. 281.

*Da Costa, Brit. Conch.* p. 167.

*Chemnitz, viii.* p. 86, tab. 79, fig. 696.

*Montagu, Test. Brit.* p. 156 and 561.

*Linn. Trans.* viii. p. 102.

*Turton, British Fauna,* p. 163.

*Pennant, Brit. Zool.* iv. p. 232.

*Dorset Catal.* p. 39, tab. 13, fig. 4.

*Turton, Conch. Dict.* p. 3.

*Walker, Minute Shells,* p. 22, fig. 80.

*Mus. nost.* In old shells, on stones and Fuci.

In all its stages of growth this species may be readily distinguished from any of the varieties of *Anomia Ehippium*. It is usually flat, sometimes a little tumid about the beaks, nearly orbicular, without wrinkles or undulations, and of a whitish or corneous color. The usual diameter is from a quarter to half an inch, but we have met with it nearly two inches. The base is occasionally truncate, as often happens to the younger ones of *Anomia Ehippium* and *A. undulata*. The substance is always thin and brittle; and the plug of attachment is tendinous, seldom hard at the base, with a testaceous termination.

Large specimens sometimes cover the part near the hinge of the *Pecten opercularis*, partaking of the convexity, ribs, and striæ of its foster parent.

undulata. *ANOMIA testâ rotundatâ seu oblongâ, striis longitudinalibus undulatis,*  
5. *valvâ inferiori foveâ trigonâ sub umbonem.*

Shell rounded or oblong, with longitudinal undulate striæ, and a triangular cavity on the under valve beneath the hinge.

*Tab. nost. 18, fig. 8, 9, 10.*

*Anomia undulata. Gmelin, Syst. p. 3346.*

*Turton, Linn. Syst. iv. p. 286.*

*Chemnitz, viii. p. 88, tab. 77, fig. 699.*

*Montagu, p. 157, tab. 4, fig. 6.*

*Pennant, Brit. Zool. iv. 233.*

*Turton, British Fauna, p. 163.*

*Dorset Catal. p. 39, tab. 11, fig. 4.*

*Dillwyn, Descript. Catal. p. 289.*

*Turton, Conch. Dict. p. 4.*

*Ostrea striata.*

*Da Costa, p. 162, tab. 11, fig. 4.*

*Montagu*, Test. p. 153, and Suppt. p. 580.

*Donovan*, British Shells, ii. tab. 45.

*Ostrea subviridis*. *Lister*. Conch. tab. 202, fig. 36.

*Mus. nost.* On old shells, and the crevices of rocks.

Shell an inch or more in diameter, very variable in figure and consistence, sometimes very convex and opaque, often thin transparent and flat; sometimes the under valve is more convex than the upper, which is rarely concave; but always furnished with numerous radiating striæ which cause the margin to be crenate: inside of a rich and splendid green, with an iridescent blue margin: the beak is generally terminal, but in the flatter varieties not quite so: the perforation is large, and sometimes quite entire.

On the under valve, on one side of the perforation, is a triangular striated cavity, resembling that which is seen on the valves of the *Pecten*, as if it had contained an additional ligament for the more safe attachment.

The plug terminates in a thin oval layer, strongly striate transversely, and crossed with fine longitudinal lines, frequently found on the valves of the *Pinna ingens*.

The varieties figured at 12 and 13, we have taken from the cavities of rocks in Torbay. They are extremely thin and brittle, resembling brown paper: the upper valve a little concave, and clothed with thin greenish-white scales; the under valve very convex and fragile: the longitudinal striæ very obscure.

*ANOMIA testâ orbiculari, valvâ superiori punctis elevatis, inferiori punctis concavis.* punctata.  
6.

Shell orbicular, with raised dots on the upper valve and concave ones on the under valve.

*Tab. nost.* 18, fig. 11.

*Anomia punctata.* *Gmelin*, Syst p. 3346.

*Turton*, Linn. Syst. iv. p. 286.

*Chemnitz*, viii. p. 88, tab. 77, fig. 698.

*Dillwyn*, Descript. Catal. p. 238.

*Mus. nost.* On Crabs and old Oyster shells.

Shell about an inch in diameter, thin, transparent, of a purplish-white color, orbicular but a little truncate at the base; the upper valve convex and covered with numerous raised pustular dots: the under valve flat and marked with concave dots: beaks terminal.

In the cabinet of Mr. Strangeways, of Teignmouth, are some remarkably fine ones, full an inch and a half in diameter. They all answer to the description and figure of Chemnitz.

*cylindrica.* ANOMIA *testâ ovatâ subcylindrico-convexâ transversim rugosâ, umbone*  
7. *recurvo.*

Shell oval somewhat cylindrically convex and transversely rugged, with the beak curved backwards.

*Anomia cylindrica.* *Gmelin*, Syst. p. 3346.

*Turton*, Linn. Syst. iv. p. 288.

*Penant*, Brit. Zool. iv. p. 233.

*Dillwyn*, Descript. Catal. p. 291.

*Turton*, Conch. Dict. p. 6.

*Anomia cymbiformis.* *Linn. Trans.* viii, p. 104, tab. 3, fig. 6.

*Montagu*, Suppl. p. 64.

*Turton*, British Fauna, p. 163.

*Mus. nost.* On Fuci and Sertulariæ.

Shell half an inch long, and a quarter broad, brownish-white, narrower towards the beak which curves over the under valve, and ends in an obtuse point, sometimes smooth, but mostly with some rough transverse marks, but no longitudinal ones.

*ANOMIA testá ovatá subcylindrico-convexá, longitudinaliter striatá, umbone recurvo.* striolata.  
8.

Shell oval, somewhat cylindrically convex, and striate longitudinally, with the beak curved backwards.

*Mus. nost.* From the roots of Fuci

Shell in all respects resembling the last species, but is always marked with fine rather remote longitudinal raised lines, a sufficient distinction of specific character.

*ANOMIA testá suborbiculari vel oblongá, striis crebris longitudinalibus aculeatis.* aculeata.  
9.

Shell somewhat orbicular or oblong, with numerous longitudinal prickly striæ.

*Anomia aculeata.* Gmelin, Syst. p. 3346.  
Turton, Linn. Syst. iv. p. 285.  
Chemnitz, viii. p. 92, tab. 77, fig. 702.  
Montagu, p. 157. tab. 4, fig. 5.  
Linn. Trans. viii. p. 103.  
Turton, British Fauna, p. 163.  
Pennant, Brit. Zool. iv. p. 233.  
Dillwyn, Descript. Catal. p. 288.  
Turton, Conch. Dict. p. 4.

*Mus. nost.* On Fuci, and among rocks.

Shell from a quarter to half an inch in diameter, flat, rounded or oblong, sometimes truncate at the top, brown or whitish, covered with concave or prickly scales disposed in longitudinal lines down the raised striæ; the under valve sometimes but rarely prickly on the outside.

fornicata. ANOMIA testâ suborbiculari, striis minutis, valvâ superiori intus sub  
10. umbonem fornicatâ.

Shell somewhat orbicular and finely striate, the upper valve furnished with a vaulted chamber on the inside under the beak.

*Tab. nost.* 18, fig. 12, 13.<sup>r</sup>

*Anomia fornicata.* Lamarck, Syst. vi. p. 228.

*Mus. nost.* From Torbay.

Shell about half an inch in diameter, white and rather flat, orbicular or inclining to oblong, irregularly sinuous on the margin at the sides, with numerous extremely fine radiating striæ which are only visible towards the margin, and on the narrower or hinge part are as fine and regular transverse ones: hinge pointed, terminal: inside silvery, with fine longitudinal striæ round the margin; and under the hinge is a large hollow vaulted chamber, which on one side is much curved and scaly on the outside; the under valve is flat and silvery, with the perforation round and nearly closed.

tubularis. ANOMIA testâ orbiculari, valvâ inferioris foramine integro cylindrico-  
11. tubulari.

Shell orbicular, with the perforation of the under valve entire and forming a cylindrical tube.

*Mus. nost.* Attached to Fuci.



Shell about a quarter of an inch in diameter, whitish, with the beak terminal: the under valve has the perforation entire all round, and produced into a raised cylindrical tube. The plug of attachment is tendinous.

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51. TEREBRATULA—BRUGUIERE.

*Test ovata, inæquivalvis, pedicello tendineo fixa; valvâ superiori umbone producto, perforato seu emarginato; inferiori ramis duobus, sæpe ramulosis, e disco interno protensis. Cardo dentibus duobus: lateralibus nullis. Ligamentum internum.*

Shell oval, inequivalve, fixed by a tendinous pedicle; the upper valve with the beak produced, and perforated or emarginate; the under valve with two elongated projections issuing from the internal disk, and which are sometimes variously branched. Hinge with two teeth: lateral teeth none. Ligament internal.

This genus is also parasitical, being fixed to submarine substances by a tough short stalk, which issues from the aperture at the termination of the extended beak in the upper valve. The internal structure of the under valve, independently of the strong joint-like primary teeth, exhibits a remarkable apparatus for

the support of the inhabitant; being furnished with two tooth-like processes, originating in the concave surface a little below the hinge, extending inwards towards the margin, and variously branched in various species.

Cranium. 1. **TEREBRATULA** *testá ovatá semipellucidá, striis minutis decussatis, margine interno integerrimo.*

Shell oval semitransparent, with minute decussate striæ, and the inner margin very entire.

Anomia Cranium. *Gmelin*, Syst. p. 3347.

*Turton*, Linn. Syst. iv. p. 287.

*Dillwyn*, Descript. Catal. p. 294.

*Turton*, Conch. Dict. p. 5.

Terebratula Cranium. *Montagu*, in Linn. Trans. xi. p. 188, tab. 13, fig. 2, and B.

Dredged in Bressay, in the Shetland Islands, by Dr. Fleming.

Shell an inch long, and hardly as much broad, convex, thin, brittle, covered with a dull white skin, under which it is milk-white and semitransparent; the surface very finely reticulate or shagreened. The internal projecting processes of the under or shorter valve have a lateral ramification issuing from the base on one side.

Psittacea. 2. **TEREBRATULA** *testá ovatá, striis longitudinalibus, umbone prælongo curvo, margine sinuato integerrimo.*

Shell oval, with longitudinal striæ, the beak much produced and curved, and the margin sinuous and very entire.

Anomia Psittacea. *Gmelin*, Syst. p. 2348,

*Turton*, Linn. Syst. iv. p. 287.

*Chemnitz*, viii. p. 106, tab. 78, fig. 713.

*Dillwyn*, Descript. Catal. p. 296.

*Turton*, Conch. Dict. p. 5, fig. 42, 43, 44.

*Lister*, Conch. tab. 211, fig. 46.

*Mus, nost.* Found on Teignmouth beach.

Shell nearly an inch and a quarter long, and an inch broad, convex, of a blackish horn-color, inflected and smooth at the sides, longitudinally striate on the disk, with the beak of the upper valve elongated curved and pointed.

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52. DISCINA—LAMARCK.

*Testa inæquivalvis ovato-orbicularis, depressiuscula, fixa; valvâ utraq̃ue disco centrali orbiculato. Discus valvæ superioris medio submillatus, inferioris rimâ transversâ divisus. Cardo indistinctus. Ligamentum internum.*

Shell inequivalve, roundish-oval, rather flat, and fixed; each valve furnished with an orbicular central disk. The disk of the upper valve papillary near the middle, of the under valve divided by a transverse cleft. Hinge indistinct. Ligament internal,

ostreoides. DISCINA

1.

*Discina ostreoides.* *Lamarck*, Syst. vi. p. 237.

*Orbicula Norwegica.* *Lamarck*, Syst. p. 242.

*Patella anomala.* *Gmelin*, Syst. p. 3721.

*Turton*, Linn. Syst. iv. p. 585.

*Anomia turbinata.* *Dillwyn*, Descript. Catal. p. 286.

*Patella distorta.* *Montagu*, in Linn. Trans. xi. p. 195, tab. 13, fig. 5.

*Turton*, Conch. Dict. p. 140.

*Mus nost.* Attached to submarine stones.

Shell hardly half an inch in diameter, rather flat, rugged and very irregular in the circumference; the upper valve brown, with a small wart-like protuberance which is not quite central; inside minutely granulate: the under valve thin, white or blueish white, and attached to submarine stones.



### 53. ANODON—LAMARCK.

*Testa transversa, æquivalvis, inæquilateralis, lateribus subhiantibus.*

*Cardo edentulus, laminâ transversâ anticâ sinu terminatâ. Ligamentum externum.*

Shell transverse, equivalve, inequilateral, a little open at the sides. Hinge without teeth, furnished with a transverse lamina

under the ligament on the anterior side, which terminates in a depression. Ligament external.

*ANODON testá ovatá tumidá inæquilaterali, margine arcuato, latere Cygneus.*  
*antico angustato acuminato.* 1.

Shell oval tumid inequilateral, arcuated at the margin, with the anterior side narrowed to a point.

*Mytilus Cygneus.* Linn. Syst. Nat. p. 1158.

*Gmelin*, Syst. p. 3355.

*Turton*, Linn. Syst. iv. p. 293.

*Pennant*, iv. p. 239, tab. 70.

*Da Costa*, p. 214, tab. 15, fig. 2.

*Chemnitz*, viii. p. 185, tab. 86, fig. 762,

*Donovan*, British Shells, ii. tab. 55.

*Montagu*, Test. Brit. p. 170.

*Linn. Trans.* viii. p. 109. tab. 3. A. fig. 2.

*Turton*, British Fauna, p. 165.

*Dorset Catal*, p. 40, tab. 12, fig. 42.

*Dillwyn*, Descript. Catal. p. 315.

*Turton*, Conch. Dict. p. 115.

*Musculus latus.* Lister, Conch. tab. 156, fig. 11.

*Mus. nost.* Common in rivers, ponds, and canals.

Shell growing to two or three inches long, and six or seven broad, green or pale brown, wrinkled or striate transversely, produced at the anterior side to a rather pointed termination, with the margin opposite the hinge curving outwards: beaks minute, with the region about them sometimes decorticated.

paludosus. ANODON *testâ oblongâ convexâ subæquilateralis, margine arcuato, latere antico sinuato-subangulato.*  
2.

Shell oblong, convex, and nearly equilateral, arcuated at the margin, with the anterior side sinuate and somewhat angular.

*Tab. nost. 15. fig. 5.*

*Mytilus dentatus.* Turton, Conch. Dict. p. 115.

*Mus. nost.* From the great Bog of Allen, Ireland.

Shell longer than the last, but not so broad, green with yellowish white longitudinal rays, fawn color at the sides and margin, with a fawn color tinge on the inside: both the extremities are rounded, the anterior one slightly angular and flexuous: beaks nearly central.

The outline of this shell is quite different from any of the varieties of *Anodon Cygneus*, and it appears to be clearly distinct.

Anatinus. ANODON *testâ ovatâ convexâ inæquilaterali, margine subincurvo, latere antico alato-angulato, umbonibus decorticatis.*  
3.

Shell oval convex inequilateral, slightly incurved at the margin, with the anterior side angular and winged, and the beaks decorticated.

*Mytilus Anatinus.* Linn. Syst. Nat. p. 1158.

*Gmelin*, Syst. p. 3355.

*Turton*, Linn. Syst. p. 293.

*Pennant*, iv. p. 239, tab. 71.

*Chemnitz*, viii. p. 189, tab. 86, fig. 763.

*Da Costa*, Brit. Conch. p. 215.

*Donovan*, British Shells, i. tab. 13.

*Montagu*, Test. Brit. p. 171.

*Turton*, British Fauna, p. 165.

*Linn. Trans.* viii. tab. 3, A. fig. 3.

*Dorset. Catal.* p. 40, tab. 13, fig. 6.

*Dillwyn*, Descript. Catal. p. 317.

*Turton*, Conch. Dict. p. 116.

*Musculus tenuis.* *Lister*, Conch. tab. 153, fig. 8.

*Mus. nost.* In ponds and deep rivers.

Shell about half the size of the last, covered with a brown or blackish skin which forms a membrane beyond the margin; the anterior side winged, angular, and somewhat truncate; the margin opposite the hinge running nearly straight, or slightly indented: the space about the hinge always much decorticated as if worm-eaten, like the *Unio margaritifera*.

*ANODON testá oblongá depressiusculá, lateribus rotundatis, margine* Avonensis.  
*rectiusculo, umbonibus subterminalibus.* 4.

Shell oblong flattish, rounded at both the sides, with the margin nearly straight, and the beaks almost terminal.

*Mytilus Avonensis.* *Montagu*, Test. Brit. p. 172.

*Turton*, British Fauna, p. 165.

*Linn. Trans.* viii. p. 110, tab. 3, A. fig. 4.

*Turton*, Conch. Dict. p. 116.

*Mus. nost.* From the Avon, in Wiltshire and Oxfordshire.

Shell rather less than the last, of an olive brown color, with the front margin nearly straight or slightly arcuated towards the smaller end, and the hinge near one end:

## 54. UNIO—BRUGUIERE.

*Testa transversa, æquivalvis, inæquilateralis, lateribus subhiantibus; umbonibus eroso-decorticatis. Cardo dente conico obtuso laciniato, valvæ alterius bilobo; et sinu marginali antico remoto: lateralibus nullis. Ligamentum externum.*

Shell transverse, equivalve, inequilateral, a little open at the sides; with the beaks decorticated and eroded. Hinge with an obtuse conic jagged tooth, which in one valve is divided into two lobes; and a remote cardinal depression on the anterior side: lateral teeth none. Ligament external.

A genus distinguished from the Anodon, by the conic obtuse rugged teeth, and from the Mysca and Cyclas by the want of lateral teeth; and by the cavity on the cardinal margin at the anterior termination of the ligament.

Inhabitants of clear rapid rivers, where they lie imbedded in the gravel, with the anterior end just above the surface, and are often rooted up and cast on shore by floods and torrents. The valves are used as spoons by the Irish peasantry.

margaritifera-<sup>rus.</sup> UNIO *testâ oblongâ subarcuatâ, latere antico angulato.*

1. Shell oblong and slightly curved, angular at the anterior side.

*Tab. nost. 16, fig. 1.*

*Mya margaritifera.* Linn. Syst. Nat. p. 1112.

*Gmelin, Syst. p. 3219.*

*Turton, Linn. Syst. iv. p. 176.*

*Pennant, iv. p. 163, tab. 46. fig. 2.*

*Chemnitz, vi. p. 15, tab. 1, fig. 5.*



- Da Costa*, p. 225, tab. 15, fig. 3.  
*Donovan*, British Shells, iii. tab. 73.  
*Montagu*, Test. Brit. p. 33.  
*Linn. Trans.* viii. p. 40.  
*Turton*, British Fauna, p. 146.  
*Wood*, Conch. p. 107. tab. 23. fig. 1-3.  
*Dillwyn*, Descript. Catal. p. 52.  
*Turton*, Conch. Dict. p. 106.

*Musculus niger*. *Lister*, Conch. tab. 149, fig. 4.

*Mus. nost.* In most rapid rivers.

Shell two inches or more long, and four or five broad, covered with a black wrinkled skin which fringes the margin; inside blackish-white mixed with green, with a blackish border round the edge: the front margin a little contracted in the middle, giving a somewhat curved outline to its figure.

Young shells have the interior marginal edge, under the ligament, raised into a kind of laminar process; but the teeth distinguish it from the last family, and the terminal cavity from the next.

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#### 55. MYSCA—TURTON.

*Test transversa, æquivalvis, inæquilateralis, lateribus sub-*  
*hiantibus; umbonibus corrugato - verrucosis. Cardo dente*

*transverso crenato, valvæ alterius bilobo ; lateralibus anticis lamellatis transversim elongatis, valvæ alterius didymis. Ligamentum externum.*

Shell transverse, equivalve, inequilateral, a little open at the sides ; with the beaks wrinkled or warty. Hinge with a transverse crenate tooth, which in one valve is divided into two lobes : lateral teeth at the anterior side only, laminar, transversely elongated, and double in one of the valves. Ligament external.

This genus is distinguished from the *Unio* by the strong transverse notched teeth placed behind the beaks, the long lateral teeth which reach to the end of the ligament and are double in the left valve, and the want of the internal depression or sinus at their anterior termination. The species are inhabitants of quiet and placid rivers.

Batava. 1. *MYSCA testâ oblongâ, extremitatibus rotundatis, umbonibus rugosoverrucosis.*

Shell oblong, rounded at both ends, with the beaks rugged and warty:

- Mya Batava.* *Linn. Trans.* viii. p. 37.  
*Wood, Conch.* p. 103. tab. 19, fig. 1, 2.  
*Dillwyn, Descript. Catal.* p. 49.  
*Turton, Conch. Dict.* p. 105.  
*Pennant, Brit. Zool.* iv. p. 161.  
*Mya Pictorum.* *Chemnitz,* vi. p. 19, tab. 1, fig. 6.  
*Donovan, British Shells,* v. tab. 174.

*Montagu*, Test. Brit. p. 36.

*Musculus* ex flavo-viridescens. *Lister*, tab. 146, fig. 1.

*Mus. nost.* From Oxfordshire.

Shell an inch long, and two broad, greenish-brown, rounded at both the extremities. From the *Mysca Pictorum* it differs, in being narrower in proportion to its length, with both the sides nearly equally rounded, and in having no contraction in the front margin: the inside is of a deeper blue tint, and the primary tooth of the left valve is more deeply and distinctly lobed.

*MYSTA testâ onticè subangulato-acuminatâ, margine subcoarctato, umbonibus rugoso-verrucosis.* Pictorum.  
2.

Shell somewhat angular and pointed at the anterior side, with the margin a little contracted, and the beaks rugged and warty.

*Mya Pictorum.* *Linn. Syst. Nat.* p. 1112.

*Gmelin*, *Syst.* p. 3218.

*Turton*, *Linn. Syst.* iv. p. 175.

*Pennant*, iv. p. 162, tab. 46, fig. 1.

*Da Costa*, p. 228, tab. 15, fig. 4.

*Wood*, *Conch.* p. 104, tab. 19, fig. 3, 4.

*Linn. Trans.* viii. p. 38.

*Dorset Catal.* p. 28, tab. 12, fig. 4.

*Dillwyn*, *Descript. Catal.* p. 49.

*Turton*, *Conch. Dict.* p. 106.

*Mya ovalis.* *Donovan*, *British Shells*, iii. tab. 89.

*Montagu*, Test. Brit. p. 34.

*Turton*, *British Fauna*, p. 146.

*Mus. nost.* In most of our rivers.

Shell an inch and a quarter long, and nearly three inches broad, narrow oval, covered with a yellowish-green skin, a little flexuous at the anterior side and slightly contracted at the margin near the middle; inside perlaceous, with often a fawn-colored tint.

ovata.  
3.

*Mysca testâ ovatâ, anticè attenuatâ, margine subarcuato, umbonibus corrugatis.*

Shell oval, tapering to the anterior end, with the margin slightly arcuated, and the beaks wrinkled.

*Mya ovata.* Linn. Trans. viii. p. 39.

Wood, Conch. p. 105, tab. 19, fig. 5.

Dillwyn, Descript. Catal. p. 50.

Turton, Conch. Dict. p. 106.

*Mya ovalis.* Montagu, Test. Brit. p. 563.

*Mya depressa.* Donovan, British Shells, iii. tab 101.

*Musculus angustior.* Lister, Conch. tab. 147, fig. 2.

*Mus, nost.* From the Avon and Froome, Wiltshire.

Shell an inch and a half long, and two inches and a half broad, covered with a brownish-green skin, much longer in proportion to its breadth than the two last, rather depressed, often radiate: the margin is mostly arched a little outwardly, sometimes contracted in the middle, and sometimes with the anterior end slightly falcate; but may be distinguished by its more regularly oval shape.

solida.  
4.

*Mysca testâ crassâ solidâ subcylindricâ, anticè conico-acuminatâ, umbonibus corrugatis.*

Shell thick solid and somewhat cylindrical, conically tapering to a point at the anterior end, and the beaks wrinkled.

*Tab. nost. 16, fig. 2.*

*Mya ovata.* Donovan, British Shells, iv. tab. 122.

*Mus. nost.* From the Avon, near Bristol.

Shell two inches long, three and a half broad, and nearly as deep as it is long, covered with a blackish-brown skin, under which it is of the richest pearly lustre; thick and [ponderous, with the margin thick and very obtuse, nearly cylindrical about the hinge, from which it regularly tapers in a conical manner to the anterior side: beaks rugged, and often decorticated.

Montagu, at p. 36, is of opinion, that this is only a variety of *Mysca ovata*: but a series of each of them, from the Avon and the Froome, has sufficiently convinced us of their specific distinction. One is uniformly flat and thin; the other is nearly cylindrical and thick.

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56. CYCLAS—BRUGUIERE.

*Testa orbicularis vel ovata, æquivalvis, clausa. Cardo dentibus duobus minutis divergentibus: lateralibus utrinque, valvæ alterius didymis. Ligamentum externum.*

Shell orbicular or oval, equivalve, closed. Hinge with two minute divergent teeth: and lateral ones on each side, which are double in one of the valves.

Besides the general outline, this genus is distinguished by the form and number of the teeth. The primary ones are very minute, consisting of a triangular or cloven tooth with an oblique laminar one in one valve, closing between two plain laminar divergent teeth in the other valve: the lateral teeth are transverse, flat and somewhat pointed, placed on each side the hinge, single in one of the valves, and closing between double ones in the other valve.

\* *suborbiculares, æquilaterales. 1-3,*  
somewhat orbicular and equilateral.

rivicola. 1. *CYCLAS testâ suborbiculari æquilaterali convexâ opacâ, striis transversis confertis regularibus.*

Shell somewhat orbicular equilateral convex and opaque, with regular close-set transverse striæ.

*Tab. nost. II, fig. 13.*

*Mus. nost.* From the Thames, and Oxford.

Shell three quarters of an inch in diameter, covered with a blackish-brown skin, much more orbicular and regularly striate than the next species, and not so globular: it is sometimes marked with a few transverse paler zones, but has not the single deep groove which generally distinguishes the *Cyclas cornea*, and is more opaque, and blueish on the inside.

cornea: 2. *CYCLAS testâ subrhombico-globosâ æquilaterali subdiaphanâ transversim substriatâ, sulco unico.*

Shell somewhat rhombic and globular equilateral semitransparent, with irregular transverse striæ and a single groove.

*Tab. nost. 11. fig. 14.*

- Tellina cornea. *Linn. Syst. Nat. p. 1120.*  
*Gmelin, Syst. p. 3241.*  
*Turton, Linn. Syst. iv. p. 197.*  
*Chemnitz, vi. p. 136, tab. 13, fig. 133.*  
*Pennant, iv. p. 184, tab. 52, fig. 3.*  
*Linn. Trans. iii. p. 45, tab. 13, fig. 39, 40.*  
*Linn. Trans. viii. p. 59.*  
*Donovan, British Shells, iii. tab. 96.*  
*Wood, Conch. p. 196. tab. 46, fig. 3.*  
*Dillwyn, Descript. Catal. p. 104.*  
*Turton, Conch. Dict. p. 179.*
- Cardium corneum. *Montagu, Test. Brit. p. 86.*  
*Turton, British Fauna, p. 154.*  
*Dorset Catal, p. 32, tab. 7, fig. 2.*
- Cardium Nux. *Da Costa, p. 173, tab. 13, fig. 2.*
- Mus. nost.* Muddy streams, pools, and ditches.

Shell three eighths of an inch long, and half an inch broad, horn-color or yellowish, often bright yellow round the margin, faintly and irregularly striate transversely, of an oblong-globular shape, with a slight appearance of angularity at the anterior side: the single groove is mostly apparent, sometimes nearly central, often nearer the beaks or margin: inside rather glossy, yellowish or blueish: beaks central, prominent, obtuse.

CYCLAS *testá depressá pellucidá læviusculá æquilaterali anticè subangulatá, umbonibus tuberculosi.* lacustris, 3.

Shell flattish transparent nearly smooth equilateral and somewhat angular at the anterior side, with the beaks tubercularly prominent.

*Tab. nost. 11, fig. 18.*

- Tellina lacustris. *Gmelin, Syst. p. 3242.*  
*Turton, Linn. Syst. iv. p. 197.*  
*Chemnitz, vi. p. 139, tab. 13, fig. 135.*  
*Pennant, Brit. Zool. iv. p. 184.*  
*Linn. Trans. viii. p. 60.*  
*Wood, Conch. p. 197, tab. 47, fig. 5.*  
*Dillwyn, Descript. Catal. p. 104.*  
*Turton, Conch. Dict. p. 180.*
- Cardium lacustre. *Montagu, Test. Brit. p. 89.*  
*Turton, British Fauna, p. 154.*
- Pectunculus pusillus rostratus. *Lister, tab. 159, fig. 15.*  
*Mus. nost. Stagnant waters, and slow streams.*

Shell a quarter of an inch long, and a little more in breadth, slightly angular at one side, thin, transparent, often covered with an ochraceous coat, sometimes black towards the beak from the dried and shrunk animal, rather flat: beaks very prominent and obtuse, like tubercles, which however are less visible in the young ones.

\*\* *obliquæ, inæquilaterales, 4, 5.*  
 oblique and inequilateral.

annica.  
 4. CYCLAS *testâ obliquâ subdepressâ inæquilaterali transversim sulcatâ, umbonibus tumidis.*

Shell oblique rather flat inequilateral, with transverse grooves and the beaks tumid.



*Tab. nost.* 11, fig. 15.

*Gmelin*, Syst. p. 3242.

*Turton*, Linn. Syst. iv. p. 197.

*Chemnitz*, vi. p. 138, tab. 13, fig. 134.

*Pennant*, Brit. Zool. iv. p. 185.

*Linn. Trans.* viii. p. 60.

*Dorset. Catal.* p. 31, tab. 7, fig. 2. a.

*Wood*, Conch. p. 153, tab. 47, fig. 6.

*Dillwyn*, Descript. Catal. p. 105.

*Turton*, Conch. Dict. p. 168.

*Tellina rivalis.* *Linn. Trans.* iii. p. 44, tab. 13, fig. 27, 28.

*Donovan*, British Shells, ii. tab. 64, fig. 2.

*Cardium amnicum.* *Montagu*, Test. Brit. p. 86.

*Turton*, British Fauna, p. 154.

*Mus. nost.* In slow rivers and streams.

Shell about a quarter of an inch long, and three eighths of an inch broad, of a brownish or blueish horn-color, thin and semi-transparent, sometimes yellowish towards the margin, a little produced and narrower at one end, with regular transverse grooves; inside blueish: beaks prominent, obtuse, nearer one end.

*CYCLAS testá obliquá tumidá inæquilaterali transversim striolatá, um-* pusilla.  
5.  
*bonibus depressis.*

Shell oblique tumid inequilateral and obscurely striate transversely, with the beaks depressed.

*Tab. nost.* 11, fig. 16, 17.

*Tellina pusilla.* *Gmelin*, Syst. p. 3231.

*Turton*, Linn. Syst. iv. p. 187.

*Wood*, Conch. p. 152.

*Dillwyn*, Descript. Catal. p. 106.

*Mus. nost.* In slow streams and stagnant ponds.

Shell about the eighth of an inch long, and a little broader ; very convex thin and transparent, horn-color or yellowish, often covered with a rough coat, with obscure close-set transverse striæ : beaks near one end, not tumid as in the last species.

From the young of *Cyclas amnica* it is distinguished by its greater convexity, and the want of regular grooves between the raised striæ : and from the other species by its oblique outline, not having the beaks central.

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## ADDENDA.

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### XYLOPHAGA—TURTON.

*Testa ovato-globosa, æquivalvis, anticè hiantissima, posticè clausa, accessoriis cardinalibus instructa. Cardo edentulus infra marginem. Ligamentum nullum.*

Shell globular-oval, equivalve, very open at the anterior side and closed behind, furnished with accessorial valves about the hinge. Hinge without the long curved tooth under the margin. Ligament none.

#### XYLOPHAGA.

*Tab. nost. 2, fig. 4 and 5.*

*Teredo dorsalis.* Turton, Conch. Dict. p. 185, and p. 16 of this work.

dorsalis.  
1.

We have lately had opportunities fully to examine and elucidate this new and interesting genus, important as it adds to our knowledge of those singular inhabitants of wood and stone, essentially differing from all other bivalves, in being furnished with accessorial valves or appendages, and which additional valves appear to stand as substitutes for the permanent ligament.

Fragments of a wreck, known to have been buried in the ocean for nearly half a century, near Berry-Head at the entrance of Torbay, have lately been dragged up, filled with magnificent specimens of the *Teredo navalis*, and this shell, in their most perfect state.

Like the *Teredo* it inhabits the interior of wood which has been some time under salt water, penetrating to the depth of from half an inch to an inch, forming for itself an oval receptacle or cavity, and having a very small and single external orifice.

The valves are shaped like those of *Teredo*, being furnished with a triangular striated projection in front of the head of each: but it wants the tube with its accessorial valves, is closed and rounded at the hinder part, and attaches itself to the inner surface of its cylindrical lodgment, by a tube of suction in the centre of the gape, such as is found in the *Gastrochæna Pholadia*. There is also a strong round muscular impression in each valve: and from any of the known species of the *Teredo*, the valves may be distinguished by the internal longitudinal rib.

Its habitation in wood naturally separates it from the *Pholas*, from which it also differs in the triangular striated projection at the top of each valve, a character always present in the piercers of wood, and never in the corrodors of stone. And it most essentially differs both from the *Pholas* and the *Teredo*, in wanting the long curved tooth originating from the hollow under the inner margin of the valves, having only a slender curved process upon the cardinal margin itself, meeting a smaller and slightly cloven one in the opposite valve.

At the hinge on the back are a pair of accessorial valves, something resembling the foliations of a calyx, represented as magnified at fig. 5 of our plate.

It appears to have the same alliance to the *Teredo*, as the *Gastrochæna* has to the *Pholas*.

Careful maceration and dissection of some living specimens of the *Pholas lamellata*, and *Pholas crispata*, having satisfied us that there are small accessorial valves at the back of each. We suppose therefore that it may be considered as an established conclusion, that in those bivalve shells which are furnished with accessorial valves or appendages, of a different shape and structure from the primary ones, there is no permanent ligament; and that when there is a permanent ligament, either externally or internally, there are no accessorial valves.

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#### TEREDO.

*TEREDO valvis posticè auriformibus auriculis reflexis, accessoriis transversis malleiformibus.* Malleolus.

Shell with the valves ear-shaped behind and the auricles reflected, the accessorial valves transverse and mallet-shaped.

*Tab. nost. 2, fig. 19.*

*Mus. nost.* From timber in Torbay.

Shell a quarter of an inch in diameter; and is distinguished from the *Teredo navalis*, in having distinct auricles underneath,

of an oblong shape, and detached on their internal edge, as in the *Teredo bipennata*; in having the striæ on the triangular processes in front remote and not half as many in number; and in the shape of the accessorial valves, which are transverse and not unlike a mallet, as is represented something magnified in our plate, and whence its specific name. From *Teredo Bipennata* it differs in the accessorial valves: and from the *Teredo Nana* in the distinct auricles underneath, a character not found in this last species; and in the want of the strong conic tooth on the cardinal margin.

In some late heavy gales, a piece of spar, supposed to have formed part of the Venerable man of war, wrecked in Torbay about fifteen years since, was drifted into the bason of Torquay, covered with the *Lepas anatifera*, and filled with this very distinct species of *Teredo*. The tube consists of a slight testaceous deposit on the surface of the chamber, the termination of which is slightly semiconcavated: the accessorial valves are terminal, and appear through a minute and rather elongated perforation on the outer surface of the wood.

Besides the *Xylophaga Dorsalis* above described, we have before us four distinct and well defined species of *Teredo*. Two of these are furnished with an ear-shaped process on the inside of the valves, at the outer angle under the hinge, having the inner margin detached and forming a straight transverse edge, and the outer margin much reflected: these are the *T. bipennata*, and the *T. Malleolus*; the former of which has the accessorial appendages very long, linear, and feathered; the latter has the accessorial appendages transverse and mallet-shaped, with a slender point rising like a handle from the middle, as is represented in our plate 2, fig. 19.

The two others have an auricular projection as in the two last, but the inner margin on the inside is furnished with a rib only and not a detached margin, and the outer edge is not reflected: these are the *T. navalis*, and the *T. nana*; the former of which has the accessorial appendages elongated and spoon-shaped, as is represented in our plate 2, fig. 3; the latter is distinguished by the strong projecting conic tooth on the cardinal margin, but the accessorial appendages we have not as yet detected.

*MYTILUS præcisus*, p. 24.

We have specimens of this shell taken from the interior of stone dredged in Torbay. It is a species of *Saxicava*, much allied to the *S. rugosa*, but is flatter and thinner, with the valves more unequal.

*MYA ovalis*, p. 33.

We observed a specimen of this species in the cabinet of Mrs. Griffiths, taken among the rocks in Torbay.

*SPHENIA Binghami*, p. 37.

Minute and delicate specimens are found not unfrequently among the fine sand sent us by Mr. Lyons, from Tenby.

*LISTERA compressa*, p. 51.

It is probable that there may be two species of this genus, as, among our specimens gathered from different habitats, we observe some which have two distinct denticles in one valve and one in the other, all of them strong and erect; others have three additional denticles in one valve, and two in the other, all oblique and rib-like. If so, the species with three oblique denticles in one valve

should be called *Listera fragilis*, with reference to the *Maetra fragilis* of Montagu's plate 5, fig. 1, which seems to be of this genus.

*AGINA purpurea*, p. 54.

In Mrs. Griffiths's cabinet we remarked a specimen exactly like our figure, of a purple color, dredged in Torbay.

*KELLIA rubra*, p. 57.

Found in prodigious numbers imbedded in the *Fucus pygmæus*, which partially clothes the rocks at half flood. In the month of June, the greater part of them are filled with perfectly formed young ones, about twelve in number, flat and of a pale red color, and completely filling up the cavity of the valves, to the destruction of the parent, like the *Cyclas cornea*. It is the only instance, within our knowledge, of a marine bivalve being strictly viviparous, or producing the fry in a perfectly formed state. Its animal structure and functions must consequently be analogous to the fresh water bivalves. This may account for the vast numbers collected together.

*MAETRA crassa*, p. 69.

Not uncommon at very low tides at the entrance of the rivers Dart and Teign: certainly a very distinct species from the *Maetra solida*.

*MAETRA glauca*; p. 73.

We have some fine specimens of this shell, dredged in Cornwall.

*PSAMMOBIA Scopula*, p. 98.

In the summer of 1820, great numbers of this species and the



*Ps. strigilata* were procured about Exmouth in a living state. Since that time, not a single specimen has been found. Like the shoals of migratory fish, it is probable that particular species of shellfish resort occasionally to particular localities, and as abruptly disappear. Our cabinet contains some specimens of the *Psammobia tæniata*, procured at Exmouth more than twenty years ago, at which time it is supposed they were not uncommon, but since which time not an individual has been found.

*ARCA reticulatá*, p. 168.

By the kindness of Dr. Mac Gee, of Belfast, this very beautiful shell is now before us. The breadth is more than twice as much as the length. One end is rounded, and the other obliquely truncate. The epidermis is of a pale chesnut, darker towards the ends, under which it is glossy white. From our *Arca perforans* it differs, in being much flatter, thinner, and semitransparent, with the beaks nearer the rounded end. Besides the fine decussations which cover the surface, there are about twelve raised longitudinal lines clothed with fine dark hair. The inside is striate longitudinally; and what specifically distinguishes it both from the *Arca perforans* and the *Arca barbata*, the inner margin is finely notched.

Dr. Mac Gee also informs us, that the *Mya nitida*, described by Mr. Wood, p. 103, with an obtuse tooth in each valve, has been found at Bangor, in Ireland.

## CONCORDANTIA SYSTEMATICO-SYNONYMICA ;

*A systematic and synonymic CONCORDANCE: exhibiting the Advancement of the Science for about 50 Years.*

LINNÉ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
<p>PHOLAS. Ph. Dactylus. Ph. candidus. Ph. crispatus. Ph. striatus.</p>	<p>PHOLAS. Ph. Dactylus. Ph. candidus. Ph. crispatus.  Ph. parvus.</p>	<p>PHOLAS. Ph. Dactylus. Ph. candidus. Ph. crispatus. Ph. striatus. Ph. parvus.</p>	<p>PHOLAS. Ph. Dactylus. Ph. candida. Ph. crispata. Ph. striata. Ph. parva. Ph. papyracea. Ph. lamellata. Ph. tuberculata.</p>
<p>TEREDO. T. navalis.</p>	<p>TEREDO. T. navalis.</p>	<p>TEREDO. T. navalis.</p>	<p>TEREDO. T. navalis. T. bipennata. T. nana. T. Malleolus. XYLOPHAGA. X. dorsalis.</p>
<p>MYA. M. arenaria. M. truncata.</p>	<p>MYA. TELLINA. M. arenaria. M. truncata.</p>	<p>MYA. LIGULA. M. arenaria. M. truncata.</p>	<p>MYA. M. arenaria. M. truncata. M. ovalis.</p>

LINNÉ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
M. arctica.	M. dubia.	M. Pholadia.	GASTROCHELENA. G. Pholadia. ANATINA. An. arctica. An. prætenuis. An. pubescens. An. distorta. An. declivis. An. truncata.
	T. fragilis. M. declivis.	M. prætenuis. M. pubescens. M. distorta.	PANOPÆA. P. Glycymeris. CORBULA.
	M. inæquivalvis.	C. Nucleus. LYONSLA. L. striata.	
	M. striata.		
	M. suborbicularis.	SPHENIA. Sph. Binghami. Sph. Swainsoni. KELLIA. K. suborbicularis. MONTACUTA.	
	M. bidentata. M. ferruginosa. L. substriata.		M. bidentata. M. ferruginosa. M. substriata. M. oblonga.
	L. prismatica.		ERVILIA. E. nitens. AMPHIDESMA. A. prismaticum. AGINA.
	M. purpurea.		
M. margaritifera.	M. margaritifera.	M. margaritifera.	A. purpurea. UNIO. U. margaritiferus. MYSCA.
M. Pictorum.	M. ovalis. M. Pictorum.	M. Pictorum. M. Batava. M. ovata. M. solida.	

LINNÉ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
<p style="text-align: center;">SOLEN.</p> <p>S. Siliqua. S. Ensis. S. Vagina.</p> <p>S. Legumen. S. vespertinus. S. strigilatus.</p> <p>S. Minutus.</p>	<p style="text-align: center;">SOLEN. TELLINA.</p> <p>S. Siliqua. S. Ensis. S. Vagina. S. pellucidus.</p> <p>S. Legumen. T. depressa.</p> <p>S. Cultellus.</p>	<p style="text-align: center;">SOLEN.</p> <p>S. Siliqua. S. Ensis. S. Vagina. S. pellucidus. S. Novacula.</p> <p>S. Legumen. S. vespertinus.</p> <p>S. antiquatus. S. fragilis.</p> <p>S. minutus.</p> <p>S. squamosus.</p>	<p style="text-align: center;">SOLEN.</p> <p>S. Siliqua. S. Ensis. S. Vagina. S. pellucidus. S. Novacula. S. Ligula.</p> <p style="text-align: center;">PSAMMOBIA.</p> <p>Ps. Legumen. Ps. vespertina. Ps. strigilata. Ps. antiquata. Ps. teniata. Ps. Scopula. Ps. diclivis. Ps. florida. Ps. costulata.</p> <p style="text-align: center;">HIATELLA.</p> <p>H. minuta. H. oblonga.</p> <p style="text-align: center;">LEPTON.</p> <p>L. squamosum. L. nitidum.</p>
<p style="text-align: center;">TELLINA.</p> <p>T. Donacina. T. bimaculata.</p>	<p style="text-align: center;">TELLINA.</p> <p>T. trifasciata.</p> <p>T. planata. T. crassa.</p>	<p style="text-align: center;">TELLINA. CARDIUM.</p> <p>T. Donacina. T. bimaculata. T. tennis. T. crassa. T. fausta. T. proficua. T. squalida. T. lata. T. striata. T. Fabula. T. similis. T. maculata.</p>	<p style="text-align: center;">TELLINA.</p> <p>T. Donacina. T. bimaculata. T. tennis. T. crassa. T. crassa ? T. crassa ? T. depressa. T. punicea. T. striata. T. Fabula. T. similis. T. maculata.</p>

LINNÉ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
<p>T. Fervensis. T. solidula. T. fragilis.</p>	<p>T. incarnata. T. carnaria.</p>	<p>T. Fervensis. T. solidula.</p>	<p>PSAMMOBIA. Ps. Ferroensis. Ps. solidula. Ps. fragilis. Ps. Laskeyi. Ps. polygona.</p>
<p>T. lactea.</p>		<p>T. Laskeyi. T. polygona.</p>	<p>PANDORA. P. margaritacea.</p>
<p>T. carnaria T. divaricata. T. pisiformis.</p>		<p>T. inæquivalvis.  T. lactea. T. rotundata. T. Radula.</p>	<p>LUCINA. L. lactea. L. rotundata. L. Radula. L. alba. L. Leucoma.</p>
<p>T. cornea.</p>	<p>T. cornea.</p>	<p>T. flexuosa.  T. carnaria. C. arcuatum. C. discors.</p>	<p>CRYPTODON. Cr. flexuosus. STRIGILLA. St. carnaria. St. divaricata. St. pisiformis.</p>
<p>CARDIUM. C. edule. C. aculeatum. C. ciliare. C. echinatum. C. lævigatum. C. medium. C. serratum.</p>	<p>CARDIUM. C. edule. C. aculeatum. C. ciliare. C. echinatum. C. lævigatum;</p>	<p>C. rubrum.  C. corneum. C. amnicum. C. lacustre.</p>	<p>KELLIA. K. rubra. CYCLAS. C. cornea. C. amnica. C. lacustris. C. pusilla. C. rivicola.</p>
		<p>CARDIUM. C. edule. C. aculeatum. C. ciliare. C. echinatum. C. lævigatum. C. medium.  C. tuberculatum.</p>	<p>CARDIUM. C. edule. C. aculeatum. C. aculeatum, Y. C. echinatum. C. lævigatum. C. medium. C. serratum. C. tuberculatum.</p>



LINNÉ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
D. Irus	T. Cornubiensis	D. castanea D. Irus	CAPSA. C. castanea PETRICOLA. P. Irus
<p style="text-align: center;">VENUS.</p> V. verrucosa V. Gallina V. virginea V. decussata V. Cassina V. Dysera V. cancellata	<p style="text-align: center;">VENUS.</p> V. Erycina V. rugosa V. rhomboides V. literata  V. ovata V. sinuosa	<p style="text-align: center;">VENUS.</p> V. verrucosa V. striatula V. virginea V. decussata V. Casina V. Dysera  V. ovata V. sinuosa V. Pullastra V. Paphia V. subcordata V. granulata V. aurea V. reflexa V. laminosa V. substriata	<p style="text-align: center;">VENUS.</p> V. verrucosa V. Gallina V. virginea V. decussata V. Casina V. Dysera V. cancellata V. ovata V. sinuosa V. Pullastra V. fasciata V. subcordata V. granulata V. aurea V. reflexa V. laminosa V. substriata V. Sarniensis V. ænea V. nitens V. pallida
V. exoleta V. Chione V. Tigerina	V. exoleta	V. exoleta V. Chione V. Tigerina V. lactea V. Guineensis	<p style="text-align: center;">CYTHEREA.</p> C. exoleta C. Chione C. Tigerina C. sinuata C. Guineensis
V. deflorata	V. deflorata	V. deflorata V. sulcata V. Danmoniensis V. Scotica	<p style="text-align: center;">PSAMMOBIA, CRASSINA.</p> Ps. deflorata Cr. sulcata Cr. sulcata Cr. Scotica





LINNÉ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
<p>O. maxima O. Jacobæa O. varia O. opercularis</p> <p>O. Pusio</p>	<p style="text-align: center;">PECTEN.</p> <p>P. maximus P. Jacobæus P. varius P. opercularis</p> <p>P. Pusio P. obsoletus P. lævis P. glaber</p>	<p style="text-align: center;">PECTEN.</p> <p>P. maximus P. Jacobæus P. varius P. opercularis P. lineatus</p> <p>P. distortus P. obsoletus P. lævis P. glaber</p> <p>P. fragilis P. subauriculatus</p>	<p style="text-align: center;">PECTEN.</p> <p>P. maximus P. Jacobæus P. varius P. opercularis P. opercularis, Var P. Pusio P. sinuosus P. obsoletus P. lævis P. glaber P. Islandicus P. subrufus P. tumidus</p> <p style="text-align: center;">LIMA.</p> <p>L. bullata L. subauriculata</p>
<p style="text-align: center;">ANOMIA.</p> <p>A. Ephippium A. Squamula A. electrica A. Cepa</p>	<p style="text-align: center;">ANOMIA.</p> <p>A. Ephippium A. Squamula</p>	<p style="text-align: center;">ANOMIA.</p> <p>A. Ephippium A. Squamula</p> <p>A. aculeata A. undulata A. cymbiformis</p> <p>T. Cranium</p>	<p style="text-align: center;">ANOMIA.</p> <p>A. Ephippium A. Squamula A. electrica A. Cepa A. aculeata A. undulata A. cylindracea A. punctata A. striolata A. fornicata A. tubularis</p> <p style="text-align: center;">TEREBRATULA.</p> <p>T. Cranium T. Psittacea</p>
<p style="text-align: center;">MYTILUS.</p> <p>M. Crista Galli M. edulis M. unguulatus</p>	<p style="text-align: center;">MYTILUS.</p> <p>M. edulis</p>	<p style="text-align: center;">MYTILUS.</p> <p>M. Crista Galli M. edulis M. unguinus</p>	<p style="text-align: center;">MYTILUS. OSTREA.</p> <p>O. Crista Galli M. edulis M. unguulatus</p>

LINNÆ, ed. 12.	PENNANT, ed. 3.	MONTAGU.	TURTON.
<p>M. Modiolus M. barbatus</p> <p>M. Hirundo</p> <p>M. Cygneus M. Anatinus</p>	<p>M. incurvatus M. pellucidus</p> <p>M. Modiolus M. curtus M. umbilicatus</p> <p>M. Cygneus M. Anatinus</p>	<p>M. incurvatus M. pellucidus</p> <p>M. rugosus M. præcisus</p> <p>M. Modiolus M. barbatus M. umbilicatus M. striatus M. discors</p>	<p>M. incurvatus M. pellucidus SAXICAVA.</p> <p>S. rugosa S. præcisa S. Pholadis MODIOLA.</p> <p>Mo. Modiolus Mo. Modiolus, Var Mo. Modiolus, Var Mo. Modiolus, Y. Mo. discors Mo. discrepans Mo. Gibsii AVICULA.</p> <p>A. Hirundo ANODON.</p> <p>An. Cygneus An. Anatinus An. Avonensis An. paludosus</p>
<p>PINNA.</p> <p>P. pectinata</p>	<p>PINNA.</p> <p>P. fragilis</p>	<p>PINNA.</p> <p>P. pectinata P. ingens P. muricata</p>	<p>PINNA.</p> <p>P. pectinata P. ingens P. muricata P. fragilis P. papyracea</p>
		<p>PATELLA.</p> <p>P. distorta</p>	<p>DISCINA.</p> <p>D. Ostreoides</p>



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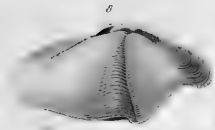
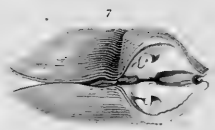
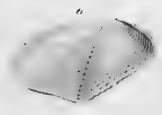
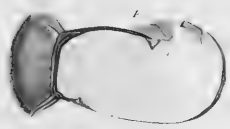
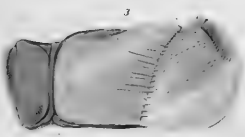
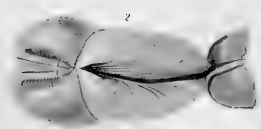
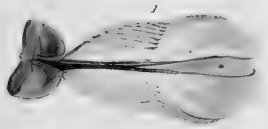
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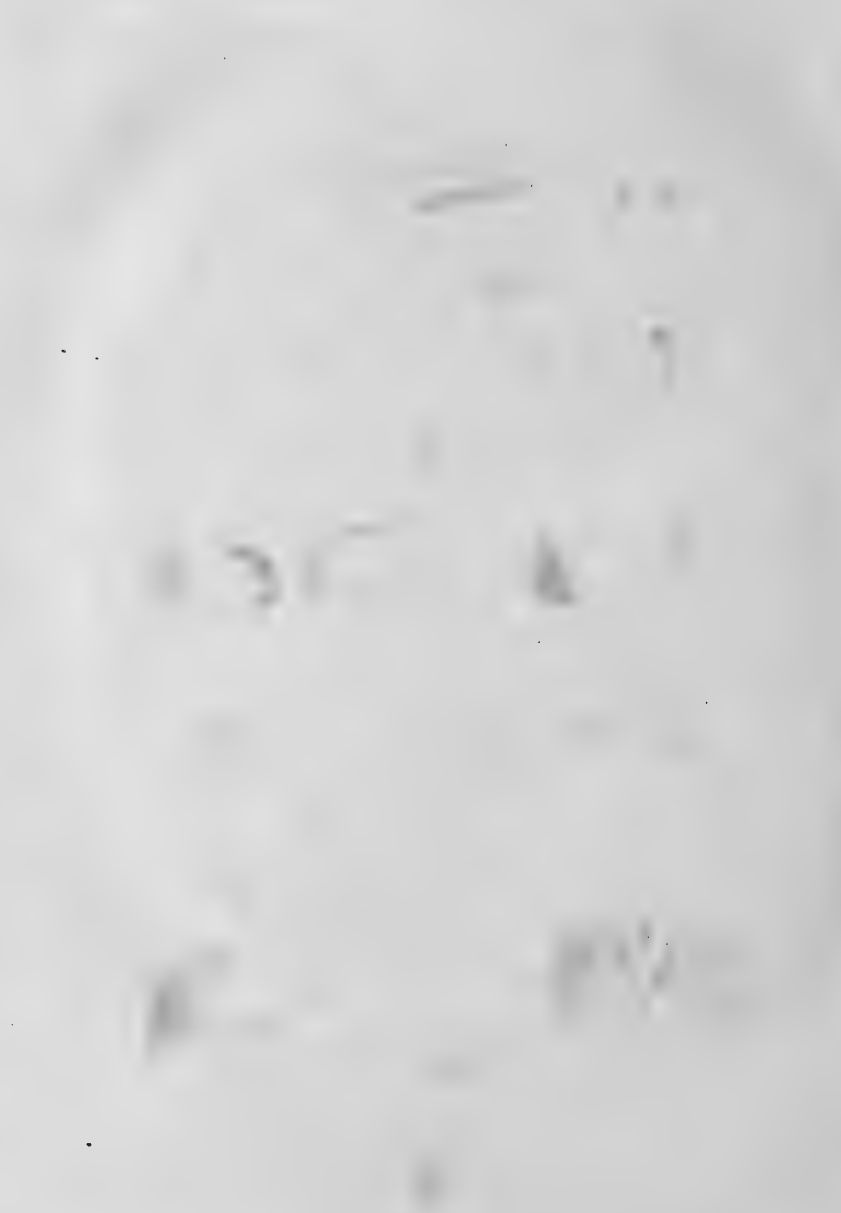
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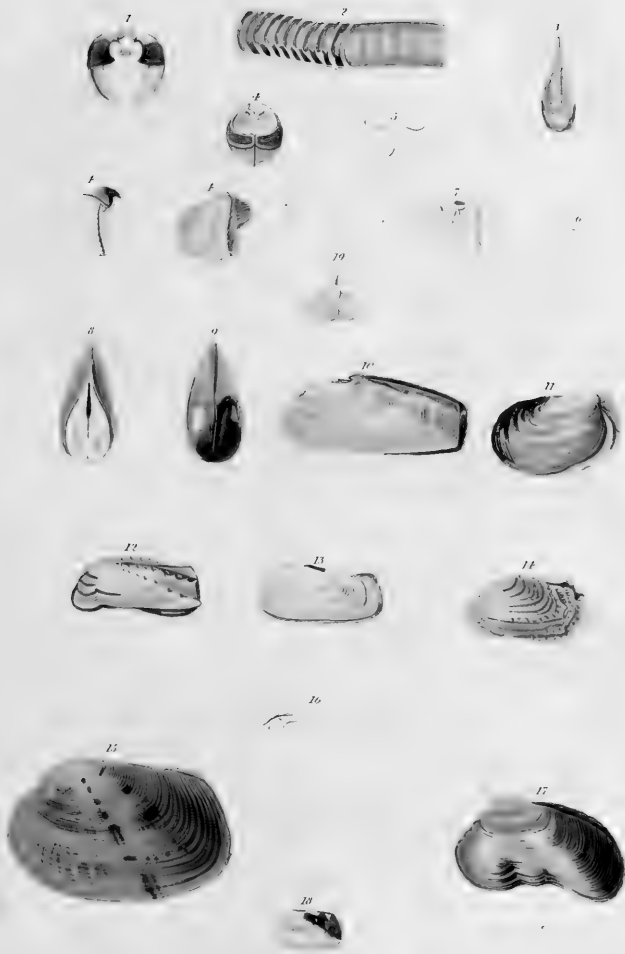
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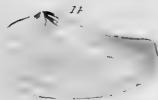
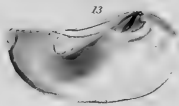
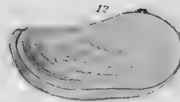
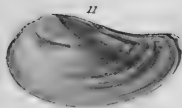
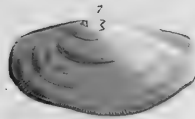
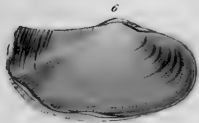
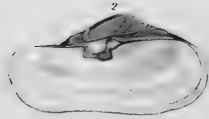
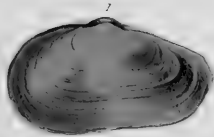




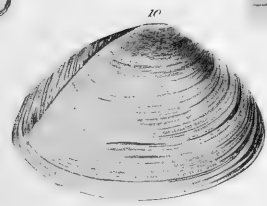
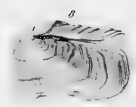
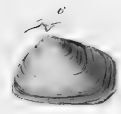
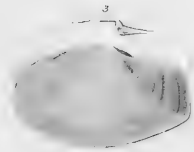
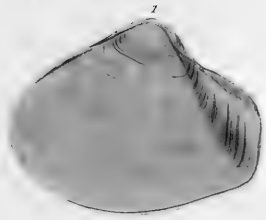




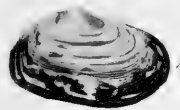
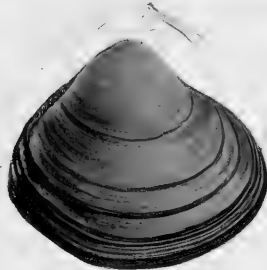
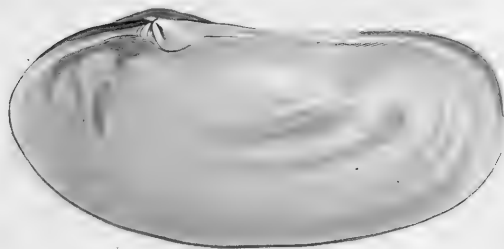
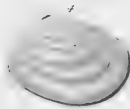
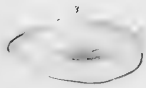
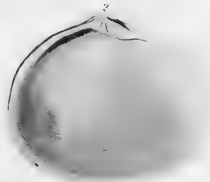
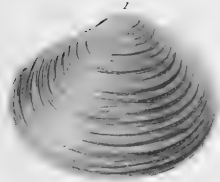










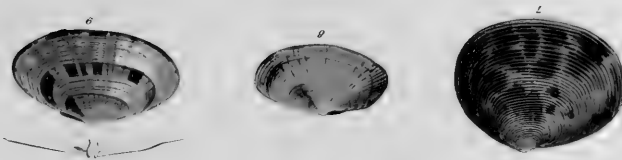
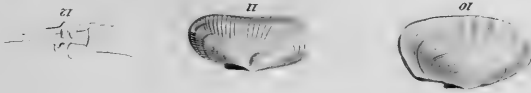
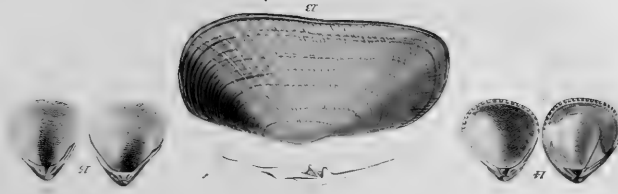


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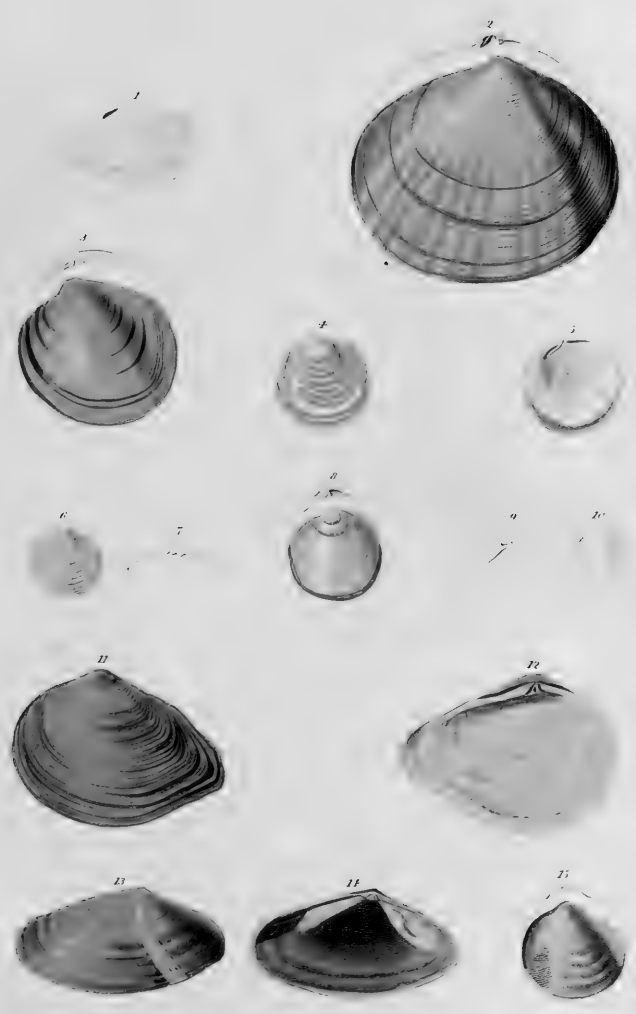
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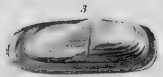
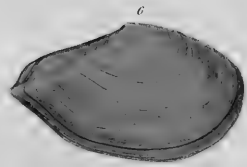
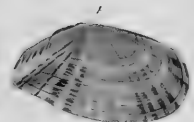
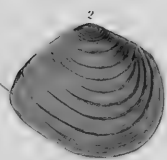
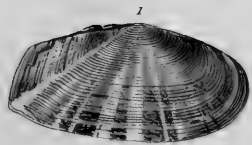
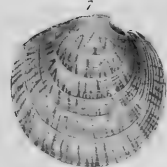
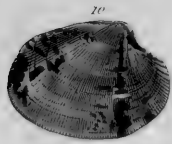
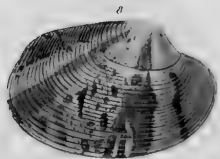
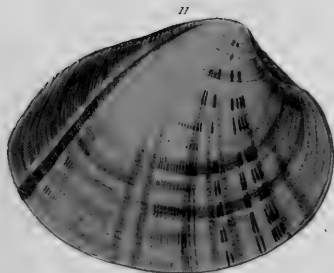




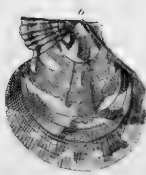
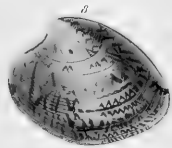
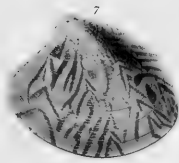
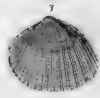
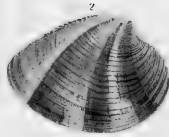
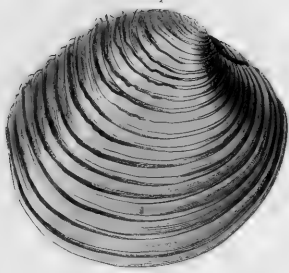






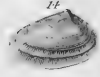
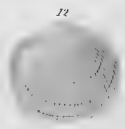
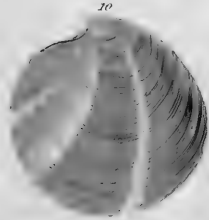
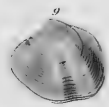
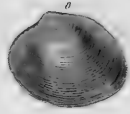
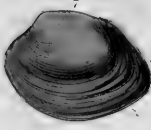
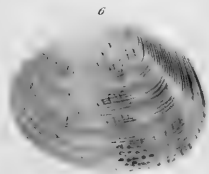
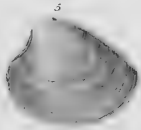
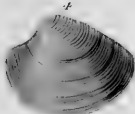
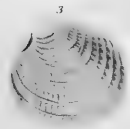
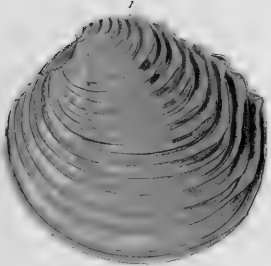




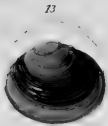
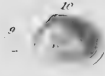
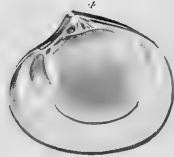
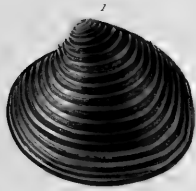


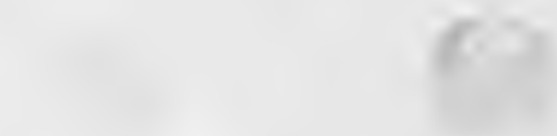


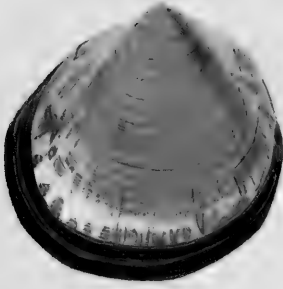




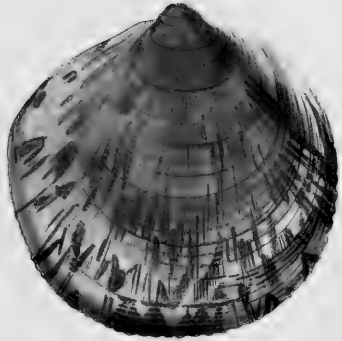








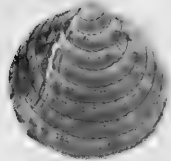
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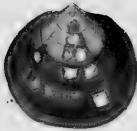
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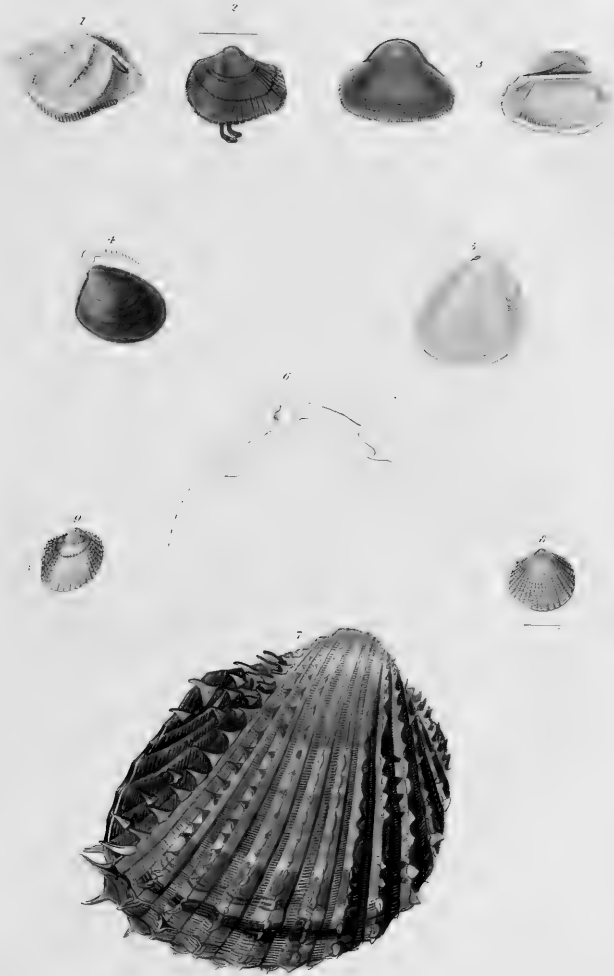


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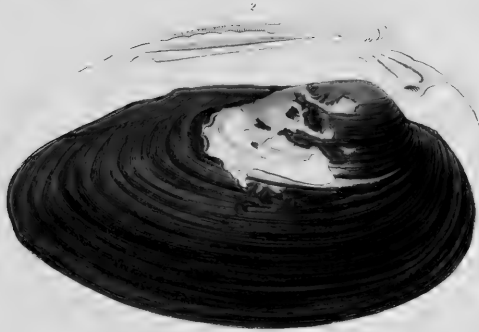
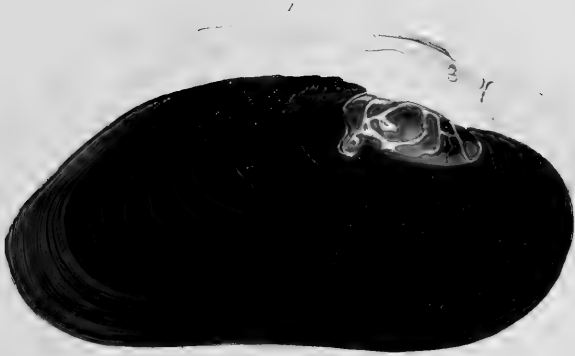








12









Faint, illegible text or markings in the top center.

Faint, illegible text or markings in the top right corner.

Faint, illegible text or markings in the middle left area.

Faint, illegible text or markings in the middle center area.

Faint, illegible text or markings in the middle right area.

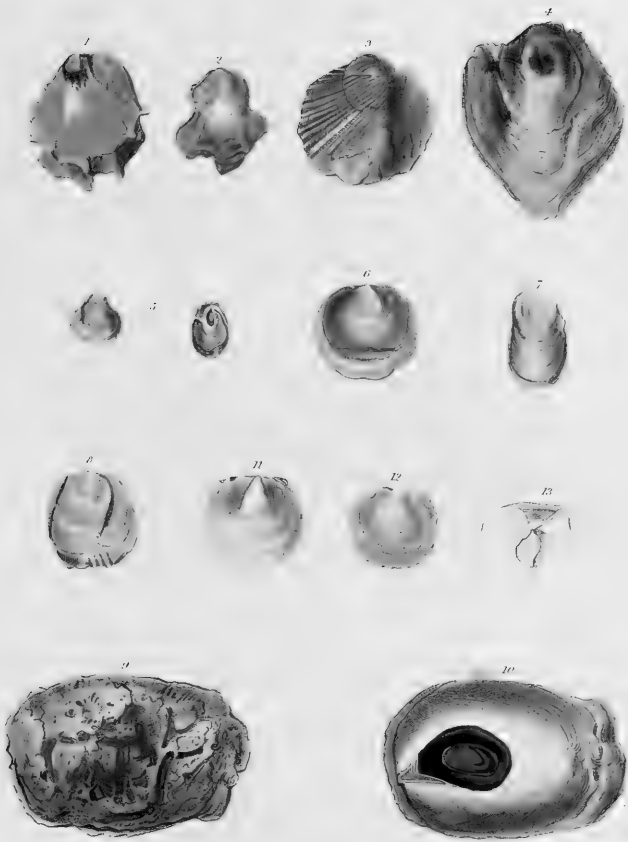
Faint, illegible text or markings in the lower middle left area.

Faint, illegible text or markings in the lower middle center area.

Faint, illegible text or markings in the lower middle right area.

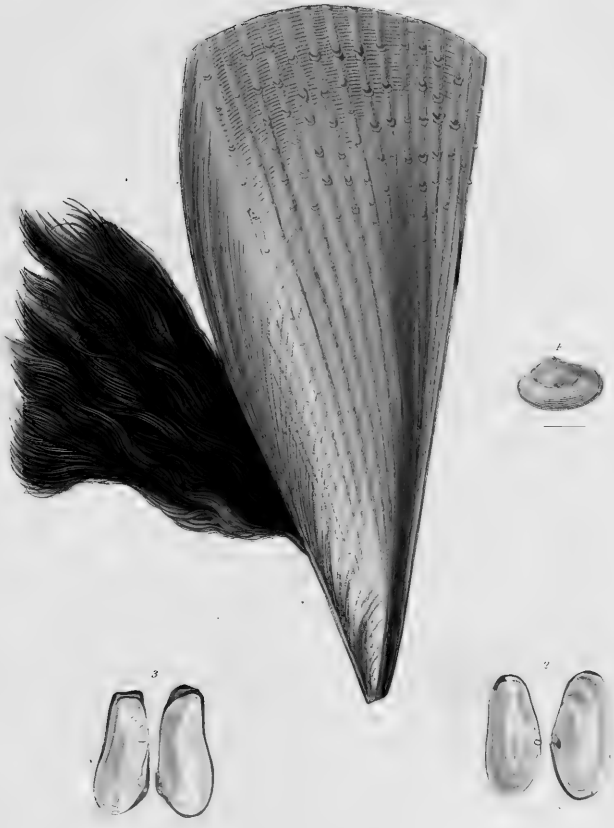




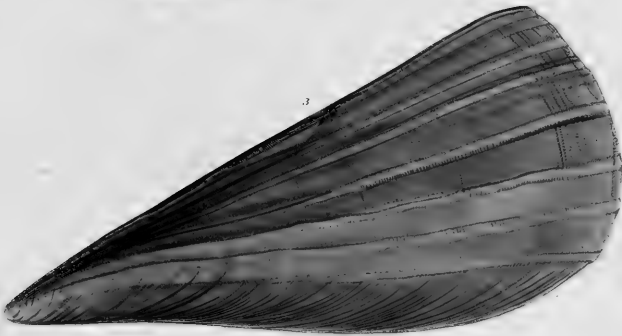
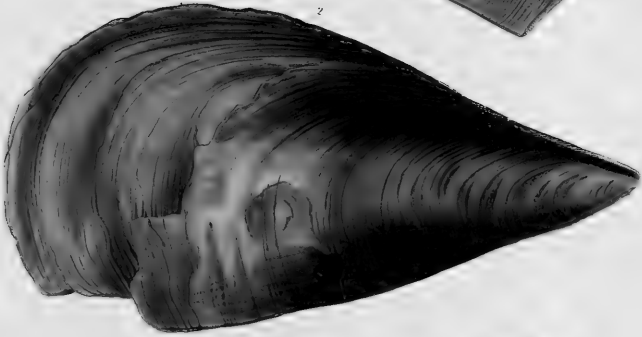




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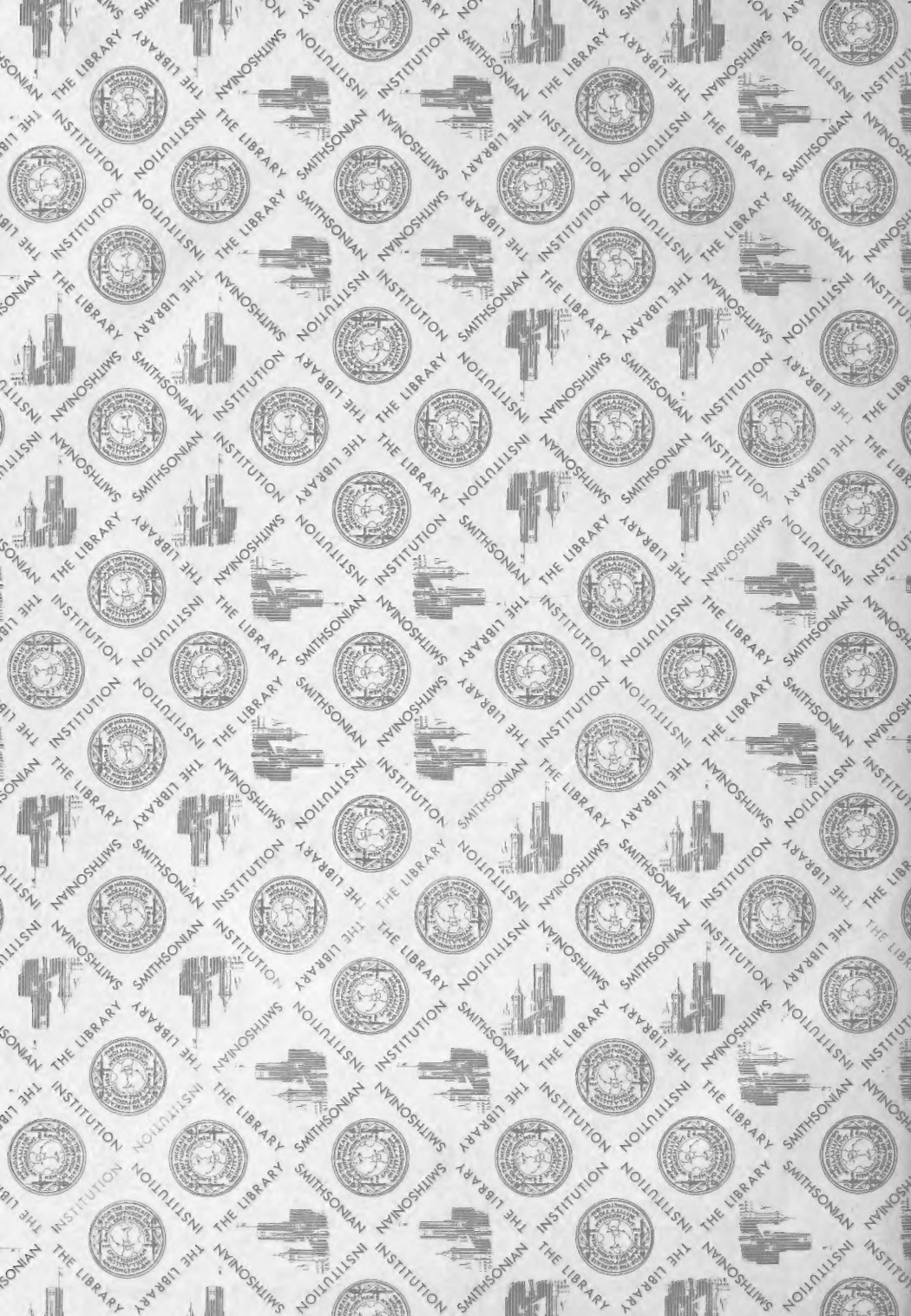


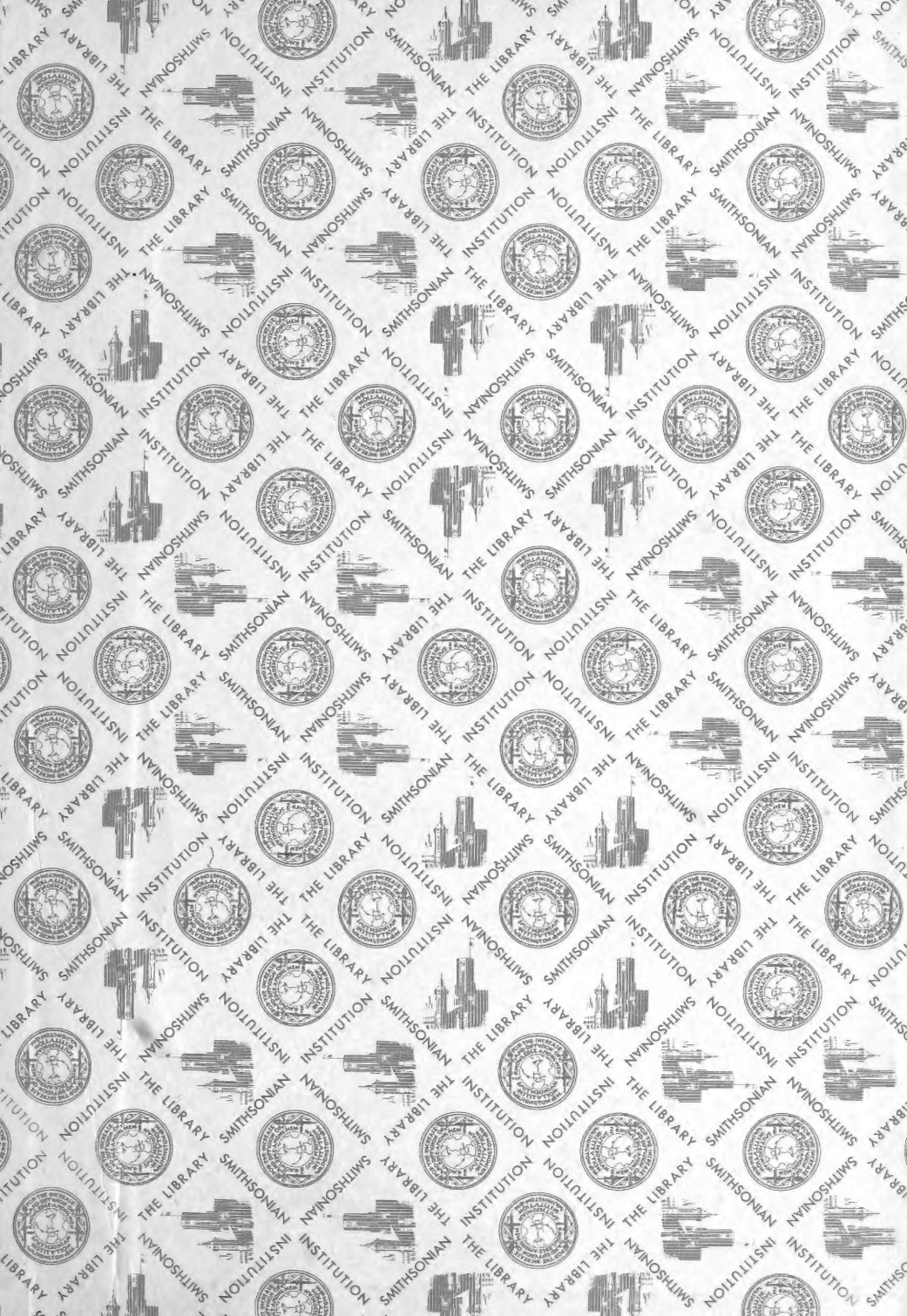












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