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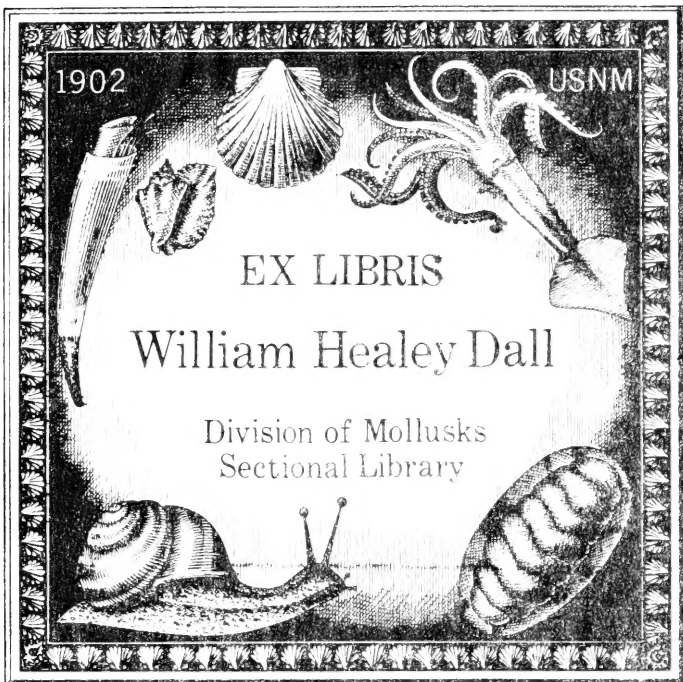
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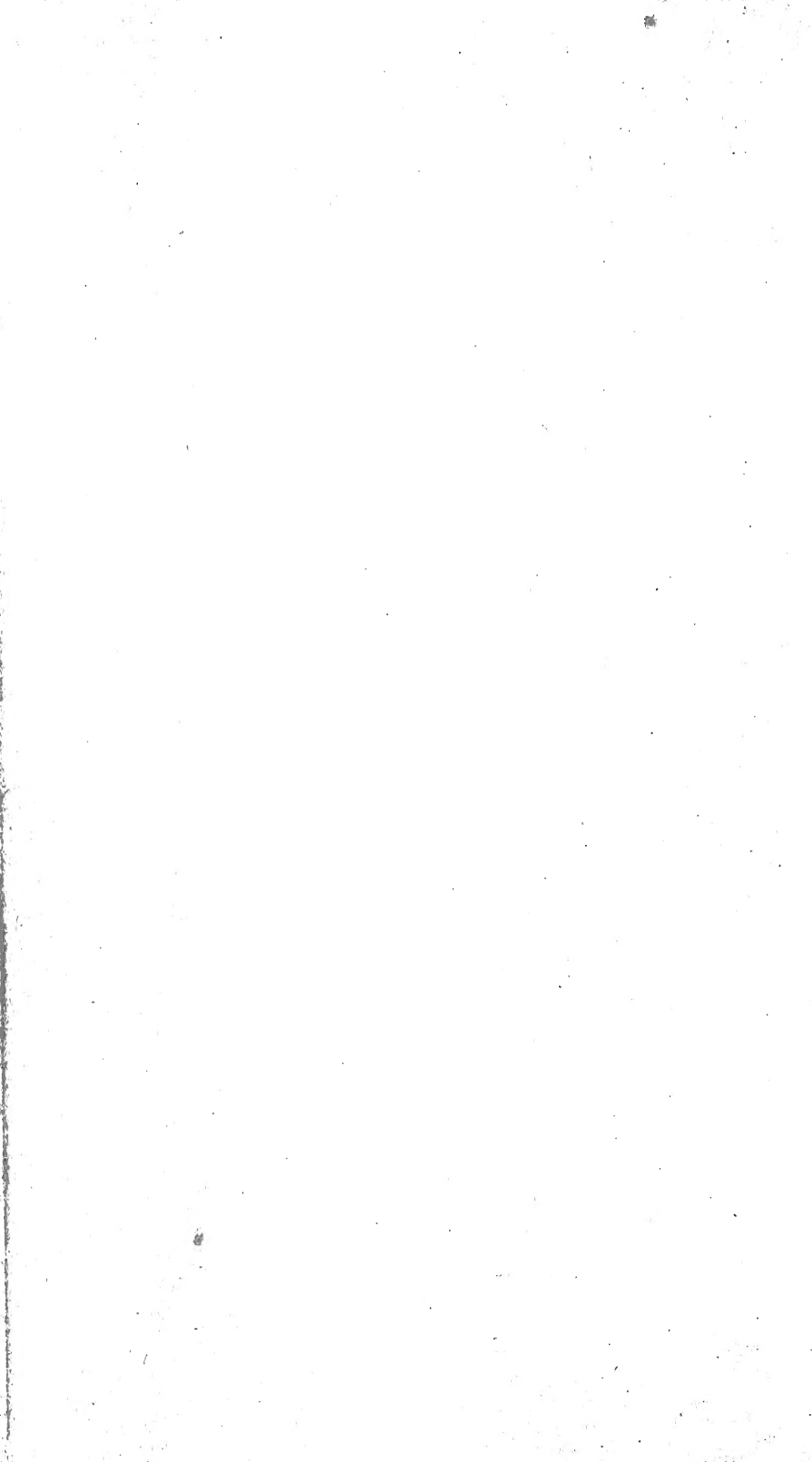
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THE NATURALIST'S MISCELLANY

or

coloured figures of natural objects;
drawn and described from nature

by

GEORGE SHAW

Figures by F. P. Nodder

(Mollusks from volumes 1 - 12)

London

1790 - 1801



1841 - 66, C

Index and dates of publication

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(Data from Sherborn: Ann. Mag. Nat. Hist.,
ser. 6, vol. 15, 1895, pp. 375-376)

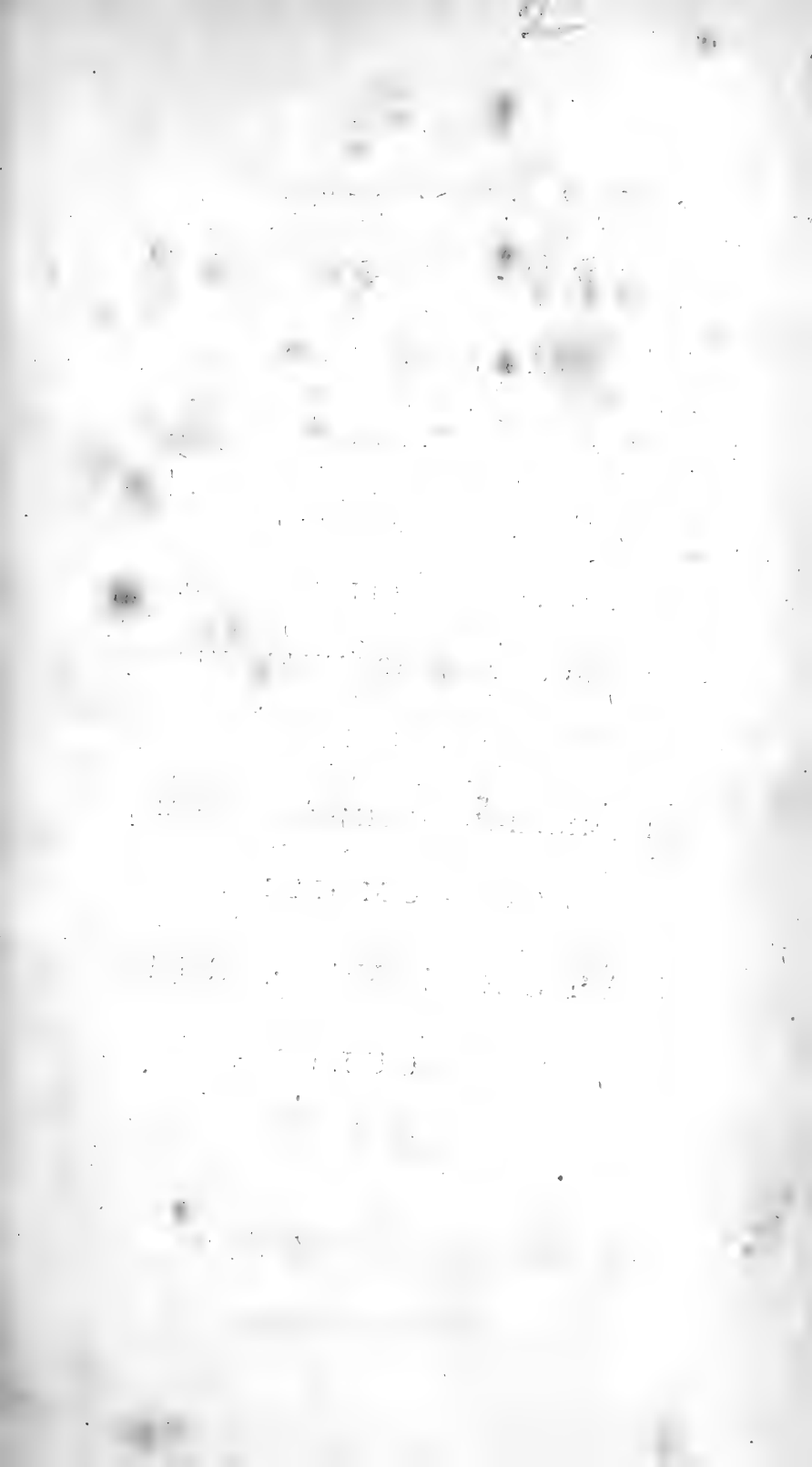
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23 SHELLS





VIRO ORNATISSIMO
JOSEPHO BANKS,
BARONETTO,
REGIÆ SOCIETATIS LONDINENSIS
EXIMIO PRÆSIDI:
PEREGRINATORI CELEBERRIMO,
INGENII ACUMINE, LABORUM PATIENTIA,
PHYSICIS
PER OMNE ÆVUM COMMENDATISSIMO,
SECUNDUM HUNC
NATURÆ VIVARIII
FASCICULUM,
D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

HELIX HORTENSIS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, subdiaphana, fragilis.

Apertura coarctata, intus lunata, f. subrotunda :
segmento circulo dempto.

Lin. Syst. Nat. p. 1241.

CHARACTER SPECIFICUS, &c.

HELIX testa imperforata pallida, fasciis latis interruptis fuscis.

COCHLEA vulgaris major pulla maculata et fasciata hortensis.

List. Angl. tab. 2. fig. 2.

AN HELIX LUCORUM?

Lin.

Militat omnis amans, et habet sua castra Cupido :
Attice, crede mihi ; militat omnis amans.

Ov.

Helix vulgaris, seu ut communiter vocatur, Cochlea, in numero est animalium quæ ob vilitatem, formamque fordidam et abjectam, a plerisque contemni et negligi solent ; in quibus tamen plura fortasse discernere

cernere potest physicus quæ delectationem admirationemque excitent, quam vel in majoribus animalibus. Cochlearum enim anatome adeo miraculis plena est, ut de variis illarum partibus integrum volumen posset componi. Cum vero longis ambagibus speciatim has minutias describere lectoribus plurimis molestum fit, breviter tantum illa percurramus memoratu dignissima. Oculi Cochlearum in summitatibus duorum longiorum tentaculorum, seu ut vulgo vocantur, cornuum fiti sunt: quod licet a quibusdam physicis dubitatum sit, ab experimentis tamen et accuratissimis Swammerdamii investigationibus clare confirmatur: probatur quoque eos eosdem fere humores, tunicas, et vasa, quibus animalium majorum oculi instruuntur, continere. Non defuere qui Cochlearum cornua pro veris telescopiis naturalibus habuerunt, asserueruntque posse illas ea vel extendere vel contrahere pro distantia objecti ad quod oculos direxerint. Hæc autem idea structuram magis multimodam arguit, quam revera his organis tribuit Natura, et fortasse inter plurimas fit hæc hypothesis, quas ingenio suo indulgere solent nonnulli Naturæ speculatores.

Dentes Cochleæ sunt validi et acuti; omnesque corporis partes tam interiores quam exteriores ad animalis istius mores habitusque egregie accommodantur.

De miro generandi modo dicturus, lectores meos enixe orem necesse est ut nec me fabulas philosophicas fingere existiment, nec fidem suam deficere et immiui sinant.

Si quidem vera nobis referunt oculati Naturæ inter animalia inferiora investigatores, Cochlearum amores
inufitato

inufitato et ſibi peculiari quodam more promoventur ; ſemperque ipſum complexum præcedit mira formula, quæ pugnæ ſtatarix faciem omnino exhibet.

Cochleæ laſcivientes mutua vota telorum parvulorum iſtibus, quæ peracuta ſunt et quaſi cornea, ſibi invicem communicant ; illiſque refertam pharetram exiguam, in dextro latere cervicis ſitam, quamdiu permanferit illis conjunctionis deſiderium, intus geſtant. Emiſſo primo telo, illico reſpondet Cochlea vulnerata, et ſimile in amantem jaculatur ; ab illa telum alterum emittitur, rurfuſque ipſa invicem percutitur ; Cupidiniſque ſagittæ, quas per omne ævum cecinit fervidum poetarum et amantium ingenium, in ipſa tandem Natura revera inveniuntur. Peraſto hoc lepido prælio, coeunt Cochleæ, et deinde locum idoneum ubi ova ſua deponant ſollicite quæritant ; humidum nempe et opacum reſeſſum, vel ſub terræ gleba, vel cavo aliquo tegmine. Rotunda ſunt hæc ova, magnitudine fere piſorum parvulorum, coloris albi ſubpellucentis, et ſubſtantix mollis. Ex his excluduntur Cochleæ plene formatae, teſtas ſuas in dorſo ferentes, nec ullam aliam mutationem præter naturale molis incrementum ſubeunt. Hortis et pomariis damnum non leve inferre ſolent Cochleæ, et notatu dignum eſt, illas, ſi defecerit cibus ſucculentus, fruſtus nempe aut folia, corpora etiam dura et ficca rodere : memini enim egomet Helicem hortenſem, (qualis eſt illa quæ hic depingitur,) ſub vitro cujus diameter quatuor uncias ſuperabat incluſam, ſubſtratam chartam communem cæruleam una nocte uſque ad ipſius vitri marginem devoraſſe ; circulo relicto velut ab ipſo circino deſignato.

Ab experimentis Spallanzanii aliorumque probatur, Cochleas, abscissa aliqua parte, repullulandi facultatem habere: ipse enim Spallanzanius Cochleæ caput abscidit, quod, elapso certo tempore perfecte regerminabat. Hujus experimenti veritas, licet a nonnullis denegetur, ab aliorum tamen doctissimorum physicorum testimonio satis comprobatur.

Quanquam variis intervallis sagittas suas jaculentur Cochleæ, fatendum tamen est tabulam repræsentare illas plus æquo a se invicem remotas. Plerumque propius accedunt; immo interdum fit ut telum ipsum, gladii instar, in corpore opposito infixum stet, dum Cochlea quæ jaculum emiserit, recedit paululum, sagittam quasi commilitonis sui expectans.





Londoni: Published May 1879 by T. R. Nodder & Co. N. 3. Ranton Street.

THE
GARDEN SNAIL.



GENERIC CHARACTER.

The *Animal* a Slug.
Shell spiral, sub-pellucid.
Aperture semi-lunar.

SPECIFIC CHARACTER, &c.

SNAIL with a shell of a pale colour, with broad interrupted bands of brown.

The COMMON GARDEN SNAIL.

See to the fight the gentle warriors move,
And dart with harmless force the shafts of love!

The Snail is amongst the number of those animals which we are apt to overlook on account of their seemingly contemptible appearance, but which will perhaps open to our attentive survey a greater variety of curious particularities than most other creatures can exhibit. The anatomy of the snail is full of wonders, and a volume might be written on its history; but, without descending to a tedious narrative of all its parts, I shall only mention a few of the most remarkable ones. The eyes of Snails are situated on the tips of the two longest horns, and though their existence
has

has been questioned by some Naturalists, yet the accurate research of SWAMMERDAM has sufficiently proved their real nature, and that they are furnished with nearly the same humours, coats, and vessels as in most of the larger animals. Some authors have supposed the horns to be a kind of natural telescopes, and that the animal shortened or lengthened them according to the distance of the objects to which it directed them; but this idea seems to imply a more complicated structure than can be found in this organ, and, I believe, must be given up as one of those ingenious hypotheses which are too frequently entertained by speculative enquirers.

The teeth of the Snail are sharp and strong, and all the internal as well as external parts of the creature are admirably calculated by Nature for the mode of life to which it is destined.

But the most wonderful part of the history of the Snail, is its manner of breeding; and I must request my readers to summon all their philosophical faith to receive the surprising particulars.

If the observations of the most profound enquirers into the operations of Nature amongst the lower orders of animals may be depended upon, the amours of Snails are conducted in a manner very different from those of most other creatures, and are always preceded by a very extraordinary ceremonial, which has all the appearance of a regular combat.

When these animals are disposed to love, they signify their mutual wishes by launching several little darts at each other. These darts are of a very sharp form, and of a horny substance, and the animals are provided with

with a little quiver or reservoir of them during the breeding season: this internal quiver or repository of the darts is situated within the neck, and opens externally on the right side. Upon the discharge of the first dart, the wounded Snail immediately retaliates upon the aggressor, and discharges a similar one; the other again renews the battle, and is again in its turn wounded; and thus the darts of Cupid, so long and loudly celebrated by poets and lovers, and which are metaphorical with all the rest of the creation, are here completely realized. When the animals have continued for some time the combat just described, a reconciliation takes place, and they unite; after which they are solicitous to deposit their eggs in a place of safety. For this purpose they choose a moist, cool situation, generally under some little clod, or in some small sheltered cavity, in which they place them: they are perfectly round; about the size of very small pease, of a semi-transparent white colour, and of a soft substance: from these the young are hatched completely formed, and with their shells on their backs, and undergo no farther change than a gradual increase of size.

The depredations which these animals commit in gardens and orchards is very considerable, and it is remarkable that in defect of moist succulent food, as fruit and tender leaves, they will even attack substances of a hard and dry nature. I have known the common garden Snail here figured, when confined for one night under a glass of more than four inches in diameter, which was placed on a sheet of common blue paper, entirely devour the whole paper contained in the included

ded space, to the very edge of the glass, so that a circular piece seemed almost as accurately taken out, as if marked by a pair of compasses.

From the experiments of SPALLANZANI and others, it appears that Snails are possessed of a very considerable degree of reproductive power. SPALLANZANI in particular, has found that the whole head of a Snail may be cut off, and yet in a certain space of time will be reproduced. This has been denied by some, but its truth is established by experiments conducted by the most careful and accurate observers.

It is necessary to add, that the Snails in the annexed plate, are represented at somewhat too great a distance from each other; this is a circumstance which admits of great variation, but in general the animals make a nearer approach before they dart their spicula; and in some particular instances they have been known to approach so near during this action, that the dart has been infixed in the manner of a sword, in which case the animal that discharged it, withdraws again to some little distance, and seems to wait for a similar attack.

VOLUTA ARAUSIACA.



CHARACTER GENERICUS.

Animal Limax.

Testa unilocularis, spiralis.

Apertura ecaudata, subeffusa.

Columella plicata: Labio Umbilicove nullo.

Lin. Syst. Nat. p. 1186.

CHARACTER SPECIFICUS, &c.

VOLUTA testa alba fasciis transversis fulvis,
columella sex-plicata.

VEXILLUM ARAUSIACUM.

Rara hæc et perelegans concha generis LINNÆANI *Volutæ* nominati est species. Hanc ipsam ille nullibi descripsit. Communiter illam appellaverunt phyfici *Vexillum Arausiacum*. Indica est concha, et præcipue in insula Amboyna reperitur.

Fig. 1. Testa adulta. Fig. 2. Testa junior.

THE
ORANGE FLAG,
OR
ORANGE-STRIPED VOLUTE.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell unilocular, spiral.

Pillar or Column twisted or plaited.

SPECIFIC CHARACTER, &c.

WHITE VOLUTE, with orange-coloured transverse bands, and (generally) six plaits on the column.

LE PAVILLON D'ORANGE.

Argenv. Append.

Knorr. part 5, t. 1. f. 1.

The elegant and rare shell here figured, belongs to the Linnæan genus *Voluta*, but is not amongst the species described by LINNÆUS. Its general name amongst collectors is the Orange-Flag. It is an East-Indian shell, and is principally found in the island of Amboyna.

Fig. 1. The adult shell. Fig. 2. A somewhat younger shell.



2

ARGONAUTA ARGO.



CHARACTER GENERICUS.

Animal Sepia.

Testa univalvis, spiralis, involuta, membranacea, unilocularis.

Lin. Syst. Nat. p. 1161.

CHARACTER SPECIFICUS, &c.

ARGONAUTA carina utrinque subdentata.

Gmel. Syst. Nat. p. 3367.

NAUTILUS fulcatus.

Klein. ostr. t. 1. f. 3.

NAUTILUS tenuis.

Rumpf. mus. t. 18. f. 1. 4. A. B.

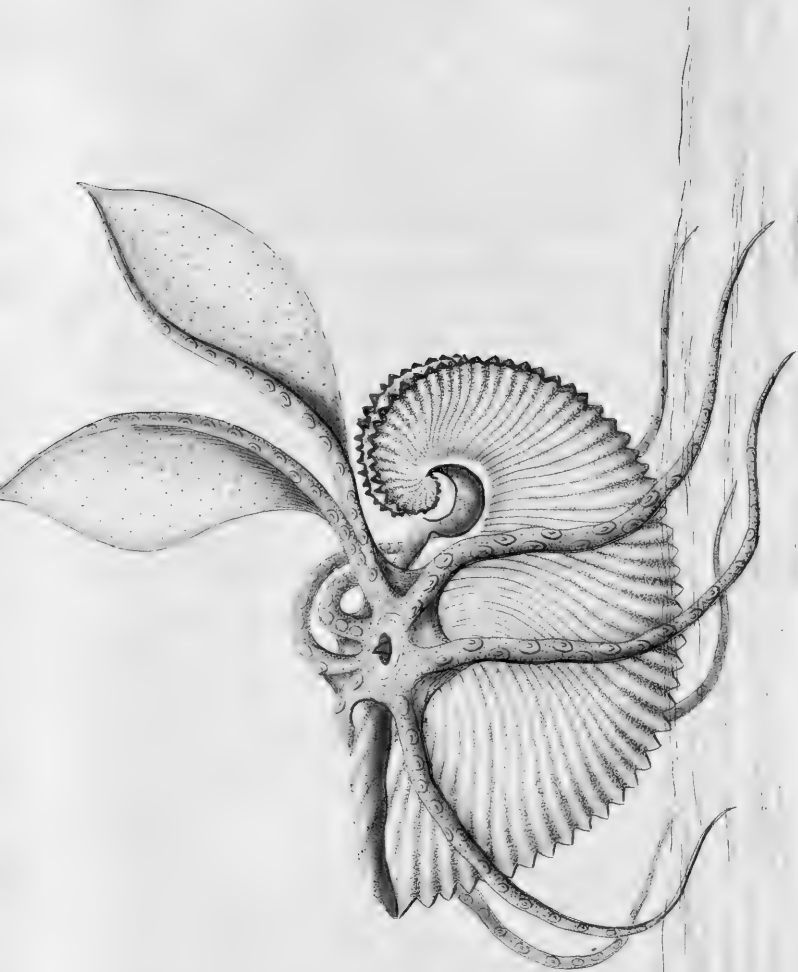
Utcunque inter animalia ejusdem familiæ eadem fere fit formæ partiumque similitudo, pauca tamen proferri possunt exempla, in quibus a norma sua insigniter aberrare solet natura; præcipue vero in classe testacea. Testarum enim univalvium (ut dicuntur) incolæ, generi Limacis simillimi sunt; bivalvium contra generibus Tethyos et Ascidiæ. Formæ hujus anomalæ nullum notabilius argumentum possit feligi quam in genere Argonautæ; vel Nautili qui papyraceus dicitur: ab omnibus enim aliis ejusdem divisionis adeo discrepat animal

animal hanc testam inhabitans, ut illius verum esse et genuinum incolam non mirum fit si ægre credatur. Linnæus igitur de hac re scribit, “ Domunculam alienam, quemadmodum Cancer Diogenes seu Bernhardus, intrasse Sepiam, cum non connexa sit testæ, sibi adeo alienæ, qui non crederet, nisi tot testes nobis obfringerent, qui propriis oculis viderunt Argonautam velificantem?”

Extra testam visus Argonautæ habitator sepia speciem, sepiam præcipue octopodiam admodum refert: nec sane ab ea forma generali differt, nisi quod ad extremitates brachiorum duorum membranas ovatas habeat, quas cum super mare pacatum navigat, erigit, reliquis sex brachiis remigans. Fieri non potuit ut miranda res hominum oculos effugeret: ideoque a variis auctoribus descriptam legimus; nullis elegantius quam Plinio.

“ Inter præcipua autem miracula est, qui vocatur Nautilus, ab aliis Pompilos. Supinus in summa æquorum pervenit, ita se paulatim subrigens, ut emissa omni per fistulam aqua, velut exoneratus sentina, facile naviget. Postea prima duo brachia retorquens, membranam inter illa miræ tenuitatis extendit; qua velificante in aura, cæteris subremigans brachiis, media cauda, ut gubernaculo, se regit. Ita vadit alto, Liburnicarum ludens imagine, et si quid pavoris interveniat, hausta se mergens aqua.”

Cavendum est hanc testam, quæ verus est Argonauta, cum Nautilo communiter dicto, seu Nautilo *concamerato* confundamus, qui generis est omnino distincti. Crescit Argonauta Argo ab una uncia ad sex vel etiam octo. Mare Mediterraneum nec non Indicum incolit.



THE
A R G O N A U T,
OR
P A P E R N A U T I L U S.



GENERIC CHARACTER.

Animal extremely resembling a Sepia.

Shell univalve, spiral, extremely thin.

SPECIFIC CHARACTER, &c.

ARGONAUT with whitish furrowed shell, with the keel dentated on each side.

THE PAPER NAUTILUS.

NAUTILLE PAPIRACÉ.

Argenv. t. 5.

Notwithstanding the general similarity of structure which prevails amongst animals of the same tribe, there are yet some remarkable deviations from it. This is no where more conspicuous than in the testaceous tribe, in which the inhabitants of most of the Univalves bear a strong affinity to the genus *Limax*, or Slug, while those of almost all the Bivalves are distinguished by a striking similarity to the genera of *Tethys* and *Ascidia*. Amongst the instances of deviation from the general plan may be

be adduced the very remarkable and curious genus Argonauta or Paper-Nautilus, which is inhabited by an animal of an appearance so widely removed from those of most of the Univalves, as almost to make doubtful the reality of its being the genuine and proper inhabitant of the shell in which it resides. Linnæus accordingly has well observed, that unless the evidence of so many eye-witnesses had enforced belief, it might have been reasonably imagined that an animal so unlike the rest of the tribe, was only a usurper of the shell; in the same manner as the Cancer Diogenes and a few others, which take possession of such vacant shells as happen to suit their convenience. The inhabitant of the Argonauta, if seen detached from its shell, might pass for a real Sepia, and bears so great a resemblance to the Sepia octopodia or eight-armed Cuttle-fish, that the principal difference consists in its being furnished at the extremities of two of its arms with a pair of membranes of an oval form, which, during its occasional navigations on the surface of a calm sea, it raises upright and expands to the gale; while by the assistance of the six remaining arms it rows itself along. It seems impossible that so curious a spectacle could have escaped the particular observation of mankind. Accordingly we find it described by various authors: by none however more elegantly than by Pliny, whose short and beautiful description, has generally been quoted by modern writers.

“ But amongst the principal miracles of nature is the animal called Nautilus or Pompilos. It ascends to the surface of the sea in a supine posture, and gradually raising itself up, forces out by means of its tube all the
water

water from the shell, in order that it may swim the more readily; then throwing back the two foremost arms, it displays between them a membrane of wonderful tenacity, which acts as a sail, while with the remaining arms it rows itself along; the tail in the middle acting as a helm to direct its course; and thus pursues its voyage like a little ship; and if alarmed by any appearance of danger, takes in the water and descends."

We must be careful not to confound this shell, which is the real and proper Nautilus, with the chambered or pearly Nautilus, which belongs to a very distinct genus. The Argonauta Argo is found of various sizes, from one to six or eight inches in length, or even larger. It is a native both of the Mediterranean and Indian seas.



L I M A X A T E R .



CHARACTER GENERICUS.

Corpus oblongum, repens; supra clypeo carnosio;
subtus Disco longitudinali plano.

Foramen laterale dextrum pro genitalibus et excrementis.

Tentacula quatuor, supra os.

Lin. Syst. Nat. p. 1081:

CHARACTER SPECIFICUS, &c.

LIMAX ATERRIMUS subtus pallidus.

LIMAX ATER.

List. Angl. 131.

LIMAX tota nigra.

Aldr. inf. 702.

COCHLEA NUDÁ 3 tota nigra.

Gesn. aquat. 254.

LIMAX ATER.

Lin. Syst. Nat. p. 1081.

L I M A X M A X I M U S .



CHARACTER SPECIFICUS, &c.

LIMAX CINEREUS atro maculatus.

LIMAX MAXIMUS cinereus striatus.

List. anat. t. 3. f. 6—10.

LIMAX MAXIMUS.

Lin. Syst. Nat. p. 1081.

LIMAX CINEREUS. β .

Gmel. Syst. Nat. p. 3100.

Nudum

Nudum est genus *Limax* caretque testa. De hoc differere supervacaneum fortasse nonnullis videatur, quippe quod vulgatissimum non possit ignorari. Dignissimum tamen est genus quod speciatim describatur, cum exstet exemplum generale seu archetypum unde omnes fere testarum univalvium incolæ formantur; quorum nonnulli adeo *Limaci* similes, ut primo visu in hoc tantum differre videantur quod se ad libitum intra testam possint subducere. Exemplo sit genus *Helix* dictum, in quo nempe continentur *Helices* vulgares testaceæ. Quinimo reliquæ univalves (exceptis paucis quæ insigniter discrepant) ad genus *Limax* plus minus appropinquant. Specierum Britannicarum notiores sunt *Limax ater*, et *Limax maximus*: quorum prior aterrimo colore facillime distinguitur, in pratis et pascuis sæpissime repertus; alter rarior, fusco-pallens, non sine maculis striisque inæqualibus nigerrimis, in sylvis præcipue conspicitur, nec raro in hortis vere et autumno: in domos etiam irrepit. Convenit utrisque de victu, foliis scilicet et radicibus plantarum. *Limax maculatus*, (ut et alii nonnulli,) acaris minimis super corpus turmatim discurrentibus, et in ipsum etiam foramen laterale thoracis irrepentibus sæpissime solet infestari. Vetat tamen torpidum ingenium, aut mucus quo obducitur corpus, ut signa det molestiæ et perturbationis, vel exeuntibus acaris, vel intrantibus.

THE
BLACK LIMAX.



GENERIC CHARACTER.

Body oblong; Thorax convex or shielded above, flat beneath; with a *Foramen* on the right side. Four *Tentacula*, situated above the mouth.

SPECIFIC CHARACTER, &c.

JET-BLACK LIMAX, pale beneath.

THE BLACK SLUG.

THE COMMON BLACK SNAIL.

THE
SPOTTED LIMAX.



SPECIFIC CHARACTER, &c.

GREYISH LIMAX, spotted with black.

THE GREAT SPOTTED SLUG.

THE SPOTTED WOOD-SNAIL.

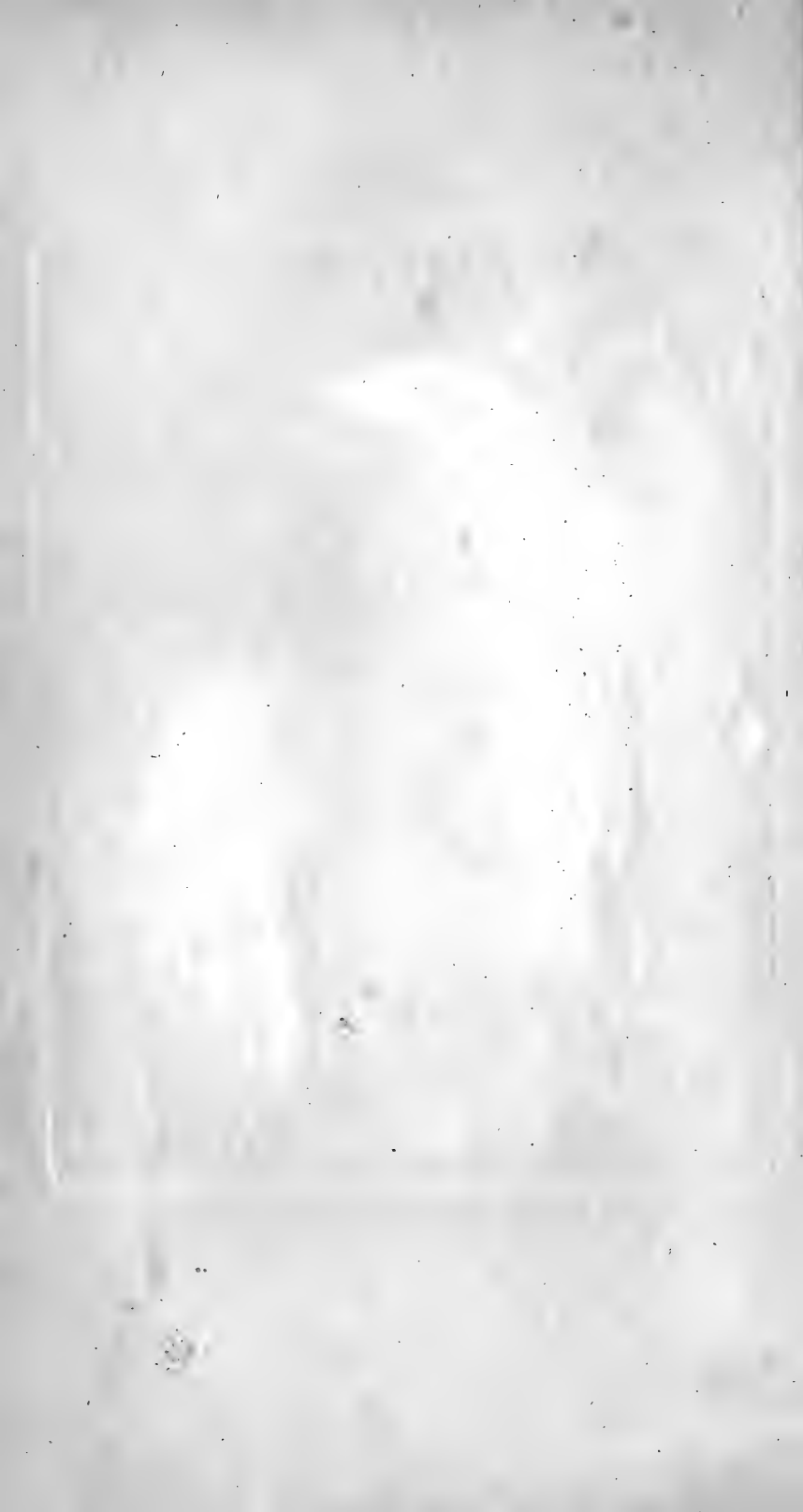
THE SPOTTED HOUSE-SLUG, OR CELLAR-SNAIL.

The genus *Limax* or Slug, consists of the naked or shell-less Snails. As these animals are so very common, it might seem almost unnecessary to introduce them
into

into a work like the present. The genus however is in reality of very great importance, since it stands, as it were, the general archetype or pattern on which the animals of almost all the univalve shells are formed: indeed so very nearly are some of them allied to this genus, that they seem, on a cursory view, to differ in scarce any other circumstance than that of being furnished with shells, into which they can at pleasure withdraw themselves. Of this the genus *Helix*, which contains the common or shell-snails, is a convincing proof. The rest of the univalves, (with a few remarkable exceptions,) are more or less similar to the genus *Limax*. Two of the most familiar species of *Limax* which this country produces are the *Limax ater* and *maximus*: the one is distinguished by its intense blackness, and is extremely common in fields and meadows; the other, less common than the former, is of a pale brown, with irregular deep-black spots and streaks: it is principally seen in woods and in garden-ground during the vernal and autumnal seasons, and not unfrequently creeps into houses. Both agree in their mode of living; feeding on the leaves and roots of vegetables. The spotted Slug, like some others of its genus, is often infested by a very small species of *acarus*, which appears in great numbers, running with much celerity over the animal, and frequently entering the lateral foramen of the body. The *Limax* however, either from its natural hebetude, or from being coated at all times by a quantity of mucus, seems to feel no particular inconvenience from these little insects, and shews no symptoms of irritation even when they are running in and out of the orifice in its side.

London: Adlard & Co. Printers, 1857. *Ed. by F. C. C. L. & Co. 1857. London: Adlard & Co. Printers, 1857.*





DORIS ARGO.



CHARACTER GENERICUS.

Corpus repens, oblongum, subtus planum.

Os antice subtus.

Anus postice, supra cinctus ciliis.

Tentacula duo, supra corpus antice, intra foramina retractilia.

CHARACTER SPECIFICUS, &c.

DORIS OVALIS, corpore lævi, tentaculis duobus ad os, ano ciliato phrygio.

Lin. Syst. Nat. p. 1083.

ARGO.

Bobadsch. mar. 65. t. 5. f. 45.

LEPUS MARINUS alter major.

Column. ecphr. t. 32.

Plurima quæ hoc genus amplectitur animalia limacibus valde affinia omnino in mari degunt. Ostendit tabula specierum Europæarum maximam et formosissimam. Color variat: interdum scilicet flavus est, plus minusve saturatus; interdum aurantius, seu etiam coccineus. In multis Britannicæ littoribus non raro conspicitur Doris Argo.

THE
LEMON DORIS.



GENERIC CHARACTER.

Body repent, oblong, flat beneath.

Mouth placed below, toward the anterior end.

Vent behind, furrounded above by a fringe.

Tentacula two, seated on the upper part of the body in front, retractile.

SPECIFIC CHARACTER, &c.

OVAL DORIS with smooth body; the vent furrounded by a ramified fringe.

LEMON DORIS.

Pennant Brit. Zool. 4. p. 36.

THE SEA-LEMON.

The animals of this genus are greatly allied to those of the genus *Limax*, but are entirely marine. The species of *Doris* are numerous. The largest as well as the most elegant of the European kinds is that figured on the annexed plate. In colour it varies much; being sometimes of a yellow, more or less deep, and sometimes of a bright orange, or even scarlet. It is not unfrequently found on several parts of the coasts of Britain.





CLIO LIMACINA.



CHARACTER GENERICUS.

Corpus natans, oblongum: *Alis* duabus, membranaceis, oppositis.

Lin. Syst. Nat. p. 1094.

CHARACTER SPECIFICUS, &c.

CLIO NUDA, corpore obconico.

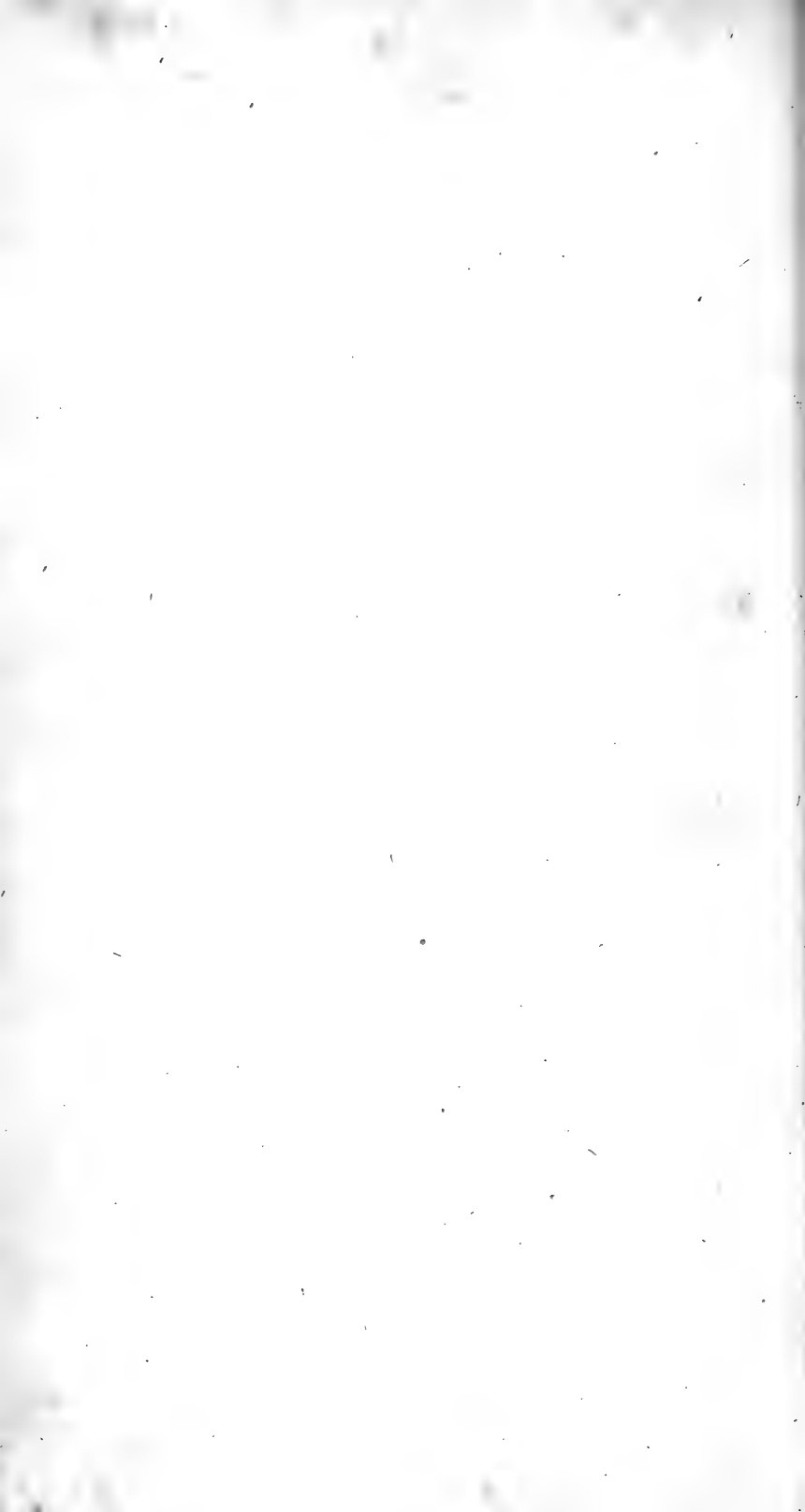
Gmel. Syst. Nat. p. 3149.

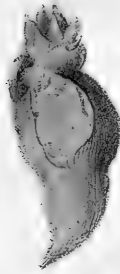
Phipps. it. bor. p. 195.

Mart. Spitsb: p. 169. t. P. f. 5.

Soland. et Ellis. cor. tab. 15 f. 9. 10.

Paucas et exiguas continet species genus Clio, quarum e corpore utrinque producitur, ut plurimum, membrana velut thecam efficiens, et a capite utrinque expanditur quasi velum parvulum ovatum; unde fit ut sepias minutas brachiis carentes non male referant. Caret autem theca species quam describimus, et limaci parvo non longe est abfimilis. Fusco-albicat, longaque est circiter unciam cum dimidio. Oceanum septentrionalem inhabitat.





THE
LIMACINE CLIO.



GENERIC CHARACTER.

Body oblong, nuyant; with a pair of opposite membranaceous *Wings* or expanded proccesses.

SPECIFIC CHARACTER, &c.

NAKED, OR SHEATHLESS CLIO, with inverfely conical body.

SNAIL-SHAPED CLIO.

LIMACINE OR SLUG-SHAPED CLIO.

NORTHERN CLIO.

The genus *Clio*, which is far from a numerous one, consists of animals of a small size, and in general form not ill refembling minute *Sepiæ* or Cuttle-fish without arms. This appearance arifes from the body being edged, as it were, with a membrane on each fide, forming a kind of sheath; and on each fide the head is a small expanded oval proccfs. The fpecies here exhibited is deftitute of the sheath-like membrane above-mentioned, and bears no
very

very distant resemblance to a small slug. Its colour is a very pale or whitish brown, and its length about an inch and half. It is an inhabitant of the Northern ocean.

VENUS DIONE.



CHARACTER GENERICUS.

Animal Tethys.

Testa bivalvis æquivalvis, altero latere complanato et velut duplicato.

Cardo dentibus tribus: omnibus approximatis; lateralibus apice divergentibus.

CHARACTER SPECIFICUS, &c.

VENUS SUBCORDATA, latere complanato ferie duplici spinarum curvarum ciliato.

PECTUNCULUS RUBER, fasciis acutis et ex altera parte muricatis exasperatus.

List. Conch. t. 307. p. 140.

CONCHA BRASILIANA CUSPIDATA.

Bonanni Mus. Kirch. Cl. 2.
n. 121. p. 448.

CONCHA VENERIS ARMATA.

Jacobæus in Mus. Reg. Dan.

PECTUNCULUS VENEREUS.

Pet. gazoph. t. 31. fig. 9.

CONCHA ECHINATA.

Valent. Mus. Museor. t. 35. n. 19.

CONCHA VENERIS occidentalis cum spinis.

D'Argenville. t. 21. f. 1.

Concham raram et elegantem ostendit tabula, qua nihil injuriarum passa vix pretiosiores continet hodiernorum

diernorum museorum serinia. At difficillimum est specimina nancisci integra et illæsa, ea præcipue quæ ad plenam magnitudinem pervenerint.

Venerem Dionem, quam generant maria Americana, primus descripsit et depinxit Bonannus? Color illi generalis est levissime incarnatus, seu fere albidus; valvula utraque zonis plurimis levatis et concentricis extrinsecus notata. Pars posterior seu complanata in variis speciminibus plus minus est purpurea, et spinarum curvarum utrinque serie laterali ciliata; unde fit, ut si e transverso testam intuearis, non longe oculo absimilis videatur, vel etiam ori ringenti quadrupedis. Cum species numerosissimas contineat genus, multisque egregium fit decus, nomen ideo ei datum est quod puchritudinem denotet.

Venerem seu Dionem e mari anadyomenen toties celebrarunt poetæ, ut supervacaneum forsan habeatur de re notissima quicquam dicere. Bellum tamen Aufonii epigramma liceat citare.

“ Emerfam pelagi nuper genialibus undis
Cyprin Apellei cerne laboris opus.
Ut complexa manu madidos falis æquore crines
Humidulis spumas stringit utraque comis
Jam tibi nos Cypri, Juno inquit et innuba Pallas
Cedimus, et formæ præmia deferimus.”

At vel Aufonio felicius cecinit celeberrimus Darwin, in eximio poemate cui titulus HORTUS BOTANICUS, cujus versus in linguam Latinam eleganter adeo transtulit eruditus quidam amicus, ut si quod
ille

ille scripsit in scriniis ineditum fervem, persuasissimum habeam me a publica delectatione detracturum.

Addidi et egomet arcttorem, humiliorem, et quasi centonicam imitationem.

“ Sic primum vitreum fugiens Erycina profundum,
Nereidumque domos, patrio jam debita cælo,
Surgit ad æthereum solem pulcherrima rerum,
Cæruleis emersa vadis : rutilante sedentem
Hanc concha manibus tollunt submisse inhiantes
Semiviri, visusque avidos pascuntur amore.
At leve subridens falsam dea crine soluto
Humorem, liquidas et gemmas exprimit ; illæ
Defiliunt niveis sinuoso tramite mammis
Protinus, et placide lambunt juvenilia membra.
Præsentis valet interea vis vivida formæ.
Sternitur attonitum pacatis fluctibus æquor
Immensum, vix jamque tremit, metuitque moveri.
Mollius aspirant zephyri, simul æthera stillant
Ambrosiam, et toto nova regnat in orbe voluptas.”

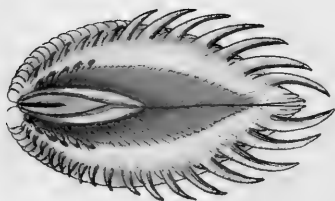
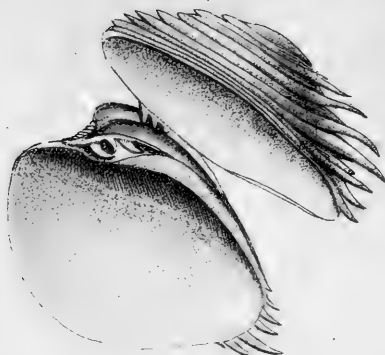
IMITATIO CENTONICA.

Sic alto enata oceano, si credere fas fit,
Alma Venus quondam pelagi gratissima nymphis,
Muscosos inter scopulos cautefque profundas
Lusit amabiliter ; vitreisque sedilibus hærens
Dulcia subridens immiscuit oscula verbis,
Et finxit vultum, et meruit formosa videri :
Jam teneros experta jocos, nec egena leporum.
At mox tota merum sal, plena et fulgida forma,
Tritonum manibus folio subvecta virenti
Sedibus ex imis, pacato in marmore ponti
Institit, attonitas despectans desuper undas :
Qualis ubi e cælo radiis argenteus almis

Lucifer

Lucifer affurgit, ridentemque undique terram
Vivificat, pictos revocans ad gaudia campos.
Ut roseis cæpit digitis ficcare capillos,
Per caput errantes guttæ et per eburnea colla
Suave micant; dein terga petunt, humerosque latusque
Pectoraque, et falsis stellantes roribus artus.
Continuo natura Deam mirata salutat,
Et manifesta Venus cælo terrisque renidet.





VENUS DIONE,
OR THE
OCCIDENTAL VENUS-SHELL.



GENERIC CHARACTER.

Animal resembling a Tethys.

Shell bivalve; Valves similar, flattened on one side and furnished with a duplicature.

Hinge consisting of three teeth, approximated, the outer ones diverging.

SPECIFIC CHARACTER, &c.

SUBCORDATED VENUS, with a double row of incurvated spines on the flat side.

THE OCCIDENTAL VENUS-SHELL.

CONQUE DE VENUS occidentale.

Encyclop. Recueil de planches. tom. 6.
t. 73. fig. 6.

CONQUE DE VENUS à pointes.

Fav. D'Herbigny Dict. vol. 1. p. 262.

THE VENUS SHELL OR CONCHA VENERIS.

Hill's Hist. of Animals. p. 158.

The rare and curious shell represented on the present plate is numbered amongst the most valuable articles

articles of the conchyliological cabinet, and is indeed considered, when in its complete and unblemished state, as one of the cimelia of modern museums. It is, however, not often that specimens can be obtained which have not suffered some accidental injuries, especially those which have attained their full size. The Venus Dione is a native of the American seas, and was first described and figured by Bonanni? Its general colour is a very pale or whitish pink; each valve is marked externally by a great number of sharpened concentric zones or prominent ribs: the hinder or flattened part is of a purple tinge, more or less deep in different individuals, and is ciliated on each side with a row of curved spines, so as to give the shell, when viewed in a transverse direction, an appearance not ill resembling that of an eye, or even of the ringent mouth of a quadruped.

As the genus to which it belongs is extremely extensive, and contains several species of uncommon beauty, it has therefore received a name appropriated to the elegance of its form.

The birth of the younger Dione or Venus from the sea has so often been commemorated by the poets of antiquity, that it would be superfluous to relate what must be universally known. It may be sufficient therefore to quote on this subject the elegant epigram of Ausonius on the celebrated picture of Venus anadyomene by the hand of Apelles.

“ Emerfam pelagi nuper genialibus undis
Cyprin, Apellei cerne laboris opus.

Ut

Ut complexa manu madidos falis æquore crines
Humidulis spūmas stringit utraque comis
Jam tibi nos Cypri, Juno inquit et innuba Pallas
Cedimus, et formæ præmia deferimus.”

Form'd in bold fancy by Apelles' hand,
See Venus on her native ocean stand.
As from the wave in full-blown charms she springs,
And from her hair the dropping moisture wrings,
Juno and Pallas view her with amaze :
In silence on the lovely tablet gaze :
No more at beauty's envied prize repine,
But to the pictur'd fair the willing palm resign.

A still more beautiful description has, however,
been given by Dr. Darwin in his celebrated poem
THE BOTANIC GARDEN.

“ So young Dione, nurs'd beneath the waves,
And rock'd by Nereids in their coral caves,
Charm'd the blue sifterhood with playful wiles,
Lisp'd her sweet tones, and tried her tender smiles.
Then on her beryl throne by Tritons borne,
Bright rose the Goddess like the star of morn ;
When with soft fires the milky dawn he leads,
And wakes to life and love the laughing meads ;
With rosy fingers, as uncurl'd they hung
Round her fair brow, her golden locks she wrung ;
O'er the smooth surge on silver sandals stood,
And look'd enchantment on the dazzled flood.
The bright drops, rolling from her lifted arms,
In slow meanders wander o'er her charms,
Seek round her snowy neck their lucid track,
Pearl her white shoulders, gem her ivory back,
Round her fine waist and swelling bosom swim,
And star with glitt'ring brine each crystal limb.
Th' immortal form enamour'd Nature hail'd,
And Beauty blaz'd to heaven and earth unveil'd.”

Of

Of this the reader will find in the corresponding Latin part a free translation by the hand of a learned friend, so highly elegant that I cannot resist the pleasure of presenting it to the public.

I have also myself added, in the manner of a cento, a more close imitation of Dr. Darwin's lines.

CYPRÆA PARDALIS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, involuta, subovata, obtusa, lævis.

Apertura utrinque effusa, linearis, utrinque dentata, longitudinalis.

Lin. Syst. Nat. p. 1172.

CHARACTER SPECIFICUS, &c.

CYPRÆA FERRUGINEA, fusco guttata, linea dorsi testacea, subtus alba.

CYPRÆA testa ovata, postice obtusa, antice rotundata, linea longitudinali testacea.

Lin. Syst. Nat. p. 1176.

PORCELLANA GUTTATA.

Rumph. mus. t. 38. f. A.

CYPRÆA TIGRIS.

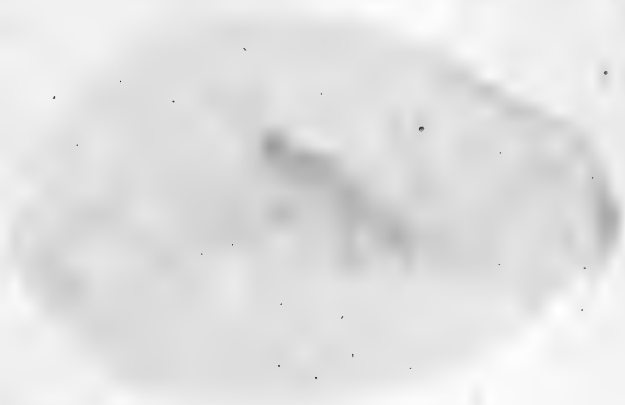
Lin. Syst. Nat. p. 1176.

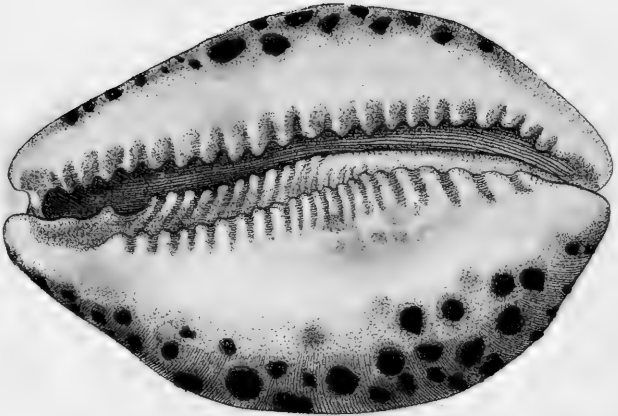
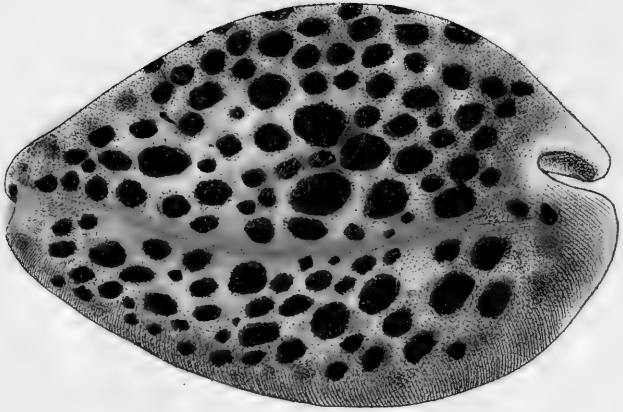
CYPRÆA TIGRIS.

Lin. Syst. Nat. Gmel. p. 3408.

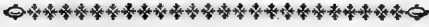
Licet conchæ pretium augeat raritas, hac tamen ægre reperies pulchriorem quæ fere abundat in mu-
seorum scriniis. Variat color, qui plus minus vivi-
dus,

duſ, et incertus admodum eſt macularum numerus; ad ſpeciei vero diſtinctionem notæ ſunt fatiſ characteriſticæ. Nomen *Cypræa* huic generi datum eſt, quod antiquitus vocatum ſit *concha Veneriſ*, quem titulum tranſtulerunt hodierni phyſici ad aliam penitus diverſam, bivalvem nempe, quæ *Venus Dione Linnæi*, quamque in hoc opere jam deſcripſimus. Concham de qua jam tractamus, inſigniverunt antiqui ſcriptores nomine *conchæ Veneriſ*, quod graviter indignata Venus inſtructam inimiciſſime a Periandro navem contra Cnidi incolas, hiſ ipſiſ conchiſ mandaffe fertur ut adhærentes navi morarentur curſum. Notandum porro eſt epidermide carere, ut plurimum, teſtas quas continet hoc genus, et ab ipſa natura eximium nitorem ducere, qui aliis plurimiſ non niſi labore artificis comparatur.





THE
LEOPARD COWRY.



GENERIC CHARACTER.

Animal resembling a Limax.

Shell univalve, involute, obtuse, ovate.

Aperture linear, longitudinal, toothed on both sides.

SPECIFIC CHARACTER, &c.

FERRUGINOUS CYPRÆA, spotted with deep brown, with a yellowish dorsal line; white beneath.

THE COMMON SPOTTED COWRY.

THE TIGER OR LEOPARD COWRY.

Common as is this shell in every collection, and for that very reason considered as of little value, there scarcely exists a more beautiful species. It varies much in intensity of colour, as well as in the number of the spots with which it is so elegantly adorned, but the characteristic marks of the species are always readily ascertained. The name *Cypræa* is given

given to this genus in compliance with its ancient title of *Concha Veneris* or *Venus's Shell*; which in modern conchylology belongs to a bivalve shell which has already made its appearance in the present work, viz. the *Venus Dione* of Linnæus. The name *Concha Veneris* applied to the present shell by the ancient writers originated from its supposed efficacy in expediting the commands of the goddess Venus, who, displeas'd at a voyage undertaken by order of the tyrant Periander against the natives of Gnidos, is said to have made use of this shell to stop the progress of the vessel. I should observe that the Cyprææ in general are unfurnished with any epidermis or exterior cuticle, and are found naturally adorned with that beautiful polish which is given to many other shells by artificial means.

CONUS MARMOREUS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, convoluta, turbinata.

Apertura effusa, longitudinalis, linearis, edentula,
basi integra.

Columella lævis.

CHARACTER SPECIFICUS, &c.

CONUS testa conica fusca vel atra, maculis ovatis seu trigono-ovatis albis.

CONUS testa conica fusca, maculis ovatis albis, spiræ anfractibus canaliculatis.

Lin. Syst. Nat. p. 1165.

STROMBUS PYRAMIDALIS, &c.

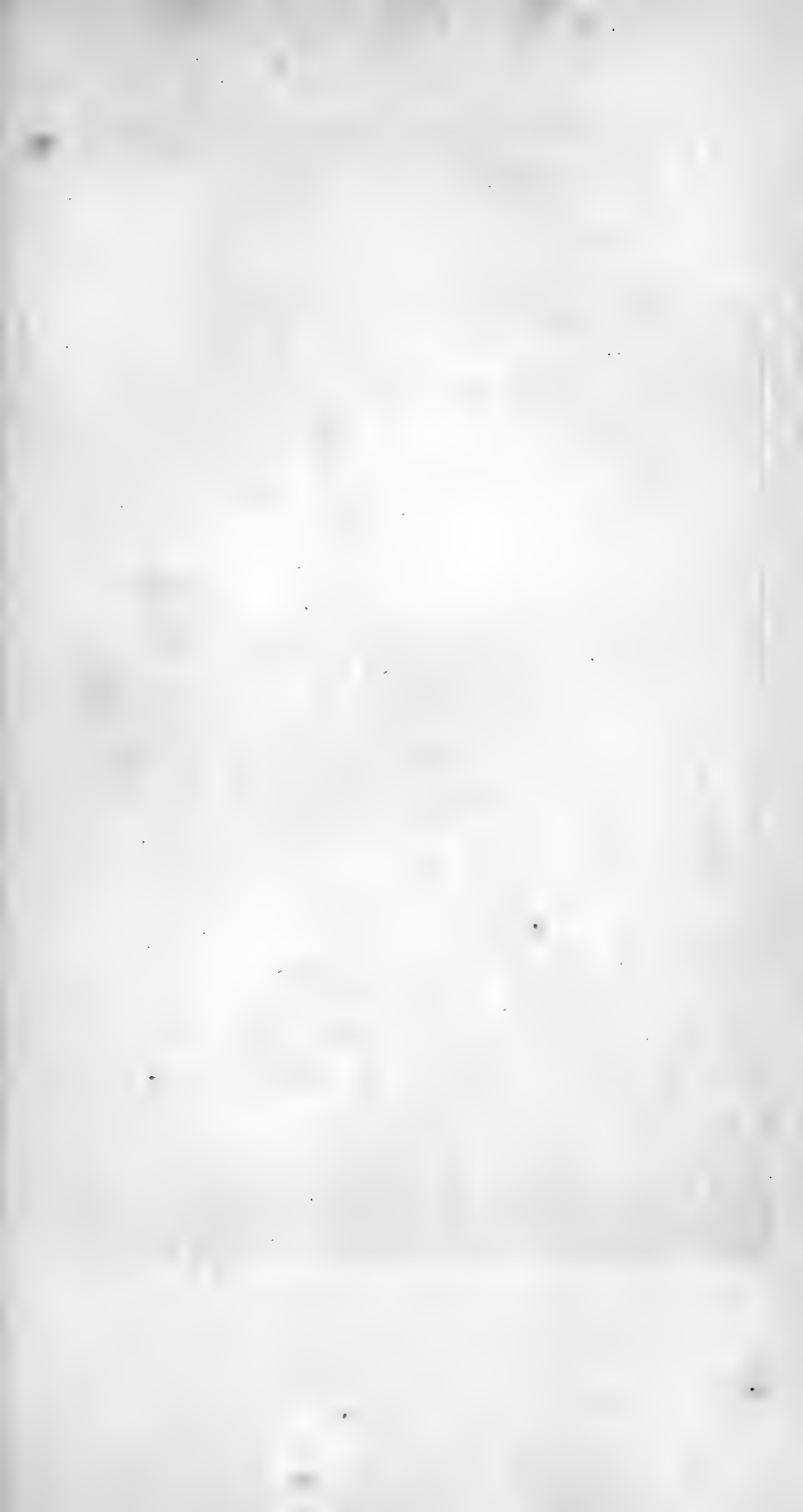
Seb. Mus. 3. t. 46. f. 1.—15.

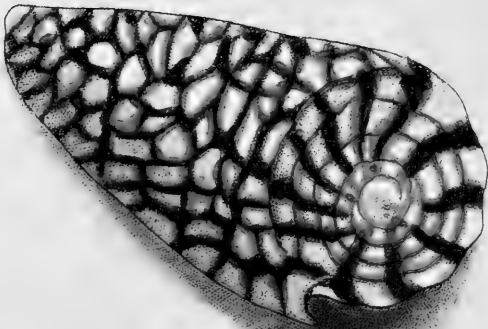
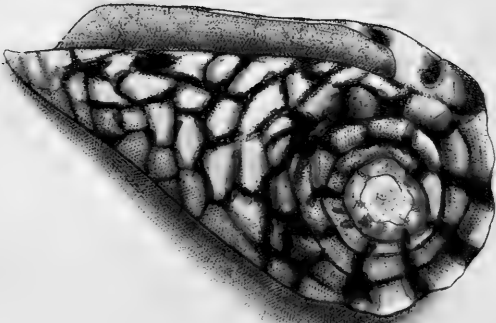
Exuberat, ut plurimum, splendorum colorum varietate *Conorum* genus: avidissime arreptum a concharum studiosis. Perraræ enim sunt multæ species, et pretiosissimæ: Conus scilicet *arausiacus*, *C. Ammiralis*, præsertim *Ammiralis summus*, *A. occidentalis*, præ cæteris autem lauta illa et magnifica varietas, (ni species diversa fit) titulo gaudens *Cedo nulli*;

nulli; cujus specimen constitit interdum emptori centum aureis nummis.

His omnibus cedit longe species quam jam describimus: habet tamen suam nec mediocrem elegantiam. Innascitur in oceano Americano.

Ante publicatum Systema Linnæanum vocari solitum est hoc genus nomine *Volutæ*; quod Linnæus rectius, ut opinor, titulo *Coni* distinxit: similis enim est major pars generis cono mathematico.





THE
MARBLED CONE.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell more or less conic or pyramidal.

Aperture longitudinal, linear, without teeth, entire at the base.

Pillar smooth.

SPECIFIC CHARACTER, &c.

PYRAMIDAL BROWN or BLACK CONE,
with ovate or trigonal-ovate white spots.

LE CORNET des COEURS.

Knorr. 1. t. 7. f. 4. 15. f. 2.

The BLACK and WHITE MARBLED CONE.

The shells of this genus are in general highly distinguished by the richness and variety of their colors, and are considered as constituting the principal beauties of conchyliological cabinets. Many species are also extremely rare and valuable, as the *C. araufiacus*, the *C. Ammiralis*, and its respective varieties;

varieties; particularly the *Ammiralis summus*, *A. occidentalis*, and above all the superb variety, if not distinct species, known by the title of *Cedo nulli*, of which a specimen has been sometimes valued at the price of an hundred guineas. The present species, though not comparable either in point of beauty or rarity to many others, is yet possessed of a very high degree of elegance. It is a native of the American ocean.

It should be observed that this genus, before the *Systēma Naturæ* of Linnæus made its appearance, was distinguished by the name of *Voluta* or *Volute*; but Linnæus, with greater propriety, has applied the title of *Conus*; the outline of the shell, in most species, approaching very nearly to the mathematical figure of a cone.

DORIS RADIATA.



CHARACTER GENERICUS.

Corpus repens, oblongum, subtus planum.

Os antice subtus.

Anus postice, supra cinctus ciliis.

Tentacula duo, supra corpus antice, intra foramina retractilia.

Lin. Syst. Nat. p. 1083.

CHARACTER SPECIFICUS, &c.

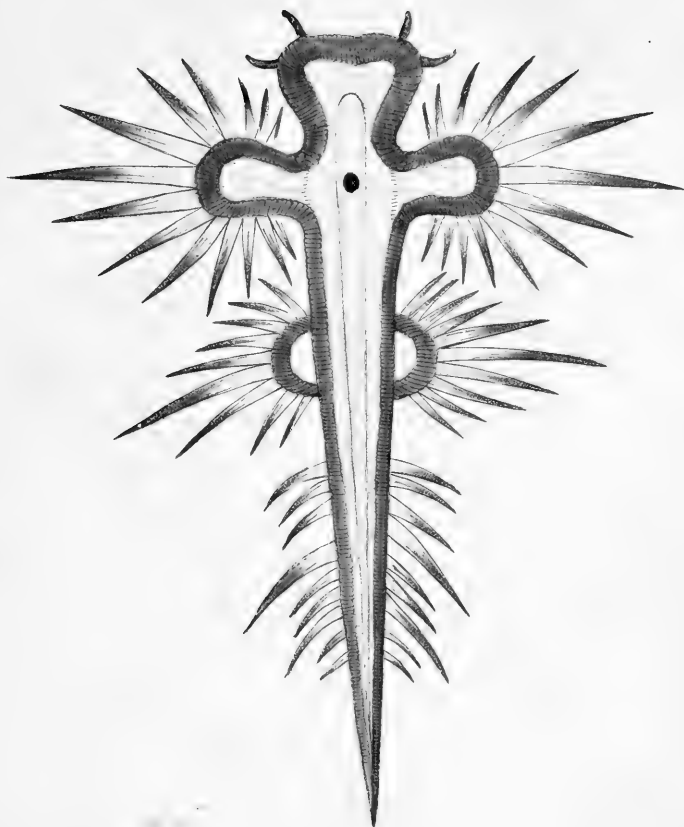
DORIS ex argenteo cærulea, subtus alba, papillis lateralibus fasciculatq-radiatis.

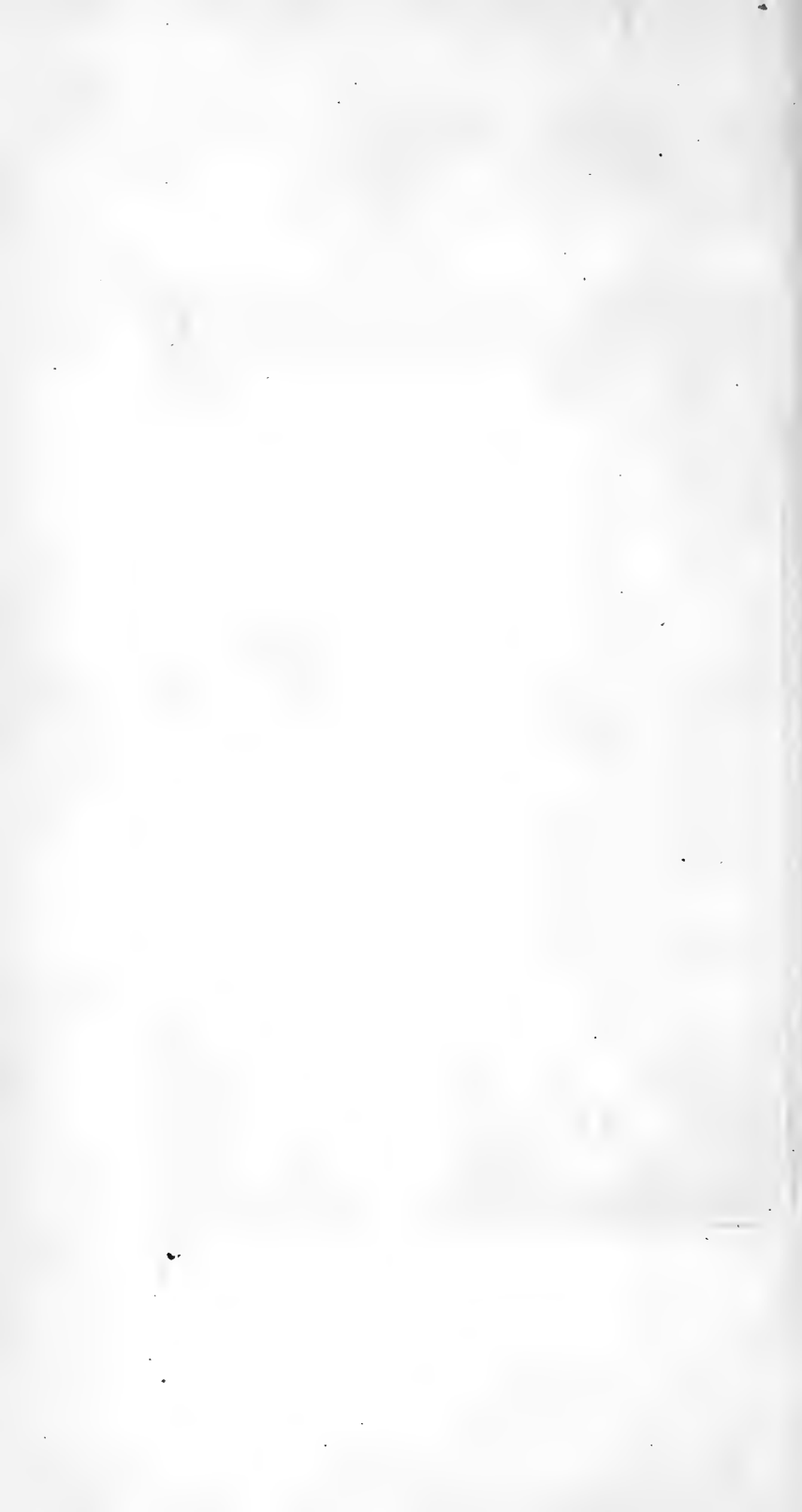
DORIS RADIATA.

Lin. Syst. Nat. Gmel. p. 3105.

Ad quam familiam revera pertineat marinum hoc animal difficile est primo visu pro certo statuere; mira adeo ei et ambigua est facies. Generi tamen *Doris* conjunctius videtur quam alii alicui, in quo etiam ordinatur a Gmelinio, in auctiore sua editione Systematis Linnæani. Formæ singulari accedit color pulcherrimus, scilicet cæruleo-pallens argento quasi obductus, margine corporis et apicibus omnibus tentaculorum summopere cyaneis. Magna est

ei contractionis vis, unde fit ut ad libitum nunc magis, nunc minus, extensum videatur. Longitudo communis unciam paulo superat. Ostenditur animal in tabula paulo auctum microscopio, ut variæ partes dilucidius appareant. Ut solent pleraque hujus generis, vel innatat summo mari, vel prope superficiem. Conspicitur præcipue in oceano Indiae occidentalis.





THE
RADIATED DORIS.



GENERIC CHARACTER.

Body repent, oblong, flat beneath.

Mouth placed below, towards the anterior end.

Vent behind, furrounded by a fringe.

Tentacula two, seated on the upper part of the body in front, retractile.

SPECIFIC CHARACTER, &c.

SILVER-BLUE DORIS, white beneath, with lateral extenfile radiato-fasciculated papillæ.

DORIS RADIATA.

Lin. Syst. Nat. Gmel. p. 3105.

Phil. Transf. Vol. 53. p. 57. t. 3.

So very singular is the appearance of this curious marine animal, that at first view it is not easy to guess to what tribe of beings it should with the greatest propriety be referred. The genus, however, to which it seems most nearly allied, and in which it is placed in the enlarged edition of the *Systema Naturæ*, by Dr. Gmelin, is that of *Doris*. The

singulari-ty of its form is equalled by the elegance of its color, which is a beautiful pale blue, with a gloss of silver, while the margin of the whole body, and the tips of all the processes with which it is beset are of the richest deep blue. It possesses a high degree of muscular power, and appears occasionally in various states of contraction and extension. Its general length is somewhat more than an inch, the figure being slightly magnified, in order to shew the several parts with a greater degree of distinctness. Like others of this genus it swims principally on or near the surface of the sea, and is chiefly found in the West-Indian ocean.

DENTALIUM ELEPHANTINUM.



CHARACTER GENERICUS.

Animal Terebella.

Testa univalvis, tubulosa, recta, monothalamia, utraque extremitate pervia.

Lin. Syst. Nat. p. 1263.

CHARACTER SPECIFICUS, &c.

DENTALIUM testa decem-angulata fubarcuata striata.

Lin. Syst. Nat. p. 1263.

DENTICULUS ELEPHANTIS.

Rumph. mus. t. 41. f. 1.

DENTALIS.

Argenv. conch. t. 3. f. H.

Licet aliæ sint læves, aliæ angulis striatæ, per diversas tamen Dentaliorum species pervasit generalis quædam similitudo. Speciem angulatam depinximus, quæ maxima est totius generis. Color communis viret. Maria Europæa et Indica inhabitat Dentalium elephantinum. Dat nomen generi forma non longe abfimilis denti prominenti et elongato.





Fig. 1

THE
ELEPHANTINE DENTALIUM.



GENERIC CHARACTER.

Animal resembling a Terebella.

Shell univalve, tubular, with undivided cavity,
pervious at each extremity.

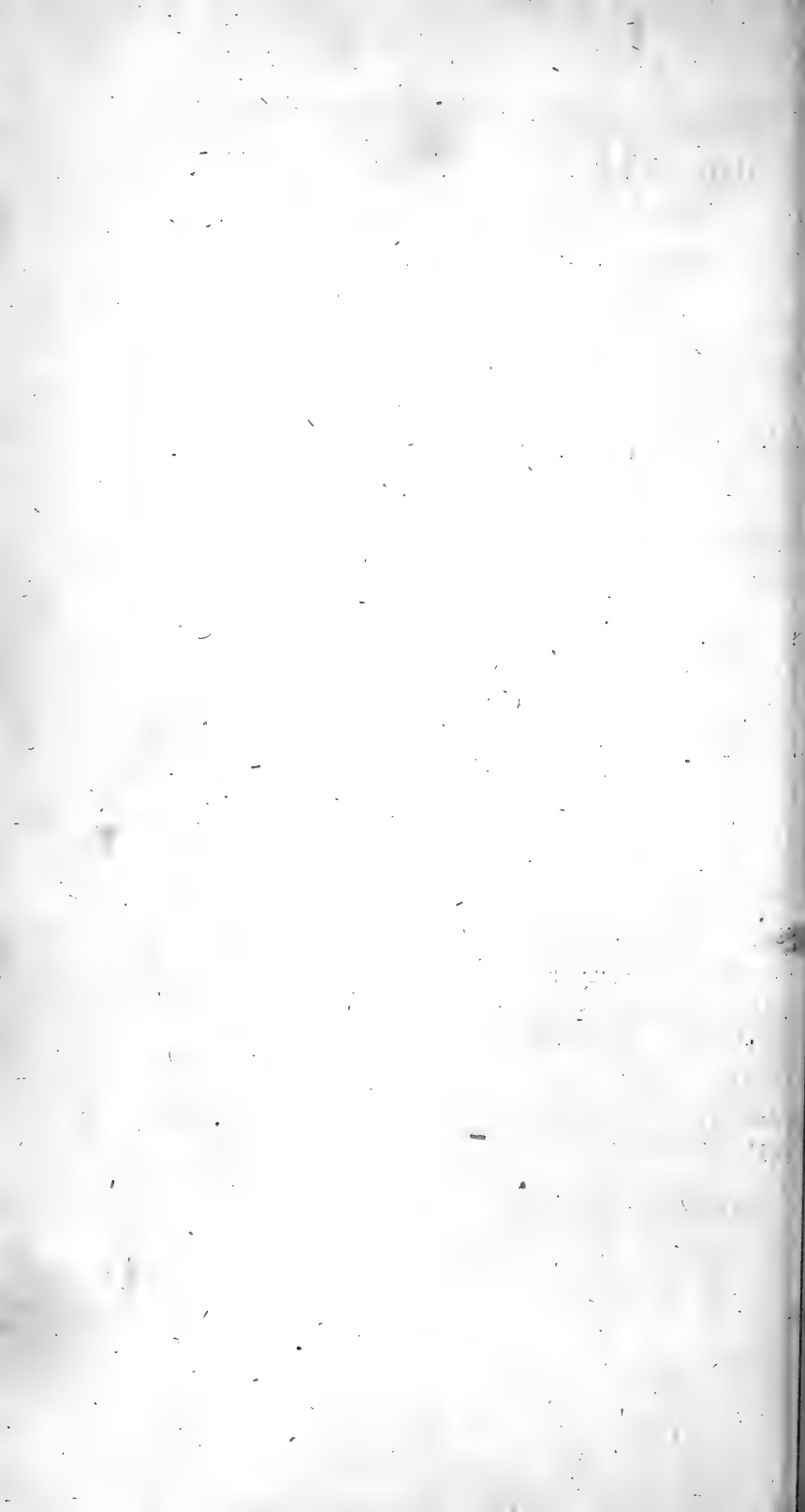
SPECIFIC CHARACTER, &c.

SLIGHTLY CURVED GREENISH DEN-
TALIUM with ten longitudinal ribs.

The GREAT RIBBED TOOTH-SHELL.

The LARGE GREEN DENTALIUM.

In the genus Dentalium, so named from its tooth-like form, there prevails a considerable degree of general similarity between the different species; of which, however, some are smooth, while others are marked by longitudinal angular processes. In this latter division ranks the species represented on the plate, which is the largest of the genus. Its general color is a dull green. It is found both in the European and Indian seas.



VOLUTA.



CHARACTER GENERICUS.

Animal Limax.

Testa unilocularis, spiralis.

Apertura ecaudata subeffusa.

Columella plicata: Labio Umbilicove (ut plurimum) nullo.

Lin. Syst. Nat. Gmel. p. 3459.

VOLUTA EPISCOPALIS.



CHARACTER SPECIFICUS, &c.

VOLUTA testa lævi, anfractuum margine integro, columella quadriplicata.

VOLUTA EPISCOPALIS.

Lin. Syst. Nat. Gmel. p. 3459.

VOLUTA MITRA *episcopalis*.

Lin. Syst. Nat. p. 1194.

MITRA EPISCOPI.

Rumph. mus. t. 29. f. K.

Seb. mus. 3. t. 51. f. 8.—16.

VOLUTA PAPALIS.



CHARACTER SPECIFICUS, &c.

VOLUTA testâ transversim striata, anfractuum margine labroque denticulatis, columella quadruplicata.

VOLUTA PAPALIS.

Lin. Syst. Nat. Gmel. p. 3459.

VOLUTA MITRA *papalis*.

Lin. Syst. Nat. p. 1195.

MITRA PAPALIS.

Seb. mus. 3. t. 51. f. 1.—5.

Rumf. t. 29. f. 1.

Adeo inter se affines sunt conchæ in tabula depictæ, ut Linnæus in editione duodecima Systematis Naturæ dubitasse omnino videtur, sintne species revera diversæ; cum ambas eodem nomine communi designaverit, nempe *Volutæ Mitræ*. Speciem lævem, mitram scilicet *episcopalem* decorant plerumque maculæ pulchre rubentes, sed pallidulæ, forma fere quadrata. *Mitra papalis* e contrario maculis aspergitur, quarum forma inæqualior, colorque multo faturior, et rubro-ferrugineus. Inveniuntur

tur ambæ in mari Indico, et recentes cooperiuntur
epidermide, seu pellicula tenui fusco-flavescente.
Quod incolit eas animal venenatum esse dicitur, et
mucrone quodam seu proboscide acuminata tan-
gentes vulnerare.

THE
MITRE VOLUTES.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell unilocular, spiral.

Pillar or Column twisted or plaited.

THE
EPISCOPAL VOLUTE.



SPECIFIC CHARACTER, &c.

Smooth white Volute with squarish red spots;
the edges of the spires entire; the pillar with
four wreaths.

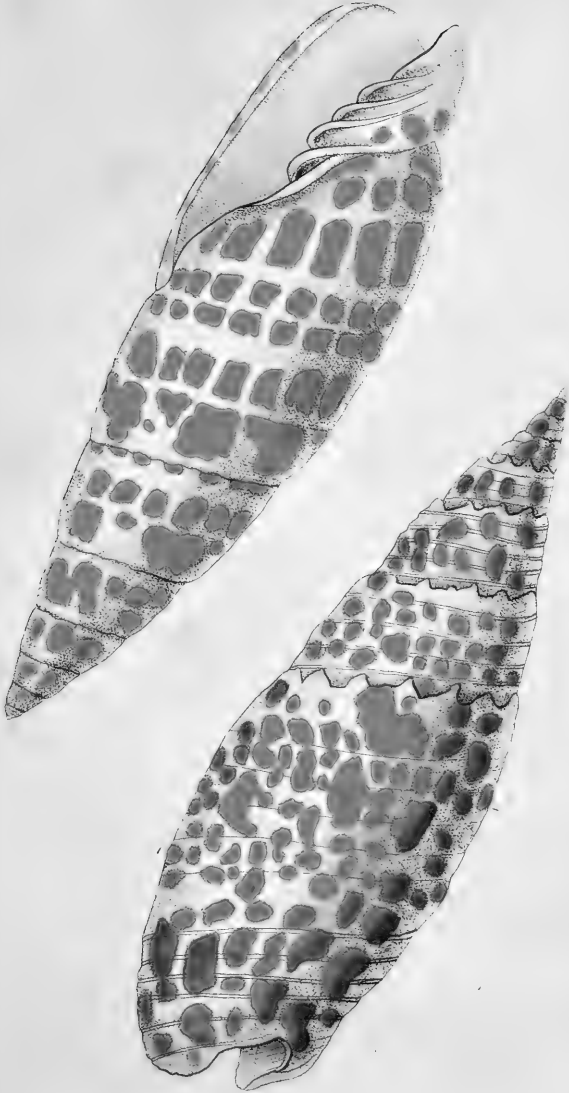
The SMOOTH MITRE-SHELL.

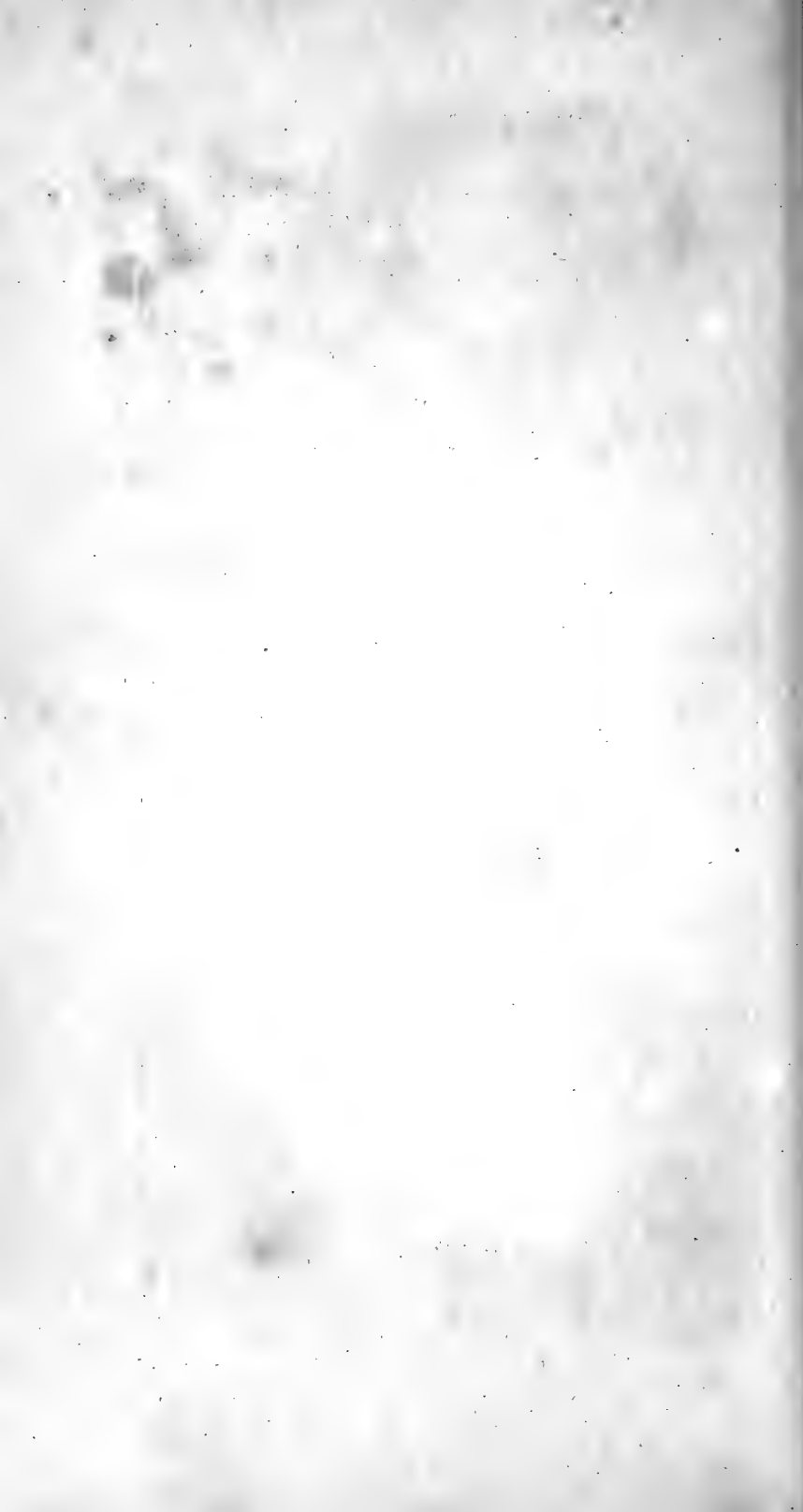
La MITRE.

Argenv. conch. pl 9. f. C.

La MITRE EPISCOPALE.

Knorr: 1. pl. 6. f. 2.





THE
PAPAL VOLUTE.



SPECIFIC CHARACTER, &c.

Transversely striated white Volute with irregular dark-red spots; the edges of the spires toothed; the pillar with four wreaths.

The ROUGH or TOOTHED MITRE-SHELL.

The PAPAL MITRE.

La TIARE.

Argenv. pl. 9. f. E.

La COURONNE PAPALE.

Knorr. 1. pl. 6. f. 1.

The two shells at present figured, are so very nearly allied, that Linnæus, in the twelfth edition of the *Systema Naturæ*, seems to have considered them as scarce specifically distinct; and has therefore included them both under the common title of *Voluta Mitra*. In the smooth sort, or *M. episcopalis*, the spots are commonly of a bright, though somewhat pale red, and of a shape much inclining to square:

square: on the contrary, in the *M. papalis* they are of a very deep or brownish red, as well as much more irregular in their form. Both are natives of the Indian ocean, and, when recent, are covered with a thin, yellowish-brown epidermis or cuticle. The inhabiting animal is said to be of a poisonous nature, and to wound those who touch it with a kind of pointed trunk.

BULLA ACHATINA.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, convoluta, inermis.

Apertura subcoarctata, oblonga, longitudinalis,
basi integerrima.

Columella obliqua, lævis.

Lin. Syst. Nat. p. 1181.

CHARACTER SPECIFICUS, &c.

BULLA testa ovata, apertura obovata apiceque
fanguineis, columella truncata.

Lin. Syst. Nat. p. 1186.

BULLA GALLICA.

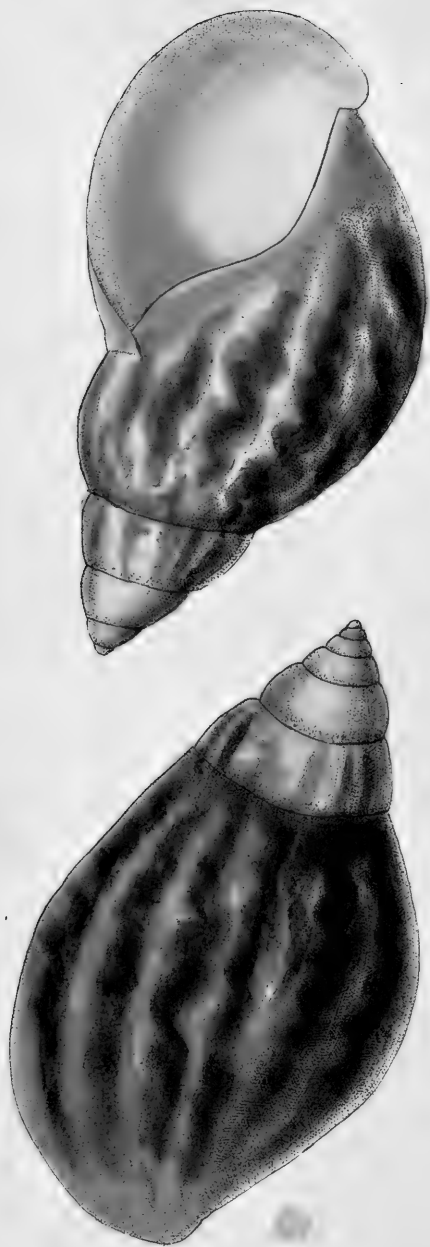
Seb. Mus. 3. t. 71. 1. 2. 3. & 7. 8.

BUCCINUM cauda brevi, ore expanso.

Argenv. t. 10. f. E.

Perpulchram hanc concham parit America, et
Americæ adjacentes insulæ. Variat colore, qui in-
terdum fuscus, undis obscurioribus, interdum multo
splendore insignis quem cernere est in tabula. Spe-
cies

cies hæc terrestris? est et tenuis. Distinguitur varietas depicta apertura læte purpurea. Quod eam incolit animal limaci simillimum est. Non omnino persuasum mihi habeo debere hanc testam generi quod *Bullam* vocat Linnæus annumerari, cujus interformam generalem et characteres huic non plene convenit.



THE
AGATE BULLA.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell univalve, convoluted.

Aperture somewhat straitened, oblong, longitudinal, entire at the base.

Column oblique and smooth.

SPECIFIC CHARACTER, &c.

Ovate, pointed, wide-mouthed BULLA, with broad fasciæ, crimson mouth, and truncated column.

The AGATE BULLA.

The CRIMSON-MOUTHED BULLA.

This most elegant shell is a native of America and the West Indian islands. It varies considerably in point of color, being sometimes of a dusky brown, with deeper variegations; at other times ornamented with the beautiful hues represented on the annexed plate. This is commonly called the purple-mouthed variety.

variety. It is a land? shell, of a thin structure, and the inhabiting animal bears the most striking resemblance to the common snail. It may be added that it seems scarce allowable to rank this shell under the Linnæan genus *Bulla*, with the general form and characters of which it does not perfectly agree.

CHITON SQUAMOSUS.



CHARACTER GENERICUS.

Animal Doris.

Testæ plures, longitudinaliter digestæ dorso incumbentes.

Lin. Syst. Nat. p. 1106.

CHARACTER SPECIFICUS, &c.

CHITON testa octovalvi semifriata, margine squamuloso.

CHITON testa octovalvi semifriata, corpore squamuloso.

Lin. Mus. Ulr. 465.

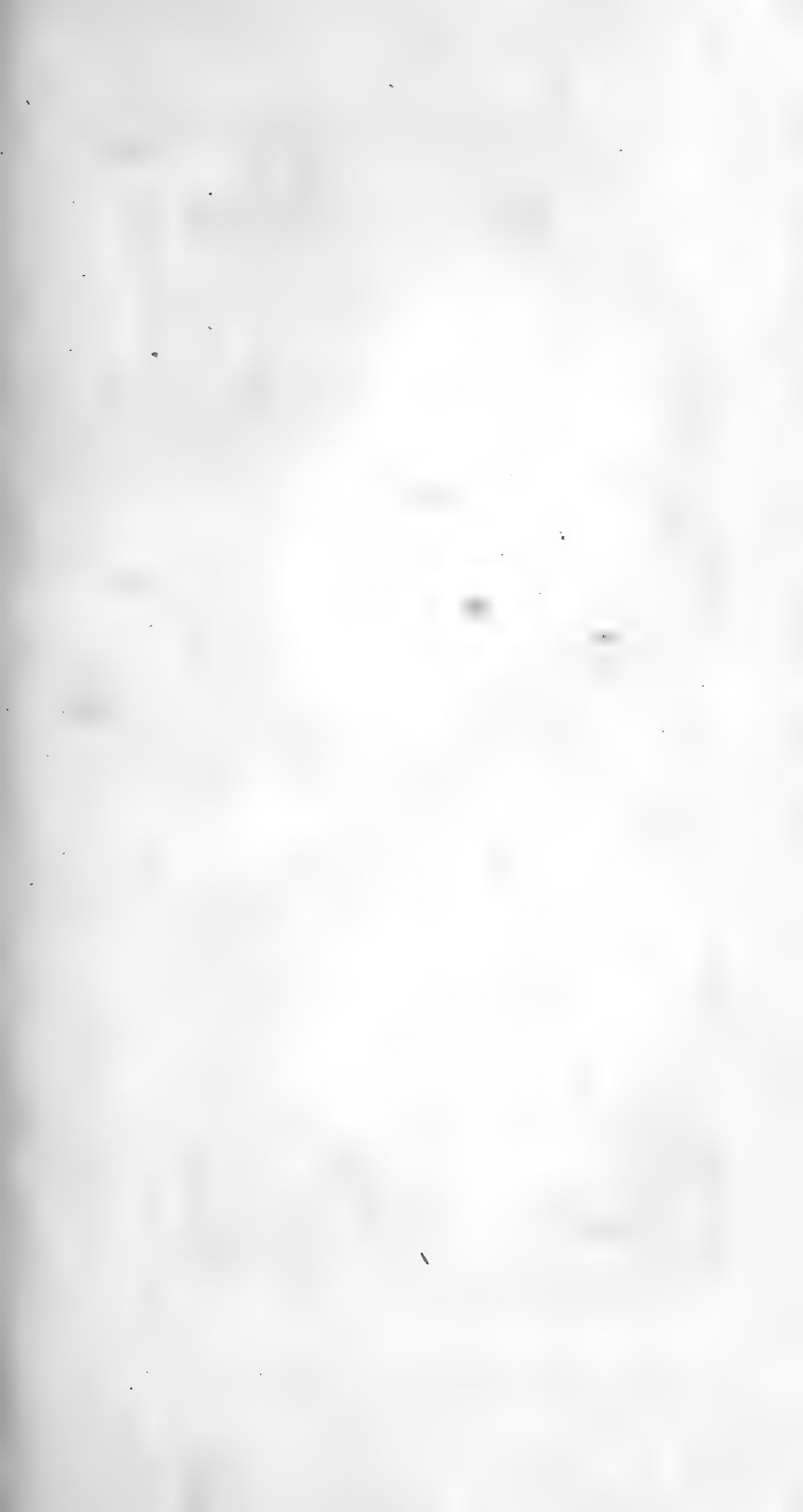
CHITON squamosus, testa septemvalvi.

Chemn. Chiton. t. 1. f. 4.

Rupibus adhæret, ut plurimum, genus *Chiton*, patellarum more; continetque species satis numerosas, quibus si negarit natura pulchritudinem, miram certe concessit conformationem, e plurimis quasi zonis testaceis constantem. Oras incolit Americanas species quam depinximus, inter maximas habitas
fui

fui generis: color ejus cæruleo-virescens venulis atomisque obscurioribus variatur.

Suave est philosopho contemplari generalem quandam similitudinem, quæ interdum mira et manifesta est in animalibus penitus diversis, nec ulla affinitate inter se conjunctis. In hoc ipso scilicet *Chitonis* genere, testa qua obducitur animal loricæ fimillima est qua muniuntur *Dasypodes*. Quod contigit quoque insectis quæ continet *Onisci* genus; quorum species communis, quæ et officinalis dicitur, hanc ipsam ob causam nomine Linnæano *Oniscus Armadillo* nuncupatur.





THE
SCALY CHITON.



GENERIC CHARACTER.

Animal resembling a Doris.

Shell consisting of several segments disposed longitudinally in the back.

SPECIFIC CHARACTER.

CHITON with the shell commonly consisting of eight valves; the margin scaly.

The genus Chiton is generally found adhering to rocks, like some of the Lepades. The species, which are pretty numerous, are less remarkable for beauty than for singularity of structure; being composed of several distinct shelly bounds. The species here represented is one of the largest, and is a native of the American coasts. Its general color is a blueish green, variegated with veins and specks of darker and lighter colors. It is curious to contemplate the similarity in point of general form, which sometimes takes place between animals of the most distant tribes, and which have no real affinity to each other. Thus in the present genus, the inhabiting animals are covered with an armour resembling that
of

of the *Dasyodes* or *Armadillos* amongst quadrupeds; and the insects of the genus *Oniscus* are formed on a similar plan; the officinal or common species in particular, which has obtained its trivial name from this very circumstance.

BULLA VIRGINEA.



CHARACTER GENERICUS.

Animal limax.

Testa univalvis, convoluta, inermis.

Apertura subcoarctata, oblonga, longitudinalis.

Columella obliqua, lævis.

Lin. Syst. Nat. p. 1181.

CHARACTER SPECIFICUS, &c.

BULLA ALBA, fasciis versicoloribus duplicatis,
columella truncata purpurea.

BULLA TESTA subturrata erecta, columella
truncata sanguinea.

Lin. Syst. Nat. p. 1186.

BUCCINUM VIRGINEUM.

Lin. Mus. Lud. Utr. n. 267.

In Asiæ fluviis præcipue reperta sedem sibi vindicat hæc concha inter pulcherrimas sui generis. Colore interdum variat; notas tamen semper retinet certas adeo et constantes, ut de specie non possit dubitari.

THE
RIBBAND BULLA.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell univalve, convoluted.

Aperture somewhat fraitened, oblong, longitudinal, entire at the base.

Column oblique and smooth.

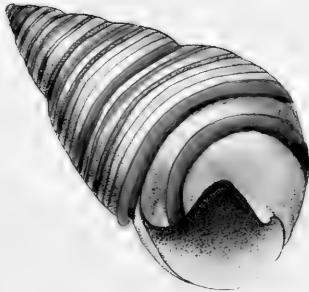
SPECIFIC CHARACTER, &c.

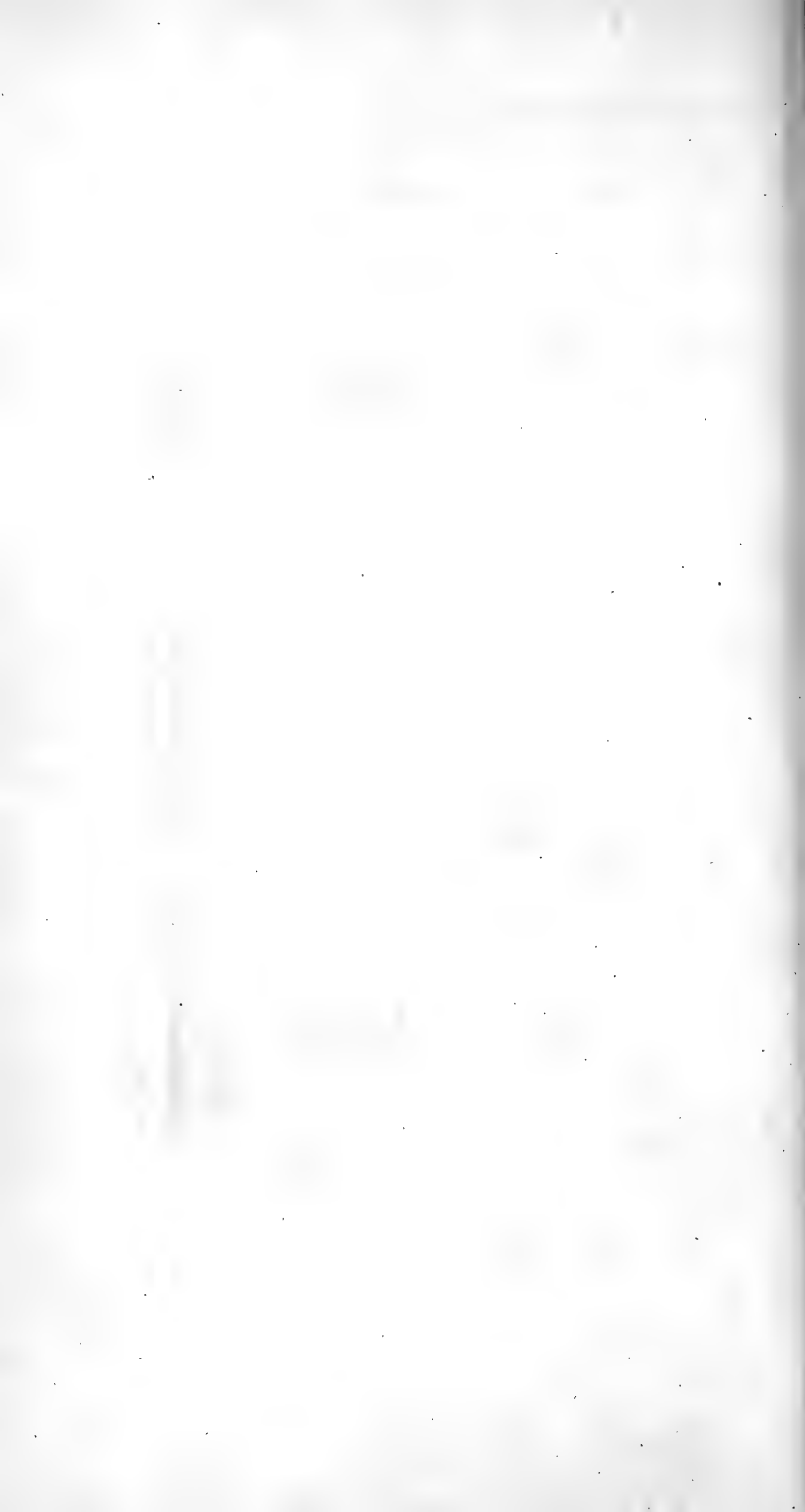
WHITE BULLA, with particoloured double bands, and purple truncated column.

The STRIPED BULLA.

The PAINTED BULLA.

This beautiful shell, which is justly considered as one of the most elegant of the genus, is principally found in the rivers of Asia. It varies sometimes in its colors, but always retains characters sufficiently clear to determine the species.





ALCYONIUM ARENOSUM.



CHARACTER GENERICUS.

Animal (plerumque) plantæ forma crescens.
Stirps fixa, carnosa, gelatinosa, spongiosa, vel coriacea, *osculis polypiferis* obsita.

CHARACTER SPECIFICUS, &c.

ALCYONIUM simplex semicirculare arenofutofum.

ESCHARA LUTOSA.

Pall. el Zooph. p. 37. n. 5.

Eschara MILLEPORA arenosa Anglica.

Raii syn. p. 31.

FLUSTRA ARENOSA.

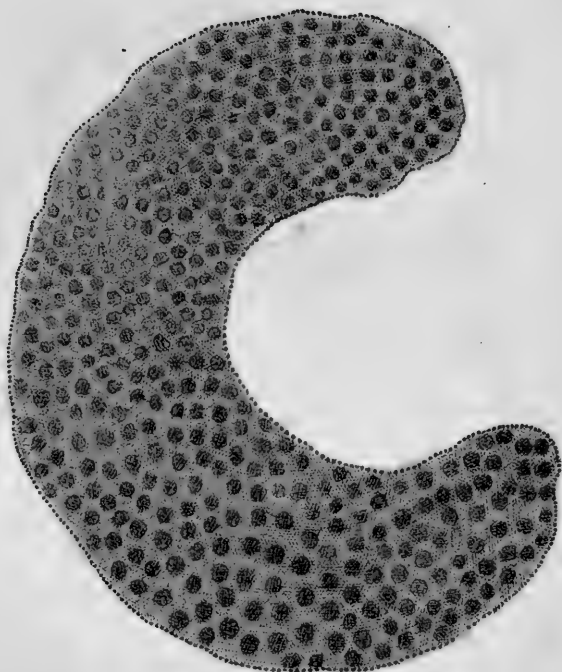
Lin. Syst. Nat. Gmel. p. 3829.

FLUSTRA ARENOSA.

Soland. et Ell. Zooph. p. 17

Miram hanc substantiam, quam in *Escharis* numeravit Pallas, in *Milleporis* Ellisius? in *Flustris* Gmelinus, qui systema naturæ Linnæanum auctius edidit,
nullus

nullus dubito in *Alcyonii* genere reponere. Adhæret plerumque radicibus fucorum majorum; circa littora Britanniae septentrionalis minime rara; semper retinens figuram semicircularem. Substantia est multo leviori et magis friabili quam cætera pleraque Alcyonia, et constare videtur ex arena glutine animali connexa. Cellulæ polypos recipientes qui putantur massam ædificasse, majusculæ sunt, nec profundæ, sed potius superficiariæ. Color totius leviter fuscoflavet. Ostendit tabula veram magnitudinem.



SANDY ALCYONIUM.



GENERIC CHARACTER.

Animal (commonly) growing in the form of a plant.

Substance more or less fleshy, gelatinous, spongy, or coriaceous: beset with polype-cells.

SPECIFIC CHARACTER.

Flat sandy ALCYONIUM of a semi-circular form.

Horse-shoe MILLEPORE.

English sandy MILLEPORA.

Ellis corallin. p. 74.

I have not the slightest hesitation in ranking this curious substance under the genus *Alcyonium*, rather than that of *Eschara*, in which it is placed by Pallas, of *Millepora*, in which it is stationed by Ellis? or lastly, in that of *Flustra*, in which it is arranged by Gmelin in his enlarged edition of the *Systema Naturæ* of Linnæus. It is represented in its natural size, and is generally found attached to the roots of the

the larger fuci: it is not uncommon about the northern parts of the British coasts, and always preserves its semicircular shape. Its texture is much fligher than that of most others of this genus, seeming to consist of sandy particles connected by an animal gluten: the cells or cavities, in which are supposed to reside the polypes, or fabricators of the mass, are rather large than small, and are not very deeply impressed, but rather superficial. Its colour is a pale yellowish brown.

BULLA? OCCIDUA.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, convoluta, inermis.

Apertura coarctata, oblonga, longitudinalis.

Columella obliqua, lævis.

Lin. Syst. Nat. p. 1181.

CHARACTER SPECIFICUS, &c.

BULLA? (Helix?) ovato-oblonga, crassa, al-
bida, spira obtusa, labio purpureo.

HELIX oblonga. H. testa perforata ovato-ob-
longa, striata, labro columellaque roseis.

Müll. Hist. Verm. p. 86. n. 284.

PSEUDO-AURIS MIDÆ, testa ovali oblonga,
subumbilicata, tumida, crassa, anfractibus
sex ventricosus, apice obtuso, labro et labio
roseis, apertura ovata integerrima.

Martini. Vol. 9. p. 30. t. 119.

fig. 1022. 1023.

BUCCINUM admodum crassum, &c. &c.

List. conch. t. 23. *fig.* 21. &c.

i. 1055. *fig.* 1.

COCHLEA

COCHLEA terrestris Americana Plumieri.

List. it. Par. p. 74. t. 3.

HELIX oblonga.

Born. Mus. Cæs. Vind. test. t. 15.

fig. 21. 22.

HELIX oblonga.

Lin. Syst. Nat. Gmel. p. 3637.

COCHLEÆ lævæ.

Seb. Mus. 3. t. 71. fig. 17—20.

Facie formaque generali affinis admodum est Bulla Occidua perpulchræ Bullæ achatinæ, quam in hoc opere jam depinximus. Ab illa tamen facile dignosci possit, quod crassior multo sit, labio non tenui, quale est Bullæ achatinæ, sed circa testæ hiatum solidam in marginem ducto. Differt quoque colore; nam alba paulatim subflavet, labio pulchre roseo, (quo etiam leviter inficitur interna testæ superficies,) caretque omnino eleganti illa variatione qua decoratur Bulla achatina. Terrestris est species, et in variis Americæ meridionalis partibus non raro reperitur, nec non in insulis Americanis seu occiduis. Animal testam incolens helici communi simillimum est. Color est cinereus, umbris striisque huc illuc obscurioribus et lucidioribus variatus, et in aliquibus partibus sub-cæruleo et roseo commistus. Viro celeberrimo Carolo Plumiero, quem circiter finem sæculi jam elapsi merito insigniverunt scripta

scripta quæ congeffit de naturali novi orbis historia, de botanice præcipue, figuram archetypam debemus, quam in tabula imitati sumus, quamque cum Listero in Lutetia Parisiorum agente, communicavit Plumierus. Ova quæ deponit *Bulla occidua* putamine calcario conteguntur, et tum forma tum magnitudine ad ovorum passeris vulgaris similitudinem tam prope dicuntur accedere, ut ab iis vix ac ne vix possint distingui.

THE
OCCIDENTAL BULLA.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell univalve, convoluted.

Aperture somewhat straitened, oblong, longitudinal, entire at the base.

Column oblique and smooth.

SPECIFIC CHARACTER, &c.

Ovate-oblong thick BULLA? (Helix?) with obtuse spire, and purple lip.

The Rose-lipped SNAIL.

Rose-mouthed BULLA.

Surinam SNAIL.

Oviparous SNAIL.

Der Rosenmund. } *Martini. Vol. 9. p. 30. t. 119.*
Roodlip. } *fig. 1022. 1023.*

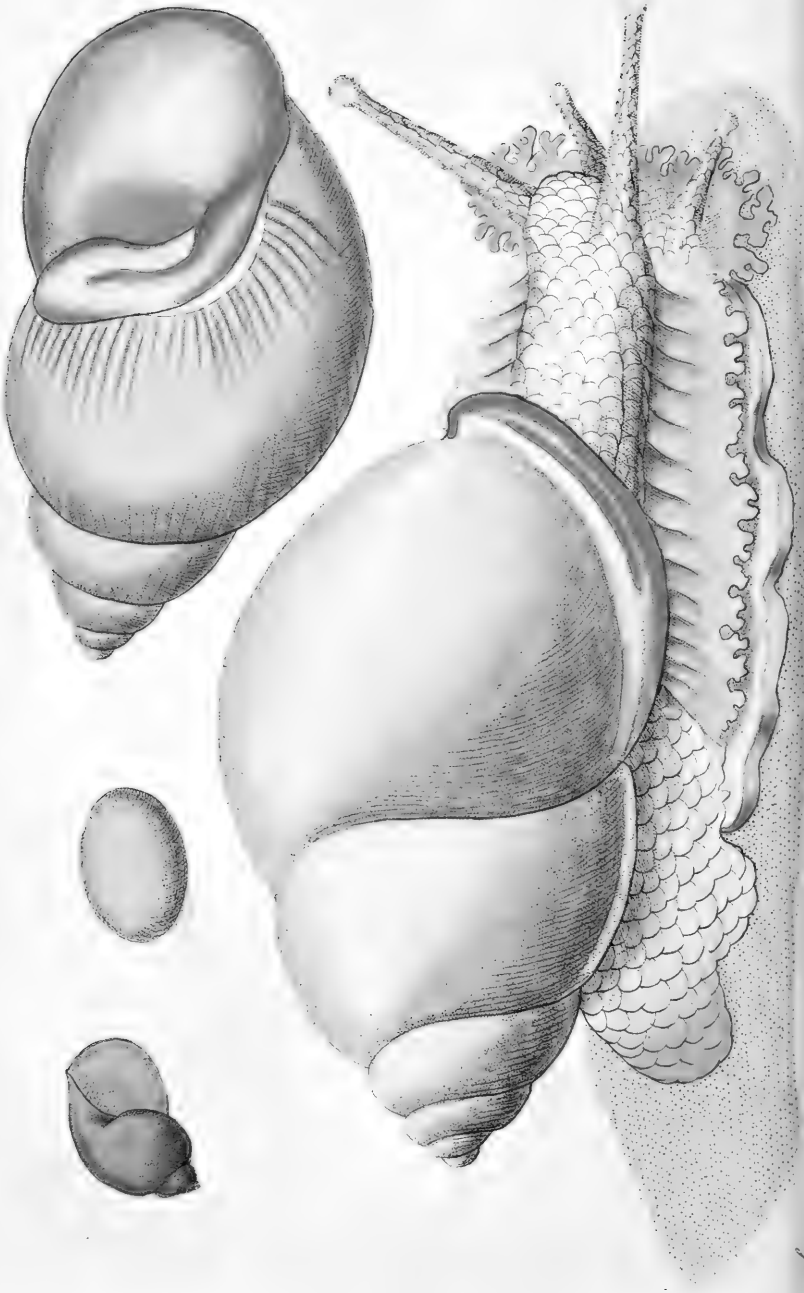
FAUSSE Oreille de Midas.

Davil. Cat. 1. p. 134. n. 166.

Der rosenmundige SCHNIRKEL.

Born. Mus. Cæs. p. 381. t. 15.
fig. 21. 22.





La FAUSSE Oreille de Midas.

Favanne conch. t. 65. fig. 1.

Surinam HELIX.

Cat. Mus. Port. p. 55. n. 1299.

p. 39. n. 933.

p. 82. n. 1835.

p. 174. n. 3745.

In its general appearance this shell is very nearly allied to the beautiful species called *Bulla achatina*, already figured in the present work: it is however readily distinguished by its far thicker or more solid substance, by the lip or edge, which instead of being thin, as in that shell, forms a strong ridge or border round the opening, and by its total want of the beautiful variegations so conspicuous on the surface of the *Bulla achatina*; being merely of a dull white, with the border or lip before-mentioned of an elegant purple or rose-color: the inside of the shell has also a slight tinge of the same color. It is a terrestrial species, and is not very uncommon in several parts of South America, as well as the West Indian Islands. The inhabiting animal, which bears the most striking resemblance to the common snail, is of a cinereous color, varied with lighter and darker shades and streaks; with a tinge of blueish and rose-color on some parts. It is to the celebrated Father Plumier, so distinguished towards the latter part of the last century for his researches into
the

the natural history of the new world, and more particularly in the botanical department, that we owe the original of the elegant representation on the present plate; the drawing having been communicated by Plumier to Dr. Lister during the time of his residence in Paris.

The eggs which this animal deposits are covered with a hard calcareous coating, and are said to resemble those of the common sparrow to such a degree as to be scarce distinguished from them.

MYTILUS CAMELLII.



CHARACTER SPECIFICUS, &c.

MYTILUS testa oblonga, tenui, virescente, subtruncata, natibus acuminatis carinatis, valvis clausis.

CONCHA caudata, &c.

Camellii delin. rer. nat. tom. 4.

Mus. Brit.

In omnibus convenire videtur hæc species Mytilo Rostro, nisi quod alarum arcte clausarum non hient extremitates. In Japonia generatur Mytilus Camellii, et in Museo Britannico figuræ quædam sunt archetypæ quas ipse Camellus delineavit. Vidi quoque interdum hunc Mytilum in chartis Sinenfibus depictum. Iconas autem quas ostendit tabula nostra, non modo testas sed animal incolens exhibentes debemus ipsis speciminibus, quæ spiritu vini condita in Museo reponuntur Britannico.

THE
CAMELLIAN MUSCLE.

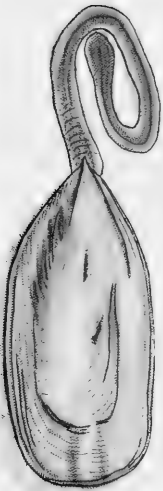


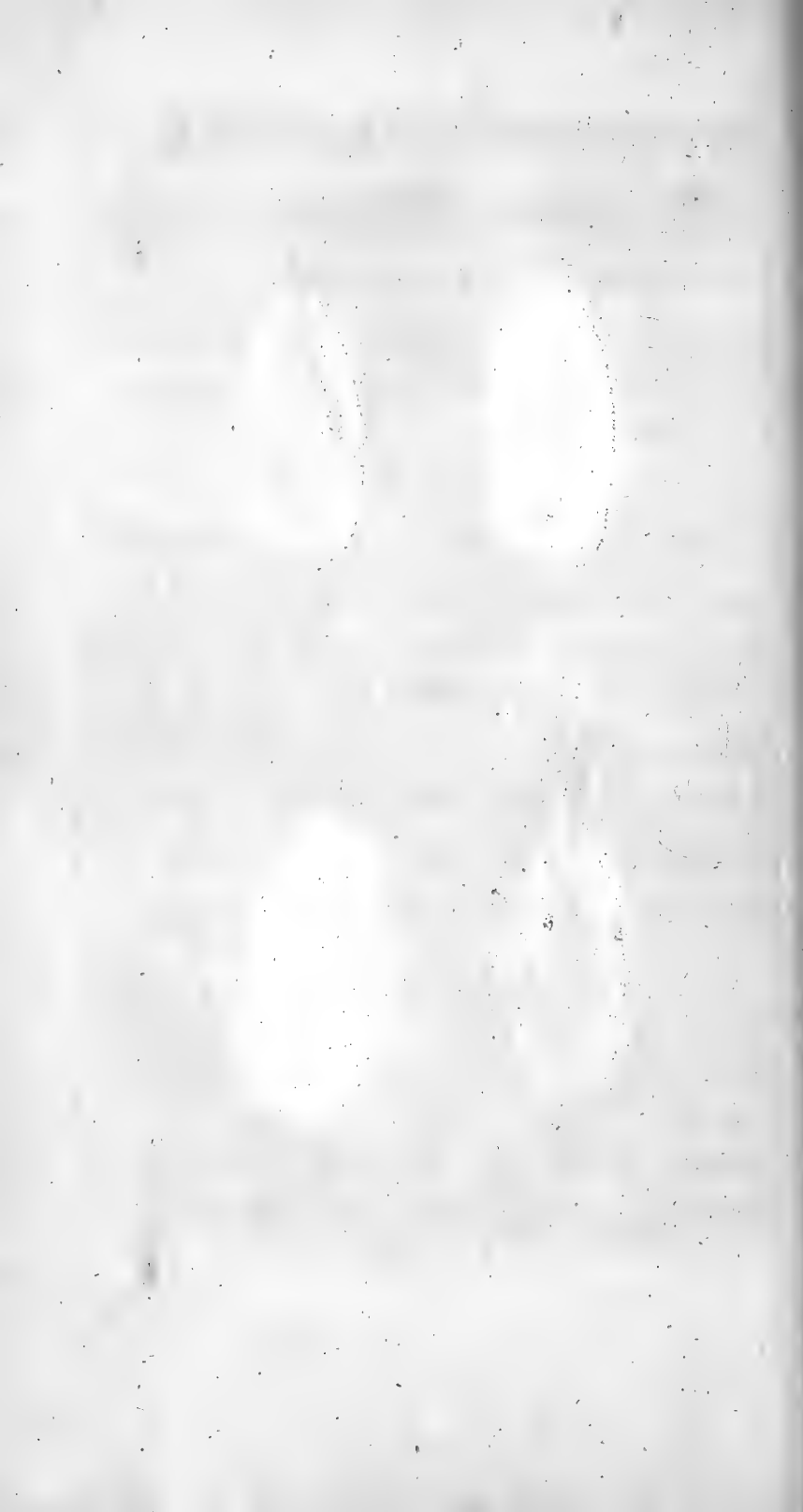
SPECIFIC CHARACTER, &c.

MUSCLE with oblong, thin, greenish, truncated shell, the beaks sharp and carinated; the shells completely closing.

The Clofe DUCK'S-BILL.

This species seems to agree in every respect with the *Mytilus Rostrum*, except that the valves shut very exactly, without leaving any hiatus at either end as in that shell. It is a native of Japan, and is represented in some original drawings of Camelli (Kamel) in the British Museum: I have also observed this species in Chinese drawings. The figures here represented, shewing not only the shell but likewise the inhabiting animal, are from specimens finely preserved in spirits in the British Museum.





PTEROTRACHEA CORONATA.



CHARACTER GENERICUS.

Corpus liberum, gelatinosum, pinna gelatinosa mobili ad abdomen vel caudam.

Oculi duo intra caput.

Lin. Syst. Nat. Gmel. p. 3137.

CHARACTER SPECIFICUS, &c.

PTEROTRACHEA ventre caudaque pinniferis, capitis proboscide tereti perpendiculari, frontis coronula aculeis decem.

Forsk. Fn. aeg. ar. p. 117. n. 41.

PTEROTRACHEA coronata.

Lin. Syst. Nat. Gmel. p. 3137.

Luculente et accurate explicuit hanc speciem celeberrimus Forskal in opere cui titulus *Descriptiones Animalium, &c. &c. quæ in itinere orientali, &c. &c.*

“ *Corpus* subteres : crassitie pollicis : longitudine fere spithamæ. *Caput* antice rotundatum ; coronula in fronte spinis decem conicis : harum tres utrinque constituunt lineas medias perpendiculares : extra
illas

illas superne utrinque duæ, una supra alteram. Infra coronam *Proboscis* dependet, fere duos pollices longa, nervo medio et apice in capitulum incrassato, albido: ore terminali. Apex hyalinus: et tota proboscis gelatina farta videtur: sub illa maculæ albidæ, parvæ, sparvæ interdum. Oculus uterque ad nucham interne prope marginem; hinc fatis ab invicem remoti; constant macula ovali, transversa, fusca; cui introrsum imponitur *infundibulum*, seu conus inversus, obscure testaceus; recipiens spherulam hyalinam, similem bullæ aeræ. *Truncus* ab oculis ad caudam fere cylindricus; pone superne rotundatus, nec nisi basi cum cauda conjunctus, lævis, immaculatus: inferne juxta pinnam albo-maculatus: abdomen subtus totum asperum. Ante pinnam *Sacculus* duplex, an gula? ovatus, pendulus, hyalino-maculatus. *Anus* proxime supra ligamentum caudæ. In quibusdam supra anum in extremo trunco *nucleus* globosus, albidus, lente minor. *Cauda* verticalis, pollicaris; antice, sed inferius longo collo adnata trunco; cæterum triangularis, utrinque lineis quatuor aculeatis; angulato-scabra, terminata pinnula utrinque horizontali, semicordata, cauda quater brevior, prominente ultra caudæ apicem; ubi margine incumbit margini caudæ. *Pinna* pone medium trunci, orbicularis, diametro pollicis, compressa, basi incrassata, laminisque trunci albis utrinque crenatis, affixa. Subtus in margine pinnula alia, campanulata, puncto medio affixa, hyalina.

Habitat in Mari Mediterraneo et Archipelago."





5

CORONATED PTEROTRACHEA.

GENERIC CHARACTER.

Body nayant, gelatinous, furnished with a fin at the abdomen or tail.

Eyes two, within the head.

SPECIFIC CHARACTER.

PTEROTRACHEA with abdomen and tail pinnated, the head marked with aculeated lines in front, the proboscis columnar and perpendicular.

It is to the celebrated Forskal that we are indebted for an accurate description of this curious animal.

Body subcylindric; about an inch in diameter, and almost a span in length. The head is rounded on the fore-part, and furnished in front with a coronet of ten conical spines: of these three on each side constitute so many perpendicular middle-lines: beyond and above which, on each side, are two more; one above the other. Beneath the coronet hangs the proboscis, which is nearly two inches long, with a whitish middle-nerve, and an incrassated, capitulated, hyaline tip, and terminal mouth. The whole proboscis appears as if filled with jelly: beneath

neath it are sometimes seen small scattered whitish spots. The eyes are situated on each side the back of the neck, internally, near the margin; and are pretty remote from each other. Each consists of a transverse, oval brown spot, on which is placed inwards an infundibulum or inverted cone of an obscurely-testaceous color, receiving a hyaline spherule resembling an air-bubble. The trunk from the eyes to the tail is nearly cylindrical; rounded behind on the back-part, and only connected with the tail at its base: it is smooth and without spots; but beneath, near the fin, is spotted with white. The whole abdomen is rough beneath: before the fin is seated a double sacculus, (perhaps the stomach?) it is ovate, pendulous, hyaline-spotted. The vent is seated near the ligament of the tail. In some specimens, near the vent, at the end of the body, is a globose whitish nucleus, smaller than a lentil. The tail is vertical, an inch long, connected to the body in front, (but beneath it), by a long neck: it is triangular, with the angles rough, and has four aculeated lines on each side, and is terminated on each side by a semi-cordate, horizontal pinnule four times shorter than the tail, and projecting beyond its tip, where its edge rests on that of the tail. The fin is situated beyond the middle of the body, and is orbicular, an inch in diameter, compressed, thickened at the base, and affixed to the white laminæ of the trunk, which are crenated on each side. Beneath, in the margin, is another pinnule, which is bell-shaped, hyaline, and affixed by a middle point.

It is a native of the Mediterranean and Archipelago.

TURBO PETHOLATUS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, solida.

Apertura coarctata, orbiculata, integra.

Lin. Syst. Nat. p. 1232.

CHARACTER SPECIFICUS, &c.

TURBO testa imperforata ovata lævi nitida, anfractibus sursum subangulatis.

Lin. Syst. Nat. p. 1233.

COCHLEA petholata.

Rumpf. t. 19. f. D. & 5. 6. 7.

COCHLEA variegata.

Argenv. Conch. t. 6. f. K.

List. Conch. t. 584. f. 39.

Gualt. test. t. 64. f. F.

Klein. ostr. t. 2. f. 51.

Maria Indica et Americana incolit Turbo petholatus, magnitudine vera in tabula depictus.

THE
V A R I E G A T E D T U R B O .



GENERIC CHARACTER.

Animal snail-shaped.

Shell univalve, spiral, solid.

Aperture orbicular.

SPECIFIC CHARACTER, &c.

TURBO with ovate glossy variegated shell; the whirls inclining to an angular form on the upper part.

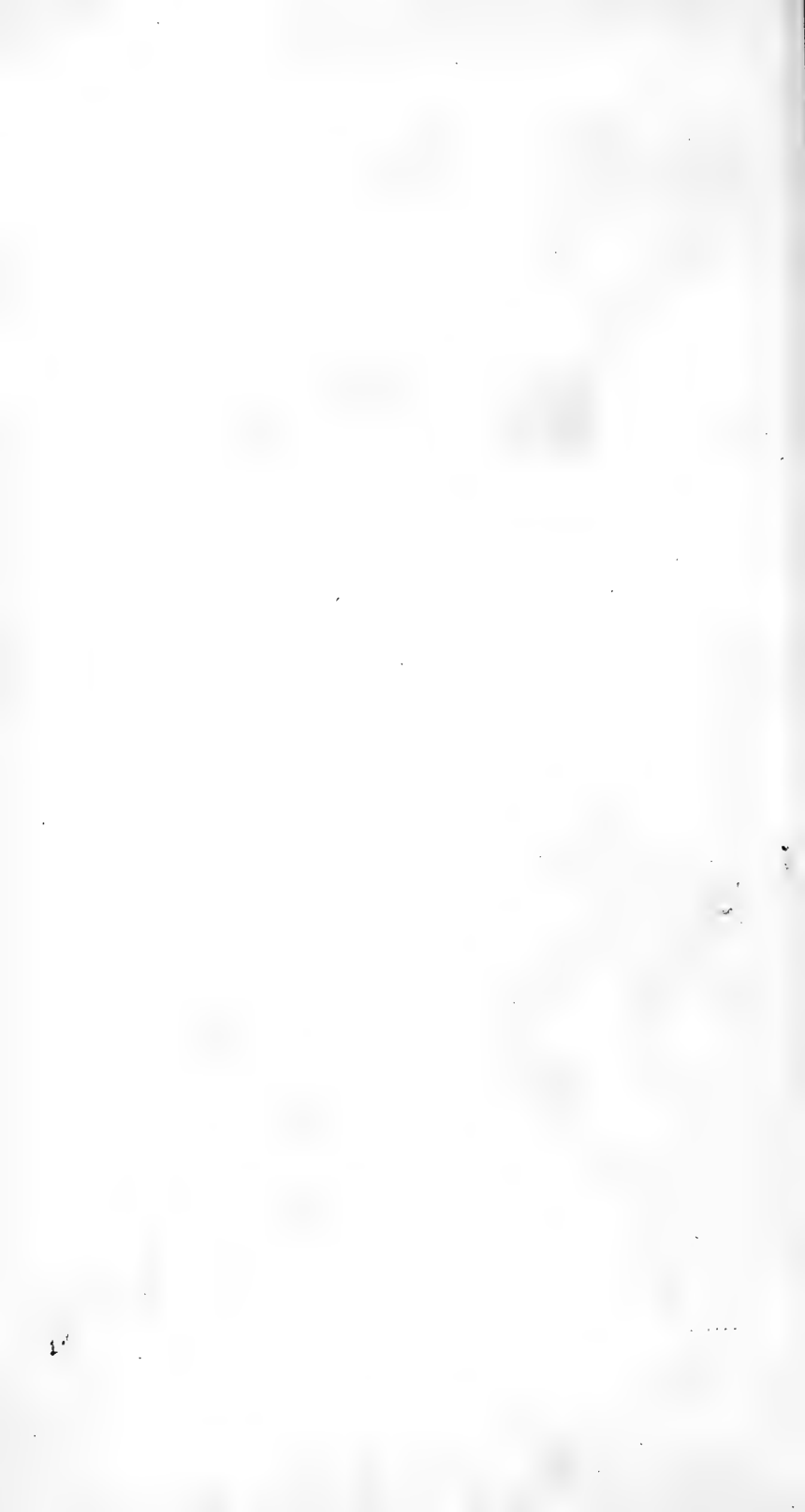
The variegated TURBO.

The ribband TURBO.

The parti-coloured American SNAIL.

This elegant shell is a native of the Indian and American seas, and is represented on the plate in its natural size.





SEPIA OCTOPODIA.



CHARACTER GENERICUS.

Corpus carnosum : vagina excipiente pectus, ad
cujus basin tubus.

Brachia (præter bina tentacula pedunculata in ple-
rifque) octo interius adspersa cirris verrucosis.

Os inter brachia, terminale, corneum.

Lin. Syst. Nat. Gmel. p. 3149.

CHARACTER SPECIFICUS, &c.

SEPIA corpore ecaudato, tentaculis pedunculatis
nullis.

Lin. Syst. Nat. p. 1095.

Lin. Syst. Nat. Gmel. p. 3149.

POLYPUS octopus.

Rondel. pisc. 513.

OCTOPODIA.

Hasselg. act. ups. 1750. p. 33.

POLYPUS pelagius.

Seb. mus. 3. p. 4. t. 2. f. 1—7.

Magna interdum huic animali moles est; major
nullibi quam in oceano Indico et Septentrionali.

Narrat

Narrat Dominus Pennantus se ab hominibus fide dignis accepisse, in certis maris Indici partibus visa interdum fuisse specimina, quorum singula brachia longa essent novem orgyias; Indosque navigium suscipere non audere, nisi prius latis securibus instructos, ut brachia sepia cymbam prensantis possint abscindere: quod ni faciant periclitari ipsam cymbam ne sub aquis mergatur.

Lepidam historiam ex Trebio Nigro excerptit Plinius de monstro hujusmodi *, quod immodicis in receptacula commissis furtis, non levem piscatorum iram in se convertit.

“ Cætera, quæ idem retulit, monstro propiora possunt videri.

Carteia in cetariis affuetus exire e mari in lacus eorum apertos, atque ibi falsamenta populari, (mire omnibus marinis expetentibus odorem quoque eorum: qua de causa et nassis illinuntur:) convertit in se custodum indignationem assiduitate furti. Immodicæ his sepes erant objectæ: sed has transcendebat per arborem: nec deprehendi potuit, nisi canum sagacitate. Hi redeuntem circumvasere noctu, concitique custodes expavere novitatem. Primum omnium magnitudo inaudita erat: deinde color muria obliti, odore diri. Quis ibi polypum expectasset, aut ita cognosceret? cum monstro dimicare sibi videbantur. Namque et afflatu terribili canes agebat, nunc extremis crinibus flagellatos, nunc robustioribus brachiis clavarum modo incussos, ægreque multis

* *S. Loligine?*

tridentibus confici potuit. Ostendere Lucullo caput ejus, dolii magnitudine, amphorarum quindecim capax, atque, (ut ipsius Trebii verbis utar) barbas, quas vix utroque brachio complecti effret, clavarum modo torofas : longas pedum tricenûm : acetabulis, five caliculis urnalibus, pelvium modo: dentes magnitudini refpondentes. Reliquiæ affervatæ miraculo pependere pondo DCC.”

Huc forfan referenda funt quæ vaga et incerta feribuntur de monftro Arctico, *Kraken* feu *Korven* dicto; quod verifimile eft originem duxiffe ab ingentibus aliquibus hujus fpeciei fpeciminibus, in mari feptentrionali vifis, et in majus, ut fit, celebratis.

THE
EIGHT-ARMED CUTTLE-FISH.



GENERIC CHARACTER.

Body fleshy, sheathing the breast, which is furnished at its base with a tubular opening.

Arms eight, (and in most species two pedunculated tentacula,) beset with numerous suckers or acetabula.

Head short; *Eyes* large; *Mouth* resembling a Parrot's beak.

SPECIFIC CHARACTER, &c.

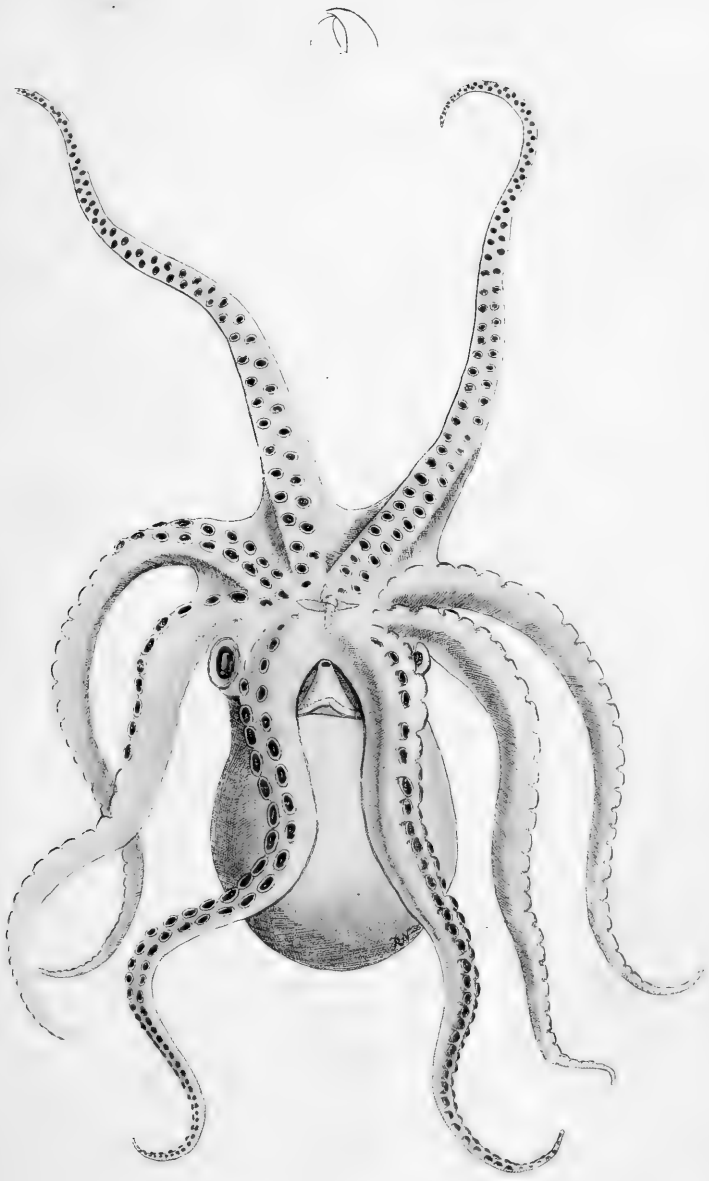
Short-bodied CUTTLE-FISH, without any tail or appendage; with eight arms and no tentacula or longer arms.

The SEA POLYPUS.

The eight-armed CUTTLE-FISH.

Penn. Br. Zool. 4. p. 44. pl. 28.

The size to which this animal sometimes grows is very great; but it is in the Indian and Northern seas that it seems to arrive at its fullest magnitude. Mr. Pennant tells us he has been well assured that in some



Tabl. Nov. 98. by F.P. Nodder.

some parts of the Indian seas, specimens have been seen with each arm of the length of nine fathoms; and that in those seas the Indians never venture to navigate their canoes or boats without being provided with broad hatchets in order to cut off the arms of the cuttlefish, should it happen to attack the vessel, which it sometimes does in such a manner as greatly to endanger its being drawn under water.

A most entertaining account is given by Pliny, from Trebius Niger, of an enormous monster of this kind (perhaps a *Loligo*), near the coast of Carteia, which used to rob the neighbouring reservoirs of salted fish, and which continued its depredations in so alarming a manner as to provoke the vengeance of the enraged proprietors.

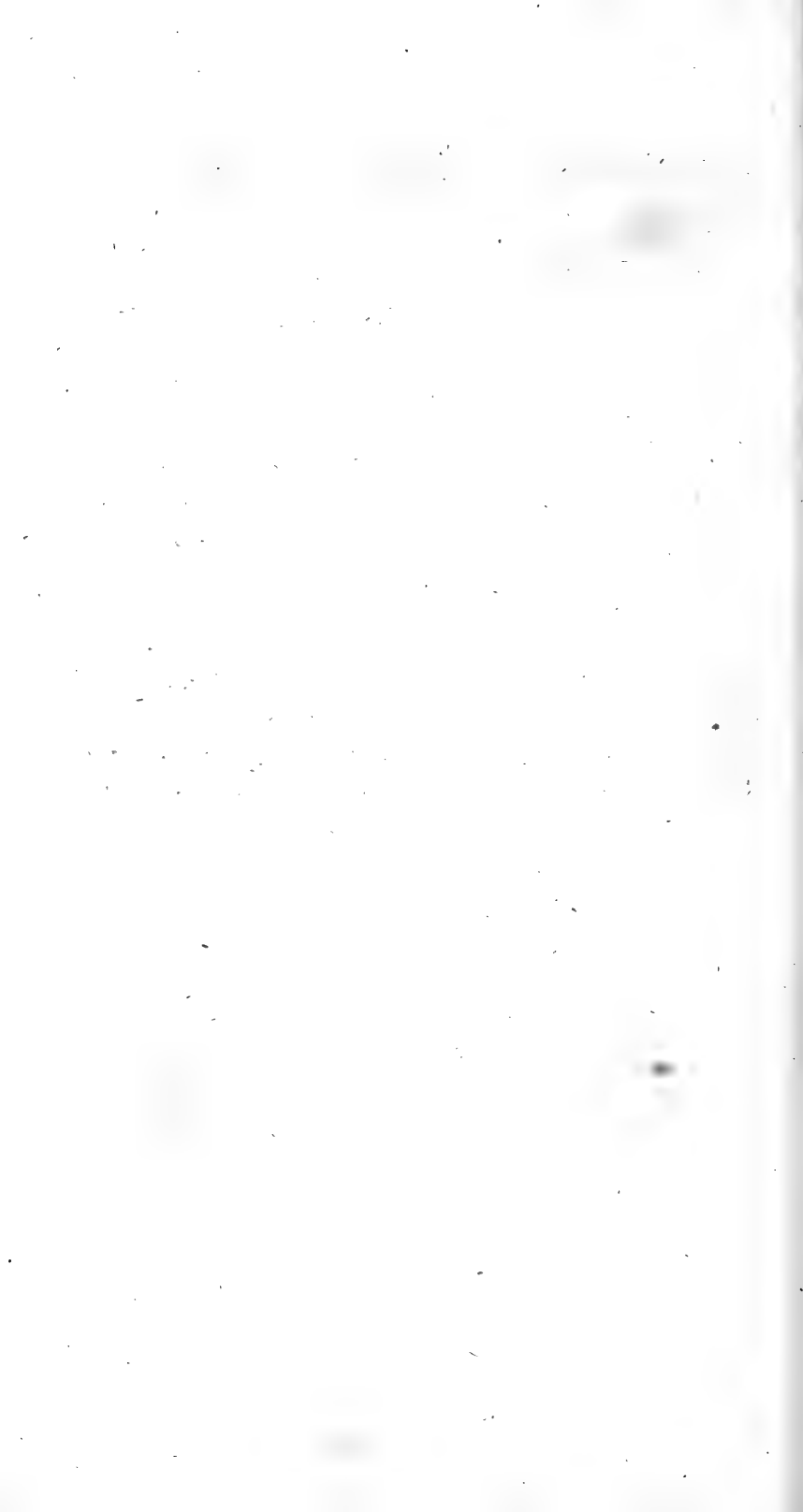
This tale, in the translation of honest Philemon Holland, runs thus.

“ The rest which mine author hath related as touching this fish, may seem rather monstrous lies and incredible, than otherwise: for he affirmed, that at Carteia there was one of these *Polypi*, which used commonly to go forth of the sea, and enter into some of their open cisterns and vaults among their ponds and stews, wherein they kept great sea-fishes, and otherwhiles would rob them of their salt-fish, and so go his waies againe: which he practised so long, that in the end he gat himselfe the anger and displeasure of the masters and keepers of the said ponds and cisterns, with his continuall and immeasurable filching: wherupon they staked up the place and empalled

palled it round about, to stop all passage thither. But this thiefe gave not over his accustomed haunt for all that, but made meanes by a certaine tree to clamber over and get to the fore-said salt-fish; and never could he be taken in the manner nor discovered, but that the dogges by their quicke sent found him out and bayed at him: for as he returned one night toward the sea, they assailed and set upon him on all sides, and therewith raised the foresaid keepers, who were affrighted at this so sodaine an alarme, but more at the straunge sight which they saw. For first and foremost this Polype fish was of an unmeasurable and incredible bignesse: and besides, hee was besmeared and beraied all over with the brine and pickle of the foresaid salt-fish, which made him both hideous to see to, and also to stinke withall most strongly. Who would ever have looked for a Polype there, or taken knowledge of him by such markes as these? Surely they thought no other, but that they had to deale and encounter with some monster: for with his terrible blowing and breathing that he kept, he drave away the dogges, and otherwhiles with the ends of his long fringed winding feet, he would lash and whip them; sometimes with his stronger claws like armes he rapped and knocked them well and surely, as it were with clubs. In summe, he made such good shift for himselfe, that hardly and with much adoe they could kill him, albeit he received many a wound by trout-speares which they launced at him. Well, in the end his head was brought and shewed to Lucullus for a wonder,

der, and as bigge it was as a good round hogthead or barrel that would take and containe 15 Amphores: and his beards (for so Trebius tearmed his clawes and long-stringed feet) carried such a thickness and bulke with them, that hardly a man could fathom one of them about with both his armes, such knockers they were, knobbed and knotted like clubs, and withall 30 foot long. The concavities within them, and hollow vessels like great basons, would hold four or five gallons apeece: and his teeth were answerable in proportion to the bignes of his bodie. The rest was saved for a wonder to be seen, and waighed 700 pound weight.”

It may be added that the vague and uncertain descriptions of the northern animal called the Kraken or Korven, may perhaps owe their origin to exaggerated accounts of some uncommonly large specimens of this animal seen in the northern seas.



SEPIA LOLIGO.



CHARACTER GENERICUS.

Corpus carnosum: vagina excipiente pectus, ad
cujus basin tubus.

Brachia (præter bina tentacula pedunculata in ple-
rifque) octo interius adspersa cirris verrucosis.

Os inter brachia, terminale, corneum.

Lin. Syst. Nat. Gmel. p. 3149.

CHARACTER SPECIFICUS, &c.

SEPIA corpore subcylindrico subulato, cauda an-
cipiti-rhombea.

Lin. Syst. Nat. p. 1096.

LOLIGO.

Rond. pisc. 506.

LOLIGINIS species maxima.

Seb. Mus. 3. p. 7. t. 4.

In magnam Interdum crescit molem Sepia Loligo;
minor tamen est Sepia octopodia; a qua etiam facile
fecernitur corpore magis elongato. Suppeditavit
huic Natura nec non aliis nonnullis congeneribus
receptaculum magnum internum, foramine extrin-
fecus

fecus aperto: continetur in hoc sacco fluidum quoddam nigrum et spissum, quo, si turbata sit, statim emisso, aquam infuscare, et e conspectu fugere dicitur. Utebantur antiqui hoc succo, atramenti vice: putatque celeberrimus Swammerdamus atramentum Sinense seu quod Indicum vulgo dicitur, ex hoc ipso liquore spissato concoqui, additis certis suffimentis, aliisque ejusmodi. Affirmant contra nonnulli succum, quem emittit Loligo, in atramentum scriptorium apte et utiliter non posse converti; et ut aliquid ejus ope plane et probe literis mandetur, summa peritia opus esse. Quibus fortasse assentiendum sit, si liquor recens fuerit extractus: sed si prius satis exsiccatum, contritum fuerit et in aqua solutum, de calamo facilius dilabetur; et probabile omnino videtur quod opinatur Swammerdamus; præcipue cum certum sit atramenti Indici modicam quantitatem, si post solutionem in vase aliquo fervetur, intra paucos dies foetorem non levem emittere; quod satis indicare videtur animalem originem.

Prædatoria est indole Sepia Loligo, ut et aliæ congeneres; vesciturque præcipue testaceis et molluscis variis. Color generalis fusco-rubet, oculis læte cæruleis. Non prorsus supervacaneum sit notare Sepias ab antiquis Polypos fuisse dictas; polyposque parvulos aquaticos, quos Hydras hodie nuncupant physici, facie seu habitu generali sepiis quodammodo similes esse; consperguntur enim hydrarum tentacula verrucis pluribus quæ visibiles sunt ope microscopii, quasque verisimile est eodem fungi munere quo sepiarum acetabula. Addendum porro est, vice ossis quod sepiæ officinalis seu communis in corpore habet,

bet, instrui hanc speciem cartilagine quadam enfi-
formi, hyalina, longa; quæ a quibusdam physicis
quasi species Pennatulæ descripta et depicta est; a
Seba nempe in tertio volumine thesauri rerum natu-
ralium p. 40. tab. 16. In editionibus quoque non-
nullis prioribus systematis naturæ Linnæani, falso
reponēbatur in genere Pennatulæ.

THE
CALAMARY.



GENERIC CHARACTER.

Body fleshy, sheathing the breast, which is furnished at its base with a tubular opening.

Arms eight, (and in most species two pedunculated tentacula,) beset with numerous suckers or acetabula.

Head short; *Eyes* large: *Mouth* resembling a Parrot's beak.

SPECIFIC CHARACTER, &c.

SEPIA with subcylindric subulate body and flattish sharp-edged rhomboid tail.

The CALAMARY or Ink-Fish.

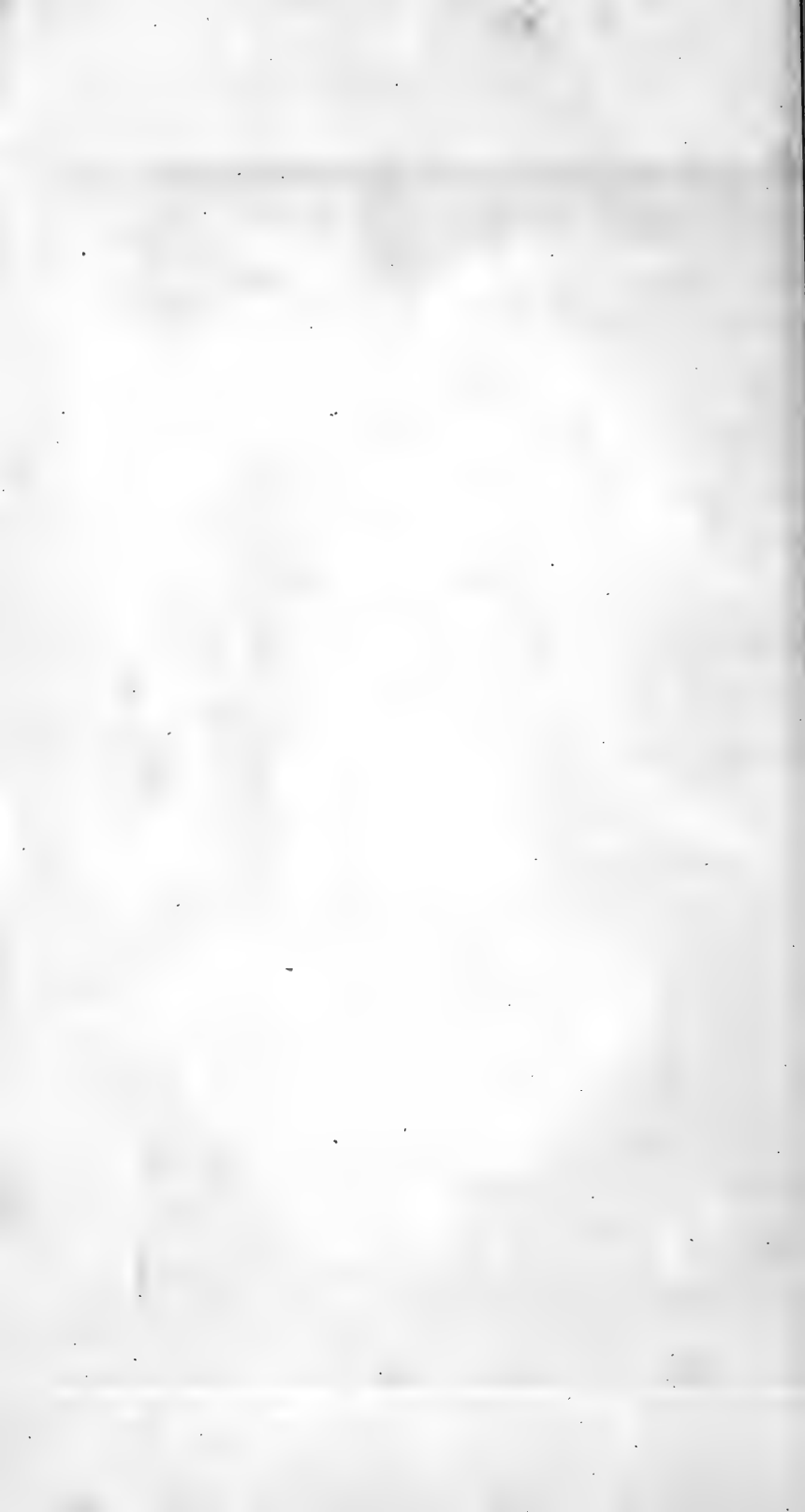
The INK-SEPIA or Loligo.

The Ink CUTTLE-FISH.

This species is readily distinguished from the *S. octopodia* or eight-armed Cuttle-Fish by its more elongated form: in size it is inferior to that animal, though sometimes seen of a very considerable magnitude.



Publ. by F.P. Nodder, Decr 98.



nitude. It is provided, like some others of this genus, with a large receptacle or internal pouch containing a peculiar secretion or fluid of a black color and of a thickish consistence, and opening outwardly by a tubular foramen. When pursued it ejects a quantity of this fluid, which mixing with the surrounding water, is supposed to facilitate the escape of the animal by concealing it from view. This liquor appears to have been used by the ancients for the purpose of ink. The sagacious Swammerdam also declares himself of opinion that the celebrated compound formed by the Chinese, and commonly termed Indian ink, is no other than the black fluid before mentioned in an inspissated state, with the addition of certain perfumes, &c. By others however it is affirmed that the liquor of the *Loligo* is not very convenient for the purpose of an ink, and requires a considerable degree of dexterity in its use. This perhaps may be the case with the recent liquor, but when dried and again ground or dissolved in water, it may become much more easily manageable, and it should seem that Swammerdam's theory may be highly probable; more especially as Indian ink dissolved in water and kept in any considerable quantity, in the space of a few days acquires a very high degree of fœtor, which clearly seems to indicate an animal substance. Like the rest of the *Sepiæ*, the *Loligo* is of a very predacious nature, and feeds on Shell-fish and various Mollusca. Its general color is a reddish brown: the eyes of a beautiful blue. It may not be improper to observe that the different species of this genus were the *Polypi*
of

of the ancients, and it is also highly probable that the small fresh-water animals called Hydræ or Polypes in modern natural history, are considerably allied in general habit to the Sepiæ, and their arms or tentacula when microscopically examined, seem beset with numerous verrucæ which probably act in the same manner as the acetabula or suckers on those of the Sepiæ. It may also be observed that the Loligo, instead of the friable calcarious bone with which the common or officinal Cuttle-Fish is furnished, has on the contrary a long, lance-shaped, transparent cartilage in place of the bone; and this cartilage has sometimes been described and figured as a species of pennatula, under which name it may be found in the third volume of Seba's Thesaurus, p. 40. pl. 16. and even in some of the earlier editions of the Systema Naturæ of Linnæus it was erroneously placed under that genus.

HELIX.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, subdiaphana, fragilis.

Apertura coarctata, intus lunata, f. subrotunda :
segmento circulo dempto.

Lin. Syst. Nat. p. 1241.

HELIX RINGENS.



CHARACTER SPECIFICUS, &c.

HELIX *testa* subcarinata imperforata convexa :
apertura refupinata ; *labio* posterius quadruplicato.

Lin. Syst. Nat. p. 1243.

List. conch. t. 99. *f.* 100.

Argenv. ed. 2. t. 28. *f.* 13. 14.

HELIX CAROCOLLA.



CHARACTER SPECIFICUS, &c.

HELIX *fusca*, *testa* imperforata utrinque convexa,
labro transversali albo.

HELIX

HELIX Carocolla. H. testa carinata imperforata
utrinque convexa.

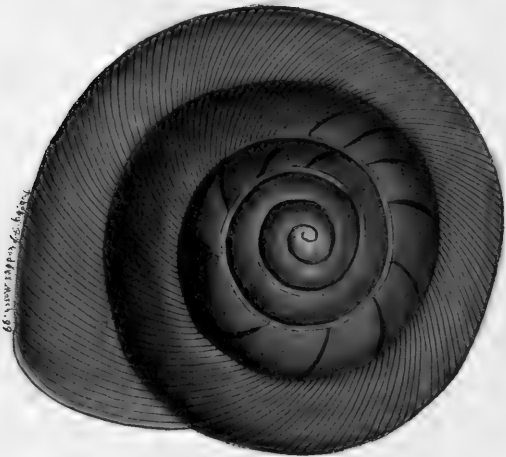
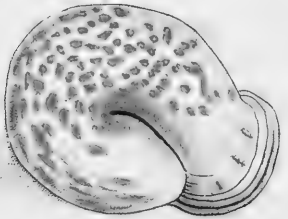
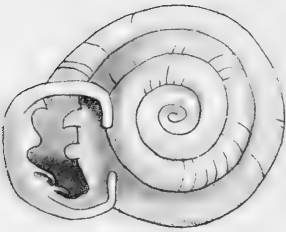
Lin. Syst. Nat. p. 1243.

LUCERNA antiqua.

Argenv. ed 2. p. 214. t. 8. d.

Knorr vergn. 4. t. 5. f. 2. 3.

Cum incolat, ut plurimum, genus numerosum Helicis aquas dulces aut loca terrestria, eo fit, ut careat crassa illa et polita substantia qua testæ marinæ præcellunt. At quamvis non jactent pulchritudinem, multæ tamen sunt species, quarum forma mira et inusitata abunde doceat, habere Naturam fere incredibilem et veluti lusoriam varietatem. Inter species maxime notabiles numerari possunt *Helix ringens*, et *Helix carocolla*, quarum priorem denotant in tabula figuræ minores, posteriorem figuræ majores. Ambæ in India innascuntur.



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S N A I L.



GENERIC CHARACTER.

Animal resembling a slug.

Shell spiral; sub-pellucid.

Aperture femilunar.

R I N G E N T S N A I L.



SPECIFIC CHARACTER, &c.

Whitish HELIX, with yellowish-brown spots,
and inverted ringent mouth.

INDIAN SNAIL with inverted ringent mouth.

Toothed INDIAN SNAIL.

L A M P S N A I L.



SPECIFIC CHARACTER; &c.

Brown imperforated HELIX, slightly convex on
both sides, with white transverse lip.

The Indian LAMP-SNAIL.

La LAMPE antique.

Argenv. ed. 2. p. 216. pl. 8. d.

The genus *Helix* is more distinguished by the number than the beauty of its species ; which being mostly either land or fresh-water inhabitants, have not that thick and glossy appearance which, in general, distinguishes those shells which are natives of the sea. It is however marked in many species by a high degree of singularity in point of form ; and exhibits striking examples of that strange variety of shape into which Nature has arranged her productions. Amongst the more remarkable species may be numbered the *Helix ringens*, represented by the smaller figures, and the *Helix Carocolla*, represented by the larger figures on the present plate. Both these shells are natives of India.

CONUS AULICUS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, convoluta, turbinata.

Apertura effusa, longitudinalis, linearis, edentula,
basi integra.

Columella lævis.

CHARACTER SPECIFICUS, &c.

CONUS testa venis reticulatis fasciisque longitu-
dinalibus fuscis interruptis.

Lin. Syst. Nat. p. 1171.

Seb. Mus. t. 47. fig. 10—12.

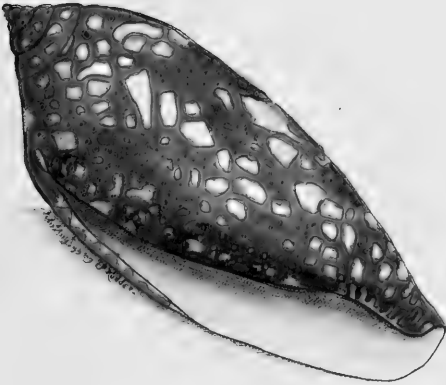
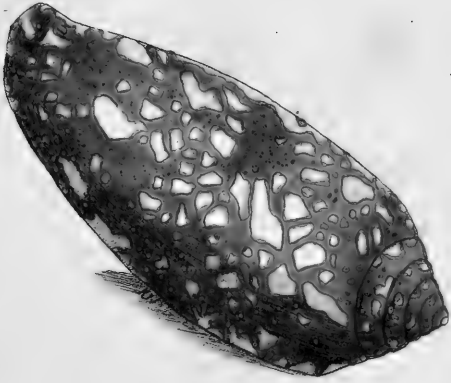
Knorr. vergn. 2. t. 1. f. 1—3. et. 3. t. 19. f. 1.

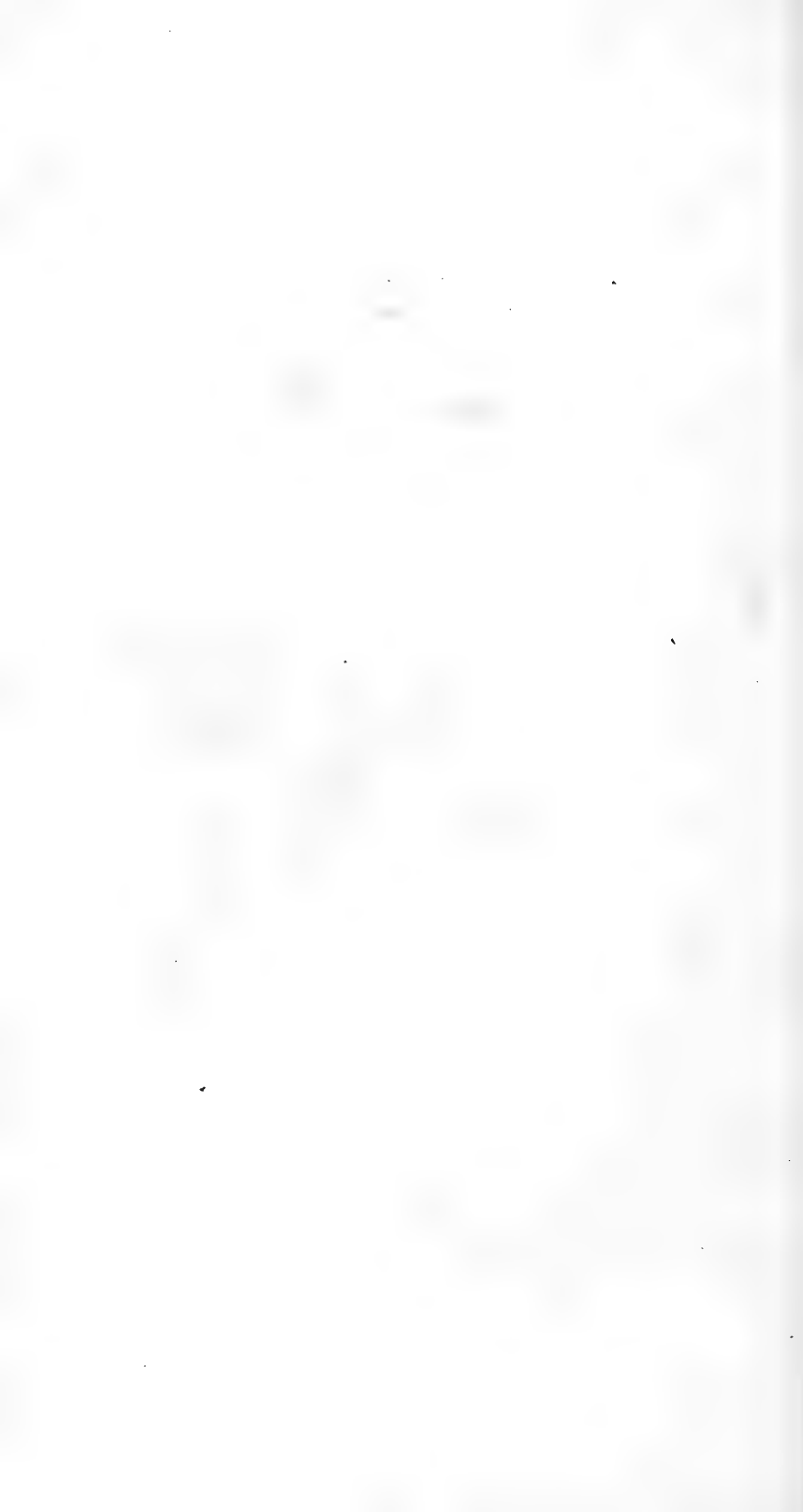
Regenf. conch. 1. t. 8. f. 25.

Born. mus. Caes. Vind. test. t. 7. f. 14.

In mari Indico præcipue reperta sedem sibi jure vindicat hæc cochlea inter pulcherrimas sui generis. Colore interdum variat ; notas tamen semper retinet certas adeo et constantes, ut de specie vix possit dubitari.







THE
PORPHYRY CONE.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell more or less conic or pyramidal.

Aperture longitudinal, linear, without teeth, entire at the base.

Pillar smooth.

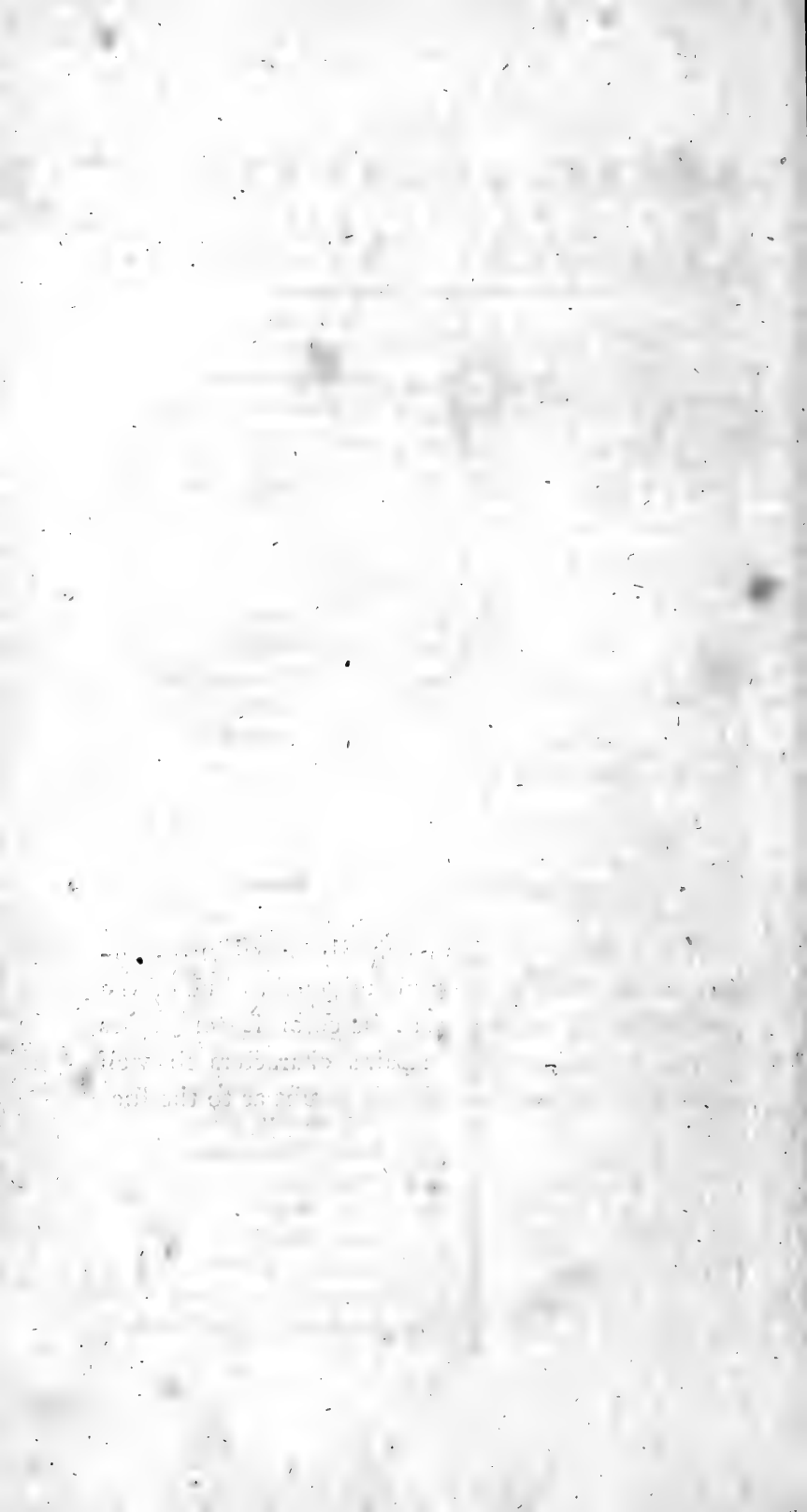
SPECIFIC CHARACTER, &c.

White CONE, with brown reticular veins and longitudinal bands.

Heart-spotted CONE.

Porphyry CONE.

This shell, which is principally found in the Indian ocean, may justly be considered as one of the most beautiful of its genus: in color it sometimes varies, but commonly retains characters so well marked as hardly to admit of a doubt as to the species.



BULLA ACHATINA.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, convoluta, inermis.

Apertum subcoarctata, oblonga, longitudinalis,
basi integerrima.

Columella obliqua, lævis.

Lin. Syst. Nat. p. 1186.

CHARACTER SPECIFICUS, &c.

BULLA testa ovata, apertura obovata apiceque
sanguineis, columella truncata.

Lin. Syst. Nat. p. 1186.

BULLA Gallica.

Seb. mus. 3. t. 71. f. 1. 2. 3. 7. 8.

Jampridem in opere hoc nostro Bullam achatinam
ore purpureo depinximus. Rarior autem longe est
eximia hæc varietas, et colorum insignem jactat ele-
gantiam.

THE
AGATE BULLA.



GENERIC CHARACTER.

Animal resembling a Limax or Slug.

Shell univalve, convoluted.

Aperture somewhat straitened, oblong, longitudinal, entire at the base.

Column oblique and smooth.

SPECIFIC CHARACTER, &c.

Ovate, pointed, wide-mouthed BULLA, with broad fasciæ and truncated column.

Var.

With blue variegations and crimson mouth.

La Corne de pourpre.

Knorr. vergn. 4. p. 44. pl. 24. f. 1.

A purple-mouthed variety of the *Bulla achatina* has already been represented in the present work; but the beautiful kind here figured is much less frequent, and is highly remarkable for the elegance and delicacy of its colors.



Pl. 1

London, Published Sept. 1850 by F. & J. Wadley, Newman Street



OSTREA ISOGONUM.



CHARACTER GENERICUS.

Animal Tethys.

Testa bivalvis, (plurimis) inæquivalvis, subaurita.

Cardo edentulus, fossula cava ovata striisque lateralibus transversis.

CHARACTER SPECIFICUS, &c.

OSTREA testa æquivalvi, lobo laterali majore, cardine multoties fulcata.

Lin. Syst. Nat. p. 1149.

Ostrearum genus, quo nomine eas solummodo intelligimus quas titulo ostrearum *rudium* distinxit Linnæus, (exclusis iis quæ *pectines* vocantur,) varias continet species facie inter se valde dissimiles. Ex iis quæ ob formam notatu dignissimæ sunt, speciem naturali colore et magnitudine repræsentat tabula oceani Indici incolam.

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A.S.

London Published July 1st 1800, by F.L. Nodder, Newman Street.

THE
LONG OYSTER.



GENERIC CHARACTER.

Animal resembling a Tethys.

Shell bivalve (in most species unequally), subauriculated.

Hinge toothless, with an ovate fossule and lateral transverse streaks.

SPECIFIC CHARACTER, &c.

Equal-valved OYSTER, with the right lobe largest, and the hinge marked by numerous furrows.

The genus *Ostrea*, by which is here meant the assortment called by Linnæus *Ostrea rudis*, (excluding the *Pectines* or Escallops,) contains several species which differ considerably in point of habit from each other. Among the most striking as well as curious is that represented on the plate, which is a native of the Indian ocean. Its general size and color are as expressed in the figure.

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CHAMA GIGAS.



CHARACTER GENERICUS.

Animal Tethys.

Testa bivalvis, groffior.

Cardo callo gibbo, oblique inferto fossulæ obliquæ.

CHARACTER SPECIFICUS, &c.

CHAMA testa oblonga, plicata fornicato-squamata.

CHAMA squamata.

Rumph. mus. t. 42. A. B.

CHAMA GIGAS.

Lin. Syst. Nat. p. 1137.

Species, quam depinximus, non modo maxima est sui generis, sed et omnium testaceorum; interdum nempe plusquam tripedalis; ostreaque, sive animal inclusum (idque non hyperbolice loquimur) centum convivis possit sufficere. Carent tamen permagna hæc specimina nitore & elegantia minorum. Color tum internus tum externus plerumque albet. In junioribus autem conspici interdum possit ruboris rosei levissima quædam mistura. In maribus Indicis generatur Chama Gigas: reperitur etiam circa littora insularum fere omnium quas alluit oceanus pacificus.







THE
GREAT CHAMA.



GENERIC CHARACTER.

Animal resembling a Tethys.

Shell bivalve, thick.

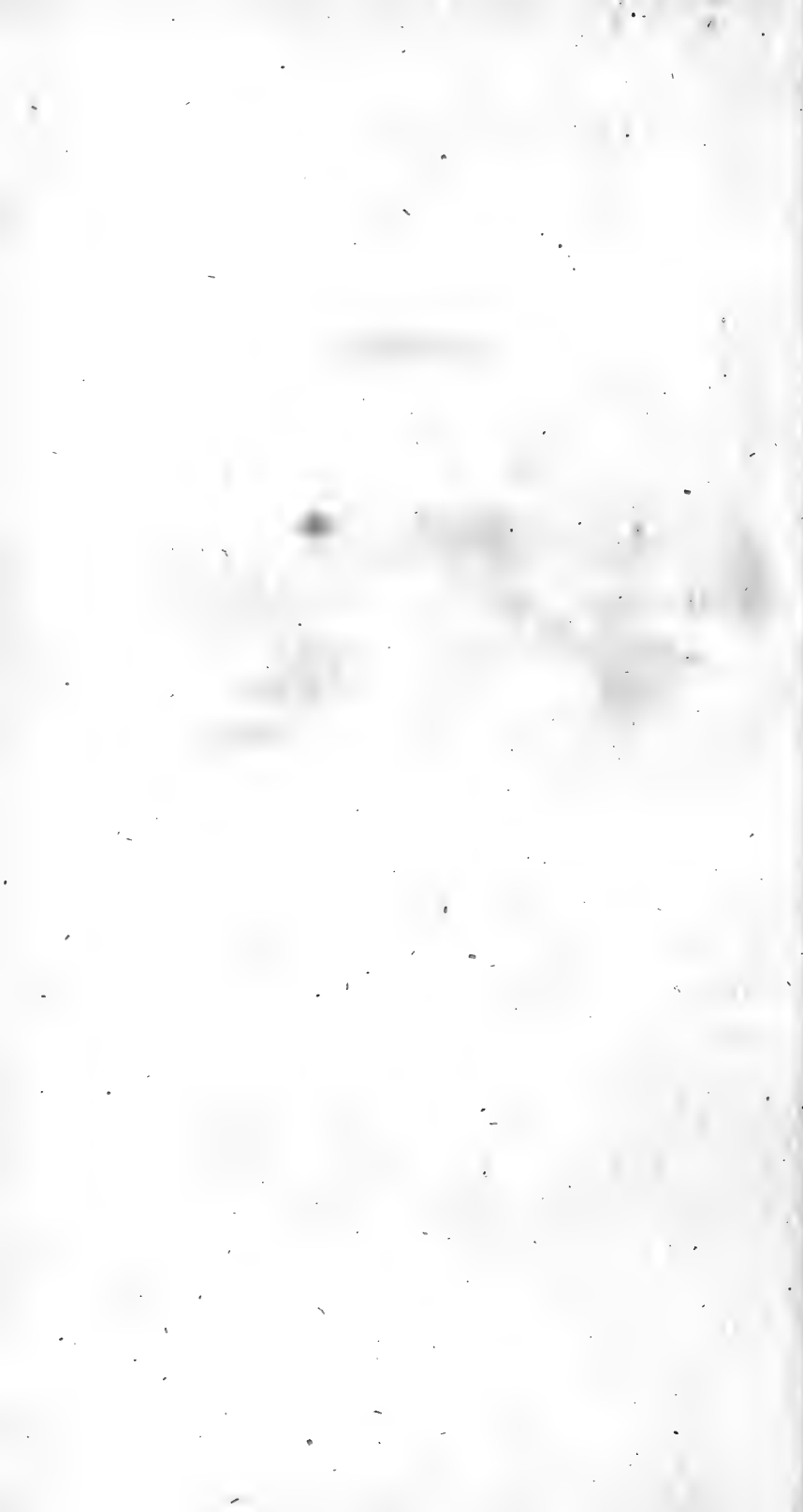
Hinge furnished with a gibbose callus obliquely inserted into an oblique fossule.

SPECIFIC CHARACTER, &c.

Great whitish oblong plaited CHAMA, with arched scales.

The GREAT CHAMA, or Giant Clamp.

The shell represented on the plate is not only the largest of the genus to which it belongs, but of the whole testaceous tribe, having been sometimes seen of the length of more than three feet, with the included animal sufficient to afford a meal for upwards of an hundred persons. These large specimens however are by far less regular and beautiful than the smaller ones. The color is commonly white, both internally and externally; but, when young, a slight tinge of rose-color is sometimes visible. It is a native of the Indian seas, and is met with on the shores of most of the islands in the great southern or pacific ocean.



MUREX TRIBULUS.

VAR.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, exasperata suturis membranaceis.

Apertura desinens in canalem integrum, rectum seu subascendentem.

Lin. Syst. Nat. p. 1213.

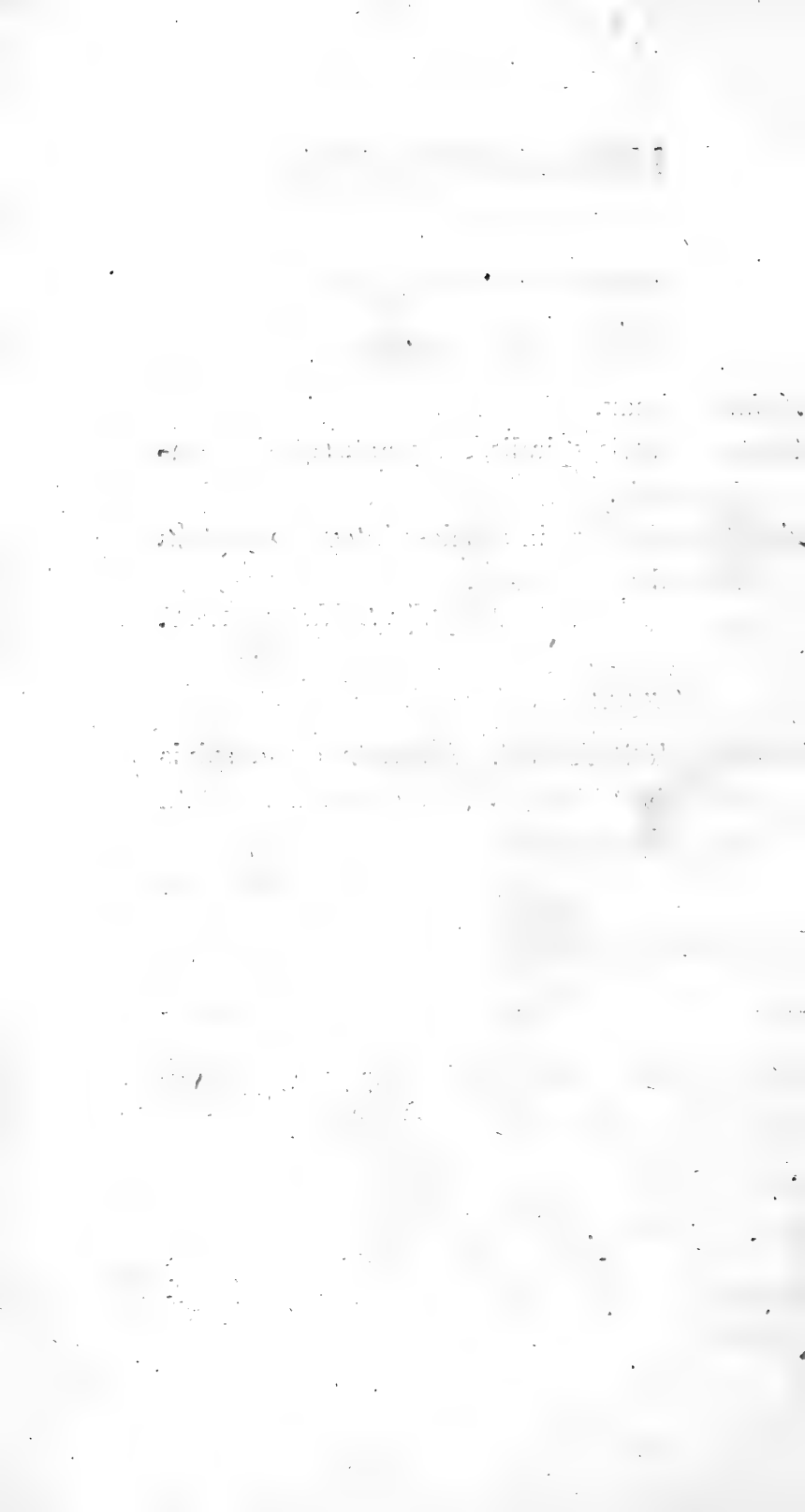
CHARACTER SPECIFICUS, &c.

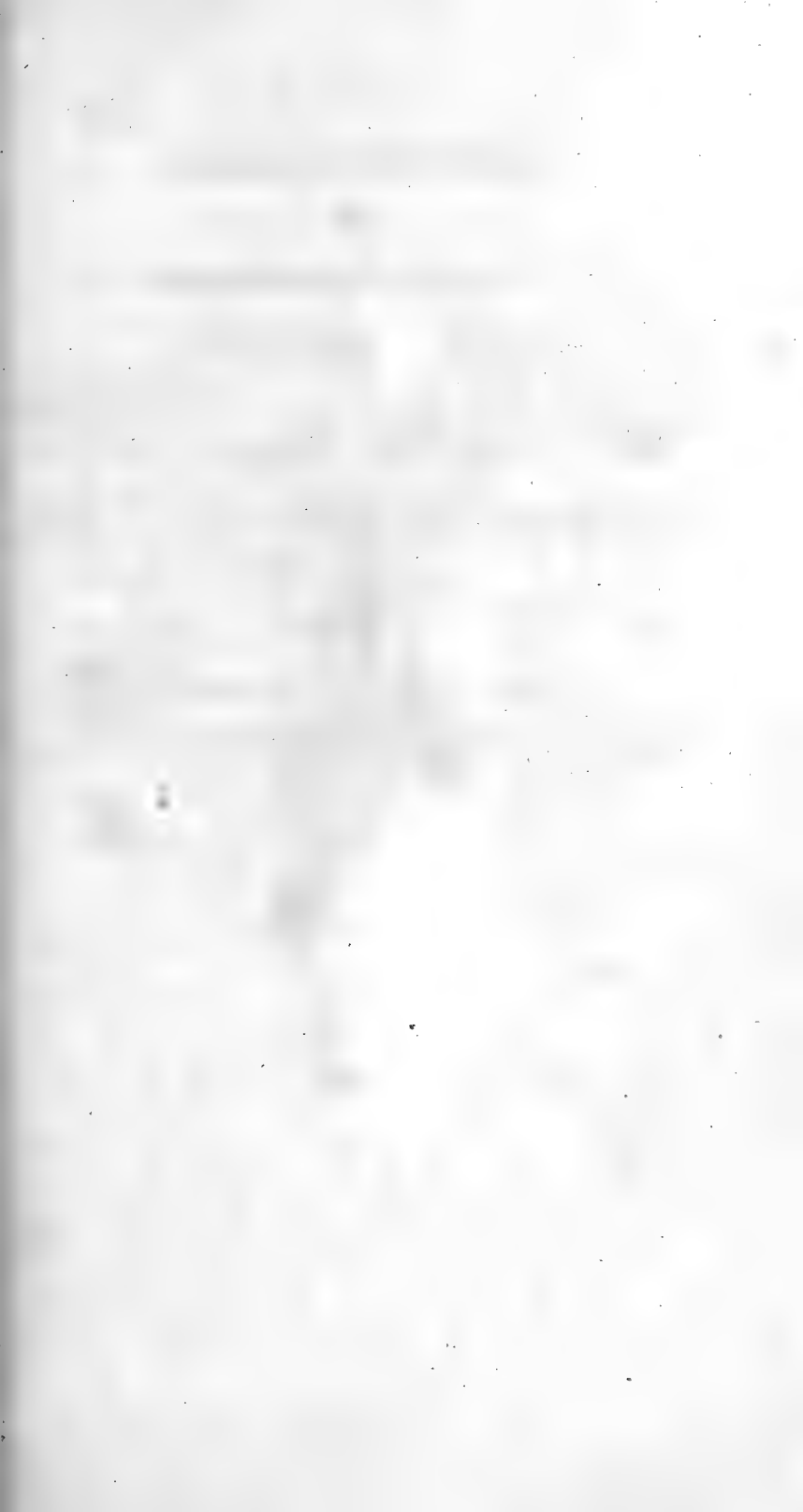
MUREX TRIBULUS. M. testa ovata spinis setaceis trifariis, cauda elongata subulata recta similiter spinosa.

Lin. Syst. Nat. 1214.

VAR. spinis longissimis.

Quas genus *Murex* amplectitur numerosissimæ sunt species. His, ut plurimum, insignis est scabritie superficies, nunc in longas spinas excurrens, nunc in processus quosdam crispatos seu quasi foliatis. Testam de qua jam agitur rarissimam alit mare Indicum et Atlanticum. Variant specimina quoad colorem, nec non rostri et spinarum longitudinem.







R. 17

London Published Dec 27th 1800, by F. & P. Collier, Newman Street.

THE
THORNY MUREX.

VAR.



GENERIC CHARACTER.

Animal allied to a Slug.

Shell univalve, spiral, roughened with membranaceous sutures.

Aperture ending in a strait or subascending channel.

SPECIFIC CHARACTER, &c.

Whitish MUREX, with a triple row of setaceous spines, and long beak with similar spines.

VAR. With extremely long spines.

The Thorny Woodcock.

The genus Murex, of which the species are extremely numerous, is distinguished, in general, by a peculiar roughness of surface, which either runs out into long spines, or into processes more or less crisped or foliated. The very rare shell exhibited on the present plate is principally found in the Indian and American seas, and varies as to color and length of the beak and spines.

BUCCINUM TUBEROSUM.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, gibbosa.

Apertura ovata, desinens in canaliculum (s. retusam lacunam) dextrum, cauda retusum.

Labium interius explanatum.

Lin. Syst. Nat. p. 1196.

CHARACTER SPECIFICUS, &c.

BUCCINUM testa cingulis duobus tuberculis, cauda recurva.

Lin. Syst. Nat. p. 1198.

Gualt. test. t. 41. f. A.

Seb. mus. 3. t. 73. f. 5—15.

Knorr. Vergn. 3. t. 10. f. 1. 2.

In Oceano Americano præcipue innascitur Buccinum tuberosum, magnitudine et coloribus varians, et interdum fere in pedalem crescens longitudinem.

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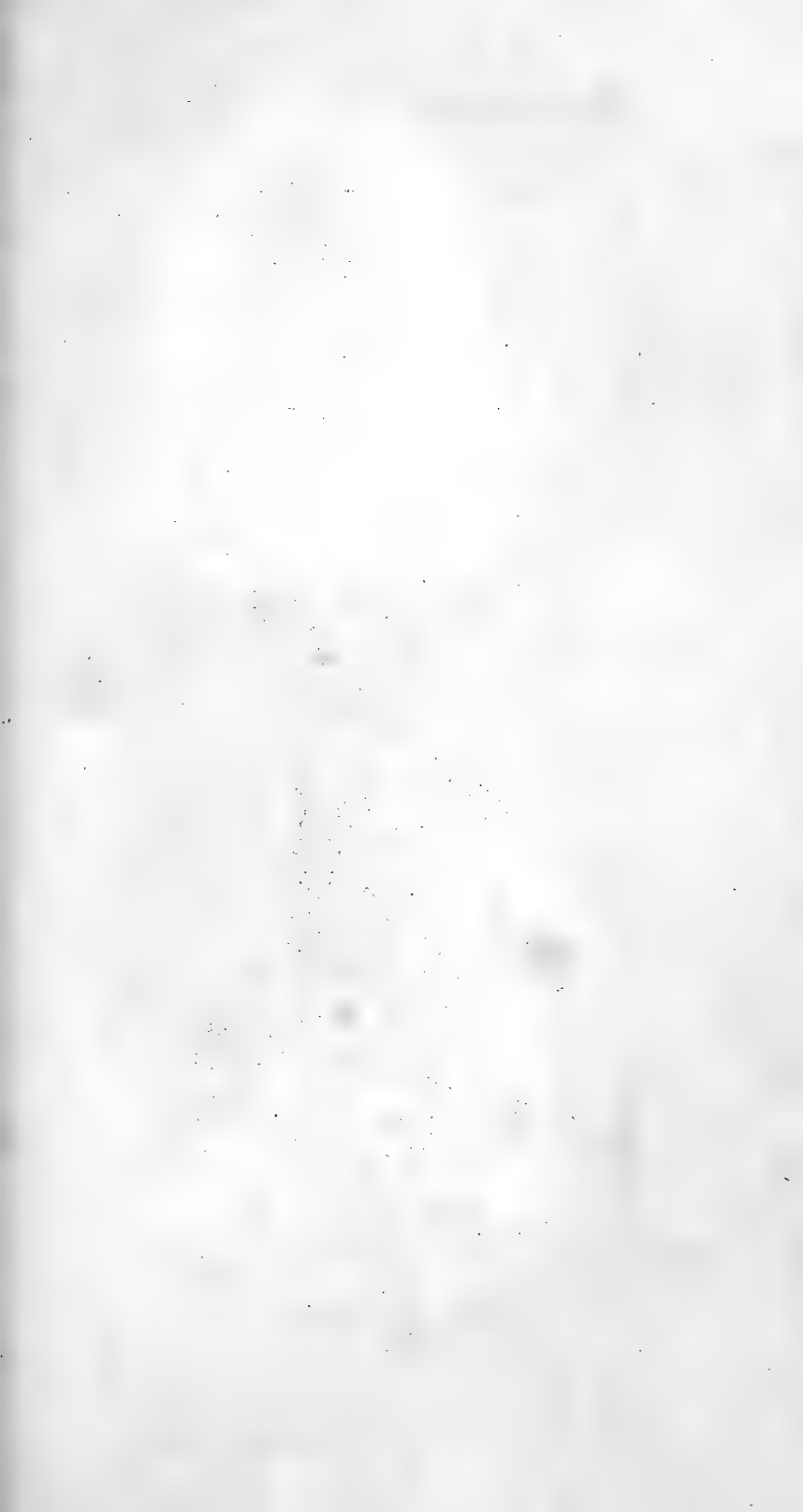
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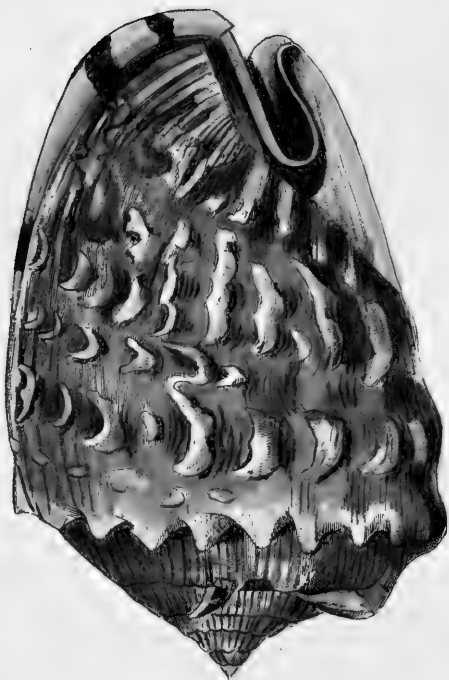
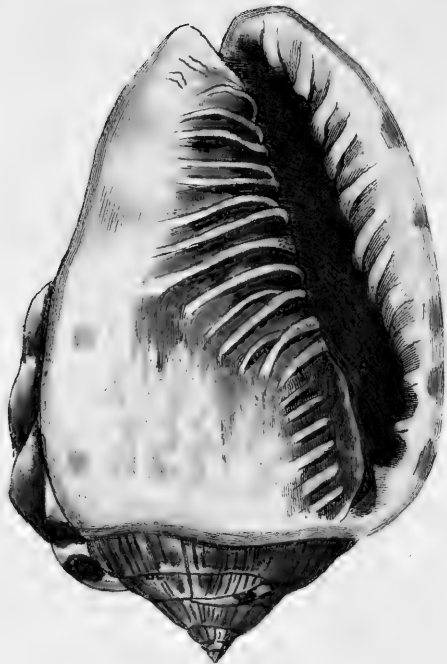
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TUBEROUS BUCCINUM,



GENERIC CHARACTER.

Animal allied to a Slug.

Shell univalve, spiral, gibbous.

Aperture ovate, ending in a channel pointing towards the right.

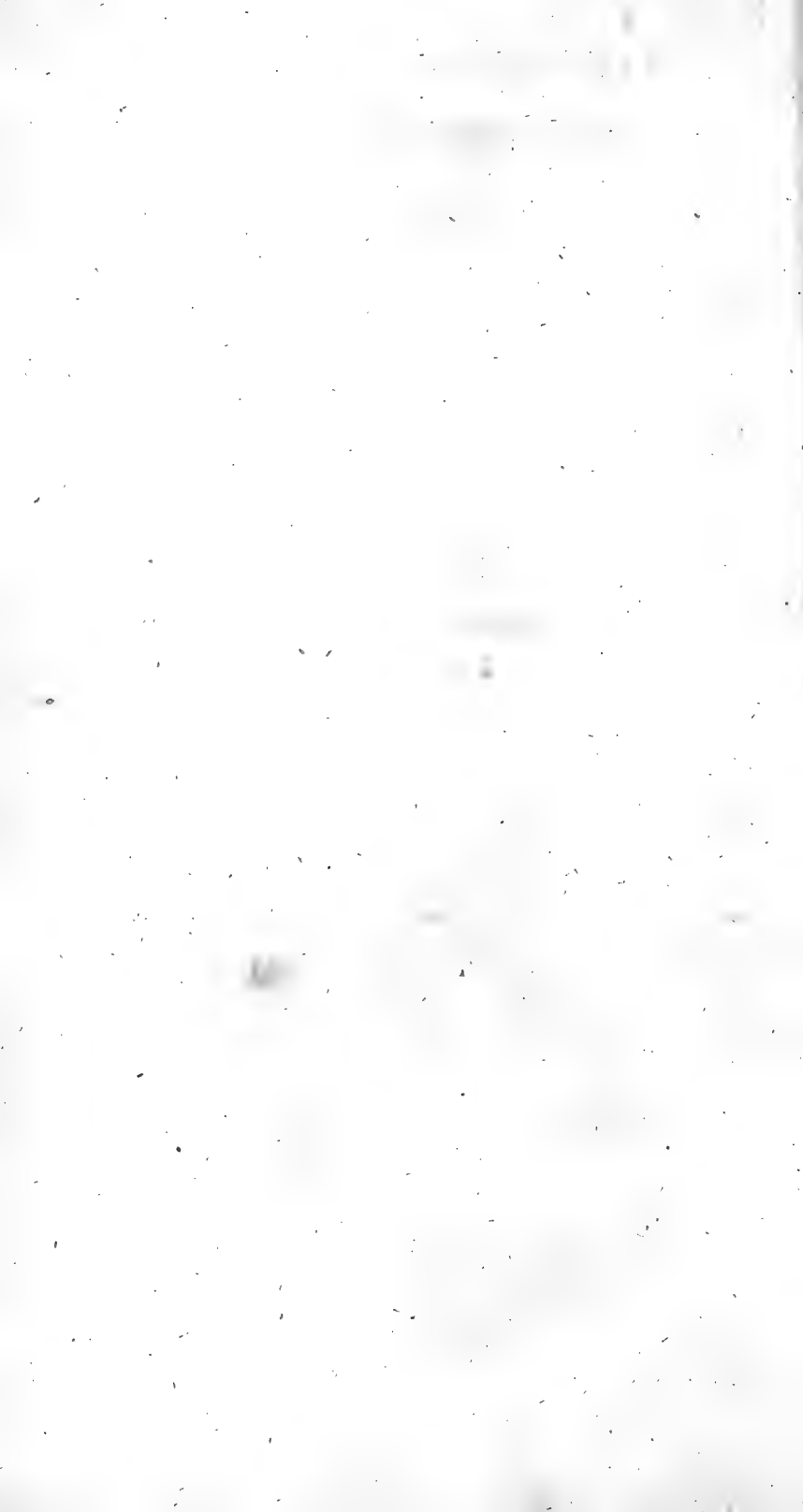
Interior Lip expanded.

SPECIFIC CHARACTER, &c.

Pale BUCCINUM with rufous and dusky variations, two rows of tubercles, and recurved tip.

Knobbed BUCCINUM,

The shell here represented is a native of the American seas, and varies greatly both in size and colors, sometimes measuring almost twelve inches in length.



MUREX TRITONIS.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, exasperata suturis membranaceis.

Apertura desinens in canalem integrum, rectum seu subascendentem.

Lin. Syst. Nat. p. 1213.

CHARACTER SPECIFICUS, &c.

MUREX testa ventricosa oblonga lævi, anfractibus rotundatis, apertura dentata, cauda brevi.

Lin. Syst. Nat. p. 1222.

Buccinum TRITONIS.

Rumph. mus. t. 28. f. B.

Magnificam hanc concham, magnitudine interdum fere sesquipedali, generant præcipue maria Indica. Corniformis cum sit, convertere eam dicuntur pastores Asiatici et Africani in tubam pecuariam; barbaræque nonnullæ gentes in bellicam. Mihi sane persuasissimum est hanc ipsam testam in animo habuisse Ovidium, qui, simul atque audita sit grandisona Tritonis buccina, maris iram coercitam et immanes diluvii aquas recedentes cecinerit.

Jupiter

Jupiter ut liquidis stagnare paludibus orbem,
Et superesse videt de tot modo millibus unum ;
Et superesse videt de tot modo millibus unam,
Innocuos ambos, cultores numinis ambos ;
Nubila disjecit: nimisque Aquilone remotis,
Et coelo terras ostendit, et æthera terris.
Nec maris ira manet: positoque tricuspide telo
Mulcet aquas rector pelagi: supraque profundum
Extantem, atque humeros innato murice tectum
Caeruleum Tritona vocat; conchæque sonaci
Inspirare jubet; fluctusque et flumina signo
Jam revocare dato. Cava buccina sumitur illi
Tortilis, in latum quæ turbine crescit ab imo:
Buccina, quæ medio concepit ut aëra ponto,
Littora voce replet sub utroque jacentia Phoëbo.
Tum quoque, ut ora Dei madida rorantia barba
Contigit, et cecinit jussos inflata receptus,
Omnibus audita est telluris et æquoris undis:
Et quibus est undis audita, coercuit omnes.
Jam mare littus habet: plenos capit alveus amnes:
Flumina subsidunt: colles exire videntur.
Surgit humus: crescunt loca decrescentibus undis.”

Color illi generalis est albidus seu albo-flavescens, zonis transversis plus minus fuscis, ferrugineis, seu nigricantibus undulatus. Variant enim hujus nec non plerarumque concharum colores ob ætatem, et aliis multis de causis.





R.A.

London Published May 1st 1861, by J.P. Notholt, Newman Street.

THE
TRITONIAN MUREX.



GENERIC CHARACTER.

Animal allied to a Slug.

Shell univalve, spiral, roughened with membranaceous sutures.

Aperture ending in a strait or subascending channel.

SPECIFIC CHARACTER, &c.

MUREX with large, oblong, smooth, whitish shell, with transverse ferruginous undulations, toothed aperture, and short top.

The Sea Trumpet, or great clouded MUREX.

Triton's Trumpet.

This superb shell, which is sometimes seen of near a foot and a half in length, is principally found in the Indian seas. From its peculiar form it is well adapted for the purpose of a horn or trumpet, and is said to be often used as such by the African and Asiatic shepherds. It is said to be occasionally used as a military trumpet among barbarous nations. We may also conclude it to have been the shell intended by

by Ovid in his description of the retiring of the waters of the deluge on the sound of the trumpet of Triton.

But when th' all-powerful ruler of the sky
Saw earth in one wide waste of waters lie,
While late of all its peopled realms contain'd
One only pair of human race remain'd,
Innocuous both, resign'd to Heav'n's decree,
Celestial pity touch'd the Deity.

At his command, by winds resistless driv'n,
Dispersing clouds to earth unveil the heav'n :
And Neptune bids blue Triton sound amain
His powerful trump, and bind the waves again.
The sea-born herald at the call appears ;
High o'er the surge his scaly shoulders rears ;
And while the foaming billows round him swell
Grasps with his bearded lip the spiral shell.
With such a blast the sounding conch he blew
O'er all the globe at once the thrilling signal flew.
Back to their ancient bounds, from pole to pole
Th' alarmed seas in reflux circles roll :
The hills emerge ; the woods their branches shew ;
And earth restor'd peeps slowly from below.

This shell is generally of a whitish or yellowish colour, richly variegated with deep and pale ferruginous, brown, and blackish, transverse undulations ; varying, like all other shells in the intensity and beauty of its colours, according to age or other circumstances.





R. N.

London. Published June 1st 1861, by F. & J. W. Alder, New man Street.

THE
MURICATED PINNA.



GENERIC CHARACTER.

Animal allied to a *Limax*.

Shell subbivalve, fragile, gaping at the upper part, emitting a beard or tuft of silken filaments.

Hinge toothless, the valves coalescing together.

SPECIFIC CHARACTER, &c.

PINNA with striated shell, with acute, ovate, concave scales.

Guált. test. t. 79. f. D.

Seb. 3. t. 92.

Obs. Several of the *Pinnæ* are considered by *Linnæus* as varieties rather than distinct species.

The genus *Pinna*, of which some species grow to a very large size, is distinguished, among other circumstances, by the remarkable power which the inhabiting animal possesses, of affixing itself at pleasure to rocks, or other substances, by a vast number of fine silky threads or filaments, which it forms by extending

extending its tubular trunk or tongue, and discharging from its tip a minute drop of gluten, which, by the retraction of the same organ, is of course formed into a silken filament; and this operation being several thousand times repeated, a thick and beautiful tuft of silky fibres is composed, by the help of which the animal is securely fastened or anchored in such places as it finds convenient. The *Pinna muricata* is among the smaller species of this genus; measuring about six or eight inches in length. In color, as well as in the degree of roughness of its external surface, it varies considerably. It is commonly of a deep brown externally, and of a reddish tinge, varied with a degree of pearly lustre internally. The silk or byssus of the *Pinnæ* is of a rich golden brown color, and is occasionally manufactured into gloves, &c. by the inhabitants of those parts of the Mediterranean coasts where it most abounds, viz. on some of the coasts of Italy and Sicily. It should be added, that the power of adhering by means of silken filaments thus drawn from the inhabiting animal, is not entirely confined to the genus *Pinna*, but takes place, in a smaller degree, in some species of *Mytilus*.

MUREX HAUSTELLUM.



CHARACTER GENERICUS.

Animal Limax.

Testa univalvis, spiralis, exasperata suturis membranaceis.

Apertura desinens in canalem integrum rectum s. subascendentem.

CHARACTER SPECIFICUS, &c.

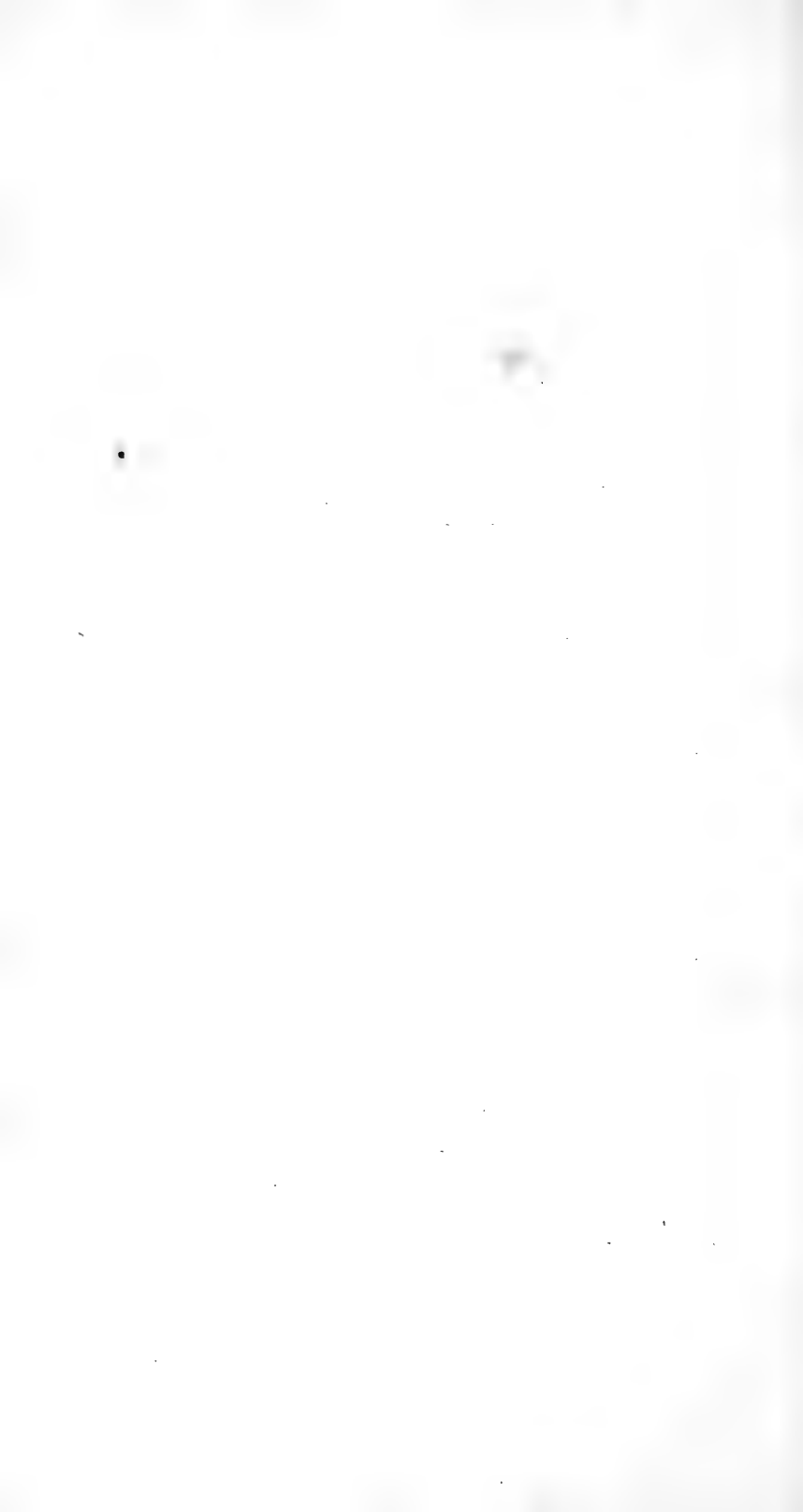
MUREX testa ovata, tuberculata, cauda elongata subulata recta muricata.

HAUSTELLUM.

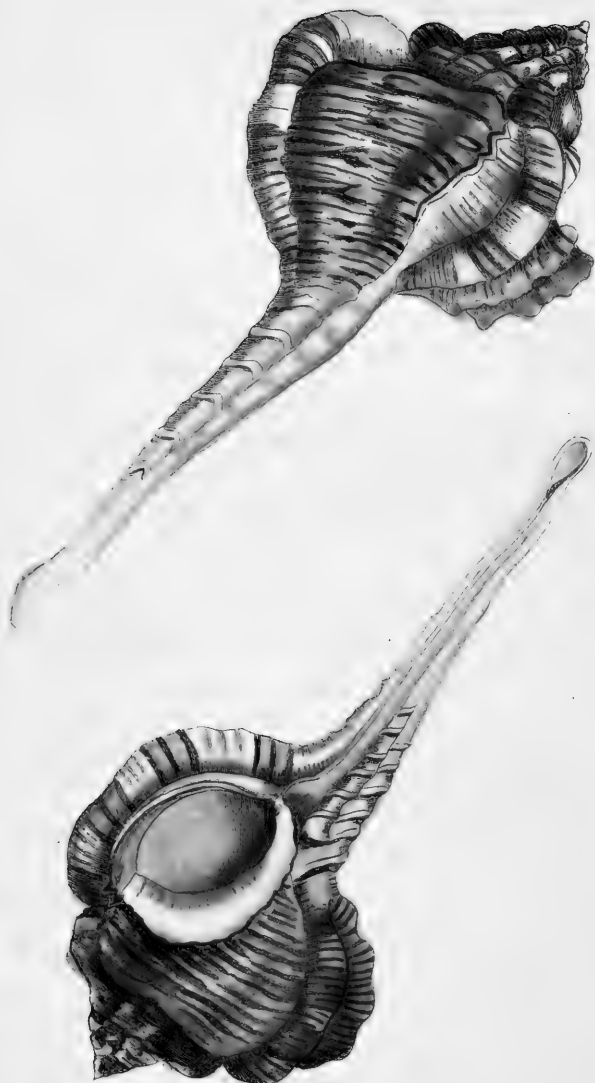
Rumph. mus. t. 26. f. F.

Argenv. conch. t. 19. f. B.

Muricem Haustellum magnitudine vera depictum ostendit tabula. In mari Asiatico præcipue innascitur.







THE
PIPE MUREX.



GENERIC CHARACTER.

Animal allied to a Slug.

Shell univalve, spiral, roughened by membranaceous sutures.

Aperture ending in a strait or subascending channel.

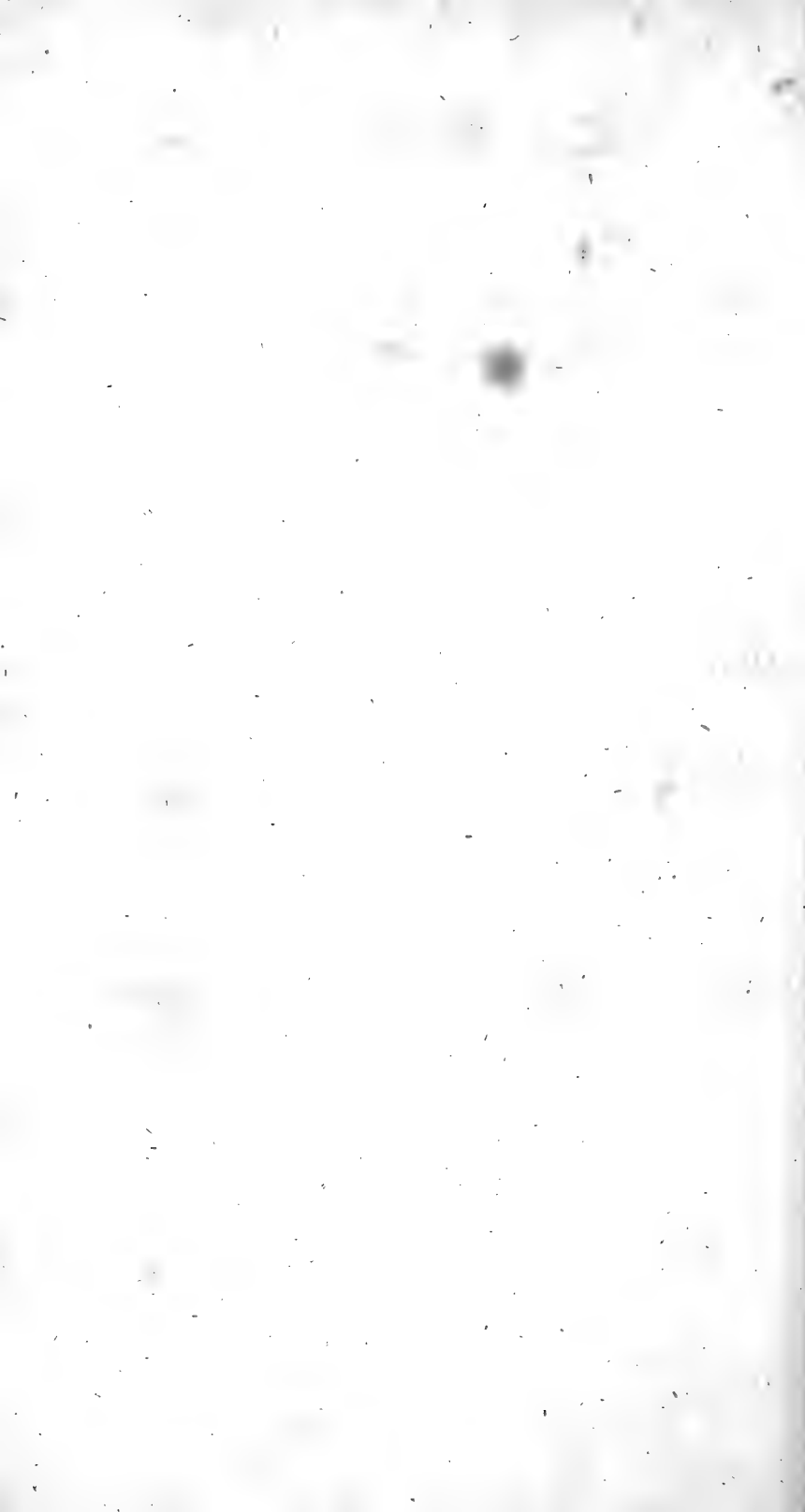
SPECIFIC CHARACTER, &c.

MUREX with ovate tuberculated shell, with an elongated tapering muricated tip.

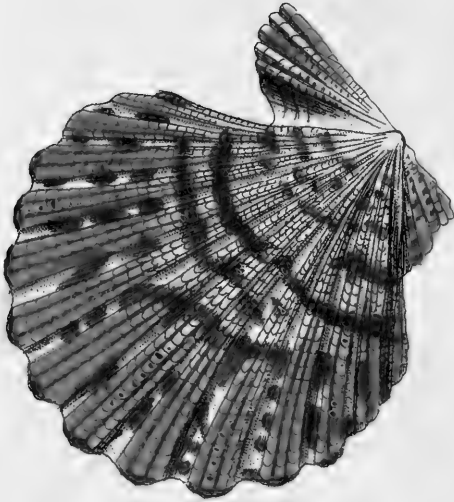
La Becasse.

Argenv. p. 257. pl. 16. f. B.

This shell is represented on the plate in its natural size. It is chiefly found in the Asiatic seas.







OSTREA PALLIUM.



Animal Tethys.

Testa bivalvis, (plurimis inæquivalvis,) subaurita.

Cardo edentulus, fossula cava ovata striisque-lateralibus transversis.

Lin. Syst. Nat.

CHARACTER SPECIFICUS, &c.

OSTREA testa æquivalvi, radiis duodecim convexis, striata, scabra, squamis imbricata.

Lin. Syst. Nat. p. 1145.

Pecten secundus.

Rumph. mus. t. 44. B.

PALLIUM Ducale.

Argenv. t. 24. f. I.

Inter testas pulcherrimas hujus generis merito numeratur Ostrea Pallium, coloribus plurimum varians. In oris Indicis præcipue conspicitur, et magnitudine verâ in tabula exprimitur.

THE
MANTLE SCALLOP.



GENERIC CHARACTER.

Animal resembling a Tethys.

Shell bivalve, (in most species unequally,) sub-auriculated.

Hinge toothless, with an ovate or subtrigonal fossule and lateral transverse streaks.

SPECIFIC CHARACTER, &c.

Variegated SCALLOP with equal valves, striped by twelve rough, imbricated, scaly rays.

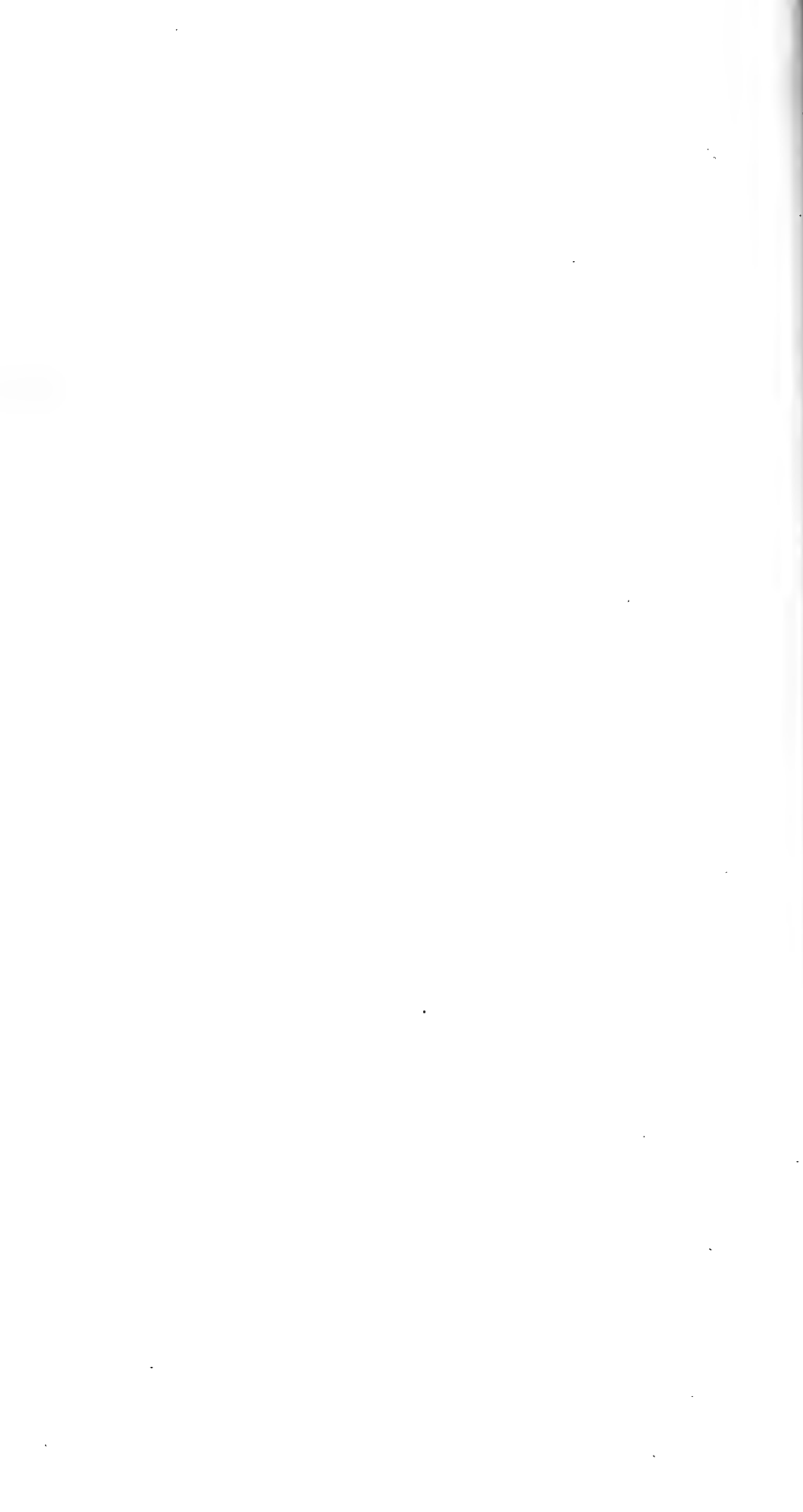
The Ducal MANTLE SCALLOP.

Le Manteau Ducal.

Argenv. Knorr. &c. &c.

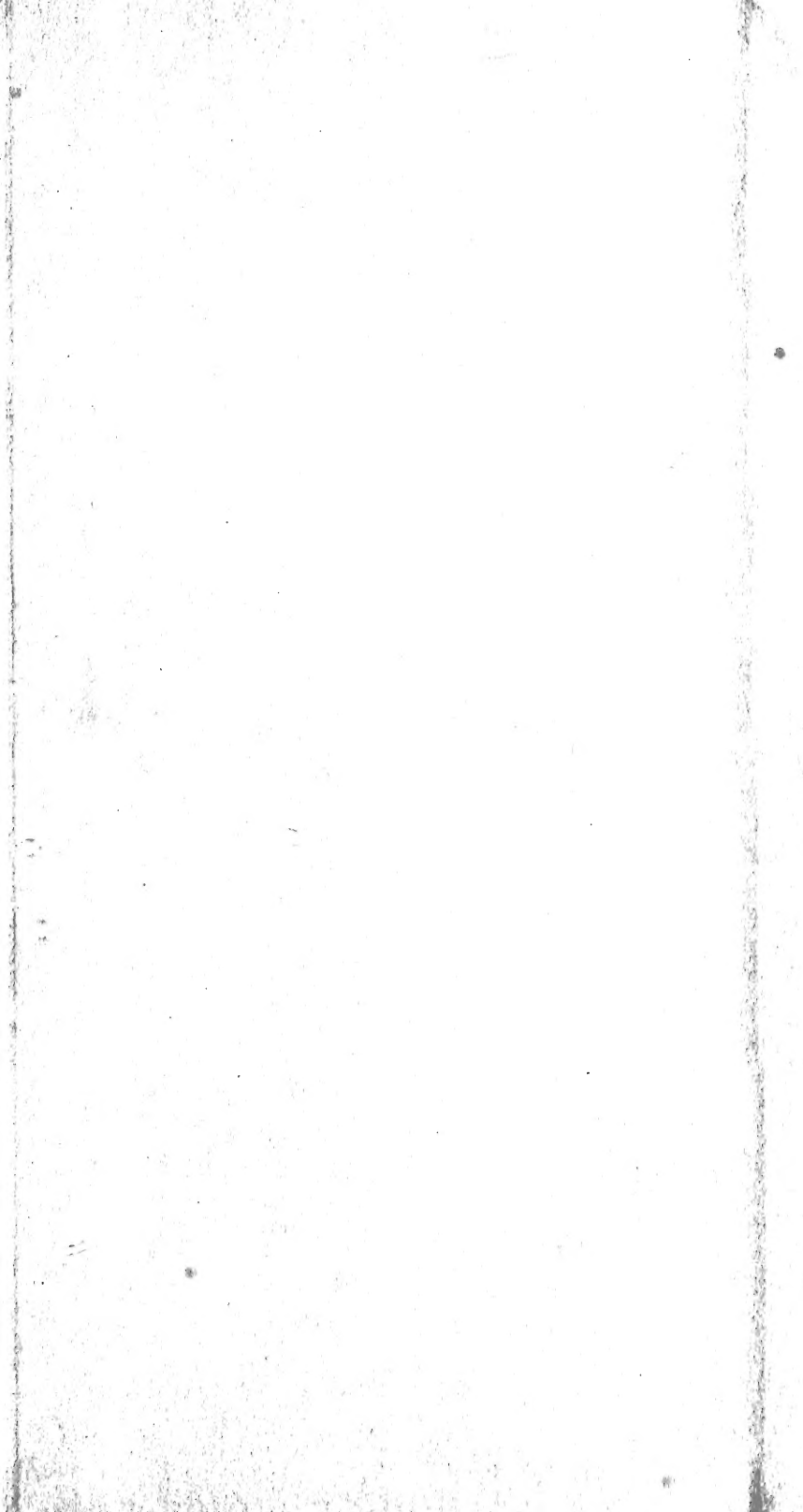
This shell is very justly considered as one of the most beautiful of its tribe: it varies much in colour, and is principally found about the coasts of the Indian seas: it is represented on the plate in its natural size.

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