K-|-a WALKER

Division of Mollusks
Sectional Library

152

240

Q. 1 P. 4

TESTACEA

MINUTA RARIORA,

Nuperrime detecta in Arena

LITTORIS SANDVICENSIS;

A GUL. BOYS, Arm. S. A. S.

Multa addidit, et omnium Figuras ope Microscopii ampliatas accurate delineavit.

GEO. WALKER.

A COLLECTION

OF THE

Minute and Rare SHELLS,

LATELY DISCOVERED

In the Sand of the Sea Shore near SANDWICH;

By WILLIAM BOYS, Esq; F. S. A.

Considerably augmented, and all their Figures accurately drawn, as magnified
with the Microscope.

By GEO. WALKER, Bookfeller, at FAVERSHAM.

L O N D O N:

PRINTED BY J. MARCH;

And Sold by B. WHITE, in Fleet Street; Messrs. SCATCHERD and WHITAKER, in
Ave-Maria Lane; and W. HUMPHREY, St. Martin's Lane, near Charing Cross;
and at FAVERSHAM, by the AUTHOR.

August 1784

T O
THE MOST NOBLE HER GRACE
The Dutchess Dowager of *P O R T L A N D*;

A N D T O

Sir *J O S E P H B A N K S*, Baronet, P. R. S.

MOST ZEALOUS PROMOTERS OF EVERY LAUDABLE ATTEMPT TO INCREASE
THE KNOWLEDGE OF THE HISTORY OF NATURE;

THIS DESCRIPTION OF THE
M I N U T E A N D R A R E S H E L L S,

L A T E L Y D I S C O V E R E D

O N T H E S E A C O A S T O F S A N D W I C H,
A N D O T H E R A D J O I N I N G P A R T S I N T H E C O U N T Y O F K E N T:

I N T E S T I M O N Y O F

A N H E A R T - F E L T G R A T I T U D E F O R T H E V E R Y O B L I G I N G A T T E N T I O N A N D
G E N E R O S I T Y T H E Y H A V E B E E N P L E A S E D T O B E S T O W

U P O N I T S P U B L I C A T I O N ;

I S M O S T H U M B L Y D E D I C A T E D

B Y T H E I R E V E R D E V O T E D , A N D

M O S T O B E D I E N T S E R V A N T ,

G E O . W A L K E R .

T H E

I N T R O D U C T I O N.

THE first discovery of the curious minute Shells, exhibited in this collection, originates with that inquisitive naturalist William Boys, Esq; F. S. A. of Sandwich, in the county of Kent; who, by his unremitting researches into the works of Nature, was happily induced to examine with his glasses the Sand of the adjoining shore, whereby he discovered a considerable number of minute Shells, altogether new to him, lodged therein.

Information of this having been communicated to my worthy friend, Edward Jacob, Esq; F. S. A. Mr. Boys was earnestly pressed by him to prosecute the discovery, with the offer of procuring assistance in the pursuit, if his other necessary avocations would not permit him to employ it so closely as Mr. Jacob wished: The proposal being readily accepted by Mr. Boys, Mr. Jacob was pleased to make an offer of the employment to me, which I entered upon most willingly; and, upon receiving several parcels of Sand from Mr. Boys, I pursued the following method in examining them:—First, I placed small portions of it when dry under Dr. Withering's botanical Microscope, in order to separate the Shells from the Sand, and afterwards proceeded to enlarge every single Shell with the greater magnifiers of Cuff's Microscope for opaque objects, and Wilson's pocket one; and by these aids I drew them as exhibited in the plates.

And

And here it may not be unacceptable to inform future Inquirers that, in order to facilitate the more easy discovery of these minute objects, after the Sand was perfectly dry, I put a handful on an open sheet of paper, and gently shook it from side to side, by which means, the minute Shells being lighter than the sand, were separated from and lay above it, and were thereby much more expeditiously procured, than by any other means I could think of. It is also adviseable to place the objects for inspection in a situation where no sudden blast of air can come, otherwise, being very light, they may be unexpectedly blown away, as I have too frequently experienced thereby the loss of several rare specimens; indeed a careless breathing or cough, while they were under examination, hath been attended with the same disagreeable accident.

I beg leave to observe to Gentlemen, especially to those who have read Plancus's treatise, that, although the Sand of our coast contains so great a variety of specimens, yet it is by no means so productive as the Sand at Rimino, least, despairing of success in their first trials, they may be induced to lay aside their further inquiries; they cannot fail however of finding some of the most common in every parcel of it.

The undertaking to make the enlarged drawings by the Microscope exact, from my want of practice, and the smallness of the objects, was a matter of more difficulty than I was aware of, and required much time and patience to overcome.—Perseverance however hath enabled me to represent the objects, not only to the satisfaction of my two worthy friends, Mr. Jacob and Mr. Boys, but also of that most noble Lady her Grace the Dutchess Dowager of Portland, who hath been pleased to accept of several of the minute Shells here engraved, and whose generous approbation and assistance in this publication can never be forgotten without the highest ingratitude. To this noble patronage I am happy to add, that of the very respectable and consummate naturalist Sir Joseph Banks, Bart. President of the Royal Society, who hath condescended, not only to compare the drawings with a considerable
number

number of the Shells here exhibited, but also to approve, and very generously to promote the undertaking, for which singular favors I can never be sufficiently thankful.

The approbation of two such very eminent personages, I flatter myself, cannot fail to ensure a favourable reception of my endeavours from every curious admirer of the wonderful works of our beneficent CREATOR! especially those of our own island, as so large a number of Shells, heretofore unknown, are hereby added to the British Conchology, sufficient to shew the path is now laid open, and made easy for still greater discoveries to be made by inquisitive naturalists, in the different parts of the kingdom. What a number of minute Shells, equal to a moiety of the engraved English series, hath now been discovered in small quantities of Sand from an inconsiderable part of our coasts! Surely this is encouragement, and will be an inducement to Gentlemen of a philosophical turn of mind occasionally to employ their leisure hours in similar researches; nor can they fail of making discoveries that will amply repay them for their inquiries. Indeed it is somewhat surprising, that the Authors of our own country, who have so advantageously applied the Microscope to a variety of objects of the animal kingdom, should totally have neglected to examine the shores of our own seas, crowded as they are with objects, equally worthy their attention, and yet it has not been for want of hints. The account of the minute and rare Shells discovered at Rimini, on the coast of the Adriatic Sea, was published by Plancus in the year 1739; and Mr. Paker's observation, in page 244, of his treatise on the Microscope, published in the year 1742, deserved more attention than has been paid to it. Shell fish, says he, "Are objects that have as yet been very slightly examined by
" the Microscope, and therefore the serious inquirer into Nature's secret
" operations may here be certain of discovering beauties, which at present
" he can have no conception of."

But thus it is, Nature opens her rich and inexhaustible treasures slowly and gradually to the inquisitive mind of man. The fact is, different observers
have

have generally different pursuits, otherwise these objects would scarcely have escaped the attention of many other Gentlemen, as well as of the quick-sighted Mr. Ellis, a justly celebrated Author, who hath so clearly investigated and described the corals and corallines of the adjoining coasts.

To Mr. *BOYS*, all praise is justly due from every lover of natural science, for his happy and successful investigation of this part of our natural history, which hath so long continued unexplored.

Being anxious of adding still more to this elegant collection, than the Sand from Sandwich had afforded, I have examined the sediments of various parts of the shores, from thence up to Faversham, and the isle of Shepey, as well as the banks of fresh water streams and ditches, the boggy places, and the woods in this neighbourhood, whereby very considerable additions have been made, which are noticed in the explanatory index.

When the drawings were finished, there remained an almost insurmountable difficulty in my properly arranging and describing the Shells; thro' my small acquaintance with Conchology, nevertheless this was overcome, by the obliging assistance of my antient friend Mr. Jacob, who always willing to instruct me in my weak researches in natural history, most kindly engaged in the task, tho' so liable to censure.

The Classification is agreeable to that of the greatest illuminator of natural history the Sun ever shone upon the illustrious Linnæus however, in a retrograde course; as that seemed more suitable to this collection—if the descriptions should be deemed somewhat imperfect, and not sufficiently clear, a reference may be had, for further satisfaction, to the engravings, which may be depended upon as very exact copies of the originals, altho' so much enlarged. Their natural size may be known by the small figures at the bottom or on the side of each enlarged specimen; and where there is no mark or minute figure subjoined, that is of the real size or notice, will be taken of the omission in the index.

The

The assigning adequate trivial names to the shells, except in a few instances, hath been omitted, through the fear of giving such as might any way interfere with those already given by Linnæus, to Shells of the same kinds, the principal aim has been to give concise and accurate descriptions of them; how they may be approved, is submitted to the public.

As it is an allowed difficulty to determine where one class of Shells ends, and another begins, a liberty is taken of placing all the compressed Snails under the title *HE LIX*, and those with a produced clavicle, whether less or more, and whether the aperture be round or oval, or tending to either form, under the title *T U R B O*, which it is hoped will be pardoned by the Critics in Conchology.

It having been suggested that many of these Shells may prove to be the fry of shells heretofore published, great care hath been taken to obviate that idea, several specimens suspected to be such, have therefore been laid aside for future investigation.

The Author begs leave to inform his readers, that he will continue his researches; and if he should be so successful as to procure a sufficient number of Shells for another plate, it shall be published separately, as an appendix, to accommodate the present purchasers, without putting them again to the expence of the whole: And that he shall think himself much obliged to any Gentleman who will favour him with any minute Shells here unnoticed, with an account where discovered, or any other observations tending to illustrate this part of our natural history

FAVERSHAM,

G E O. W A L K E R.

E R R A T A.

- Page 4. Fig. 15. read *imperfurato transverse striatum*.
 9. 31. read *depictus*.
 19. 68. read *Subumbilicatus*.
 22. 79. read *areis*.
 24. 85. read *striated*.

The Defects in the Punctuation it is hoped will be excused; and the Date May 1, 1784, added at the End of the Introduction.

THE
EXPLANATORY INDEX
OF THE
Species of SHELLS contained in the Three Plates
WITH THE
Places where found, and their Degrees of Rarity.

SERPULA. The Wormshell.

FIG. 1.

SERPULA Subovalis intorta umbilico pervio.

The hollow oval Wormshell,

The colour white and glossy,

It varies in size and shape, and is found in every portion of the sea sand which hath been examined.

An Linnæi S. N. p. 1264 — 791 Seminulum? Gualtieri Tab. 10. F. S.

FIG. 2.

SERPULA Bicornis ventricosa.

The bellied semilunar Wormshell,

The colour white, opaque and glossy,

From Sandwich and Reculver—tho' not common.

B

FIG. 3.

F I G. 3.

SERPULA *Bicornis umbilico perforato.*

The femilunar perforated Wormshell,
The colour white, opaque and glossy;
From Sandwich—very rare.

F I G. 4.

SERPULA *Subrotunda dorso elevato.*

The roundish Wormshell with an elevated back,
The colour white, opaque and glossy,
In the sand of all the different parts of the shore.

F I G. 5.

SERPULA *Tenuis ovalis lævis.*

The thin smooth egg-shaped Wormshell,
The colour pellucid, with milky veins,
From Sandwich—not common

F I G. 6.

SERPULA (*Lagena*) *striata fulcata rotunda.*

The round striated and furrowed Flask Wormshell,
The colour whitish, transparent and glossy,
From Sandwich, Reculver, and Shepey—very rare.

F I G. 7.

SERPULA (*Lagena*) *marginata.*

The bordered Flask Wormshell,
The colour white, transparent and glossy,
From Reculver—very rare.

F I G. 8.

SERPULA (*Lagena*) *lævis globosa*.
 The smooth round Flask Wormshell,
 The colour white and transparent,
 From Sandwich—very rare.

F I G. 9.

SERPULA (*Lagena*) *lævis ovalis*.
 The smooth oval Flask Wormshell,
 The colour bluish-white, very transparent like glass,
 From Sandwich—very rare

F I G. 10.

SERPULA (*Retorta*) *rotunda marginata cervice curvatim exerto*.
 The marginated Retort Wormshell,
 The colour white and opaque,
 From Sandwich—not common.

F I G. 11.

SERPULA *Recta anfractibus tribus contiguis regulariter involutis*.
 The strait horn Wormshell, with three close intorted spires at the tip,
 The colour white, semitransparent,
 From Sandwich — rare.

This shell, tho' resembling the semilituus of Linneus, p. 1163, N^o 280, is not of the genus of Nautilus, having neither syphon in the aperture, nor the internal concamerated structure.

F I G. 12.

SERPULA *Recta umbilico pervio anfractu apicis unico involuto.*
 The single spired strait horn Wormshell with a pervious umbilicus,
 The colour whitish, transparent and glossy,
 From Reculver — very rare.

F I G. 13.

SERPULA *Quatuor anfractibus umbilicata apertura rotunda.*
 The four spired round mouth umbilicated Wormshell,
 The colour white, opaque and glossy,
 From Sandwich — not common.

F I G. 14.

SERPULA *Apertura rotunda anfractibus duobus umbilicata.*
 The two-spired umbilicated round mouth Wormshell,
 The colour white, opaque and glossy,
 Found adhering to lobsters, both single and in clusters.

D E N T A L E. The Toothshell.

F I G. 15.

DENTALE *Apice imperforata transversaliter substriata.*
 The imperforated transversly striated toothshell,
 The colour white and opaque,
 From Sandwich — not very common.

PATELLA

PATELLA. The Limpet.

FIG. 16.

PATELLA Plana orbiculata margine regulariter dentato.

The toothed-wheel limpet,
The colour white and opaque,
From Sandwich — extremely rare.

HELIX. The depressed Snail.

FIG. 17.

HELIX Apertura patentissima.

The very wide mouth snail,
The colour white, tinged with pale red pellucid,
From Sandwich and Reculver — very rare.

It somewhat resembles Mr. Pennant's Fig. 139, pl. 86, but is a sea shell flatter, thick, and without transverse wrinkles.

FIG. 18.

HELIX Cornea quatuor anfractibus apertura rotunda.

The horn snail of four spires with a round mouth.
The colour of horn pellucid,
In a fresh water Stream, near Faversham.

FIG. 19.

HELIX Umbilicata quatuor anfractibus apertura subrotunda.

The umbilicated snail of four spires with a roundish mouth,
The colour brown and opaque,
From the same place as N° 18.

FIG. 21

FIG. 20.

- HELIX *Striata apertura compressa tribus anfractibus carinata.*
 The striated suboval mouth'd snail of three spires and a sharp edge.
 The colour light brown pellucid,
 From the same place as N^o 18.

FIG. 21.

- HELIX *Subglobosa umbilicata ore subrotundo margine spinoso.*
 The roundish mouth deeply umbilicated snail with a thorny margin,
 The colour brown pellucid,
 From Byfing Wood, near Faversham — exceeding rare:

FIG. 22.

- HELIX *Umbilico profundo trium anfractuum apertura subrotunda.*
 The snail with three spires, deep umbilicus, and a roundish mouth,
 The colour white, opaque and glossy,
 From Sandwich — not common.

FIG. 23.

- HELIX *Paludosa compressa tribus anfractibus ore rotundo reflexo.*
 The bog snail of three spires, with the border of the round mouth
 reflected,
 The colour white and opaque,
 In marshy ground near Faversham — common.

This elegant Shell is here engraved, as before, only described by Dacosta from Morton's
 Northamptonshire, p. 417.

FIG. 24.

FIG. 24.

- HELIX *Apertura ampla ovali anfractibus apicis resupinatis.*
 The snail with a large oval mouth, and the spires of the tip turned
 backwards,
 The colour of horn semipellucid and glossy,
 From Sandwich — very rare.

FIG. 25.

- HELIX *Globosa duobus anfractibus lævis apertura subrotunda.*
 The smooth round snail with two spires and a roundish mouth,
 The colour white, opaque and glossy,
 From Sandwich — not common.

FIG. 26.

- HELIX *Unici anfractus subumbilicata apertura rotunda marginata eleganter
 reticulata.*
 The round mouth'd reticulated single spired slightly subumbilicated
 snail,
 The colour white and pellucid,
 From Reculver — extreamly rare.

FIG. 27.

- HELIX *Utrunque umbilicata apertura rotunda unici anfractus.*
 The single spired umbilicated round mouth'd snail,
 The colour white, opaque and glossy,
 From Sandwich — not common.

FIG. 28.

F I G. 28

HELIX Lineata dorso convexo umbilicata margine acuto.

The lineated snail with two central white lines crossing the umbilicus
and a sharp edged margin,

The colour chestnut and pellucid,

From Hernhill Brooks on Flags—very rare.

F I G. 29.

HELIX Striata apertura subovali anfractibus supradorsalibus.

The oval mouth'd striated snail with the spires reflected on the back,

The colour greenish — white pellucid,

From Sandwich — very rare.

F I G. 30.

HELIX Anfractibus duobus apertura subrotunda ad umbilicum coarctata.

The snail with two spires, and a roundish aperture contracted near
the umbilicus,

The colour white and pellucid,

From Sandwich — not common.

. T U R B O.

TURBO. The produced Snail.

PLATE II.

FIG. 31.

TURBO *Quinque anfractibus lævis cancellatim depictas.*
 The painted turbo with five spires,
 The colour white and brown elegantly checquered.
 From Dover, by the Rev. Mr. Lyon — not uncommon.

An varietas Turbinis littorei Lin. S. N. p. 1232, N° 607.
 The engraving is double the natural size of the shell.

FIG. 32.

TURBO *Subumbilicatus quatuor anfractibus reticulatis apertura subrotunda.*
 The slightly umbilicated turbo with four reticulated spires, and a
 roundish aperture,
 The colour white and pellucid.
 From Seasalter — very rare.

FIG. 33.

TURBO *Lævis tribus anfractibus apertura rotunda.*
 The smooth three spired turbo with a round aperture,
 The colour of horn pellucid,
 From Faversham Creek — not common.

FIG. 34.

FIG. 34.

TURBO *Lævis quinque anfractibus apertura subrotunda marginata.*
 The smooth five spired turbo with a roundish bordered aperture,
 The colour whitish and opaque,
 From Sandwich—not uncommon.

FIG. 35.

TURBO *Lævis contrarius tribus anfractibus apertura subrotunda.*
 The smooth reversed three spired turbo with a roundish aperture,
 The colour white pellucid,
 From Reculver—exceeding rare.

FIG. 36.

TURBO *Quinque anfractibus ventricosus apertura subrotunda.*
 The five spired ventricose turbo with a roundish mouth,
 The colour white and opaque,
 From Reculver—very rare.

FIG. 37.

TURBO *Tumidus quatuor anfractibus reticulatis apertura subovali.*
 The turbo with four tumid reticulated spires, with an oval aperture,
 The colour white and opaque,
 From Sandwich—very rare.

FIG. 38.

FIG. 38.

TUBBO Tribus anfractibus primo strigis tribus transversis apertura subovata.
 The three spired turbo, the first spire with three transverse ridges,
 and a suboval aperture,
 The colour opaque white,
 From Seasalter—very rare.

FIG. 39.

TURBO Turritus novem anfractibus striatis apertura rotunda.
 The taper turbo with nine striated spires and a round aperture,
 The colour white and opaque,
 From Sandwich—very rare.

FIG. 40.

TURBO Turritus septem anfractibus strigatis apertura ovali.
 The taper turbo with seven ridged spires and an oval aperture,
 The colour opaque white,
 From Sandwich—rare.

FIG. 41.

TURBO Sex anfractibus striatis apertura subrotunda marginata.
 The six spired striated turbo with a roundish marginated aperture,
 The colour opaque brown,
 From a ditch-bank near Faversham—not common.

FIG. 42.

TURBO *Quinque anfractibus striatis apertura subovali.*
 The five spired striated turbo with a suboval aperture,
 The colour opaque brown,
 From Byling Wood, near Faversham—very rare.

FIG. 43.

TURBO *Quinque anfractibus subcarinatis apice purpureo apertura ovali.*
 The five spired turbo, longitudinally and slightly ridged with an oval aperture,
 The colour white with a purple tip.
 From Sandwich, and Faversham Creek—not uncommon.

FIG. 44.

TURBO *Turritus carinatus septem anfractibus apertura coarctata marginata.*
 The taper carinated turbo with seven spires and a contracted marginated aperture,
 The colour opaque white.
 From Sandwich—very rare.

FIG. 45.

TURBO *Clathratus sex anfractibus apertura ovali marginata.*
 The barred six spired turbo with an oval marginated aperture,
 The colour opaque white.
 From Sandwich—exceeding rare.

F I G. 46.

T U R B O Longitudinaliter striatus quinque anfractibus apertura subrotunda.
The striated turbo with five spires and a roundish aperture,
The colour opaque white.
From Sandwich—not uncommon.

F I G. 47.

T U R B O Crassus clathratus quinque anfractibus apertura rotunda marginata.
The thick barred turbo of five spires and a round margined aperture
The colour opaque white,
From Sandwich—very rare.

F I G. 48.

T U R B O Turritus perversus novem anfractibus punctatis apertura coarctata.
The reversed taper turbo of nine dotted spires and straitned aperture,
The colour light-brown opaque,
From Sandwich—not common.

F I G. 49.

T U R B O Sex anfractibus reticulatis apertura ovali submarginata.
The six spired reticulated turbo with an oval submarginated aperture,
The colour semipellucid white,
From Shepey island—very rare.

FIG. 50.

TURBO Sex anfractibus apertura ovali bidentata.

The double toothed turbo of six spires and an oval aperture,

The colour opaque brown and glossy,

On the roots of rushes in marshes near Faversham—very common.

FIG. 51.

TURBO Striatus sex anfractibus apertura ovali bidentata marginata.

The striated double toothed margined turbo of six spires and an oval aperture,

The colour semipellucid white.

In the mossy banks of a stream near Faversham—common.

FIG. 52.

TURBO Quatuor anfractibus subumbilicatus reticulatus apertura ovali.

The reticulated four spired subumbilicated turbo with an oval aperture

The colour pellucid white.

From Shepey island—very rare.

FIG. 53.

TURBO Quatuor anfractibus apertura unidentata.

The four spired turbo with a one toothed oval aperture,

The colour brown semipellucid glossy,

In moss of boggy ground near Faversham—not uncommon.

FIG. 54.

TURBO *Stagnalis perversus* quinque anfractibus apertura ovali.
The reverfed lake turbo of five fpires and oval aperture,
The colour femipellucid brown and glossy,
On the bank of a fream near Faverfham—not uncommon.

This feems defcribed by Petiver, tho' very indifferently engraved, Gaz. T. 10. f. 8.

FIG. 55.

TURBO *Tribus anfractibus reticulatis* apertura unidentata.
The three fpired elegantly reticulated turbo with a one toothed oval
aperture,
The colour pellucid white.
From Sandwich—exceeding rare.

FIG. 56

TURBO *Tribus anfractibus umbilicatus* apertura subrotunda.
The three fpired umbilicated turbo with a roundifh aperture,
The colour greenifh white pellucid,
From Faverfham Creek—not common.

FIG. 57.

TURBO *Striatus quatuor anfractibus* apertura ovali marginata.
The ftriated four fpired turbo with an oval marginated aperture,
The colour opaque white,
From a fream near Faverfham—very rare.

TROCHUS.

TROCHUS. The Topshell.

FIG. 58.

TROCHUS Umbilicatus quinque anfractibus marginatus apertura subrotunda.

The five spired umbilicated marginated topshell with a roundish aperture,

The colour opaque brown,

From Sandwich—common.

BUCCINUM. The Whilk.

FIG. 59.

BUCCINUM Ampullaceum tribus anfractibus apertura ovali.

The bellied whilk of three spires with an oval aperture,

The colour opaque white,

From Faversham Creek—very rare.

FIG. 60.

BUCCINUM Turritum quinque anfractibus apertura ovali.

The taper whilk of five spires with an oval aperture,

The colour white, semipellucid and glossy,

In Faversham Creek only—but not uncommon there.

VOLUTA.

VOLUTA. The Volute.

PLATE III.

FIG. 61.

VOLUTA Alba opaca longitudinaliter striata.

The white opaque volute,

This shell resembles Mr. Pennant's voluta jonensis, but differs in the form of the aperture, as well as in the size.

From Sandwich and Shepey island — not uncommon.

BULLA. The Dipper.

FIG. 62.

BULLA Crassa apertura medio coarctata.

The thick dipper, with a compressed aperture,

The colour white and opaque.

From Reculver — very rare,

D

FIG. 63.

NAUTILUS. The Chambered Nautilus.

FIG. 63.

NAUTILUS *Spiralis umbilicatus geniculis insculptis.*

The spiral umbilicated nautilus with deep joints,

The colour, while the fish is alive, is a fine pellucid crimson; when dead, is white.

It is found alive on the fucus vesiculosus, and is a very common shell on all the coast, and seems to be an universal littoral one, by the numbers found at Rimino, and in the sand of the South Seas.

Lin. S. N. p. 1162, No. 276. Nautilus Beccarii.

Planch. Tab. 1. Fig. 1. Gualtier, Tab. 19. Fig. H, H, I.

FIG. 64.

NAUTILUS *Beccarii perversus,*

The spiral reversed nautilus,

This exactly resembles N^o 63, except being reversed, and is not uncommonly found in the same sand with it.

FIG. 65.

NAUTILUS *Spiralis geniculis crenatis.*

The spiral nautilus, with crenated joints,

The colour opaque white.

The finest specimens are from Shepey — not uncommon.

Lin. S. N. p. 1162, No. 275, crispus. Planch T. 1. f. 2. Gualt T. 19. f. A. D.

FIG. 66.

F I G. 66.

NAUTILUS *Spiralis apertura lineari geniculis elevatis.*

The spiral nautilus, with a narrow aperture and raised joints,

The colour opaque white.

From Shepey island — not common.

Lin. S. N. 1162, No. 274, calcar. Pl. T. 1. f. 3, 4. Gualt T. 19. f. C. B.

F I G. 67.

NAUTILUS *Spiralis geniculis lævibus.*

The spiral nautilus with smooth joints,

The colour semipellucid, white and glossy.

From Sandwich and Seafalter — not common.

F I G. 68.

NAUTILUS *Spiralis utrinque subumbilicatus geniculis depresso plurimis.*

The spiral subumbilicated nautilus, with many depressed joints,

The colour opaque white.

From Reculver — very rare.

F I G. 69.

NAUTILUS *Spiralis umbilicatus geniculis fulcatis.*

The umbilicated spiral nautilus, with furrowed joints.

The colour opaque white.

From Sandwich — not common.

F I G. 70.

NAUTILUS *Spiralis crassus utrinque umbilicatus geniculis lineatis.*

The thick spiral doubly umbilicated nautilus, with fine joints,

The colour opaque white.

From Reculver — exceeding rare.

F I G. 71.

NAUTILUS *Spiralis lobatus anfractibus supra rotundatis subtus depressoioribus.*

The spiral lobated nautilus, with the spires rounded on the upper side, and depressed on the under.

Colour opaque white.

From Whitstable — not common.

F I G. 72.

NAUTILUS *Oblongus carinatus apertura lineari ovali.*

The oblong carinated nautilus, with a narrow oval aperture,

The colour whitish, transparent like glass.

From Seafalter and Sandwich — very rare.

F I G. 73.

NAUTILUS *Subarcuatus geniculis exertis.*

The bending nautilus with raised joints,

The colour opaque brown.

From Shepey island — very rare.

FIG. 74.

NAUTILUS Rectus geniculis depreffis.

The strait nautilus with depreffed joints,

The colour pellucid white.

From Sandwich — exceeding rare.

MYTILUS. The Muscle.

FIG. 75.

MYTILUS Striatus umbonibus productis.

The striated muscle with lengthened beaks,

The colour pellucid white.

From Reculver and Sandwich — not uncommon.

FIG. 76.

MYTILUS Lævis valvulis antice inflexis.

The smooth muscle, with the valves inflected in front,

The colour brown and glossy.

From a fresh water stream near Faversham — common.

FIG. 77.

MYTILUS Subrhombiformis punctatus.

The subrhombic dotted muscle,

The colour pellucid white.

From Sandwich — common.

FIG. 78.

F I G 78.

MYTILUS Subovalis densissime punctatus.
 The suboval thickly dotted muscle,
 The colour pellucid white.
 From Sandwich — not uncommon.

F I G. 79.

MYTILUS Discors arcis tribus distinctis.
 The divided muscle,
 The colour opaque brown.
 From Sandwich — not common.

Lin. S. N. 1159, No. 261. Da Costa Er. Conch. p. 221. Tab. 17. f. 1. where it is
 exactly described, and as badly engraved.

A N O M I A. The Scale.

F I G. 80.

A N O M I A Squammula.
 The scale anomia,
 The colour opaque white and glossy.
 From Sandwich — not uncommon.

Lin. S. N. 1151, No. 221.

This shell is well described by Da Costa; but neither he or Mr. Pennant have caused it
 to be engraved.

A R C A.

ARCA. The Ark.

FIG. 81.

ARCA Oblonga striata antice angulata.

The oblong striated ark, with the foreside angulated,

The colour opaque white.

From Sandwich — not uncommon.

Lin. S. N. p. 1141, No. 171. Arca Modiolus.

CARDIUM. The Cockle.

FIG. 82.

CARDIUM Striatum radiatum.

The striated and radiated cockle,

The colour opaque white.

From Sandwich — common.

This seems to resemble the cardium edule, Lin. S. N. p. 1124, No. 90; but on comparison will be found to differ from it.

FIG. 83.

CARDIUM Subcordatum subangulatum.

The truncated heart cockle,

The colour opaque white.

From Seafalter — very rare.

Lin. S. N. p. 1123, No. 83.

Dr. Lister's H. C. Tab. 317, No. 154, somewhat resembles this shell, but is not transversely striated.

FIG. 84.

CARDIUM Subcordatum antice muricatum.

The heart cockle, with the front muricated,

The colour opaque white.

From Shepey island — not uncommon.

CARDIUM Striatum apicibus reflexis.

The smooth cockle with reflected beaks,

The colour opaque brown.

From Sandwich — not common.

CARDIUM Læve apice minuto.

The smooth small beaked cockle,

The colour semipellucid, pale red and glossy.

From Shepey island — rare.

The title of cardium to this and the precedent is doubtfully given.

L E P A S. The Acorn Shell.

L E P A S Balanus striatus apertura obliqua.

The striated acorn shell, with an oblique aperture,

The colour light brown.

From Sandwich, on the roots of sea-weeds; the finest specimens on lobsters — not uncommon.

A P P E N D I X.

E C H I N U S. The Sea Urchin.

F I G. 88.

ECHINUS *Ovalis depressus ambulacris quinis.*

The five rayed depressed oval sea urchin,

The colour opaque white.

From Sandwich — common.

This is nearly allied to Lin. p. 1104, No. 14; but wants the five lines on the under side.

F I G. 89.

ECHINUS *Subrotundus planus lobatus.*

The flat roundish lobated echinus,

The colour opaque white.

From Reculver — rare.

A S T E R I A S. The Star Fish.

F I G. 90.

ASTERIAS *Triradiata lævis.*

The smooth three rayed starfish,

The colour white, transparent as glass,

On all the different shores that have been examined.

Corded

SMITHSONIAN INSTITUTION LIBRARIES

3 9088 00316583 4

nhmoll QL425.G7W179

A collection of the minute and rare shel