The naturalists' miscellany, or, Coloured figures of natural objects; drawn and described immediately from nature.

Contributors

Shaw, George, 1751-1813.
Nodder, Frederick Polydore
Nodder, Richard P

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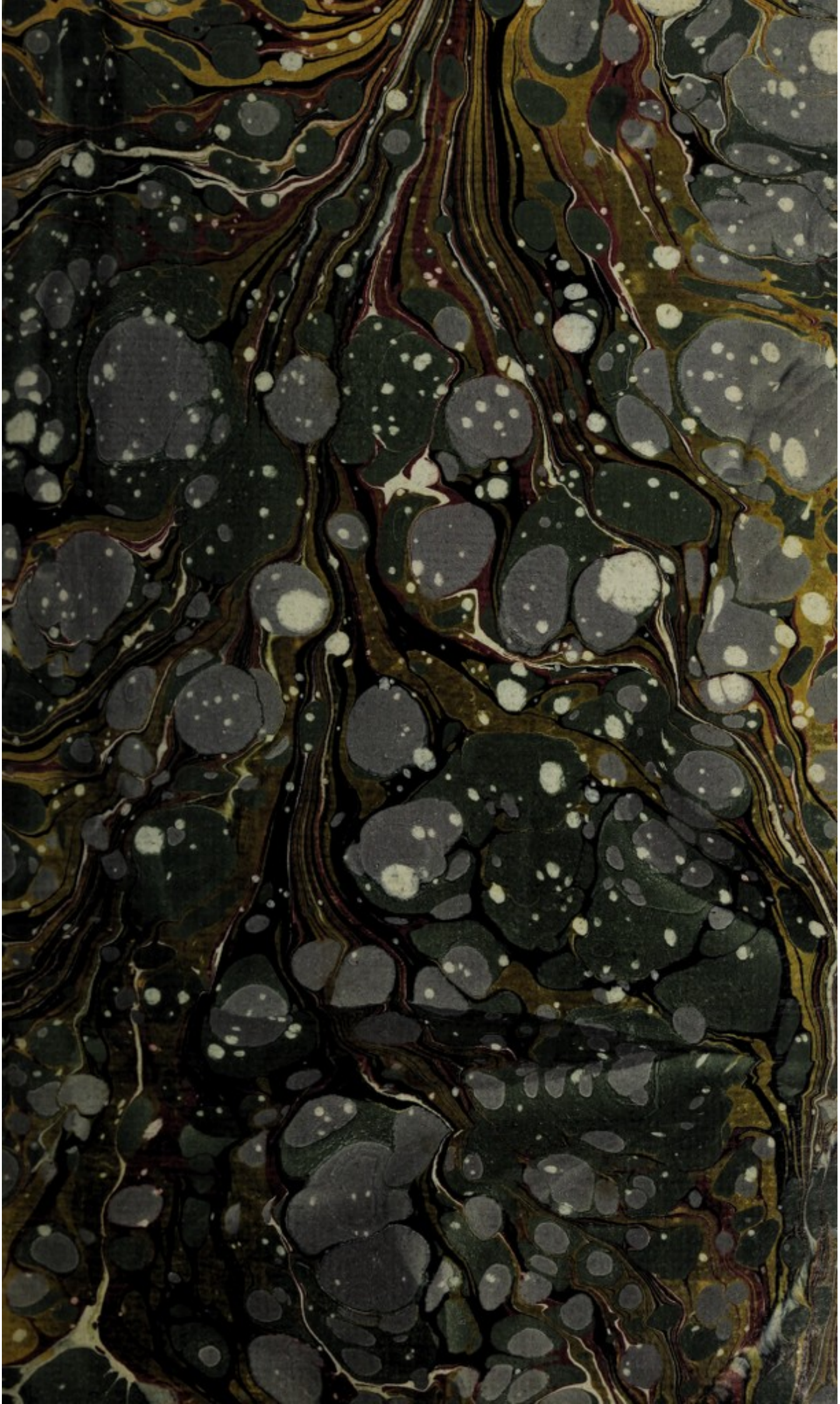
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

John Coakley Lettsom. MD. FRS
London.
Dum Spiras Spes.
No. 7114.



48008/B

REVERENDISSIMO IN CHRISTO PATRI,

JOANNI MOORE,

PROVIDENTIA DIVINA,

ARCHIEPISCOPO CANTUARIENSI,

ANIMI CANDORE,

INGENII SUAVITATE,

VITÆ INTEGRITATE

SPECTATISSIMO,

TERTIUM HUNC

NATURÆ VIVARII

FASCICULUM,

CULTU OMNI ET OBSERVANTIA,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO

THE MOST REVEREND FATHER IN GOD,

JOHN,

BY DIVINE PROVIDENCE,

ARCHBISHOP OF CANTERBURY,

&c. &c. &c.

THIS THIRD VOLUME

OF

THE NATURALIST'S MISCELLANY

IS,

WITH THE MOST PROFOUND HUMILITY, INSCRIBED,

BY

HIS GRACE'S MOST DEVOTED SERVANTS,

GEORGE SHAW,

FREDERICK P. NODDER.

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CERTHIA COCCINEA.

Character Genericus.

Roſtrum arcuatum, tenue, ſubtrigonum, acutum
Lingua acuta.
Pedes ambulatorii.

Lin. Syſt. Nat. p. 184.
Picæ.

Character Specificus, &c.

CERTHIA COCCINEA, alias caudaque nigris, roſtro pallido.

CERTHIA COCCINEA.

Gmel. Syſt. 1. p. 470.

CERTHIA VESTIARIA.

Lath. Ind. orn. p. 282.

Certhia Coccinea, in inſulis Sandvicenſibus copioſiſſima, roſtrum gerit prælongum, incurvum et pallidum: tota avis coloris eſt læte rubri, exceptis alis caudaque nigris: tabula illam exprimit magnitudine naturali: interdum utrinque juxta humeros macula alba conſpicitur.

S N

London, Published Augst 1st 1799 by F.P. Nodder & Co. N.o 13 Bunnet Street.

THE

SCARLET CREEPER.

GENERIC CHARACTER.

Bill ſlender, incurvated, ſharp pointed.
Tongue differing in ſhape in the different ſpecies.
Legs moderately ſtout.
Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnæus. Latham. Pennant.

SPECIFIC CHARACTER, &c.

SCARLET CREEPER, with black wings and tail, and pale bill.

HOOK-BILLED RED CREEPER.

Lath. Synopſ. 1. p. 704.

The Scarlet Creeper is a native of the Sandwich Iſlands, where it is extremely numerous. The bill in this ſpecies is very long, hooked, and of a pale colour. The whole bird is of a vivid red, except the wings and tail, which are black. In ſome individuals a white ſpot appears on each ſide the ſhoulders.

RANA CORNUTA.

Character Genericus.

Corpus tetrapodum, ecaudatum, nudum.
Lin. Syſt. Nat. p. 354.

Character Specificus, &c.

RANA PALPEBRIS CONICIS.
Lin. Syſt. Nat. p. 356.

BUFO CORNUTUS s. Spinoſus Virginianus.
Seb. 1. t. 72. f. 1. 2.

BUFO CORNUTUS.
Laur. amph. p. 25. n. 2.

Qui quæſtioni reſpondere vellet, quidnam animal effinxerit natura deformiſſimum? vix hæreret ranam cornutam quaſi exemplum inſolitæ turpitudinis ſeligere; quæ ſane vel ipſa Pipa ſeu Surinamenſi foedior eſt et monſtroſior. Non poſſumus illam non horreſcere et averſari frontem intuentes quaſi cornua gerentem, ſummas nempe palpebras in mucronem calloſum productas, oriſque immodicam amplitudinem, hiatumque ultra ſolitum immanem. Rariſſima eſt rana cornuta. Americam Septen-

Septentrionalem inhabitat, et in Virginia potiſſimum invenitur. Color generalis eſt fuſco-vireſcens, faſciis latis albicantibus longitudinalibus per dorſum ductis. Cutis quoque corporis ſuperioris tuberculis aculeatis contecta eſt. Crura fuſco tranſverſim faſciata ſunt.

London Published Aug.st 1.st 1794 by F.P. Nodder & Co.s No.s Brewer Street.

THE

HORNED FROG.

GENERIC CHARACTER.

Body four-footed, naked, without tail.

Lin. Syſt. Nat.

SPECIFIC CHARACTER.

FROG with horned eyelids.

Should inquiry be made, which is the ugliest animal yet known to exiſt? the creature here repreſented might perhaps with juſtice be propoſed as an anſwer: an animal of ſuch prodigious deformity as even to exceed in this reſpect the Surinam toad, or Rana Pipa. What gives an aſpect ſo peculiarly forbidding to the preſent ſpecies is the horned appearance of the front, which is cauſed by a ſharp-pointed elongation of the upper part of each eyelid into a callous proceſs reſembling a horn: to this may be added the exceſſive width of the mouth, which exceeds that of every other known ſpecies of Rana. This animal is extremely rare, and is a native of ſome parts of North America. It is principally found in Virginia. Its general colour

is

is a greeniſh brown, with broad longitudinal ſtripes of whitiſh on the back, and the ſkin on the upper part of the body is covered with a kind of ſpiny tubercles: the legs are tranſverſly faſciated with brown.

PAPILIO HELENA.

Character Genericus.

Antennæ apicem verſus craſſiores, ſæpius clavato-capitatæ.

Alæ (ſedentis) erectæ ſurſumque conniventes. (*Volatu* diurno.)

Lin. Syſt. Nat. p. 744.
Eq. Tr.

Character Specificus, &c.

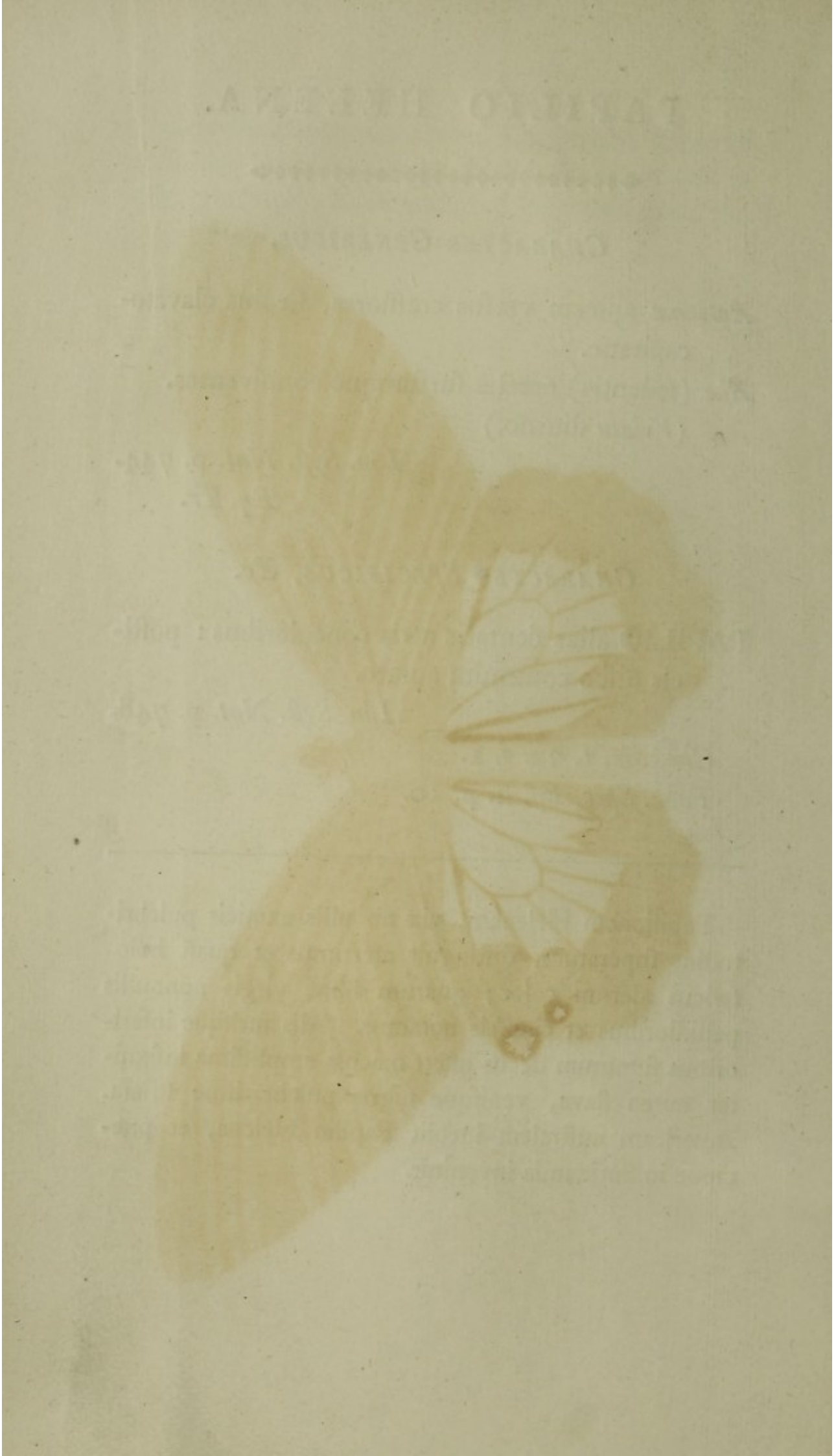
PAPILIO alias dentatis atris concoloribus: poſticis diſco communi aurato.

Lin. Syſt. Nat. p. 748.

Clerk. ic. t. 22. f. 1.

Fabr. Spec. Inſ. 2. p. 10.

Papilionem Helenam, vix ab ullis exoticis pulchritudine ſuperatum, diſtinguit aterrimus et quaſi holoſericus alarum color; quarum fibræ virgis nonnullis pallidioribus et cinereis notantur. Alis utriſque inferioribus ſummum decus affert macula ampliſſima inſigniter aureo-flava, veniſque nigris pulcherriſme ſtriata. Americam auſtralem incolit Papilio Helena, et præcipue in Surinamia invenitur.



S.N°

London Published Augst 1st 1791 by F.P. Nodder & Co. N.° 18 Bowver Street

HELENA.

OR, THE

BLACK-AND-GOLD BUTTERFLY.

Generic Character.

The *Antennæ*, or *Horns*, thickening towards the upper part, and generally terminating in a knob, or club-ſhaped tip.

The *Wings* (when ſitting) erect, and meeting upwards. (*Flight* diurnal.)

Specific Character.

BLACK BUTTERFLY with both ſurfaces alike; the diſk of the lower wings of a brilliant gold colour.

The Papilio Helena, one of the moſt beautiful of the exotic butterflies, is diſtinguiſhed by the deep velvet black of its wings, which are marked by a few lighter or greyiſh ſtripes accompanying the fibres; while the lower wings are each ornamented by a very large ſpot or patch of the richeſt golden-yellow, traverſed by ſeveral veins of black. It is a South-American inſect, and is principally found at Surinam.

MEROPS SUPERBUS.

Character Genericus.

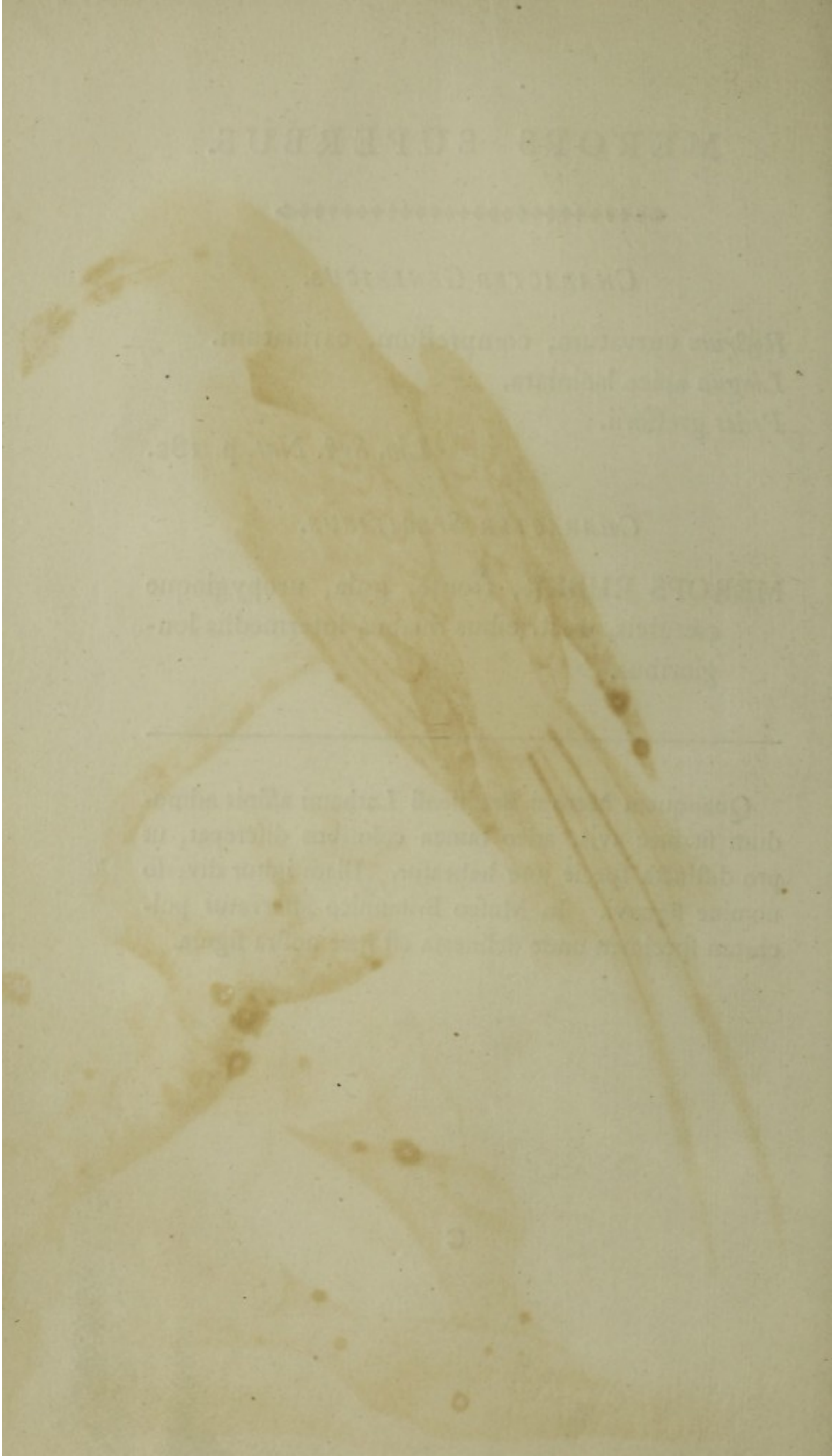
Roſtrum curvatum, compreſſum, carinatum.
Lingua apice laciniata.
Pedes greſſorii.

Lin. Syſt. Nat. p. 182.

Character Specificus.

MEROPS RUBER, fronte, gula, uropygioque cæruleis, rectricibus duabus intermediis longioribus.

Quanquam Meropi Braſilienſi Lathami affinis admodum ſit hæc avis, adeo tamen coloribus diſcrepat, ut pro diſtincta ſpecie jure habeatur. Illam igitur diverſo nomine ſignavi. In Muſeo Britannico aſſervatur pulchrum ſpecimen unde delineata eſt hæc noſtra figura.



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THE

SUPERB BEE-EATER.

Generic Character.

Bill curved, compreſſed, carinated, and ſharp pointed.

Tongue (generally) laciniated at the tip.

Feet greſſorial, *i. e.* three toes forward and one backward; and the three lower joints of the middle toe cloſely joined to thoſe of the outmoſt.

Specific Character.

RED BEE-EATER, with front, throat, and rump, blue; and the two middle tail-feathers longer than the reſt.

The colours of this bird differ ſo much from thoſe of the Merops Braſilienſis of Mr. Latham, to which it is yet extremely nearly allied, as to juſtify its being regarded as a diſtinct ſpecies. I have therefore called it by a different title. The beautiful ſpecimen from which the preſent figure was taken is preſerved in the Britiſh Muſeum.

MADREPORA FUNGITES.

Character Genericus.

Animal *Meduſa.*
Corallium cavitatibus lamelloſo-ſtellatis.
Lin. Syſt. Nat. p. 1272.

Character Specificus, &c.

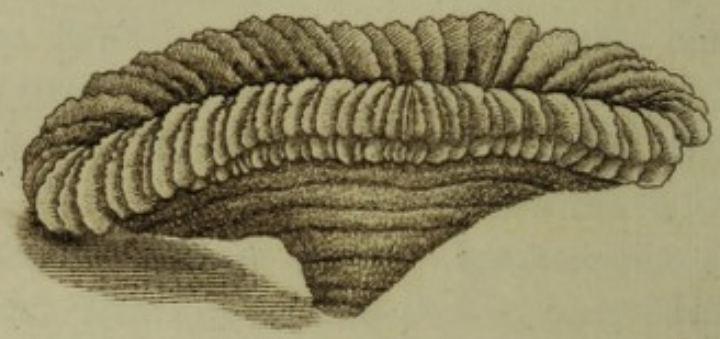
MADREPORA ſimplex acaulis convexa, ſubtus plerumque concava, interdum convexa et pedunculata.

FUNGUS LAPIDOSUS.
Clus. exot. 125. f. 1.

FUNGUS LAPIDEUS.
Buch. hiſt. 3. p. 801. f. 1, 2.

Cum anteactis temporibus, dormiret recentiorum philoſophorum curioſa ſedulitas, quæ jam fere per totum orbem feliciter diffunditur; nugis et fabellis anilibus ſæpius credebatur, vetuitque plurimorum hominum hebes incuria ut vel ampla eſſet ſpeciminum ſupellex, vel etiam nactorum plena et genuina deſcriptio. In plantis igitur et animalibus indies erratum eſt. Radix filicis in ſeptentrionali Aſia ſatis vulgaris naturam cum quadrupede participare diù cenſebatur, vocabaturque communiter

niter *agnus vegetabilis*. Gryllorum certæ ſpecies exoticæ quibus alæ ſunt amplæ, virides, et venoſæ, folia animata habebantur: nec defuere qui ſerio et pertinaciter aſſeruerunt arborum quarundam Indicarum et Americanarum, ſimul ac deciderant folia, ſubito alis pedibuſque gaudentia circa ipſam arborem volitare. Coralium quoque, ſeu Madreporam in tabula depictam, fungum eſſe, ſive agaricon in lapidem converſum opinabantur tunc temporis phyſici. Ignoſcendum eſt ſane huic errori potius quam aliis multis, cum Madrepora agarico ſimillima pleroſque ſpectatores (exceptis paucis, quibus res penitus ſcrutari cordi eſt) poſſet decipere. Comperti ſunt tandem in India Orientali, ubi frequentior eſt Madrepora, ſeduli examinatores, eſſe eam fulcrum ſeu habitaculum ſubſtantiæ gelatinoſæ et animatæ, forma ad *Meduſas* ut vocantur, orbiculatas et depreſſas accedentis. Efficit animal mirandum hoc domicilium, materiem calcariam glutinoſam ab omni corporis parte copioſe exprimendo; ita ut ſulci ſeu depreſſiones in Madrepora, lamellis totidem acutis et radiatis in ipſius animalis corpore reſpondeant; quod cum ſit tenerrimum, aeri expoſitum in meram pelliculam paucis horis decreſcit, nec niſi in aqua marina, qua naſcitur, probe poteſt examinari. In nonnullis ſpeciminibus ex parte inferiore, ſeu concava, proles minor varia protruditur. In India præcipue Orientali invenitur Madrepora Fungites, creſcitque interdum ad magnitudinem ſex unciarum in diametro, interdum vix unam ſuperat. Color albus non caret elegantia, totaque ſuperficies exterior tuberculis minutiſſimis leviter exaſperatur. Lamellarum margines interrupto ordine ſerratæ ſunt.



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THE

MUSHROOM MADREPORE.

Generic Character.

The *Animal* reſembling a Meduſa.

The *Coral* marked by lamellated ſtar-ſhaped cavities.

Specific Character.

MADREPORE with riſing or convex laminæ above, generally concave and papilloſe beneath, and ſometimes footſtalked.

Before that ſpirit of inquiry which characterizes the modern cultivators of natural hiſtory began to diffuſe itſelf in Europe, innumerable errors were committed in the hiſtories both of animals and vegetables, while the general neglect with which the major part of mankind regarded ſubjects of this nature, ſtill increaſed the difficulty of obtaining proper ſpecimens and deſcriptions of ſeveral of the moſt curious and intereſting productions of nature. The root of a ſpecies of fern, not uncommon in the northern parts of Aſia, was ſuppoſed to partake of the nature of a quadruped, and was dignified by the title of the vegetable lamb. Some of the locuſt tribe with large green veiny wings were believed

to

to be animated leaves; and there were not wanting thoſe who were ready to vouch the certainty of the leaves which fell from ſeveral trees in India and America becoming ſuddenly furniſhed with legs and wings, and ſoon after fluttering round the branches of the tree which gave them birth; while the coral which forms the ſubject of the preſent plate was regarded as a ſpecies of petrified muſhroom. It muſt be confeſſed that of all erroneous ideas this was one of the moſt plauſible; for ſo very ſtriking is the general reſemblance which this coral bears to the genus Agaricus, that it is impoſſible not to be forcibly impreſſed with the ſimilarity of the ſtructure. From obſervations, however, which have been made in thoſe parts of India where it is commonly found, it appears to be the production of an animal of a ſoft or gelatinous nature, and which bears a general affinity to the ſhape of the orbicular depreſſed Meduſæ or Sea-Blubbers. The animal forms this curious fulcrum or habitation by ſecreting a copious depoſition of calcarious matter from every part of its body, and the ſulci or furrows in the Madrepore anſwer to ſo many ſharp radiated laminæ of the creature's body. So tender is this animal, that it collapſes and ſhrinks to a mere pellicle when expoſed for ſome hours to the air; ſo that it is only in the ſea-water that it can be viewed to advantage. Some ſpecimens of this Madrepore are proliferous, or have young productions of the ſame form growing from ſeveral parts of the concave or lower ſurface. The Madrepora Fungites is found of various ſizes, from an inch to ſix inches in diameter. Its colour is an elegant white, and every part of the external

external ſurface is roughened by ſmall protuberances, and the edges of the lamellæ or gills are irregularly ſerrated. It is principally found on the coaſts of the Eaſt Indies.

SCARABÆUS GOLIATUS.

Character Genericus.

Antennæ clavatæ capitulo fiſſili.
Tibiæ anticæ ſæpius dentatæ.

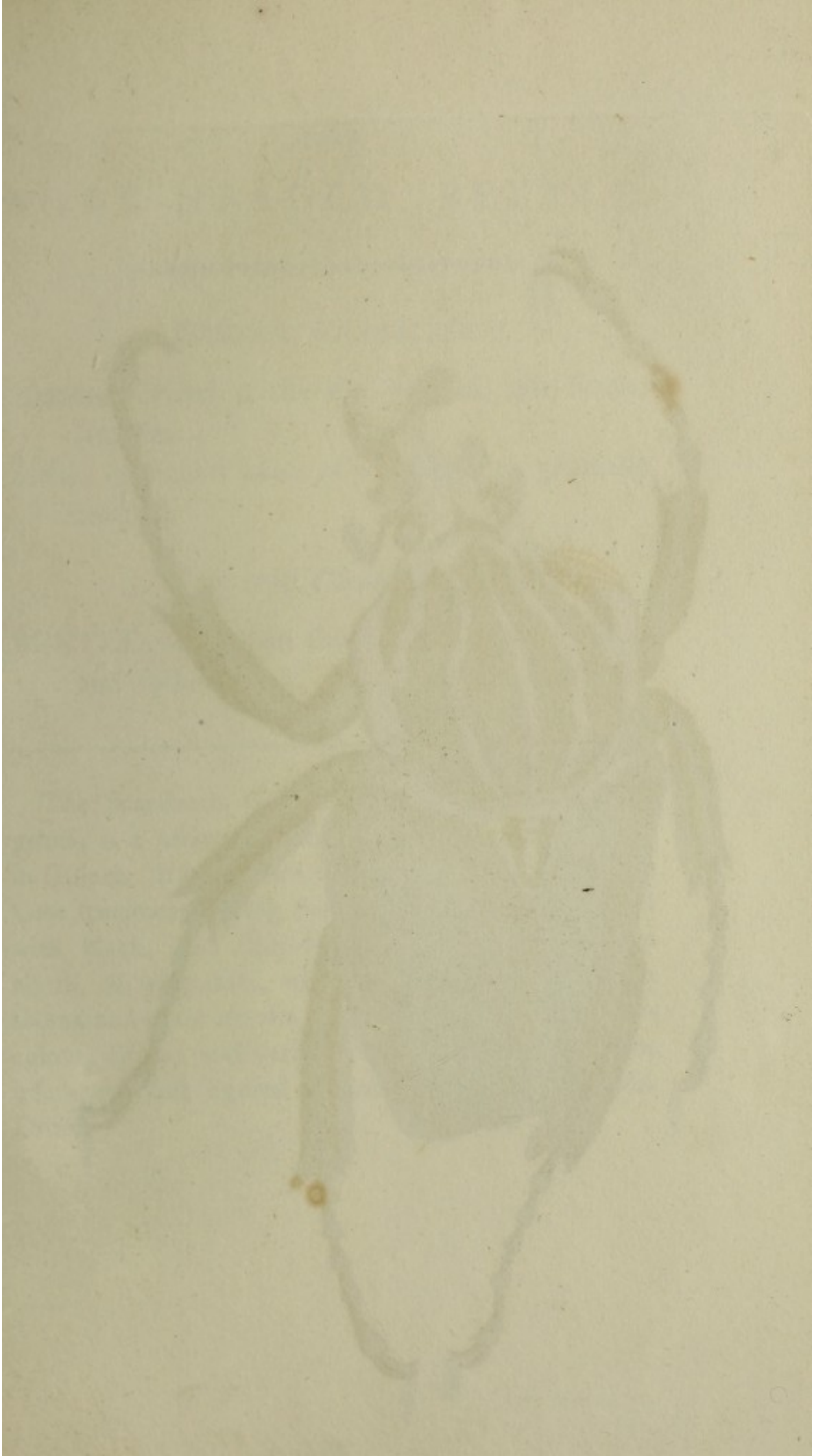
Lin. Syſt. Nat. p. 541.

Character Specificus, &c.

SCARABÆUS ſcutellatus, thorace inermi, clypeo bifurco.

Fabr. Spec. Ins. tom. 1. p. 14.
Drur. Ins. 1. tab. 31. & 3. tab. 40.
Voet. Scar. tab. 22. fig. 51.

Scarabæus Goliatus, ſui generis fere rariſſimus, Africam incolit, præcipue Guineam. Coloribus variat; thorace interdum roſeo nigris lineis variato, elytriſque purpureo-ferrugineis; interdum tum thorace tum elytris albido-flaveſcentibus, nigro interſtinctis. In elegantiſſimo opere Domini Drury primo depicta eſt hæc ſcarabæi ſpecies.



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THE
FORK-HEADED BEETLE.

Generic Character.

Antennæ divided at the tip, or head, into ſeveral lamellæ.

Tibiæ, or ſecond joints of the fore-legs, generally toothed.

Specific Character.

BEETLE with plain thorax ſtriped with black, and forked head.

The Scarabæus Goliatus, one of the rareſt of its genus, is a native of Africa, and is principally found in Guinea. It is a ſpecies which varies much in colour; ſome ſpecimens having the thorax roſe colour, ſtriped with black, and deep-ferruginous or purple-brown elytra, or wing-caſes, while in other ſpecimens both thorax and elytra are of a dull yellowiſh white, or cream-colour, ſtriped and varied with black. This curious inſect was firſt figured in the elegant work of Mr. Drury.

TROCHILUS MULTICOLOR.

Character Genericus.

Roſtrum ſubulato-filiforme, apice tubulato, capite longius: Mandibula ſuperior vaginans inferiorem.

Lingua filiformis, filis duobus coalitis tubuloſa.

Pedes ambulatorii.

Lin. Syſt. Nat. p. 189.

Character Specificus, &c.

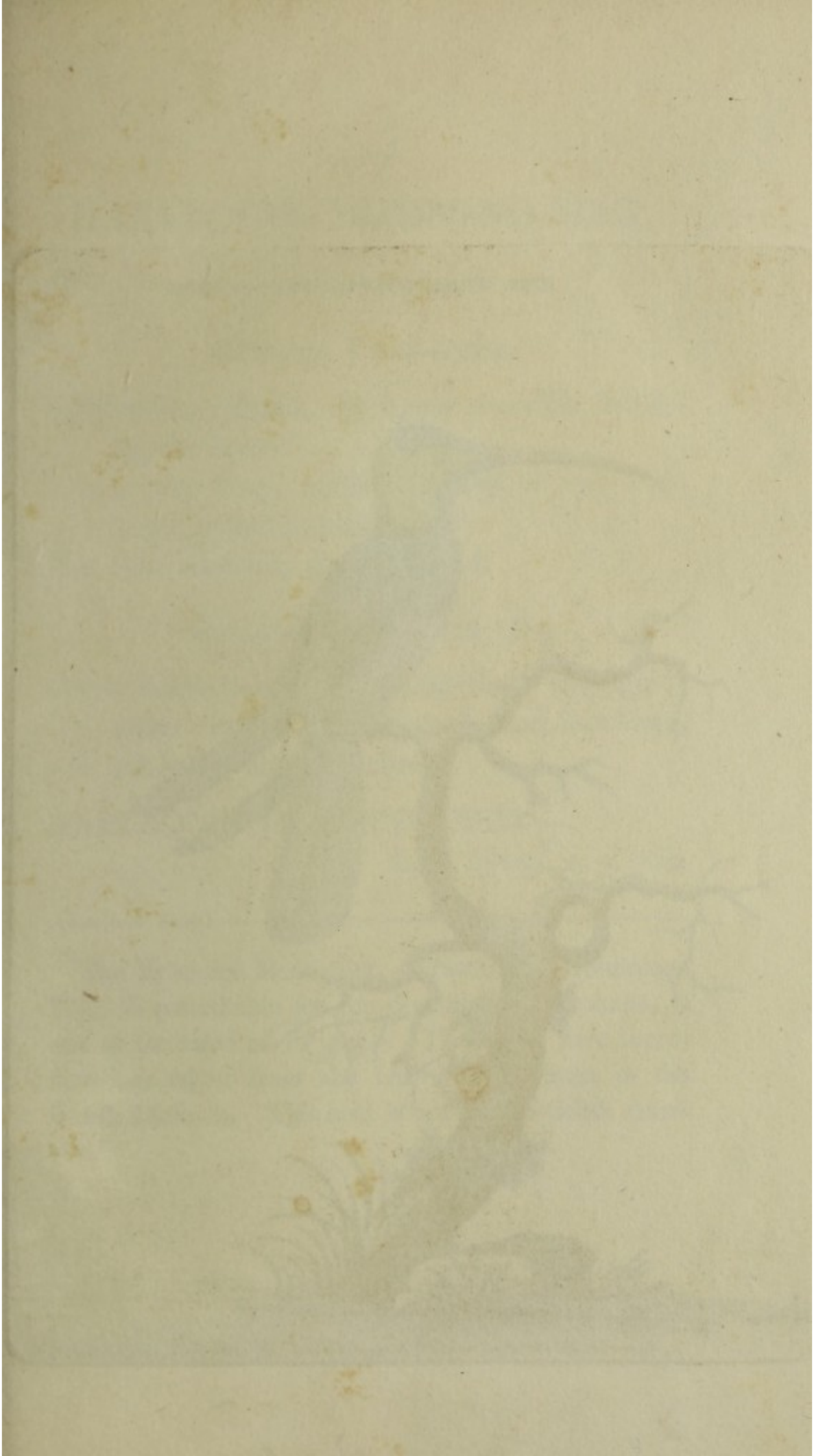
TROCHILUS curviroſtris fuſcus, vertice, gula, pectore, humeriſque, viridi-aureis, abdomine rubro, genis cyaneis.

TROCHILUS MULTICOLOR.

Lath. ind. orn. p. 308.

Gmel. Syſt. Nat. p. 490.

Trochilus Multicolor, variis ditiſſimus coloribus, inter rariſſimas ſui generis ſpecies habetur. Depingitur figura noſtra a ſpecimine pulcherrimo quod ſuppeditavit Muſeum Britannicum. Americam Auſtralem incolit hæc avicula.



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THE

HARLEQUIN HUMMING-BIRD.

Generic Character.

Bill ſlender, tubular, the upper mandible ſheathing the lower.

Tongue very long, miſſile; formed of two conjoined cylindric tubes.

Toes three forward, one backward.

Specific Character, &c.

Curve billed brown Humming-Bird, with gold-green crown, throat, breaſt, and ſhoulders, red belly, and blue cheeks.

HARLEQUIN HUMMING-BIRD.

Lath. Synopſ. 2. p. 760.

The Trochilus Multicolor, or Harlequin Humming-Bird, ſo remarkable for the diverſity of its colours, is one of the rareſt of its genus. The figure here repreſented is taken from the beautiful ſpecimen in the Britiſh Muſeum. This bird is a native of South America.

ISIS NOBILIS.

Character Genericus.

Stirps lapidea, rigida.
Flores Hydræ e poris lateralibus.

Character Specificus, &c.

ISIS ſtirpe corallina æquali continua, ſtriis obſoletis obliquis, ramis vagis.

Lin. Syſt. Nat. p. 1288.

CORALLIUM RUBRUM.

Bauh. pin. 366.

GORGONIA PRETIOSA.

Elliſ. Zooph. p. 90.

Iſis nobilis, ſeu Corallium vulgare rubrum, e ſubſtantiis illis marinis eſt quæ, communi fere phyſicorum recentium conſenſu, ab animalibus hydras ſeu polypos quodammodo referentibus effingi creduntur. Degunt hæc animalia in cavitatibus iſtis quæ in cortice corallii molli et ſubereo frequenter conſpiciuntur; eorumque veſtigia paulatim diſtantia punctiſque ſimilia in ſuperficie etiam duriſſima imprimuntur, omnibus corallii ipſius ramuſculis ſtriis longitudinalibus ab ipſa baſi extrinſecus notatis. Fatendum ſane eſt non mediocri fide opus eſſe ut omnia Lithophyta ab animalibus incolentibus

bus revera et omnino formari perſuaſum habeamus. Cum vero noſtrum non ſit notiſſimas Domini Elliſii obſervationes in dubium vocare, gaudeant volumus lectores ſuis ſententiis, ſtatuantque ipſi an inter animalia an vegetabilia ſubſtantias haſce ſatius ſit numerare: ad utraque enim miro modo videntur pertinere. Notandum eſt ſpecimina corallii rubri, quo formoſiora videantur, cortice exteriore, ut plurimum, denudari. Depingitur igitur ramulus cortice obductus juxta ipſam naturam. *Fig.* 2.

S

London Published Oct.r 1.st 1799 by F. P. Nodder & Co.N.o 16 Brewer Street.

RED CORAL,

Generic Character.

The *Coral* having the habit or appearance of a plant.

The *Stem*, or internal part, differing in the different ſpecies, and generally either of a horny or a ſtony appearance.

The *cortical part* ſoft, and inhabited by animals reſembling polypes.

Specific Character, &c.

BRIGHT-RED STONY-BRANCHED CORAL, with longitudinal ſtriæ.

COMMON RED CORAL.

The Iſis nobilis, or common red Coral, is one of thoſe numerous ſubmarine productions which, by the almoſt general conſent of modern naturaliſts, are regarded as the fabrication of animals reſembling polypes, which reſide in the cavities ſo conſtantly ſeen in the ſoft or cortical part of the coral; and the impreſſions or veſtiges of which are viſible even on the ſurface of the hard part or the coral itſelf; being generally ſeated at diſtant intervals, and appearing like ſmall impreſſed ſpots, while the

the whole coral, throughout all its ramifications, is marked externally by longitudinal ſtriæ proceeding from the very baſe itſelf. It muſt be candidly confeſſed that a good ſhare of philoſophical faith is neceſſary to reconcile us to the idea of all the coral tribe being entirely the work of animals: yet as we cannot preſume to controvert the well-known obſervations of Mr. Ellis, we ſhall leave our readers to their own opinions, and at perfect liberty to regard theſe curious ſubſtances either as belonging to the animal or vegetable kingdom, to both of which they ſeem to be ſtrangely allied. It is neceſſary to obſerve that the ſpecimens of red coral as generally ſeen, have, in order to increaſe the beauty of their appearance, been deprived of their cortical or exterior coat. A branch in its natural ſtate, or with its exterior coat, is repreſented at *fig.* 2. in the annexed plate.

LACERTA VARIA.

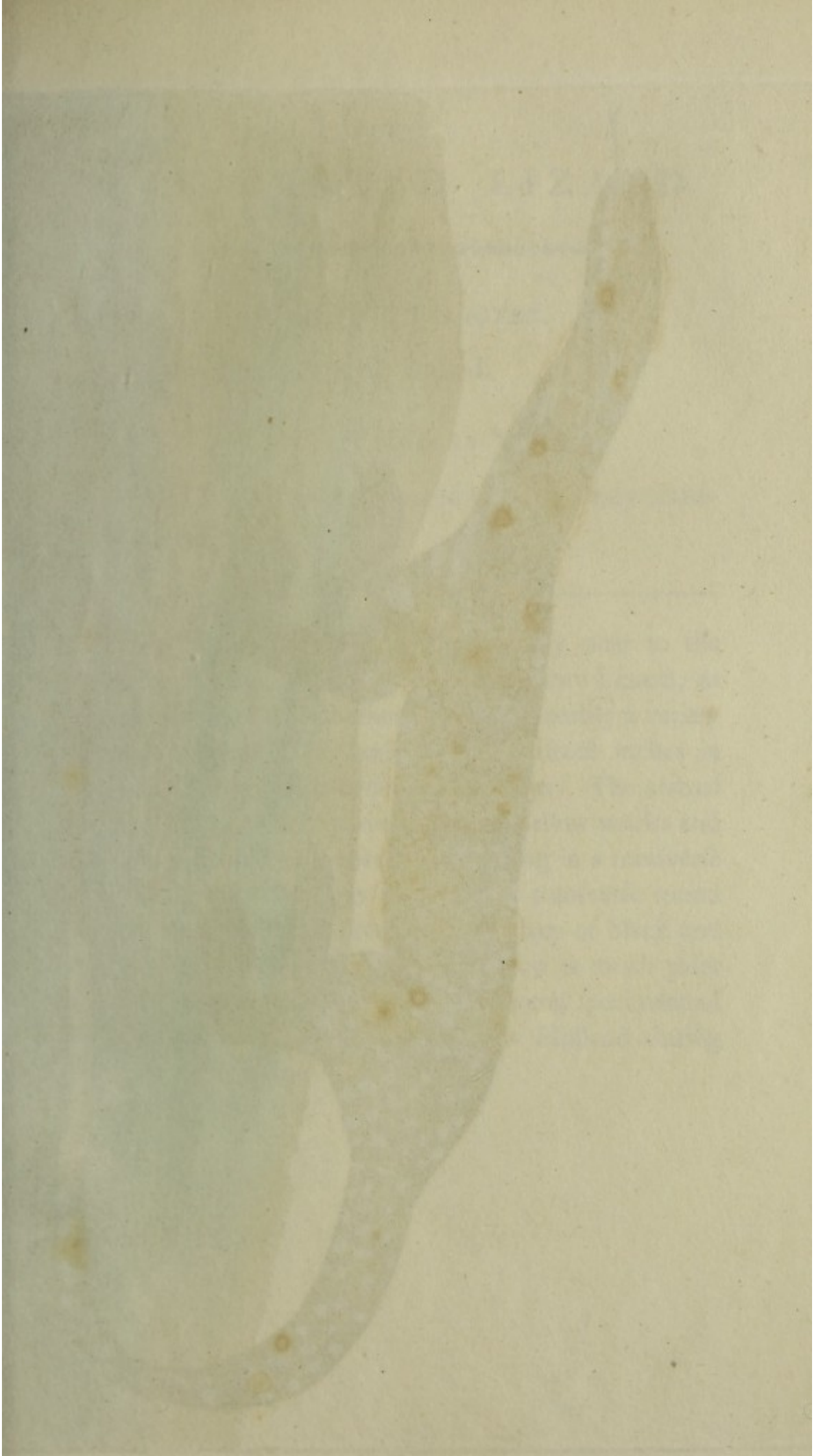
Character Genericus.

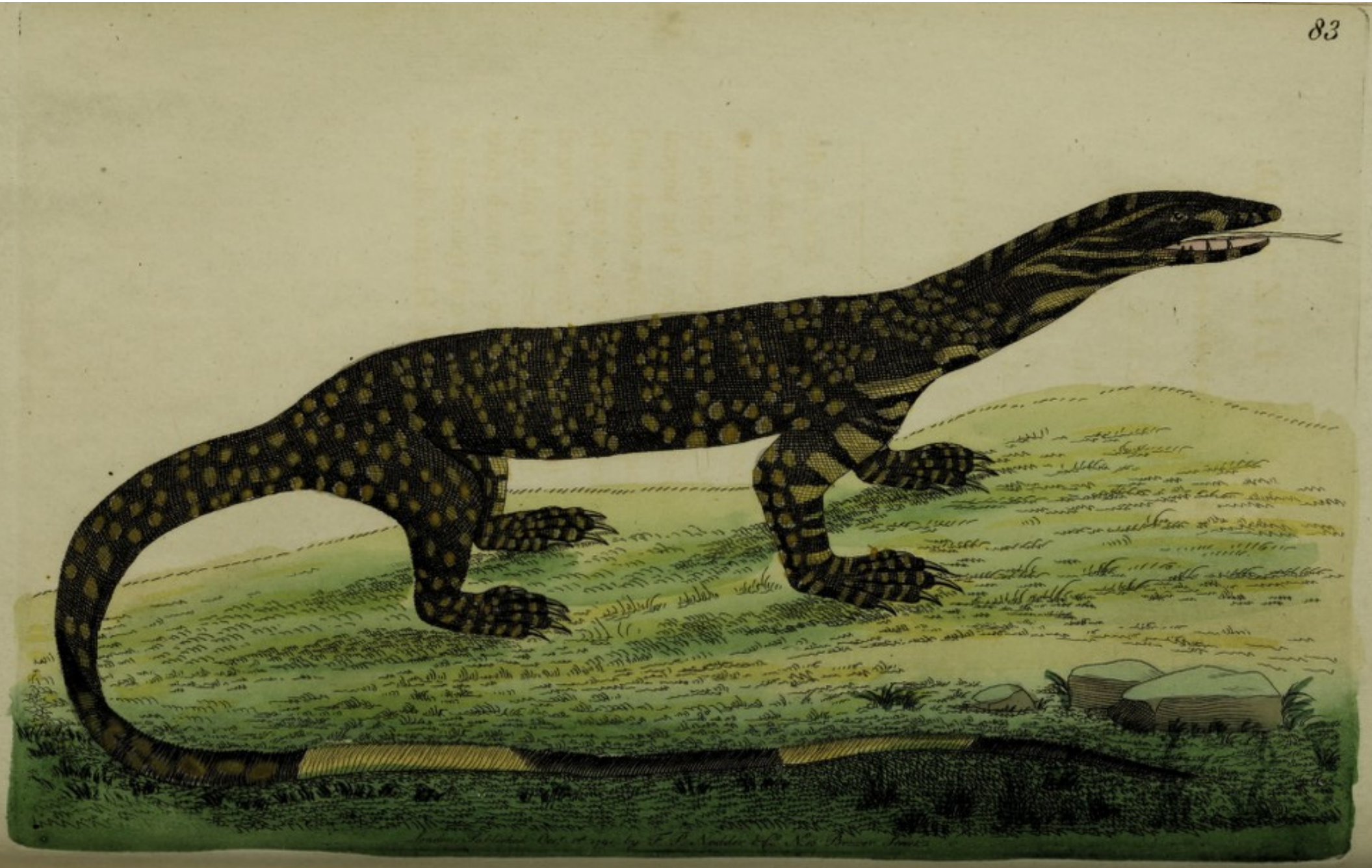
Corpus tetrapodum, caudatum, nudum.

Character Specificus,

LACERTA cauda longa carinata, corpore maculis tranſverſis variis.

Tam prope accedit hæc lacerta ad illius ſimilitudinem quam Linnæus nomine *Monitoris* deſcripſit, ut dubium forſan ſit an ſpecies vere ſit diſtincta, ſeu illius tantum varietas. Corpus uncias circiter quindecim longum eſt, caudaque multo longior. Color niger eſt, notis, ſtriiſque flavis, imparibus, per corpus tranſverſe diſcurrentibus. Super crura ſunt ſeries tranſverſæ macularum rotundarum, caudaque faſciis latis nigris flaviſque alternatim interſtinguitur. In nonnullis ſpeciminibus color flavus pallidior multo eſt quam in aliis, et fere albeſcens. Plurima hujus lacertæ ſpecimina noviſſimis a Nova Hollandia navigiis in Angliam illata ſunt.





THE VARIEGATED LIZARD.

Generic Character.

Body four-footed, tailed, naked.

Specific Character.

LIZARD with long carinated tail, the body tranſverſely variegated.

This Lizard approaches ſo extremely near to the Lacerta Monitor of Linnæus, or Monitory Lizard, as to make it doubtful whether it be not in reality a variety of that ſpecies. The body is about fifteen inches in length, and the tail is conſiderably longer. The animal is of a black colour, variegated with yellow marks and ſtreaks of different ſhapes, and running in a tranſverſe direction. On the legs are rows of tranſverſe round ſpots; and on the tail broad alternate bars of black and yellow. In ſome ſpecimens the yellow is much paler than in others, and nearly white. Several ſpecimens of this ſpecies were brought from New Holland during the late voyage from Botany Bay.

TETRAO PORPHYRIO.

Character Genericus.

Macula prope oculos nuda, papilloſa.
Lin. Syſt. Nat. p. 273.

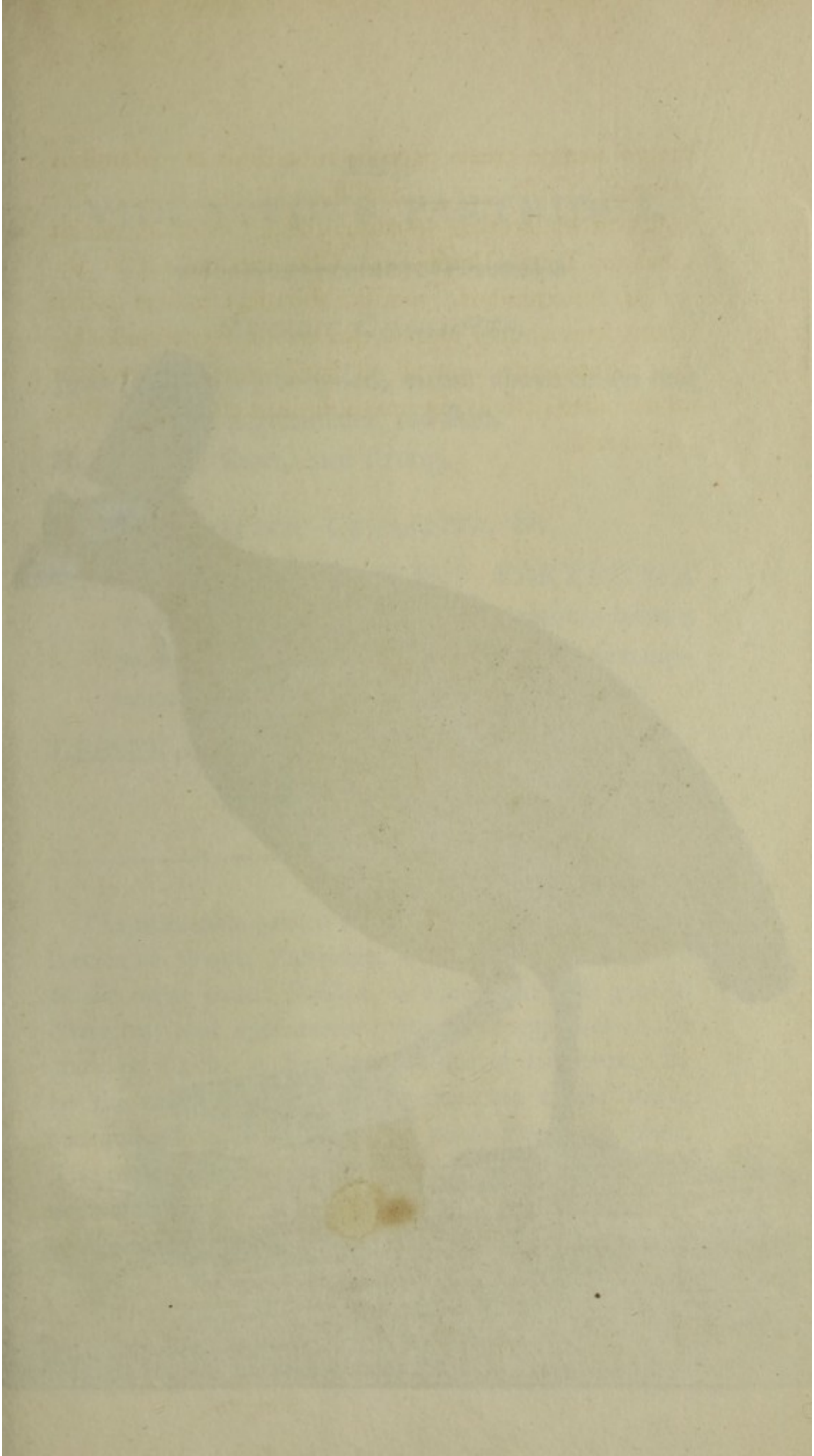
Character Specificus, &c.

TETRAO VIOLACEO-NIGRICANS, viridi ſuffuſus, alis fuſco-ferrugineis, criſta compreſſo-erecta ferrugineo-rubente.

LE ROULOUL DE MALACCA.
Son. Voy. Ind. vol. 2. p. 174. pl. 100.

Genus *Tetrao* numeroſum varias ſpecies complectitur quæ nominibus perdicum, urogallorum, coturnicum, &c. communiter vocantur; pertinetque ad diviſionem gallinaceam, quæ ſcilicet continet omnes illas aves quæ forma vivendique modo ad gallum gallinaceum plus minus accedunt. Tetraonum plures exotici ſunt; maxima pars extra Europam nutritur. Species de qua jam loquimur, ut fileamus inuſitatum colorem, generis ſui eſt rariſſima. Notandum præterea eſt characteres illi eſſe incertos; ut ad genus Columbæ non minus quam Tetraonis pertinere videatur; præſertim ſi ſpecimen exſiccatum inſpicias. Figura hæc noſtra ab ipſa ave viva fideliter depicta eſt. Palpebris peculiare quoddam eſt;

margo nempe crenis parvulis ruberrimis et exſtantibus ornatus. Criſta quoque molliſſima et quaſi ſerica. Peninſulam Malaccam, variaſque Indiæ Orientalis inſulas inhabitat Tetrao Porphyrio. Obſervandum eſt in aliquibus ſpeciminibus, (maribus fortaſſe,) exſtare in baſi frontis ſetas aliquot nigras, quæ in hoc ſpecimine defuere. Notandum quoque eſt hanc avem, quamvis in genere adeo diverſo, in multis ſimilem eſſe Cuculo Perſæ Linnæi.



London, Published March 1st 1790, by S. P. Woodward & C.o No. 1 Bevaer Street.

THE

VIOLACEOUS PARTRIDGE.

Generic Character.

Eyes (generally) bounded, either above or on one ſide, by a granulated red ſkin.

Bill convex, ſhort, and ſtrong.

Specific Character, &c.

VIOLACEOUS-BLACKISH PARTRIDGE with a caſt of green, ferruginous-brown wings, and compreſſed, upright, ferruginous-red creſt.

LESSER-CROWNED PIGEON.

Lath. Syn. vol. 2. p. 622.

The numerous genus *Tetrao*, comprehending all the ſpecies of Grous, Partridge, Heathcock, &c. belongs to the order called *Gallinæ*, or ſuch as in their general characters and appearance make ſome approach to the common Cock, or Phaſianus Gallus of Linnæus. By far the major part of the Tetraones are exotic birds; and indeed moſt of them are extra-European birds. The preſent ſpecies, excluſive of its unuſual colour and peculiar elegance, is likewiſe remarkable for being one of the rareſt of the genus: it is alſo to be obſerved,

that from a kind of ambiguity in its appearance, it may ſeem to bear almoſt as much affinity to the genus Columba as to that of Tetrao; and indeed in a dried ſpecimen it is not eaſy to decide with abſolute preciſion to which genus it ſhould with the greateſt propriety be referred. The preſent figure was taken from the living bird, and exhibits with great fidelity its ſeveral characters. The eyelids are ſingularly formed; being regularly ſurrounded by a ſeries of riſing crenatures of the moſt vivid ſcarlet. The creſt alſo, which is of a ſtructure peculiarly delicate, adds greatly to the beauty of the bird. It is a native of Malacca, and ſome of the Eaſt-Indian iſlands. It ſhould be obſerved that in ſome ſpecimens, (perhaps males,) a certain number of long, black, riſing briſtles appear, ſeated at the baſe of the front: theſe in the preſent ſpecimen were wanting. It may be added, that notwithſtanding the difference of its genus, this bird bears a ſtriking affinity with the Cuculus Perſa of Linnæus.

PHALANGIUM CANCROÏDES.

Character Genericus.

Pedes octo.
Oculi verticis duo contigui, duo laterales.
Frons antennis pediformibus.
Abdomen rotundatum.

Lin. Syſt. Nat. p. 1028.

Character Specificus, &c.

PHALANGIUM abdomine obovato depreſſo, chelis lævibus: digitis piloſis.

Lin. Syſt. Nat. p. 1028.

CHELIFER abdomine lineis tranſverſis.

Geoffr. Paris. 2. p. 618.

SCORPIO MINIMUS.

Roeſel. 3. *Supl.* t. 64.

Animalculum hoc, phyſicis diu cognitum, diverſis temporibus ad diverſa genera retulerunt entomologi. Laborioſus celeberrimuſque Swammerdamus quaſi ſcorpionis ſpeciem deſcripſit. Idem fecit Roeſelius. Quanquam in editione duodecima Syſtematis Naturæ Linnæus in genere Phalangii poſuerit, in Fauna tamen Suecica ab eodem auctore conſcripta, inter acaros numeratur. Ingenioſus Degeer genus illi diſtinctum nomine Cheliferi

Cheliferi inſtituit. Fabricius denique in Syſtemate Entomologico iterum ad genus *Scorpii* amandavit, cui fortaſſe conjunctius eſt quam ulli alii. Magnitudine multum variat hoc inſectum: quæ enim in Anglia inveniuntur ſpecimina, multo minora ſunt quam in Sebæ, Swammerdami, et Roeſelii operibus depicta. Figura microſcopica in hac noſtra tabula accuratiſſime delineatur. Altera quæ disjungitur, caput et thoracem amplitudine admodum aucta oſtendunt, ut partes pectinatæ appareant; quæ quamvis ſitu diverſæ, formam tamen fere eandem habent ac in ſcorpiis. Figura 1. magnitudinem naturalem inſecti, ut in Anglia conſpicitur, monſtrat. Accuſat hoc inſectum Linnæus, ſed (ut mihi videtur,) injuria, cutim interdum penetrandi, papulamque magnitudine piſi, ſummo cum dolore excitandi. Circa parietes antiquos, ut plurimum invenitur, et interdum inter papyram, &c. conſpicitur. Inter inſecta quoque rariora non immerito numeratur.

1 - 8

London, Published Nov.r 1st 1791. by P. P. Nodder & Co. N.o 13 Berners Street.

THE

CANCROID PHALANGIUM.

Generic Character.

Eight *Legs.*
Two vertical and two lateral *Eyes.*
Antennæ reſembling legs.
Abdomen rounded.

Specific Character.

PHALANGIUM with obovate depreſſed abdomen, and ſmooth chelæ, ſlightly hairy at the tips.

This little inſect, which has long been known to naturaliſts, has been occaſionally referred to very different genera. The celebrated and laborious Swammerdam has deſcribed it as a ſpecies of Scorpion. In the works of Roeſel it is alſo regarded as a Scorpion. In the twelfth edition of the Syſtema Naturæ of Linnæus it is ranked under the genus Phalangium; while in the Fauna Suecica of the ſame author it is made an Acarus. The ingenious Degeer inſtitutes for it a ſeparate genus under the name of Chelifer. Laſtly Fabricius in his Syſtema Entomologiæ has remanded it to the genus Scorpio, to which perhaps it is more nearly allied than to any other. This inſect ſeems to vary conſiderably in ſize; thoſe which

which are found in our own country being much ſmaller than the repreſentations given by Swammerdam, Roeſel, and Seba. The microſcopical figure in the annexed plate is executed with the greateſt accuracy. The ſeparate figure repreſents the head and thorax very much magnified, in order to ſhew the pectinated parts, which though differing in ſituation, are nearly of the ſame form as in ſcorpions. Fig. 1. ſhews the natural ſize of the Engliſh ſpecimens. Linnæus accuſes it (I believe moſt unjuſtly,) of ſometimes getting under the ſkin, and raiſing a painful tumour. It is generally found on old walls, and ſometimes amongſt papers, &c., and is not a very common inſect.

AMPHISBÆNA ROSEA.

Var. A. Albæ.

CHARACTER GENERICUS.

Annuli trunci caudæque.

Lin. Syſt. Nat. p. 392.

CHARACTER SPECIFICUS.

AMPHISBÆNA annulis trunci circiter 223; caudæ 16.

Generis Amphiſbænæ perpaucæ quæ noſcuntur ſpecies a pleriſque ſerpentibus tantum differunt, ut eas primo viſu vermes potius quam angues putemus: ſquamis enim penitus carent, quarum in loco corpus cingunt annuli ſeu ſpatia circularia æque diſtantia, quæ ſtriis innumeris in longitudinem ductis decuſſantur. Caput in areas paucas dividitur, ſquamis majoribus in pleroque colubrino genere non abſimiles; caudaque non ſenſim attenuata, ſed vix a proportione cæteri corporis recedens, apiceque valde obtuſo ſeu rotundato. Orta eſt ab hac forma vulgaris opinio, Amphiſbænæ duo eſſe capita, unum ſcilicet in utraque extremitate: cum enim oculi adeo minuti ſint ut primo viſu non diſtinguantur, eo fit ut inter caput et oppoſitum extremum ambiguum ſit diſcrimen. Hujus generis ſpecies maxima eſt Amphiſbæna alba; ob colorem pallidulum, gil-

vum ſcilicet, ſeu fere album, ſic nominata. Colore tamen eſt interdum pulcherrime roſeo, qualis in tabula depingitur. Non raro pedali eſt longitudine. Americam incolit et plane innocuus eſt ſerpens.

London, Published Nov.r 1st 1831, by T.& W. Boys, 18, Brewer Street.

THE

ROSE-COLOURED AMPHISBÆNA.

Generic Character.

The whole animal marked by annuli or circular ſegments.

Specific Character.

AMPHISBÆNA with the annuli of the body amounting to about 223; of the tail 16.

The animals of the genus Amphiſbæna, which contains but very few ſpecies, differ ſo much from the major part of the ſerpent tribe, as to be almoſt liable, on a curſory view, to be miſtaken for worms rather than ſnakes; being totally deſtitute of ſcales; inſtead of which the whole animal is marked with equidiſtant annuli, or circular ſpaces ſurrounding the body, and decuſſated by an infinite number of longitudinal diviſions or ſtriæ. The head is marked with a few large diviſions or ſpaces analogous to the large ſcales in the major part of the genus Coluber; and the tail, inſtead of tapering gradually, is ſcarce diſtinguiſhable from the proportion of the reſt of the body; and is extremely obtuſe or rounded. This peculiarity of ſhape in the genus Amphiſbæna, gave riſe to the erroneous idea of the Amphiſbæna being furniſhed with a head at each extremity:

mity: for as the eyes are very ſmall, and at firſt view inconſpicuous, the head bears no ſtriking mark of diſtinction from the oppoſite extremity. The largeſt ſpecies of this genus, is the Amphiſbæna alba; ſo called from its colour; which is a very pale cream-colour, or nearly white: it ſometimes however occurs of a beautiful roſe-colour, in which ſtate it is repreſented on the annexed plate. The Amphiſbæna alba is frequently ſeen of at leaſt a foot in length. It is a native of America, and is perfectly harmleſs.

XIPHIAS PLATYPTERUS.

Character Genericus.

Caput maxilla ſuperiore terminatum roſtro enſiformi.

Corpus alepidotum.

Character Specificus, &c.

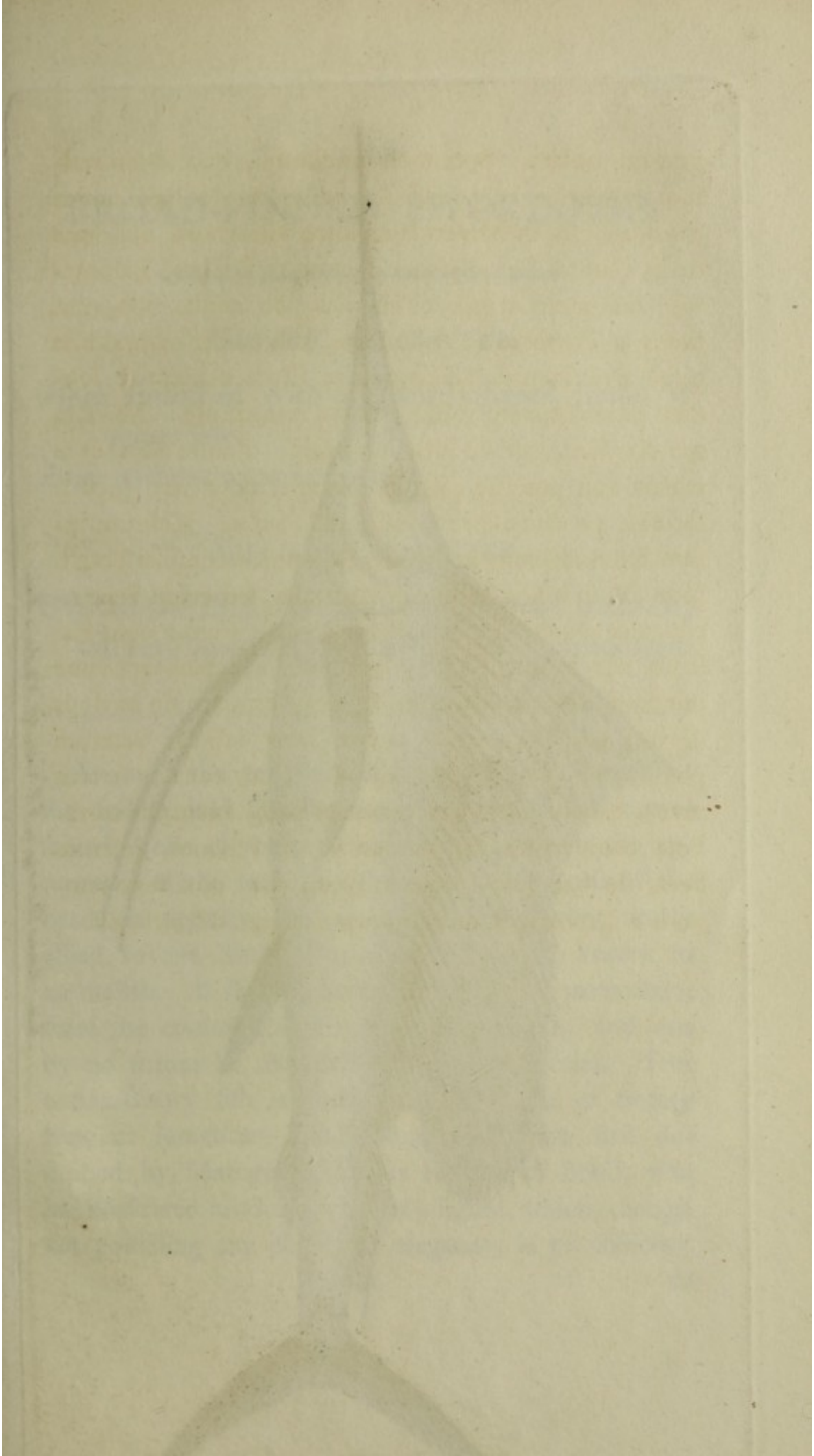
XIPHIAS pinna dorſi latiſſima, appendicibus pectoralibus acuminatis longiſſimis.

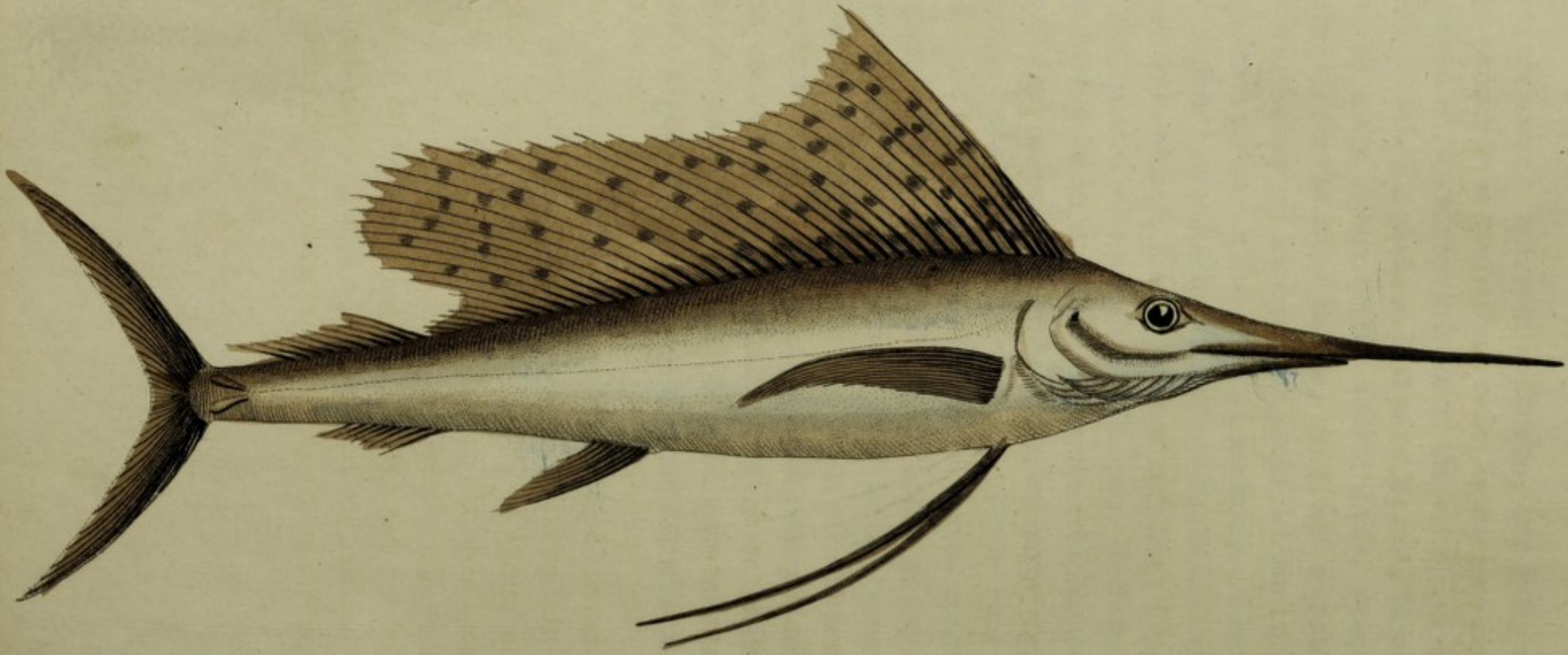
GUEBUCU.

Marcgr. bras. l. 4. c. 15. p. 171.

Monſtrum fortaſſe nullum hoc inſignius generat oceanus vel Indicus vel Pacificus. Si roſtrum ſpectemus peracutum et velut enſiforme, Xiphiæ communi phyſicis optime cognito affine putemus: cum tamen ab illo variis notis diſcrepet, ſpeciem omnino diverſam habeamus neceſſe eſt. Longitudo illi eſt viginti pedum; interdum multo major. Piſcem hunc primus deſcripſit Marcgravius in hiſtoria ſua Braſilienſi, qui etiam figuram addidit, certe non elegantem, quæ tamen ipſum animal ſatis accurate exprimit. Color generalis eſt ſub-cæruleo-argenteus, dorſo ſuperiori, capite, caudaque exceptis, quæ inſigniter fuſca ſunt. Pinna dorſi magna fuſco-palleſcit, maculis rotundatis plurimis ni-

gerrimis notata. Specimen ipſiſſimum, quo forſan nullum pulchrius et perfectius, unde figura hæc noſtra delineata eſt, in Muſeo Britannico aſſervatur, cui dono dedit illuſtris ille phyſicus Josephus Banks, Baronettus; ad quem tribus circiter abhinc annis, venerunt literæ a Præfecto navis Indicæ, robur fere incredibile piſcis deſcribentes, afferenteſque illum denſam et ſolidam navis carinam roſtro penitus transfixiſſe. Mortem ipſi Xiphiæ conſcivit ictus violentia. Fauſte admodum evenit non potuiſſe piſcem roſtrum reducere; quod ſi feciſſet, perdita eſſet navis immiſſa aqua. Roſtrum ipſum ligno infixum in Muſeo Britannico conſpici poteſt. Non ſolum maria Indica et Auſtralia, ſed etiam Septentrionalia incolit Xiphias Platypterus. Fertur eum balænis eſſe inimiciſſimum, cumque iis ſæpius acerrime pugnare. Notatu dignum eſt loqui Plinium de navibus Xiphia perfoſſis; quod tamen inter fabulas veterum phyſicorum ſemper habitum eſt. Cum vero ita ſe rem revera habere intra pancos annos variis exemplis certiſſime compertum ſit, probabile eſt Plinium, inſcium licet, de hac ipſa ſpecie locutum eſſe, quæ tunc temporis a Xiphia communi minus accurate diſtincta eſt.





London, Published Dec.1st 1799 by F.P. Nodder & Co. N.o 8 Brewer Street.

THE

BROAD-FINNED SWORD-FISH.

Generic Character.

Head furniſhed with a ſword-ſhaped ſnout or upper jaw.

Body without apparent ſcales.

Specific Character.

SWORD-FISH with extremely broad back-fin, and very long ſharp-pointed thoracic appendages.

Amongſt the monſters of the deep which inhabit the Indian and Pacific oceans, the fiſh here repreſented is one of the moſt remarkable. From the appearance of the long and ſharp-pointed proceſs of the head, it appears, on a curſory view, very nearly allied to the Sword-fiſh, already ſo well known to naturaliſts. It differs, however, in ſeveral particulars, from the common or European Sword-fiſh, and can by no means be regarded as the ſame ſpecies. This extraordinary fiſh is found of the length of twenty feet, or ſometimes much longer. It was firſt deſcribed by Marcgrave, in his Hiſtory of Braſil, who has illuſtrated his deſcription by a figure, which, though not poſſeſſing any degree of elegance, is yet ſufficient

to aſcertain the animal. The general colour of this fiſh is a ſilvery blueiſh white, except on the upper part of the back, the head, and the tail, which are of a deep brown. The back-fin is of a pale brown, finely ſpotted with roundiſh marks of deep black. The ſkin is ſmooth, and without any appearance of ſcales. The ſpecimen from which the preſent figure was taken, is an uncommonly fine one: perhaps the moſt complete and perfect ever ſeen in Europe. It is now in the Britiſh Muſeum, to which collection it was preſented by Sir JOSEPH BANKS, Bart. Preſident of the Royal Society. About three years ago a letter was ſent to the Preſident, from the captain of an Eaſt-Indiaman, accompanied by an account of an aſtoniſhing inſtance of the powerful ſtrength which this fiſh occaſionally exerts: the bottom of the ſaid ſhip having been pierced through by a fiſh of this ſpecies, in ſuch a manner that the ſword or ſnout was completely imbedded or driven through, its whole length, and the fiſh killed by the violence of the effort. A moſt ſingularly fortunate circumſtance for the preſervation of the veſſel! which, had the fiſh been enabled to have withdrawn its ſnout, muſt inevitably have foundered in conſequence of the leak. The wood, together with the ſword imbedded in it, is now in the Britiſh Muſeum. This fiſh is found not only in the Braſilian and Eaſt-Indian ſeas, but alſo in the Northern ocean. It is ſaid to be a great enemy to whales, with which it is reported to have frequent combats! It is remarkable that Pliny mentions the circumſtance of the Sword-fiſh being able to transfix veſſels; which has generally been regarded as one of thoſe exaggerations

ſo

ſo frequent in the works of the ancient naturaliſts; but as the preſent fiſh is well known to poſſeſs this power, (ſeveral other equally-well authenticated accounts having been received within theſe few years,) it is ſurely no improbable ſuppoſition, that Pliny, though not conſcious of the difference, in reality ſpoke of this very ſpecies, which at that time was doubtleſs confounded with the common Sword-fiſh.

LACERTA UNISTRIATA.

Character Genericus.

Corpus tetrapodum, caudatum, nudum.

Character Specificus, &c.

LACERTA FUSCA, ſubtus pallidior, linea dorſuali albida, ſuper caput furcata, digitis unguiculatis, ſubtus, lamellatis.

LACERTA VITTATA ?

Gmel. Syſt. Nat. 1. p. 1067.

Rariſſima eſt hæc lacerta, nec certum eſt annon adhuc unquam deſcripta ſit. Inter ſpecies Linnæanas fruſtra requiritur, nec non in numeroſo horum animalium agmine quæ ſuppeditat Theſaurus Sebæ. Quantum colligere poſſum a ſpeciminibus quæ egomet inſpexi, longa eſt, ut plurimum, ſex uncias, interdum ad novem pertingens. Color eſt languide fuſco-flaveſcens, ochræ ſimilis, ſubtus pallidior. Cauda gilva notis longitudinalibus fuſcis variatur. Per dorſi longitudinem late diſcurrit linea inſignis albo-gilva, quæ ab utroque latere capitis furcæ inſtar, divaricat ; extremitatibus oculis tenus protenſis. Cutis tuberculis, præſertim verſus caudam, levitur exaſperatur, quæ minutiſſima cum ſint, non niſi attento oculo conſpici queant. Simillima

eſt

eſt illi hæc ſpecies quam Linnæus nomine *Gecko* diſtinxit. In figura noſtra exhibetur animal magnitudine ipſius ſpeciminis; ſed in figura 1. augetur paululum pars inferior pedis, ut tranſverſæ lamellæ clarius diſtinctiuſque inſpiciantur.

London, Published Decr 1st 1790, by F.P. Nodder Esqr. No. Berners Street.

THE

SINGLE-STRIPED LIZARD.

Generic Character.

Body four-footed, tailed, naked.

Specific Character.

BROWN LIZARD, paler beneath, with a white dorſal line forked over the head, and unguiculated feet, lamellated beneath.

This ſpecies of Lacerta is extremely rare, and it may be doubted whether it has yet been deſcribed. It certainly is not a Linnæan ſpecies, nor does it occur in the numerous collection of Seba. The ſize of the ſpecimens which I have examined is rather ſmall, viz. from about ſix to nine inches in length. The colour is a ſoft yellowiſh brown, paler beneath: the tail is cream-coloured, varied with longitudinal marks of brown, and on the back of the animal is a very remarkable white, or rather cream-coloured broad line, which divides on each ſide the top of the head in the manner of a fork, the extremities of each diviſion juſt reaching to the eyes. The ſkin of this Lizard, when cloſely examined, is ſlightly exaſperated, eſpecially towards the tail, with minute tubercles, but they are ſo extremely ſmall that they are not perceptible without a cloſe examination. The feet are tranſverſely lamellated beneath.

The

The ſpecies to which this animal ſeems to bear the greateſt affinity is the Lacerta Gecko of Linnæus. The figure here given repreſents it of its natural ſize; and at fig. 1. is repreſented the under part of one of the feet, rather larger than nature, in order to ſhew with greater diſtinctneſs the tranſverſe lamellæ with which it is furniſhed.

PSITTACUS CONCINNUS.

Character Genericus.

Roſtrum aduncum: mandibula ſuperiore mobili, cera inſtructa.
Nares in roſtri baſi.
Lingua carnoſa, obtuſa, integra.
Pedes ſcanſorii.

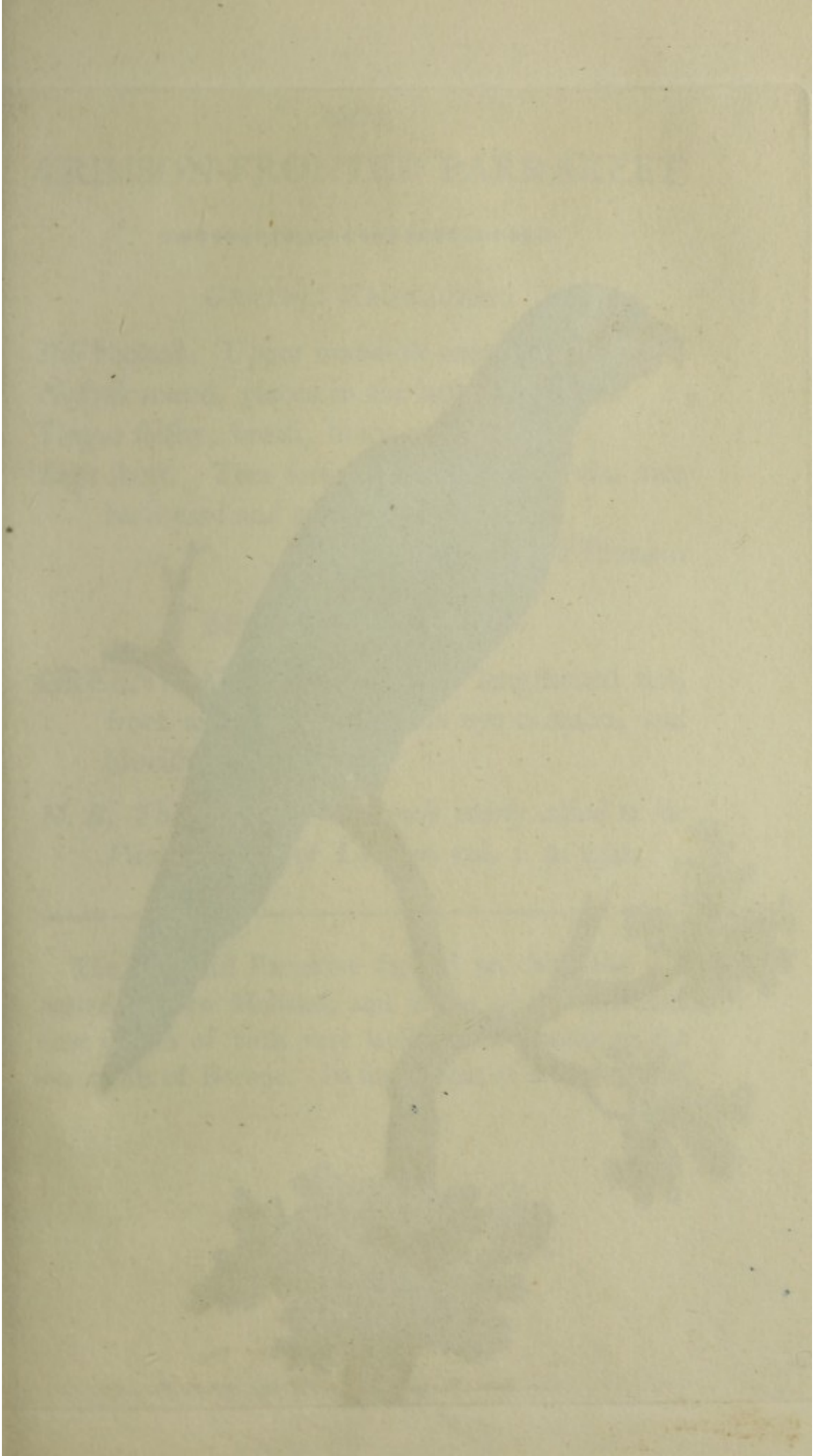
Lin. Syſt. Nat. p. 139.

Character Specificus.

PSITTACUS ſubmacrourus viridis, fronte maculaque poſtoculari coccineis, vertice cæruleſcente.

Valde affinis P. pacifico. Lath. Syn. 1. p. 252.

Novæ Hollandiæ eſt incola perpulchra hæc Pſittaci ſpecies, et inter alias plurimas aves phyſicis Europæis nuperrime innotuit. Magnitudo eſt quaſi parvi Turturis.



J.N

London Published Dec.r 1.st 1791 by F.P. Nodder & Co.° N.° 18 Brewer Street.

THE

CRIMSON-FRONTED PARRAKEET

Generic Character.

Bill hooked. Upper mandible moveable.
Noſtrils round, placed in the baſe of the bill.
Tongue fleſhy, broad, blunt at the end.
Legs ſhort. Toes formed for climbing, viz. two backward and two forward.

Linnæus and *Pennant.*

Specific Character.

GREEN PARRAKEET with lengthened tail, front and ſpot behind the eye crimſon, and blueiſh crown.

N. B. This ſpecies is extremely nearly allied to the Pacific Parrot of Latham. vol. 1. p. 252.

The beautiful Parrakeet figured on this plate is a native of New Holland, and is one of the numerous new ſpecies of birds very lately made known to the naturaliſts of Europe. Its ſize is that of a ſmall turtle.

PLATALEA AJAJA.

Character Genericus.

Roſtrum planiuſculum: apice dilatato, orbiculato, plano.

Pedes tetradactyli, ſemipalmati.

Lin. Syſt. Nat. p. 231.

Character Specificus, &c.

PLATALEA corpore ſanguineo.

Lin. Syſt. Nat. p. 231.

PLATALEA roſea.

Briſſ. Av. 5. p. 356. t. 30.

PLATALEA braſilienſis AJAJA dicta.

Marcgr. bras. 204.

Plataleæ leucorodiæ Linnæi, ſeu communi, corporis forma ſimillima eſt eximia hæc avis; coloribus autem longe diſcrepat: univerſa enim, exceptis roſtro pedibuſque, pulcherrime roſea eſt, alarum parte ſuperiori dorſoque phœniceis. Fertur autem ætate grandior pleneque et perfecte plumata, totu eſſe penitus læte phœnicea, vel etiam coccinea; collumque inferius torque ſeu cingulo nigro ornari. Roſtrum fuſco-pallet. Crura fere nigricant. Vivit eodem modo quo Platalea communis,

munis, ſeu leucorodia, littora nempe locaque aquoſa quærens, animaliaque minora, ranas ſcilicet, vermes, et alia ejuſmodi depaſcens. Americam incolit Auſtralem.

THE

ROSE-COLOURED SPOON-BILL.

Generic Character.

Bill flattiſh, with dilated, orbicular, flat tip.
Feet 4-toed, ſemi-palmated.

Specific Character, &c.

SPOONBILL with crimſon plumage.

SPATULE couleur de roſe.

Buff. pl. enl. n. 165.

ROSEATE SPOONBILL.

Lath. Syn. 3. p. 16.

This elegant bird, which is a native of South America, in its general ſhape bears a near reſemblance to the Platalea leucorodia of Linnæus, or common Spoonbill, but differs widely in color; the whole bird, except the beak and legs, being generally of a fine full roſe-colour, which on the upper part of the wings and the back, deepens almoſt into crimſon. It is ſaid however, that the bird, when advanced in age, and in full perfection of plumage, is entirely of a vivid crimſon, or even ſcarlet, with the addition of a black circle or collar round the lower part of the neck. The bill is of a

pale brown: the legs blackiſh. In its manner of life it reſembles the European or common Spoonbill; frequenting the ſhores and watery places, and feeding on the ſmaller aquatic animals, as frogs, worms, &c.

MONOCULUS POLYPHEMUS.

Character Genericus.

Pedes natatorii.
Corpus cruſta tectum.
Oculi (pleriſque) approximati, teſtæ innati.

Character Specificus, &c.

MONOCULUS teſta antica convexa lunata, cauda triquetro-ſubulata.

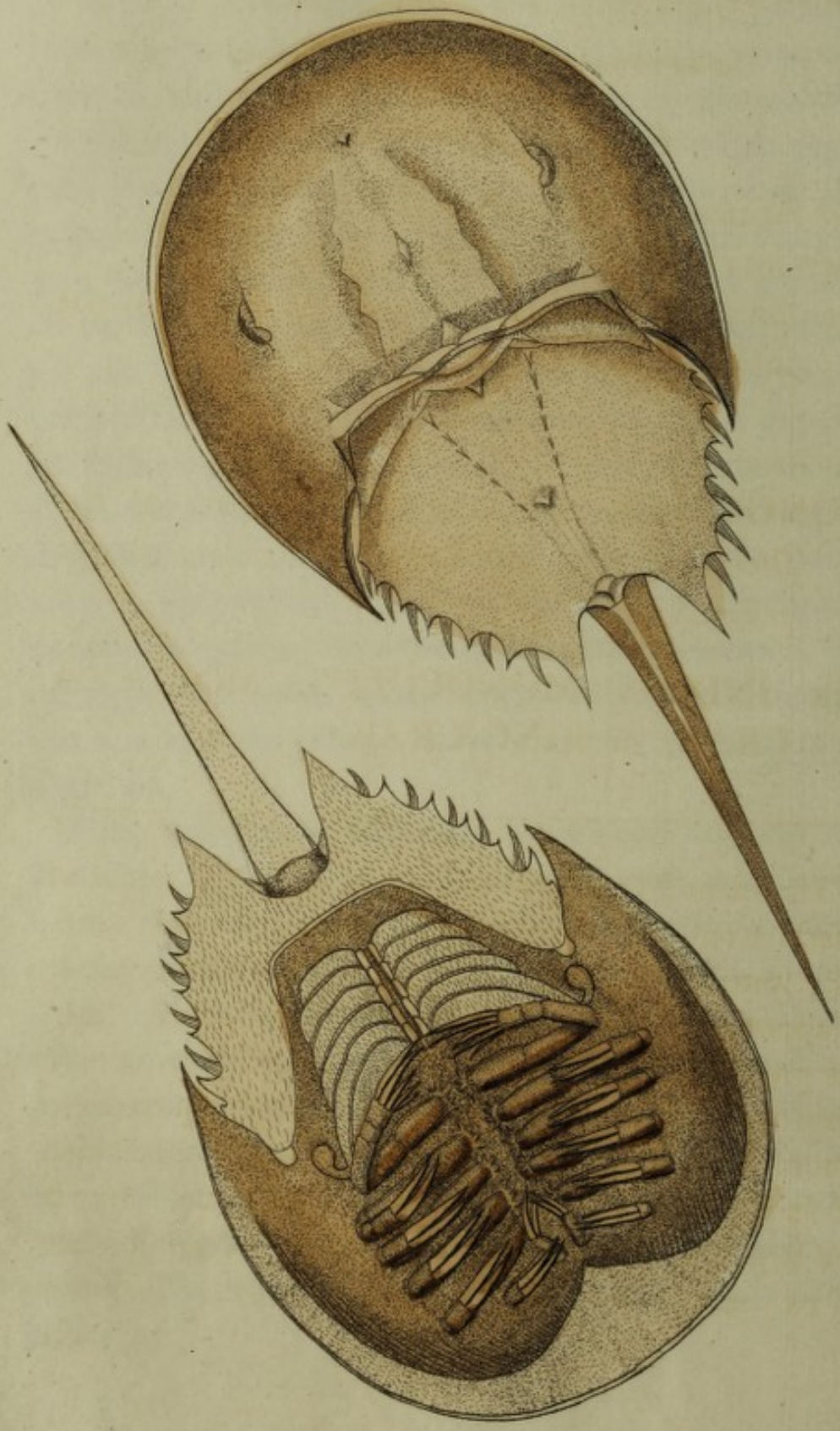
MONOCULUS teſta convexa ſutura lunata: poſtica dentata, cauda ſubulata longiſſima.
Lin. Syſt. Nat. p. 1057.

Cluſ. exot. l. 6. c. 14. p. 128.
Bont. jav. l. 5. c. 31.

Monoculum dicitur hoc genus, quod oculi, ut plurimum, ſibi invicem adeo appropinquant, ut primo intuitu unicus eſſe oculus videantur. Aliquarum tamen ſpecierum oculi, et præſertim ejus de qua jam agitur, ſunt alter ab altero valde remoti. Animal quod repræſentat tabula, omnium proculdubio eſt maximum, quotquot inter inſecta numerare hodiernis viſum eſt phyſicis: eſt enim illi corpus, extra caudam, interdum bipedale in longitudinem. Linnæus dicit " inſectorum omnium facile

facile maximum." Oceanum Indicum incolit, et, (ut fertur) bina plerumque ſimul conſpiciuntur, ſcilicet mas et fæmina prope natantes. Pleræque hujus generis ſpecies parvula ſunt inſecta in aquis dulcibus viventia, quorum multa adeo ſunt minuta, ut inter animalcula microſcopica numerentur. Qui intimas et minus cognitas Naturæ partes ſcrutari ſolent, et innumera animalculorum agmina quibus aquæ ſcatent, attentius examinare, ii ſane ſumma cum voluptate conſpiciant neceſſe eſt varias hujus generis ſpecies, quæ ſine ope microſcopii vix videndæ, characteribus tamen genericis plane demonſtrant certiſſimum eſſe illis cum ingenti et gigantea ſpecie de qua jam loquimur, cognationis vinculum. Hæc animalcula menſibus æſtivis in omnibus fere aquis ſtagnantibus facillime reperiuntur; eorum etiam nonnulla a ſcriptoribus microſcopicis, Bakero præcipue, non fane eleganter, ſatis tamen accurate delineantur, et exempla ſunt miræ quoad magnitudinem differentiæ quam in ejuſdem generis animalibus non poſſumus non obſervare.

Huic deſcriptioni Monoculi Polyphemi non abs re ſit addere, quod tunica oculi externa, quæ in aliis inſectis e convexitatibus innumeris baſi hexagona incluſis conſtat, in hoc, atteſtante Domino André (Phil. Tranſ. t. 72.) e corpuſculis plurimis conicis ſit conflata. Poſſit etiam obſervari quod oculi multarum parvularum Monoculi ſpecierum, ab oculis aliorum inſectorum ſtructura et aſpectu differunt, et velut e pluribus ocellis ſeu globulis tunica communi contentis, componi videntur. Notandum præterea eſt genus Monoculi generi Cancri (quod aſtacos omnes et cancros includit) valde eſſe affine.



J. N

London. Published Jan.y 1.st 1792 by T. P. Nodder & Co. No.18. Bower Street.

THE

INDIAN MONOCULUS.

GENERIC CHARACTER.

Feet formed for ſwimming.

Body covered by a cruſtaceous ſhell.

Eyes (in moſt ſpecies) approximated, fixed in the ſhell.

SPECIFIC CHARACTER, &c.

MONOCULUS with the anterior part of the ſhell lunated, and long, triangular, ſharp-pointed tail.

The INDIAN MONOCULUS, MOLUCCA CRAB, or KING-CRAB.

The name Monoculus was beſtowed on this genus of inſects from the circumſtance of the eyes being generally ſeated ſo near each other, as, upon a curſory view, to appear as if ſingle. In ſome ſpecies however, (as in the preſent,) it happens that they are really very remote from each other. Of all the animals which modern naturaliſts have agreed to diſtinguiſh by the appellation of Inſects, the creature figured on this plate is by far the largeſt yet known; ſpecimens being ſometimes ſeen of two feet in length, excluſive of the tail. Linnæus

calls

calls it " inſectorum omnium facile maximum." It is a native of the Indian ocean, and is ſaid to be generally found in pairs, or male and female ſwimming together. Moſt of the ſpecies of Monoculus are ſmall freſh-water inſects, and ſome of them even belong to the tribe of microſcopic animalcules. To thoſe who are accuſtomed to penetrate into the leſs conſpicuous provinces of Nature, and to inveſtigate the legions of animated beings with which the waters in particular are peopled, it muſt afford a pleaſing entertainment to view ſeveral ſpecies of this genus, which though ſcarce perceptible without the aſſiſtance of the microſcope, yet with reſpect to their generic characters, bear the moſt ſtriking reſemblance to the gigantic ſpecies juſt deſcribed. Theſe minute Monoculi are very common animalcules, and may be found in the ſummer months in almoſt all ſtagnant waters. Some of them are figured, (though not very elegantly, yet with ſufficient exactneſs,) in Baker's works on the microſcope, and may ſerve as curious examples of the wonderful diſparity of ſize which ſometimes takes place in animals of the ſame genus.

To what has been ſaid of the Monoculus Polyphemus, I ſhould not omit to add, that the eyes in this animal, according to the obſervations of Mr. André, (Phil. Tranſ. vol. 72.) conſiſt of a great number of very ſmall cones, in which reſpect they differ from thoſe of moſt other inſects, in which the outward coat of the eye is compoſed of innumerable ſlight convexities, each bounded by an hexagonal outline. It may be proper to add, that the eyes of moſt of the ſmaller ſpecies of

Monoculi

Monoculi differ in their ſtructure and appearance from thoſe of the generality of inſects, and ſeem compoſed of a number of ſmaller eyes or globular parts united by the ſame external tunic. It may alſo be obſerved that the genus Monoculus is very nearly allied to that of Cancer, which contains the Crab and Lobſter tribe.

PAPILIO ULYSSES.

Character Genericus.

Antennæ apicem verſus craſſiores, ſæpius clavato capitatæ.

Alæ (ſedentis) erectæ ſurſumque conniventes, (volatu diurno.)

Character Specificus.

PAPILIO alis caudatis nigris, diſco cæruleo radiante; poſticis ſubtus ocellis ſeptem.

Lin. Syſt. Nat. p. 748.

Fabr. ſpec. inſ. 2. p. 13. *Eq. Achiv.*

Clerk. ic. t. 23.

Cram. pap. 11. t. 121.

Inſolitæ pulchritudinis eſt Ulyſſes. Alæ ſunt nigerrimæ et quaſi holoſericæ; area autem ſeu pars media plaga magna amæniſſime cærulea impletur, cum ad oras pertigerit radiata. Exemplo eſt hoc inſectum papilionum caudatorum, in quibus ſcilicet alæ poſticæ in proceſſus ſeu quaſi caudas excurrunt. Aſiæ eſt incola Ulyſſes. In quibuſdam ſpeciminibus color alarum fuſcus eſt potius quam niger. Superficies inferior nigra eſt, prope apices rufo tincta; alarumque poſticarum oræ ſerie macularum ocellatarum cæruleo-rufeſcentium, albo nigroque fimbriatarum, decorantur.

J N

London, Published Jan.y 1st 1790, by B. P. Nodder &c.o N.o 64 Bruton Street.

ULYSSES,

OR

THE RADIATED BUTTERFLY.

Generic Character.

Antennæ or Horns thickening towards their extremity, and generally terminating in a knob, or club-ſhaped tip.

Wings (when ſitting) erect, and meeting upwards. (*Flight* diurnal.)

Specific Character.

BUTTERFLY with tailed black wings, the middle-part blue and radiated, with 7 ocellated ſpots on the under ſurface of the lower wings.

This is an inſect of uncommon beauty. The wings are of the deepeſt velvet black, while the area or middle part of each is poſſeſſed by a very large bed of the moſt exalted blue that can poſſibly be conceived, and which terminates in a radiated manner round the edges. This inſect alſo affords an example of the caudated papilios, in which the lower wings are furniſhed with a pair of appendages reſembling tails. It is an Aſiatic inſect. The ground-colour in ſome ſpecimens is rather brown than black. The under ſurface is black, tinged with

with rufous near the tips, and the edges of the lower pair are ornamented by a ſeries of large ocellated ſpots, of a reddiſh colour tinged with blue, and edged with black and white.

PSITTACUS EXIMIUS.

Character Genericus.

Roſtrum aduncum: mandibula ſuperiore mobili, cera inſtructa.
Nares in roſtri baſi.
Lingua carnoſa, obtuſa, integra.
Pedes ſcanſorii.

Lin. Syſt. Nat. p. 139.

Character Specificus.

PSITTACUS macrourus varius, capite gula pectore criſſoque coccineis, dorſo nigro flavo-viridi undulato, alis caudaque cæruleis.

* *Roſtrum pallidum. Pedes nigricantes. Rectrices duæ intermediæ virides.*

A Nova Hollandia nuperrime illata eſt hæc avis, et jam primo depingitur. De ſplendido ejus ornatu ſpeciatim differere ſupervacaneum foret, cum figura varios colores exquiſite oſtendit. Magnitudine et forma generali pſittaco ſuperbo ſeu Pennantii ſimillima eſt.

London Published Feb.7th 1791. by F.P. Nodder & Co. No.8 Brewer Street.

THE

NONPARÉIL PARROT.

Generic Character.

Bill hooked. Upper mandible moveable.
Noſtrils roundiſh, placed in the baſe of the bill.
Tongue fleſhy, broad, blunt at the end.
Legs ſhort. Toes formed for climbing, viz. two forward and two backward.

Specific Character.

LONG-TAILED VARIEGATED PARROT, with head throat breaſt and vent crimſon, back black undulated with yellow-green, blue wings and tail.

The two middle tail-feathers are green

This bird is a ſpecies hitherto undeſcribed; having been very lately brought from New Holland. To particularize the richneſs of its robe would be unneceſſary; the figure accurately ſhewing all its variegations of colour. In ſize and general form it is ſtrongly allied to the Pennantian Parrot.

COLUBER NASICORNIS.

Character Genericus.

Scuta abdominalia.
Squamæ ſubcaudales.

Lin. Syſt. Nat. p. 275.

Character Specificus.

COLUBER ſubolivaceo-ferrugineus, nigro irroratus, maculis dorſalibus pallidis nigro circumſcriptis, faſcia laterali undulata pallida.

Abdomen pallide ochraceum fuliginoſo-maculatum.
Scuta abdom: 127.
Squam: ſubcaud: circiter 32.

Inter ſpecies hucuſque ignotas numerandus eſt Coluber naſicornis. E numero eſt dirorum iſtorum ſerpentum quorum morſus in calidioribus mundi partibus, mortem inferre ſolet celerem et luctuoſam. Si totum fere genus ſerpentinum horreſcunt plurimi homines in hujuſmodi inveſtigationibus minus verſati, quanto majori metu putemus illos percuti, qui in vivum hunc colubrum inopinato inciderint; quem totum horrificum deformat vultus præter modum torvus et atrox. Cornua enim gerit duo magna et acuminata, (non, qualia Ceraſtis,) ſupra oculos; ſed ſuper naſum ſeu ſummum maxillæ

maxillæ ſuperioris ſita. Erecta propemodum ſunt, paulum tamen retro flectuntur, extrinſecuſque ab utroque latere. Non omnino cornea ſunt, ſed quodammodo flexibilia, forma fere triangulari ſive triquetra. Longa ſunt circiter dimidium unciæ, et a baſi utraque exſtat ſquama dura ejuſdem fere formæ cum ipſis cornubus; quo fit, ut duo quaſi minora cornua exurgere videantur. Os illi, ut aliis venenatis ſerpentibus, telis tubulatis duobus utrinque munitur, quæ, cum maxima ſint, vulnus ſæviſſimum poſſunt infligere. Horum minora ſunt poſtica. Longus eſt Coluber naſicornis uncias circiter triginta quinque. Coloris eſt fuſco-flaveſcentis, maculis parvulis nigricantibus creberrime irrorati. Per totam dorſi longitudinem, magnis intervallis, decurrit ſeries macularum fuſco-flaveſcentium, majoribus nigris immerſarum; protenditurque per utraque latera a capite ad caudam faſcia anguſta, ochracea, acute flexuoſa, cujus pars inferior ſeu ventri proxima, nigrior multo eſt quam reliquum corpus. Venter obſcure ochraceus eſt, ſeu cinereo-flavus, labeculis variis nigricantibus notatus; ſparguntur inſuper per totum corpus huc, illuc, maculæ plurimæ diverſæ magnitudinis. Cauda tenuis breviſque pro corpore. Squamæ aſperæ duræque et infigniter carinatæ. Caput ſquamis parvis tegitur, parſque ſuperior maculam habet permagnam fuſcam, utrinque in proceſſus acuminatos excurrentem. Latera capitis plumbeo, ſeu cinereo colore cinguntur. Caput ipſum latum et depreſſum, genæque fuſco et flavicante variæ.

Captum fuiſſe putem hunc ſerpentem cum jam exuvias depoſiturus eſſet; ſquamæ quippe exteriores a ſubja-

ſubjacentibus facile ſeparantur, quæ, hoc facto, lucidiores videntur; immo circa ventrem fere albeſcunt, maculis nigrioribus notatæ. Colubrum naſicornem accepit Dominus EDVARDUS JENKINS in oppido vulgo dicto *Charles-Town* in Carolina Auſtrali degens, a navarcha e Guinea profecto, illoque nuperrime Muſeum Britannicum ditavit. Notum eſſe eum creditur in interiori Africa.

London Published Feb.y 1.st 1799 by F. P. Nodder bookseller No.28 Bowver Street

THE HORN-NOSED SNAKE.

Generic Character.

Tranſverſe *Lamellæ* under the abdomen.
Broad alternate *Scales* under the tail.

Specific Character.

OLIVE-BROWN SNAKE, freckled with blackiſh, with a row of pale dorſal ſpots ſurrounded by black, and a flexuous pale faſcia on the ſides.

The abdominal plates are 127. *The ſubcaudal ſcales about* 32.
The belly is of a pale olive-colour with duſky ſpots.

The ſnake here repreſented muſt be conſidered as a ſpecies hitherto unknown, and adds to the number of thoſe malignant reptiles whoſe bite, in the hotter regions of the globe, proves the dreadful forerunner of a ſpeedy and painful death. If at firſt glance of moſt of the ſerpent-tribe an involuntary ſort of horror and alarm is ſo often felt by thoſe who are unuſed to the examination of theſe animals, how much greater dread muſt the unexpected view of the ſpecies here exhibited be ſuppoſed to inflict? when to the general form of the creature

ture is ſuperadded the peculiar fierceneſs and forbidding torvity with which nature has marked its countenance; diſtinguiſhed by the very uncommon appearance of two large and ſharp-pointed horns, ſituated, (not as in the Ceraſtes, above the eyes,) but on the top of the noſe, or anterior part of the upper jaw. They ſtand nearly upright, but incline ſlightly backwards and and a little outwards on each ſide, and are of a ſubſtance not abſolutely horny, but in ſome degree flexible. Their ſhape is ſomewhat triangular or three-ſided. They are about half an inch in length, and at the fore-part of the baſe of each ſtands an upright ſtrong ſcale, of nearly the ſame ſhape with the horn itſelf, and thus giving the appearance of a much ſmaller pair of horns. The mouth is furniſhed with extremely large and long fangs or tubular teeth, ſituated as in other poiſonous ſerpents, and capable of inflicting the moſt ſevere wounds: two of theſe fangs appear on each ſide of the mouth, of which the hinder pair are ſmaller than the others. The length of this animal is about thirty-five inches. Its colour is a yellowiſh olive-brown, very thickly ſprinkled all over with minute blackiſh ſpecks. Along the whole length of the back is placed, at conſiderable diſtances, a ſeries of yellowiſh-brown ſpots or marks, each of which is imbedded in a patch of black; and on each ſide the body, from head to tail, runs an acutely flexuous or zig-zag line or narrow band, of an ochre-colour. This band is bounded beneath by a much deeper or blacker ſhade than on the reſt of the body. The belly is of a dull ochre-colour or cinereous yellow, freckled with ſpots and markings

markings of blackiſh. Beſides theſe there is a number of black ſpots of different ſizes here and there diſperſed over the whole ſnake. The tail is ſomewhat thin and ſhort in proportion to the body. The ſcales of this ſnake are harſh and ſtiff, and are very ſtrongly carinated. The head is covered with ſmall ſcales, and is on its upper part marked by a very large longitudinal patch of brown, running out into pointed proceſſes at the ſides, and bounded by a ſpace of dull lead-colour or cinereous. The ſhape of the head is broad and flattened: the cheeks are varied with blackiſh and yellow. It ſeems to have been taken at a period not far diſtant from that of caſting its ſkin; as the exterior ſcales ſeparate eaſily from the ſubjacent ones, which then appear of a clearer and lighter colour than before, and the yellowiſh variegations on the ſides and belly approach to a whitiſh colour, with darkiſh ſpots and marks. This ſnake is ſuppoſed to be a native of the interior parts of Africa, and was obtained from the maſter of a Guinea veſſel by the Rev. EDWARD JENKINS of Charles-Town, South Carolina, by whom it was lately preſented to the Britiſh Muſeum.

MANTIS STRUMARIA.

Character Genericus.

Caput nutans, maxilloſum, palpis inſtructum.
Antennæ (pleriſque) ſetaceæ.
Alæ quatuor, membranaceæ, (pleriſque) convolutæ; inferiores plicatæ.
Pedes antici compreſſi, ſubtus ſerrato-denticulati, armati ungue ſolitario et digito ſetaceo laterali articulato. *Poſtici* quatuor, læves, greſſorii.
Thorax linearis, elongatus, anguſtatus.

Lin. Syſt. Nat. p. 689.

Character Specificus, &c.

MANTIS thorace utrinque membranaceo-dilatato obcordato.

Lin. Syſt. Nat. p. 691.

Roeſ. inſ. 2. *gryll.* t. 3.
Mer. Sur. 27. t. 27.

Cum anteactis temporibus, fabulis et erroribus immerſa jaceret veritas, non defuere qui hujuſmodi inſecta folia eſſe quaſi animata firmiter credididerint. Notabilis admodum eſt thorax permagnus et dilatatus. Alæ inferiores

feriores pellucidæ ſunt, leviſſimo tantum virore tinctæ. Americam Auſtralem incolit ſingulare hoc animalculum.

Fig. 1, Pupa, ſeu inſectum adhuc imperfectum.
Fig. 2, Imago, ſeu inſectum declaratum.

London, Published Feb.y 1st 1791 by F.P. Nodder & Co. No.18 Brewer Street.

THE

BROAD-BREASTED MANTIS.

Generic Character.

Head unſteady: Mouth armed with jaws, and furniſhed with palpi.

Antennæ ſetaceous, (ſome few ſpecies excepted.)

Wings four, membranaceous, in moſt ſpecies convoluted: the lower ones (generally) plicated.

Feet anterior compreſſed, ſerrated beneath, armed with a lateral ſolitary claw and jointed proceſs; *poſterior* four, ſmooth, formed for walking.

Thorax (in moſt ſpecies) elongated and narrowed.

Specific Character, &c.

MANTIS with the ſides of the thorax nearly membranaceous and greatly dilated.

Mer. Sur. t. 27.

Roeſ. 2. *gryll.* t. 3.

The Mantis Strumaria is amongſt the number of thoſe inſects which in leſs enlightened times have been conſidered as a kind of animated leaves. The very large, dilated thorax in this inſect is highly remarkable.

The

The lower wings are of a tranſparent appearance, and have but a ſlight caſt of green. This curious animal is a native of South America.

Fig. 1, The inſect in its pupa ſtate.
Fig. 2, The inſect in its complete ſtate.

PSITTACUS PULCHELLUS.

Character Genericus.

Roſtrum aduncum: mandibula ſuperiore mobili, cera inſtructa.
Nares in roſtri baſi.
Lingua carnoſa, obtuſa, integra.
Pedes ſcanſorii.

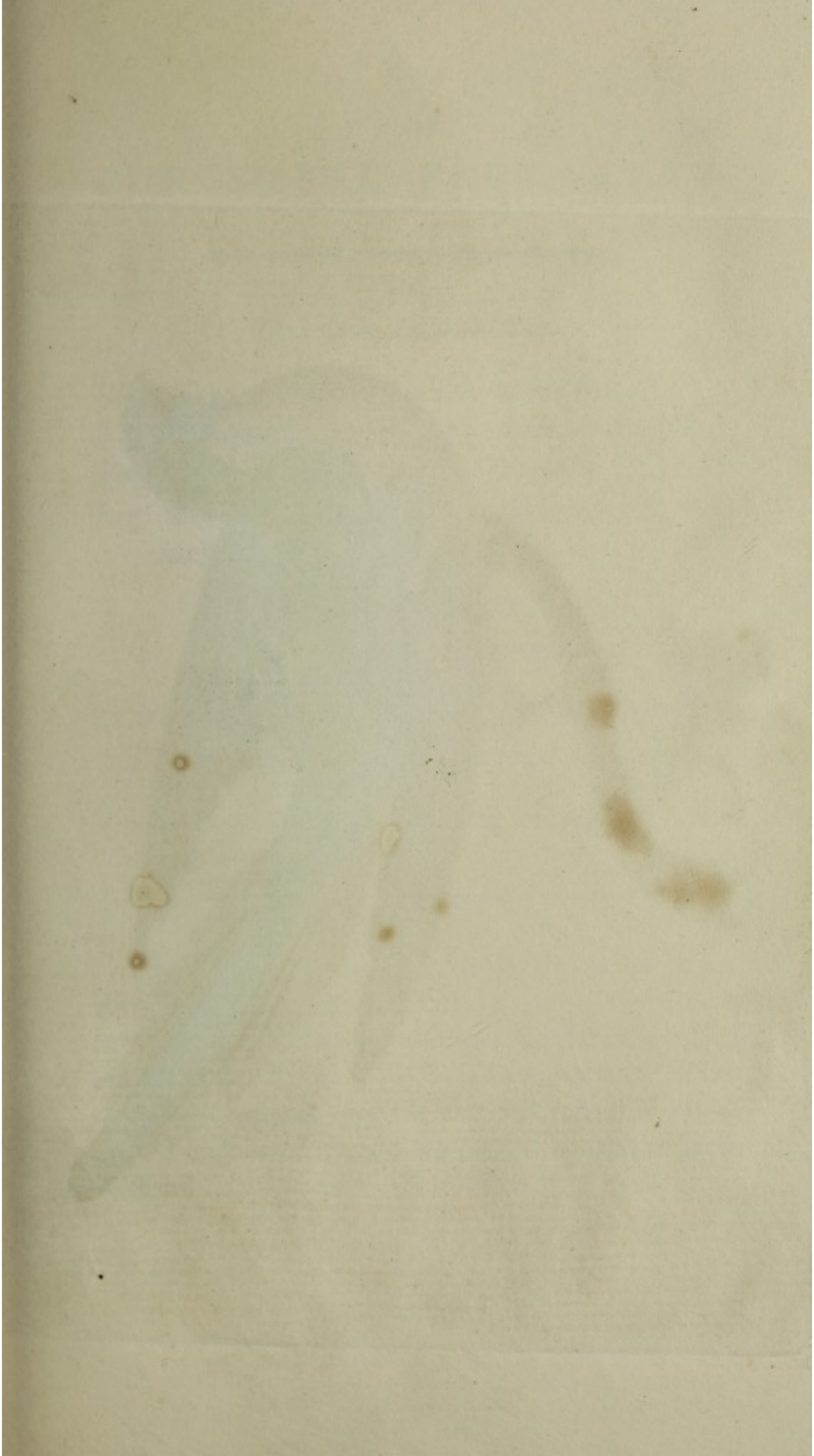
Lin. Syſt. Nat. p. 139.

Character Specificus.

PSITTACUS macrourus viridis, ſubtus luteus, capiſtro aliſque cæruleis.

Roſtrum pedeſque nigricant.

Inter minimas ſui generis numeranda eſt hæc ſpecies, non longe enim ſuperat magnitudine figuram quæ in tabula continetur. Notabile eſt hanc avem, parvula licet ſit, magno illi pſittaco qui Ararauna dicitur, primo intuitu admodum ſimilem eſſe. Species procul dubio nunquam adhuc deſcripta eſt, et novam Hollandiam incolit.



THE

TURCOSINE PARRAKEET.

Generic Character.

Bill hooked. Upper mandible moveable.
Noſtrils roundiſh, placed in the baſe of the bill.
Tongue fleſhy, broad, blunt at the end.
Legs ſhort. Toes formed for climbing, viz. two backward and two forward.

Specific Character.

LONG-TAILED GREEN PARRAKEET, yellow beneath, with blue wings and frontlet.

The beak and legs are black.

This may be numbered amongſt the ſmalleſt of its tribe, not very much exceeding in ſize the figure here repreſented. It is remarkable that this diminutive ſpecies bears at firſt view a conſiderable reſemblance to the Pſittacus Ararauna, or great blue and yellow Maccaw. It is an undoubted non-deſcript, and is a native of New Holland.

SILURUS CALLICHTHYS.

Character Genericus.

Caput nudum. Os cirris aliquot filiformibus tentaculatum.

Membr. branch. radiis 4—14.

Corpus: Radius pinnarum pectoralium aut dorſalis primus ſpinoſus, retrodentatus.

Lin. Syſt. Nat. p. 501.

Character Specificus, &c.

SILURUS pinna dorſali poſtica uniradiata, ſquamis ordine duplici, cirris quatuor.

Lin. Syſt. Nat. p. 506.

Amæn. acad. 1. p. 317. t. 14. f. 1.
Gron. muſ. 1. n. 70.
Seb. muſ. 3. t. 29. f. 13.

Squamarum quibus piſces muniuntur, pulchritudo et diverſitas, obſervationum microſcopicarum ſtudioſis ampliſſimam diu præbuerunt materiem. Nonnullis ſunt ſquamæ ovatæ, annulis concentricis fibrarum reticulatarum ornatæ: aliis fere quadratæ, fibris in diviſiones inæquales diſpoſitis, marginibus aculeorum pellucidorum ſerie diſtinctis. Quarundam ſpecierum ſquamæ ob exigui-

exiguitatem primo viſu vix diſcerni poſſunt; aliarum non modo minimas ſed et muco denſo coopertas attentiſſima oculorum acie inveſtigare neceſſe eſt. Sunt e contrario piſces qui ſquamis teguntur ampliſſimis; quod inſigniter evenit in peculiari illa varietate, (ni potius diſtinctam ſpeciem putemus) Cyprini, nomine Cyprini *Regis* diſtincti; cujus ſquamæ quadrantem diametri ipſius corporis æquant. Non deſunt denique exempla piſcium ad diverſiſſima genera pertinentium, quorum ſquamæ ampliſſimæ et duriſſimæ a reliquis in tantum diſcrepant, ut prima facie ad ipſa animalia cruſtata videantur accedere. Hos vocat Linnæus *cataphractos*, quod ſcilicet quaſi lorica muniantur. Ejuſmodi principes ſunt Silurus cataphractus, Silurus Callichthys, Cottus cataphractus, Trigla cataphracta, Loricaria cataphracta. Silurus Callichthys, quem oſtendit tabula, tum Europam tum Americam inhabitat; plerumque autem in America Auſtrali, et præcipue in Braſilia invenitur. Rivulos incolit, e quibus, ſi æſtate fervidiore fere exſiccati fuerint, mirum dictu! ſe ſurripit, et per prata late evagatur, aquas altiores quæritans. E piſcinis quoque in quibus ſervatus ſit interdum erepit, margines ſeu aggeres perforando. Relictis tamen aquis, ſuper terram incedere non ſolius eſt Callichthys; idem enim facere ſolent alii nonnulli, Muræna præcipue Anguilla dicta, quæ per prata noctu prorepit, limaces fortaſſe aliaque id generis prædatura; et ſi hyems fuerit ſeverior, ſub ipſo etiam foeno et in cavernis latitans interdum deprenſa eſt. Callichthys longitudo communis eſt circiter quatuor pollices: color fuſco-flaveſcens, dorſo paulum obſcuriore. Oculi minuti; et utrinque ad latera oris (ut in aliis ejuſdem generis) tentacula duo longa et magna extenduntur.

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THE

WANDERING SILURUS.

Generic Character.

Head naked, large, depreſſed.

Mouth wide, generally furniſhed with long tentacula or beards.

Firſt ray of the pectoral and dorſal fins commonly ſtrong and ſerrated backwards.

Specific Character, &c.

SILURUS with a double range of ſcales, four beards, and the laſt dorſal fin ſingle-rayed.

Gron. muſ. 3. t. 29. fig. 13.
Marcgr. bras. 151.

The beautiful and varied ſtructure which diſtinguiſhes the ſcales of fiſhes, has long afforded an extenſive field for microſcopical obſervation. In ſome the ſcales are of an oval ſhape, with concentric rings of reticulated fibres; in others of a ſquariſh form, with the fibres curiouſly diſpoſed into diſſimilar patches or ſubdiviſions, and ornamented at the extremities with a ſeries of tranſparent aculei or prickles. In ſome fiſhes the ſcales are ſo extremely ſmall as to be ſcarce diſtinguiſhable on a curſory view, and in ſome they are not only very ſmall, but

but ſo coated over by a mucous tegument as to require the moſt attentive inveſtigation in order to diſcover them. In others, on the contrary, they are as remarkable for their extreme largeneſs, as in the peculiar variety (if not diſtinct ſpecies) of Cyprinus or Carp, known by the title of the King-Carp, in which the ſcales are equal to a fourth part of the diameter of the fiſh. Laſtly, there are not wanting ſome inſtances of fiſh belonging to very different genera, which are coated with ſcales of a ſize ſo very large, of a ſtructure ſo uncommonly ſtrong, and of a diſpoſition ſo unlike that which appears in the ſcales of other fiſh, that they ſeem at firſt glance to belong to the cruſtaceous tribe. Fiſhes of this peculiar caſt are termed by Linnæus *cataphracted* or mailed fiſh, as if in ſuits of armour. Of theſe the moſt remarkable are the Silurus cataphractus, Silurus Callichthys, Cottus cataphractus, Trigla cataphracta, and Loricaria cataphracta. The Silurus Callichthys, here repreſented, is a native both of Europe and America, but is more common in South America than in Europe, being principally found in Braſil. It inhabits rivulets, and when theſe during a dry ſeaſon grow extremely ſhallow, it has the extraordinary faculty of creeping out and traverſing over the dry ground in order to ſeek deeper water. It has alſo been known to make its eſcape from fiſhponds in which it has been confined, by piercing through the banks. This terreſtrial locomotion of fiſhes is not however confined to the Callichthys, but is known to take place in ſome others, and particularly in the common eel, which frequently creeps about meadows by night, in queſt perhaps of ſlugs, &c., and has been known during the froſts of a ſevere winter to take refuge under hay-ricks

and

and in caverns. The general length of the Callichthys, is about four inches: its color is a yellowiſh brown, ſomewhat deeper on the back than on the other parts. The eyes are ſmall, and on each ſide the mouth are ſituated (as in ſeveral others of this genus) two very large and long cirrhi or beards.

TUBIPORA MUSICA.

Character Genericus.

Animal Nereis ?

Corallium tubis cylindricis, cavis, erectis, parallelis.

Lin. Syſt. Nat. p. 1270.

Character Specificus, &c.

TUBIPORA tubis faſciculatis combinatis: diſſepimentis tranſverſis membranaceis diſtantibus.

Lin. Syſt. Nat. p. 1270.

PSEUDO-CORALLIUM RUBRUM.

Aldr. muſ. 291.

ALCYONIUM FISTULOSUM RUBRUM.

Bauh. hiſt. 3. p. 808. fig. 2.

TUBULARIA PURPUREA.

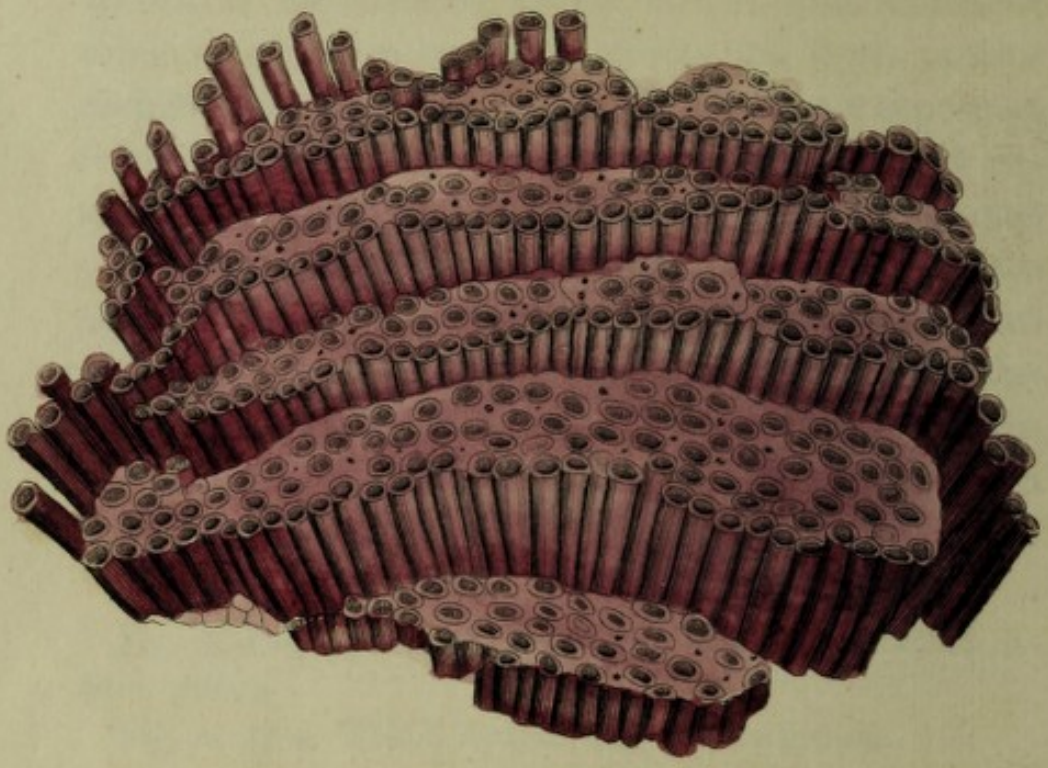
Tourn. inſt. t. 342.

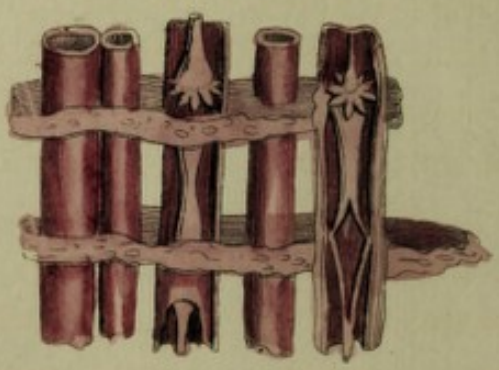
Iis lithophytis annumerandum eſt hoc corallium quorum ſi formam generalem ſpectes, vix poſſit dubitari quin ab animalibus efficta ſint. Conſtat quippe tota maſſa e tubulis erectis et parallelis, alio ſuper alium gradatim aſſurgente, qualiter fere fit in cellulis apum. Septa tranſverſa quibus tuborum ſtrata connectuntur, aſcendunt inæqualiter in variis partibus, tubis ipſis raro unciam,

unciam, interdum ſemiunciam altis, eorundem diametro nunc decimam nunc octavam pollicis partem attingente. Ab hac tamen proportione in diverſis ſpeciminibus longe deceditur. Vera animalium incolentium natura vix adhuc pro certo explorata eſt: ea tamen putat Linnæus Nereidibus vix ac ne vix differre. Speciem hac pulchriorem vix fortaſſe inveniemus in toto genere corallino: ſtructuræ enim ipſius elegantiam mire auget color ſuaviter purpureus ſeu phoeniceus. Si ſinguli tubi accuratius inſpiciantur, patebit eorum unumquemque tubulum minorem geniculis aliquot ſeu ſeptis radiatis diviſum continere, cujus ope diverſis ſtratis ſæpe cum ſe invicem communicatur. In magnam molem ſeſe extendit formoſum hoc corallium, nec defuere ſpecimina quæ pedes duos immo tres diametro ſuperarunt. Cum adhuc ſit recens, tota ſuperficies exterior gelata ſeu mucoſa ſubſtantia obducitur, quæ etiam per partes tubulatas quodammodo diffundi videtur. Magna Tubiporæ muſicæ eſt copia circa littora inſularum Indicarum nec non maris Pacifici.

Fig. 1, Pars aperta, et microſcopio aucta, ut ſtructura interior pateat.

Fig. 2, 3, 4, Tubuli ſeparati magnitudine naturali.





J. N.

London, Published March 1st 1799, by F. P. Nodder & Co. No. 18 Brewer Street.

CRIMSON TUBIPORE,

OR

ORGAN CORAL.

Generic Character.

Animal allied (probably) to the genus Nereis.
Coral consisting of erect cylindric parallel tubes.

Specific Character, &c.

TUBIPORE with fasciculated connected tubes, and distant transverse membranaceous dissepiments.

Argenv. conch. t. 26. fig. A.
Ellis Zooph. p. 144. t. 27.

This is one of those Lithophytes which in structure and general appearance seem plainly to indicate the operation of animals, the whole mass consisting of an assortment of upright parallel tubes, rising over each other by stages, somewhat in the manner of the cells of an honeycomb. The stages or transverse dissepiments by which the strata of tubes are connected, are of unequal heights in different parts of the mass, and the tubes of each stratum seldom rise to the height of an inch, and sometimes do not exceed half an inch, and their diameter is from about a tenth to an eighth of an

an inch. In different ſpecimens however there is a conſiderable variation, both in the proportional length and diameter of the tubes. The real nature of the inhabiting animals of theſe tubes is not clearly aſcertained, but they are ſuppoſed by Linnæus to be ſtrongly allied to Nereides. In point of beauty ſcarce any of the coral tribe can exceed the preſent ſpecies; the colour, which is a rich purple or deep crimſon, highly increaſing the elegance of the fabric. The individual tubes, when accurately examined, appear each furniſhed with a ſmaller internal tube, which is divided at certain diſtances by radiated diaphragms or partitions. By means of theſe internal tubes the different ſtrata often communicate with each other. This curious coral extends itſelf to a very conſiderable ſize; ſpecimens having been frequently ſeen of from one to three feet in diameter. In its recent ſtate the whole upper ſurface is coated over by a mucous or gelatinous ſubſtance, which ſeems to pervade the tubular texture of the whole coral. The tubipora muſica is produced in the greateſt abundance about the ſhores of the Eaſt-Indian iſlands and thoſe of the Pacific Ocean.

Fig. 1, A piece laid open and magnified by the microſcope, in order to ſhew the interior ſtructure.

Fig. 2, 3, 4, Separate tubes of their natural ſize.

CASUARIUS AUSTRALIS.

Character Genericus.

Roſtrum depreſſum, rectum, ſubconicum.
Nares ovatæ.
Alæ breviſſimæ, volatui inutiles.
Femora in parte inferiore denudata.
Pedes tridactyli, digitis omnibus anticis.
Cauda nulla.

Lath. ind. orn. p. 664.

Character Specificus, &c.

CASUARIUS FUSCUS, vertice inermi.

STRUTHIO CASUARIUS.

Lin. Syſt. Nat. p. 265.

CASUARIUS NOVÆ HOLLANDIÆ.

Lath. ind. orn. p. 665.

Inter aves quas protulit ingens illa inſula Nova Hollandia (ni continens potius appelletur) inſignis eſt quæ in tabula depingitur Caſuarii ſpecies; a communi ſeu Africana adeo diſcrepans, ut dubitari non poſſit illam penitus et revera diverſam eſſe. Magnitudine enim eſt multo majori, alta interdum, ad minus, pedes ſeptem. Color imus cinereo-fuſcus, ſubtus pallidior. Caret caput galea ſeu criſta illa cornea, quæ ſpeciem commu-

nem diſtinguit. Collum præterea loco rugoſæ illius et rubræ cæruleæque cutis, et caruncularum quæ in Africana conſpicuæ, pennis parvis veſtitur, per quas ipſa cutis in hac parte leviter cærulea vix ac ne vix diſcerni poſſit. In apicibus alarum, quæ ad volandum inutiles, unguiculus eſt incurvatus et acutus. Crura validiſſima, nigricantia, et in parte poſtica conſpicue ſerrata. Roſtrum ejuſdem fere coloris cum cruribus.

THE

SOUTHERN CASSOWARY.

Generic Character.

Bill depreſſed, ſtrait, nearly conical.
Wings extremely ſmall, and unfit for flight.
Feet tridactylous, with all the toes ſtanding forward.

Specific Character, &c.

DARK-BROWN CASSOWARY with unarmed head.

NEW-HOLLAND CASSOWARY.
White's Voyage, pl. 1. p. 129.

One of the moſt remarkable birds which the continent of New Holland has yet afforded is a ſpecies of Caſſowary which differs from the common or African kind in ſo many reſpects as to leave no doubt of its being perfectly diſtinct. In ſize it is conſiderably ſuperior to the common Caſſowary, having been ſeen of the height of at leaſt ſeven feet. Its general colour is a ſort of cinereous brown, ſomewhat paler beneath. The head is deſtitute of that horny creſt which ſo ſtrikingly diſtinguiſhes the African ſpecies; and the neck inſtead of being furniſhed with a wrinkled longitudinal red-and-blue ſkin and wattles as in that bird, is covered

with ſmall feathers, through which the ſkin, which is of a bluiſh colour in that part, is juſt viſible. The wings are perfectly uſeleſs for flight, and at the tip of each is a ſmall, ſharp, crooked ſpur or claw. The legs are very ſtrong, of a blackiſh colour, and of a ſerrated appearance on the hinder part. The beak is of nearly the ſame colour with the legs.

ARGONAUTA ARGO.

Character Genericus.

Animal Sepia.

Teſta univalvis, ſpiralis, involuta, membranacea, unilocularis.

Lin. Syſt. Nat. p. 1161.

Character Specificus, &c.

ARGONAUTA carina utrinque ſubdentata.

Gmel. Syſt. Nat. p. 3367.

NAUTILUS ſulcatus.

Klein. oſtr. t. 1. f. 3.

NAUTILUS tenuis.

Rumpf. muſ. t. 18. f. 1. 4. A. B.

Utcunque inter animalia ejuſdem familiæ eadem fere ſit formæ partiumque ſimilitudo, pauca tamen proferri poſſunt exempla, in quibus a norma ſua inſigniter aberrare ſolet natura; præcipue vero in claſſe teſtacea. Teſtarum enim univalvium (ut dicuntur) incolæ, generi Limacis ſimillimi ſunt; bivalvium contra generibus Tethyos et Aſcidiæ. Formæ hujus anomalæ nullum notabilius argumentum poſſit ſeligi quam in genere Argonautæ; vel Nautili qui papyraceus dicitur: ab omnibus enim aliis ejuſdem diviſionis adeo diſcrepat

animal

animal hanc teſtam inhabitans, ut illius verum eſſe et genuinum incolam non mirum ſit ſi ægre credatur. Linnæus igitur de hac re ſcribit, " Domunculam alienam, quemadmodum Cancer Diogenes ſeu Bernhardus, intraſſe Sepiam, cum non connexa ſit teſtæ, ſibi adeo alienæ, qui non crederet, niſi tot teſtes nobis obſtringerent, qui propriis oculis viderunt Argonautam velificantem ?"

Extra teſtam viſus Argonautæ habitator ſepiæ ſpeciem, ſepiam præcipue octopodiam admodum refert: nec ſane ab ea forma generali differt, niſi quod ad extremitates brachiorum duorum membranas ovatas habeat, quas cum ſuper mare pacatum navigat, erigit, reliquis ſex brachiis remigans. Fieri non potuit ut miranda res hominum oculos effugeret: ideoque a variis auctoribus deſcriptam legimus; nullis elegantius quam Plinio.

" Inter præcipua autem miracula eſt, qui vocatur Nautilos, ab aliis Pompilos. Supinus in ſumma æquorum pervenit, ita ſe paulatim ſubrigens, ut emiſſa omni per fiſtulam aqua, velut exoneratus ſentina, facile naviget. Poſtea prima duo brachia retorquens, membranam inter illa miræ tenuitatis extendit; qua velificante in aura, cæteris ſubremigans brachiis, media cauda, ut gubernáculo, ſe regit. Ita vadit alto, Liburnicarum ludens imagine, et ſi quid pavoris interveniat, hauſta ſe mergens aqua."

Cavendum eſt hanc teſtam, quæ verus eſt Argonauta, cum Nautilo communiter dicto, ſeu Nautilo *concamerato* confundamus, qui generis eſt omnino diſtincti. Creſcit Argonauta Argo ab una uncia ad ſex vel etiam octo. Mare Mediterraneum nec non Indicum incolit.

London. Published April 1st 1790 by T.P. Nodder & Co. No 13 Bower Street.

THE ARGONAUT, OR PAPER NAUTILUS.

Generic Character.

Animal extremely reſembling a Sepia.
Shell univalve, ſpiral, extremely thin.

Specific Character, &c.

ARGONAUT with whitiſh furrowed ſhell, with the keel dentated on each ſide.

THE PAPER NAUTILUS.

NAUTILLE PAPIRACÉ.

Argenv. t. 5.

Notwithſtanding the general ſimilarity of ſtructure which prevails amongſt animals of the ſame tribe, there are yet ſome remarkable deviations from it. This is no where more conſpicuous than in the teſtaceous tribe, in which the inhabitants of moſt of the Univalves bear a ſtrong affinity to the genus Limax, or Slug, while thoſe of almoſt all the Bivalves are diſtinguiſhed by a ſtriking ſimilarity to the genera of Tethys and Aſcidia. Amongſt the inſtances of deviation from the general plan may be

be adduced the very remarkable and curious genus Argonauta or Paper-Nautilus, which is inhabited by an animal of an appearance ſo widely removed from thoſe of moſt of the Univalves, as almoſt to make doubtful the reality of its being the genuine and proper inhabitant of the ſhell in which it reſides. Linnæus accordingly has well obſerved, that unleſs the evidence of ſo many eye-witneſſes had enforced belief, it might have been reaſonably imagined that an animal ſo unlike the reſt of the tribe, was only a uſurper of the ſhell; in the ſame manner as the Cancer Diogenes and a few others, which take poſſeſſion of ſuch vacant ſhells as happen to ſuit their convenience. The inhabitant of the Argonauta, if ſeen detached from its ſhell, might paſs for a real Sepia, and bears ſo great a reſemblance to the Sepia octopodia or eight-armed Cuttle-fiſh, that the principal difference conſiſts in its being furniſhed at the extremities of two of it arms with a pair of membranes of an oval form, which, during its occaſional navigations on the ſurface of a calm ſea, it raiſes upright and expands to the gale; while by the aſſiſtance of the ſix remaining arms it rows itſelf along. It ſeems impoſſible that ſo curious a ſpectacle could have eſcaped the particular obſervation of mankind. Accordingly we find it deſcribed by various authors: by none however more elegantly than by Pliny, whoſe ſhort and beautiful deſcription, has generally been quoted by modern writers.

" But amongſt the principal miracles of nature is the animal called Nautilos or Pompilos. It aſcends to the ſurface of the ſea in a ſupine poſture, and gradually raiſing itſelf up, forces out by means of its tube all the

water

water from the ſhell, in order that it may ſwim the more readily; then throwing back the two foremoſt arms, it diſplays between them a membrane of wonderful tenuity, which acts as a ſail, while with the remaining arms it rows itſelf along; the tail in the middle acting as a helm to direct its courſe; and thus purſues its voyage like a little ſhip; and if alarmed by any appearance of danger, takes in the water and deſcends."

We muſt be careful not to confound this ſhell, which is the real and proper Nautilus, with the chambered or pearly Nautilus, which belongs to a very diſtinct genus. The Argonauta Argo is found of various ſizes, from one to ſix or eight inches in length, or even larger. It is a native both of the Mediterranean and Indian ſeas.

SCORPIO AFER.

Character Genericus.

Pedes octo: insuper *Chelæ* duæ frontales.

Oculi octo: horum tres ad latus utrumque thoracis; duo in tergo.

Palpi duo, cheliformes.

Cauda elongata, articulata, terminata Mucrone arcuato.

Pectines duo subtus, inter pectus et abdomen.

Lin. Syst. Nat. p. 1037.

Character Specificus, &c.

SCORPIO pectinibus 13-dentatis, manibus subcordatis pilosis.

Lin. Syst. Nat. p. 1038.

SCORPIO INDUS.

Degeer. ins. 7. p. 341. n. 3.

Inter omnia insecta hactenus cognita, quæ venenosæ et malignæ sunt indolis, Scorpiones primo semper numerari soliti sunt. Notandum tamen est vim veneni vel augeri vel minui pro diversa hominum vulneratorum idiosyncrasia, statuque ipsius animalis, majorive minorive impetu quo plaga infligitur. Concedendum etiam est vulgarem Scorpionem Europæum, multo magis

gis quam neceſſe eſt timeri, cujus ab aculeo vix aliquid mali poteſt evenire. At vero ingentes Africani Scorpiones, qualis eſt ille qui in tabula depingitur, vulnus infligere poſſe jure cenſetur, quod dolor acerrimus, viruſque graviſſimum ſolent comitari. Venenum per tria minutiſſima foramina prope apicem aculei exit, a ſummo fere apice et ab utroque latere. Notum eſt multum diuque dubitaſſe phyſicos ſitne foramen necne, per quod venenum effunditur, in aranearum ſorcipibus. Similiter de foraminibus in ſcorpionis aculeo dubitatum eſt, immo pene ad lites perventum. Celeberrimus Redi, optimis licet vitris microſcopicis tunc temporis inſtructus, non potuit foramen diſcernere; qui tamen revera illud extare minime dubitavit, quippe qui ab aculeo compreſſo guttulam quaſi liquoris albeſcentis juxta apicem exprimi ſæpe viderat. Alii autem multi ullum eſſe foramen plane negarunt. Valliſneri et Leewenhoek foramina duo triangula clare viſa deſcripſerunt ab utroque latere prope apicem ſita; alii tria detexerunt; unde patet Scorpionis aculeum venenum promptius efflare poſſe quam alius cujuſvis animalis. Pars illa quæ Scorpionibus ſub pectore ſita eſt, quæque more pectinis denticulata eſt, hoc ipſo nomine *pectinis* a Linnæo deſignatur; qui etiam diverſas ſpecies numero dentium in pectine diſtinguere conatus eſt. Fefellit tamen multos hæc diſcriminandi methodus; pectinibus enim ejuſdem ſpeciei impar forſan ſit numerus dentium; ideoque hoc ſolo ſigno ſpecies non poſſunt ſatis accurate dignoſci. Species hic depicta eſt magnus Scorpio Africanus, a Linnæo Scorpio Afer nominatus. Color ejus communis eſt admodum fuſcus, interdum pene nigricans. In magnam creſcit molem, interdum multo majorem quam

repræ-

repræſentat tabula. Vivipari ſunt Scorpiones, et plurimos uno partu edunt pullos, qui perfecte formati, nullam aliam mutationem ſubeunt, niſi forte quod araneārum more exuvias abjiciant. Quæ ſcripſerunt varia et mira de his animalibus antiquiores phyſici, aniles ſunt fabulæ, quas præſens ævum, cui omnigena affulſit ſcientia, ægre et indigne audiat. Hæc igitur putida et inania lubens taceo. Unum tamen e plurimis fas mihi ſit ſeligere; Scorpionem nempe carbonibus ignitis circumdatum, cum nullum ſibi exitum patere viderit, ſaluti tandem deſperantem, ſui ipſius aculei ictibus perire. Hanc fabulam, quaſi fide dignam, plures etiam nunc temporis, ſerio et graviter recitant, et pro unico ſuicidii exemplo inter inferiora animalia ſeligunt.

Fig. 2. Pectines.

THE

AFRICAN SCORPION.

Generic Character.

Eight *Legs*, beſides the 2 frontal *Chelæ*.
Eight *Eyes*, viz. 3 on each ſide the thorax, and 2 on the back.
Two cheliform *Palpi* or feelers.
Tail long, jointed, terminated by a crooked *point*.
Two *Combs* beneath, between the thorax and abdomen.

Specific Character, &c.

SCORPION with 13-toothed combs and ſomewhat heart-ſhaped hairy claws.

Swammerd. bibl. nat. t. 3. f. 3.
Roeſ. inſ. 3. t. 65.

Scorpions may be conſidered as the moſt malignant and poiſonous of all known inſects. It is true that the effect of their ſting will differ greatly according to the different circumſtances of the conſtitution of the perſon receiving the wound, as well as of the ſtate of the animal itſelf, and the degree of violence with which the wound was inflicted. It is alſo to be acknowledged that the common European Scorpion is not in general

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London. Published April 1st 1795 by F. P. Nodder & Co. N°15 Brewer Street.

of ſo terrible a nature as is commonly ſuppoſed, and it is but rarely that any bad conſequences happen from its ſting. But the large Scorpions of Africa, ſuch as here repreſented, may well be ſuppoſed capable of inflicting a wound of the moſt ſevere pungency and of the moſt dreadful malignity. The poiſon is evacuated through three very ſmall foramina near the tip of the ſting, viz. one on each ſide the tip, and the other in the upper part. It is well known that a diverſity of opinion has ſubſiſted amongſt authors relative to the ſlit or foramen in the fangs of ſpiders, through which their poiſon is evacuated. The ſame contrariety of ſentiment takes place with reſpect to ſuch a foramen in the Scorpion's ſting. The celebrated Redi, aſſiſted by the beſt microſcopes he could procure, was not able to diſcover it; though he was well convinced of its exiſtence from perceiving the minute drop of poiſon exſude from near the tip of the ſting. Others have denied the exiſtence of the foramen; but Valliſneri and Leewenhoek have both deſcribed two foramina, viz. one on each ſide the tip, and which are of a ſhape inclining to triangular: beſides theſe a third foramen has ſometimes been ſeen; ſo that the ſting of the Scorpion can with greater facility diſcharge its venom than that of any other animal. The part in Scorpions which is ſeated below the breaſt and is toothed in the manner of a comb, is in the Linnæan language termed the pecten; and Linnæus has endeavoured to diſtinguiſh the ſpecies of Scorpions from the number of teeth in this part; but this has been found a fallacious mark of diſtinction; ſince they vary in the number of teeth, and conſequently no great certainty can be obtained from this character alone.

The

The very large ſpecies here repreſented is the great African Scorpion, or Scorpio Afer of Linnæus. Its general colour is a deep brown, nearly approaching in ſome ſpecimens to black. It grows to a very large ſize; ſpecimens being ſometimes ſeen which far exceed in ſize the figure here repreſented. Scorpions are viviparous inſects, and produce a very conſiderable number of young at once; which are completely ſhaped, and undergo no farther change, except (perhaps) caſting their ſkin from time to time in the manner of ſpiders. Several fabulous anecdotes of theſe animals have been recorded by the older writers on natural hiſtory, which are totally unworthy of being related in the preſent enlightened age. One of the moſt remarkable of theſe legends is, that a Scorpion ſurrounded by live coals, finding no method to eſcape, grows deſperate from its ſituation and ſtings itſelf to death. It is not uncommon to hear this quoted with ſerious credulity as the only inſtance of ſuicide amongſt inferior animals.

Fig. 2. The pectinated parts or combs.

CERTHIA CARDINALIS.

Character Genericus.

Roſtrum arcuatum, tenue, ſubtrigonum, acutum.
Lingua acuta.
Pedes ambulatorii.

Lin. Syſt. Nat. p. 184.

Character Specificus, &c.

CERTHIA RUBERRIMA, alis caudaque nigris, abdomine albido.

CERTHIA CARDINALIS ?

Lath. ind. orn. p. 290.

CERTHIA RUBRA ?

Gmel. Syſt. Nat. 1. p. 479.

Inter minimas numeratur hæc avicula ſui generis, ſiſtitque eam tabula magnitudine naturali. Forma generali Certhiæ cruentatæ Linnæi videtur ſimillima. In inſulis aliquibus Auſtralibus naſci creditur; quicquid autem ad peculiares illius mores attinet incognitum omne et incertum eſt.

THE CARDINAL CREEPER.

Generic Character.

Bill ſlender, incurvated, ſharp-pointed.
Tongue differing in ſhape in the different ſpecies.
Legs moderately ſtout.
Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnæus. Latham. Pennant.

Specific Character, &c.

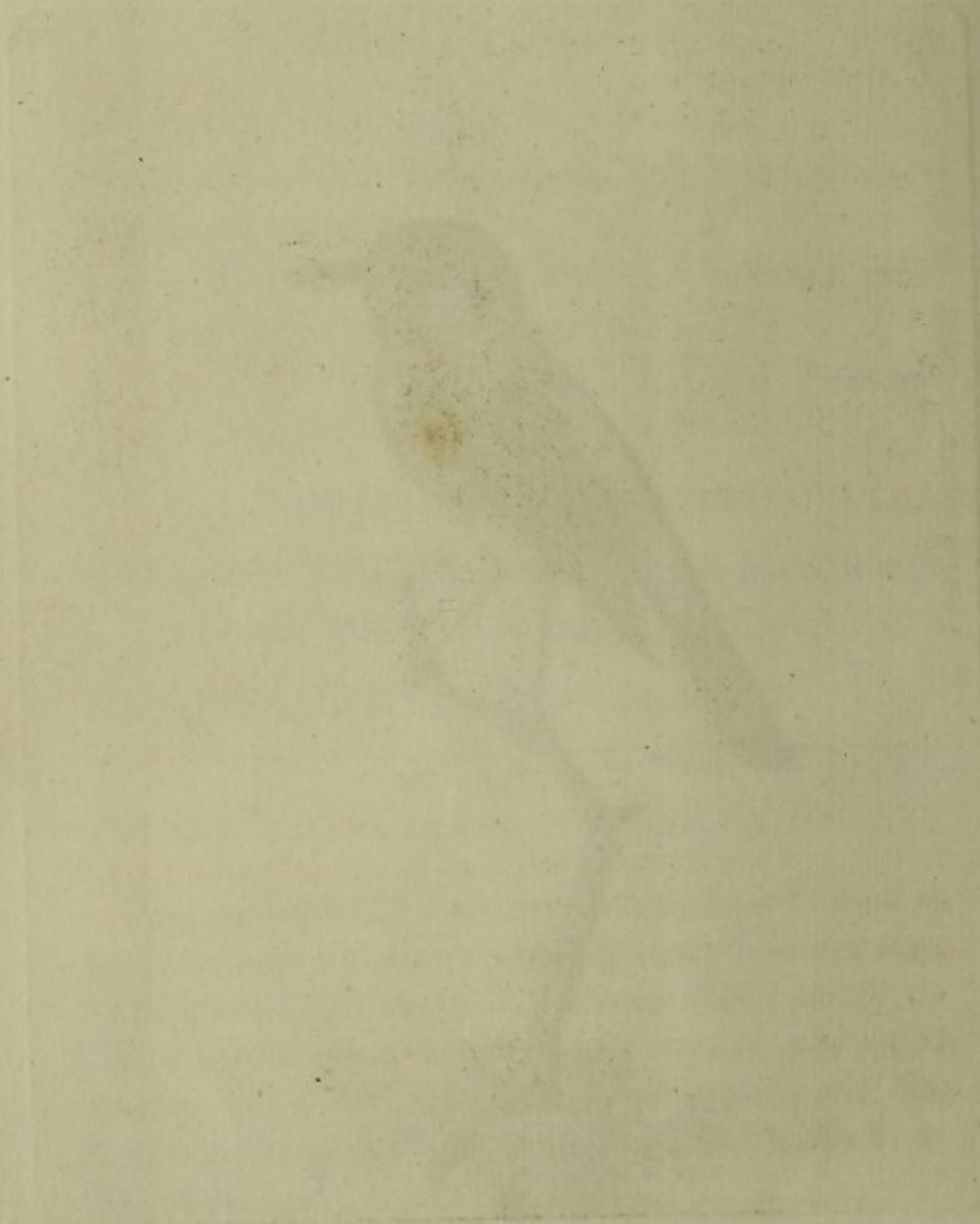
CARMINE-RED CREEPER, with black wings and tail, and whitiſh belly.

CARDINAL CREEPER.

Lath. Syn. 1 p. 733.

This bird may be numbered amongſt the ſmalleſt of its genus, the figure repreſenting it of its natural ſize. In its general appearance it ſeems extremely nearly allied to the certhia cruentata of Linnæus, or red-ſpotted creeper. It is ſuppoſed to be a native of ſome of the Southern iſlands, but its particular hiſtory ſeems to be unknown.

London, Published May 1st 1792 by F.P. Nodder & Co. No 8 Bevnor Street.



ASTERIAS CAPUT MEDUSÆ.

Character Genericus.

Corpus depreſſum: cruſta ſubcoriacea, tentaculis muricata.

Os centrale, quinquevalve.

Lin. Syſt. Nat. p. 1098.

Character Specificus, &c.

ASTERIAS radiis dichotomis, ore depreſſo.

ASTERIAS CAPUT MEDUSÆ.

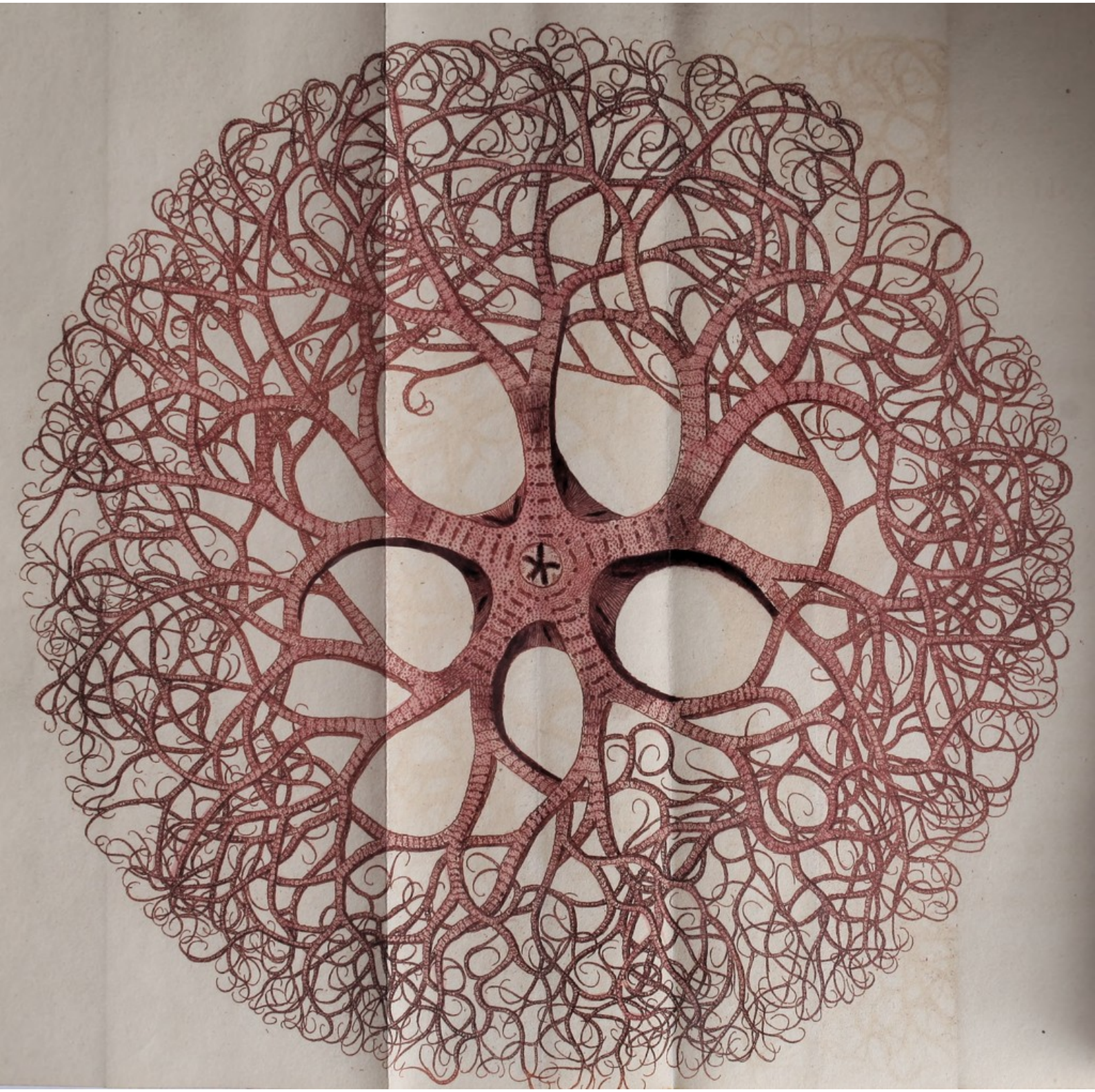
Lin. Syſt. Nat. p. 1101.

STELLA MARINA.

Jonſt. inſ. t. 26. f. 11.

Aſteriæ, ſeu ſtellæ æquoreæ, ut vulgo nominantur, mirum et numeroſum conſtituunt genus animalium marinorum. Specierum diverſarum diverſa admodum eſt facies externa. Pars maxima formæ ſunt ſtellatæ, ſeu in quinque radios æquales diviſæ: aliæ in plures radios, decem nempe vel tredecim: nonnullæ ſcabræ et tuberoſæ, nonnullæ læves, aliæ denique ſpinoſæ ſunt. Species vero reliquis longe mirabilior Aſterias caput Meduſæ vocatur. Hæc a centro in quinque æquales et æque diſtantes radios geniculatos primum dividitur, quorum ſinguli dein in duos alios minores divaricant;

hi iterum paulo longiore intervallo in duos adhuc minores ſeparantur; et hoc modo, diviſionibus minoribus et numeroſioribus, infinita pene ſerie ſenſim attenuata et multiplicata, diſtribuuntur membra, donec millia multa numero ſuperent. Inde fit ut animal quaſi rete ſit vivum, nec immerito *rete mirabile* poſſit dici, cum illa quæ pro cibo natura voluit animalia, contractis ſubito innumeris ramulis amplectatur, et adempta aufugiendi poteſtate, miſera devoret. Aſteriæ facultatem repullulandi habent, membrumque aliquod vel caſu vel vi abruptum aut avulſum progreſſu temporis renovatur. In oceano, præſertim prope littora cibi captandi gratia vagantur, animaliaque non tantum nuda et molliora ſed etiam teſtis obtecta comedunt; dentibus enim duris et acutis ſpinas referentibus armantur, adeo fitis ut aculei omnes ad centrum convergant, diſpares in diverſis ſpeciebus. Species hic depicta in oceano fere omni invenitur, præcipue in mari Mediterraneo. Colore variat: interdum pallida, ſeu ruſo-albeſcens, interdum fuſceſcens, immo etiam penitus fuſca reperitur. Aſteriæ (fortaſſe,) ut plurimum, viviparæ? ſunt.



THE BRANCHED ASTERIAS, OR MEDUSEAN STAR-FISH.

Generic Character.

Body depreſſed; covered with a coriaceous cruſt, muricated with tentacula.

Mouth central, with five valves.

Specific Character, &c.

ASTERIAS, with regularly-divided and ſubdivided branches, and depreſſed mouth.

MEDUSA-HEAD STAR-FISH.

BASKET STAR-FISH.

The Aſteriæ or ſea-ſtars, as they are generally called, form a very numerous and wonderful genus of marine animals. The ſeveral ſpecies differ greatly in appearance from each other: the greater number are of a ſtellated form, and are divided into five rays or proceſſes; others are divided into a much greater number of rays, as ten, and thirteen. Some ſpecies are ſmooth, ſome tuberculated, others prickly. The ſpecies which of all others is moſt worthy of admiration is that called the Caput Meduſæ, or Meduſa's Head Star-fiſh: this very

very curious animal is firſt divided into five equidiſtant, thickly-jointed proceſſes, each of which is ſoon ſubdivided into two other ſmaller ones, and each of theſe, at a ſomewhat farther diſtance, into two others ſtill ſmaller: this mode of regular ſubdiviſion is continued to a vaſt extent, and in the moſt beautiful gradation of minuteneſs, till at length the number of the extreme ramifications amounts to ſeveral thouſands. By this moſt curious ſtructure the animal becomes as it were a living net, and may well deſerve the title of *rete mirabile*, and is capable of catching ſuch creatures as are by nature deſtined for its prey, by the ſudden contraction of all its innumerable ramifications, by which the unfortunate object is ſecured beyond all poſſibility of eſcape. The ſea-ſtars have a very conſiderable degree of reproductive power, and if injured by accidental violence, or if one or more of their limbs or branches be torn or cut off, the creature will in time be furniſhed with new ones. They wander about the ocean, particularly near the ſhores, in queſt of food, and prey not only on the ſofter animals, but even on the ſmaller ſhell-fiſh; and are armed for this purpoſe with hard and ſharp teeth, reſembling prickles, and ſituated in a circular form, with the points converging towards the opening of the mouth, and differing in number in the different ſpecies. The ſpecies here repreſented is not uncommon in moſt ſeas, and is frequently found in the Mediterranean. In colour it varies, being ſometimes pale, or reddiſh white, and ſometimes of a brown, more or leſs intenſe. The Aſteriæ in general are viviparous? animals.

PTINUS FATIDICUS.

Character Genericus.

Antennæ filiformes; articulis ultimis majoribus.
Thorax ſubrotundus, immarginatus, caput excipiens.

Lin. Syſt. Nat. p. 565.

Character Specificus, &c.

PTINUS fuſcus ſubpiloſus, griſeo irregulariter maculoſus.

DERMESTES TESSELATUS ? ?

Fabr. Syſt. Ent. p. 56. *Sp. inſ.* p. 65.

PTINUS PULSATOR ?

Gmel. Syſt. Nat. p. 1605.

Ex ineptiis omnibus quæ imbecillos vulgi animos occuparunt, inanior nulla eſt quam mortiſagi, ut dicitur, metus; qui parvulum licet inſectum, ruris quietem perturbare, vaniſque et falſis terroribus totum pagum ſolebat implere. Dominatur etiam nunc in populorum animis ſuperſtitioſa iſta ſolicitudo, nequiitque fugare has tenebras quod jam fere per totum orbem diffunditur ſcientiæ et veritatis lumen. Fatendum quidem eſt, illis qui in pane quotidiano comparando totum fere tempus terere

terere coguntur, deeſſe tum otium tum mentem ut in cauſam peculiaris alicujus ſonitus accurate philoſophiceque inquirant: mirum tamen eſt inſectum commune non penitius cognoſci, nec melius intelligi unde ſonitus exoriatur.

Vere jam provecto, mutuo ſe convocare ſolent formidata hæc animalcula, eodem fere modo quo aves; licet non ſit vera vox, ſed pulſatio capitis clypeati in duram aliquam ſubſtantiam. Audiuntur ictus ſepties, novies, vel undecies; quod ipſum fortaſſe majorem vulgo metum incutit. Repetuntur ſonitus celeriter, incertis intervallis, et in domibus antiquis, ubi maxima eſt Mortiſagorum copia, per totum fere diem poſſunt audiri; præſertim ſi calidior ſit aeris temperies. Exacte imitari poteris hos ictus ſi unguem modice in menſam impingas. Cum colori ligni veteris ſimillimus ſit color mortiſagi, inquirentis oculus diu eluditur. Longus eſt circiter quadrantem unciæ, modica craſſitie. Ad coleoptera pertinet, quorum nempe alæ elytris ſeu tegumentis corneis munitæ ſunt; licet enim rariſſime volet, volatilis eſt. Referri debet proculdubio ad genus *Ptinus* dictum. Miror nec inveniri eum in editione duodecima ſyſtematis naturæ Linnæi, nec in opere entomologico Fabricii, ni forte *Dermeſtes teſſelatus* idem ſit, quod ſi fiat, erravit Fabricius in genere. In volumine vigeſimo, nec non in vigeſimo ſecundo Actorum Anglicorum, nec male, deſcribitur, additis obſervationibus celeberrimi Derhami, qui de animalculi forma moribuſque recte diſſeruit. Vereor ne quod falſum et ineptum ſit aſſerere videar, cum dicam poſſe mortiſagum, in pyxide ſervatum, ad id manſuetudinis et docilitatis perduci, ut menſæ impoſitus pulſanti alicui prompte reſpondeat.

reſpondeat. Cavendum eſt ne hoc inſectum, (quod verus eſt ruſticorum mortiſagus pulſatorius,) cum alio confundamus, quod interdum eodem nomine dicitur, quodque horologii more diu et ſine ulla intermiſſione ſonum edit; pertinet enim hoc ad ordinem penitus diverſum, nomine *Termitis pulſatorii* a Linnæo diſtinctum. Claudet hanc Mortiſagi deſcriptionem quod in opere celeberrimo, *Pſeudodoxia* ſcilicet *Epidemica*, obſervavit vir doctiſſimus Thomas Brown. "Qui ab animis populi unicam hanc ſuperſtitionem poſſet evellere, ille profecto a pavidis nutricum et aviarum capitibus ſudoris multum gelidi depelleret."

London, Published May 1st 1790 by J.P. Vedder & Co. No 18 Brewer Street.

THE BEATING PTINUS, OR DEATH-WATCH.

Generic Character.

Antennæ filiform; the laſt joints larger than the others.

Thorax roundiſh, immarginated, receiving the head.

Specific Character, &c.

Duſky and ſomewhat hairy PTINUS, with irregular grey-brown ſpots.

THE DEATH-WATCH.

Phil. Tranſ. vol. 20. p. 376. vol. 22. p. 832.

Amongſt the popular ſuperſtitions which the almoſt general illumination of the preſent century has not been able to obliterate, the dread of the Death-watch may well be conſidered as one of the moſt predominant; which, though nothing more than a ſmall inſect, ſtill continues to diſturb the habitations of rural tranquillity with groundleſs fears and abſurd apprehenſions.

It

It is not indeed to be imagined that they who are engaged in the more important cares of providing the immediate neceſſaries of life ſhould have either leiſure or inclination to inveſtigate with philoſophic exactneſs the cauſes of a particular ſound: yet it muſt be allowed to be a very ſingular circumſtance that an animal ſo common ſhould not be more univerſally known, and the cauſe of the particular noiſe which it occaſionally makes, be more generally underſtood. It is chiefly in the advanced ſtate of ſpring that this alarming little being commences its ſound; which is no other than the call or ſignal by which the inſects of this ſpecies mutually attend to each other, and which may be conſidered as analogous to the call of birds; though not owing to the voice of the inſect, but to its beating on any hard ſubſtance with the ſhield or fore part of its head. The prevailing number of diſtinct ſtrokes which it beats, is from ſeven to nine or eleven, which very circumſtance may perhaps ſtill add in ſome degree to the ominous character which the animal bears amongſt the vulgar. Theſe ſounds or beats are given in a pretty quick ſucceſſion, and are repeated at uncertain intervals; and in old houſes where the inſects are numerous, may be heard almoſt every hour of the day; eſpecially if the weather be warm. The ſound exactly reſembles that which may be made by beating moderately hard with the nail on a table.

The inſect is of a colour ſo nearly reſembling that of decayed wood, viz. an obſcure greyiſh brown, that it may for a conſiderable time elude the ſearch of the inquirer. It is about a quarter of an inch in length, and is moderately thick in proportion. It belongs

to

to the claſs of coleopterous inſects, or ſuch as have horny or ſhelly ſheaths defending their wings, for it is a winged inſect, though rarely ſeen in flight. The genus to which it unqueſtionably belongs is that of *Ptinus*; but it is remarkable that it does not occur in the twelfth edition of the Syſtema Naturæ of Linnæus; nor has Fabricius diſtinctly mentioned it in his entomological works, unleſs his *Dermeſtes teſſelatus* be intended for the ſame inſect, in which caſe he muſt have placed it in a wrong genus. In the twentieth and twenty-ſecond volumes of the Philoſophical Tranſactions it has been long ago deſcribed, and ſome very juſt obſervations made relative to its habits and general appearance, by the celebrated Mr. Derham, and it is extremely ſingular that ſo remarkable an inſect ſhould have almoſt eſcaped the notice of more modern entomologiſts. Ridiculous, and even incredible as it may appear, it is an animal that may in ſome meaſure be tamed; at leaſt it may be ſo far familiarized as to be made to beat occaſionally, by taking it out of its confinement and beating on a table or board, which it readily anſwers, and will continue to beat as often as required.

We muſt be careful not to confound this inſect, which is the real Death-watch of the vulgar, (emphatically ſo called,) with another inſect, which makes a ſound like the ticking of a watch, and which continues its ſound for a long time without intermiſſion: it belongs to a totally different tribe from the Death-watch, and is the *Termes pulſatorium* of Linnæus. I ſhall conclude this deſcription of the Death-watch by a ſentence from the celebrated work *Pſeudodoxia Epidemica*,

Epidemica, or Vulgar Errors, by the learned Sir Thomas Brown, who expreſſes himſelf in ſome ſuch words as theſe. " He that could eradicate this error from the minds of the people would ſave from many a cold ſweat the meticulous heads of nurſes and grandmothers."

LOXIA CARDINALIS.

Character Genericus.

Roſtrum conico-gibbum, frontis baſi rotundatum verſus caput: Mandibula inferior margine laterali inflexa.

Nares in baſi roſtri.

Lingua integra.

Lin. Syſt. Nat. p. 299.

Character Specificus, &c.

LOXIA CRISTATA RUBRA, capiſtro nigro, roſtro pedibuſque ſanguineis.

Lin. Syſt. Nat. p. 300.

COCCOTHRAUSTES RUBRA.

Cateſb. Carol. 1. p. 38. t. 38.

COCCOTHRAUSTES VIRGINIANA CARDINALIS dicta.

Briſſ. av. 3. p. 252.

LOXIA CARDINALIS.

Lath. ind. orn. p. 375.

E calidioribus Americæ Septentrionalis partibus in Europam jamdudum illata eſt Loxia Cardinalis. Ob colorem lautum ſplendidumque vocemque potentem et ſuaviloquam apud nos magni ſemper habita eſt, nec deſunt qui eam ipſi luſciniæ vix ac ne vix cedere exiſtimant. Ingenio eſt alacri, vivido, docilique.

THE

CARDINAL GROSBEAK.

Generic Character.

Bill ſtrong, thick, and convex.
Noſtrils ſmall.
Tongue truncated.

Specific Character, &c.

CRESTED RED GROSBEAK with black frontlet.

VIRGINIAN NIGHTINGALE.

Raii. Syn. p. 85.
Will. orn. p. 245. pl. 44.

CARDINAL GROSBEAK.

Lath. Syn. 2. p. 118.

The bird here figured is a native of the warmer parts of North America, from whence it was imported ſoon after the firſt diſcovery of that continent; and from the glowing ſplendor of its colour, and the extraordinary powers of its note, ſoon became a diſtinguiſhed favorite in Europe. It is even by ſome conſidered as ſcarce inferior to the nightingale. It is a bird of a lively nature, and poſſeſſes a conſiderable degree of docility.

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ISIS HIPPURIS.

Character Genericus.

Flores Hydræ, ſparſi e floribus lateralibus.
Stirps radicata, lapidea, rigida, ſæpe articulata.
Lin. Syſt. Nat. p. 1287.

Character Specificus, &c.

ISIS ſtirpe corallina, articulis ſtriatis, geniculis attenuatis.
Lin. Syſt. Nat. p. 1287.

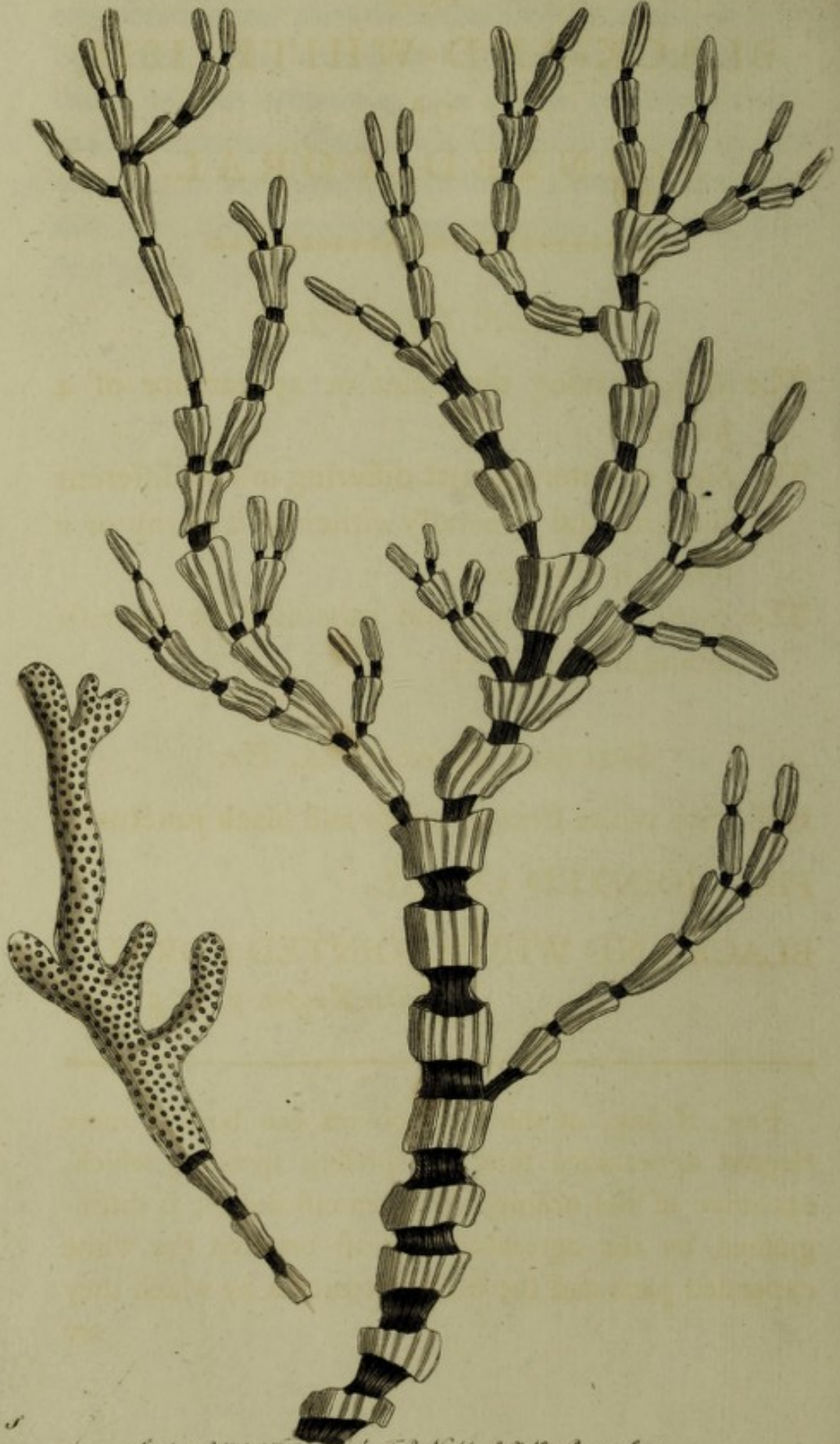
ACCABARIUM ALBUM.
Rumpf. Amb. 6. p. 228. t. 84.

HIPPURIS SAXEA.
Clus. exot. 124.

LITHOPHYTON articulatum internodiis ſtriatis.
Gualt. teſt. 118. fig. 16.

Jactare ſane poſſunt perpauca Lithophyta elegantiorem faciem quam hæc, de qua jam agitur, ſpecies. Ne quid enim dicam de ramulorum pulchritudine, bella eſt oppoſitio albarum expanſarumque partium, nigrorumque quibus connectuntur geniculorum. Notandum tamen eſt pulchrum hunc aſpectum non eſſe ipſius naturæ;

turæ; hæc enim veſtivit iſidem cortice albo et ſpongioſo, foraminibus parvulis creberrime excavato, in quibus, cum adhuc recens ſit lithophytum, habitant animalia polypos referentia, quæ ipſum corallium ædificaſſe creduntur. Creſcit Iſis Hippuris in variis mundi partibus, in mari præcipue Indico. Diverſæ extat magnitudinis, alta interdum paucas uncias, interdum duos fere pedes.



London. Published 1st June 1st 1795 by T. P. Nodder & Co. N.° 18 Brewer Street.

THE BLACK-AND-WHITE ISIS, OR JOINTED CORAL.

Generic Character.

The *Coral* having the habit or appearance of a plant.

The *Stem* or internal part differing in the different ſpecies, and generally either of a horny or a ſtony appearance.

The *cortical part* ſoft, and inhabited by animals reſembling polypes.

Specific Character, &c.

ISIS with white ſtriated joints and black junctures.

PIED JOINTED CORAL.

BLACK AND WHITE JOINTED CORAL.

Ellis. Zooph. p. 105. t. 3.

Few, if any, of the Lithophytes can boaſt a more elegant appearance than the preſent ſpecies; which, excluſive of the neatneſs of its ramifications, is diſtinguiſhed by the agreeable contraſt between the white expanded parts and the black internodia by which they are

are united. It is to be obſerved, however, that this beautiful appearance is very different from that of the ſame coral in its natural ſtate; in which it is coated over by a ſoft or ſpongy whitiſh part, thickly marked with ſmall foramina, which in the recent Lithophyte are the habitations of ſo many animals reſembling polypes; the ſuppoſed fabricators of the coral. The Iſis Hippuris is produced in ſeveral parts of the world, but is chiefly found in the Indian ſeas. It is found of various ſizes, from a few inches to nearly two feet in height.

CERCARIA MUTABILIS.

Character Genericus.

Vermis nudo oculo inconſpicuus, ſubpellucidus, caudatus.

Character Specificus, &c.

CERCARIA VIRIDIS, (interdum rubra,) corpore cylindraceo mutabili, cauda acuminata ſub-bifida.

CERCARIA VIRIDIS?

Müll. anim. infus. p. 126. tab. 19. fig. 6——13.

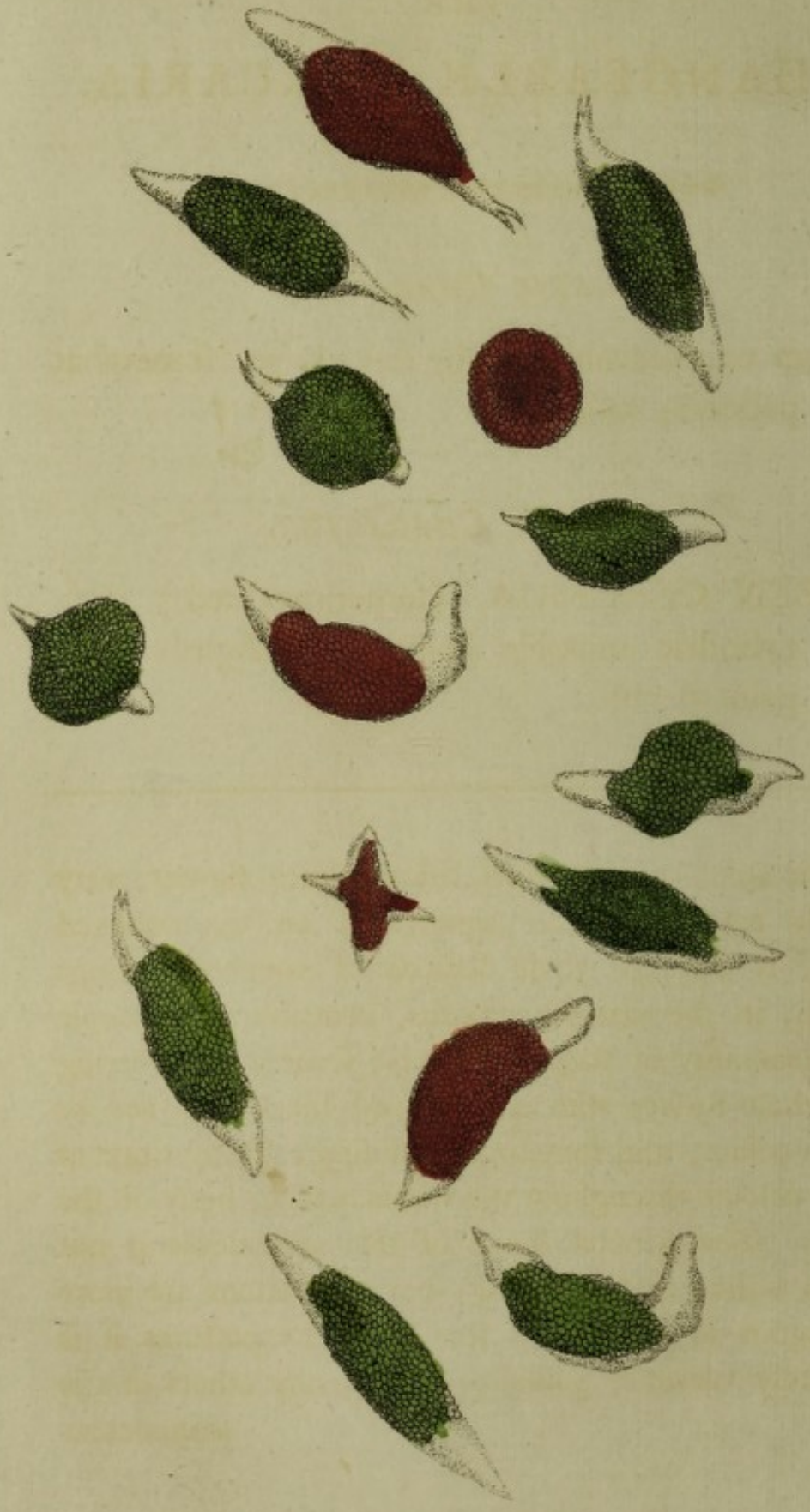
Oſtenditur in tabula animalculum, ſitu varium, microſcopio ſummopere auctum. Hujuſmodi æſtivis menſibus denſiſſima ſuper paludes conglomerantur agmina, adeo ut interdum tota ſuperficies rubra videatur ſeu viridis; alias ipſius aquæ corpus vel hoc vel illo colore non leviter tingatur. Forma limaci, motu hirudini ſimilior eſt cercaria. Cum huic, ut et aliis multis animalculis, ſumma ſit contractionis vis, hinc fit ut nunc fere in orbem colligatur, nunc in diverſſimos longitudinis gradus ad libitum extendatur. Motu incedit tardiuſculo; cumque natet penitus explicata, utraque extremitas pellucida videtur, corpuſque granulis virentibus aut rubellis, piſcium ova non male referentibus, refertum.

refertum. Caput ſeu anterior pars obtuſior, cauda autem acuta, apicem interdum leviſſime bifurca; quod tamen vix ac ne vix conſpici poſſit. Cum in reliquis omnibus prorſus conveniant cercariæ in tabula depictæ, niſi quod hæ ſint rubræ, illæ virides, nolumus ob ſolam coloris differentiam vere diſtinctas pronunciare. Virides ſæpiſſime menſibus Maii et Junii, interdum citius, mane plerumque et veſpere aquarum ſtagnantium ſuperficiem occupant, medio die fundum petentes. Rubræ, quæ longe rariores, aquas nonnunquam quaſi in ſanguinem convertunt; narrantque auctores univerſos populos hoc ſigno ingenti ſtupore perculſos: quod ſane vulgo facile condonari poſſit; cauſam enim ſæpiſſime ignorent neceſſe eſt, cum ipſa animalcula ſine microſcopii ope non niſi acutiſſimo oculo conſpici poſſint. Vidi egomet non ſemel magnam paludem una nocte rubore obductam et ſanguine veluti perfuſam, cujus die proxime elapſo ne minimum erat veſtigium. Notandum eſt etiam eodem fere modo, licet minus, decolorari paludes a monoculo pulice Linnæi, nec-non a larva culicis communis, aliiſque multis. Quid igitur mirum, anteactis temporibus, cum adhuc curta eſſet philoſophia, vitrique optici ignoraretur uſus, ſi homines vani et meticuloſi aquas ſanguineum rubentes conſpicati, Deos illico infeſtos et præſens aliquod exitium pertimuerint? Immo narrat celeberrimus Swammerdamus totam Lugduni civitatem hac ipſa re ſupra modum attonitam, aquis primo mane immenſo (ut poſtea compertum eſt) animalculorum agmine quaſi cruentatis: nec dubitamus quin ſpecies eadem fuerit cum hac noſtra quam deſcripſimus. Hoc præterea omine turbatos Romanorum animos, inter alia quæ

Cæſaris

Cæſaris fatum aut præibant aut ſequebantur portenta, memoravit Virgilius.

——————— " nec tempore eodem
Triſtibus aut extis fibræ apparere minaces,
Aut puteis manare cruor ceſſavit."



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THE

CHANGEABLE CERCARIA.

Generic Character.

Worm unobſervable by the naked eye, ſomewhat pellucid, tailed.

Specific Character.

GREEN CERCARIA, (ſometimes red,) with cylindric mutable body, and ſlightly bifid pointed tail.

The animalcule of which microſcopical figures, very highly magnified, are repreſented on the annexed plate, is amongſt thoſe legions of animated beings which, in the warmer months, contribute to people the generality of ſtagnant waters; ſometimes covering the whole ſurface with a continued ſheet of a red or green colour, and ſometimes diffuſing a ſtrong tinge of thoſe colours throughout the whole maſs or body of the water. The general ſhape of this animalcule is not much unlike that of a ſlug, but its motions are more analogous to thoſe of a leech. In its poſtures it is infinitely variable, poſſeſſing, like many others of the animalcular

animalcular tribe, the higheſt degree of contractile power; in conſequence of which it occaſionally appears in all the various ſtates of elongation and contraction repreſented in the plate; and not unfrequently reduces itſelf to a globular form. Its motions are rather ſlow than ſwift, and when ſwimming at full length it generally appears tranſparent at both extremities, while the body ſeems filled with a congeries of globules or grains of a green or reddiſh colour, and not ill reſembling the ſpawn of fiſh. The head or fore-part is obtuſe, but the tail or extremity is acute, and ſometimes exhibits a ſlight appearance of bifurcation at the tip; but this is a particular which in general is ſcarce to be perceived. The difference in colour between theſe animalcules ſeems hardly ſufficient to juſtify our regarding them as ſpecifically diſtinct; ſince both the green and the red ſort are ſo perfectly alike in other reſpects that no difference can be perceived between them. The green ſort may be very frequently obſerved in moſt ſtagnant waters in the months of May and June, and ſometimes much ſooner, appearing commonly on the ſurface in the evening and early in the morning, and retiring towards the middle of the day to the bottom. The red variety is far leſs common, and the appearance which it ſometimes exhibits is ſuch as to alarm a ſuperſtitious mind with the idea of the water being tinged with blood: a panic of which numerous inſtances have been adduced by authors; and which is the more excuſeable in thoſe who are ignorant of the cauſe, as the animalcules are ſo extremely minute as to be utterly imperceptible, (except to an uncommonly

ſharp

ſharp eye,) without the aſſiſtance of a glaſs; ſo that even taking up the water and examining it affords to the vulgar no ſatisfactory elucidation. I remember to have more than once obſerved the whole ſurface of a large moat or pool completely covered in the ſpace of a ſingle night with this animalcule, when the day before there was not the leaſt appearance of diſcoloration in the water: the whole ſurface appeared as if covered with florid blood. It ſhould be obſerved that ſeveral other ſpecies of animalcules ſometimes give the ſame tinge to ſtagnant waters, though in a far leſs ſtriking degree: thus the monoculus pulex of Linnæus is frequently ſo numerous as to redden the water: the larva of the common gnat has alſo been known to produce a ſimilar diſcoloration.

Theſe are appearances which in leſs enlightened ages, unaſſiſted by the microſcope, have ſo often filled the minds of the people with the moſt terrible apprehenſions, and have been regarded either as the precurſors of ſome great calamity, or magnified into the immediate ſymptoms of heavenly diſpleaſure. We are aſſured by the celebrated Swammerdam that the city of Leyden was in a ſtate of conſternation on diſcovering one morning that the waters of that place were apparently changed into blood; which, upon accurate examination, was found to be owing to no other cauſe than prodigious numbers of minute red animalcules, (in all probability of the very ſame ſpecies here repreſented.) For the effect which ſuch appearances produced on the minds of the ancients, it may be ſufficient to recal to the recollection of the reader the words of

Virgil,

Virgil, who, in his terrific liſt of prodigies which either preceded or accompanied the death of Julius, has not neglected to enumerate this phænomenon.

——————— " nec tempore eodem
Triſtibus aut extis fibræ apparere minaces,
Aut puteis manare cruor ceſſavit."

The trembling prieſt o'er boding victims ſtood,
And wells, portentous omen! flow'd with blood.

ANAS PLUTONIA.

Character Genericus.

Roſtrum lamelloſo-dentatum, convexum, obtuſum.
Lingua ciliata, obtuſa.

Lin. Syſt. Nat. p. 194.

Character Specificus.

ANAS NIGRA, remigibus albis.

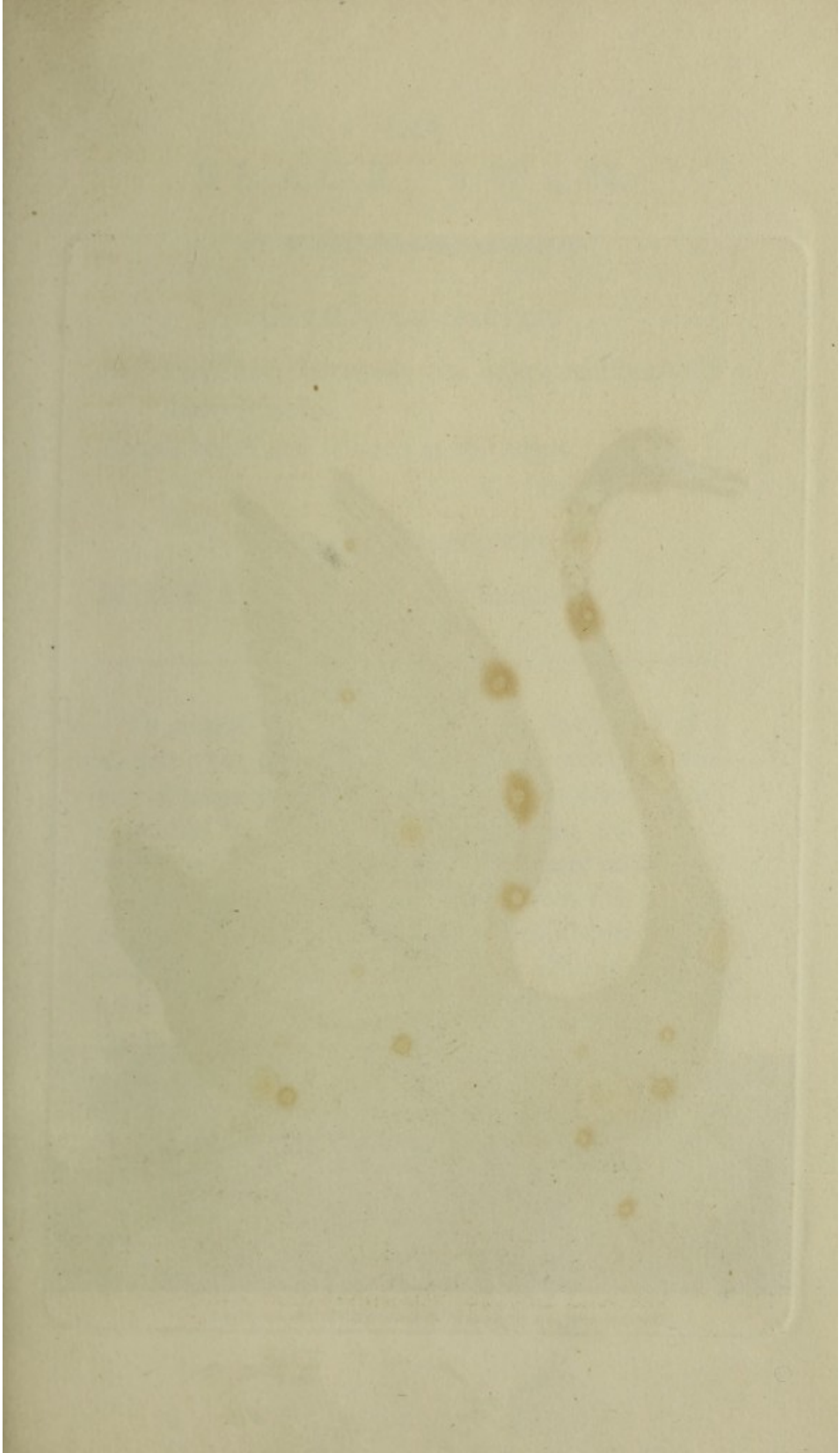
ANAS ATRATA?

Lath. ind. orn. p. 834.

Cum ipſa nive candidior ſit cycnus communis, colorque ei conſtans ſemper fuerit et perpetuus, mirum fortaſſe ſonet populi auribus qui jam olim in proverbium abiit *cycnus niger*. Nemo tamen ſanus unquam dubitaverit quin e numeroſiſſimo genere anatino exſtare poſſet alicubi in terris ſpecies quæpiam diſtincta, quæ forma licet modoque vivendi cycno candido ſimillima, a natura tamen colorem prorſus contrarium ſortita ſit. Hæc jam tandem comperta eſt in Nova Hollandia inſuliſque adjacentibus, quamque tabula fideliter depictam oſtendit. Si nigredinem excipias, convenit huic in reliquis fere omnibus cum cycno Europæo. Idem ei natanti decor, eadem nec ingrata ſuperbia, variique corporis

ſitus. Tota avis, remigibus albis exceptis, coloris eſt aterrimi. Roſtrum amoeniſſime rubrum, cute implumi, quæ baſin cingit, ſuper frontem late et ultra oculos excurrente. Apici mandibulæ ſuperioris nigricanti prope adjacet macula flava. Crura nigra, pedes paulo pallidiores.

Amiciſſime nobiſcum communicavit exemplum fideliter depictum, unde figuram hanc noſtram mutuati ſumus, Thomas Wilſon armiger, quod ei nuperrime miſerat cum aliis multis hujuſmodi cimeliis Dominus White, Novæ Hollandiæ chirurgus præcipuus.



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THE BLACK SWAN.

Generic Character.

Bill broad and flattened; the edges marked with ſharp lamellæ.

Tongue broad and ciliated at the edges.

Specific Character.

BLACK SWAN with white remiges.

To vulgar ears a black ſwan has the ſound of a miracle: but this ariſes merely from annexing the proverbial name to the common ſwan, ſo emphatically diſtinguiſhed by its conſtant ſnowy plumage, from which it was never known to vary: but no one could ever rationally be ſuppoſed to call in queſtion the poſſible exiſtence of ſome diſtinct ſpecies of this numerous genus, which, however nearly allied in point of ſize and habit to the common ſwan, might yet be naturally black. In fact ſuch a ſpecies is now diſcovered. It is a native of New Holland, and the neighbouring iſlands, and is accurately repreſented on the plate annexed. In general appearance it bears the moſt ſtriking reſemblance to the common ſwan, and is remarkable for all thoſe gracefully-varying attitudes which ſo eminently

diſtinguiſh the European ſpecies. The whole bird, except the long wing-feathers, which are white, is of the deepeſt and fulleſt black: the beak is of a fine red, and the ſkin ſurrounding the baſe is continued high over the forehead and beyond the eyes: the tip of the upper mandible is blackiſh, and near the tip is a ſpot of yellow. The legs are black; the feet ſomewhat paler.

The original drawing of this moſt curious bird, accurately taken from the life, and from which the preſent figure is copied, was obligingly communicated by Thomas Wilſon, Eſq. of Gower Street, to whom it was ſent, together with many other non-deſcript animals, &c. by Mr. White, chief ſurgeon to the Engliſh ſettlement at New South Wales.

MYRMECOPHAGA ACULEATA.

****

Character Genericus.

Dentes nulli.
Lingua teres, extenſilis.
Os anguſtatum in roſtrum.
Corpus (pleriſque) pilis tectum.

Character Specificus.

MYRMECOPHAGA ACULEATA, cauda breviſſima.

Digna eſt quæ penitius examinetur hæc ſpecies, non modo quod nova prorſus ſit et adhuc inaudita, ſed quod in ea inſigne detur exemplum miræ iſtius gradationis qua genera diverſiſſima interdum ſibi invicem appropinquant. Vinculum videtur eſſe hæc quo connectuntur genera ſatis diſtincta *Hyſtricis* et *Myrmecophagæ*, cum enim huic ſit facie veſtituque ſimilior, illius habet roſtrum veroſque characteres. Pedem circiter unum longa eſt, quatenus a ſpeciminibus adhuc viſis colligi poſſit: deeſt igitur figuræ noſtræ pluſquam dimidia pars magnitudinis naturalis. Totum corpus ſuperius cum cauda ſpinis contegitur validis et longioribus, quales omnino ſunt hyſtricis vulgaris, niſi quod vice circulorum qui alternatim albi nigrique, plerumque albeant, apicibus altius nigro tinctis, quodque albedo

albedo a nigredine ſeparetur annulo parvo ſordide aurantio. Aliæ vero ſpinæ totæ albent, ſi excipias extremitates leviſſime nigricantes. Caput, crura, corporiſque partes inferiores e fuſco nigricant, veſtiunturque pilis ſeu ſetis potius denſiſſimis. Caudæ brevioris apicem denudatæ et paululum complanatæ ſuperficies ſuperior ſpinis contegitur perpendicularibus, illas ſaltem longitudine æquantibus quæ in dorſo cernuntur. Roſtrum longum, nudum, nigrum, tubulatum, eodem modo formatum quo roſtrum *Myrmecophagæ jubatæ*, in apice rictum habet minimum, unde lingua lumbriciformis longe protruditur, qualis eſt etiam Myrmecophagarum. Nares parvæ, ad extremum roſtri ſitæ. Oculi minimi, nigri, iride cærulea. Crura breviſſima, craſſiſſima, digitis quinque inſtructa. Pedum anticorum digitis ſunt ungues quinque validiſſimi, longi, obtuſiuſculi, nigricantes: poſticorum quatuor tantum (pollex enim cæteris latior, ungue caret,) quique differunt inter ſe: prior ſcilicet eſt longiſſimus, paululum curvatus, et acutus; ſecundus paulo brevior, ſed ſimiliter formatus; reliqui duo multo breviores, aliquatulum curvi, et obtuſiuſculi. Vivit proculdubio hæc ſpecies more aliarum Myrmecophagarum, in tumulo enim quem congeſſerant formicæ primo deprenſa eſt, ideoque nomine *Hyſtricis formicariæ* diſtincta. Ad nos a Nova Hollandia allata eſt.

Cum nuperrime detectum ſit hoc animal, neminem ſcientia naturali vel leviter imbutum latere poſſit minus quam antea convenire Linnæanos characteres generi *Myrmecophagæ*. Cum igitur quæ in generibus *Manis* et *Myrmecophagæ* continentur animalia veſtitu ſolo differant, huic enim corpus ſquamoſum, illi piloſum; ſatius

forſan

forſan foret duo hæc genera conjungere, annumerata iis noviſſima hac ſpecie, et ex parte characterum dicere *Corpus vel pilis vel ſquamis vel aculeis veſtitum:* ni novum omnino genus inſtituatur, a generibus Manis et Myrmecophagæ in hoc tantum diſcrepans, quod nec ſquamis, nec pilis, ſed aculeis contegatur.

THE

PORCUPINE ANT-EATER.

Generic Character.

Body (in moſt ſpecies) covered with hair.
Snout tubular; mouth ſmall; no teeth.
Tongue cylindric, long, extenſile.

Specific Character.

SPINY ANT-EATER with very ſhort tail.

This extraordinary animal may well be conſidered amongſt the moſt curious and intereſting quadrupeds yet diſcovered; ſince it is not only an abſolutely new and hitherto unknown ſpecies, but is alſo a moſt ſtriking inſtance of that beautiful gradation, ſo frequently obſerved in the animal kingdom, by which creatures of one tribe or genus approach to thoſe of a very different one. It forms a connecting link between the very diſtant genera of Hyſtrix and Myrmecophaga; having the external coating and general aſpect of the one, with the mouth and peculiar generic characters of the other. This animal, ſo far as can be judged from the ſpecimens hitherto obſerved, is about a foot in length: the figure conſequently repreſents it of nearly half the natural ſize. The whole upper parts of the body and tail

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are thickly coated with ſtrong, ſharp ſpines, of a conſiderable length, and perfectly reſembling thoſe of the common porcupine, except that inſtead of being annulated with ſeveral alternate rings of black and white, as in that animal, they are moſtly white, with black tips, the colour running down to ſome little diſtance on the quill, and being ſeparated from the white part by a circle of dull orange: others are entirely white, or at leaſt have but a ſlight appearance of black towards the tips. The head, legs, and whole under parts of the body are of a deep brown or ſable, thickly coated with ſtrong, cloſe-ſet, briſtly hair. The tail is ſhort, bare, ſlightly flattened at the tip, and coated on the upper part of the baſe, with ſpines at leaſt equal in length to thoſe of the back, and ſeated perpendicularly upwards. The ſnout is long and tubular, and perfectly reſembles in ſtructure that of the Myrmecophaga jubata, or great ant-eater; having only a very ſmall opening or rictus at the tip, from whence is protruded a long lumbriciform tongue, as in the ant-eaters. The noſtrils are ſmall, and ſeated near the extremity of the ſnout. The eyes are very ſmall, and black, with a pale-blue iris. The legs are very ſhort and thick, and are each furniſhed with five rounded broad toes: on the fore feet are five very ſtrong, long, and blunt claws, of a black colour; ſeated on each toe. On the hind-feet are only four claws, the thumb, which is broader than the reſt of the toes, being deſtitute of a claw. The firſt claw on the hind-feet is extremely long, ſomewhat curved, and ſharp-pointed; the next rather ſhorter, but of ſimilar appearance; the two remaining ones far ſhorter, very ſlightly curved, and not ſharp-pointed.

In

In its mode of life this animal beyond a doubt reſembles the Myrmecophagæ, having been found in the midſt of an ant-hill; for which reaſon it was named by its firſt diſcoverers the ant-eating porcupine. It is a native of New Holland.

It cannot eſcape the obſervation of every ſcientific naturaliſt, that in conſequence of the diſcovery of this curious animal, the Linnæan character of the genus Myrmecophaga is in part rendered inapplicable. Since therefore the animals in the genera of *Myrmecophaga* and *Manis* differ only in the external coating of the body, the former being covered with hair and the latter with ſcales, it would perhaps be not improper to conjoin the two genera, to add this as a new ſpecies, and to give as part of the generic character *Corpus pilis, ſquamis, vel aculeis tectum.* But if this be not done, it would perhaps be proper to make this animal conſtitute a new genus, which would differ from the genera of Manis and Myrmecophaga in having the body coated with aculei, inſtead of hair as in the Myrmecophaga, or of ſcales as in the Manis.

CICADA PLEBEIA.

Character Genericus.

Roſtrum inflexum.
Antennæ ſetaceæ.
Alæ quatuor, membranaceæ, deflexæ.
Pedes (pleriſque) ſaltatorii.

Lin. Syſt. Nat. p. 705.

Character Specificus, &c.

CICADA ſcutelli apice bidentato, elytris anaſtomoſibus quatuor, lineiſque ſex ferrugineis.

Lin. Syſt. Nat. p. 707.

Mouſſ. inſ. 127.
Adr. inſ. 307.
Matth. Dioſc. 264.

Cicada, quam ſæpiſſime memorant poetæ antiqui, quamque communiter cum gryllo vulgari ſeu campeſtri confundunt plerique interpretes, Europam incolit calidiorem, in Italia et Græcia, ut plurimum reperta. Species notiſſima, ſeu cicada plebeia Linnæi quam depinximus, æſtate calidiſſima conſpicitur, ramoque inſidens per totum fere diem ſtridulum canit et acutum. In Italia eſt altera ſpecies, (quæ cicada orni Linnæi) huic ſimillima, ſed minor. Majorum cicadarum variæ

ſunt

ſunt ſpecies, adeo inter ſe ſimiles, ut revera licet diverſæ, eaſdem tamen putarent incurioſi ſpectatores. Omnes ab ovis originem ducunt, quæ deponunt parentes in arborum radicibus juxta terram, quæque in larvas excluduntur, a veteribus ſcriptoribus Tettigometrarum nomine diſtinctas. Peracto duorum annorum ſpatio, exuvias ponunt larvæ, perfectumque naſcitur inſectum. Figura tertia Tettigometram ſeu larvam cicadæ plebeiæ monſtrat. Notandum eſt in Britannia plurimas eſſe cicadarum ſpecies; parvulæ tamen ſunt, nec vocem ſeu ſtridorem notabilem emittunt.

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THE

COMMON CICADA.

Generic Character.

Beak inflected.
Antennæ ſetaceous.
Wings four, membranaceous, deflected.
Feet (in moſt ſpecies) formed for leaping.

Specific Character.

CICADA with the ſcutellum bidentated at the tip, the elytræ marked with four anaſtomoſes and ſix ferruginous lines.

The Cicada, ſo often commemorated by the ancient poets, and ſo generally confounded by the major part of tranſlators with the graſshopper, is a native of the warmer parts of Europe, and is particularly plentiful in Italy and Greece. The moſt common ſpecies, or cicada plebeia, here repreſented, appears in the hotter months of ſummer, and continues its ſhrill chirping during the greateſt part of the day; ſitting amongſt the leaves of trees. In Italy there is another ſpecies, (the cicada orni, Lin:) which bears a very great general reſemblance to the former but is conſiderably leſs: indeed amongſt the larger cicadæ there are ſeveral ſorts, which,

which, though really diſtinct, are yet ſo very nearly allied to each other, as to be eaſily regarded, on a curſory view, as the ſame ſpecies. All the cicadæ proceed from eggs, which are depoſited by the parent inſects in and about the roots of trees, near the ground: they hatch into larvæ, which, when grown to a certain ſize, are the Tettigometræ of the older writers. Theſe larvæ, after having continued in this ſtate two years, caſt their ſkins and produce the complete inſect. Fig. 3. ſhews the larva or Tettigometra of the cicada plebeia. I ſhould obſerve that in our own country we have ſeveral ſpecies of this genus, which however are extremely ſmall, and are not diſtinguiſhed by any ſound ſufficient to excite attention.

INDEX.

Pl.

86. AMPHISBÆNA roſea.
108. Anas Plutonia.
101. Argonauta Argo.
103. Aſterias Caput Meduſæ.
99. Caſuarius Auſtralis.
94. Coluber naſicornis.
107. Cercaria mutabilis.
102. Certhia Cardinalis.
75. Certhia coccinea.
110. Cicada plebeia.
106. Iſis Hippuris.
82. Iſis nobilis.
83. Lacerta varia.
89. Lacerta uniſtriata.
105. Loxia Cardinalis.
79. Madrepora Fungites.
95. Mantis ſtrumaria.
78. Merops ſuperbus.
91. Monoculus Polyphemus.
109. Myrmecophaga aculeata.
77. Papilio Helena.
92. Papilio Ulyſſes.
85. Phalangium cancroides.
90. Platalea Ajaja.
87. Pſittacus concinnus.
93. Pſittacus eximius.
96. Pſittacus pulchellus.
104. Ptinus fatidicus.
76. Rana cornuta.
80. Scarabæus Goliathus.
100. Scorpio Afer.
97. Silurus Callichthys.
84. Tetrao Porphyrio.
81. Trohcilus multicolor.
98. Tubipora muſica.
88. Xiphias platypterus.

INDEX.

Pl.

86. AMPHISBÆNA roſe-coloured.
103. Aſterias Meduſa-Head.
109. Ant-Eater Porcupine.
80. Beetle fork-headed.
78. Bee-Eater ſuperb.
77. Butterfly black-and-gold.
92. Butterfly radiated.
99. Caſſowary Southern.
107. Cercaria changeable.
75. Creeper ſcarlet.
102. Creeper Cardinal.
110. Cicada common.
82. Coral common red.
106. Coral black-and-white.
104. Death-watch.
76. Frog horned.
105. Groſsbeak Cardinal.
81. Humming-bird Harlequin.
89. Lizard ſingle-ſtriped.
83. Lizard variegated.
95. Mantis broad-breaſted.
79. Madrepore Muſhroom.
91. Monoculus Indian.
101. Nautilus paper.
96. Parrakeet turcoſine.
87. Parrakeet crimſon-fronted.
93. Parrot nonpareil.
84. Partridge violaceous.
85. Phalangium cancroid.
100. Scorpion African.
97. Silurus wandering.
94. Snake horn-noſe.
90. Spoon-bill roſe-coloured.
88. Sword-Fiſh broad-finned.
108. Swan black.
98. Tubipore crimſon.