

Buenos Ayres

6 (1)

The Fossil Shells from this locality are either well known among recent species from the same locality, or in so incomplete a condition that they cannot be identified. They are

- 1 *Maclra*, numerous specimens, but in bad condition.
- 2 *Venus flexuosa*
- 3 *Cytherea*, several specimens, too imperfect.
- 4 *Potamomya labiata*.
- 5 *Ostrea*, - generic character alone distinguishable.
- 6 *Buccinum globulosum*
- 7 *Oliva patula*: the difference between these and the living shells is so slight, that it cannot be regarded as specific.

Upraised Shells, Copiapó, ⁷
Chile

- 1 *Mulinia Byronensis* Gray. (n.º 846.)

Upraised Shells, Chiloe.

- 1 *Venus costellata* Sowb. Zool. Proc.
- 2 Odd valves of an *Ostrea*, quite destitute of distinguishing mark; they may be young shells of *O. latipina* Desh. or only *O. Edulis* Linn. (n.º 535.)

Upraised Shells near
Valparaiso.

- 1 *Concholepas peruviana* (n.º 145. 146.)
- 2 *Pipurella biradiata*
- 3 *Trochus*, not yet named but well known & very common. (n.º 150.)
- 4 *Mesodesma donaciforme* Desh. (n.º 242.)
- 5 *Balanus* not yet named, but very common on all the coasts of Peru.
- 6 Fragments of *Mytilus Chilensis*

Costrea Tatissima Deshayes Coquilles Pop. des Env.
de Paris t. I. pl. 52. 53.

Unpraised Shells. Patagonia

* The Fossils of this Locality are composed of three separate parcels, probably different epochs, viz.

- 1 a granular Limestone (n. 381.) containing two fossil species; one, by far the most abundant, probably a Melania, the other probably a Paludina.
- 2 Coarse Siliceous Sand (n. 342 & 378) with fragments of a Cytherea, a Pectunculus, an Olivia, a Margarita, a Cypraea, a Terebra and a Macropora, all probably the same as recent species. I think two specimens of a Vermetus that are associated with these are really only living shells of the present time.
- 3 Shells of recent species living at the present time in the neighbouring Seas: viz. Mytilus Magellanicus Lam.; a Mytilus not described; Patella deaurata Lam. Volva Ancilla Lam.; Fusus Magellanicus, (Murex Lam.) ~~was~~ a variety of the same; and a Balanus, probably B. Tulipa.

- 3 Cast of the inside of a Cytherea
4 Fragments of a Pecten. P. variis (now described)

Turritella ambulacrum.

Many specimens, some of which are rather variable in external characters, and all imbedded in a light grey friable sand; number under N. Cruz hills.

Lewis & Clarke's Travels

Page 139. between Latitude 47. & 48. & about 102 West of
Some quantities of Lava & pumice Stone. is not
a geologist.

see Santa Cruz p. 9.

This may possibly be distinct from the
Natica solids of Navados, Chile; it is
however obviously impossible to
be certain, seeing that no part of
the outside of the shell remains.

Venus meringii D'Or.
~~is nearly allied to *Venus* *...*~~
 described in the work?
~~*Venus* *...*~~

Suppose this to be *Natica* *Cruziana* D'Or.
 no part of the outer surface remains
 & therefore it cannot be described.
 P. Cruz

Natica *Chili*

Turritella carinifera Desh.

A fragment of a shell which I believe to be of this species.

Found at the point of the bay of *Chilense* at *Hufo* etc. etc.
 Turritella shell in the collection of *Chilense* in paper *Hufo*
 of *Hufo*. See in *Chilense*! *Natica* *Chili*

Venus suboccurans. *Cruziana* D'Or. *Palao* 16

Venus, testa oblonga, anfractibus sex, spiraliter striatis,
 et longitudinaliter costatis, striis confertis, costis
 obtusis, postice interruptis; sutura distincta; caudis
 mediocri, ^{suboccurans} long. 0.65 lat. 0.3 poll.

A single specimen. I do not know any recent species
 that nearly resembles it.

New Bay 17
northern coast of
Patagonia

- 1 Cast of a *Lucina* (n^o: 370)
- 2 *Pecten asper*
- 3 Coralline coating *Turritella*
- 4 *Musculella Maroquoni*
- 5 *Scutella*, probably new species

^{from an}
Unraised, inland Bed; Malconado

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(1a)

From this locality there are only four species, viz

1. *Potamomya labiata*
2. *Solen caribaeus* (^{family} *Solenocurtus* Be. M.)
3. *Mytilus*, fragments
4. *Assiminea* or *Paludina*

1312

- 1 *Urosalpinx Bellovacina* Dosh: t. 50. p. 6. (n. 580)
- 2 *Urosalpinx Virginica* Lam: (n. 568. 569)
- 3 A *Pecten* resembling *aserrimus*; but as the internal surface alone can be seen, it cannot be positively identified. (n. 571. 570)
- 4 Cast of a *Tellina*
- 5 Casts of a *Nanus*? (n. 584)
- 6 Two odd valves of an *Area*, (both imperfect) which cannot be distinguished from *A. inaequalis* Lam. (n. 579)

7 *Venus lamellifera*, testâ subovatâ, gibbâ, lateri ^{postico} ~~postico~~ longiore, antice brevi, sub umbonem sinuatâ; superficie striis radiatilibus (nunquam duplicatis), lamellis concentricis elevatis ornata; margine dorsali planulatâ, striatâ; impressione anticâ cordiformi, lata: long. 1.7, lat. 1.1, alt. 1.4 poll.

This beautiful species resembles *Venus cancellata* Sin. most nearly; it differs from that species in being much more ventricose, in having the anterior impression deeper and in the greater development of the concentric lamella, which are deeply striated from the base to the outer edge on both sides. Found in a loose sandy bed. It is possible that the casts mentioned above may belong to this species. (n. 578.)

- 8 Map containing a cast of an *Area* or *Cucullia* (n. 587)

2. 1875
of the north near the
mountain

St. Joseph's Bay
North Patagonia

20 (3)

Baranovsky D. Oct. 1875 Vol. 10 Pl. 111 p. 50 of the work
1875 Oct. 1875, Min. Com. 1. 370 f. t.
more abundant

21
Port Desire, Patagonia

A fragment of the hinge of a Bivalve, probably a *Cyprina*; the specimen shows the beak, the fulcrum for the ligament and one large tooth, but is otherwise so incomplete that we cannot be certain to what genus it belongs.

21④ 4
Port Desire, Patagonia

Cucullaea alta. N. 10 f. 11, 13

The specimens from this locality are larger than those from Santa Cruz.

Strobilium, *ornata*

Besides the species described there are the following from this locality.

Pecten asper Sowerby. Min: Conch: t. 370 f. 1.

Cast of a *Cardium*, very indistinct.

Cast of a Bivalve, supposed a *Cyprina*, from its not having any siphonal scar in the palled impression.

Another cast of a Bivalve, supposed to be a *Corbis* from the umbones being nearly central.

~~*Terebratula* ^{Patagonica, F. orthig.} ~~var. *ornata*~~ Min: Conch: 576 f. 2 to 5.~~

Casts and fragments of *Turritella ambulacrum* _{not}

~~*Fusus lamellosus* (Murph *lamellosus* Lam.) The specimens of this shell are unusually large they appear to connect *Fusus magellanicus* with *F. lamellosus*, being of a more elongated form than the ordinary variety of *F. magellanicus*, but still having the varices acuminate posteriorly.~~

Cast of a *Pygmaea* resembling *Pedastanus* ^{magellanicus} ~~*ornatus*~~ also similar to *P. ventricosa* Sowerby *Tank. Cat.*

Turritella _{2. P. 1. Conch. at St. Julian}

Cerithium verrucosum? Goldf. t. X. f. 6. formed upon a spiral shell.

Turritella ambulacrum

Not only does the Mineralogical Character of this bed, ~~but~~
~~also~~, ~~resemble~~ the ~~Popit~~ ~~shells~~ ~~contained~~ ~~in~~ it, resemble
 that of Mavedad, Chili, but several also of the Popit shells
 contained ~~in~~ it, are identical with those of that bed.
 The shells of this bed are in a very imperfect state of
 preservation, so that it is difficult to characterize or identify
 them; two or three are however remarkable & distinct
 enough to be described.

Those resembling the Mavedad species are

- 1 *Voluta alta*, ^{Pl. N. f. 75} of which there are two casts with scarcely
 any remains of the shell; these casts are however
 interesting because they show ^{the form} ~~the form~~ of the anterior
 part of the shell.
- 2 *Prochus collaris*, ^{Pl. N. f. 69, 65} of which there is a single specimen
 the which has lost all its pearly lustre.
- 3 *Natica solida*, ^{Pl. N. f. 40, 41} several specimens very much discoloured, because

J. Cruz Patagonica

The following are too imperfect to be described.

A *Bythosarca*, somewhat similar to *B. Noe*, two fragments.

An *Artemis*

A *Cardita* now described as *Cardita patagonica* D'Orb.

~~A *Neris* nearly like the recent *N. plicata* Lam. which is found on the West coasts of Africa.~~

A *Neris* slightly resembling *N. fasciata* Montagu, which is common on the British shores.

A *Cardium* with very delicate close set radiating lines. (Card. *fauleburni* Hoff. *descriptum*)

A Bivalve, probably a *Macla*, its genus however cannot be decided, because its hinge cannot be displayed. Now called *Macla Donovani* D'Orb.

A fragment of a *Crassatella*. now described as *Cr. Lyellii* D'Orb.

A Bivalve, probably a *Tellina*.

A *Serpula*.

A *Fusus* nearly like *despectus* in its proportions and general form, but which has had obtuse longitudinal ridges somewhat similar to those of *Buccinum undatum*.

~~Swift thinks them are two species
ditto for the same & will
separate them as the 2. side of the shell~~

All that can be distinguished in this bed is a fragment of a *Volute*, too incomplete to be identified; two fragments of *Luridella saturata* (vide Navidad, Chili); and an imperfect specimen of *Sigaretus subglobosus* (vide Navidad, Chili).

The fossils of this bed are in such a completely decomposed state, that it is only possible to enumerate the generic names: they are

- a *Solen*.
- a *Novaculina*
- a *Cytherea*
- a *Crepidula*
- a *Mytilus*.

Chiloe, ~~Exp. No.~~³⁹ 20

Besides the four species described, all that
can be in any manner identified from this locality
are,

a Fragment of a Solen and
a fragment of a Bivalve, probably a Cytherea

XXX.

The Shell which appears to abound most in this bed
 is identical with the recent *Turritella unguolata* (Sowerby
 Tank. Cat.) which is found in great profusion at
 Valparaiso and at Coquimbo. All the shells of this bed are
 tender & fragile and they are imbedded in a soft friable
 sandstone. Besides this there is a small & very imperfect
 specimen of what I suppose to be *Venus* ^{that was from} *caalbida* Lam.
 and a ~~rather~~ single valve of one of the acéphalous molluscs,
 which is too imperfect to allow of its genus being determined.

(A slip made to place above the Turritella)

(Nos 161. 165. 169. 168)

Trizonia imitosa, testâ ovato-subcuneiformi, crassa, latere antico brevi, rotundato, postico producto, sub-acuminato; ~~et~~ antica parte rugis elevatiusculis, irregularibus, obliquis, varicosis ~~irregularibus~~, pone medianam obliquè terminantibus, instructâ; posticâ parte lavi, lineis incrementi solum habentibus, carinâ obtusâ ab umbonem usque ad marginem inferiorem posticam decurrente; long. 85 lat. 15, alt. 27 poll.

This species, which we do not find represented either by DeBuck or Lea, resembles var. β of *Trizonia gibbosa* Allen, Con. t. 236 most nearly, which belongs to the Portland Oolitic Beds of Tisbury. It may however be readily distinguished from that species, by its less gibbous form as well as by the different form & structure of the rugosities on the two thirds of the anterior surface. There are several casts of the same, (numbered 163. 164. 171.)

Conception

Baculites vertebralis (N^o 172. 166. 174.)

May not the occurrence of this genus be regarded as confirmatory of DeBuck's opinion that these beds belong to the Cretaceous group?

not / will refer to the two casts of the Pecten
45/ & Savoy can say no more than that
Nautilus (n° 170) is in Pecten.

Diopatra ³⁰ (26)

This cannot be regarded as *Nautilus simplex* of
Min. Con. t. 122, because there is in this a small lobe
near the commencement of the chambers, in which
respect it slightly resembles *N. sinuatus* Min. Con. t. 146.
It is apparently an intermediate form, but the specimen
is too imperfect for description.

Cast of a *Maclura*? (n° 167)

Imperfect valves of a *Pecten*? (n° 172)

Natica Gibboniana? See Amer. Phil. Trans. new series
vol. vii, p. 256 t. 9. f. 10. a very incomplete
specimen: (n° 173)

Besides the above there is a cast of a large Bivalve,
in so indistinct a condition that it is not possible to
ascertain its genus (n° 160)

Will suspect to the two casts of the Pecten
to Sowerby can say he never then the
Nautilus (n: 170) in Pecten

30
Pecten (26)

This cannot be regarded as *Nautilus simplex* of
Mün. Con. t. 122, because there is in this a small lobe
near the commencement of the chambers, in which
respect it slightly resembles *N. sinuatus* Mün. Con. t. 144.
It is apparently an intermediate form, but the specimen
is too imperfect for description. - seq. Galloway

Cast of a *Mactra*? (n: 167) *Arcaucana*? *Arca* *Palaeol.*

Imperfect valves of a *Pecten*? (n: 172) *thin shell*

Natica gibbosa? *Arcaucana*? *Arca* *Palaeol.*
cha Amer. Phil. Trans. new series
vol. vii, p. 258 t. 9. f. 10. a very incomplete
specimen. (n: 173)

Besides the above there is a cast of a large Bivalve,
in so indistinct a condition that it is not possible to
ascertain its genus (n: 160)

Novedad, Chili.

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The Fossil Shells of this locality present a general resemblance in external appearance to recent species of tropical & infrotropical forms, but a particular examination of them proves nearly all of them to be specifically distinct from any recent species with which we are acquainted up to the present time. ~~It is apparent, however, that our which~~
~~are not dependent on the present, ^{the} appearance~~
~~of them.~~ The imperfection of the specimens will in some instances render it impossible to detail the whole of their characters.

Besides those which I have been able to describe there are some few in so incomplete a condition that I can only conjecture the genus to which they may belong. I

over

add a list of these, and of one or two others, which must be regarded as doubtful species.

Cytherea, somewhat resembling *C. Erycina*; but no part of the external surface remains.

Venus, ^{meridionalis D. Or.} ~~nearly allied to scabrida Lam.~~

Artemis, Gray, a single valve probably belonging to this gen.

Maetra, a few small single valves.

Pecten, a small single valve.

Teredo, small fragment of a tube.

X Balanus, a fragment.

X Monoceros or Purpura, a fragment of the posterior part.

~~Pecten~~ granulatus

X Pedunculatus dispar? D. Or. abundant.

Pectunculus, Navada, Chili
may possibly be distinct from Pectipar
of Vofs. it agrees however so well
with the description that it would not
be prudent to describe it as distinct.

1 *Venus opaca* Brod. & Sov. (young shells)

+ 2 *Artemis ponderosa* - commonly called

Venus concentrica, though sufficiently distinct from the ~~known~~ *Artemis* ~~and~~ *Venus concentrica*; but also well known as a recent S. American species: it is proved to be a true *Artemis* by the pattern

3 *Natica duplicata* ~~Wood~~ ^{Agassiz} ~~supposed~~ ^{to be a} ~~subspecies~~ ^{improper}

Besides the above, which cannot be distinguished from recent individuals, there is a bivalve in such imperfect condition that it is not possible to ascertain whether it be a *Mya* or *Sulvaria*; and also a univalve, resembling a *Buccinum*. Also a singular *Cyprina* like those from Patagonia.

Coquimbos (older series)

Perna macillata Lam. ^{see also p. 57}

There are several large specimens of this species which has only been known ^{hitherto} in a fossil state; and which is said to have been brought from America by Lamarck, though he gives no precise locality. I have it from the vicinity of Turin in Piedmont.

Coquimbos (older series)

Bulla Hydatis ^{Agassiz} ~~Agassiz~~ ¹⁸⁴⁷ p. 12.

There is a cast of a *Bulla*, which agrees in shape & thickness with our common European *Bulla Hydatis*, being however only a cast it is impossible to ascertain with certainty whether it be the same or to describe it if different.

Perhaps not *Vernis opaque* 329

it is however impossible to tell
what genus it belongs to - attempts
having been newly made to get at its
king, without success. G.H.S.

Codium ~~sp.~~

Cardium vada. Anca 7. May. R. 18. 18.

Cardium, testa suborbiculari; crassa, radius 40, rotundatis, rugosis, interstitiis radiatae posterioribus angustis, conflatis, ceteris subaqualibus; interstitiis angustis; long. 2.25, diam. ^{alt.} 2.25, lat. 1.8, poll.

The general appearance of this species resembles that of our common European *Cardium suborbiculari*; the number of radiating ribs is however nearly double and the interstices are much narrower & not regular.

Several specimens embedded in green blocks of onyx and stone

9. 7. 1845 sent to the British Museum
for the name of the fossil

Cognate (older series)
(~~older~~ by Covington)The fossil shells thus designated are ^{in two part of the} _{intermediate Be.}

- 1 in *Sulvaria*?
- 2 *Mytilus*, identical with *Mytilus Chilensis*
- 3 Casts of a *Tridacna*
- 4 Casts of a *Territella*
- 5 Casts of an *Olivia*?
- 6 Cast of a *Cassia*?
- 7 Cast of a *Cytherea*
- 8 Two specimens of *Monoceros* ^{Covington} ~~anguliferum~~.

~~These shells were first described by myself, that were
by Covington in the paper of the same name~~

They are embedded in sandstone & do not describe
in state than from the upper series.

... (see vol. II) ... Coquimbo 2844.

The few fossil shells which bear this number are

- 1 A species of Ostrea, very imperfect & much worn, so that it is quite impossible to specify it.
- 2 Fragments of a ~~Patella~~ Pecten, ~~Patella~~ probably an undescribed species, but the fragments are quite insufficient.
- 3 A cast of the inside of a Natica.
- 4 A Balanus, much worn and adhering to a worn specimen of a Monoceros; it appears, as far as I am able to judge from such worn specimens to be identical with a species which now lives in great abundance on the neighbouring coast.
- 5 A group of fragments of Balani, similar to one belonging to the "Coquimbo, intermediate bed" which see.
- 6 Several specimens of Monoceros ^{cariniferum} ~~intermediate~~ described among the fossils of "Coquimbo, ~~intermediate~~ intermediate bed."

The shells of the list, ~~some~~ ^{may} belong to the "intermediate bed" but were specified with the great Pecten.

... (see vol. II) ...

Coquimbos
intermediale Bed.

Coquimbos

36 (44)

The fossil shells from the bed thus designated are
1 A species of *Coluca* in very imperfect state

Coquimbos

37 (45)

Monoceros cariniferum Blainv. Pl. Tab. 41

Monoceros cariniferum. Testa ovata, subglobosa, crassiuscula,
lavi, spiræ plerumque brevi, nunquam levatiuscula; an-
fractibus quinque, carinatis, ultimo maximo, 1-2- vel 3-
carinato, carinâ posticâ validiori, constante; aperturâ
ovata, posticâ calis anguliferâ, dente antico breviuscula.

This species, which varies greatly in its form, as well
as in the number and distinctness of its carinations, is
undoubtedly identical with that in bed marked "Coquimbos
2844". One young specimen has scarcely a trace of a keel,
this individual is moreover very thin.

Coquimbo ^{Japan} ~~Japan~~

Pecten purpuratus Lam.

The fossil *Pecten* which occurs in this locality, resembles very closely a recent species, which is common at Coquimbo and to which we find the name *Pecten purpuratus* Lam. attached in the British Museum. I cannot however regard this as decidedly the *P. purpuratus* of Lamarck, ^{and} as I have never had an opportunity of comparing it with the specimen in Lamarck's collection, I am unable to decide: in the short character which Lamarck gives of his species there are two circumstances in which it differs from our recent species from Coquimbo, which are, the number & convexity of the rays. Lamarck in his character of *P. purpuratus* says that it has 26 convex rays, whereas in our shell the rays are 22, and all very ^{more} flat. With regard to the locality, ~~it is~~ ^{we} observe that Lamarck, speaking of his *P. purpuratus*, says "Habite les mers orientales et australes"; and afterwards "On le dit du Japon": neither of which localities accords with that of our shell. One other circumstance contributes, with those already mentioned, to render it doubtful in my opinion whether our shell be the *P. purpuratus* of Lam. for our shell has a remarkable character which is not noticed by Lamarck; it is this,

over

34
when the Shell has reached a diameter of about two inches, ~~the~~ small interstitial ribs make their appearance between ~~some~~ of the principal ribs, which interstitial ribs become quite distinct when the Shell has arrived at a diameter of 3 $\frac{1}{2}$ inches. Supposing however that the recent species in question is the *P. purpuratus* of Lamarck I have now to state that the fossil resembles it very nearly in every character, differing only in having the principal ribs more convex, the interstices narrower and ~~the~~ ventral points of the interstices obtusely bidentate instead of being only obtusely quadrate.

~~Agassiz~~

No. 2789

Agassiz (49)
38v

- 1 Venus opaca Brod. & Sow. Lach. Bor.
- 2 ~~Mulinia~~ ^{in this case, as if it is from the} ~~Byronensis~~ Gray, Nat. Hist. Mag.
- 3 Turritella cingulata Sow. Tank. Cat.
- 4 ^{in this case} Cyrena donaciformis
- 5 Calyptraea ^{Byronensis?} ~~Byronensis~~ Gray ^{donaciformis}
- 6 Monoceros costatum Sow.

These are all the species I find under this allocation; some of them are in very good condition; I find nothing to distinguish them from recent species; they come from the same upper series. —

See also various recent shells of same

Venus Chilensis

Slight differences are observable between the fossil & recent specimens of this species, they are not however greater than may be observed in different ^{recent} individuals ~~of the same~~ from the same locality.

Payta, Peru 39 (50)

Only two fossils are from this locality, namely

Pectunculus transversus Lam. } given me
x
Ostrea Virginica Lam.

(If you have not this Pectunculus, pay keep it.)

Cordillera of Copiapo ⁴⁰ (31)
Northern Chile

In this locality are the following

- 1 *Pachyodon*, very closely resembling *Uria Listeri* of Min. Con: t. 154 f. 1.3.4. which belongs to Mitchellburg's genus *Pachyodon*. The specimen appears to have lost its external surface, so that if really distinct no character remains to distinguish it by.
- 2 *Lima* very nearly resembling the shell called *Plagiostoma rusticum* Min. Con: 381. but probably distinct; the fragments however are not sufficient. (65)
- 3 *Pecten alatus* DeBuck loc. cit. (59)
- 4 *Perna quadrata* var. Phillips Yorkshire Part 1. t. X. f. 21.22 (66)
- 5 *Gryphaea incurva* Min. Con: t. 112 f. 1.2. (64, 58.)
- 6 *Spirifer linguifera* ^{his class Chile} Phill. Yorkshs Part 2 t. X. f. 4 (9977)
- 7 *Terebratula tetrabedra* Min. Con: t. 83. f. 4 (n.º 133) ^{his class Chile}
- 8 *Terebratula obsolata* ^{sally's description + his class} Min. Con: t. 83. f. 7 (n.º 132) ⁷³ (127)
- 9 *Trochus Humboldtii* (*Pleurotomaria Humboldtii* DeBuck Petrif. Occisill. ex Amargue par Humboldt p. 9 f. 26. This is not a *Pleurotomaria*. (n.º 60. 61. 110)
- 10 *Avicula echinata* Min. Con: t. 293. f. 1.

Guasco Alto;
Cordillera of Northern Chile

From this locality there are several species of *Terebratula*. It is well known that many species of this genus are very variable in the forms they assume, which renders the determination of them exceedingly difficult. Thus among 24 specimens which I believe to be merely varieties of the same species, there are some agreeing very nearly with *T. hastata* Min. Con. t. 446 f. 2, 3, others like *T. trigonata* Min. Con. t. 446 f. 1, others like *T. bifurcata* Min. Con. t. 446 f. 1, 2, 4 while some bear a not very distant resemblance to *T. emarginata* Min. Con. t. 435 f. 5. It is more than probable that several of the above named are merely varieties of growth or age of the same species: perhaps all except *hastata* might ~~possibly~~ properly be regarded as varieties of *T. ornithocephala*.

Next to this come numerous varieties and various stages of growth of *Terebratula obsoleta* Min. Con. t. 83 f. 7.

Besides these there is one resembling *T. ~~obsoleta~~ ^{longispina}* ~~obsoleta~~ ^{Min. Con. t. 83 f. 7}.
Spirifer ^{tab. XXXV} ~~obsoleta~~ ^(number 40) which also closely resembles a recent species from the Coast of Peru. Phillips t. 12 f. 26. (p. 39).

One specimen of *Terebratula Neurodon* Phillips t. 12 f. 26. (p. 39).
 A *Spirifer* resembling *spirifer pinguis* Allen. Con. t. 271. Phillips Geol. of Yorksh. t. 9 f. 18, 19 and only differing from it in having two or three small ridges along the elevated central radiating ridge of one valve & corresponding depression of the other valve.

A *Succinea* resembling *S. concentrica* and
 One specimen of *Trochus Humboldtii* (*Neurotomaria* Daltrock)

N: 781. 782. 783. 784. 785. 787. 798.

Belen alatus DeBuech Petrifications recueillies en Amer.
signe par Humboldt in p. 3. f. 1. 2. 3. 4.

There is no doubt that several specimens in this collection belong to this species, although the stria mentioned by DeBuech as rising into little scales on the ridges are not evident in these specimens which are entirely deprived of the outer surface of the shell. The general form of the shell, however, as well as the number & form of the ridges and interstices agree with DeBuech's species. One specimen is remarkable for having the shell in a great measure replaced by Calcimony in irregular concentric globules similar to those which compose the Beckite found in the Limestone of Torquay.

Cordillera of Coquimbo

N: 777. 778. 779. 780.

Progyra sinuata? Min. Con. 1. 336 where it is called
Gryphaea sinuata. The specimens are very incomplete,
it is however probable that they belong to this species.

Astrorhiza *lanceolata*

43 (54)
~~Consistencies of Coquimbos~~

Besides the above I find the following from this locality
Gryphaea dilatata (786-788.)

A species of *Orthoceratites*, very incomplete (945)

A Madrepora probably of the genus *Astraa*. (977)

2780

Large Gryphaea - very like & probably identical with *Gryphaea orientalis* (Purbeckian), in the Geological Survey's collection from the south of India.

82

The few fossils belonging to this locality are all very indistinct, the following indications are therefore all that can be given

- | | | |
|---|---------------------------|--------|
| <i>Lucina</i> ? | (n ^o 618) | Lucina |
| <i>Caogya</i> | (n ^o 615) | Lucina |
| <i>Pucullaea</i> ? | (n ^o 750) | Lucina |
| <i>Ustrca</i> | (n ^o 752) | |
| <i>Crassatella</i> ? | (n ^o 614) | Lucina |
| <i>Gyphaa dilatata</i> ? | (n ^o 617) | Lucina |
| <i>Ammonites</i> ? something like <i>A. Vanuxemensis</i> Lea, but too indistinct and only a small fragment. | | |
| <i>Natica gibboriana</i> ? | Lea. (n ^o 613) | Lucina |
| <i>Terebratula</i> ? | (n ^o 611) | |
| <i>Cerithium</i> ? | () | |

Upper Chalk of Sicily Det. Burgo. 45 (57)

1. *Ammonites*? *irregularis*, testa costellis radiantibus, numerosis, ^{irregularibus} confertis, in tergo dichotomis ornata.

This appears to be very distinct from any described or figured by DeBuchs & Lea. It is however only a fragment, so that its general shape cannot be ascertained, nor can we be certain that it is an Ammonite. It is very much compressed.

N. 803. 804. 801. 802

Dear Darwin

I return you a
proof of the Form-Descriptions
corrected. As I originally
gave the names, had
not "E. Forbes" better be
left out ~~after~~ each
species — the general
leading sufficing — ^{Whitaker}
Dowley's name would
remain attached to his
Descriptions. — they to
be placed within inverted
commas.

As I have been absent
from town for the last
4 days, working my