

tendency is towards a square shape; in the deeper sinking, in a longitudinal depression, of the coronal extremities of the nasal bones in the *Tiger* than in the *Lion*; in the bounding of this depression above in most of the *Tigers' crania* by a small but distinct semilunar ridge, which is not found in those of the *Lion*; and in the larger comparative size, chiefly in their transverse diameter, of the infraorbital *foramina* in the *Lion*. These *foramina*, it is curious to observe, are double either on one or both sides in the only four *crania* examined of *Lions* which were known to be Asiatic, while in all the others the *foramen* was single on each side.

Specimens were exhibited of *Placunanomia* from the collection of Mr. Cuming, and the following Notes by Mr. Broderip respecting them were read.

Genus PLACUNANOMIA.

Since my publication of this genus in the 'Proceedings of the Committee of Science and Correspondence,' (Part II. p. 28.) Mr. Cuming has found among his stores the following three species in addition to *Plac. Cumingii*, which I have already recorded.

PLACUNANOMIA RUDIS. *Plac. testá sordidè albá, crassá, concentricè irregulariter corrugatá, intùs nitidè politá: alt. $1\frac{7}{8}$, long. $1\frac{5}{8}$, lat. $\frac{5}{8}$ poll.*

Hab. in Indiá Occidentali.

OBS. *Ostreæ edulis* speciem referens.

Mr. Cuming detected this *Placunanomia* attached to a *Spondylus croceus*.—W. J. B.

13 M PLACUNANOMIA FOLIATA. *Plac. testá subdiaphand, subcirculari, rudi, subfoliatá, sordidè albá, intùs splendente; valvæ superioris medio purpureo-fusco: alt. $1\frac{7}{8}$, long. $1\frac{5}{8}$, lat. $\frac{1}{4}$ poll.*

Hab. in sinu Guayaquil Columbiae Occidentalis. (Isle of Muerte.)

Dredged up attached to a dead *Pinna* from a bottom of sandy mud, at the depth of eleven fathoms.

The surface of the inside of the lower valve is uneven but lustrous, and of a hue somewhat approaching to golden. The inside centre of the upper valve is of a rich-purple brown. The outer surface of the lower valve, which has been attached throughout its whole extent, bears a somewhat crystalline appearance; and this observation may be applied to the adhering surface of *Plac. rudis*. In the last-mentioned species this portion is comparatively small, and the eye will immediately detect it from the contrast which it affords with the dull exterior of the part which was free.—W. J. B.

PLACUNANOMIA ECHINATA. *Plac. testá subtumidá, valvâ superiore seriatim echinatá, limbo purpurascente: alt. $1\frac{1}{8}$, long. $1\frac{3}{8}$, lat. $\frac{3}{8}$ poll.*

Hab. ad Insulam Nevis.

Dredged up attached to shells, by Mr. Powers, from sandy mud at a depth of six fathoms.

The inside of the upper valve is of a shining colour, approaching to golden, and that of the lower is sometimes silvery and sometimes of a lighter shade of the colour of the inside of the upper valve.

This species varies much in shape, according to circumstances. Mr. G. B. Sowerby possesses one of an irregular ovate form. Indeed *Placunanomia*, in common with other adherent genera, varies much in shape, accommodating its external form to the surface to which its lower valve is attached. It is remarkable also for putting on the appearance of other genera or species; and this, with the extreme closeness of the adhesion of the lower valve, has been perhaps one of the causes why it has escaped the notice of zoologists. Thus, *Plac. Cumingii*, to a casual observer, looks like one of the plicated *Oysters*; *Plac. rudis* greatly resembles the common *Oyster*, *Ostrea edulis*; and *Plac. echinata* wears something of the appearance of some of the short-spined *Spondyli*.—W. J. B.

Besides the species above recorded Mr. G. B. Sowerby has kindly furnished me with an odd valve of a large species from Luçonia, beautifully iridescent internally: but as it is believed that this is identical with the fine shell sold by him to the British Museum, I leave the description of it to the officers of that institution, in whose province it is, and who are so fully capable of doing it justice.

This genus, then, appears to be widely diffused. Mr. G. B. Sowerby has some other odd valves which may prove new. I possess two or three specimens adhering to *Spondyli* from an unknown locality; but they appear to be young, and, though I am inclined to think that there is among them a new species, I wait for further information before I venture to characterize it.—W. J. B.

Mr. Owen read the following Notes on the Anatomy of the purple-crested Touraco, *Corythaix porphyreolopha*, Vig.

"In commencing the anatomical examination of this *Bird*, my attention was first directed to the form of the tongue. This was large, and not confined to the posterior region of the mouth, but extended to the end of the lower mandible: its *apex* was beset with a few small horny bristles directed forwards, as in the *Toucans*, *Rhamphastos*, Linn., but much less produced than in those birds. It is probable that the ripeness of fruit on which these birds feed is tested by these yielding processes. The base of the tongue was, as usual, beset with retroverted *papillæ*, and elevated into a distinct ridge, serving, as in many of the cold-blooded *ovipara*, as an *epiglottis*. The interspace between this ridge and the laryngeal aperture was very glandular. That aperture was simple and terminated posteriorly by two retroverted spines; so that it is defended in some degree against regurgitated food as well as from that which is swallowed.

"The *œsophagus* is continued down to the stomach of uniform ample width (its diameter being $\frac{2}{3}$ of an inch) without any dilatation or *ingluvies*, as in the true *Rasorial* birds. Its termination for about $\frac{1}{4}$ of an inch is occupied by the zone of gastric glands, forming the *proventriculus*, which does not deviate in capacity or course from

January 28, 1834.

William Yarrell, Esq., in the Chair.

A preparation was exhibited of the stomach of *Semnopithecus Maurus*, F. Cuv., presented to the Society by G. H. Garnett, Esq. It was brought under the notice of the Meeting for the purpose of showing that there exists in that *Monkey* the extremely elongated and sacculated form of the *viscus*, which was first described by M. Otto, as occurring in *Semn. leucoprymnus*, and which was subsequently exhibited by Mr. Owen, at the Meeting of June 11, 1833, (Proceedings, Part. I. p. 74.) as obtaining also in the only two species of the genus which he had then examined, the *Semn. Entellus*, F. Cuv., and the *Semn. fascicularis*, Raffl.,—a structure which he afterwards described and figured in the 'Transactions' (vol. i. p. 65, pll. 9 and 10). Mr. Owen's impression that this remarkable modification of the stomach is a generic peculiarity, receives confirmation from its occurrence in the first previously unexamined species which has been dissected within the Society's reach since the publication of his remarks.

An extensive series of *Eulimæ*, chiefly from the collection of Mr. Cuming, was exhibited, and the following account by Mr. G. B. Sowerby of the genus and of the characters of the several species was read.

Genus EULIMA, Risso.

Testa turrita, acuminata, polita, anfractibus plurimis; aperturâ ovatâ, posticè acuminatâ; labio externo subincrassato, varices obsoletos frequentes, subsecundos, plerumque efformante: operculo corneo, tenui, nucleo antico.

This genus of marine *Shells* appears to be most nearly related to *Pyramidella* and *Rissoa*. A species which has been long known has had the appellation of *Turbo politus* among British Linnean writers; and a fossil species has been placed by Lamarck among the *Bulini*, under the specific name of *Bul. terebellatus*. There are two distinctly marked divisions of the genus, which are characterized by the two species above mentioned; one has a solid *columella*, and the other is deeply umbilicated. All the species are remarkable for a brilliant polish externally, and the shells are frequently slightly and somewhat irregularly twisted, apparently in consequence of the very obsolete *varices* following each other in an irregular line, principally on one side, from the *apex* toward the aperture. Several recent species are British, and the fossil species are found in the *calcaire grossier* near Paris.

* Perforatæ.

EULIMA SPLENDIDULA. *Eul. testâ acuminato-pyramidali, brunnescente, prope suturas albo castaneoque articulatâ; umbilico magno; aperturâ anticè angulatâ: long. 1.45, lat. 0.6 poll.*

Conch. Illustr., f. 7.

Hab. ad Sanctam Elenam Americæ Meridionalis.

A single specimen of this brilliant shell was dredged in sandy mud at from six to eight fathoms' depth.—G. B. S.

EULIMA MARMORATA. *Eul. testá acuminato-pyramidalí, albido brunneoque marmoratá; anfractibus paululùm rotundatis; umbilico magno, patulo; aperturá anticè angulatá: long. 0·85, lat. 0·4 poll.*

Conch. Illustr., f. 8.

Hab.

A single specimen was in the collection of the late G. Humphrey.—G. B. S.

EULIMA INTERRUPTA. *Eul. testá acuminato-pyramidalí, albicante, ad varices brunneo maculatá; umbilico mediocri; aperturá anticè angulatá: long. 0·7, lat. 0·25 poll.*

Conch. Illustr., f. 11.

Hab. in Americâ Centrali.

Dredged in coarse sand, at from eleven to thirteen fathoms, in the Gulf of Nocoio.—G. B. S.

EULIMA IMBRICATA. *Eul. testá acuminato-pyramidalí, albidá, longitudinaliter spadiceo lineatá; anfractibus infrà angulatis, prominentibus; umbilico parvo; aperturá anticè angulatá: long. 0·8, lat. 0·25 poll.*

Conch. Illustr., f. 4.

Hab. ad Sanctam Elenam Americæ Meridionalis.

Dredged in sandy mud in from six to eight fathoms.—G. B. S.

EULIMA BRUNNEA. *Eul. testá acuminato-pyramidalí, brunnea; anfractibus rotundatis; umbilico parvo; aperturá anticè rotundatá: long. 0·6, lat. 0·2 poll.*

Conch. Illustr., f. 9.

Hab. ad Insulam Haynan dictam, in mare Sinensi.

Several specimens were in the late G. Humphrey's collection.—G. B. S.

** Imperforatæ.

EULIMA BREVIS. *Eul. testá breví, acuminatá, hyaliná; varicibus subsecundis; aperturá anticè rotundatá: long. 0·4, lat. 0·15 poll.*

Conch. Illustr., f. 15.

Hab. ad Insulas Oceani Pacifici.

Found on the *Mother-of-pearl Shells* at Lord Hood's Island.—G. B. S.

EULIMA HASTATA. *Eul. testá breviusculá, albá, prope apicem testacé; aperturá ovatá, margine laterali anticáque subangulatis: long. 0·7, lat. 0·2, poll.*

Conch. Illustr., f. 10.

Hab. ad Sanctam Elenam.—G. B. S.

EULIMA MAJOR. *Eul. testá acuminato-pyramidalí, opacá, lacteá; labio externo subarcuato: long. 1·6, lat. 0·4 poll.*

Conch. Illustr., ff. 1. 1*. 1**.

Hab. ad Insulam Tahiti.

The largest specimen was found in coral sand on the reefs.—G. B. S.

EULIMA LABIOSA. *Eul. testá acuminato-pyramidalí, latiusculá;*

anfractibus subrotundatis; aperturâ brevi, labio externo posticè dilatato: long. 0·7, lat. 0·3 poll.

Conch. Illustr., f. 2.

Hab. ad Insulam Annaa Oceani Pacifici.

Found in fine coral sand.—G. B. S.

EULIMA ANGLICA.

Turbo politus, Mont., *Test. Brit.* Conch. Illustr., f. 5.

EULIMA SUBANGULATA. *Eul. testâ acuminato-pyramidali, tenui, opacâ, albâ; anfractu ultimo anticè subangulato: long. 0·7, lat. 0·2 poll.*

Conch. Illustr., f. 3.

Hab. ad littora maris Indici.

A few specimens were among the late G. Humphrey's stores, labelled E. I.—G. B. S.

EULIMA PUSILLA. *Eul. testâ acuminato-pyramidali, tenui, hyalina, albâ; anfractibus longiusculis: long. 0·3, lat. 0·05, poll.*

Conch. Illustr., f. 6.

Hab. ad Sanctam Elenam Americæ Meridionalis.

Variat omnino fusca.—G. B. S.

EULIMA ARTICULATA. *Eul. testâ acuminato-pyramidali, albâ, fusco articulatâ et marmoratâ; anfractibus subrotundatis; varicibus subprominulis; labio externo crassiusculo: long. 0·9, lat. 0·25 poll.*

Conch. Illustr., f. 12.

Hab. ad littora Australiæ.

This species is remarkable for the dark coloration immediately anterior to each *varix*.—G. B. S.

EULIMA VARIANS. *Eul. testâ subfusiformi, acuminatâ, tenui, coloribus variâ; aperturâ oblongâ: long. 0·5, lat. 0·15 poll.*

Conch. Illustr., f. 14.

Hab. ad Xipixapi Americæ Meridionalis.

Two specimens were collected in sandy mud by Mr. Cuming, one of which is white, the other dark brown: several others were among G. Humphrey's stores, some of which are white, others are marked with brown lines and mottled.—G. B. S.

EULIMA LINEATA. *Eul. testâ fusiformi, tenui, albâ, lineis fuscis duabus spiralibus; aperturâ oblongâ: long. 0·7, lat. 0·1 poll.*

Conch. Illustr., f. 13.

Hab.

Several specimens of this were in G. Humphrey's collection, marked "Spira lineata, Weymouth, M.P.": these two last letters stand for *Musæi Portlandici*. I make no further remark, save that it appears to have been published by Da Costa under the name of *Turbo glaber*.—G. B. S.

EULIMA ACUTA. *Eul. testâ turrito-acutâ, albâ; anfractibus duodecim lævibus, suturis obsoletis; varicibus sparsis: long. 0·4, lat. 0·05 poll.*

Hab. in Americâ Centrali. (Bay of Montiji.)

Found in coarse sand at a depth of thirteen fathoms.—G. B. S.

February 25, 1834.

Lieut.-Col. Sykes in the Chair.

A letter was read, addressed to the Secretary by M. W. Bojer, Corr. Memb. Z.S., and dated Mauritius, Nov. 15, 1833. It referred principally to the animal from Madagascar, which was transmitted in the spring of last year to the Society by the late Mr. Telfair, and which was brought by Mr. Bennett on April 9, 1833, (Proceedings, Part I. p. 46,) under the notice of the Society as the type of a new genus, for which he proposed the name of *Cryptoprocta*, on account of its possessing an anal pouch, and being thereby distinguishable from *Paradoxurus*, F. Cuv. One of the habits of the *Cryptoprocta ferox* indicated, during the life of the animal, the existence of this pouch: when violently enraged, and it was apt to become exceedingly ferocious on the sight of a morsel of flesh, "it frequently gratified the persons present with, not an odoriferous, but a most disagreeable smell, very like that of *Mephitis*." When its voracity was not thus excited, it was "quite domesticated and extremely fond of playing with children," and ran "about the house and yard free and sprightly, eating everything." When at liberty "it lay constantly in a rolling posture;" in confinement its sleeping position was not that of the *Viverræ*, "but always on its side, or even on its back, holding with its fore-feet the small wires of its cage." "It died of epileptic fits, which tormented it for nearly three months, and during the last few days of its existence the attacks were very strong and frequent." It had lived in the Mauritius, M. Bojer states, about twenty-five months; and he feels on this account some hesitation as to the immature condition of its dentary system, inquiring whether "this period was not sufficient for its developement, or were the detention and domestication the cause of the imperfection?"

With reference to this inquiry, Mr. Bennett remarked that in the *Viverridæ* generally the replacement of the milk teeth takes place at a comparatively late period of existence, a fact recorded by Mr. Gray in the 'Proceedings of the Committee of Science and Correspondence' of this Society (Part II., p. 65), and principally insisted on as regards *Paradoxurus*, a genus most intimately allied to *Cryptoprocta*. He added, that the fits of which the animal died were not improbably occasioned by the irritation of dentition.

Mr. Bennett's account of *Cryptoprocta ferox*, with a figure of the animal, will be published in the Second Part of the Society's 'Transactions.'

The reading was commenced of a Paper, entitled "Descriptions of New Species of *Calyptræidæ*: by W. J. Broderip, Esq.;" and the *Shells* described in it, chiefly obtained from the collection of

Mr. Cuming, were exhibited. The abstract of this Paper, including the characters of the new species, will be given on the completion of the reading of it.

Mr. Owen read a Paper "On the Anatomy of the *Calyptræidæ*." After referring to the account given by Cuvier of the anatomy of *Crepidula*, to that by M. Deshayes of *Calyptræa*, and to M. Lesson's of *Crepipatella*, as elucidating the general plan of organization in this family, he proceeds to describe the structure of *Calypeopsis*.

The anatomy of this genus agrees very nearly with that of the before-known genera of the family, scarcely differing, except in the comparative extent of the locomotive and respiratory systems; but Mr. Owen has been enabled to add to the labours of his predecessors an account of the *testis*, and a description of the salivary glands. The *testis* is lodged in a membranous chamber, and consists of a glandular part of a light brown colour, and of a fibrous texture when seen under the lens; though, from analogy, the apparent fibres are no doubt seminal tubes. By the side of the *testis* there is a bag, or *vesicula seminalis*, appropriated to receive the secretion, which communicates with the termination of the oviduct posterior to the *anus*; the *anus* being situated on the right side of the branchial orifice, anterior to the *testis*, which here separates it from the oviduct. Between the *testis* and the process on the right side of the neck (regarded by Cuvier as the *penis*,) Mr. Owen has been unable to trace any communication: he feels, consequently, convinced that if this process forms part of the male generative system, it is to be regarded rather as an exciting than an intromittent organ. The salivary apparatus consists of two elongated follicles with glandular *parietes*, occupying the neck on either side of the *æso-phagus*, anterior to the nervous collar, and opening into the *æso-phagus* on each side of the base of the lingual plate.

After passing in review the several systems, Mr. Owen concludes by remarking on the internal chamber or cup which exists in the shells of this family. He regards it as being necessitated by the greater extent of the locomotive powers in *Calyptræa* than in *Patella*; a calcareous plate being interposed between the *viscera* and the foot to protect them from the pressure to which they would otherwise be exposed during the comparatively extensive and frequent contractions of the latter organ. As respiration has a direct relation to locomotion, the *Calyptræidæ* approach towards the higher marine univalves in the organs dedicated to that function. Throughout the family the extent of the respiratory *lamina* is found to correspond with the extent of the internal shell, and with the extent and organization of the foot.

Numerous specimens were exhibited of *Birds* collected in North America, principally in the United States, by George Folliott, Esq., and presented by him to the Society. At the request of the Chairman, Mr. Gould brought them severally under the notice of the Meeting. His principal object being to illustrate, so far as these

March 11, 1834.

William Spence, Esq., in the Chair.

Specimens and drawings were exhibited of a *freshwater Tortoise*, forming part of the collection of Mr. Bell, by whom it was described as the type of a new genus, for which he proposed the name of

CYCLEMYS.

Sternum latum, testam dorsalem longitudine ferè æquans, integrum, solidum; testæ dorsali ligamento squamato connexum.

CYCLEMYS ORBICULATA. *Cycl. testá suborbiculari, carinatá, posticè dentatá, fuscá; scutis sterni flavescentibus, fusco radiatim lineatis.*
Long. dorsi, 8 unc.; lat. 7; alt. 3.

Emys orbiculata, Bell.

Pullus. *Emys Dhor*, Gray, *Syn. Rept.*, p. 20.?

Hab. in Indiâ.

Mr. Bell regards the *Tortoise* which he has thus characterized as supplying a link in the connecting series of the *land* with the *freshwater* families which has hitherto been wanting; and as especially valuable in the natural arrangement, by the clue which it furnishes to the correct location of the Indian forms of the genus *Emys*. It is, indeed, most nearly related to *Emys spinosa*, and on a superficial observation might almost be referred to that species; but on closer examination it is found to differ from that *Tortoise*, not only specifically, but generically also: its sternal bones are permanently separated from the dorsal ones, with which they are connected by means of a ligament alone, similar to that which performs the same office in *Terrapene*. From the *Box-Tortoises*, however, to which, in this point of its structure, it is so closely related, *Cyclemys* is altogether distinct, the whole of its *sternum* being entire, instead of having, as is invariably the case in *Terrapene*, one or more transverse divisions of the *sternum* itself, the lobes of which move as on a hinge. In *Terr. Europæa* this mobility of the *sternum* exists in each lobe in a small degree, combined with the ligamentous connexion of the sternal to the dorsal bones. In *Cyclemys* the whole *sternum* moves together, though very slightly.

The transition from the *land* to the *freshwater Tortoises* may consequently be regarded as commencing in *Terrapene*; passing through *Terr. Europæa* to *Cyclemys orbiculata*; and thence through the Indian forms of *Emys*, which so closely resemble the latter species, to the other forms of *Emys*: the natural series of connexion between the *Testudinidæ* and the *Emydidæ* being thus completed.

The exhibition was resumed of the new species of *Shells* contained in the collection of Mr. Cuming. Those now exhibited were accompanied by

panied by characters by Mr. G. B. Sowerby, and consisted of species and varieties additional to those previously characterized by Mr. Broderip, (Proceedings, Part I. p. 52.) of the

Genus CONUS.

CONUS ALGOENSIS. *Con. testâ tenuiusculâ, subcylindrâ, lævi, fuscâ, fasciâ unicâ seu fasciis duabus interruptis albis; spirâ brevi, subrotundâ, albo fuscoque articulatâ: long. 1·15, lat. 0·55 poll.*

Hab. ad littora Africæ Meridionalis.

Found on the sands at Algoa Bay.—G. B. S.

CONUS AULICUS.

Var. roseus. Testâ formâ et staturâ Con. Aulico omninò simillimâ, maculis irregulariter subtrigonis, roseis.

Hab. ad Insulam Annaa.

This, the most beautiful variety of *Con. Aulicus*, is found on the coral reefs around the Island of Annaa or Chain Island.—G. B. S.

CONUS NUSSATELLA.

Var. tenuis. Testâ tenui, albâ, flavicante nebulatâ, punctulis fuscis transversè seriatim dispositis; striis transversis tenuissimis.

Hab. ad Insulam Annaa.

Found on the coral reefs.

This variety differs in being more slender, much thinner, more produced at the spiral end, and wider anteriorly, from the ordinary variety. Its transverse *striæ* are, moreover, very fine, and its brown specks much more distant and regular.—G. B. S.

CONUS TENDINEUS.

Var. granulosus. Testâ formâ et staturâ omninò Con. tendinei, striis transversis confertis granulosis.

Hab. ad Insulam Annaa.

Found on the coral reefs.—G. B. S.

CONUS LUZONICUS.

Var. Testâ formâ et staturâ omninò Con. Luzonici, fusco-nigricante, fasciâ interruptâ medianâ cærulescente-albidâ, anticè albido variâ.

Hab. ad Insulas Gallapagos.

Found in the clefts of rocks at low water.

A specimen of the more usual variety, which accompanies these, shows the *epidermis*.—G. B. S.

CONUS BRUNNEUS, Wood. *Con. testâ turbinatâ, crassâ, coronatâ, fuscâ, maculis albis transversè fasciatim dispositis; spirâ subprominulâ, albo fuscoque maculatâ, spiraliter sulcatâ, tuberculis magnis; basi lineis elevatis, subgranosis: long. 1·8, lat. 1· poll.*

Wood, Suppl. pl. 3. f. 1.

Variat testâ crassiore, totâ fuscâ, immaculatâ.

Hab. ad Insulas Gallapagos, ad Puertam Portreram et ad Panamam.

Found in the clefts of rocks.—G. B. S.

CONUS PULCHELLUS. *Con. testá oblongo-turbinatá, coronatá, albicante roseo tinctá; supernè turgidulá, infrà granoso-lineatá; punctulis nonnullis fusco-nigricantibus sparsis; aperturá intùs carneá: long. 1·5, lat. 0·8 poll.*

Hab. ad littora occidentalia Australiæ.

From Freemantle.—G. B. S.

CONUS DIADEMA. *Con. testá turbinatá, lævi, crassá, coronatá, fuscá, fasciá angustá medianá pallidiore; spirá subdepressá, tuberculis magnis, albis; apice mucronato; basi lineis elevatiusculis nonnullis; aperturá intùs purpureo-albicante: long. 1·7, lat. 1· poll.*

Hab. ad Insulas Gallapagos.

Found in the clefts of the rocks at low water.—G. B. S.

CONUS FERRUGATUS. *Con. testá acuminato-conicá, lævi, albá, maculis longitudinalibus punctisque seriatim dispositis ferrugineis; spirá subacuminatá, albá, ferrugineo maculatá; basi sulcatá: long. 1·7, lat. 0·8 poll.*

Hab. ad Sinum Californiæ et apud Insulam Guaymas.

This differs much from *Con. monilifer* in its proportions.—G. B. S.

CONUS REGALITATIS. *Con. testá turbinatá, lævi, crassiusculá, supernè ventricosá, spadiceá, maculis punctulisque albo-cærulescentibus variá; spirá depressiusculá, spiraliter sulcatá; basi lineis elevatiusculis paucis, subrugosis: long. 2·, lat. 1·1 poll.*

Hab. ad littora Americæ Centralis. (Real Llejos.)

Found in the clefts of rocks on sandy mud.

It may be designated *Real Llejos* or *Royalty Cone*.—G. B. S.

A specimen was exhibited of the *Musk Duck* of New Holland, *Hydrobates lobatus*, Temm. It had recently been presented to the Society by Lieut. Breton, R.N., Corr. Memb. Z. S., who entered into some particulars respecting its habits. He stated that these birds are so extremely rare, that he saw only thrée of them during his various excursions, which extended over twelve hundred miles of country. He has never heard of any instance in which more than two were seen together. They are met with only on the rivers, and in pools left in the otherwise dry beds of streams. It is extremely difficult to shoot them, on account of the readiness with which they dive; the instant the trigger is drawn, the bird is under water.

Some observations by Dr. Hancock on the *Lantern-fly* and other *Insects* of Guiana were read.

The writer concurs with M. Richard and M. Sieber in regarding as erroneous the statement of Madame Merian, that the *Lantern-fly*, *Fulgora lanternaria*, Linn., exhibits at night a brilliant light, and remarks that the whole of the native tribes of Guiana agree in treating this story as fabulous: it seems to be an invention of Europeans desirous of assigning a use to the singular diaphanous projection, resembling a horn lantern, in front of the head of the insect. He also states that the *Fulgoræ* rarely sing.

March 25, 1834.

William Yarrell, Esq., in the Chair.

A specimen was exhibited of an *Albatross* presented to the Society by Lieut. Breton, Corr. Memb. Z. S., whose principal object in calling the attention of the Society to it was to mention that, being unprovided at the time at which the bird was killed with any of the ordinary preserving powder or soap, he had used for its preservation a mixture of Cayenne and black peppers with snuff and salt. The skin, well rubbed with this mixture, was brought through the inter-tropical regions in an ordinary trunk, affording free access to insects, and arrived in England uninjured. Lieut. Breton conceives that it may be advantageous to collectors to be made aware that the preservation of skins can be secured by articles so constantly at hand as those which he employed in this instance.

The exhibition was resumed of the new species of *Shells* forming part of the collection made by Mr. Cuming on the western coast of South America, and among the islands of the South Pacific Ocean. Those brought on the present evening under the notice of the Society were accompanied by characters by Mr. G. B. Sowerby, and consisted of five species of the

Genus GASTROCHÆNA.

GASTROCHÆNA OVATA. *Gast. testâ ovatâ, albicante, longitudinaliter striatâ, striis exilibus, lamellosis, formam marginis semper sequentibus; longitudine lateris antici quintam partem testæ æquante: long. 1·2, lat. 0·7, alt. 0·7 poll.*

Hab. in Sinu Panamensi (Isle of Perico,) et ad Insulam Platæ.

Found in *Spondyli* at the Isle of Perico, and in coral rocks, at a depth of seventeen fathoms, at the Island of Plata.—G. B. S.

GASTROCHÆNA TRUNCATA. *Gast. testâ oblongâ, posticè rotundato-truncatâ, striatâ, sordidè albicante; epidermide tenui lamellosâ posticè tectâ; latere antico brevissimo, subacuminato: long. 1·4, lat. 0·7, alt. 0·7 poll.*

Hab. in Sinu Panamensi. (Isle of Perico.)

Found in *Spondyli*.—G. B. S.

GASTROCHÆNA BREVIS. *Gast. testâ breviter ovatâ, tenui, pellucidâ, striatâ, striis exilissimis; longitudine lateris antici octavam partem testæ æquante: long. 0·8, lat. 0·5, alt. 0·5 poll.*

Hab. ad Insulas Gallapagos et apud Insulam Lord Hood's dictam. Found in *Pearl oysters* in from three to seven fathoms.—G. B. S.

GASTROCHÆNA RUGULOSA. *Gast. testā oblongā, albidā, striatā, rugulosā, striis anticis prope marginem hiantem confertis, acutis; hiatus longissimo: long. 0·8, lat. 0·3, alt. 0·4 poll.*

Hab. ad Insulas Gallapagos et apud Insulam Lord Hood's dictam. Found with the last.—G. B. S.

GASTROCHÆNA HYALINA. *Gast. testā ovali, albidā, hyalinā, lævi, dorso longitudinaliter striato; latere antico brevi; hiatus duos trientes testæ æquante: long. 0·55, lat. 0·25, alt. 0·3 poll.*

Hab. ad Insulam Lord Hood's dictam.

Found with the two last.—G. B. S.

A Note was read from Mr. Gray, giving an account of the arrival in England of two living specimens of *Cerithium armatum*, which had been obtained at the Mauritius, and had been brought from thence in a dry state. That the inhabitants of *land Shells* will remain alive without moisture for many months is well known: he had had occasion to observe that various marine *Mollusca* will also retain life in a state of torpidity for a considerable time, some facts in illustration of which he had communicated at a recent Meeting of the Society (Proceedings, Part I., p. 116.): the present instance included, however, a torpidity of so long a continuance as to induce him to mention it particularly. The animal, though deeply contracted within the shell, was apparently healthy, and beautifully coloured. It emitted a considerable quantity of bright green fluid, which stained paper of a grass green colour: it also coloured two or three ounces of pure water. This green solution, after standing for twelve hours in a stoppered bottle, became purplish at the upper part; but the paper retained its green colour though exposed to the atmosphere.

The Secretary mentioned an instance of the arrival in this country of a living *Cerithium Telescopium*, Brug., brought from Calcutta, in company with some small *Paludinæ*, which also reached England alive: these *Mollusca* were, however, kept in sea water frequently changed. The *Cerithium* was placed by Mr. G. B. Sowerby, for dissection, in the hands of the Rev. M. J. Berkeley and G. H. Hoffman, Esq., who have prepared a paper on its anatomy for the forthcoming No. of the 'Zoological Journal': it will be illustrated by a series of figures, which were exhibited to the Meeting. It is worthy of remark, that the spirit in which this animal was immersed for the purpose of killing it, and in which it was kept for some weeks, became of a dark verdigris colour.

Dr. Weatherhead exhibited two young *Ornithorhynchi* preserved in spirit, which he had recently received from New Holland, and stated his intention of presenting one of them to the Society's Museum. The smallest of them is about two inches in length; the largest about four. Both are destitute of hair; and in both the eye-lids are closed. In the smaller one there is a vestige of an umbilical slit.

Numerous specimens were exhibited from Mr. Cuming's collection, in illustration of a Paper by Mr. Broderip, entitled, "Descriptions of several New Species of *Calyptæidæ*."

The new species described in this paper are distributed and characterized as follows :

Subgenus CALYPTRÆA.

Testa subconica, subacuminata, cyathi basi adhærente, lateribus liberis.

a. *Cyatho integro*.

CALYPTRÆA RUDIS. *Cal. testâ fuscâ, subdepressâ, suborbiculari, radiatim corrugatâ, limbo crenato; cyatho concentricè lineato, albido, irregulariter subcirculari; epidermide subfuscâ: diam. 2 poll. circiter, alt. $\frac{7}{17}$.*

Hab. ad Panamam et Real Llejos.

This species, whose white onyx-like cup, adhering only by its base, shows to great advantage against the ruddy brown which is the general colour of the inside of the protecting shell, was found under stones. The young shells are the flattest and most regular in form, but their inside is generally of a dirty white, dimly spotted with brown.—W. J. B.

β. *Cyatho hemiconico, longitudinaliter quasi diviso*. (*Calyptæa*, Less.)

CALYPTRÆA CORRUGATA. *Cal. testâ subalbâ, suborbiculari, subdepressâ, corrugatâ; intûs nitente; cyatho concentricè lineato, producto; epidermide fuscâ: diam. $1\frac{5}{8}$ poll. circ., alt. $\frac{8}{10}$.*

Hab. in Americâ Centrali. (Guacomayo.)

Found under stones at a depth of fourteen fathoms.—W. J. B.

CALYPTRÆA VARIA. *Cal. testâ albâ, suborbiculari, crassiusculâ, longitudinaliter creberrimè striatâ; cyatho concentricè lineato, crassiusculo, producto: diam. $1\frac{3}{8}$, alt. max. $\frac{7}{8}$, alt. min. $\frac{3}{8}$ poll.*

Hab. in Oceano Pacifico. (Lord Hood's Island, the Gallapagos, and the Island of Muerte in the Bay of Guayaquil.)

This is a very variable species allied to *Cal. equestris*, and taking almost every shape which a *Calyptæa* can assume. It differs in thickness according to localities and circumstances.—W. J. B.

CALYPTRÆA CEPACEA. *Cal. testâ albâ, suborbiculari, subconcavâ, tenui, diaphanâ, striis numerosis subcorrugatâ; intûs nitente; cyathi terminationibus lanceolatis: long. $1\frac{1}{17}$, lat. $1\frac{1}{8}$, alt. $\frac{3}{8}$ poll.*

Hab. in sinu Guayaquil. (Island of Muerte.)

This was dredged up, adhering to dead shells, from sandy mud, at a depth of eleven fathoms. Besides other differences, the terminating points of the divided *cyathus* are much more lanceolate than they are in *Cal. varia*.—W. J. B.

CALYPTRÆA CORNEA. *Cal. testâ suborbiculari, complanatâ, albâ, subdiaphanâ, concentricè lineatâ et radiatim striatâ; intûs nitente: diam. $\frac{9}{8}$, alt. $\frac{1}{8}$ poll.*

Hab. ad Aricam Peruvicæ.

Dredged up from sandy mud at a depth of nine fathoms.—W. J. B.

Subgenus CALYPEOPSIS, Less.

Cyatho interno integro, lateraliter adhærente.

CALYPTRÆA RADIATA. *Cal. testá conico-orbiculari, albidá fusco radiatá, striis longitudinalibus crebris; limbo crenulato; apice acuto, subrecurvo; cyatho depresso: diam. 1, alt. $\frac{5}{8}$ poll.*

Hab. in Americâ Meridionali. (Bay of Caraccas.)

The cup of this pretty species is pressed in, as it were, on one side, and adheres to the shell not only by its *apex*, but also by a lateral seam, which scarcely reaches to the rim of the cup. The *apex* of the younger specimens, both externally and internally, is generally of a rich brown, and there can be little doubt that when first produced they are entirely of that colour.

Found in sandy mud, on dead shells, at a depth of from seven to eight fathoms.—W. J. B.

CALYPTRÆA IMBRICATA. *Cal. testá albidá, crassá, subconicá, ovatá, costis longitudinalibus et squamis transversis imbricatá; apice subincurvo, acuto; limbo crenato; cyatho depresso: diam. 1, lat. $\frac{5}{8}$, alt. $\frac{9}{8}$ poll.*

Hab. ad Panamam.

Found on stones, in sandy mud, at a depth of from six to ten fathoms.—W. J. B.

CALYPTRÆA LIGNARIA. *Cal. testá crassá, fuscá, deformi, striis corrugatá; apice prominente subadunco, acuto, posteriore: long. $1\frac{1}{10}$, lat. $\frac{5}{8}$, alt. $\frac{7}{8}$ poll.*

Hab. in Americâ Centrali. (Real Llejos.)

The majority of individuals of this species have their shells so deformed that they set description at defiance: the comparatively well-formed shell occurs so rarely that it may be almost considered as the exception to the rule. When in this last-mentioned state, the circumference of the shell is an irregular, somewhat rounded oval, and it rises into a shape somewhat resembling the back of *Ancylus*, with the *apex* very sharp and inclining downwards. The shell in this shape is generally less corrugated than it is in deformed individuals, though some of those are comparatively smooth; but in both states the shell is striated immediately under the *apex*, and is for the most part corrugated on the other side of it.

Found under stones.

Var. *a*. Enormiter conica, cyatho valdè profundo.

This variety is often one inch and six eighths in height, and its cup nearly one inch deep, while the diameter of the shell at the aperture does not exceed one inch.

Found on shells at the Island of Chiloe, in sandy mud, at the depth of four fathoms.—W. J. B.

CALYPTRÆA TENUIS. *Cal. testá irregulari, tenui, subdiaphaná, creberrimè striatá, albidá interdum fusco pallidè strigatá: diam. 1 circ., alt. $\frac{8}{12}$ poll.*

Hab. ad Peruviae oras. (Samanco Bay.)

Found on living shells, in muddy sand, at a depth of nine fathoms.—W. J. B.

CALYPTRÆA HISPIDA. *Cal. testâ subovatâ, subconicâ, albâ strigis maculisque subpurpureo-fuscis variâ, striis frequentibus et spinis tubularibus erectis hispida; limbo crenulato; apice turbinato; cyatho subdepresso: diam. $\frac{1}{2}$, lat. $\frac{1}{8}$, alt. $\frac{1}{10}$ poll.*

Hab. ad Insulam Muerte. (Bay of Guayaquil.)

This elegant species, the circumference of whose somewhat depressed cup is free, with the exception of one part where it adheres laterally, was found on dead shells, in sandy mud, at a depth of twelve fathoms.—W. J. B.

CALYPTRÆA MACULATA. *Cal. testâ ovatâ, albidâ purpureo-fusco maculatâ, longitudinaliter rugosâ; limbo serrato; apice subturbinato, subincurvo: diam. $\frac{1}{2}$, lat. $\frac{1}{8}$, alt. $\frac{3}{8}$ poll.*

Hab. ad Insulam Muerte.

The external contour of this shell, more especially in the position of the subturbinated apex, much resembles that of *Ancylus*. The circumference of the cup is free, excepting at one point, where it adheres laterally throughout its length.

Found in sandy mud, on dead shells, at a depth of eleven fathoms.—W. J. B.

CALYPTRÆA SERRATA. *Cal. testâ suborbiculari, albâ subpurpureo vel fusco interdum fucatâ vel strigatâ, costis longitudinalibus prominentibus rugosis; limbo serrato; apice subturbinato; cyatho valdè depresso: diam. $\frac{1}{2}$, lat. $\frac{1}{8}$, alt. $\frac{1}{10}$ poll.*

Hab. ad Real Llejos et Muerte.

Var. testâ albâ.

Found on dead shells, in a muddy bottom, at the depth of from six to eleven fathoms.—W. J. B.

Subgenus SYPHOPATELLA, Less.?

Laminâ internâ subtrigonâ, subcirculari, latere dextro replicato.

CALYPTRÆA SORDIDA. *Cal. testâ subconicâ, sordidè luted, longitudinaliter subradiatâ; apice turbinato; cyatho depresso, subtrigono, haud profundo: diam. $\frac{1}{2}$, lat. $\frac{1}{8}$, alt. $\frac{1}{10}$ poll.*

Hab. ad Panamam.

This species, the inside and outside of which are of a sordid yellow, is generally covered externally with coral or other marine adhesions. The plate is spoon-shaped.

Found on stones, on a sandy bottom, at depth of twelve fathoms.—W. J. B.

CALYPTRÆA UNGUIS. *Cal. testâ tenui, conicâ, corrugatâ, fuscâ; apice subturbinato; cyatho depresso, subtrigono: diam. $\frac{1}{2}$, alt. $\frac{1}{10}$ poll.*

Hab. ad Valparaiso.

The plate is spoon-shaped, but not so shallow as that of *Cal. sordida*.

Found on shells, at a depth of from seven to forty-five fathoms.—W. J. B.

CALYPTRÆA LICHEN. *Cal. testâ albidâ, interdum pallidè fusco*

sparsá, subdiaphaná, subturbinatá, orbiculatá, complanatá : diam. $\frac{6}{8}$, alt. $\frac{2}{8}$ poll.

Hab. ad Insulam Muerte.

Found on dead shells, in sandy mud, at a depth of eleven fathoms.—W. J. B.

CALYPTRÆA MAMILLARIS. Cal. testá albidá, subconicá; apice subpurpureo, mamillare : diam. $\frac{5}{10}$, alt. $\frac{4}{12}$ poll.

Hab. ad Insulam Muerte.

This pretty species varies. It is sometimes milk white, with the mamillary apex of a brownish purple, and with the inside sometimes of that colour, sometimes white, and sometimes yellowish. In other individuals the white is mottled with purplish brown stripes and spots.

Found on dead shells, in sandy mud, at a depth of eleven fathoms.—W. J. B.

CALYPTRÆA STRIATA. Cal. testá sordidè albá, suborbiculatá, subconicá, subturbinatá, striis longitudinalibus elevatis creberrimis corrugatá; intùs fusco-flavescente : diam. $\frac{1}{2}$, alt. $\frac{3}{8}$ poll.

Hab. ad Valparaiso.

Found on shells in sandy mud, at a depth of from forty-five to sixty fathoms.

CALYPTRÆA CONICA. Cal. testá conicá, fuscá albido maculatá, subturbinatá : diam. $1\frac{3}{8}$, alt. $\frac{7}{8}$ poll.

Hab. ad Xipixapi et ad Salango.

Found attached to shells in deep water.

Subgenus CREPIPATELLA, Less.

Laminâ rotundatâ, apice laterali et subterminali.

CALYPTRÆA FOLIACEA. Cal. testá suborbiculari, albidá, foliaceá; intùs castaneá vel albá castaneo variá : diam. 1, alt. $\frac{3}{8}$ poll.

Hab. ad Aricam Peruvix, saxis adhærens.

This *Crepidatella*, which bears no remote resemblance to the upper valve of some of the *Chamæ* when viewed from above, was found on exposed rocks near the shore.—W. J. B.

CALYPTRÆA DORSATA. Cal. testá subalbidá, planiusculá, costis longitudinalibus irregularibus rugosá; intùs medio fusco-violacé : diam. $\frac{3}{8}$, lat. $\frac{1}{2}$ poll.

Hab. ad Sanctam Elenam.

The back of this shell is not unlike the upper valve of some of the *Terebratulæ*.

Found on dead shells, in sandy mud, at a depth of six fathoms.—W. J. B.

CALYPTRÆA DILATATA, Lam., varietas intùs nigro-castanea. Cal. testá sordidè albá castaneo strigatá; intùs nitidè nigro-castaneá; laminá albá : diam. $1\frac{2}{8}$, lat. $1\frac{1}{8}$, alt. $\frac{1}{2}$ poll.

Hab. ad Valparaiso.

This highly coloured variety was found on exposed rocks at low water. The pure white of the plate shows to great advantage, lying above the rich back ground of the interior of the shell. In some individuals this internal colour is all but black.—W. J. B.

CALYPTRÆA STRIGATA. *Cal. testâ subcorrugatâ, sordidè rubrâ albo varid; intùs subrufâ interdum albâ vel albâ rubro-castaneo varid: diam. 1 poll.*

Hab. ad Valparaíso.

This varies much both in colour and shape. Some of the specimens are quite flat, and the *lamina* almost convex. An obscure subarcuate longitudinal whitish broad streak may be traced on the backs of most of them. It is not impossible that it may be a variety of *Cal. dilatata*.

Found on *Mytili* at depths varying from three to six fathoms.—W. J. B.

CALYPTRÆA ECHINUS. *Cal. testâ albidâ violaceo maculatâ, interdum fuscâ, striis longitudinalibus creberrimis spinis fornicatis horridâ; intùs flavente vel albâ: diam. $1\frac{1}{2}$, lat. $1\frac{1}{8}$, alt. $\frac{5}{8}$ poll.*

Hab. ad Peruviam. (Lobos Island.)

In old specimens the spines are almost entirely worn down, and rough *striæ* only, for the most part, remain. In this state it bears a great resemblance to the figure given of *Crepidula fornicata* in Sowerby's Genera of Shells, No. 23, f. 1.

Found under stones at low water.—W. J. B.

CALYPTRÆA HYSTRIX. *Cal. sordidè albâ vel fuscâ, complanatâ, longitudinaliter striatâ, spinis magnis fornicatis apertis seriatim dispositis; intùs albidâ, interdum castaneo maculatâ: diam. $1\frac{3}{8}$, lat. $\frac{7}{8}$, alt. $\frac{3}{8}$ poll.*

Hab. ad Peruviam. (Lobos Island.)

Approaching the last, but differing in being always more flattened, in the comparatively great size of the vaulted spines, and in the comparatively wide interval between them; still I would not be positive that they are not all varieties of *Crepidula aculeata*, Lam.—W. J. B.

CALYPTRÆA PALLIDA. *Cal. testâ sordidè albâ, ovatâ; apice prominente: diam. $\frac{7}{8}$, lat. $\frac{5}{8}$, alt. $\frac{3}{8}$ poll.*

Hab. ad Insulas Falkland dictas.

Found under stones.—W. J. B.

Subgenus CREPIDULA, Less.

Laminâ subrectâ, apice postico et submedio.

CREPIDULA UNGUIFORMIS, Lam., varietas complanato-recurva: *long. $1\frac{2}{3}$, lat. $\frac{6}{8}$ poll.*

Hab. ad Insulam Chiloen et ad Panamam.

This variety affords a good example of the powers of adaptation of the animal. The shell is either flattened or concave on the back, and recurved in consequence of its adhesion to the inside of dead shells of *Ranellæ Vexillum*, *cœlata*, &c.

It was dredged from sandy mud, at a depth ranging from four to ten fathoms.—W. J. B.

CALYPTRÆA LESSONII. *Cal. testâ complanatâ, subconcentricè foliacea, foliis tenuibus, albâ fusco longitudinaliter strigatâ; intùs albidâ; limbo interno interdum fusco ciliato-strigato: long. $1\frac{1}{4}$, lat. $\frac{1}{2}$, alt. $\frac{2}{8}$ poll.*

Hab. in sinu Guayaquil. (Isle of Muerte.)

This beautiful species, which I have named in honour of M. Lesson, was found under stones at low water. It will remind the observer of the upper valves of some of the *Chamæ*.—W. J. B.

CALYPTRÆA INCURVA. *Cal. testâ fusco nigricante, tortuosâ, corrugatâ; intûs nigricante, septo albo; apice adunco: long.* $\frac{6}{8}$, *lat.* $\frac{1}{2}$, *alt.* $\frac{3}{8}$ *poll.*

Hab. ad Sanctam Elenam et ad Xipixapi.

Found on dead shells dredged from sandy mud, at a depth ranging from six to ten fathoms.—W. J. B.

CALYPTRÆA EXCAVATA. *Cal. testâ crassiusculâ, subtortuosâ, lævi, albidâ vel subflavâ fusco punctatâ et strigatâ; intûs albâ vel albâ fusco fucatâ, limbo interdum fusco ciliato-strigato: long.* $1\frac{7}{8}$, *lat.* $1\frac{1}{8}$, *alt.* $\frac{5}{8}$ *poll.*

Hab. ad Real Llejos.

This species is remarkable for the depth of the internal margin before it reaches the *septum*. In *Crepidula adunca*, Sow., this depth is even greater than it is in *Crep. excavata*. The *apex* is close to the margin, and obliquely turned towards the right side.—W. J. B.

CALYPTRÆA ARENATA. *Cal. testâ subovatâ, albidâ rubro-fusco creberrimè punctatâ; intûs subrubrâ vel albidâ subrubro maculatâ, septo albo: long.* $1\frac{1}{8}$, *lat.* $\frac{7}{8}$, *alt.* $1\frac{1}{2}$ *poll.*

Hab. ad Sanctam Elenam.

This approaches *Crep. porcellana*. The *septum* is somewhat distant from the margin, and the *apex*, which is also somewhat distant from it, is obtuse and obliquely turned towards the right side.

From sandy mud, on shells, at a depth ranging from six to eight fathoms.—W. J. B.

CALYPTRÆA MARGINALIS. *Cal. testâ subovatâ, sublævi vel vix corrugatâ, subflavâ vel albidâ fusco strigatâ; intûs nigricante vel flavâ fusco strigatâ, septo albo: long.* $1\frac{1}{8}$, *lat.* $\frac{1}{2}$, *alt.* $1\frac{1}{2}$ *poll.*

Hab. ad Panamam et ad Insulam Muerte.

This species was found on stones and shells, in sandy mud, at a depth ranging from six to ten fathoms. The white *septum* shows beautifully against the black-brown of the interior. The *apex* is almost lost in the margin, and is directed towards the right side.—W. J. B.

CALYPTRÆA SQUAMA. *Cal. testâ suborbiculari, complanatâ, sublævi, subtenui, pallidè flavâ vel albidâ fusco substrigatâ; intûs subflavâ vel subflavâ fusco strigatâ: long.* 1, *lat.* $1\frac{1}{2}$, *alt.* $1\frac{1}{2}$ *poll.*

Hab. ad Panamam.

The *apex* of this very flat species is lost in the margin. Found under stones.—W. J. B.

✓ **TETRODON STRIGOSUS.** *Tetr. dorso hispido, nigrescente; ventre lateribusque lævibus, his albo nigroque longitudinaliter lineatis, illo albo: pinnâ caudali quadratâ; pectoralibus latè rotundatis.*

D. 12. A. 9. P. 19. C. 8.

Tetr. lineato, Linn., (*Tetr. Physa*, Geoff.,) analogus videtur. Differt maximè ventre lateribusque haud armatis.

The exhibition was resumed of the new species of *Shells* collected by Mr. Cuming on the western coast of South America and among the islands of the South Pacific Ocean. Those brought on the present evening under the notice of the Society were accompanied by characters by Mr. G. B. Sowerby. They belonged to the

Genus PETRICOLA.

PETRICOLA ELLIPTICA. *Pet. testâ ovato-ellipticâ, rufescenti-albidâ; radiatim costatâ, posticè lævi; lamellis concentricis sparsis; lunulâ anticâ distinctâ: long. 1.2, lat. 0.7, alt. 0.9 poll.*

Hab. ad Paytam.

Found in hard mud at low water.—G. B. S.

PETRICOLA OBLONGA. *Pet. testâ oblongo-ellipticâ, pallescente; radiatim costellatâ; lined dorsali posticâ rectiusculâ; lamellis concentricis pluribus, posticè lævigatis: long. 0.9, lat. 0.5, alt. 0.7 poll.*

Hab. ad oras Peruviae. (Pacosmayo.)

Found in hard mud at low water.—G. B. S.

PETRICOLA SOLIDA. *Pet. testâ subgloboso-ellipticâ, pallescente, umbonibus extremitatibusque ambabus fusco-violaceis; radiatim costatâ, posticè lævigatâ; lineis incrementi nonnunquam sublamellosis, posticè magis eminentibus: long. 1.3, lat. 0.8, alt. 1.0 poll.*

Hab. ad oras Peruviae. (Lambeyeque.)

Found in hard clay and stones at low water.—G. B. S.

PETRICOLA DISCORS. *Pet. testâ oblongo-ellipticâ, brunnescente; radiatim costellatâ, costellis acutis, posticè lævi; lined dorsali rectâ: long. 0.8, lat. 0.3, alt. 0.55 poll.*

Hab. ad littora Peruviae. (Lambeyeque.)

Found in hard clay.—G. B. S.

PETRICOLA CONCINNA. *Pet. testâ oblongâ, pholadiformi, albicante; concentricè costellatâ; anticè rotundatâ, radiatim sulcatâ; dorso declivi, alterius valvæ lamellâ lævigatâ; posticè acuminatiusculâ, cotesillis concentricis lamellosis, confertis: long. 0.8, lat. 0.35, alt. 0.35 poll.*

Hab. ad Montem Christi.

Only one perfect pair and a single valve could be preserved.

Found in hard clay at low water.—G. B. S.

PETRICOLA DENTICULATA. *Pet. testâ oblongâ, pholadiformi, extùs pallescente, intùs ad extremitates fusco-nigricante tinctâ; anticè subrostratâ, posticè rotundatâ; lined dorsali rectiuscula,*

ventrali subprominula; omnino radiatim sulcata et concentricè striatà, striis anticè sublamellosis denticulatis: long. 1.3, lat. 0.6, alt. 0.6 poll.

Hab. ad Paytam Peruviae.

Found in hard clay and stones at low water.—G. B. S.

Var. abbreviata. Testa brevior, striis sublamellosis denticulatis nullis: long. 1.1, lat. 0.6, alt. 0.6 poll.

Hab. ad Insulam Platæ.

Found in stones at low water.—G. B. S.

PETRICOLA RUGOSA. *Pet. testà oblongà, pholadiformi, albicante; radiatim costellatà, tenuissimè concentricè striatà; marginibus plerumque deformibus: long. 1.4, lat. 0.55, alt. 0.7 poll.*

Hab. ad oras Chilenses. (Conception.)

Found in *Balani* at from three to seven fathoms depth.—G. B. S.

PETRICOLA TENUIS. *Pet. testà oblongà, pholadiformi, tenui, albicante; radiatim costellatà, costellis anticis posticisque fortioribus, omnibus striis exilissimis rugulosis decussatis; latere antico brevissimo: long. 1, lat. 0.5, alt. 0.55 poll.*

Hab. ad littora Peruviae. (Lambeyeque & Pacosmayo.)

Found in hard clay at low water.—G. B. S.

PETRICOLA ROBUSTA. *Pet. testà rotundato-subtrigond, subgibbosà, solidiusculà, extùs rufescente-fuscà, intùs nigricante; radiatim costatà, costis anticis tenuioribus confertioribus, posticis altioribus; interstitiis omnibus exilissimè decussatim striatis; latere antico rotundato, postico subacuminato; margine dorsali declivi: long. 1.2, lat. 0.8, alt. 0.9 poll.*

Hab. ad Panamam et ad Insulam Muerte dictam.

Found in rocks at the depth of from six to eleven fathoms.—G. B. S.

PETRICOLA AMYGDALINA. *Pet. testà tenui, subhyalind, flavescente, obovatà, lævi; latere antico brevissimo, angustiore; postico longiore, altiore, lamellis nonnullis elevatis distantibus ornato: long. 1.3, lat. 0.5, alt. 0.8 poll.*

Hab. ad Insulas Gallapagos.

Found in *Mother-of-Pearl Shells* in from three to six fathoms at Lord Hood's Island.—G. B. S.

The following "Description of a new Genus of *Gasteropoda*, by W. J. Broderip, Esq., Vice President of the Geological and Zoological Societies, F.R.S., &c." was read.

SCUTELLA.

Testa Ancyliformis, intùs nitens. Apex posticus, medius, involutus. Impressiones musculares duæ, oblongo-ovatæ, laterales. Apertura magna, ovata.

Animal marinum.

This genus appears to be intermediate between *Ancylus* and *Patella*, while the aspect of the back sometimes reminds the observer of *Navicella* or *Crepidula*, Lam. Its place will most probably be among the *Cyclobranches* of Cuvier.

Axis 9, diam. 14 lin.

Hab. in Novâ Hollandiâ, 200 millia passuum ab Ostio Fluvii Macquarrie.

HELIX GRANIFERA. *Hel. testâ conicâ, orbiculari, depressiusculâ, imperforatâ, pallidè brunneâ, granis minutis albis aspersâ; spirâ convexâ, obtusâ; anfractibus vix elevatis, ultimo acutè carinato, anticè convexiusculo; aperturâ ovato-trigonâ; labiis incrassatis, reflexis, albis, externo anticè recto, inæqualiter 3-dentato, dentibus duobus internis obliquis approximatis, externo majore distante compresso.*

Axis 7, diam. 11 lin.

Hab. vulgaris in Indiâ Occidentali.

HELIX PACHYGASTRA. *Hel. testâ orbiculari, depressâ, imperforatâ, badiâ, lævi, tenuiter striatâ; spirâ convexiusculâ; anfractibus planis, ultimo ventricosus, rotundato, obsoletissimè in medio carinato; aperturâ subtrigonâ; labiis incrassatis callosis, externo anticè intus dente parvo extus plicâ majore instructo.*

Axis 4½, diam. 8 lin.

Mr. Gray observed on this character that he calls that a tooth which is solid, and that a plait which is marked externally by a corresponding groove. Thus the *Chondri* of Cuvier have toothed mouths, and the *Pupæ* and *Clausiliæ* plaited.

The exhibition was resumed of the new species of *Shells* contained in the collection formed by Mr. Cuming, chiefly on the Western Coast of South America and among the islands of the South Pacific Ocean. Those brought on the present occasion under the notice of the Society were accompanied by observations and characters by Mr. G. B. Sowerby, and comprised the following species of the

GENUS PHOLAS.

“The utmost caution is necessary in the examination and description of the various sorts of *Pholades*, on account of the extraordinary difference in the form of the same species in different stages of growth. The addition of accessory valves also, as they increase in age, must be carefully observed, in order to guard against too implicit a confidence in their number and form. And though I might be considered guilty of asserting a truism by stating that the difference in size of different individuals of the same species may and sometimes does mislead the tyro in the science of Malacology; lest such difference should mislead the adept also, let him too proceed cautiously, and when he finds a fully grown shell of half an inch in length agreeing perfectly in proportions and characters with another of two inches long, let him not conclude that it is a distinct species, but if he can find no other difference except that which exists in their dimensions, let him consider the one a giant, the other a dwarf. Let it be remembered that among the *Cyprææ* it is not un-

common to observe young shells of three inches in length, and fully grown ones of the same sort only one inch in length; likewise, of the well-known British *Pholades* there are individuals quite in a young state of two inches in length, and perfectly formed shells of the same species not more than half an inch long. For an instance in demonstration I need only refer to the *Phol. papyraceus*, so abundant at Torquay, of which the young shells have been considered by many as a distinct species and have been named by Dr. Turton *Phol. lamellosus*. This varies in size exceedingly, so that it may be obtained both in an incomplete and young state and in a fully grown condition from half an inch to nearly two inches in length. The circumstance of its having rarely occurred in an intermediate state of growth, when the anterior opening is only partly closed and the accessory valves only partly formed, led Dr. Turton and others to persist in regarding the young and old as two distinct species. Other similar instances will be shown in the course of the present concise account of some hitherto undescribed species of the same genus brought to England by Mr. Cuming."—G. B. S.

PHOLAS CRUCIGER. *Phol. testá oblongá, scabrá, marginibus anticá ventrali apertá, anticá dorsali reflexá; valvá accessoriá solitariá, posticá, transversá: long. 1.7, lat. 0.65, alt. 0.7 poll.* BM.

Hab. ad oras Columbiæ Occidentalis et Americæ Centralis.

In this species the anterior ventral opening is somewhat more closed in some specimens than in others. It appears to form only one accessory valve, which crosses the valves behind the *umbones*: the dorsal margins are closed by *epidermis*.

Found in three localities; namely, in soft sandstone at half-tide on the shores of the island of Puna in the Gulf of Guayaquil; in soft stone at low water in the Bay of Caraccas; both in West Columbia; and in hard clay at a depth of thirteen fathoms in the Gulf of No-coiyo in Central America.—G. B. S.

PHOLAS CHILOENSIS, var. *parva*. *Phol. Chiloensis, testá parvâ, tenuiore: long. 1.6, lat. 0.6, alt. 0.6 poll.*

Found in soft stone at a depth of seventeen fathoms at the island of Plata, West Columbia.—G. B. S.

PHOLAS SUBTRUNCATA. *Phol. testá ovato-oblongá, scabrá, posticè rotundato-subtruncatâ, lævi; margine anticá ventrali hiatus maximo; valvá accessoriá solitariá, anticá, lanceolatâ, anticè acuminatâ: long. 1.9, lat. 0.9, alt. 0.8 poll.*

Hab. ad Insulam Platæ, Columbiæ Occidentalis.

Found in soft stone at a depth of seventeen fathoms. Very like our British *Pholas parva*.—G. B. S.

PHOLAS CALVA, Gray, MSS. *Phol. testá ovatâ, anticè retusâ, posticè subacuminatâ, hiantè; valvis singulis in areas tres divis; areis, anticâ scabriusculâ; intermediâ epidermide corneâ lon-*

itudinaliter striatâ indutâ; posticâ squamis corneis, posticè rotundatis, imbricatis, lævibus, gradatim minoribus, ornatâ; parte anticâ ventrali clausâ lævigatâ; valvâ accessoriâ anticâ dorsali maximâ, lævi, quinquelobatâ; marginibus dorsali ventralique posticis epidermide corneo-testaceâ obtectis: long. 2', lat. 1', alt. 1.1 poll.

Hab. ad Sinum Panamæ.

Obs. Testæ junioris parte anticâ ventrali apertâ, hiatu maximo; valvâ accessoriâ nullâ, marginibus dorsali ventralique posticis haud obtectis: long. 1.5, lat. 0.7, alt. 0.7 poll.

This is another remarkable instance of extreme dissimilarity between the young and fully grown shells; the large anterior ventral opening, so conspicuous in the young shell, being completely closed up in the fully grown individual; the enormous accessory valve covering the *umbones* and spreading widely over the anterior dorsal parts of the shell is also a remarkable addition formed at its full growth.

Found in *Spondyli*, at a depth of twelve fathoms, at the Isle of Perico in the Bay of Panama: the young shells have also been taken out of hard stones at low water in the same place.—G. B. S.

PHOLAS CALVA, var. *nana*. *Phol. calva*, testâ *nana*: long. 0.5, lat. 0.25, alt. 0.25 poll.

Hab. ad Panamam.

Found in hard stones at low water.—G. B. S.

PHOLAS ACUMINATA. *Phol. testâ ovatâ, anticè rotundatâ, posticè acuminatâ, hiatu minimo; valvis singulis in areas tres divisis; areis, anticâ scabriusculâ; intermediâ epidermide corneâ longitudinaliter striatâ indutâ; posticâ squamis corneis, posticè acuminatis, imbricatis, lævibus, gradatim minoribus, ornatâ; parte anticâ ventrali clausâ, lævigatâ; valvâ accessoriâ anticâ dorsali magnâ, subtetragonâ, anticè unilobatâ; marginibus ventrali dorsalique epidermide corneo-testaceâ obtectis, tegmine dorsali anticè inflato: long. 2', lat. 0.9, alt. 0.9 poll.*

Hab. ad Panamam.

Found in limestone at low water. The same sort of difference is observable between the young and fully grown shells in this species as in *Phol. calva*.

One specimen of this shell in Mr. Cuming's collection merits particular notice. It demonstrates a fact of considerable importance to geologists. It is in argillaceous limestone, very much resembling *lias*, and in forming the cavity in which it resides, it has, by such chemical process as frequently takes place, absorbed a much greater quantity of the rock than could be retained or converted; this is again deposited at the upper part of the cavity; and thus the rock is recomposed.—G. B. S.

PHOLAS MELANURA. *Phol. testâ ovatâ, anticè rotundatâ, posticè obtusâ, hiatu mediocri; valvis fasciâ impressâ transversim sul-*

catâ dimidiatis; areis, anticâ obliquè divisâ, parte posticâ dorsali radiatim corrugatâ, parte anticâ ventrali tenuiore, inflatâ; posticâ longitudinaliter striatâ, posticè epidermide nigrâ indutâ; margine dorsali anticâ inflato-reflexâ; valvis accessoriis duabus, posticis, subtrigonis, supernè fornicatis: long. 1.4, lat. 0.75, alt. 0.8 poll.

Hab. ad Montem Christi, Columbiae Occidentalis.

Found in hard clay at low water.—G. B. S.

PHOLAS TUBIFERA. *Phol. testâ oblongâ, posticè subattenuatâ, subtruncatâ, anticè rotundatâ; valvis fasciâ transversim sulcatâ dimidiatis; areis, anticâ obliquè divisâ, parte posticâ dorsali radiatim sulcatâ, decussatâ, parte anticâ ventrali tenuiore, subinflatâ; posticâ longitudinaliter striatâ; margine dorsali anticâ reflexo-inflatâ; valvis accessoriis dorsalibus duabus, posticis, subovatis; epidermide posticè in duas valvas planulatas decurrente, deinde tubulum calcareum ad extremam partem conspicuum: long. 1.3, lat. 0.5, alt. 0.45 poll.*

Hab. ad Sinum Caraccensem, Columbiae Occidentalis.

OBS. Testa intermediae ætatis tubulum caret.

Found in decayed wood dredged up at ten fathoms' depth.

A marked resemblance may be easily traced between this and the *Pholas papyracea* of Southern Devonshire.

PHOLAS QUADRA. *Phol. testâ oblongâ, tenuissimâ, anticè inflatâ, rotundatâ, posticè subattenuatâ, subtruncatâ; valvis fasciâ transversim sulcatâ dimidiatis; areis, anticâ obliquè divisâ, parte posticâ dorsali concentricè lamellosâ, lamellis squamuliferis, parte anticâ ventrali tenuiore, inflatâ, radiatim obsolete costellatâ; posticâ longitudinaliter sulcatâ; margine dorsali anticâ concavo-reflexâ, musculum recipiente, epidermide obtectâ; epidermide posticè in vesiculas quatuor, undique duas, decurrente; deinde tubulum calcareum ad extremam partem conspicuum: long. 1, lat. 0.3, alt. 0.3 poll.*

Hab. ad Montem Christi, Columbiae Occidentalis.

Found in stones at low water.—G. B. S.

PHOLAS QUADRA, var. *Phol. Quadra, testâ parvâ, margine dorsali anticâ inflato-reflexâ.*

Hab. ad Montem Christi.

This variety differs only in the circumstance of the epidermis which covered the muscle contained in the concave reflected anterior dorsal margin being changed into calcareous matter. The young shells are without any tube or other accessory parts.—G. B. S.

PHOLAS CURTA. *Phol. testâ ovali, posticè acuminatâ, anticè rotundatâ; valvis fasciâ transversim sulcatâ dimidiatis; areis, anticâ obliquè divisâ, parte posticâ dorsali longitudinaliter striatâ et radiatim corrugatâ, parte anticâ ventrali tenuiore, subinflatâ;*

posticâ concentricè striatâ; valvâ accessoriâ solitariâ, dorsali, anticâ, utrâque extremitate subacuminatâ, medio coarctatâ; marginibus ventrali dorsalique epidermide corneo-testaceâ obtectis, parte dorsali posticè furcatâ: long. 0.6, lat. 0.3, alt. 0.35 poll.

Hab. ad littora Columbiae Occidentalis.

From the Isle of Lions, Province of Veragua, in soft stone at low water.—G. B. S.

PHOLAS CORNEA. *Phol. testâ oblongâ, tenui, anticè rotundatâ, posticè obtusâ; epidermide tenui corned indutâ; valvis fasciâ dimidiatis; areâ anticâ obliquè divisâ, parte posticâ dorsali rugosiusculâ, parte anticâ lævi; areâ posticâ majore, lævigatâ; valvis accessoriis tribus, anticâ dorsali rotundatâ, posticè subemarginatâ, anticè subacuminatâ; hiatus postico magno: long. 0.9, lat. 0.5, alt. 0.5 poll.*

Hab. ad littora Columbiae Occidentalis.

Found in the trunk of a tree at low water at Chiriqui in the province of Veragua.—G. B. S.

The whole of the *Toucans* of the Society's collection were exhibited in illustration of an account given by Mr. Gould, at the request of the Chairman, of the species of *Ramphastos*, Ill., and *Pteroglossus*, Ej., constituting the family *Ramphastidæ*. Mr. Gould's attention having been of late particularly directed to this family in the preparation of a Monograph of it, illustrated by coloured figures of all the birds comprised in it, he was enabled to state the existence of the under-mentioned species of the

Fam. RAMPHASTIDÆ, Vig.

Rostrum magnum, ad basin nudum; *tomis* serratis.

Lingua pectinata.

Pedes scansorii.

Genus RAMPHASTOS, Ill.

Ramphastos (pars), Linn.

Rostrum maximum.

Nares frontales, prope basin maxillæ sitæ.

Cauda æqualis.

Nigri, torque pectorali tectricibusque caudæ inferioribus coccineis, pedibus cæruleis. *Rostrum*, guttur, tectrices caudæ superiores, orbitæque nudæ discolores.

* *Caudæ tectricibus superioribus flavis.*

RAMPHASTOS ERYTHORHYNCHUS, Gmel. *Ramph. rostro rubro, culmine fasciâque basali flavis, hac posticè lineâ anticè fasciâ tomisque nigris.*

Long. tot. 23 poll.; *rostri*, $6\frac{1}{2}$; *alæ*, $8\frac{1}{2}$; *caudæ*, $6\frac{1}{2}$; *tarsi*, 2.

the jaws from the gape. Horns, hoofs, and muzzle black. *Iris* dark hazel. *Eye* mean.

Female: as large as the male and like him in all material respects.

Young: paler and mixed with grey.

Inhabits the precipitous and wooded mountains of the central region of Nepál, up and down which it rushes with fearful rapidity, though it does not spring or leap well; nor is it speedy.

The exhibition was resumed of the new species of *Shells* contained in the collection formed by Mr. Cuming on the Western Coast of South America, and among the Islands of the South Pacific Ocean. Those exhibited on the present evening consisted of various species of *Anatinidæ* and of the *Myidous* genus *Saxicava*: they were accompanied by characters by Mr. G. B. Sowerby.

Genus PERIPLOMA, Schum.

PERIPLOMA LENTICULARIS. *Per. testá ellipticá, lenticulari, æquivalvi, albá, impolitá, tenui; epidermide tenuissimá; margine dorsali anticá sinuatá, cum margine anticá angulum superne efformante: long. 0·7, lat. 0·3, alt. 0·55 poll.*

Hab. ad Insulam Muerte dictam.

The inside of this species shines with a silvery lustre, but is not iridescent.

It was found in sandy mud at a depth of eleven fathoms.—G. B. S.

PERIPLOMA PLANIUSCULA. *Per. testá oblongá, planiusculá, inæquivalvi, albicante, impolitá, tenuiusculá; latere antico brevi, subrugoso; marginibus, anticá subdeclivi subtruncatá, dorsali rectiusculá; epidermide tenui, pallescente: long. 2·4, lat. 0·8, alt. 1·8 poll.*

Hab. ad Sanctam Elenam.

Odd valves alone were found on the sands.

This species bears some resemblance to Professor Schumacher's *Per. inæquivalvis*; it differs, however, in shape from that species, and both the valves are deeper.—G. B. S.

Genus ANATINA.

ANATINA PRISMATICA. *An. testá oblongá, subtrapeziformi, crassiusculá, opacá, lamíná interná prismaticá; latere antico truncato, hiatu maximo; lamellá utriusque valvæ interná subumbonali, ex tuberculo ligamentifero decurrente, ramoque ligamenti cornei ferè parallelo, anticè inclinato: long. 2·7, lat. 1·3, alt. 1·8 poll.*

Hab. ad littora Oceani Polaris Meridionalis. (New South Shetland.)

Driven on shore after a gale.—G. B. S.

ANATINA COSTATA. *An. testá oblongá, albá, posticè rostratá, anticè rotundatá; costis octo radiantibus, anticis gradatim mino-*

ribus; rostro levi; margine ventrali crenatâ: long. 0.3, lat. 0.15, alt. 0.2 poll.

Hab. ad Sanctam Elenam.

A single specimen was found in sandy mud at a depth of six fathoms.

In form it resembles *An. longirostrata*.—G. B. S.

Genus LYONSIA.

BM 1984
LYONSIA PICTA. *Ly. testâ obovatâ, tenui, posticè latiore; epidermide fuscâ, lineis nigris undulatis pictâ; marginibus, anticâ dorsali declivi, posticâ dorsali rectiusculâ; anticâ ventrali hiantè, hiatu parvo, posticâ et posticâ ventrali rotundatis: long. 0.85, lat. 0.4, alt. 0.65 poll.*

Hab. ad Insulam Muerte dictam.

Found attached to particles of sand in eleven fathoms' water.

As it increases in size it becomes rather irregular in its form.—G. B. S.

LYONSIA BREVIFRONS. *Ly. testâ oblongâ, pallescente; epidermide obscurâ, corned; latere antico brevi, acuminato, postico longiore, attenuato; marginibus, dorsali posticâ elongatâ rectiusculâ, dorsali anticâ brevi declivi, anticâ ventrali hiantè, hiatu declivi, elongato, magno: long. 0.8, lat. 0.3, alt. 0.4 poll.*

Hab. ad Sanctam Elenam.

Found in sandy mud at from six to eight fathoms' depth, attached to particles of sand.—G. B. S.

Genus SAXICAVA.

SAXICAVA TENUIS. *Sax. testâ oblongâ, tenui, albâ; epidermide pallescente; latere antico brevi, subtruncato: long. 0.8, lat. 0.25, alt. 0.4 poll.*

Hab. ad Pacosmayo et ad Lambeyeque.

Found in coral rock at twenty-five fathoms' depth.—G. B. S.

SAXICAVA PURPURASCENS. *Sax. testâ oblongâ, solidiusculâ, anticâ brevissimâ, posticè truncatâ; epidermide tenuissimâ, posticè purpurascente: long. 1.1, lat. 0.4, alt. 0.4 poll.*

Hab. ad Insulam Muerte dictam.

A single specimen was found in sandy mud at a depth of eleven fathoms.—G. B. S.

SAXICAVA SOLIDA. *Sax. testâ oblongâ, solidâ, rugosâ, subirregulari, albicante; epidermide corned; latere antico brevissimo, postico elongato truncato, costis divergentibus duabus conspicuis: long. 1.4, lat. 0.6, alt. 0.8 poll.*

Hab. ad Sanctam Elenam.

Found in clefts of rock brought up from a depth of eighteen fathoms.

The specimens from which the above characters have been taken appear to give the most perfectly regular form of the species. There are other varieties from Payta and the Isle of Muerte.—G. B. S.

A collection of *land* and *fresh-water Shells*, formed in the Gangetic Provinces of India by W. H. Benson, Esq., of the Bengal Civil Service, and presented by that gentleman to the Society, was exhibited. It comprised forty species, and was accompanied by a descriptive list prepared by the donor, and also by detailed notices of some of the more interesting among them. These notices were read: they are intended by Mr. Benson for publication in the forthcoming No. of the 'Zoological Journal.'

From the time that he first became acquainted with the animal of a *Shell* resembling in all respects, except in its superior size, the European *Helix lucida*, Drap., Mr. Benson regarded it as the type of a new genus of *Helicidae* intermediate between *Stenopus*, Guild., and *Helicolimax*, Fér. He had prepared a paper on this genus, for which he intended to propose the name of *Tanychlamys*; he finds, however, that Mr. Gray has recently described (page 58) the same genus under the name of *Nanina*. The generic characters observed by Mr. Benson are as follows:

NANINA, Gray.

Testa heliciformis, umbilicata; peritremate acuto, non reflexo.

Animal cito repens. Corpus reticulatum, elongatum. Pallium amplum, foramine communi magno perforatum, peritrema amplexans; processibus duobus transversè rugosis (quasi articulatis) omni latere mobilibus instructum, unico prope testæ aperturæ angulum superiorem exoriente, altero apud peripheriam testæ. Os anticum inter tentacula inferiora hians; labia radiato-plicata. Tentacula superiora elongata, punctum percipiens tumore oblongo situm gerentia. Penis prægrandis; antrum cervicis elongatum latere dextro et prope tentacula situm. Solea complanata pedis latera æquans. Cauda tentaculata; tentaculum subretractile, glandulâ ad basin positâ humorem viscidum (animale attrectato) exsudante.

Mr. Benson describes particularly the habits of the species observed by him, which he first discovered living at Banda in Bundelkond on the prone surface of a rock. The animal carries the shell horizontally or nearly so; is quick in its motions; and, like *Helicolimax*, it crawls the faster when disturbed, instead of retracting its *tentacula* like the *Snails* in general. In damp weather it is rarely retracted within its shell, the foot being so much swelled by the absorption of moisture that if it is suddenly thrown into boiling water the attempt to withdraw into the shell invariably causes a fracture of the aperture. In dry weather the foot is retracted, and the aperture is then covered by a whitish false *operculum* similar to that of other *Helicidae*. The two elongated processes of the mantle are con-

youth of the specimen. It has a group of six recurved spines just behind the *apex*, and a series of small spines on the ridge which runs on each side from the *apex* to the anterior angle of the eye. There is also a small blunt spine on each side of the middle of the frontal region; and two others are placed on the bones over the hinder part of the gill-flap. The latter form the commencement of a series of carinated shields. The small scales are rough; and the shields forming the lateral lines are radiately grooved, and furnished with a sharp continued keel, terminating posteriorly in a spine. The larger plates on the hinder part of the body are smooth, with a few longitudinal ridges, and emarginate at the *apex*. There are 17 plates on the dorsal ridge, of which the third is the smallest; 47 or 49 in the upper lateral series, among which the anterior are much the smallest, their length increasing gradually as they approach the tail, and this increase being more marked after passing the ventral, and again after passing the anal, fins; and 15 or 16 in the lower lateral series.

The exhibition was resumed of the *Shells* collected by Mr. Cuming on the Western Coast of South America, and among the Islands of the South Pacific Ocean. Those exhibited at the Meeting were accompanied by characters by Mr. G. B. Sowerby, and comprehended the following apparently undescribed species of the

Genus FISSURELLA.

FISSURELLA MAXIMA. *Fiss. testâ ovato-oblongâ, depressiusculâ, crassâ; intus albâ, margine lato, undulato, pallescente fusco articulatâ; extus radiatim sulcatâ, rugosâ, albido-cinerascente fusco radiatâ; aperturâ dorsali ovatâ: long. 5, lat. 3·4 poll.*

Hab. ad Valparaiso.

In the young shells the internal margin is proportionally broader than in those which are more fully grown: in some specimens this margin shows a very great development of crystalline structure.

Found on exposed rocks and under stones at low water.—G. B. S.

FISSURELLA GRANDIS. *Fiss. testâ ovato-oblongâ, elevatiusculâ, posticè latiore, crassâ; intus albâ, margine latiusculo, subundulato, cinerascente; extus lævigatâ, purpureo-nigrâ, radiis numerosissimis saturatioribus; aperturâ dorsali majusculâ, oblongâ, extus latiore, anticè subdeclivi: long. 4, lat. 2·6 poll.*

Hab. ad Valparaiso et ad Insulam Chiloe sub lapidibus littoralibus.—G. B. S.

FISSURELLA LIMBATA. *Fiss. testâ ovato-oblongâ, depressiusculâ, posticè latiore, crassiusculâ; intus albâ, margine latiusculo, subundato, pallescente, lined internâ purpureo-nigrâ; extus lævigatâ, rosaceo-fuscescente, radiis rufescentibus; aperturâ dorsali elongatâ, medianè subcoarctatâ: long. 3, lat. 1·9 poll.*

Hab. ad Valparaiso.

In young shells the internal line of the margin is broader and more deeply coloured than in the more fully developed specimens. Nearly all the fully grown shells are so deeply eroded as to have lost almost

all traces of coloured rays. The younger shells, which retain the coloured rays, are found in exposed situations at low water.

A representation of the inside of this shell has been given in my 'Genera of Recent and Fossil Shells', under the name of *Fiss. picta*, Lam., from which it is nevertheless very distinct.

Found on exposed rocks.—G. B. S.

FISSURELLA BIRADIATA (Frembly MSS.). *Fiss. testâ ovatâ, anticè subacuminatâ, elevatiusculâ, crassiusculâ; intûs albâ, margine latiusculo, purpurascenti-fusco; extûs radiatim striatâ, purpurascenti-fusâ, plerumque radiis duobus (utroque latere unico) pallescentibus; aperturâ dorsali oblongâ: long. 3·8, lat. 2·7 poll.*

Hab. ad Valparaiso sub lapidibus littoralibus.

In this, as well as in several others, the margin varies somewhat in width; it is, however, generally broader in the young shells. The fully grown specimens sometimes lose the two light-coloured rays.

Found also at Iquiqui in Peru.—G. B. S.

FISSURELLA LATA. *Fiss. testâ ovali, elevatiusculâ, crassiusculâ; intûs albâ, margine latiusculo, pallescente, rosaceo-maculato; extûs cinerascete, radiatim costellatâ, costellis subtuberculatis, radiis coloratis purpureo-rufis; aperturâ dorsali ovato-oblongâ: long. 3·3, lat. 2·5 poll.*

Hab. ad Insulam S. Mariæ, Chilensis.

This species approaches, in form and colouring, very nearly to *Fiss. picta*, Lam.

Found in exposed places.—G. B. S.

FISSURELLA PULCHRA. *Fiss. testâ ovato-oblongâ, depressâ, anticè angustiore, crassiusculâ; intûs albâ, margine latiusculo, subundulato, purpurascenti-fusco; extûs purpureo-cinerascete, radiis rufo-purpureis maculisque albis et violaceis concinnè pictâ; aperturâ dorsali centrali, posticè inclinatâ: long. 2·5, lat. 1·6 poll.*

Hab. ad Valparaiso.

Obs. Testa junior radiatim subcostellata.

Variat testâ totâ extûs purpurascenti-fusâ, unicolore.

Found on the rocks.—G. B. S.

FISSURELLA ORIENS. *Fiss. testâ ovato-oblongâ, depressâ, crassiusculâ; intûs albâ, margine angustiore, plerumque pallescente; extûs pallidâ fusco nigro vel roseo radiatâ; aperturâ dorsali oblongâ, medianè latiore: long. 2·7, lat. 1·6 poll.*

Hab. ad Insulam Chiloe sub lapidibus littoralibus.

Variat testâ extûs obsoletè pictâ, margine interno paullò latiore.

Hab. ad Valparaiso, rupibus adhærens.—G. B. S.

FISSURELLA CHILENSIS. *Fiss. testâ ellipticâ, depressâ, radiatim costellatâ, costellis rugosis; intûs albâ, margine lato, pallescente, nonnunquam fusco maculato; extûs cinerascete, radiis fuscis pallidis plerumque pictâ; aperturâ dorsali oblongâ, subcentrali: long. 2·4, lat. 1·8 poll.*

Hab. ad Valparaiso.

Found on rocks in exposed situations at low water.—G. B. S.

FISSURELLA OBSCURA. *Fiss. testâ ovato-oblongâ, radiatim costatâ, costellis obtusis, latiusculis; intûs virescente, margine undulato, crenulato, pallidiore; extûs coloribus variis radiatim pictâ, punctis nigris nonnullis prope aperturam dorsalem radiantibus; aperturâ dorsali subelongatâ, medianè latiore, rimâ internâ rufo marginatâ: long. 1·1, lat. 0·7 poll.*

Hab. ad Insulas Gallapagos sub lapidibus littoralibus.—G. B. S.

FISSURELLA VIRESCENS. *Fiss. testâ ovatâ, elevatiusculâ, radiatim costatâ et striatâ; intûs virescente, margine pallidiore, undulato et crenulato; extûs pallidè virescente fusco-virescente obscure radiatâ, margine costellis crenato; aperturâ dorsali oblongâ, extûs utrinque coarctatâ: long. 1·8, lat. 1·4 poll.*

Hab. ad Panamam.

Found in exposed situations at low water.—G. B. S.

FISSURELLA NIGROPUNCTATA. *Fiss. testâ ovatâ, elevatiusculâ, anticè angustiore, costellato-radiatâ; intûs virescente, margine pallidiore, crenulato, nigro punctato; extûs pallidè virescente, punctulis elongatis nigris confertim digestis radiatâ; aperturâ dorsali oblongâ, lateribus extûs subconnatis: long. 1·6, lat. 1·1 poll.*

Hab. ad Insulas Gallapagos.

Variat testâ intûs albâ; rimâ aperturæ dorsalis nigro marginatâ.

Hab. ad Insulam Lobos sub lapidibus littoralibus.—G. B. S.

FISSURELLA MACROTREMA. *Fiss. testâ ovato-oblongâ, elevatiusculâ, anticè angustiore, radiatim striatâ; intûs virescente, margine nigro variegato; extûs plerumque virescente rufo fusco vel nigrescente radiatâ; aperturâ dorsali elongatâ, lateribus extûs coarctatis, utrinque unidentatis: long. 1·4, lat. 0·9 poll.*

Hab. ad Insulas Gallapagos.

Variat testâ extûs purpurascenti-nigrâ.

Hab. ad Insulas Gallapagos.

Variat etiam testâ extûs virescente, radiis rufescentibus obscuris.

Hab. ad Lambeyeque.

Variat iterum testâ extûs rosaceo-virescente, radiis rufis; aperturæ dorsalis margine interno roseo.

Hab. ad Insulam Lobos sub lapidibus littoralibus.—G. B. S.

FISSURELLA AFFINIS, Gray. *Fiss. testâ ovato-oblongâ, elevatiusculâ, anticè angustiore, radiatim plûs minûsve muricatim striatâ, nonnunquam ferè lævigato-striatâ, plerumque purpurascenti-nigrâ; intûs albâ, margine angusto, nigricante; aperturâ dorsali parvâ, ovali: long. 1·7, lat. 1·2 poll.*

Hab. ad Insulas Mexillones et Lobos, et ad Iquiqui.

Variat testâ rufescenti-nigrâ.

Hab. ad Valparaiso.

Obs. Testæ juniores pallidæ, radiatim pictæ.—G. B. S.

FISSURELLA MICROTREMA. *Fiss. testâ ovatâ, depressiusculâ, radiatim scabroso-striatâ; intûs virescente, margine angustissimo, nigricante; extûs fuscâ, obscure subradiatim coloribus variis pictâ;*

aperturâ dorsali minimâ, margine limbi interni nigricante : long. 0.9, lat. 0.6 poll.

Hab. ad Real Llejos, Americæ Centralis.

The dorsal perforation in this species is so small, and the coloration so dark, that it is difficult at first sight to perceive that it is really a *Fissurella*.

Found under stones.—G. B. S.

FISSURELLA INÆQUALIS. *Fiss. testâ oblongâ, tenui, subdepressâ, latere antico brevi, postico longo; intûs albicante, margine albo nigroque vario, crenulato; extûs radiatim striatâ, concinnè decussatâ, olivaceâ albicante subradiatim variegatâ; aperturâ dorsali anticâ, oblongâ, utrinque bidentatâ : long. 1.1, lat. 0.6 poll.*

Hab. ad Guacomayo et ad Insulas Gallapagos sub lapidibus littoralibus.—G. B. S.

FISSURELLA PICA. *Fiss. testâ oblongâ, tenui, subdepressâ, latere antico brevi, postico longo; intûs albicante, margine crenulato; extûs radiatim striatâ, concinnè decussatâ, albâ olivaceo variegatâ; aperturâ dorsali anticâ, ellipticâ, ferè circulari, parvâ : long. 1, lat. 0.57 poll.*

Hab. ad Sanctam Elenam et ad Insulas Gallapagos.

Variat testâ albicante, radiatim olivaceo fasciatâ.

Found on dead shells in from six to eight fathoms water.—G. B. S.

FISSURELLA CHEMNITZII. *Fiss. testâ ovato-oblongâ, depressiusculâ, crassiusculâ, lateribus subcompressis, extremitatibus levatis; intûs albâ, impressione musculari prope marginem conspicuâ; extûs radiatim subsulcatâ, subdecussatâ, pallescente roseo subradiatâ; aperturâ dorsali magnâ, ovali, rimâ internâ latâ : long. 2.2, lat. 1.4 poll.*

Hab.?

The only specimen I have ever seen of this species was in the Tankerville Collection, from which, after several vicissitudes, it has at length found its way to Mr. Cuming's.

This remarkable shell is represented by Martini (I. t. xi. f. 100), whose figure is cited by Lamarck as a representation of *Fiss. Græca*.—G. B. S.

FISSURELLA LATIMARGINATA. *Fiss. testâ ovato-oblongâ, depressâ, crassiusculâ, anticè angustiore; intûs albâ, margine lato rufescenti-nigro, crenulato; extûs radiatim creberrimè striatâ, rufescenti-nigrâ; aperturâ dorsali oblongâ : long. 2.8, lat. 1.8 poll.*

Hab. ad Valparaiso et ad Iquiqui.

Found on the rocks.—G. B. S.

FISSURELLA TRAPEZINA. *Fiss. testâ subtrapeziformi, rotundato-angulatâ, anticè angustiore, depressâ, extremitatibus levatis; intûs albâ, impressione musculari prope marginem remotâ, margine incrassato; extûs concentricè subsulcatâ, pallidâ fusco radiatâ; aperturâ dorsali magnâ, latâ, anticè latiore : long. 0.95, lat. 0.8 poll.*

Hab. ad Caput Bonæ Spei.

This exceedingly rare species has existed in our collections for many years.—G. B. S.

FISSURELLA ÆQUALIS. *Fiss. testâ oblongâ, depressâ, extremitatibus ferè æqualibus; intûs albâ, margine incrassato, impressione musculari prope marginem remotâ; extûs lævi, albicante fusco radiatâ, vel fuscâ albicante radiatâ; aperturâ dorsali magnâ, oblongâ, latâ: long. 0·85, lat. 0·5 poll.*

Hab. ad Sanctam Elenam.

Found on dead shells in from six to ten fathoms.—G. B. S.

FISSURELLA FULVESCENS. *Fiss. testâ oblongâ, depressâ, fulvescente, extremitate anticâ angustiore; intûs lacteâ, margine subincrassato, subreflexo; extûs lævigatâ, radiatim substriatâ et rufo pictâ; aperturâ oblongâ, lateribus obsolete bidentatis: long. 1·6, lat. 0·9 poll.*

Hab. ad Valparaiso sub lapidibus littoralibus.—G. B. S.

FISSURELLA NIGRITA. *Fiss. testâ ovali, depressâ, lateribus subcompressis, extremitatibus levatis; intûs albâ, marginibus postico lateralibusque incrassatis; extûs nigrâ, radiatim striatâ; aperturâ dorsali magnâ, ovali, margine lævi, albo: long 1·, lat. 0·6 poll.*

Hab. ?—G. B. S.

FISSURELLA ASPERA. *Fiss. testâ ovali, altiusculâ, asperâ, posticè longiore; intûs cinerascens, margine albo, crenulato, extûs costellis numerosis radiantibus decussatim muricatis; aperturâ dorsali circulari ante verticem elevatam positâ: long. 1·, lat. 0·8 poll.*

Hab. ad Pacosmayo.—G. B. S.

FISSURELLA ASPERELLA. *Fiss. testâ ovali, depressiusculâ, asperellâ; intûs virescente, margine crenulato; extûs cinerascens, striis numerosis radiantibus, radiisque coloratis rufo-cinerascentibus; aperturâ dorsali oblongâ, dente utrinque extûs elevato: long. 0·85, lat. 0·5 poll.*

Hab. ad Insulam Lobos sub lapidibus littoralibus.—G. B. S.

FISSURELLA MUTABILIS. *Fiss. testâ ovato-oblongâ, coloribus variis plerumque subradiatim pictâ, altiusculâ, posticè longiore; intûs albâ, margine lævi; extûs radiatim striatâ; aperturâ dorsali ovato-elongatâ, medio plerumque latiore: long. 1·, lat. 0·55 poll.*

Hab. ad Caput Bonæ Spei.

Many specimens of this species were among the late Mr. G. Humphreys' collections, labelled by him "Brazil? Thalacker."—G. B. S.

FISSURELLA PANAMENSIS. *Fiss. testâ ellipticâ, elevatâ, decussatâ, posticè longiore; intûs lactescente, margine crenulato; extûs costellis radiantibus decussatis, plerumque muricatis, albicante cinerascens-fusco variè pictâ; aperturâ dorsali minimâ, subovali: long. 0·6, lat. 0·4 poll.*

Hab. ad Panamam.

Found on dead shells in from six to ten fathoms.—G. B. S.

FISSURELLA RUPPELLII. *Fiss. testá oblongo-ovatá, elevatá, decussatá, lateraliter subdepressá, posticè longiore; intùs albd, margine crenulato; extùs albicante, radiis plerumque nigris, nonnunquam viridescenti-nigris, concinnè pictá, costis costellisq̃ue alternantibus submuricatis radiantibus ornatá; aperturá dorsali parvâ, ovatâ, posticè subquadratâ, anticè infra verticem positâ, intùs posticè depressione distinctâ: long. 0·9, lat. 0·6 poll.*

Hab. ad Insulam Nevis, Capt. Powers: in Sinu Arabico, Rüppell.

A specimen of this pretty species was lately obtained by Mr. Cuming from M. Rüppell. About twenty were in the collections of the late Mr. G. Humphreys.—G. B. S.

FISSURELLA CLYPEUS. *Fiss. testá ovatâ, depressâ, crassiusculâ, pallescente fuscescenti-nigro radiatâ; intùs albd, margine subcrenato, pallescente nigro articulatâ; extùs radiatim subcorrugatâ; aperturâ dorsali oblongâ: long. 1·15, lat. 0·75 poll.*

Hab. ad Sanctam Elenam.

A single specimen is in Mr. Cuming's Collection.—G. B. S.

FISSURELLA CRENIFERA. *Fiss. testá ovato-oblongâ, subdepressâ, posticè latiore, subquadratâ; intùs albd, margine incrassato, crenato et crenulato; extùs radiatim costatâ et striatâ, radiatim varrè pictâ, costis muricatis; aperturâ dorsali oblongâ, medianè subcoarctatâ, extùs dente duplicato laterali munitâ: long. 0·6, lat. 0·3 poll.*

Hab. ad Real Llejos sub lapidibus littoralibus.—G. B. S.

A Letter was read, addressed by Capt. P. P. King, R.N., Corr. Memb. Z.S., to W. J. Broderip, Esq., and dated New South Wales, April 13, 1834. It gave some account of the Oceanic Birds observed during the late voyage of the writer from Europe to New South Wales, and more particularly of those of the genus *Diomedea*, Linn.

“ From the meridian of the island of Tristan d’Acunha to that of the island of St. Paul’s, on about the parallel of 40° of south latitude, we were daily surrounded by a multitude of oceanic birds.—Of the *Petrel* tribe the *Cape Pigeon*, *Procellaria Capensis*, Linn., was most abundant; but the *Proc. vittata* (vel *cærulea*) frequently was observed; as was also a small black *Petrel* which I do not recollect to have before seen.

“ Of the genus *Diomedea* the species which I regarded as the *spadicea*, *chlororhynchos* and *fuliginosa* of Authors, were the most remarkable. Near Tristan d’Acunha the first (*Diom. spadicea*) most abounded: between the Cape and the longitude of 30° East the second (*Diom. chlororhynchos*) became more numerous: and in the neighbourhood of St. Paul’s their place was supplied by the *Diom. fuliginosa*. Where one species abounded, the others were only occasionally seen; from which it may be inferred that each species breeds in distinct haunts. Occasionally two or three varieties of the *Diom.*

Col. Sykes, when reading to the Society, in 1832, his Catalogue of the Birds of Dukhun, not having exhibited the nest and eggs of the *Lonchura Cheet*, and of that species of *Tailor-bird* which he denominated *Orthotomus Bennettii*, brought them under the notice of the Society on the present occasion.

The nest of the *Lonchura Cheet* is a perfect hollow ball, made of a delicate *Agrostis*, with a lateral hole for the entrance of the birds. It contained ten oblong minute white eggs, $\frac{1}{4}\frac{3}{10}$ ths of an inch long by $\frac{2}{5}\frac{9}{10}$ ths in diameter. It was found in the fork of a branch of the *Mimosa Arabica*.

The nest of the *Orthotomus Bennettii* was lodged in the cavity formed by sewing the edges of two leaves together: the nest itself also was attached to the leaves by threads passing through the leaf and the bottom of the nest, and there were appearances of the end of the thread being knotted outside. The nest is composed of very delicate fibres of *Indian Hemp* and grass. It contained two minute oblong crimson eggs, $\frac{2}{5}\frac{3}{10}$ ths of an inch long by $\frac{2}{5}\frac{9}{10}$ ths wide.

Col. Sykes also exhibited an egg of the *fluviatile Tortoise* of Dukhun, *Trionyx Indicus*, Gray. It is a perfect sphere, $1\frac{1}{4}$ inch in diameter: the calcareous shell is of a peculiar alabaster-like whiteness. He found seven eggs with shells in the oviducts, and twenty-seven without shells, nearly of the size of the preceding, in one specimen. He took occasion to mention that in the stomach and intestines of another specimen of *Trionyx*, he found not only the animals, but also angular fragments of considerable size of the shells of some scores of large *Uniones*.

A paper was read, entitled, "Description of some Species of *Chama*:" by W. J. Broderip, Esq., Vice-President of the Geological and Zoological Societies, F.R.S., L.S., &c."

The author commences by remarking that the shells of the genus *Chama* appear to be subject to every change of shape and often of colour which the accidents of their locality may bring upon them, and that the distinction of the species must consequently be difficult, on account of their infinite variety. He then proceeds to describe those brought home by Mr. Cuming, and now in that gentleman's cabinet. The *Shells* referred to were exhibited in illustration of the characters and descriptions.

CHAMA FRONDOSA. *Chama testá sublobatá, lamellosá, lamellis sinuosis frondosis, longitudinaliter plicatis et in utráque valvá cardinem versus biseriatis, maximis; intus albidá, limbo purpurascente, crenulato.*

Hab. ad Insulam Platam Columbiæ Occidentalis.

The ground colour of this beautiful *Chama* is a light pinkish purple, and the luxuriant and spreading longitudinally plaited foliations are yellow tinged and streaked with the ground colour. At the root of each foliation, on its lower side, there is generally a purplish transverse stripe.

It was dredged up from a rock of coral, to which it was adhering, at a depth of seventeen fathoms.

Var. a. *Testá lamellis crebrioribus, frondibus brevioribus.*

Hab. cum præcedente.

Var. b. *Testá totá purpureá, lamellis creberrimis, frondibus brevissimis.*

Hab. ad Mexico. (Gulf of Tehuantepec.)

Dredged up from sandy mud attached to *Aviculæ* (*Meleagrinae*, Lam., *Margaritæ*, Leach,) at a depth of ten fathoms.

CHAMA PELLUCIDA. *Chama testá albá roseo seu rubro fucatá vel strigatá, lamellis frequentibus, frondibus elongatis pellucidis; intùs albá, limbo crenulato.*

Hab. ad Peruviam. (Iquiqui.)

Dredged up attached to stones, *Mytili*, and turbinated shells, at a depth varying from nine to eleven fathoms, from a bottom of coarse sand, and also found under stones at low water mark.

In old specimens the foliations and *lamellæ* are completely worn down, and the shell has somewhat of a crystalline appearance;—indeed it is always semitransparent.

CHAMA LOBATA. *Chama testá albá, lobatá, subrhomboidé, radiatim striatá, lamellis creberrimis, fimbriatis, foliaceis, striatis; limbo interno crenato.*

Hab. ad Insulam Nevis.

Found attached to small stones and shells, at Nevis in the West Indies, in sandy mud, and at a depth ranging from four to ten fathoms.

CHAMA PACIFICA. *Chama testá rubrá purpureá vel luteá, lamellis creberrimis, foliis seu squamulis brevioribus interdum albidis; limbo interno crenato.*

Hab. in Oceano Pacifico. (Lord Hood's Island.—Pearl Islands.)

The infinite variety of this species in shape and colour defies description. In many points it agrees with Lamarck's *Chama florida*, but he describes the margin of that shell as entire, whereas the margin of *Chama Pacifica* is strongly crenated.

Mr. Cuming's specimens were obtained by diving. They were attached to *Aviculæ*, at a depth ranging from three to seven fathoms. Many shells of this species were brought to this country some years ago, from the Pearl Islands, by Mr. Samuel Stutchbury.

CHAMA IMBRICATA. *Chama testá lamellosá, squamis imbricatá, albidá purpureo-fusco variá; valvâ superiore subdepressá, sublobatá, sinu ab umbone usque ad limbum currente; intùs albidá, limbo integro, sæpissimè nigro-purpureo.*

Hab. in Oceano Pacifico. (Lord Hood's Island.—Pearl Islands.)

This grows to a large size, and was obtained by diving, attached to *Aviculæ*, at a depth ranging from three to seven fathoms. There is generally a purple spot at the tip of the *umbo* of the upper valve.

This species was also brought home in considerable numbers by Mr. Samuel Stutchbury from the Pearl Islands.

Var. a. *Testá naná, castanéá albo strigatá, intùs albá.*

Hab. ad Insulas Gallapagos.

The examination of an extensive series has led Mr. Broderip to the conclusion that this dwarf, and at first sight widely differing, shell, is only a variety of *Chama imbricata*. The purple-brown is changed into chestnut striped with white, and hardly any scales are to be found on its wrinkled surface, except the double series which crown the ridge on each side of the depressed line, and sometimes a series or two on the affixed valve. This depressed line is not nearly so well marked as it is in the large variety, but it is to be observed on most of the specimens: some are absolutely without imbrications.

This variety was found attached to rocks and stones at low water.

CHAMA PRODUCTA. *Chama testá subpurpureá, creberrimè lamellosá, lamellis foliaceis, integris; valvá inferiore enormiter productá; limbo integro, purpureo.*

Hab. ad Mexico. (Gulf of Tehuantepec.)

The interior of the shell, which has something of the aspect of that of a *Gryphæa*, is white tinged with yellowish, and striped in the direction of the *lamellæ* with purple. The purple border on the smooth internal edge of the upper valve is of some width.

Dredged up from sandy mud at a depth of ten fathoms, attached to stones.

CHAMA CORRUGATA. *Chama testá corrugatá, rubro-purpureá albo variá; intùs atro-purpureá, limbo integro.*

Hab. in Americâ Centrali. (Real Lleos.)

Found attached to stones at low water. All the specimens which Mr. Broderip had seen turn from right to left.

CHAMA ECHINATA. *Chama testá albidá purpureo variá, spinis fornicatis echinatá; intùs atro-purpureá vel sub-rubrá, limbo integro; dente cardinali rubro.*

Hab. in Americâ Centrali. (Puerto Portrero.)

The spines of this species, which are close set and well developed in youth, are entirely abraded in age, till nothing but corrugation is left externally. But as the animal advances in life the interior of the shell is richly painted, till in old age it arrives to an intensity of dark purple that it is hard to imitate with colours however rich. At this period the cardinal tooth becomes of the hue of the bone of the red Coral (*Isis nobilis*) used for ornamental purposes.

Found at low water attached to rocks.

CHAMA SPINOSA. *Chama testá albá interdum roseo vel purpureo umbonem versùs valvæ superioris pictá, spinis fornicatis creberrimis horridá; intùs albá, limbo integro.*

Hab. in Oceano Pacifico. (Lord Hood's Island.)

This pretty species was dredged up, attached to corals and *Aviculæ*, at a depth ranging from three to seven fathoms. The younger specimens are tinged towards the *umbo* of the upper valve with a delicate rose-colour. The *umbo* of the lower valve is often produced after the manner of that of *Chama unicornis*, Lam.

CHAMA SORDIDA. *Chama testâ albidâ subroseo variâ vel totâ sub-rosedâ, creberrimè striatâ, hinc et hinc foliaceâ; intûs albâ, limbo crenulatâ.*

Hab. in America Centrali. (Isle of Cuña.)

This species, which varies much according to its age, but never appears to grow to a large size, was dredged up from a depth of eighteen fathoms, attached to rocks. Old specimens have the lower valve often very much produced.

A Note by Mr. George Bennett on the Nasal Gland of the *wandering Albatross*, *Diomedea exulans*, Linn., was read. It described in detail the gland situated in that bird above the orbit, as observed by the writer in 1832, and accorded with the account of it published by him in the Appendix to his 'Wanderings in New South Wales,' &c. It was illustrated by a drawing of his dissection of the head of an *Albatross*, made specially with the view of tracing the excretory duct of the gland, which he succeeded in doing for nearly two inches under the external plate of the upper mandible, in a direction towards the nostrils, but inclining slightly upwards, until he lost sight of it among the cellular substance of the bone. The writer notices the occurrence of a corresponding structure in other *Birds*, particularly among the *Natatores*, and refers to Müller for an account of the gland as it exists, in or near the orbit, in species of every order of *Aves*.

A specimen was exhibited of a *Kangaroo*, recently brought from New Holland, by Capt. Sir W. Edward Parry, R.N., and presented by him to the Society.

Mr. Bennett called the attention of the Meeting to it as representing a species not hitherto described, and distinguishable by its paler colour, which is generally of a slaty grey; by the whiteness of its tail throughout the greater part of the length of that organ; by the comparative length of the tail, which is here longer than the body, whereas in the ordinary *greater Kangaroo*, *Macropus major*, Shaw, it is shorter; by the comparative nakedness of the ears; by the great extent of the naked muzzle; and by a broad white stripe along each cheek. He stated it to be his intention to describe it in detail under the name of

MACROPUS PARRYI. *Macr. rhinario lato; auriculis elongatis nudiusculis; caudâ corpore sublongiore, pilis rigidis brevibus incumbentibus vestitâ: notæo griseo; gastræo pallido; fasciâ genarum, caudâque pro maximâ parte, albis, hac ad apicem nigrâ.*

Long. tot. a rostro ad caudæ apicem 5 ped. 4 poll.; capitis, 6 poll.; auriculæ, 4; tarsi postici, ad unguis longioris apicem, 10½; caudæ, 2 ped. 6 poll.

In a Note from Sir Edward Parry, which was read, it is stated that the animal in question is known to the natives in the neighbourhood of Port Stephens (lat. 32° S.) by the name of *Wolläroo*. This individual had been in his possession in New South Wales for two years previously to his embarkation for England, and was allowed to



Cuming, Hugh, Broderip, William John, and Sowerby, George Brettingham. 1834. "Characters of New Genera and Species of Mollusca and Conchifera, collected by Mr Cuming [Pg 2-3, 6-8, 13-14, 17-19, 21-22, 35-40, 46-47, 68-72, 87-89, 123-128, 148-151]." *Proceedings of the Zoological Society of London* 2, 2-3.

View This Item Online: <https://www.biodiversitylibrary.org/item/46213>

Permalink: <https://www.biodiversitylibrary.org/partpdf/382530>

Holding Institution

Natural History Museum Library, London

Sponsored by

Natural History Museum Library, London

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.