

Zoologia

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L. BRASIL

25,437/C



Spicilegia Zoologica;

OR

ORIGINAL FIGURES AND SHORT SYSTEMATIC DESCRIPTIONS

OF

NEW AND UNFIGURED ANIMALS.

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LONDON: PUBLISHED BY TREÜTTEL, WÜRTZ AND CO., SOHO SQUARE; AND W. WOOD, STRAND.

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.

Fam. SIMIADÆ. Gen. *Cynocephalus*.*Cynocephalus niger*, Desm.—*Niger*; *capite elongato*, *crista compressa longa ornata*; *caudâ brevissima*.*C. niger*, Desm, Mamm. 534.

Icon. t. 1. f. 2.

Inhab. India?

Mus. Brit.

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.

Fam. CEBIDÆ. Gen. *Lagothrix*.*Lagothrix Humboldtii*, Geoffr.?—*Nigro-cinerascens*; *pilis molles simis, crispatis*.*Simia Lagothrix*, Humb. Obs. Zool. 32.?*Lagothrix Humboldtii*, Geoffr. Ann. Mus. xix. 107.?*Gastrimargus olivaceus*, Spix, Braz. 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.

Fam. PHOCIDÆ. Gen. *Arctocephalus*.*Arctocephalus lobatus*, n.—*Osse frontali lato convexo*; *foramine occipitali 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.

<i>Phoca lobata</i> . P. ursina.	inches.	inches.
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Length of the head from the occipital crest to the end of the nose	9	9
Breadth of the posterior part of the head across the petrous portions of the temporal bones ..	4 $\frac{3}{4}$	4 $\frac{3}{4}$
Breadth of the most contracted part of the frontal bone near the cerebral cavity	1 $\frac{2}{3}$	1 $\frac{1}{4}$
Breadth of the expanded superciliary processes of the frontal bone	3	2 $\frac{1}{2}$
Greatest breadth of the condyles	1 $\frac{7}{8}$	2 $\frac{3}{4}$

In all the other measurements both skulls accurately coincide with each other.

Fam. DELPHINIDÆ.

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 4 $\frac{1}{2}$ —5 $\frac{1}{2}$* .

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 $11\frac{1}{2}$. Breadth of the latter at its base 3 inches.

2. *Delphinus Capensis*, n.—*Corpore lanceolato; pinnis dorsali elevata, falcata; pinnis pectoralibus mediocribus, falcatis; dorso, labiis, pinnisque nigrescentibus; ventre albido; dentibus utrinque circiter $\frac{1}{3}$* .

Icon. t. 2. f. 1.

Inhab. Cape of Good Hope, Capt. Heaviside. Mus. Coll. of Surgeons.

The entire length of the animal is 81 inches; his 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; to the blower $7\frac{1}{2}$; 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.

D. Delphis, leucoramphus, dubius, frontatus, and Tursio, (D. truncatus, Montagu in Wern. Trans. iii. t. 3.) belong to this division.

Subgen. 2. *GRAMPUS*, n.—*Caput globosum; rostro depresso, longitudine capitidis; dentes cylindrici, curvati.*

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

3. *Delphinus (Grampus) acutus*, n.—*Osse palatino carinato; rostro longo, attenuato, acuto, supra convexo, centro plano, longitudinaliter profunde sulcato; dentibus parvis, gracilibus, utrinque $\frac{2}{5}$ — $\frac{3}{5}$.*

Inhab.

Cranium in Mus. D. Brookes.

The length of the head is 7, that of the beak 8 inches; the breadth of the beak at its base $4\frac{1}{4}$.

4. *Delphinus (Grampus) Heavisidii*, n.—*Corpore obeso; fronte obliqua; pinnis brevibus obtusis, dorsali triangulari; subtus fascia, lineis, maculisque albis, notatus, ceterum totus niger; dentibus parvis, conicis $\frac{2}{5}$ — $\frac{3}{5}$ utrinque.*

Icon. t. 2. f. 6.

Inhab. Cape of Good Hope, Capt. Heaviside. Mus. Coll. of Surgeons.

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 blower $6\frac{1}{2}$, to the pectoral fin 12, to the dorsal fin 22. The length of the latter is $7\frac{1}{2}$, the curve of its anterior edge 6, its height $3\frac{1}{2}$. The pectoral fin measures along the curve $6\frac{1}{2}$, across its base $2\frac{1}{2}$. 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 $28\frac{1}{2}$ inches.

5. *Delphinus (Grampus) obscurus*, n.—*Corpore lanceolato; capite obliquo, acuto; pinnis mediocribus falcatis; collo ventreque albidis, fascia nigra ab angulo oris usque ad pinnas pectorales; striga obliqua laterali alba posticata; ceterum totus niger; dentibus parvis, conicis, utrinque $\frac{2}{5}$ — $\frac{3}{5}$.*

Icon. t. 2. f. 2. young. 3 adult. 4 and 5, Crania.

Inhab. Cape of Good Hope, Capt. Heaviside. Mus. Coll. of Surgeons.

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; his greatest girth 20; from the tip of the nose to the angle of the mouth 10, to the blower 10, to the dorsal fin $31\frac{1}{2}$, 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 $8\frac{1}{2}$; 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 depresso, attenuato; rostro longitudine capitidis, in eodem plano.*

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

Subgen. 4. *PHOCENA*, n.—*Capite globoso; rostro capite breviore; dentes compressi, spathulati.*

Comprehending the *D. Phocena* of Linné.

REPTILIA.

Fam. TESTUDINIDÆ. Gen. *Testudo*.

Testudo Bellii, n.—*Testa oblonga convexa; scutis marginalibus 24, e paribus 11, cum impari anteriore angusto, posteriore lato inflexo; scutis sterni 11, anteriore producto.*

Icon. t. 4. f. 3. 3 a.

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, blotched with black, as long as the upper shell, broad; the anterior lobe rounded, narrowed, and extended forwards; gular scutum solitary, triangular; the abdominal lobe very large, with a deep emargination behind. Sterno-costal 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. CHAMÆLEONIDÆ. Gen. *Chamæleo*.
(Consult *Ann. of Phil.* 1827.)

1. *Chamæleo Brookesiana*, n. l. c.—*Superciliis elevatis, angularibus, denticulatis; occipite plano, fronte concavo; squamis parvis irregularibus; caudâ brevi, basi compresso-incrassata; dorsi lateribus, mento antice, membrorumque marginibus serie squamorum parvarum spinosarum instructis.*

Icon. t. 3. f. 3.

Inhab. —?

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 *Beiträge*, as a distinct species existing in Mr. Brookes's museum, but without specific character or description of any kind, under the name of *C. superciliaris*. 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 $2\frac{1}{4}$ inches; body $1\frac{1}{4}$, tail 1. Perhaps young.

2. *Chamæleo dilepis*, Leach.—*Superciliis cristatis; occipite depresso, lobo late pyramidalis utrinque postice instructo, squamis magnis rugosis; capitis dorsi gulae ventrisque carinis magnis denticulatis; occipitis loborumque squamis latis hexagonis planis levibus.*

C. planiceps, Merr. (not Synon.)—*C. bilobus*, Kuhl.

Icon. t. 3. f. 5.—Var. vel ♀? t. 3. f. 4.

Inhab. Africa: Fantee and Gamboon.

Mus. Brit.

Length of the body $6\frac{1}{2}$; tail $6\frac{1}{2}$ 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. Chamæleo Tigris, Cuv. MSS. Kuhl.—*Superciliis cristatis denticulatis; occipite plano carinato; squamis uniformibus, minutis, granulatis; dorso mentoque denticulatis; mento ante 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. GECKOTIDÆ.

Gen. *Phyllodactylus*, n.

Digiti 5—5 graciles compressi, ultimo articulo squamâ latâ foliaceâ longitudinaliter fissâ, unguis recurvatus vaginante; pori femorales nulli; caudâ cylindricâ, subtus serie squamârum majorum.

The toes at once separate this genus from all the other Geckoes; 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 *Annals of Philosophy* I described this animal as the genus *Ptyodactylus* of Cuvier, which is very distinct.

Phyllodactylus pulcher, n.

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

Inhab. —?

Mus. Brit. 2 spec.

Upper part of the body and limbs covered with rather large ovate triangular trihedral 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 (in spirits), marbled with brown; scales on the under lip broad and high, front one very large; head 1; body $1\frac{3}{4}$ of an inch; tail mutilated.

MOLLUSCA.

Fam. SEPIADÆ.

Gen. *Sepioteuthis*, Blainv.

S. ? major, n.—*Corpore subcylindrico, postice attenuato; pinnis lateribus per totam corporis longitudinem productis, medio extensis.*

Icon. t. 4. f. 1.

Inhab. Cape of Good Hope. Mus. Anat. Oxford, and Coll. of Surg. Lond.

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.* f. 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 in-

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

Fam. VERMETIDÆ ? n.

Gen. *Vermetus*, Lam.

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 Risso.

Vermetus maximus, n.—*Testâ (juniore adhærente) irregulariter contortâ, subtriangulari, dorso carinatâ, superius erectâ rotundatâ; aperturâ orbiculari; peristome tenui.*

Serpula maxima. Sow. *Tank. Cat. App.* n. 23.

Icon. Animal and Operculum, nat. size. t. 5. f. 3. 3 a. Shell, Wood, *Cat. Append. p.* . t. 8. f.

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 *Annelides*, 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 pectinate on the right side, as in the other *Pectinibranchia*; the head is adpressed, bifid in front, and furnished with two short compressed tentacula, with eyes at their outer base; the foot is very short, folded across, two-lobed in front, and offering a large orbicular disk for the attachment of the operculum on the extremity of its hinder part. Dioicous?

Fam. TURBINIDÆ.

Gen. *Delphinula*.

Delphinula cancellata, n.—*Testâ depressâ, conicâ, albido-lutescente; anfractibus 4—5, costis 6 spiralibus, numerosisque concentricis, cancellatis; peristome orbiculari completo, margine tenui, 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 $\frac{1}{4}$, diameter $\frac{1}{4}$ of an inch.

Fam. NERITIDÆ.

Genus *Cryptostoma* and *Sigaretus* § B. Blainv. (Shell.) *Le Sigaret*, Adanson. *Sigaretus*, Lam.

Foot tongue-shaped, thick, expanded; above cowl-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 callous 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 lower side 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, membranaceous. Muscular impression extended round the whole of the columella 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 *Natica*, which, according to the account of M. Deslonchamp (*Bull.*

Sci. Nat. x. 296.) covers the shell when alive. In examining the animal of *Natica ampullacea* 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*, Adanson, Seneg. t. 2. f. 2. *Helix Haliotoidea*, Linn. Lister, t. 570. f. 21. *Sigaretus Haliotoideus*, Lam., Blain. *Cryptostoma Leachii*, Blainville, Man. Malac. t. 42. f. 3. Ency. Metrop. t. . f. . *Sigaretus Leachii*, Sow. Gen. Shells. f. 3. Icon. t. 5. f. 1. the operculum. f. 1. a. the details of the head. Africa, Senegal, Adanson. V. M. Mus. Brit.
2. *Sigaretus concavus*, Lam. *Sigaretus Haliotoidea*, Sow. Gen. f. 3.
3. *Sigaretus concavus*, Sow. Gen. f. 1. *Cryptostoma*, t. 5. f. 2. a. the groove on the side of the foot.
4. *Nerita Papilla*. Gmel., Chem. Africa. Capt. Owen.
5. *Cryptostoma Indica*, n. which differs from *C. Haliotoidea* in being a little more convex and solid, and in the edge of the columella being concave and polished. India, Mus. General Hardwicke.
6. *Sigaretus canaliculatus*, Defrance. Sow. Gen. f. 4.
7. *Sigaretus laevigatus*, and *S. pellucidus*, Deshayes, Coq. Fos. Par. t. 23. f. 5, 6. and 13, 14.

The genus *Sigaretus* of Lamarck should be removed from the *Macrostomes* to near the *Naticæ*; they will then form a natural family, as *Stomatia* and *Stomatella* have animals exactly similar to *Haliotis*. The *Sigaretus* of Cuvier and the *Coriocella* 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.

Fam. CERITHIADÆ ? Gen. *Tornatella*.

Animal. *Corpus spirale*. *Pallium integrum submarginatum, lateribus contractum. Branchiæ pectinatae. Tentacula 2 magna, supra frontem dilatata. Oculi —? Pes magnus, latus, contractione transversim plicatus, antice emarginatus. Unisexuale. Operculum corneum, acinaciforme, subconcentric striatum.*

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 *Cuv. 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 unisexual; the penis exserted, large, situated near the base of the right tentaculum. Branchiæ pectinate. 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 striae; 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 thin edge 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 columellæ never have opercula; but many instances may be produced to the con-

trary. *Trochus Pharaonis* is not distinguished in this respect from the other shells of that genus; and the genera *Turbinellus*, *Fasicularia*, 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*, Linnæus to *Voluta*, and Bruguière to *Bulimus*.

Fam. MURICIDÆ. Gen. *Murex*.

Murex labiosus, n.—*Testa alba, ovato-fusiformi; anfractibus 5—6, convexis, spiraliter striatis, varicibus elevatis foliaceis 10—11; ultimo anfractu spirâ duplo longiore, costis tribus spiralibus elevatis; labio exteriore expanso albo; fauce rufescente.*

Icon. t. 6. f. 9. Inhab. Valparaiso, Rev. W. Hennah, Capt. Lord Byron, R.N. Mus. Brit.

Shell ovate, fusiform, white; whorls 5—6, convex, spirally striated, 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 $\frac{1}{4}$, diameter $\frac{3}{4}$ of an inch.

Fam. BUCCINIDÆ. Gen. *Purpura*.

Purpura Callaoensis, n.—*Testa ovalâ, brunneâ; spira brevissima conicâ; anfractibus spiraliter striatis; ultimo subcarinato, plurimque costis aliis 2 spiralibus obscuris; labio exteriore tenuiter denticulato, margine externo brunneo; fauce albo.*

Icon. t. 6. f. 11. Inhab. Callao Bay, Rev. W. Hennah. Mus. Brit.

Shell ovate, brownish; spire very short, conical; whorls 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 $\frac{3}{4}$, diameter $\frac{1}{4}$ of an inch.

Fam. VOLUTADÆ. Gen. *Mitra*.

Mitra. Animal: corpore spirali compresso, latere columellari columellæ sulcis impresso; pede parvo, postice contracto, antice dilatato, truncato; capite cylindrico, brevi; proboscide longissimo, clavata, apice reflexo, disco crassiore; tentaculis brevibus, subcylindricis, compressis; oculis —?; pallio tenui; siphone brevi, compresso. Operculum nullum.

Mus. 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. Episcopalis* he has frequently seen the animal project it to the distance of five inches.

Mitra (species undetermined), South Seas. Animal. t. 6. f. 13.

Fam. APLYSIADÆ. Gen. *Aplysia*.

Aplysia Petersonii, n.—*Corpo postice contracto, transversim in duas portiones profunde diviso; pede postice 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; columellar edge subangularly bent. Length 5 inches, breadth $2\frac{1}{2}$.

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 Sebae*, 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.

Fam. HELICIDÆ. Gen. *Bulimus*, Lam.

Bulimus Peruvianus, Bruguiere.

Var. Icon. t. 5. f. 4.

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

Bulimus Hennahi, n.—*Testa conicâ, elongatâ; anfractibus 6—7 rotundato-converxis, albo-rubentibus, tenuiter transversim rugosis; aperturâ spirâ breviore, ovatâ; peristome incrassato; fauce eximie roseo; axi perforatâ.*

Icon. t. 5. f. 5.

Inhab. Plains near Arica, Rev. W. Hennah.

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 $\frac{2}{3}$, diam. $\frac{5}{8}$. Length of mouth $\frac{2}{3}$ of an inch.

Gen. *Achatina*.

Achatina nitens, n.—*Testa turritâ, nitidâ, pellucida, cornetâ; spirâ conicâ, apice obtusâ; anfractibus 7—8 gradatim majoribus, converxis; aperturâ quartam testæ partem æquante, ovata; columellâ curvatâ.*

Icon. t. 6. f. 10.

Inhab. —

Mus. Brit.

Shell turrited, shining, pellucid, horn colour; spire conical; apex blunt; whorls 7—8, gradually enlarging, convex. Aperture $\frac{1}{4}$ the length of the shell, ovate. Columella sharply curved. Axis $\frac{1}{4}$, diameter $\frac{1}{4}$ of an inch.

Fam. AURICULIDÆ. Gen. *Auricula*.

Auricula ovata, n.—*Testa ovatâ, elongatâ, purpurascente; spirâ conicâ, apice obtusâ; anfractibus planiusculis, ultimo spirâ duplo longiore, fasciis pallidis spiralibus 2 vel 4; umbilico margine carinato; fauce purpurascente; columellâ plicâ duplice; labio exteriori 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 $\frac{1}{2}$, diameter $\frac{1}{4}$ of an inch.

Subgen. *Chilina*, n.

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

Auricula fluctuosa, n.—*Testa ovatâ, tenui; spirâ conicâ, apertura triplo breviore; anfractibus 5—6 planiusculis, ultimo pallide brunneis, strigis concentricis undulatis fasciisque 4 spiralibus interrupitis variegato; columellâ albâ; fauce pallido.*

Otis fluctuosa. Humphreys, Calonne's Cat. lot.

Icon. t. 6. f. 19.

Mus. Brit.

Shell ovate, thin; spire conical, $\frac{1}{2}$ the length of the mouth; whorls 5—6, nearly flat; last whorl 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 $1\frac{1}{4}$, diameter $\frac{5}{8}$ 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 whorls more convex, and the spire rather longer; the second is from Quiliota, found by Mr. Hennah; it is shorter, solid, and thick, and more obscurely marked. *Auricula Dombeiana*, Lam., and *Voluta fluviatilis*, and *Vol. fluminea*. Maton, Linn. Trans. x. t. 24. f. 13—15, belong to this section of *Auricula*.

Fam. LYMNEIDÆ.

Gen. *Physa*, Lam.

Physa Peruviana, n.—*Testa ovata, spirâ acutâ; anfractibus 5 subito majoribus, convexiusculis; aperturâ spirâ triplo longiore; labio interiore supra ultimum anfractum subreflexo.*

Icon. t. 6. f. 10.

Inhab. Swamps between Lima and Callao, Rev. W. Hennah. Shell ovate; spire acute; whorls 5, rapidly enlarging, rather convex; mouth $\frac{3}{4}$ the length of the shell; inner lip slightly reflexed over the last whorl. Axis 1, diameter $\frac{1}{2}$ an inch. Very like *Bulla rivalis*, Maton; but twice the size, and more ventricose.

Fam. CHITONIDÆ. Gen. *Chiton*.

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

1. *Chiton Capensis*, n.—*Testa oblonga, solidâ, convexâ, subcarinata; areâ centrali nigrescenti, obscure longitudinaliter striata, laterali olivacea, sulcis 5 v. 6 radiantibus utrinque; valvis terminalibus cæruleoscentibus, nigro radiatim sulcatis; margine lato albo, nigro transversim fasciato.*

Icon. Wood, Suppl. t. 1. f. 11.

Inhab. Cape of Good Hope, Capt. Carmichael. Mus. Brit. Shell oblong, solid, convex, subcarinate; end valves blue, radially 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 $\frac{1}{2}$ an inch.

2. *Chiton glaucus*, n.—*Testa oblonga, convexâ, subcarinata, glaucâ; areâ centrali regulariter longitudinaliter, laterali valvisque terminalibus radiatim, striatis; margine —*

Inhab. — Mus. Brit.

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

3. *Chiton textilis*, n.—*Testa oblonga, elongata, albâ, pellucidâ; areâ centrali minute punctata, postice longitudinaliter tenuiter striata; areâ laterali valvisque terminalibus radiatim striatis et concentrica rugosâ; margine albo, minute squamoso.*

Icon. t. 6. f. 20.

Inhab. Cape of Good Hope, Capt. Carmichael. Mus. Brit. 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.

4. *Chiton Barnesii*, n.—*Testa oblonga, nigro-brunneo, brunneo et lutescente variegata; areâ centrali dense granulose longitudinaliter striata; areâ laterali valvisque terminalibus dense granulose radiatim costato-striatis.*

Icon. t. 6. f. 22.

Inhab. Coquimbo, Rev. W. Hennah. Mus. Brit. Shell oblong, variegated with blackish brown, brown and yellowish; end valves and lateral areas 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 $\frac{2}{3}$, breadth $\frac{1}{2}$ 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.

5. *Chiton Siculus*, n.—*Testa oblonga, elongata, carinata, levigata, viridi, brunneo-marmorata; areâ centrali longitudinaliter, marginali radiatim sulcatâ; margine lato.*

Icon. Wood, Cat. Supp. t. 1. f. 12.

Inhab. Sicily. Mus. Brit. Shell oblong, elongate, strongly keeled, smooth, polished; green variegated with brown; end valves and side areas of the middle valves

distantly radiately furrowed; central area of the middle valves deeply but distantly longitudinally grooved. Margin broad, white-green, cross-banded, covered with finely imbricated scales. Length 1 inch, breadth $\frac{1}{2}$. Consult Chemnitz, viii. t. 96. f. 815?

6. Chiton pulchellus, n.—*Testa oblonga, elongata, subcarinata, albido-lutescente; areo centrali punctulata, laterali costis duobus latis, rugulosis; valvis terminalibus inaequaliter radiatim costatis.*

Icon. t. 3. f. 9.

Inhab. Arica, Peru, Rev. W. Hennah.

Mus. Brit.

Shell oblong, elongate, slightly keeled, yellowish white; end valves distantly unequally radiately ribbed; lateral area of the middle valves with two broad regular ribs; central area closely and deeply punctured. Margin yellowish white, with very minute bran-like scales. The ribs of the lateral area are rarely bifid. Length $\frac{3}{4}$, breadth $\frac{1}{4}$ of an inch.

7. Chiton striolatus, n.—*Testa oblonga, subdepressa, levigata, regulariter minute concentrica punctulata, pallide virescente, viridi vel rufescente punctata vel marmorata; margine lato, squamoso, squamis elegantissime striatis.*

Inhab. Rio Janeiro, Rev. W. Hennah.

Mus. Brit.

Shell oblong, rather depressed, polished; pale green dotted or variegated with dark green or reddish; regularly minutely concentrically punctured all over, but more distinctly on the front edge of the lateral area of the middle valves. Margin broad, scaly, white banded with green; scales moderately distinct, beautifully and regularly striated.

** *Pallium supra scabrum, spinulis minutis (squamis longis spinulosis?) tectum.*

8. Chiton Carmichaelis, n.—*Testa oblonga convexa, vix carinata, cærulescente-brunnea, albo-lineata, levigata; valvis anticis costis nodulosis radiantibus, valvarum medianarum areis lateralibus ante posticeque costata simili longitudinali instructis; valva posterior levata; margine brunneo.*

Icon. Wood, Cat. Supp. t. 1. f. 10.

Inhab. Cape of Good Hope, Capt. Carmichael.

Mus. Brit.

Shell oblong, convex, scarcely keeled, smooth, bluish brown streaked and lined with white; front valves with distant rather broad radiating nodulose ribs; front and back margins of the lateral area of the middle valves with a single similar rib; hinder valve smooth; margin scabrous, brown. Length $\frac{1}{2}$ an inch, breadth $\frac{3}{8}$.

9. Chiton Janeirensis, n.—*Testa oblonga, elongata, albido-brunnea; areo centrali medio profunde punctata, lateribus dense longitudinaliter punctato-sulcatis; areis lateralibus costis 4 convexis nodulosis, valvis terminalibus costis similibus radiantibus instructis.*

Icon. t. 6. f. 8.

Inhab. Rio Janeiro, Rev. W. Hennah.

Mus. Brit.

Var.? *Costis valvarum terminalium paucis majoribus, arearum lateralis 2 tantum.*

Inhab. Valparaiso, Rev. W. Hennah.

Mus. Brit.

Shell oblong, elongate, brownish white; end valves with convex nodulose radiating ribs; lateral areae of the middle valves with 4 similar ribs of unequal length; central area deeply punctated in the middle, and closely longitudinally punctately grooved on the sides. Length $\frac{5}{8}$, breadth $\frac{1}{4}$ of an inch.

The variety (probably a distinct species) differs in the ribs of the end valves being stronger and fewer in number, while those of the lateral area are reduced to two, which are very broad.

*** *Pallium cartilagineum, spinis capillaribus sparsis tectum.*

10. Chiton spinulosus, n.—*Testa oblonga, convexa, purpureo-rufescente; areo centrali costis distantibus articulatis; valvis terminalibus areisque lateralibus costis obscuris distantibus radiantibus, tuberculisque mammillaribus sparsis, instructis.*

Icon. t. 6. f. 7. 7 a.

Inhab. Rio Janeiro, Rev. W. Hennah.

Mus. Rev. G. Hennah.

Shell oblong, convex, reddish-purple; end valves, and lateral areae 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 $\frac{5}{8}$, breadth $\frac{1}{4}$ of an inch.

11. Chiton Hennahi, n.—*Testa oblonga, subdepressa, minutissime punctulata, purpurascente albido-variegata; areo centrali striis longitudinalibus tenuissinis, minute et sparsim tuberculatis, tuberculis albis; valvis terminalibus areisque lateralibus striis similibus radiantibus; margine brunneo, spinis brevibus castaneis.*

Icon.

Inhab. Callao Bay, Rev. W. Hennah.

Mus. Brit.

Shell oblong, rather depressed, purplish varied with white, very minutely punctured; end valves and lateral areae with obscure, very fine, minutely and distantly tubercular, radiating striæ, tubercles white; central area similarly longitudinally striate; margin brown, with scattered short bay hairs. Length $1\frac{3}{4}$, breadth $\frac{1}{4}$ 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. Sowerbyi* of Deshayes.

Ch. niger of Barnes, is *Ch. Coquimbensis* of Frembly.

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

Fam. MYIDÆ. Gen. Anatina.

A. cuneata, n.—*Testa solidâ, irregulari, subæquivalvi, oblongo-cuneata, antice subtruncata, rotundata, postice producta, irregulariter concentrica rugosâ, intus perlacea; umbonibus anterioribus; cardine subdentulo; dente cardinali mobili magno, oblongo.*

Icon. t. 3. f. 14.

Inhab. Arica, Peru; on Alcyonia.

Mus. Brit.

The periostraca is hard, greenish, and extended beyond the margin of the shell. Length $1\frac{1}{2}$, height $\frac{3}{4}$ of an inch.

Pandora brevis of Sowerby (App. to Stutchbury's Sale Catalogue) should be referred to this genus, as it possesses the moveable piece in the hinge, which is the character of the genus.

Fam. MACTRIDÆ. Gen. Amphidesma.

Amphidesma solidum, n.—*Testa crassâ, solidâ, suborbiculata, alba, concentrica sulcatâ, tenuissime radiatim striata, postice subrugosa; margine cardinali purpureo; lunula minimâ, lanceolata; dentibus cardinalibus tenuissimis.*

Icon. t. 6. f. 6. 6 a.

Inhab. Arica, Peru, Rev. W. Hennah.

Mus. Brit.

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 fausta*. Length $2\frac{1}{2}$ inches, height $2\frac{1}{2}$.

Fam. VENERIDÆ. Gen. Glauconome.

GLAUCONOME, n.—*Testa equivalvis; umbones subanteriores; periostraca tenuis dura. Dentes cardinales tres in utrâque valva, laterales nulli. Impressio siphonalis longissima.*

Shell ovate, equivalve, inequilateral, slightly gaping behind; umbones prominent, subanterior; periostraca 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 impression very long, narrow; front muscular. Fresh water.

Glauconome Chinensis, n.—*Testa orato-oblonga, antice rotundata, postice producta, attenuata, albâ, concentrica striata; periostraca pallide viridi.*

Icon. t. 3. f. 13. 13 a, the hinge.

Inhab. China, Mrs. Mawé.

Mus. nost.

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 $1\frac{1}{2}$ inch, height $\frac{3}{4}$.

Fam. SOLENIDÆ. Gen. *Solen*.

Solen (*Solenocurtus*) *solidus*, n.—*Testa solidâ, ovato-oblongâ, albâ, obsolete concentricâ rugosâ; umbonibus convexis subanterioribus; margine dorsali postico sinuato; dentibus cardinalibus in utrâque valva 2, altis, brevibus, antico recto subbifido, altero obliquo.*

Icon. t. 3. f. 12.

Inhab. Arica, Peru.

Mus. Brit.

Length of the shell $2\frac{1}{2}$ inches, height $1\frac{3}{4}$; the most solid and shortest shell in the genus.

Fam. UNIONIDÆ. Gen. *Unio*.

Unio Chilensis, n.—*Testa ovato-oblongâ, tenui, pellucidâ, albido-virescente, intus albido-cæruleâ; umbonibus decorticatis; epidermide nigro-brunneo.*

Icon. t. 6. f. 12.

Inhab.

Mus. Brit.

Shell ovate-oblong, thin, pellucid, greenish white, internally bluish. Epidermis black-brown; umbones scarcely raised, corroded; 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 crenated; the hinder lateral teeth distinct, elevated. Length 3, height $1\frac{1}{2}$ of an inch; breadth $\frac{7}{8}$; and var. β . breadth $\frac{5}{8}$ of an inch.

Fam. MYTILIDÆ. Gen. *Modiola*, Lam.

Modiola elegans, n.—*Testa tenui, gracili, pellucidâ, pallide viridi; antice attenuatâ rotundatâ, postice dilatatâ; margine cardinali recto; areâ dorsali posticâ tenuiter radiatâ, transversimque purpureo undatâ; reliquâ parte lăvi.*

Icon. t. 6. f. 14.

Inhab. Coast of Africa, Capt. W. F. Owen, R.N. India ? Mus. Brit.

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. POLLICIPEDIDÆ. Gen. *Smilium*.

SMILIUM, n. (Ann. Phil. 1825).—*Laminae testaceæ 13; quarum paria 5 laterales, subtriangulares; anteriores 2, dorsalis ventralisque triangulares, incurvæ; posterior dorsalis linearis, geniculatus; omnes glabrae. Pedunculus pilosus.*

S. Peronii, n. Ann. Phil. 1825.

Icon. t. 3. f. 11.

Inhab.

Mus. Brit.

IBLA n. l. c.—*Laminae testaceæ 4; posteriores elongatae, parum curvatae; anteriores triangulares, breves. Pedunculus cylindricus, basi contractus, pilosus.*

Ibla Cuvierana, n.—*Laminis transversim annulatis, deorsum spectantibus.*

Icon. t. 3. f. 10. 10 a.

Inhab. Kangaroo Island, Peron.

Mus. Brit.

CONCHOTRYA, n. l. c.—*Laminae testaceæ 5; quarum paria duo ventrales; unica dorsalis. Pedunculus —?*

C. *Valentiana*, n. l. c.

Inhab. Holes in shells. Red Sea, Lord Valentia. Mus. Brit.

BRISMÆUS, n. l. c.—*Laminae testaceæ 7; quarum paria 3 laterales; unica dorsalis. Corpus cylindrico-conicum. Pedunculus —?*

B. *rhodiopus*, n. l. c.

Icon. t. 6. f. 17.

Inhab. Holes in corals.

Mus. Brit.

Fam. ANATIFERIDÆ. Gen. *Octolasmis*.

OCTOLASMIS, n. l. c.—*Laminae testaceæ 8, parvæ; quarum paria 3 laterales; par unicum dorsales; lamina posterior ovato-linearis, ventrale linearem in crenâ excipiens; lateralis intermedius triangularis; dorsales juncturâ angulum centralem formantes. Corpus subcompressum.*

O. *Warwickii*, n. l. c.

Icon. t. 6. f. 16.

Inhab.

Mus. Brit.

INSECTA.

Fam. GALLINSECTA, Latr. Gen. *Coccus*.

Subgen. *CEROPLASTES*, n.—*Mas. Coccis similis? Fœm. inflata, cerifera, pellucida, laminis 7 tecta, paribus 2 lateralibus, unicâ centrali dorsali, 1 anteriori, aliâ denique posteriori; laminarum marginalium nucleo infero submarginali, dorsalis 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. lxxxiv. 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 Lac*. 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*) *Chilensis*, n.—*Major, albus, pellucidus; laminis subæqualibus, dorsali planiusculâ.*

Icon. t. 3. f. 7.

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

2. *Coccus* (*Ceroplastes*) *Janeirensis*, n.—*Minor, brunneus, subopacus, hemisphæricus; laminâ dorsali 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 Brazils 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. 164, mentions that such animals are found on a shrub of 2 or 3 feet in height, called *Quabirumy*. Consult Kirby and Spence's *Introd. to Entom.* i. 321, and perhaps also Molina's *Chili*, i. 174.

CRUSTACEA.

Fam. NEBALIADÆ. (*Les Schizopodes*, Latr.)

Subgen. *CERATASPIS*, n.—*Thorax maximus, tuberculatus, animal contractum onunino includens; abdomen articulis 7, ultimis 2 longis, reliquis annularibus; ultimo paribus 2 pinnarum caudalium; pedes 12 v. 14 longi, graciles, ciliati, appendiculati; antennæ longissimæ, setacea; oculi magni, pedicellati, approximati.*

C. monstrosus, n.—*Brunneus*; *thorace subdepresso*, *antice truncato*, *5-cornuto*; *candæ corpus subæquante*.
Icon. t. 6. f. 5. 5 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 $\frac{5}{6}$; its breadth across the broadest part of the thorax $\frac{3}{8}$ of an inch.

RADIATA.

Fam. SIPHUNCULIDÆ. Gen. *Siphunculus*, Martin.
(*Sipunculus*, Linn.—*Siponculus*, Cuv.)

1. *Siphunculus*.—*Corpus cylindraceum, lumbricoide*. *Anus ventralis*, *prope basin proboscidis*. *Proboscis retractilis*. *Os serie tentaculorum parvorum*. *Maxillæ nullæ*.
1. *Siphunculus nudus*.—*Corpo subcylindrico, lævi*; *proboscide tertiam partem corporis æquante, subcylindrico, lævi*, *prope os subincassato*, *series 5 v. 6 spinarum brevissimarum*.

S. nudus, Linn.? Mont. Pennant, Brit. Zool. t.

Inhab. Mus. Brit.

The body is slightly enlarged at each end, and finely transversely wrinkled; it is rounded at the base. Length of the body $2\frac{1}{2}$ inches, of the trunk $\frac{3}{4}$.

2. *Siphunculus Strombus*.—*Corpo cylindrico, spiraliter torto*; *infra anum tuberculatum rugoso*; *tuberculis minutis, spinulosis, brunneis*; *proboscide corpore longiore, gracili, cylindrico*.

S. Strombus, Mont. Linn. Trans. vii. p.

S. clavatus, Blainv. Dict. Sci. Nat.?

Icon. t. 6. f. 1.

Inhab. Coast of Devonshire, in *Strombus Pes Pelecani* and *Turritella cornea*. Mus. Brit.

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 rounded; the vent is papillary; and the trunk slightly enlarged at the base. Length 4 inches.

3. *Siphunculus Dentalii*, n.—*Corpo fusiformi, lævi, infra tuberculis sparsis spinulosi, prope anum tuberculatum subrugoso*; *proboscide longitudine corporis, subcylindrico, apice dilatato, globoso*.

Inhab. Coast of Yorkshire, in *Dentalium Entalis*, W. Clift, Esq. Mus. Brit.

The base of the body is rounded; and the trunk very minutely spinulose. Length $\frac{5}{6}$, breadth $\frac{1}{6}$; length of the trunk $\frac{5}{6}$ of an inch.

4. *Siphunculus tuberculatus*, n.—*Corpo subcylindrico, postice attenuato, tuberculis mamillaribus, versus utramque extremitatem majoribus, tecto*; *proboscide tertiam corporis partem æquante, cylindrico*.

Inhab. Mus. Brit.

The body is conical and attenuated behind; the trunk tubercular at the base, and nearly smooth at the apex. Length of the body $1\frac{1}{2}$ inch, its breadth $\frac{1}{4}$; length of the trunk $\frac{1}{2}$.

5. *Siphunculus arcuatus*, n.—*Corpo fusiformi, apice brevi conico, basi cylindrico longiore clavato, tuberculis magnis sparsis tecto*; *proboscide longissimo, cylindrico, apice brevissime fimbriato*.

Inhab. India, Gen. Hardwicke. Mus. Hardw.

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 $\frac{1}{2}$. Siphon 8 inches.

II. *THEMISTE*, n.—*Corpus cylindraceum, lumbricoide*. *Anus ventralis*, *prope basin proboscidis*. *Proboscis retractilis*. *Os branchiis 5 subæqualibus, dichotomis, tenuissime divisis, circumdatum*. *Maxillæ nullæ*.

1. *Themiste Hennahi*, n.

Icon. t. 6. f. 4. 4 a, the head and gills.

Inhab. Peru, Rev. Mr. Hennah. Mus. Brit.

This genus appears to be intermediate between *Holothuria* and *Siphunculus*; in internal organization it agrees with the latter. The branchiæ, which are cartilaginous at the base, are repeatedly forked; the ends of the lobes are finely fringed, and of a purple colour.

Fam. ACTINIADÆ. Gen. *Isaurus*.

ISAURUS, n. (*Les Isaures*, Savigny MSS.)—*Animalia nuda, libera vel adhaerentia (?) carnosa, cylindrica; os terminale, circulare, velo cylindrico, longitudinaliter sulcatum circumdateum; velum margine interno seriem duplificem tentaculorum ferens; tentacula alterna 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 Isaures*, 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 plaits of the stomach are strongly marked, and divide that organ to a certain extent into numerous cells.

Isaurus tuberculatus, n.—*Gregarius, subcylindricus, curvatus, longitudinaliter et transversim sulcatus, tuberculatus; tentaculis acutis*.

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 $\frac{1}{2}$ 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. natans*, n. Sav. l. c. t. 2. f. 1: the three others attached, *I. Savignii*, n. l. c. t. 2. f. 2; *I. aggregatus*, n. l. c. t. 2. f. 3, partly copied in my t. 6. f. 2; and *I. clavatus*, n. l. c. t. 2. f. 4. They all differ from the animal above described in being entirely smooth, and from each other in the shape of their tentacula.

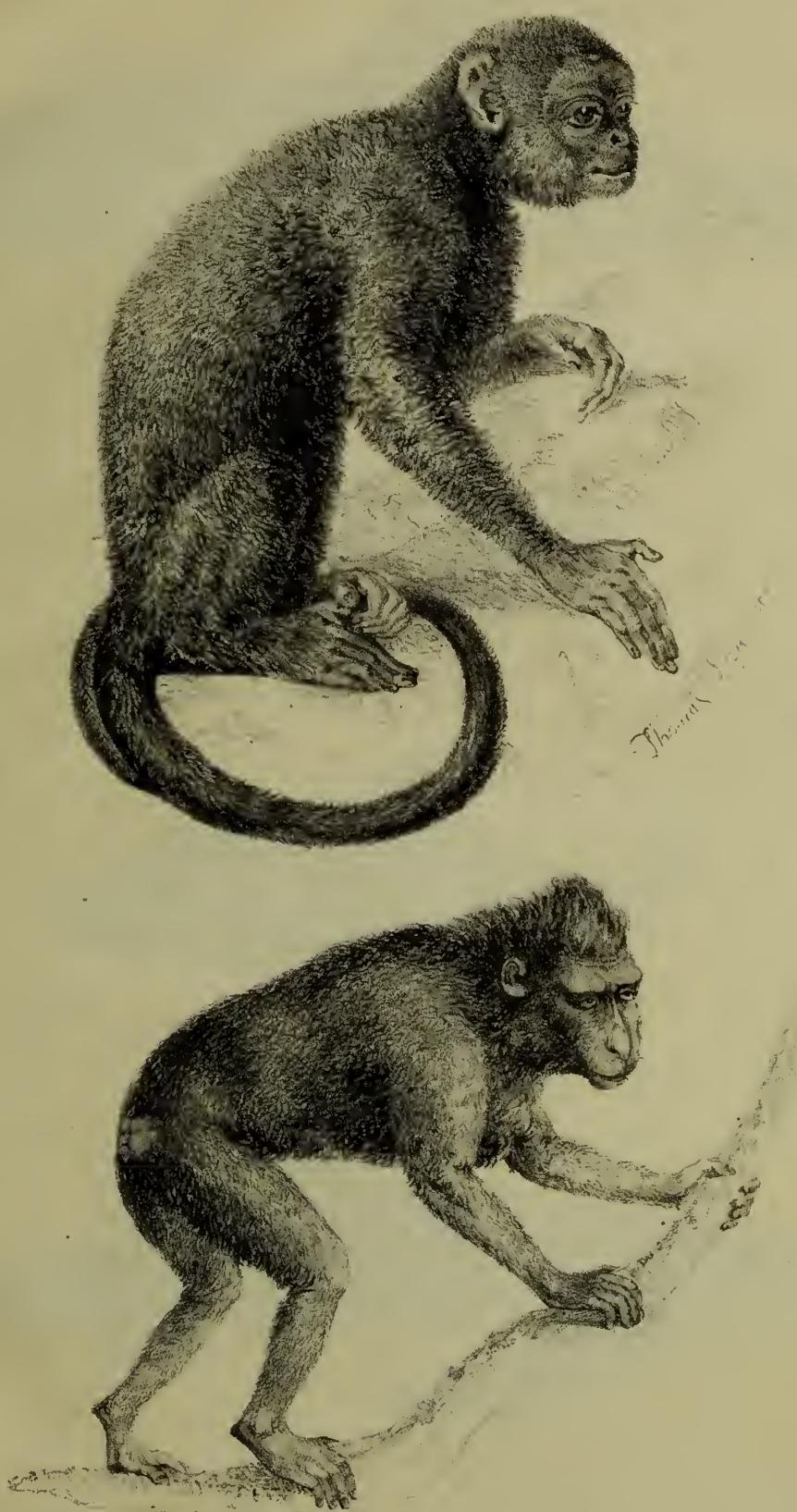
Fam. FLISTRIDÆ? Gen. *Lunulites*, Lam.

Lunulites Owenii, n.—*Suborbiculata, margine denticulata; supra convexa, clathrato-porosissima; infra concava, radiatim 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. Africana*, n. resembling *O. complanata*, Lam.



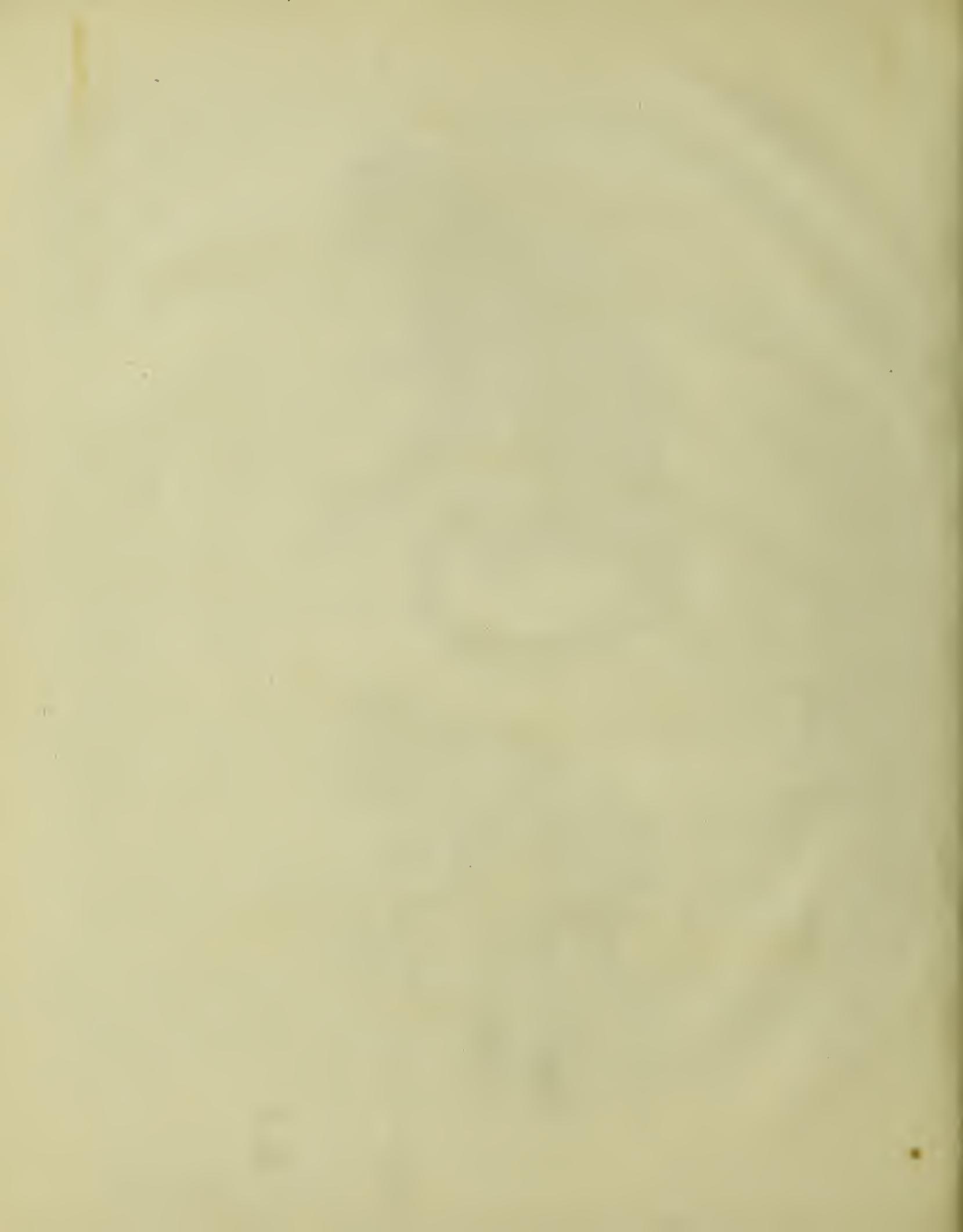


Fig 1.— $\frac{1}{12}$

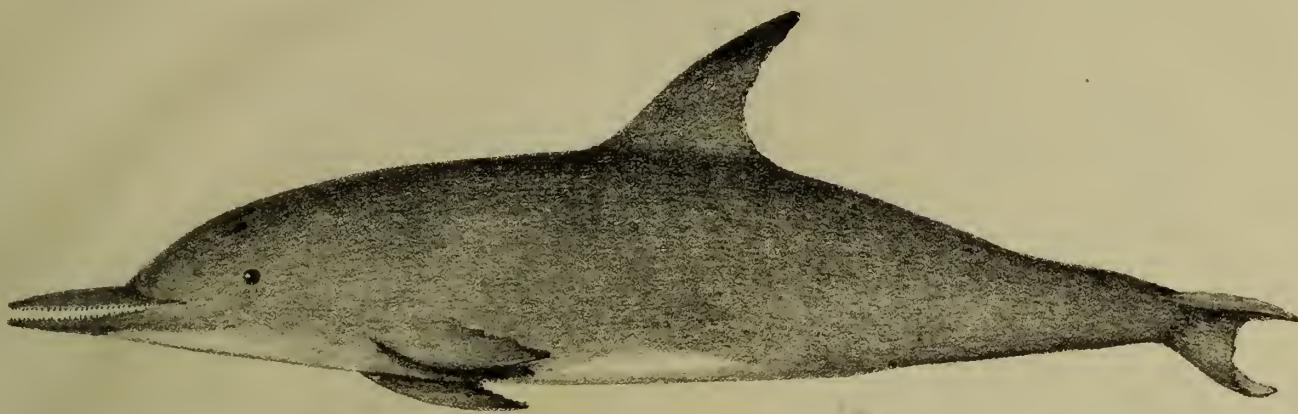


Fig 2.— $\frac{1}{12}$



Fig 4.— $\frac{1}{6}$

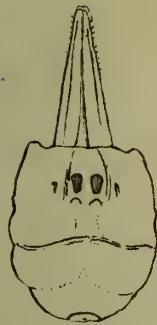


Fig 5.— $\frac{1}{4}$

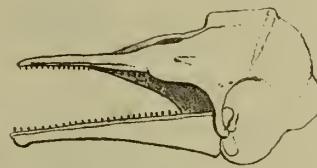


Fig 6.— $\frac{1}{12}$

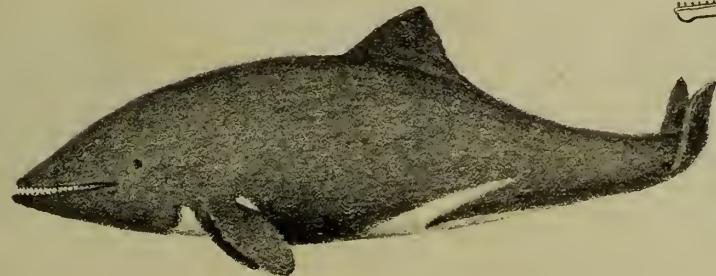
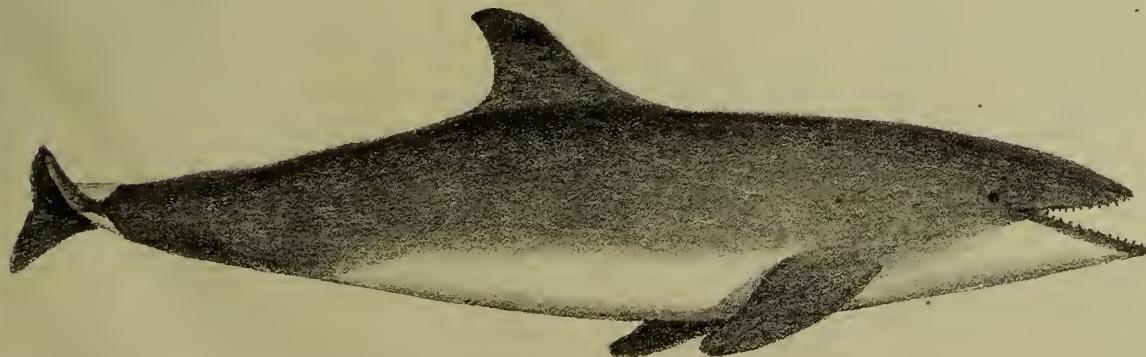
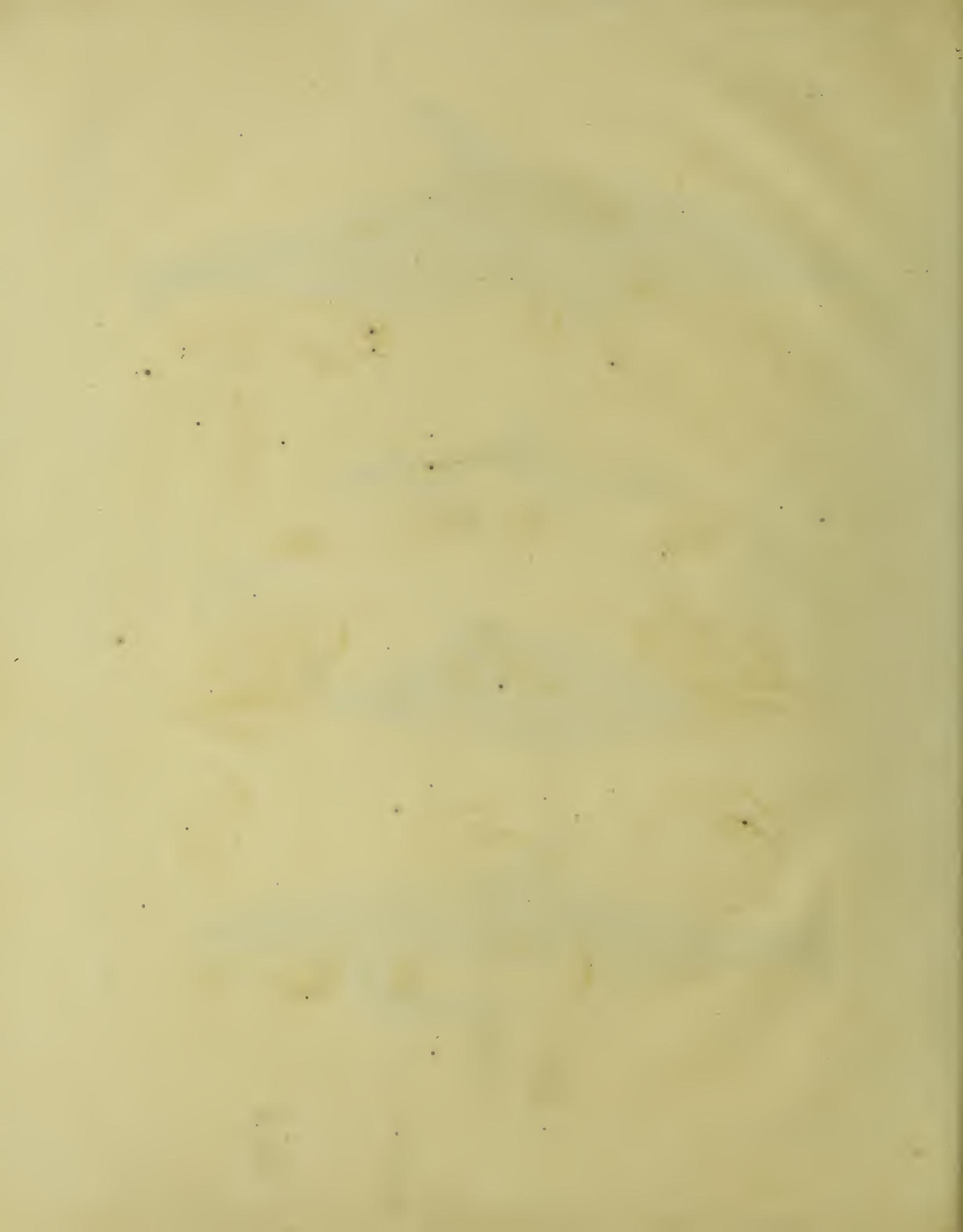
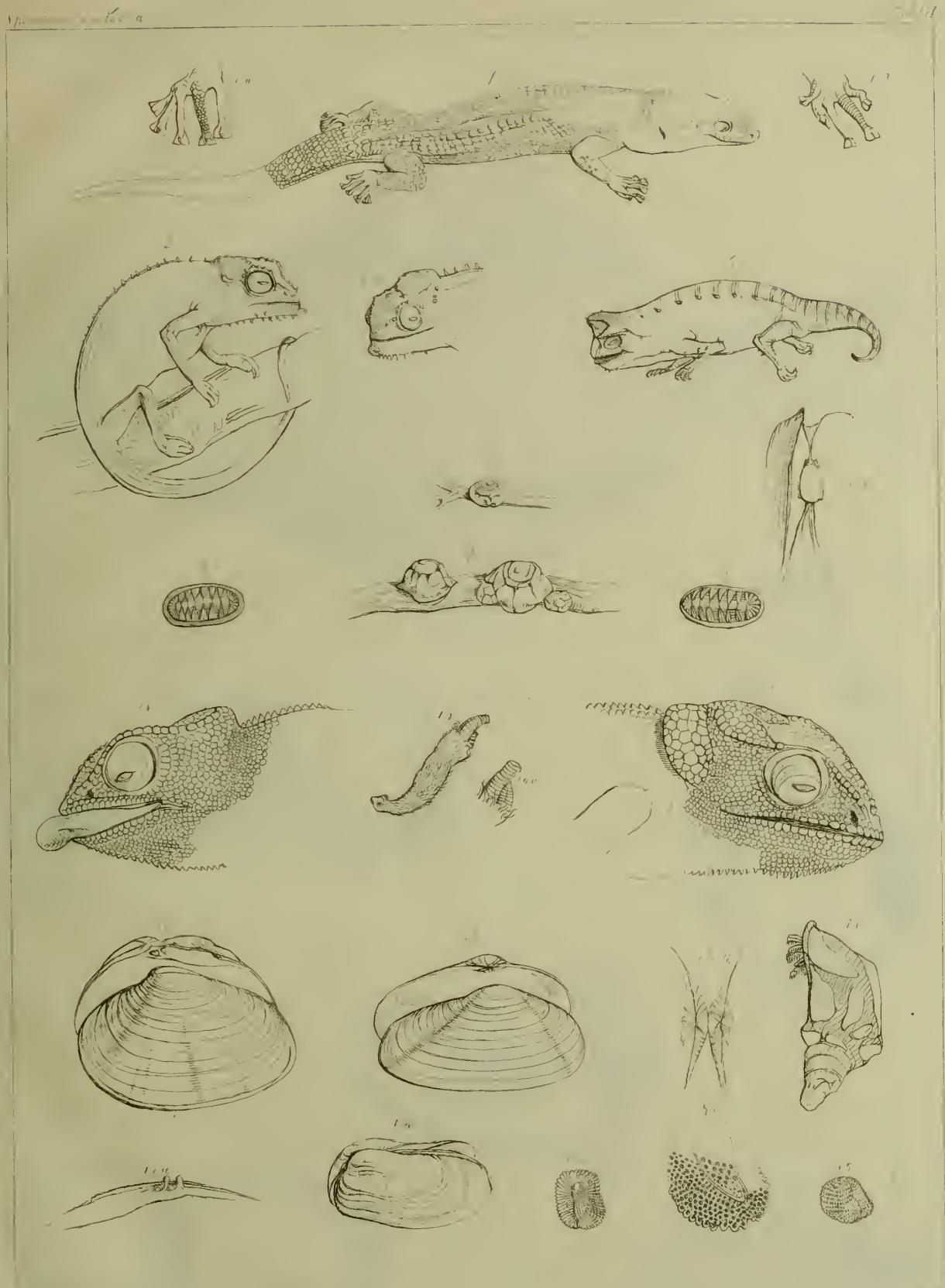


Fig 3.— $\frac{1}{12}$







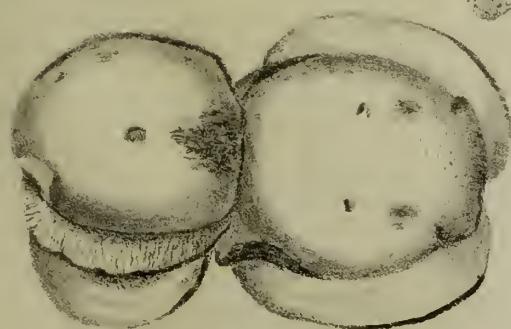
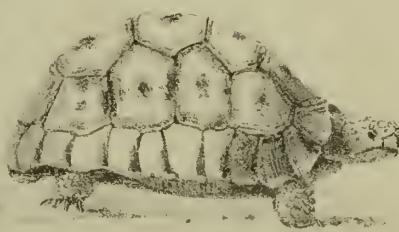
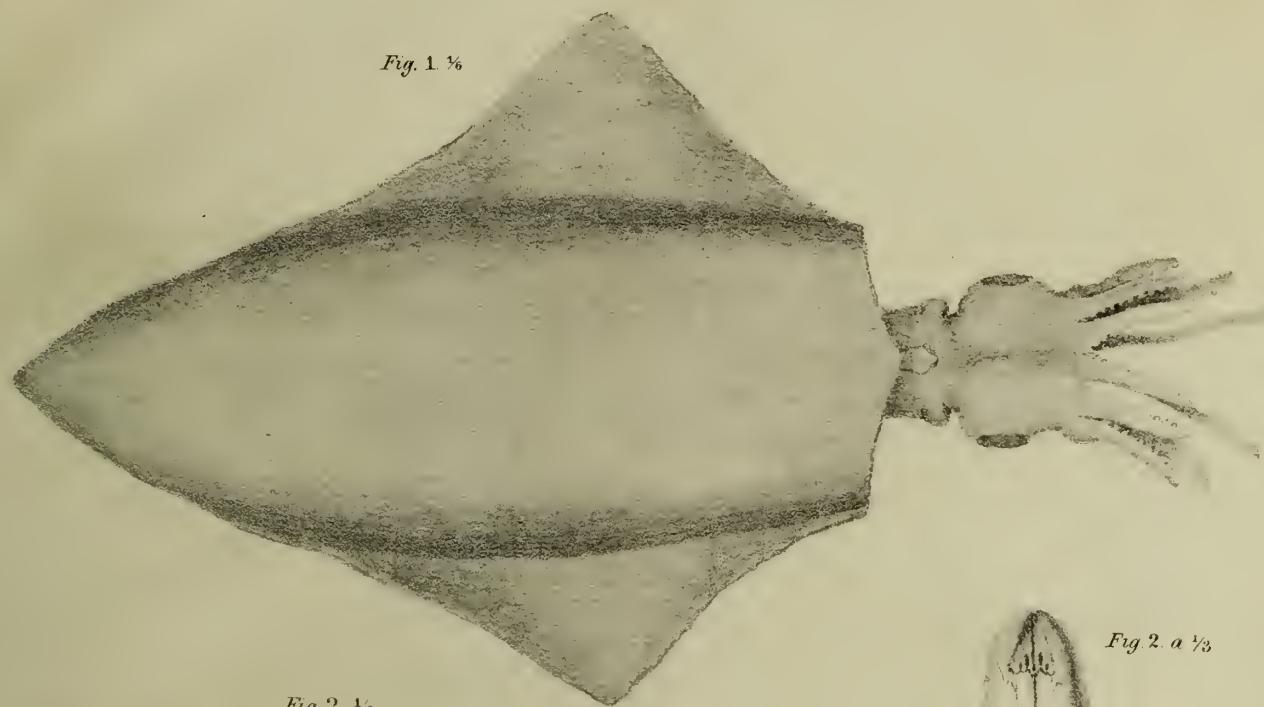


Fig. 4. a 3/2

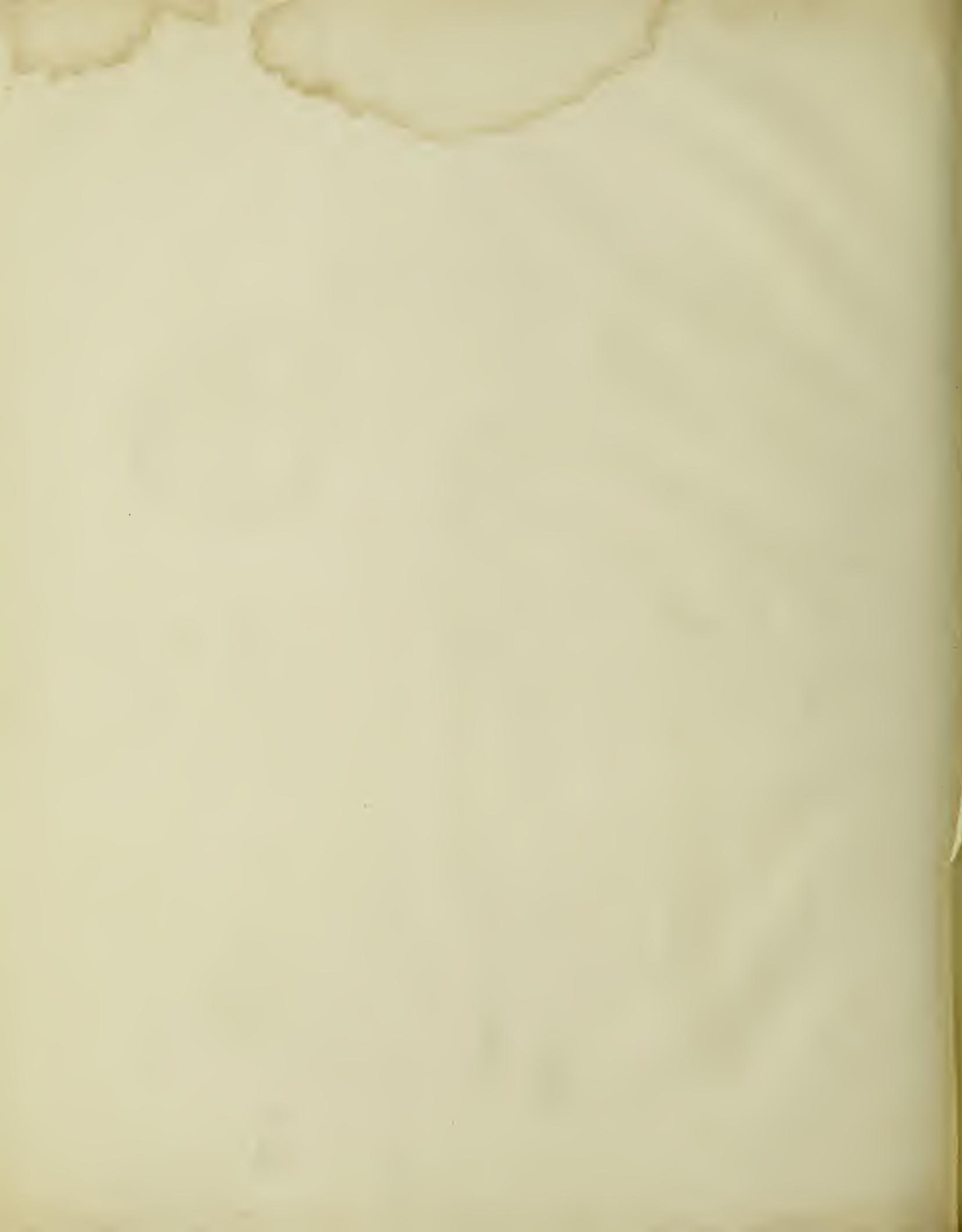


Fig. 2



a

Fig. 3



Fig. 3. a



Fig. 4.

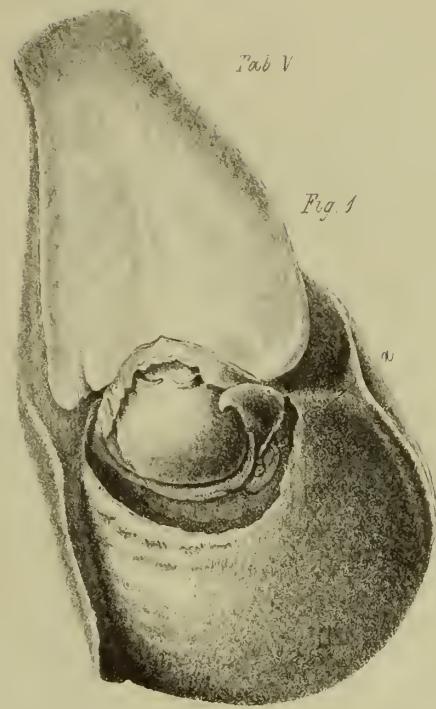


Fig. 1

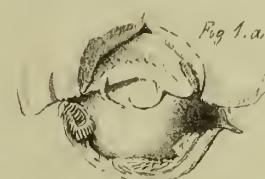


Fig. 1. a



Fig. 5.

