

Appendix

Descriptions of Fossil shells
from South America

by F. B. Sowerby Esq. F.R.S. &c

Mactra? rugata. Pl. II. p. 8

Mactra? testa oblonga, tenui, turgida, latere antico altiore, rotundata, postico longiore, acuminate; lineis incrementi rugas concentricas apperantibus.

~~This is in a soft mud or fine sandy clay, of the same character as that in which the *Cucullaea alta*, but very different from the stone in which most of the fossil shells of the locality are found. [The shell itself is changed into gypsum.]~~

[Santa Cruz, Patagonia]

Mactra Darwinii ~~Pl. II. p. 9~~ (testi concentrici striati,

Mactra testa ovali, subapiculata, subventricosa, tenuiscula, antica rotundata, postice obsoletipinnis subquadrata.

It is impossible to get at the hinge, wherefore it cannot be ascertained positively to be a *Mactra*. G.B.S.

S. Cruz, Patagonia

Crassatella Lyalli ~~Pl. II. p. 10~~

Cras. testa oblonga, planiuscula, tenuiscula, postice angulata, margine postico sup dorsali declivi, & superficie sulcis obtusis, ^{regularis} ~~subparallelis~~, longitudinalibus ornata.

This species most nearly resembles *Crassatella lamellosa* of Lam. yet is however destitute of the erect lamella ^{with} ornament the surface of that species.

S. Cruz, Patagonia

Coelbis ² *lavigata*: N. N. f. XI

~~Coelbis~~ *Coelbis*, testâ ovata-rotundata, ventricosa, lavigata,
marginibus intus laevi; long. 3.2, lat. 2.1, alt. 2.7, poll.

It is not without some hesitation that I have placed this
in the Genus *Coelbis*, although it is of the same general form
as most of the known species of that genus. It is quite free
from external rugosity or lamella. There are two specimens,
both of them so imperfect that it is impossible to ascertain
with certainty the character of the hinge & muscular impressions.
Iquique, Chile.

603
~~Chiloz, Canton West.~~

Tellinides ~~*testacea*~~
oblonga - N. H. p. 12

Tellinides? testâ oblongâ, subquadrilaterali, anteriori altiore,
posteriori acuminatior, utroque rotundatâ; disco glabro,
lineâ incrementi solusmodò signato: long. 13, alt. 07,
pall.

This shell is very thin, and being imbedded in a hard compact stone, all attempts to get at the hinge have proved abortive: it is therefore placed in *Tellinides* as the genus to which it approaches most nearly in external character.

[*Chiloz, Canton West.*]

Nanus meridionalis ~~Dillw.~~ Pl. n. 113

113

V. testa ovali, plane convexa, concentricè striata, striis
acutis, distantibus, subelevatis, interstitiis radiatim obsolete
striatis, margine minutissime crenulato.

This so closely resembles *V. exalbida* Lam. in shape, as not to
be distinguishable, except by the radiating striae & the finely crenulate
margin.

Santa Cruz, Patagonia: near Nevada, Chili*

Back of Plate

* Fort. note

Wherever a fossil has been found at two localities,
the name first given, implies that the best
specimens came from that place.

Chiloe, Capra

Cytherea subulosa N. B. p. 19.

(5)

Cytherea, testâ subovalâ, anticâ rotundatiore, posticâ angiore,
acuminatiusculâ, obtusâ; sulcis concentricis, confertiusculis;
mediis obtusis, anticâ posticâque abutioribus ornata;
long. 1', alt. 0.7, lat. 0.4, p. 11.

I have compared the single valve of this with numerous
recent & fossil *Veneres* & *Cytheres*, without being able to
identify it with any. As I have not been able to see the
hinge, I have only judged it to be a *Cytheres* from analogy.

Chiloe, eastern coast: H islands & Huafu & Ypan?

Cardium Butechum ~~Pand.~~ Pl. II. f. 15

(6)

Card. testis subglobosa, tenui, laciniis, latere postico sub-
carinato, superficie striis radiantibus, numerosis, confertissimis
instructa.

The radiating striae of the interspaces are nearly equal. Nearly
the whole outer surface is gone from both specimens.

S. Cruz, Patagonia

Cardium multiradiatum Pl. II. f. 16

Novae Zelandiae

(7)

Cardium testis subglobosa, costellis radiantibus posticis 13,
rotundatis, medianis plurimis planulatis, interspitiis rotun-
datis, margine denticulato.

These are all the characters that can be given, as there is
only the posterior portion of one valve; of course the general
form is only surmised and the proportions cannot be ascer-
tained.

Nauidad, Chile

Cardita patagonica ~~Pill.~~ N. H. p. 17. (8)

*C. testis subtriangulari rotunda, tumida, subcoriiformi, sub-
obliqua, costis radiantibus 24, angustis, angulatis, squamoso-
seccatis, interstitiis latioribus.*

Nearly related to *C. acuticostata*, and may be distinguished
by having fewer & more distant ribs.

S. Cruz, Patagonia

S. Cruz Patagonia. (9)

Nucula? glabra. N. H. p. 18

*Nucula, testis ovato-oblonga, glabra, nitida, latere antice
brevisse, postice magis acuminato; marginibus dorsalibus
declivis.*

I have referred this to *Nucula* because there is no external
fulcrum for the attachment of the Cartilage & ligament; the
nature of the stone in which it is imbedded has rendered
it impossible to expose any part of the inside.

S. Cruz, Patagonia

S. Cruz Patagonia

Nacula ornata ~~subn.~~ Pl. II. f. 19

(10)

*Nacula testâ posticâ truncata emarginatâ, superficiei
lineis elevatis undatis concentricis ornatâ.*

A beautiful species which apparently resembles *N. Thracia*.
[*formis* in general shape, but inasmuch as a fragment
alone has been found, we cannot give a more complete
character.] Pat. Genie, Patagonia

J. Cruz, Patagonia (11) 13

~~*Pedunculus insolitus*~~, 1844

Pezomacha insolita Pl. II. f. 20, 21

Pezomacha, testâ subovali, crassiusculâ, valde obliquâ,
lavi; arcu ligamenti trigonâ, lateribus elevatis; dentibus
paucis magnis.

This is the ^{most} ~~most~~ unlike the typical form of *Pedunculus* of
any which has come under my observation, being even
more oblique than the *P. obliquus* of DeTrance, from which
it differs moreover in being smooth on the outside and
destitute of radiating ridges.

J. Cruz, Patagonia

Cucullaa alta B. H. f. 22, 33

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Cucullaa, testâ ovali. trapeziformi, subobliquâ, subangulâ,
umbonibus distantibus, arcu ligamenti profundi sulcatâ,
impressiois muscularis postica margine ventrali
elevatâ.

There is a considerable *prima facie* resemblance between
this species and *Cucullaa decussata*, Min. Con. This form
of *C. long* may however be easily distinguished from the
British by its greater height, its more oblique form and
by the greater number of impressed lines on the ligamental
area.

S. Long, R and Port Davis Palagonia

Anomia alternans, ^{B. H. f. 11} ~~Qua~~ testâ suborbiculari, costellis
radialibus plurimis, subsquamiferis, alternis minoribus.]
[There is only a single valve of this species.]
[Lepanto, 1822.]

~~Testa~~ *Terebratula Patagonica* ~~Patagonica~~ ^{H. N. f. 2627} ¹³

T. testa ovali, lateri, valvis feri ^{aequaliter convexis,} ~~aequaliter convexis~~ dorsali producta, ~~vacuola~~, foramine magno, ad marginem valvarum feri parallelo, deltidis mediocri; area cardinali concava, 13 longitudinis testa: margine antice integro.

Slightly different from the *T. variabilis* of the British Crag. (vide Min. Con: t. 576 p. 2 to 5.) to which however it is very nearly related, as it is also to the *T. bisinuata* Lam. of the Iberian basin. It may be distinguished from both by its having no sinus in the anterior margin.

~~San Julian of the Gulf of Magellan~~
S. Josef. ad S. Julian. Patagonia

~~Patagonia~~ ^{Patagonia} *Pecten geminatus* H. N. p. 24 ¹⁴

Pecten testa ^{ovalis,} ~~aequaliter~~ ^{aequaliter} auriculis inaequalibus, ~~mutis~~ costis radiantibus squamuliferis 22 geminatis, interstitiis ~~mutis~~ alternis latioribus, nunquam costa minore instructa: auricula altera magna radiatum costata.

In general form this species resembles *Pecten textorius* (Schlot.) Goldf. Tab. XL. f. 9. but it has very few more than half the number of ribs, which in this species are disposed in pairs. The *P. textorius* moreover belongs to the Lias & inferior Oolite according to Goldfuss.

San Julian, Patagonia

Parton Dominicus d'Orbigny Voy. Part. Pol. (N. 10 p. 20, 21, 22)

8 *Psilon duplicatus*, testâ feri orbiculari, subaquivalvi, tenui; utrinque convexiusculâ; costis laevi, intus costis radiantibus, per paria dispositis, prope centrum minus conspicuis; auriculis parvis.

Like *Psilon*, *Neuroneetes*, *P. japonicus* & *P. obliteratus* in general characters, but easily distinguished from all three by the circumstance of its internal radiating ribs being ~~now~~ disposed in pairs. This genus has been named from ~~Sancti Spiritus~~ ~~d'Orbigny~~ ~~Voyage~~ ~~Part.~~ ~~Pol.~~ ~~N. 10. p. 20, 21, 22.~~

9 ~~*Psilon*~~ *Bellerophonina* Desh.

10 ~~Costs of a~~ *Turritella*.

11 ~~*Psilon*~~ ~~part~~

150 a described by M. d'Orbigny, but as his description is very brief, owing to the condition of his specimens & in consequence of my figure, I have thought it desirable to append the above specific character.

San Josef, Patagonia ad R. Fe', Entre Rios

Psilon Patagonicus d'Orbigny Voy. Part. Pol. (N. 10 p. 20, 21, 22)

This genus has been figured & fully described by M. d'Orbigny & has been accidentally refigured here.
San Josef, S. Julian, Patagonia; and R. Fe', Entre Rios

Pecten Paranensis D'Orb. Voy. Pol. 2. Pl. 10. f. 30. ¹¹¹

P. testa suborbiculari, subaquivalvi, radiis
radiis squamulosis, radiis prominentibus, rotundatis 18
ad 19, interstitiis aequalibus; radiis interstitiisque singulis
lineis tres radiantes squamuliferas ornatis, squamulis linea
centrali majoribus; auriculis magnis, subaquivalvibus, radiata
squamuliferis.

In form this species resembles *P. opercularis* and
P. asper of Mineral Conchology; internally the ribs are very
 strongly marked.

~~Port St. Julian, Pilegma~~ ⁽¹⁶⁾

Pecten centralis, ~~notis~~ ¹¹¹ Pl. 10. f. 31

Pecten testa subcirculari, depressa, radiis quinque
squamuliferis, centrali eminentiore, lineis radiantibus,
asperis numerosisque ornata; auriculis magnis, sub-
aequalibus?

A single fragment of this remarkable species was found
 at Port St. Julian; two others are brought from Port
 Desire. These fragments are all of the same side, so
 that we are as yet but very imperfectly acquainted
 with the species.] San Julian, Port Desire, P. Long, Pilegma

Pecten actinodes N. M. f. 33

(17)

P. testa suborbiculari, convexiuscula, tenui; valvis sub-
aequalibus, radiis, ^{principalibus} subelevatis circa 36, intermediis 3-7
minoribus, omnibus squamuliferis; auriculis inaequalibus,
~~altera~~ radiatim squamuliferis, altera magna, perfecta, altera
~~minus~~ parva, declivi.

Remarkable for its principal ribs being numerous & only slightly elevated, and for its intermediate ribs being very numerous.
San Josef, Patagonia.

Pecten rudis N. M. f. 32

(18)

Pecten testa suborbiculari, subiniquivalvi, crassiuscula,
rudi, costis radiantibus 22, rotundatis, interstitiis angus-
tioribus; intermediis nonnunquam feri obsolete; margine
valide undulato.

The spec^s is only a fragment; another fragment accompanies it, which may possibly be the opposite valve. [Coyhaique, Chile]

Crepidula gregaria N. M. f. 34

(19)

(19)

Crepidula, testa oblonga, intorta, crassa, subrugosa;
septo elongato, subspirali, lavi; vertice submarginali.

This species is remarkable for its lengthened form: it is found, grouped together in an argillaceous sandstone of a grayish colour. It bears a strong general resemblance to *Crepidula fornicata*, which is found, similarly grouped on the coast of New York, New England & generally on the Atlantic coast of N. America.
S. Cruz, Patagonia

Huafu

Bulla cosmophila N. 10. f. 35

Bulla testa ^{subcylindrica} subcylindrica; extremitatibus obtusis, rotundatis, antice ^{patulo} latiore; striis numerosis, confertis, transversis, interstitiis ^{angustis} planiusculis: long. 0.9, lat. 0.4

I do not find any character to distinguish this from the fossil which abounds in the neighbourhood of ~~Paris~~ Bordeaux and which Deshayes has regarded as merely a variety of *Bulla lignaria* Auct. It may easily distinguished by its much more cylindrical form.
Huafu Island, Chile

~~Huafu~~

Sigaretus subglobosus. N. 10. f. 36, 37

Sigaretus testa subglobosa, anfractibus quatuor, spiraliter concinnavit sulcatis. long. 0.9, lat. 0.8, ~~alt.~~ alt. 0.55, ~~poll.~~

~~This is the most concave species of Adams's Sigaretus that I have ever seen.~~ The spiral grooves & intermediate ridges are very nearly equal in general, though sometimes rather irregular. This is the most concave species of Adams's *Sigaretus* that I have ever seen, the position of its aperture being much less inclined to the longitudinal axis than it is even in the *S. concavus* Lam. a recent species common at Valparaiso. Huafu, Chile, and Ypan island, ~~Chile~~ ^{Chile}

Natica pumila. N. 10. f. 35

Natica, testa ovato subglobosa, glabra; anfractibus ~~quatuor~~ quatuor, umbilico magno, patulo.

A single individual of this small species, which appears as far as I can judge to be distinct from any of the recent species, occurs in the same sort of rock, namely a very hard and very dark olive green sandstone, with the last. The difficulty of detaching the stone from the ~~rock~~ shells has prevented me from ascertaining with certainty whether a not over

there be an umbilical callus.

Chloro, eastern cont.

(24) 17
Chiloe, East coast

Natica striolata. Pl. III. p. 39

Natica, testâ depressiusculo subglobosâ, crassiusculâ, glabâ, anfractibus quatuor ad quinque, ultimo maximo, spiraliter substriato, striis subdistantibus; collo umbilicali magno, umbilicem omnino obtegente, ad latum internum in crassatum antice conjuncto.

This species resembles Swainson's *Natica melastoma* in general form, as well as in the umbilical callus: it is however rather more circular and the umbilical callus is rounder. Judging from the apparent general form I had at first sight, when I only saw the upper surface, taken it for *Ligartus concavus*, which it also resembles, and I was not unobserved until by clearing away the stone I discovered the umbilical callus. There are two specimens of this species.

Chiloe, eastern coast

Chiloe, East coast

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Natica solidi

Natica solida Pl. III. f. 40. 41

Natica testa subglobosa, ^{crassa,} basi, spirâ brevi, anfractibus quinque
sutura subinconspicua; apertura ovali, labio columellari
postica crassissimo; umbilico medico, callo parvo: long.
1.8 lat. 1.5. poll.

This most nearly resembles a very common ^{recent} species, which has
generally been confounded with *N. Mammilla*, but which I have
lately rec^d from D. Origny under the name of *N. Ulva* of Valenciennes
over

it may be distinguished from that species by ~~the~~ being almost destitute of the umbilical callosity. The only specimen is very much worn, particularly about the suture, so that the true character of the suture is only discernible in one part, as the general appearance of the specimen conveys the deceptive notion of a deep & broad channelled suture.

Several specimens of a native shell chiefly resembling, but slightly distinct from the genus, were procured at Santa Cruz; they are in a much injured state, as only a small portion of the shell itself remains, particularly of the outer coats about the suture, which consequently appear very deep & distinct, whereas when well preserved the suture ^{is} scarcely distinguishable. Dr. Whiz considers it to be a new genus, ^(see below)

Navidad, Chile; S. Cruz, Patagonia?

Scalania rugulosa n. sp. Pl. III. f. 42. 43

Scalania, testâ acuminato-pyramidali, crassiusculâ, omnino rugulosâ, ~~anterioribus~~ varicibus numerosis, crassis rotundatis; interstitiis spirakliter obsolete subcatis; long.

lat.

Volutions about eleven or twelve, increasing very gradually in size; with 14 or 15 rounded and thickish varices on each.

San Julian, Patagonia

Trochus collaris Pl. III. f. 44. 45. [22]

Trochus testâ conicâ, lavi, anfractibus subequalibus, ~~protrâ tenuissime transversim striatis, supra subconca,~~ ~~aperturâ~~ ~~posticâ~~ ~~prope~~ ~~suturas~~ ~~tuberculis~~ ~~minutis~~ ~~seriatim~~ ~~cinctis~~; infra subconca, spirakliter tenuiter striatis; apertura angulo externo acuto: long. 0.45, lat. 0.55, poll.

A very small portion of the outer surface remains, the inner coat is wholly covered with a yellowish green reddish iridescence. Identical as far as I can judge the same as in *T. lavis*. This may possibly be only a young shell of that species, as it is only distinguished by a row of very small tubercles placed immediately under the suture, which may have existed in that species when young; and it must be observed that the first volutions are broken for both the specimens of *T. lavis*.

Novidad, Chile; S. Aug. Patagonia

Trochus laevis. N. 114 f. 46, 47.

*Trochus testâ conicâ, laevi, anfractibus subaequalibus, posticâ
trigondinistulis, anticâ tenuissimâ transversim striatâ,
aperturâ rhomboidâ, marginem angulâ subaratae apertâ;
infra subconcavis, spirâlibus tenuiter striatis; aperturâ
rhomboidâ, angulo externo acuto; umbilico medio,
intus laevissimo, labio interno subincrassato: long. 13,
lat. 2 poll.*

The remains of the pearly inner coats are beautifully iridescent
in this species; the outer surface is dull.
[Möller, Chile 2] Möller Chile

Turritella Patagonica. N. 114 f. 48. ~~Ant. 2.5 mm. 2.5 mm.~~

*Turritella testâ acumin elongate conicâ, anfractibus decem,
3 ad 4 costatis, costis, intermediâ antiâque subobsoletâ minoribus,
posticâ vix subacutâ, subgrossâ majori, tertiâ carinam
efformante, suturâ indistinctâ.*

This ~~is~~ *Turritella* ~~which~~ is probably only a variety of *T.*
cingulata and ~~which~~ more closely resembles ~~it~~ ^{as far as the appearance goes} ~~as it~~
(over)

rotations increase in size more rapidly than either the T. chilensis
or T. ambalaorum. In some respects this resembles T. carinifer
of Deshayes, it is not however nearly so long in proportion
to its width. I have adopted a name suggested by D'Orbigny
Port Desire, Patagonia; and fragments at Navidad, A.

Turritella ambulacrum. Pl. 10. f. 49

Turritella, testâ elongata turrita, supraclibus decem, ~~posteriorum~~ ^{posteriorum}
Ventricibus spiraliter tricostatis, superioribus ~~aperturam~~
costis aequalibus, anteriorum ^{Costa} antica posticaque majoribus,
intermediâ minori: suturâ in sulcum profundum positâ.

A very remarkable species, which somewhat resembles a
(turn over)

recent ~~is~~ in my possession; The two may however be easily distinguished.
In the recent species the two spiral ridges are much nearer to each other than they are in the fossil; & the spiral groove at the suture is much deeper & narrower in the fossil than in the recent.
Santa Cruz, & S. Julian, Patagonia

Turritella Chilensis Pl. IV f 51

Turritella testâ elongatâ turrita, anfractibus decem, ventricosis, spiraleriter, tricostratis, costis granulosis, intermediâ majori, suturâ in sulcum posita.

Nearly related to *Turritella cingulata* (Swob. & Dunk. Cat.); it is even questionable whether it might not be regarded as a variety of that species, along with *T. ^{Pelagica 23} ambulacorum*. In deference to the opinion of D. B.igny, who has suggested the name I have been induced to describe it. The principal differences between these *T. cingulata* are, the form of the volutions which in this are ventricose; the absence of narrow intermediate ridges; & the greater depth of the groove in which the suture is placed. From *T. ambulacorum* it differs principally in the circumstance of the central rib being the most prominent, while in *T. ambulacorum* it is the least prominent. The ribs in the latter species ~~are~~ are but slightly granose and the groove at the suture is deeper.
 Haaps & Kucha islands, Coast of Kuba

Turritella suturalis. Pl. III f 50

Turritella testâ turrita, tenuiter transversim striatâ, anfractibus 9-10, suturâ validâ divisâ, anticâ posticâque humilidiusculis, posticâ eminentiore.

Fragments alone can be separated from the hard stone in which they are imbedded; it has therefore been impossible to give the proportions.

Nasidal, Chile; and Ypan island, (Lanos Archipelago

Neurotoma subaqualis No. 452. ~~Neurotoma~~ 36

Neurotoma, testâ oblongâ, turritâ, utroque ~~oblongitate~~
acuminatâ; antica breviori; anfractibus senis, mediâ
cariniferis, carinâ tuberculiferâ; ultimo anfractu
carinis quinque, posticali tuberculiferâ; long. 0.6 lat.
0.25.

The species which most nearly resembles this is an
undescribed recent species from S. America; this fossil
species differs however from the recent one in the position
of the notch in the outer lip, which in the fossil curves
round with the posterior tuberculiferous carina, while
in the recent one the notch is placed half way between
the posterior tuberculiferous carina and the suture. There
are other marks of difference; but this may be considered
sufficient, as being forming at once a distinct criterion.

Anaso Island, coast of Chile

Neurotoma Turbinatoides. ~~Neurotoma~~ 37

Neurot. testâ oblongâ, subventricosâ, transversim tenuissimâ
muricato-striatâ, anfractibus quinque, ^{ventricosâ} infra medianâ tuber-
culatis, tuberculis acuminatis, ultimo anticâ lineâ ~~tuberculata~~
~~quatuor~~ vel quinque ~~tuberculata~~ obsolete tuberculatis; canali
brevis: long. 1.35, lat. 0.82, post.

Very different from any other known *Neurotoma*, either
recent or fossil; but most nearly allied, in shape particularly,
to *N. imperialis* ^{by Lamarck}.

Nasidad Chile

Neurotoma discors. N. W. f. 54.

Neurot. testâ fusiformi-terribâ, spirâ acuminatâ, anfractibus octo, pedice tenuissimâ transversim striatâ, medio tuberculatis, ~~sub~~ ultimis anticâ striâ crassâ sub-tuberculatis instructo; canali elongato, tenuiter transversim striato; columellâ rectâ: long. 1.8, lat. 0.62, poll.

A species which appears to be nearly related to *Pl. catenata* Lam. Pesh. II. 1. 62. ^(opposit of the Davis Basin) f. 11. 12. 13, and which may perhaps be merely a variety of that species. In stature & general characters it resembles it very closely; its striae are however very different.

Navidad, Chile

W. A. R. S.

Fusus regularis? ⁽³⁹⁾ Lam. Pesh. II. 1. 62. f. 11. 12. 13. ⁽⁴⁰⁾

Fusus regularis? Lam. Pesh. II. 1. 62. f. 11. 12. 13.

A single very imperfect specimen which may probably be a variety of this species. It is not sufficiently complete to allow of its being decided, or of its characters being given. It is not even certain that it belongs to the genus. M. d. Origny considers it as a distinct species.

Navidad, Chile

Fusus pyruliiformis. N. W. f. 56

~~Fusus testâ globosioris~~ ~~convexioris~~ turbinatâ, anticâ spirâ laterâ sulcatâ, spirâ subdepresso-conicâ, rudâ; anfractibus 3-4, medio tuberculatis, tuberculis transversim sulcatis, in costas subdecurentibus; canali elongato, transversim sulcato.

This somewhat resembles the *Solen Clavator* ^{Lam. (a recent species)} in form, its spire is however more elevated, and its canal shorter in proportion. I judge it to be a *Fusus* from the general external appearance, but cannot be quite certain, for the stone about the mouth is ~~so~~ so much indurated that it cannot be cleared away.

Navidad, Chile

Fusus subflexus. N. W. f. 57

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N. W. f. 57

Fusus testâ fusiformi-turrita, transversim striatâ, stris irregularibus, anfractibus novem, ~~seminariis tuberculatis~~ medio tuberculatis, prope suturas subadpressis; canali medioeri, subflexo: long. 24. lat. 1. poll.

The shell to which this bears the greatest resemblance is ^{apparently} named *Fasciolaria Burdigalensis* Desf. by De Basterot in the *Mémoires de la Soc. hist. nat. de Paris*; in this one shell there is, however, no appearance of oblique folds on the anterior part of the columella, consequently it is generically distinct; while in other respects it is sufficiently different, as may be seen by comparison. Its spire is longer in proportion to the last revolution, and its canal shorter.

Narried, Chile

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San Julian, Patagonia.

Fusus Noachinus nobis. N. W. f. 58 & 59

~~Fusus~~ *Fusus*, testâ foveato fusiformi, utraq. sub-acuminatâ, aequali, anfractibus quinque spiraliter sulcatis, sulcis plerumque seriatim pertusis; posticis longitudinaliter obtuse costatis; canali medioeri, subascendente; suturâ distinctâ: long. lat.

A species which bears some resemblance to *Fusus* Noa Lam. Still it is not nearly related to that species. In shape it resembles *F. lamellosus*, to which it is really related, but it is quite destitute of lamellar varices, so that it may easily be distinguished.

San Julian Patagonia

Fusus patagonicus N. W. f. 60

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Testâ ovato-oblongâ, tenuiusculâ, multifariam varicosâ, anfractibus posticis angularibus, varicibus lamelliformibus, anticis deflexis, posticis ^{interstitiis transversim sulcatis} seminariis, apertura subcirculari, canali obovatusculo, umbilico valido.

Nearly related to *Fusus lamellosus* & *F. Magellanicus* and apparently connecting the two. ~~and being~~

Naval, Chile. ⁽⁴⁴⁾

Pyrula distans. N. V. p. 41

Pyrula testa ~~popifera~~ *ficiformis*, tenuiscula, spiram brevem
obtusam, anfractibus quatuor, ultimo maximo, decussatim
striata, et carinata, carinis 11-12, distantibus, nonnullis
interstitialibus minus elevatis: long. 1.8, lat. 1.2, poll.

A very elegant species of true *Pyrula*, somewhat resembling
P. nuxitoides, in general appearance, but differing from that
species in its proportions, being much wider in comparison
with its length and having a much shorter spire.

Naval, Chile

S. Cruz, Patagonia. ⁽⁴⁵⁾

Struthiolaria ornata. N. V. p. 52

Struthiolaria, testa ovata, apice acuminato, anfractibus
senis, spiraliter striatis, prope suturam canaliculatis,
longitudinaliter costatis, costis obtusis; anticis costis
duabus spiralibus, elevatis, ante medium positis; sutura
profunda; long. 0.7, lat. 0.45, poll.

This is the only fossil species of this rare genus I have
ever seen. Casts of a large variety are found in a loose
clayey Sandstone, at Port St. Julian, Patagonia.
Santa Cruz as S. Julian, Patagonia.

Triton verruculosus B. W. f. 63

Triton testa ovato-conica, transversim tenuiter striata, anfractibus senis; ~~posteriorum~~ ^{posteriorum} ~~resilia~~ ^{resilia} ~~axis~~ ^{axis} ~~varicibus~~ ^{varicibus} ~~obsoletis~~ ^{obsoletis} ~~posticis~~ ^{posticis} serie unica medianâ tuberculorum cinctis, ultimis costis tribus ~~tuberculiformis~~ ^{tuberculiformis} subtorsolis tuberculiferis, tuberculis costâ postica majoribus, reliquiarum obsoletis; varicibus validis, trituberculiferis: long. 1.6, lat. 1.05 poll.

This may be distinguished from *Triton leucostoma* (*Ranella leucostoma* Lam.) to which ^{recent species} it is most nearly related, by the paucity of tubercles forming the posterior row, as well as by the strongly tuberculated varices, and by its being destitute of the pits which are so distinctly ~~marked~~ ^{marked} behind the varices in that species.

Nacidad, Chile

Triton leucostomoides B. W. f. 64

Triton testa ovato-oblongâ, spira obtusâ; anfractibus senis, spirâ soliter sulcatis, et longitudinaliter costatis; varicibus sub-irregularibus, rotundatis, transversim sulcatis: long. lat.

This species resembles *Triton leucostoma* (*Ranella leucostoma* Lam.) more nearly than any other species; it differs, however, in the following particulars, viz. in its general form, which is more oblong; in its longitudinal ribs, which are smaller, & more numerous and extend ~~over~~ ^{over} nearly the whole length of each rotation whereas in *T. leucostoma* they are little more than elongated tubercles near the middle of the whorls.

[Chiloé Island, coast of Chile]

[48] ~~49~~
Nardos Chile

Cassia monilifer ? n. f. 65.

*Cassia testā subglobosā, transversim tenuiter striatā, angu-
libus serie, ultimo gibbosa, serie unica tuberculorum
postice instructo; labio externo tenuiuscula, reflexa,
intus lavi; labio columellari copiosa
lavi; long. 15, lat. 11, poll.*

A second row of small tubercles may be observed occa-
sionally. I know of no species to which this is nearly related.

Revidad, Chile

Nardos Chile

Monoceros ambiguus ? n. f. 66 67

*M. testā subglobosā, crassiusculā, laeviusculā, spiralliter
obsoleti costellatā, aperturā magnā, labio externo intus incurvato,
umbilico parvo, angusto.*

A single specimen in very bad condition; in situ of the L. 1877
on long white t. in at island. etc. n. 2. Regulation of L. 1877.
Coyunbo, Chile

Nash's & Child's
No. 50. (15)

Gastroidium ~~affinis~~ Genus.

I have thought it necessary to designate this singular Shell by a new generic name, because its characters are such as will not permit its union with any hitherto established genus. The Shells to which it appears to be most nearly allied have hitherto been arranged with Buccinum, Eburna & Fusus. Such was the Buccinum of Chemnitz (which ^{Swainson} Gray has designated by the generic name of Pseudoliva*) and which, to avoid the necessity of adding to the number of generic names, I have united to the Eburna. Such also are two ^{fresh} shells described and figured by Deshayes under the names of Buccinum Tiara & B. fissuratum. One other Shell resembles this somewhat in form, but in other respects is very different, and this has been placed with the Buccina in Wood's Suppl. and with the Fusi by Gray. The characters by which this new genus may be known and distinguished from its allied genera are as follows:

Testa ventricosa, subfoliosa, spirâ brevi, anfractibus posticis ad suturas adpropis; aperturâ magnâ, ovali; cardis posticis angusto; anticis lato, reflexis; labio externo posticis incrassato, anticis tenuiore, dente brevi, sulco dorsali interno, propè anticam partem posito; labio columellari interno, non yas-cidiv, ventriculus.

Deshayes Coquilles fossiles des environs de Paris tom. II. pp. 655. 656.

* see overleaf

over

incrassato, capasso, postice apud canalem crassiore.

Gastriidium Cepa Pl. M. 1. 88. 89.

Gastro. testa copaeformi, laevigata, antice spiraculis sulcata. labii exteriori margine antice crenato: long. 23, lat. 17 poll.

Navidard. Ch. 4

* This name of Pseudoliva by which Swainson has designated the Buccinum plumbeum of ~~Gray~~ Chemnitz, and which has been adopted by Gray, is evidently untenable and absurd, because employed to describe an imaginary affinity to Oliva, which does not exist. To Eburna & Buccinum Lam. the genus is nearly related.

Terebra costellata N. H. f. 10. 71

Terebra testâ turritâ, laminsculâ, anfractibus medio tumidiusculis, posticâ linâ impropâ obsolete notatis, costellis numerosis longitudinalibus, elevatis; aperturâ lavi, colâ mella lavi.

The number of revolutions and the proportions cannot be given, for there is only a single fragment of this species.

Naridad, Chile

Naridad, Chile

Terebra undulifera N. H. f. 72. 73

Terebra testâ elongate turritâ, laminsculâ, lineolis undulatis longitudinalibus confertis, posticis fortioribus, testâ; anfractibus plurimis, posticâ tumidiusculis, linâ impropâ subobsoleta, medio subconcavis; aperturâ subrhomboidicâ, colâ mella lavi.

There are only two fragments of this species, it is obviously impossible to ascertain the number of revolutions or the proportions.

Naridad, Chile.

Naridad, Chile

transp.

Naufragio, Chile 1849

Voluta stationaria N. n. f. 76

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*Voluta testâ elongate-oblongâ, spirâ ^{attenuatâ} ~~convolutâ~~, anfractibus
senis; gracilibus, spiraliter confertim striatis, propè
sutura adpressis, deinde subventricosis; apertura oblongâ
labio externo crassiori, ^{subrotundâ} columellâ laevi, plicis duabus
acutiusculis, perobliquis: long. 7.5, lat. 2.75 poll. circa.*

There is only one specimen of this very remarkable shell,
in which the anterior part is so imperfect, that no part
of the inner lip or of the canal is to be seen, consequently
the proportions given above may be liable to a slight
error. The species is nearer to *V. Magellanica* than to
any other known species, it may, however, easily be
distinguished from that species by the characters above
stated. At Santa Cruz, then on the east, apparently belongs
to the species, but considered by M. d'Obigny as different.

Naufragio, Chile: S. Cruz, Patagonia (?)

Voluta triplicata N. n. f. 74 Naufragio, Chile

*Voluta testâ elongate-oblongâ, spirâ attenuatâ, anfractibus
senis, spiraliter confertim striatis, ad suturâ adpressis,
deinde tuberculatis, tuberculis in costas anticâ decurrenti-
bus; apertura oblongâ, longitudinem spirâ æquante;
columellâ triplicatâ, plicis obliquis, subæqualibus: long.
2.25, lat. 0.9 poll.*

This species is placed among the *Volutes*, because the posterior
or upper folds on the columella are rather smaller than
the anterior; it nearly resembles in general appearance
the *Voluta muricina* Lam. and *Murex angusta* Desh.

p. 55

though easily distinguishable from both, by the circumstance of the three folds on the columella being very nearly equal in one species, whereas in the two above-mentioned the posterior folds are more numerous and all very much smaller than the anterior: moreover, the posterior part of the volutions is not adpressed in either of these species and the proportions are also different.

Nevidus. Chile

(56) 30

Nasidad, Chile.

Oliva dimidiata. Pl. II. f. 77.

Oliva testâ oblongo-ovalâ, spirâ acuminatâ, apice obtuso; anfractibus senis, ultimus lineâ tenuissimâ transversim dimidiatus; columella antea plicis quinque obliquis, posticâ majore: long. 0.9, lat. 0.7, poll.

This species varies in its proportions; it differs from all other recent or fossil species with which I am acquainted, in the remarkable circumstance in having a broad band of enamel covering the anterior half of the last rotation above or behind the columellar band, which is distinguished from the posterior part of the rotation by a very fine line, behind which may be seen the longitudinal lines of growth, these lines being hidden on the anterior part by this last covering of enamel. This species bears a general resemblance to *O. spiculata*, a common recent species. [Nasidad, Chile.]

Nasidad, Chile.

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Dentalium giganteum. Pl. II. f. 5

Dentalium testâ terete, rectiusculâ, sulcis longitudinalibus numerosis, intersticiis rotundatis: long. 3.2, lat. 0.5, poll.

~~These~~ ~~fragments~~ ~~of~~ ~~this~~ ~~species~~ ~~with~~ ~~appears~~ ~~common~~ ~~occasionally~~ ~~grow~~ ~~to~~ ~~a~~ ~~very~~ ~~large~~ ~~size~~, for one fragment that is ^{one inch & a half} in length is half an inch in width at its smaller extremity and six tenths of an inch at its larger; while in its thickest part the shell itself is 0.13 of an inch thick. [Nasidad, Chile.]

(turn over)

Navidel, Chile.

Dentalium sulcomum. Pl. v. p. 2.

Dentalium testâ laevi, recliusculâ, costellis longitudinalibus,
elevatisculis, subdistansibus 14, interstitiis planulatis.

The proportions cannot be given for there is only one fragment
which has been broken & the two pieces conterminated by
the sandstone in which it occurs.

Navidel, Chile

Dentalium majus Pl. G. p. 3
Dentalium giganteum

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Dentalium, testa tereti, rectiusculâ, costis longitudinalibus
24, alternis majoribus, interstitiis rotundatis.

The proportions of this species cannot be given, because there are only some fragments; it appears to be one of the larger species of the genus, probably reaching the dimensions of *D. secundare* of Deshayes (tab. 3, fig. 4). It differs from that species in the circumstance of its never having only six angles; and it differs from *D. elephanticum* of Deshayes (which I have elsewhere proved not to be the *D. elephanticum* of Linnaeus) in *Chlorotoma* being less rapidly attenuated, and in being straighter.

Museo Island, cont. Chile.

Prod. S. Julian, Heligoland

1 *Balanus varians* N. H. p. 45, 6.

760

Balanus Testa polymorpha, valvis plerumque laevibus, nonnunquam radiatim obtuse costatis, apicibus subacuminatis; valvâ basali modo concavâ, modo cyathiformi, basi acuminatâ.

This is a very remarkable ~~specimen~~ as well as a very variable species. Its parietal valves are sometimes smooth, only showing the lines of growth, and sometimes covered with obtuse radiating ribs; and the species belongs to that section of the genus which has acuminated ~~and~~ solid parietal valves. But the most variable part, in form, is the basal valve. It is to be observed that in most, if not in all, the species of this genus which have been brought from the Southern hemisphere, it is the base that becomes tubular whenever any accidental circumstance causes the shell to be elongated; whereas in the elongated and clavate varieties of our common species, it is the parietal valves that are lengthened and not the basal. Thus with respect to the present species, we find that when any number of individuals are placed close together when very young, as they increase they form a group, of which the basal valves grow up side by side and become tubular, without the parietal

over

valves changing in form; hence in some specimens this valve is concave in consequence of its having been placed upon a ~~coarse~~ substance and at a distance from each other; while in others, which have been placed very close together when very young, this basal valve has taken a more or less deep cup-shape, being very small at its lower extremity and increasing in dimensions with age.

San. Julian, Patagonia.

Balanus. Coquimbensis. Pl. II. fig. 7.

Description will be sent

Coquimbo Chile

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1841
Balanus testā polymorpha, valvis levibus, nonnunquam
radiatum striatis, ~~partibus~~ ^{aperturis} lateralibus posterioribus angustioribus;
~~aperturis parvis~~ aperturis subtruncatis; apertura parva.

A remarkable fact is

(A)

P. M. M.

observable in both these specimens, I have selected that belonging to the present intermediate bed as showing it most distinctly. In consequence of the numerous individuals being closely grouped together, each one has been compelled to lengthen the basal valve, so as to form a nearly cylindrical tube, closed at the lower part and gradually increasing as it ascends until it joins the base of the six parietal valves: this increase in the length of the base seems to have taken place more rapidly than the growth of the animal would permit, it has therefore ~~filled up~~ ^{been} ~~a portion of the lower~~ ^{by} ~~part of this basal tube,~~ ^{therefore been} ~~with cells or vesicles separated~~ ^{filled up} by calcareous septa very irregular indeed, but which would nevertheless answer the purpose of ^{supporting} ~~fastening~~ the base of the animal in the tube so as ^{to enable the animal} to continue its vital functions.

Cosquimbo, Chile