Spicilegia Zoologica;

OR

ORIGINAL FIGURES AND SHORT SYSTEMATIC DESCRIPTIONS

OF

NEW AND UNFIGURED ANIMALS.

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The author having had frequent occasion to lament the inconvenience to which he has been exposed by the want of an appropriate medium through which he might communicate to the Zoologists of this and other countries those novelties in science which have fallen under his observation, has at length determined upon publishing, from time to time at indefinite periods, a series of plates of new and unfigured Species, with short Latin and English Characters and Descriptions. His object will be to render the proposed undertaking, as nearly as possible, similar in plan and character to the "Spicilegia" and "Miscellanea Zoologica" of Pallas. He cannot, however, flatter himself that its scientific value will be by any means equal to that of those two admirable productions. To follow at an humble distance in the footsteps of so great a man, is all the honour to which he can aspire.

It was his original intention to have printed only a limited number of copies for private distribution; but the wish to render it as generally accessible as possible, and the hope at the same time of repaying himself some portion of the expense, have induced him to extend his plan, and to submit it for public sale.

The favour of specimens of animals or shells, or their loan, will be particularly acceptable; and such contributions shall in every instance be most scrupulously acknowledged.

Each Part will generally contain from Three to Six Plates, and a sheet of closely-printed Letter-press. The Price of publication will be regulated by the Number of the Plates, and will be at the rate of 1s. for each Plate, and the same for each sheet of Letter-press.

MAMMALIA.


Cynocephalus niger, niger. capite elongato, cristd compressa longa ornato; caudâ brevissimâ. C. niger, Desm. Mamm. 534.

Icon. t. 1. f. 2.


I have seen this animal alive in the Tower. Its colour is black; the hair soft, that of the upper part of the head forming a compressed crest; face naked, black; tail very short, tubercular; hands long, fingers short, black. Length of the body 2 feet, of the tail 1 inch.


Lagothrix Humboldtii, Geoffr.?—Negro-cinnamon; pilis molis-simâ, crispatâ.

Simia Lagothrix, Humb. Obs. Zool. 32.?

Lagothrix Humboldtii, Geoffr. Ann. Mus. x. 107.?

Gastrimargus olivaceus, Spix, Brazil t. 28?

Icon. t. 1. f. 1.

Inhab. Brazil?

The drawing, for which I am indebted to the kindness of Mr. E. Griffith, was made by Landseer from a living specimen in Exeter Change. The animal was remarkably active, good-tempered, and obedient.


Arctocephalus lobatus, n.—Osse frontali lato convexo; foramine occipitale ovali; maxillâ inferiore rectâ. Icon. t. 4. f. 2. 2 a.

Mus. D. Brookes.

Inhab.

The skull on which this species is founded differs from that of P. ursina (F. Cuv, Mém. Mus. x. t. 15. f. 1) and G. Cuv. Oss. Foss. v. t. 18. f. 5.) in the greater breadth of the frontal bones; in the forehead being considerably more convex and arched; in the muzzle being thicker and more rounded, and the hinder margin of the lower jaw less angular, so as to allow the head to apply its whole length upon the table on which it is placed. The teeth are also rather more lobed on the edge. The sutures and outline of the bones correspond exactly with those of P. ursina.

The comparative measurement of two skulls, apparently from animals of the same age, is as follows.

Phoca lobata. P. ursina.

<table>
<thead>
<tr>
<th>inches</th>
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<tr>
<td>Length of the head from the occipital crest to the end of the nose. 9</td>
<td>9</td>
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<tr>
<td>Breadth of the posterior part of the head across the petrous portions of the temporal bones. 4½</td>
<td>4½</td>
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<tr>
<td>Breadth of the most contracted part of the frontal bone near the cerebral cavity. 1½</td>
<td>1½</td>
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<tr>
<td>Breadth of the expanded supracleary processes of the frontal bone. 3</td>
<td>2½</td>
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<tr>
<td>Greatest breadth of the condyles. 1½</td>
<td>2½</td>
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In all the other measurements both skulls accurately coincide with each other.

Fam. Delphinidae.

Subgen. 1. Delphinus, n.—Caput globosum; rostro depresso, capite longiore. Dentes cylindrici, curvati.

1. Delphinus longirostris, n.—Osse palatino carinato, postice convexo; rostro longissimo attenuato, supra depresso, lined media elevata; dentibus parvis utrinque 43—43. Inhab. Cranium in Mus. D. Brookes.
The beak is more slender and depressed than that of *D. Delphis*; the palate bone more strongly keeled; and the elevated central process of the upper surface of the beak broad and convex. Length of the head 6 inches; beak 11 1/2. Breadth of the latter at its base 3 inches.

2. *Delphinus Capensis*, n.—*Corpo lanceolato; pinnad dorsali elevata, falcata; pinnis pectoralis mediocribus, falcatis; dorso, labii, pinnisque nigrulentis; ventre albido; dentibus utrinque cinctis 1 1/2.


The entire length of the animal is 81 inches; its widest girth 42. From the tip of the nose to the angle of the mouth he measures 13; to the angle of the forehead 7 1/2; to the dorsal fin 38; to the pectoral 21. The length of the dorsal fin is 12, along the curve 12, and its perpendicular height 10; the length of the pectoral along the curve 13, the breadth of its base 5. The breadth of the tail is 18, and the length of each of its lobes along the curve 13 inches. This dolphin is at once distinguished by the shortness of his beak.

*Delphinus, leucorurus, delius, frontatus, and Tursio, (D. truncatus, Montagu in Wern. Trans. iii. t. 3.) belong to this division.

Subgen. 2. *Grammus*, n.—Caput globosum; rostro depressa, longitudinalitatis capitis; dentes cylindrici, caruiati.

To this section belong *D. griseus*, Cuv., *D. Grampus, Linn.*, *D. globiceps* (which is the *D. Melas of Traill*, the *D. deductor of Scroby*), and the following:

3. *Delphinus* (Grammus) acutus, n.—*Ose patalino coronato; rostro longo, attenuato, acuto, supra convexo, centro plano, longitudinaliter profunde sulcato; dentibus parvis, gracilibus, utrinque 1 1/4—1 1/2.


The length of the head is 7, that of the beak 8 inches; the breadth of the beak at its base 4 1/2.

4. *Delphinus* (Grammus) Heavisidii, n.—*Corpo obeso; fronte obliqua; pinnis brevibus obtusis, dorsali triangulares; subtus fasciat, lineis, mamillosque alatis, notatus, ceterum totus niger; dentibus parvis, conicos 1 1/4—1 1/2 utrinque.


The white markings beneath consist of a transverse band in front of, and a triangular spot behind each of, the pectoral fins; and of a longitudinal line on the belly, which separates just beneath the dorsal fin into three equal forks, the central one of which is continued in its direct course, while the lateral ones extend obliquely up the sides. The entire length is 46 inches; that of the mouth 6; from the tip of the nose to the blow 6 1/2, to the pectoral fin 12, to the dorsal fin 22. The length of the latter is 7 1/2, the curve of its anterior edge 6, its height 3 1/2. The pectoral fin measures along the curve 6 1/2, across its base 2 1/2. The breadth of the tail is 11, its length 4, that of the curve of each lobe 8. The girth of the body in its widest part is 24 1/2 inches.

5. *Delphinus* (Grammus) obscursus, n.—*Corpo lanceolato; capite obliquo, acuto; pinnis mediocribus falcatis; collo ventriculos, fascia nigra ad angulo oris usque ad pinnas pectorales; strigil obliqua laterali alba postice, ceterum totus niger; dentibus parvis, conicos, utrinque 1 1/4—1 1/2.


The beak is as long as the head; the body is flattened behind, and rounded on the sides; and the fins are black. In a young specimen in the same collection the colours are more defined; but even in the older specimens the white lateral streaks are to be seen in certain positions—a fact which is not shown in the drawing. The length of the larger specimen is 73 inches; its greatest girth 20; from the tip of the nose to the angle of the mouth 10, to the blower 10, to the dorsal fin 31 1/2, to the pectoral 18; the length of the dorsal fin is 10, its curve 13, its height 8; the curve of the pectoral fin is 13, the breadth of its base 8; the tail is 17 inches broad, 6 long, and 12 along the curve of each lobe. The young specimen is about half the size, and follows nearly the same proportions; it differs only in the greater length of its fins, which is in all probability owing to the mode of preparing the specimens.

Subgen. 3. *Beluga*, n.—*Capite depressa, attenuata; rostro longitudinalitis capitis, in eodem plano.

This section is formed by the *D. leucas*, Pall.

Subgen. 4. *Phoena*, n.—Capite globoso; rospo capit breviore; dentes compressi, spatulati.

Comprehending the *D. Phoena* of Linné.

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**REPTILIA.**

**Fam. TESTUDINID.** Gen. *Testudo*.

Testudo Bellii, n.—*Testa oblonga concea; scutis marginalibus 24, a paribus 11, cum imparti anteriorie angusto, posteriorie lato in flexo; scutis sterni 11, anteriore produceto.*

Inhab. Cape of Good Hope. Mus. nost. Shell oblong convex; attenuated in front, and slightly dilated and recurved at the margin, which is somewhat compressed laterally, and rounded and inflexed posteriorly. Scuta flattish, concentrically grooved, yellow with a central black spot, and a black margin. First vertebral scutum pentagonal, longer than broad; second, third and fourth broad, hexagonal. Anterior marginal scutum linear, emarginate; posterior broad, quadrate, inflexed. Sternum yellow, blanched with black, as long as the upper shell, broad; the posterior lobe rounded, narrowed, and extended forwards; gular scutum solitary, triangular; the abdominal lobe very large, with a deep emargination behind. Sterno-costaal suture extending from the 4th to the 7th marginal scutum inclusive.

The head is furnished with broad triangular plates above the nostrils, and with polygonal frontal scales behind; it has also several lateral scales. The feet are covered with scales of unequal size. Toes 5, 4.

**Fam. CHAMELEONID.** Gen. *Chameleo*.

(Consult *Ann. of Phil.* 1827.)

1. Chameleo Brookesiana, n. l. c.—*Superficii elevatis, angularibus, denticalibus; occipito plano, fronte concavo; squamis parvis irregularibus; caudae breves, basi compresso-infraeasatis; dorsi lateribus, mento antice, membranosoque margine squamino parvorum spinosorum instructis.*

Inhab. t. 3.f. 3.

Mus. D. Brookes.

Since the time when I described this species in the *Annals of Philosophy*, I have discovered that it had been previously indicated by Kuhl in his valuable *Beitraige*, as a distinct species existing in Mr. Brookes's museum, but without specific character or description of any kind, under the name of *C. supelcularia*. The name which I had given it must still, however, remain, as it is the only one under which it has been characterized. For a full description the reader is referred to my revision of the genus in the *Annals of Philosophy*. Length 24 inches; body 1 1/2; tail 1. Perhaps young.

2. Chameleo oleipis, Leach.—*Superficis cristata; occipite depressa, lobo lato pyramidalu utrinque postice instructo, squamis magnis rugosis; capitis dorsi gulæ ventricoso carinis magnis denticulatis; occipitis loborumque squamis latius hexagonis plantis levibus.*


Inhab. t. 3.f. 5.—Var. vel ? t. 3.f. 4.

Mus. Brit.
Length of the body 8½; tail 6½ inches. The variety, or it may be the female, has the sides of the head much flattened, the occipital lobes being small and indistinct; in other respects it resembles the other. It is only 8 inches in length.

3. Chamaeleo Tigris, Cuv. MSS. Kuhl.—Superficialis crassatula dentiferata; occipite plano carinato; squamus uniformis, minutis, granulatis, dorsoento dente dentificulatis; mento antice lobato.

Icon. t. 3. f. 2.—head, t. 3. f. 2. a.

Inhab. Sechell Islands, Peron. Mus. Brit. This chameleon, a specimen of which was presented to the Museum by Thomas Bell, Esq., is of a slender make, and yellow colour, finely spotted with black. The skinny lobe in front of its chin is covered with rather larger scales. Its length is 4 inches, the tail being equal to the body.

Fam. GECKOTIDE. Gen. Phylodactylus, n.

Digitii 5—5 graciles compressi, ultimo articulo squamata foliacea longitudinaliter fissae, ungues recurvata vagante; p waited femorales multi; caudâ cylindrica, subtus serie squamata majorum.

The toes at once separate this genus from all the other Gecko; they are thin, compressed, and simple at the base; but the point is furnished with a broad leaf-like scale divided longitudinally in the centre, and sheathing the recurved claw, so that the toes very nearly resemble the last joint of the tarsi of the common housefly, as represented by Sir Everard Home in his Comparative Anatomy; but the claw is single and central. It has no femoral pores, and the tail is cylindrical, scaly, with a row of broad scales beneath. In the Annales of Philosophy I described this animal as the genus Ptyodactylus of Cuvier, which is very distinct.

Phylodactyly pulcher, n.

Icon. t. 3. f. 1. a. and b. the foot in detail.


Upper part of the body and limbs covered with rather large ovate triangular trinuclear convex plates; head above granular, scattered with small ovate plates; body and limbs beneath with imbricate broad triangular flat scales; throat minutely granular; limbs short, stout, pale, whitish, marbled with brown; scales on the under lip broad and high, front one very large; head 1; body ½ of an inch; tail mutilated.

MOLLUSCA.

Fam. SEPIDEÆ. Gen. Sepioteuthis, Blainv.

S. ? major, n.—Corpus subcilindrico, postice attenuato; pinnis lateralibus per totam corporis longitudinem productis, medio extenuatis.

Icon. t. 4. f. 1.


Body subcylindrical, behind attenuated. Fins lateral, extending the whole length of the body, spread out at the middle. Head depressed. Arms 10; short arms, base with cup-shaped suckers; long arms, base simple; rest of the arms deficient. Bone ——? Length of body 27; of head 6. Breadth of body and fins 7 inches each.

This is the largest species which has hitherto been zoologically described. Mrs. Graham speaks of having seen a species, the arms of which were 18 feet long. The crystalline lens of the Cephalopodes is very peculiar; it is ovate-globose, the front end divided by a deep groove, in which are inserted the ciliary processes. They separate easily at this groove, and exhibit internally a series of concentric coats, exhibiting a beautiful golden lustre. Consult Cuv. Anat. Moll. t. 5. m. Their eyes appear to have been used as ornaments by the Peruvians, as the Rev. Mr. Hennah has brought to this country several of a large size, which he found in the tombs and old habitations of the natives. Mr. Stutchbury

forms me that the natives of the Sandwich Islands sold them to the Russians as pearls.


Adanson's much doubted description of the animal of this genus is, as certified by this second species, correct; and therefore the place assigned to it by Lamarck is proper. It will most probably form a family, also containing Magilus and Lementina of Rioso. Vernetus maximus, n.—Testa (junior adherente) irregulariter contorta, subtriangularis, dorso carinata, superius erecta rotunda; apertura orbicularis; peristomatem tenue.


Inhab. Pacific Ocean, with coral, Mr. Stutchbury. Mus.Brit. Shell when young attached, irregularly twisted, rather triangular, back keeled, the upper part becoming erect, rounded, the mouth orbicular. Peristome thin; operculum orbicular, conical, spiral, many-whorled. The inner part of the cavity is gradually obliterated as the shell elongates, by transverse septa, concave internally.

Several other shells which have erroneously been called Serpula, and placed with the Annulidae, appear to belong to this genus; but a good character is still wanting to distinguish them; for the mark left by the muscular attachment of the animal, which would at once separate them, cannot be observed without destroying the specimen. The body of the animal is long, straight, subcylindrical; the gills are divided on the right side, as in the other Pectinibranchia; the head is adpressed, bised in front, and furnished with two short compressed tentacula, with eyes at their outer base; the foot is very short, folded across, two-lobe in front, and offering a large orbicular disk for the attachment of the operculum on the extremity of its hinder part. Dioicous?

Fam. TURBINE. Gen. Delphinula.

Delphinula cancellata, n.—Testa depressa, conica, abuliculata-incontortum; anfractibus 4—5, costis 6 spiralibus, numeroseisque concentris, cancellatis; peristomate orbiculare completo, margine tenue, fauce perlacea.

Inhab. Arica, Peru, Rev. W. Hennah. Mus. Brit. The whorls enlarge rapidly, and are rounded; the cancellation is coarse; the axis conical, deep; and the peristome expanded. The operculum is horny. Axis ½, diameter ⅛ of an inch.

Fam. NERTIDE. Genus Cryptostoma and Sigaretus § B. Blainv. (Shell). Le Sigaret, Adamson. Sigaretus, Lam.

Foot tongue-shaped, thick, expanded; above gourd-shaped, partly extended over the shell; front prolonged, narrowed beyond the mouth; channelled on each side, and flat and shelving above, separated from the body by a deep cross groove. Body short, spiral. Mouth small, sunk in the cross groove. Tentacula two, compressed, triangular, united by a cross band so as to form a kind of hood. Eyes none? Gills pectinate in a longitudinal series on the left side of the body. Vent on the right angle of the mantle. Dioicous. Orifice of generation near the base of the right tentaculum, female with a callosus groove in the middle of the groove on the right side of the front lobe of the foot. Operculum horny, very small, on the right side of the back of the foot under the lowerside of the last whorl of the shell. Shell (sunk in the thick foot) spiral, ear-shaped, spirally striated. Whorls very rapidly enlarging, very oblique. Mouth very large, ovate. Columella lip reflexed. Epidermis thin, membranaceus. Muscular impression extended round the whole of the colunella edge.

When alive, the foot (not the mantle, as in most covered shells) entirely hides the shell, and the animals appear to have the power of shortening the front part of the foot so as to draw it into the shell. The animal of this genus is certainly very nearly allied to Nautilus, which, according to the account of M. Deslonchamp (Bull.
Sci. Nat. x. 296.) covers the shell when alive. In examining the animal of Natica amplexica of Lam., (preserved in spirits and much contracted,) I find that the front part of the foot is similarly, although in a less degree, extended and grooved on each side: but as both the specimens in the Museum are males, I do not know if the female is furnished with a similar groove. It differs from Natica in the small size of the operculum, which escaped the observation of M. Blainville, but which is very distinctly to be seen in both the species I have examined.

1. Le Sigaret, Adamsen, Seneg. t. 2. f. 2. Helix Halioitidea, Linn.
   Cryptostoma Leachii, Blainville, Man. Malac. t. 42. f. 3.
   Shells, f. 5.
   Icon. t. 5. f. 1. the operculum, f. 1. a. the details of the head.
   Africa. Capt. Owen.
5. Cryptostoma Indica, n. which differs from C. Halioitidea in being a little more convex and solid, and the columella being concave and polished.
   India, Mus. General Hardwicke.
   t. 23. f. 5, 6. 13, 14.
   The genus Sigaretas of Lamarck should be removed from the Macrostomes to near the Natica; they will then form a natural family, as Stomatia and Stomatella have animals exactly similar to Halioitidae. The Sigaretas of Cuvier and the Coriellia of Blainville, are not only the same genus, but are the same species, as is proved by a specimen sent by Cuvier to the British Museum, which certainly has a greenish shell.


The body is spiral and compressed; the edge of the mantle free all round, slightly thickened in front, and with a slight fold on the right side. The head is surmounted by two very broad, thin, expanded, membranaceous tentacula, forming a kind of hood, and separated from each other by a longitudinal groove; each of them has a slit near the middle of its outer margin, the upper edge of the left being expanded and rounded, while that of the right is rather larger, acute, and folded down. These tentacula bear some resemblance to the double-fringed lips of Phasianella (see Can. Moll. t. 11. f. 2, 3), Head distinct. Eyes —? Mouth sunk-in. Foot short, folded across near the anterior part when the animal is contracted, slightly nicked anteriorly, and rounded behind. The animal is unsexual; the penis exerted, large, situated near the base of the right tentaculum. Branchiæ pectinata. Operculum horny, exactly of the same shape with the mouth of the shell, attached to the upper part of the back of the foot, short, truncate, sickle-shaped, thin and pellucid, formed of somewhat concentric streaks; the inner front edge is thickened, and the whole of the inner edge together with the tip, are furnished with a thin membranaceous expansion, which is much broader at the two ends. The use of this shell is doubtless to enable the animal to adapt its operculum more exactly to the shape of the mouth of the shell.

It has been observed that shells with toothed columellae never have opercula; but many instances may be produced to the contrary. Trochus Pharaothis is not distinguished in this respect from the other shells of that genus; and the genera Turbinellus, Fasciolaria, and Pyramidella, are all furnished with opercula.

The generic name of Acteon given by De Montfort to this shell, has been lately applied by Dr. Fleming to the small Auriculae. The present genus has been referred by M. de Ferussac to the same family with the latter, with which it has no affinity whatever. D'Acosta referred it to Turbo, Linneaus to Voluta, and Bruguère to Bulimus.


Murex labiosus, n.—Testa albo, obtuso-fusiforme; anusfractus 5—6, convexus, spirali striatus, variabilis elevatis foliaceis 10—11; ultimo anfractus spiral portio longiore, costas tribus spiralis elevati; labio exteriore expanso albo; favea rufescens.
Icon. t. 6. f. 9.
Inhab. Valparaíso, Rev. W. Hennah, Capt. Lord Byron, R.N.

Mus. Brit.

Shell ovate, fusiform, white, whors 5—6, convexus, spirali striatus, with 10—11 raised foliaceous varices; last whorl twice as long as the spire, with three raised spiral ridges; outer lip expanded, white; throat red brown. Axis ¼, diameter ¾ of an inch.


Purpura Callocoenii, n.—Testa ovata, brunnea; spiral brevissima conica; anfractus spirali striatis; ultimo subcarinato, ple- rumque costis albis 2 spiralis obscuris; labio exteriore tenui, denticulato, margine externo brunneo; favea albo.
Icon. t. 6. f. 11.

Shell ovate, brownish; spire very short, conical; whors 4, spirally striated, rapidly enlarging, last slightly keeled, mostly marked with 2 other very obscure spiral ridges; throat white; outer lip finely denticulated; outer edge brown. Axis ¾, diameter ¾ of an inch.


Mitra. Animal: corpore spirali compriso, latero colomellaria columnella sulcis impresso; pede parvo, postice contracto, anicie dilatato, truncato; capite cylindrico, brevi; proboside longissimo, elevato, apice reflexo, disco cruscente; tentaculis brevibus, subcylindricis, compressis; oculis —?; pallio tenui; siphone brevi, compriso. Operculum nullum.

Musa. Brit.

The animal of Mitra, now, I believe, for the first time described, has the trunk of great length, being often twice as long as the foot. Mr. S. Stutchbury informs me that in M. Epitopica he has frequently seen the animal project it to the distance of five inches.

Mitra (species undetermined), South Seas. Animal. t. 5. f. 13.


Aplysia Petersonii, n.—Corpora postico contracto, transversim in duas portiones profunde dieiso; pede postico rugoso, tuberculato.

Icon. t. 4. f. 4. 4 a. the shell.

Inhab. Marseilles, —— Peterson, Esq.

Mus. Brit.

Body contracted posteriorly, and divided transversely into two portions. Head very large, depressed, smooth. Foot very broad, deeply emarginate in front, expanded beyond the edge of the body; the part beneath the hinder portion of the body divided by deep wrinkles into distinct tubercles. Mouth sunk-in, large; labial expansions short, triangular, wrinkled. Tentacula situated half way between the head and the transverse contraction, short, conical. Body subglobular, externally tubercular, wrinkled. Lobes of the mantle rounded, united behind, the right one rather longer than the left, partly covering the shield. Shield partly exposed, ovate; nucleus submedial; colomellar edge subangularly bent. Length 5 inches, breadth 2¾.

This species constitutes a peculiar section of the genus, characterized by the transverse contraction of the body. The animal
figured in Seba, iii. t. 1. f. 8, 9. (Aplysia Seba, n.) appears to belong to the same section. It differs from the foregoing species in the form of the hinder part of the foot, &c.


Bulinus Persuvianus, Bruguier. Var. Icon. t. 5. f. 4.

This appears to be a variety of Bruguier's species.

Bulinus Hennahi, n. — Testa conicad, elongata; anfractibus 6—7 rotundato-concave, abo-robustibus, tenuiter transversim rugosis; apertura spird breviore, ovata; peristome incrasato; fuscce eximie roxi; axis perforatd. Icon. t. 5. f. 5.


Shell conical, elongate; whorls 6—7, convex, rounded, reddish white, closely transversely wrinkled; mouth shorter than the spire, ovate. Peristome thickened; throat beautiful rose red; axis perforated. Axis $\frac{3}{4}$, diameter $\frac{3}{4}$ of an inch.

Gen. Achatina.

Achatina nitens, n. — Testa turritd, nitidd, pellucida, coned; spird conicad, aperta obscura; anfractibus 7—8 gradatim majoribus, convexis; apertura quartam testae partem aqwant, ovatd; columnelld curvad. Icon. t. 6. f. 10.


Shell turrited, shining, pellucid, horn colour; spire conical; apex blunt; whorls 7—8, gradually enlarging, convex. Aperture $\frac{3}{4}$ of the length of the shell, ovate. Columella sharply curved. Axis $\frac{3}{4}$, diameter $\frac{3}{4}$ of an inch.


Auricula ovata, n. — Testa ovatd, elongatd, purpurascence; spird conicad, aperta obscura; anfractibus planiusculis, ultimo spird duplo longior, fasciis pallidis spiralibus 2 vel 4; umbilico margine carinato; fuscce purpurascence; columnelld plicd duplici; labio exteriore intus medio incrassato. Icon. t. 6. f. 21.

Inhab. South Sea Islands, Mr. Stutchbury. Mus. Brit.

Shell ovate, elongate, purplish; spire conical; apex obtuse; whorls nearly flat; last twice as long as the spire, with 2 or 4 pale spiral bands; edge of perforation keeled; throat purplish; columella with a double plait; outer lip thickened in the middle of the inner side: The length of the spire varies; axis $\frac{3}{4}$, diameter $\frac{3}{4}$ of an inch.

Subgen. Chiliad, n.

Shell ovate, thin; aperture large, expanded; columella flattened in front, with an oblique central fold; outer lip thin. Fresh running water.

Auricula flucciosa, n. — Testa ovatd, tenui; spird conicad, aperta triplo breviore; anfractibus 5—6 planiusculis, ultima pallide brunnio, strigis concentricis undulatia fasciace 4 spiralisibus ineruptis variagato; columnelld albd; fuscce pallide. Otis flucciosa. "Humphreys, Calonne's Cat. lot.


Shell ovate, thin; spire conical, $\frac{3}{4}$ the length of the mouth; whorls 5—6, nearly flat; last whor pale brown, variegated with concentric waved streaks, and four interrupted spiral bands; inner lip dark brown; throat pale, showing the colour through; front columella white. Axis $\frac{3}{4}$, diameter $\frac{3}{4}$ of an inch.

In the Museum there are two varieties, or perhaps species, of this shell; they are neither more than half the size of the above. The first is from Valparaiso, brought by Capt. Lord Byron; this is slenderer, thin, the whors more convex, and the spire rather longer; the second is from Quillota, found by Mr. Hennah; it is shorter, solid, and thick, and more obscurely marked. Auricula Dombeysana, Lam., and Voluta fluminata, and Val. fluminata. Maton, Linn. Trans. x. t. 24. f. 13—15, belong to this section of Auricula.


Physa Perviniana, n. — Testa ovatd, spird acutd; anfractibus 5 subito majoribus, concentiusculis; aperturd spird triplo longiori; labio interiore supra ultimum anfractum subreflexo. Icon. t. 6. f. 10.


Shell ovate, spire acute; whorls $\frac{3}{4}$, rapidly enlarging, rather convex; mouth $\frac{3}{4}$ the length of the shell; inner lip slightly reflexed over the last whorl. Axis 1, diameter $\frac{3}{4}$ an inch. Very like Bulla rinalis, Maton; but twice the size, and more ventricose.


* Pallium supra squamis testaceis tectum. Testae area lateralis distincta.

1. Chiton Capensis, n. — Testa oblongd, solidd, convexd, subcarinatd; areolae centrali nigrescenti, obscure longitudinaliter striatd, laterali obscurae, sulcis 5 r. 6 radiatibus utrinque; valvis terminalibus carunculatibus, nigro radiatim sulcati; margine lati albo, nigro transversim fasciato. Icon. Wood, Suppl. t. 1. f. 11.


Shell oblong, solid, convex, subcarinate; end valves blue, radiately grooved with black; lateral area of the central valves olive, with 5 or 6 black radiating grooves on each side; central area blackish, very obscurely longitudinally striated. Margin broad, with moderate-sized oblong scales, white, cross-banded with black. The inside varies green and white. Length $\frac{3}{4}$, breadth $\frac{3}{4}$ an inch.

2. Chiton glaucus, n. — Testa oblongd, convexd, subcarinatd, glaucad; areolae centrali regulariter longitudinaliter, laterali valvisque terminalibus radiatim striatd, margine —


Shell oblong, convex, subcarinate, glaucous green; end valves and lateral area of the middle valves finely radiately grooved; central area finely and regularly longitudinally grooved; lamina of insertion pectinate. Inside white. Margin destroyed.

3. Chiton textilis, n. — Testa oblongd, elongatd, albd, pellucidd; areolae centrali minute punctatd, postice longitudinaliter tenuiter striatd; areolae laterali valvisque terminalibus radiatim striatd et concentrice rugosd; margine albo, minute squamoso. Icon. t. 6. f. 20.


Shell oblong, elongate, white, pellucid when young, green with a white central band; convex above; end valves and lateral area of the middle valves finely radiately striated, and concentrically wrinkled; central area closely and minutely punctated, and behind finely longitudinally striated; margin white, minutely scaly. Length one inch and half.


Shell oblong, variegated with blackish brown, brown and yellowish; end valves and lateral area of the middle valves closely and granularly radiately rib-striated; central area finely, closely, and granularly longitudinally striated; mantle broad, greenish-brown, with obscure darker bands, and rather large scales. Length $\frac{3}{4}$, breadth $\frac{3}{4}$ of an inch. Dedicated to Mr. Barnes, an industrious American conchologist, who has well described several species of this genus found in the New World.


Shell oblong, elongate, strongly keeled, smooth, polished; green varied with brown; end valves and side areas of the middle valves
Shell oblong, convex, reddish-purple; end valves, and lateral area of the middle valves with distant obscure raised radiating ribs and scattered mammillary tubercles; central area with distant raised finely and regularly beaded ribs; margin cartilaginous, with numerous scattered hairlike spines. Length $\frac{3}{4}$, breadth $\frac{3}{4}$ of an inch.

11. Chiton Hennahhi, n.—Testa oblonga, subdepressa, minutissime punctatula, purpurascens albid-o-eariusgat; areal centrali striis longitudinalibus tenissimis, minute et sparsis tuberculatis; tuberculis albis; valves terminalibus ariseaque laterali similibus radiantibus; margin brunneo, spinis brevisbus castaneis.


Shell oblong, rather depressed, purplish varied with white, very minutely punctured; end valves and lateral area with obscure, very fine, minutely and distantly tubercular, radiating striae, tubercles white; central area similarly longitudinally striate; margin brown, with scattered short bay hairs. Length $1\frac{1}{2}$, breadth $1\frac{1}{4}$ inch.

I may here observe, that Chiton striatus of Barnes has been called C. magnificus by Deshayes, and C. olivaceus by Frembly.

Ch. Peruvianus of Barnes is C. hirsutus of Deshayes.

Ch. aculeatus Barnes, is Ch. Sowerbii of Deshayes.

Ch. niger of Barnes, is Ch. Cogumblensis of Frembly.

Several of Frembly's species have been before figured, as C. tinlatuus, Ency. Meth. t. 162. f. 1, 2. Ch. Cummingii, Ency. Meth. t. 162. f. 3, 4.

** Fam. Mydæae. Gen. Anaiana. **

A. cuneata, n.—Testa solidæ, irregulari, subequivalve, oblongo-cuneata, antice subtruncata, rotundata, postice prodactæ, irregulariter concentrica rugosa, intus perlaci; umbonibus anteri-oribus; cardine subedentato; dente cardinali mobili magno, oblongo.


The periostroca is hard, greenish, and extended beyond the margin of the shell. Length $1\frac{3}{4}$, height $\frac{3}{4}$ of an inch.

** Fam. Mactridae. Gen. Amphidesma. **

Amphidesma solidæ, n.—Testa crassæ, solidæ, suborbiculata, alba, concentria sulcate, tenuissime radiatim striata, postice subrugosa; margini cardinali purpurea; lunulâ minimâ, lanceolata; dentibus cardinaliis tenuissimis.

Inhab. Arica, Peru, n. f. 6. 6 a.


Like the rest of the genus, this species only differs from Tellina by the ligament being internal; it has much the external shape of Tellina fusula. Length $2\frac{1}{2}$ inches, height $2\frac{3}{4}$.

** Fam. Veneride. Gen. Glauconome. **

Glauconome solidæ, n.—Testa equivalve; umbones subintertrioris; periostroca tenuissima. Dentes cardinales tres in utroque valde, laterales nulli. Impresso siphonalia longissimae.

Shell ovate, equivale, inequilateral, slightly gaping behind; umbones prominent, subanterior; periostroca thin, hard; cartilage external, marginal, short; fulcrum moderate. Hinge teeth 3 in each valve, small, diverging; the posterior long, oblique, bifid; the 2 anterior short. Lateral teeth none. Siphonal imperssion very long, narrow; front muscular. Fresh water.

Glauconome Chinensis, n.—Testa ovato-oblonga, antice rotundata, postice prodactæ, attenuata; obliqua, alba, concentria striata; periostroca pallide viridi.

I am indebted to the above-mentioned lady for two specimens of this curious shell, which exhibits such striking and well-marked distinctive characters. The posterior dorsal edge is oblique; the dorsal margin rounded; the basal edge nearly straight; and the epidermis wrinkled. The latter is pale green; the colour of the shell itself white. Length 1½ inch, height ¾ inch.

Fam. SOLENIDE. Gen. Solen.

Solen (Solenocurtus) solidus, n.—Testa solid, ovato-oblonga, alba; obsoletae concentrica rugosae; umbonibus convexis subanterioribus; margini dorsali posticum sinito; dentibus cardinalibus in utrue vallum tectum, altis, brevibus, antice recto subfusido, altero oblique. Icon. t. 3. f. 12.


Length of the shell 2½ inches, height 1½; the most solid and shortest shell in the genus.

Fam. UNIONIDE. Gen. Unio.

Unio Chilenis, n.—Testa ovato-oblonga, tenui, pellucidæ, albido-virente, intus albidum-ceruleum; umbonibus decorticatis; epidermide nigro-brunneo. Icon. t. 6. f. 12.


Shell ovate-oblong, thin, pellucid, greenish white, internally bluish. Epidermis black-brown; umbones scarcely raised, cor- roded; the hinge margin slightly rounded; behind truncated; the posterior basal edge slightly produced, rounded; the anterior basal edge obliquely rounded; the valves rather convex, regularly concentrically wrinkled. The hinge teeth compressed, simple; apex crescent; the hinder lateral teeth distinct, elevated. Length 3, height 1½ of an inch; breadth ¾ of an inch.

Fam. MYTILIDE. Gen. Modiolâ, Lam.

Modiola elegans, n.—Testa tenui, gracili, pellucida, pallide viridi; antice attenuata rotundata, postice dilatata; margine cardinali recto; areâ dorsali postice tenuiter radiata, transversimque purpureo undata; reliquâ parte levi. Icon. t. 6. f. 14.


Shell slender, thin, pellucid, pale green; before attenuated, rounded, behind dilated; hinge margin straight; the posterior dorsal part finely radiated, and transversely waved with purple; rest of the shell smooth. Length 1 inch and a half.

CIRRHIPEDA.

Fam. POLLCIPEDIDE. Gen. Smilia.

Smilia, n. (Ann. Phil. 1825).—Lamina testaceæ 13; quorum paria 5 laterales, subtriquangulares; antecores 2, dorsalis ventralis triangularis, incurvus; posterior dorsalis linearis, genticulatus; omnes glabres. Pedunculus pilosus. S. Peroni, I. Ann. Phil. 1825. Icon. t. 3. f. 11.


Ibla n. l. c.—Lamina testaceæ 4; posteriores elongata, parum curvate; antecores triangulares, breves. Pedunculus cylindricus, basi contractus, pilosus. Ibla Cavieranæ, n.—Laminis transversim annulatis, deorsum spectabantis. Icon. t. 3. f. 10. 10 a.


Conchothyra, n. l. c.—Lamina testaceæ 5; quorum paria duo ven- trores; unica dorsalis. Pedunculus ?

C. Valentina, n. l. c.


Brisius, n. l. c.—Lamina testaceæ 7; quorum paria 3 laterales; unica dorsalis. Corpus cylindrico-conicus. Pedunculus ?

B. rhodopus, n. l. c. Icon. t. 6. f. 17.

Inhab. Holes in corals.

Fam. ANATIFERIDE. Gen. Octolasmis.

Octolasmis, n. l. c.—Lamina testaceæ 8, paræ; quorum paria 3 laterales; par unicum dorsalem, lamina posterior ovato- linearem, ventrali linearum in crede excepient; laterali intermedia triangularem; dorsales juncturâ angulum centrale formantes. Corpus subcompressum.

O. Warwickii, n. l. c. Icon. t. 6. f. 16.


INSECTA.


Subgen. Ceroplastes, n.—Mas. Coccis similis? Fam. inflata, cerifera, pellucida, lamina 7 tecta, paribus 2 lateribus, unica centrali, dorso 1, antecore, ald disque posteriore; laminae marginae nucleo infero submarginali, dorso subcentrali.

The seven plates of which the covering of the female is composed, are arranged in two lateral pairs, and a central series consisting of an anterior, a dorsal, and a posterior plate; the nucleus of the six marginal plates is close to the lower edge, that of the dorsal one nearly central.

In the Phil. Trans. for 1794, vol. lxiv. Dr. George Pearson has described an insect which is doubtless related to this group, and which had been sent him from India by Dr. Anderson, under the name of White Loc. I have not been able to examine that insect; but it is evident from the description that it must be a distinct species from those which I am about to notice. It is found on the Celastrus ceriferus; and is inserted by Fabricius in his Ent. Suppl. p. 546, under the name of Coccus ceriferus.

1. Coccus (Ceroplastes) Chilenis, n.—Major, albus, pellucidus; lamina subequallis, dorso planisculis. Icon. t. 3. f. 7.

Inhab. Chili, on the branches and peduncles of a tree with pin- nated leaves. Genus unknown.

2. Coccus (Ceroplastes) Janeirensis, n.—Minor, brunneus, subopacus, hemisphericus; lamina dorso convexâ. Icon. t. 3. f. 6.

Inhab. Brazil, on a species of Solanum, with simple lanceolate velvety leaves.

Both these species were found by Mrs. Graham during her residence in the Brazil and Chili; and I believe that they have been mentioned as well by that lady as by M. Von Humboldt in their respective works; but as neither are provided with indexes, I am unable to refer to them for the particulars. D’Azara, in his Voy. Amer. Merid. p. 161, mentions that such animals are found on a shrub of 2 or 3 feet in height, called Quabiruma. Consult Kirby and Spence’s Introd. to Entom. i. 321, and perhaps also Molina’s Chil., i. 174.

CRUSTACEA.

Fam. Nebaliade, (Les Schizopodes, Latr.)

Subgen. Cerataspis, n.—Thorax maximus, tuberculatus, animal contractum omnino inclusum; abdomen articulatis 7, ultimis 2 longis, reliquis annularibus; ultimo paribus 2 pinnarum caulidi; pedes 12 t. 14 longi, graciles, ciliati, appendiculati; antenne longissimae, setaceæ; oculi magni, pedicellati, approximati.
C. monstrosus, n.—Bruneus; thorace subdepresso, antice truncato, 5-cornuto; caud corpus subequante.  Icon. t. 6, f. 5, 3 a, front of head. 5 b, one of the legs. Inhab. Found in the stomach of a dolphin off the coast of Brazil. Mus. Brit.

The horns of the thorax are five in number, one extending forwards between the eyes, two projecting perpendicularly over them, and the remaining two directed downwards on the outside of them; the forehead is longitudinally keeled; the middle of the back largely tubercular, and the sides, which are very convex, covered with 6 or 7 raised tubercular ridges; the hinder end of the thorax is extended and rounded laterally, and emarginate in the middle. Each of the false legs is furnished with a long, slender, ciliated appendix. The length of this singularly monstrous and mis-shapen animal, is \( \frac{3}{4} \) its breadth across the broadest part of the thorax \( \frac{1}{2} \) of an inch.

RADIATA.

Fam. Siphunculide. Gen. Siphunculus, Martin. (Siphunculus, Linn.—Siphunculus, Cuv.)


1. Siphunculus nudus.—Corporae subcylindraceo, latus; proboscide tertiam partem corporis aequante, subcylindraceo, latus, prope os subincrustato, seriebus 5 a. 6 spinarum brevicarinaria.  S. nudus, Linn.? Mont. Pennant, Brit. Zool. t. 6. Inhab. Mus. Brit. The body is slightly enlarged at each end, and finely transversely wrinkled; it is round at the base. Length of the body 2½ inches, of the trunk ½.


The minute tubercles which are scattered over the surface of the body just below the vent, become more and more rare as they approach the base, which is round; the vent is papillary; and the trunk slightly enlarged at the base. Length 4 inches.


The base of the body is rounded; and the trunk very minutely spinulose. Length ½, breadth ½; length of the trunk \( \frac{1}{4} \) of an inch.


The body is conical and attenuated behind; the trunk tubercular at the base, and nearly smooth at the apex. Length of the body 1½ inch, its breadth ½; length of the trunk ½.


The cylindrical base of the contracted body is two-thirds of the whole length; it is rounded and convex at the extremity; the cartilaginous tunic is covered with numerous annular wrinkles, and with scattered conical tubercles which become larger towards the two extremities. The siphon is spirally twisted when in a state of contraction. Length 4 inches, breadth ½. Siphon 8 inches.


1. Themiste Hennahi, n.  Icon. t. 6, f. 4. a, the head and gills. Inhab. Peru, Rev. Mr. Hennah. Mus. Brit. This genus appears to be intermediate between Helothuria and Siphunculus; in internal organization it agrees with the latter. The trunk is tuberculate, which are carinate when acute; are, repeatedly forked; the ends of the lobes are finely fringed, and of a purple colour.


Isaurus, n. (Les Isauri, Savigny MSS.)—Animalia nuda, libera vel adherentia (?) cornosa, cylindracea; os terminale, circumvorto, velo cylindrico, longitudinaliter sulcato circumdatum; velum marginem intero seriem duplicem tentacularum ferens; tentaculata alternare longiora; stomachus longitudinaliter plicatus.

Of this genus, indicated in the plates to the magnificent Description de l'Egypte, M. Savigny has published neither characters nor description. The name which is there given, Les Isauri, has been latinized, also without characters, by M. Lamouroux, who has called it Isaura. As, however, the latter name is already appropriated to a genus of plants, and the termination is in itself of little importance, I have ventured to change it to Isaurus.

In the fully expanded animal (see t. 6, f. 3, copied from Savigny, Polypes d'Egypte, t. 2, f. 34.) the veil which surrounds the mouth is reflected for some distance over the extremity of the body: when contracted, on the contrary, as in t. 6, f. 2 a, it is inflected in such a manner as completely to cover the tentacula and its own base. The longitudinal plates of the stomach are strongly marked, and divide that organ to a certain extent into numerous cells.

Isaurus tuberculatus, n.—Gregarious, subcylindraceus, curvatus, longitudinaliter et transversim sulcatus, tuberculatus; tentaculi acuti.

Icon. t. 6. f. 2, external appearance; f. 2 a, a longitudinal; and f. 2 b, an imaginary transverse section, showing the folds of the stomach. Inhab. Mus. Brit. Length 2 inches, diameter ½ an inch.

In the plate above referred to, M. Savigny has figured, but not described, four species of this genus. Of these the first is free, I. naiai, n. Sav. t. c. t. 2. f. 1: the three others attached, I. sagitata, n. t. c. t. 2. f. 2; I. aggregata, n. t. c. t. 2. f. 3, partly copied in my t. 6. f. 2; and I. elevatus, n. t. c. t. 2. f. 2. They all differ from the animal above described in being entirely smooth, and from each other in the shape of their tentacula.


Lunulites Owenii, n.—Suborbiculata, margine denticulata; supra convexa, clathro-porosissima; infra concava, radiatum substriata, centro rugosa.

Icon. t. 3. f. 15. 15 a, base; 15 b, magnified. Inhab. Coast of Africa, Capt. W. Owen, R.N.

The first recent species described. It is most like L. radiata, Lam., but larger and more porous. Like it, it is attached to small shells by the centre of its base. It was found in company with a new and recent species of Orbulites, O. Africano, n. resembling O. complanata, Lam.