



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

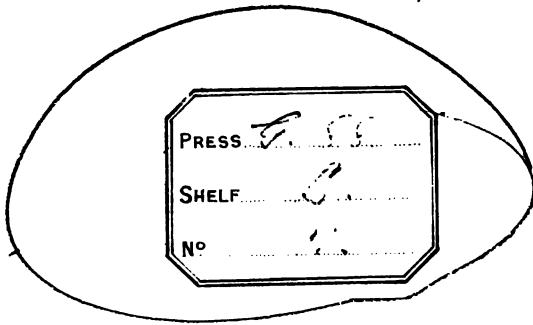
### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

18933  
e. 449



600030567R



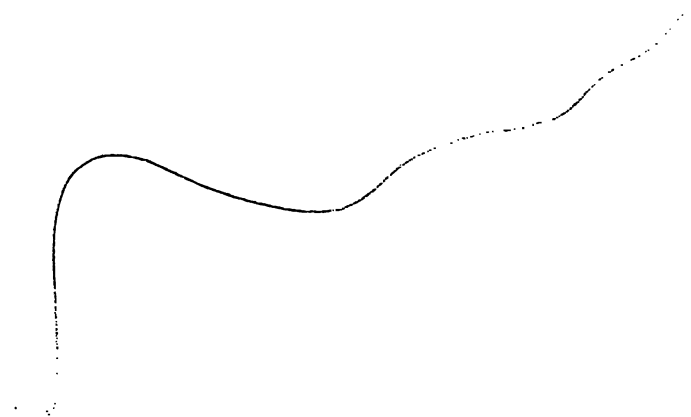
18933 e. 449











No. 2.

THE  
ZOOLOGICAL  
MISCELLANY.

---

TO BE CONTINUED OCCASIONALLY.

---

BY  
JOHN EDWARD GRAY,

F.Z.S., F.G.S., F.D.G.S., M.R.S.L., &c. &c.

---

LONDON:

PUBLISHED BY TACUTT, WIGGIE AND CO., BOND SQUARE; G. G. BOWERMAN,  
155, REGENT STREET; W. WOOD, 20, FAYERS STREET,  
COVENT GARDEN.

---

*H. E. Stringer, Printer, 20, Ironmonger Lane, Chancery.*

---

1884.







## ZOOLOGICAL MISCELLANY.

---

### I. Description of twelve undescribed species of Birds, discovered by JOHN REEVES, Esq., in China.

THE collection from which these Birds are described consisted of sixty-nine species, of which thirty-six species were peculiar to India, and thirty-three common to Europe, or North America, as well as India; of the thirty-three, twenty-seven were aquatic Birds, and six land; and of these six, two (the Kingfisher and Wagtail) seek their food in water, and two are the domestic companions of man, as the Magpie and Tree Sparrow.

*White headed Pastor.* *Pastor bicolor*, n. s. Black-brown; head, false wing, tips of wing coverts, secondaries, vent and tail feathers, abdomen and rump white; lower part of neck black; sides black streaked; bill and feet black. Length  $12\frac{1}{2}$  inches. Inhab. China, India. Dr. Horsfield.

*Silky Pastor.* *Pastor sericeus*, n. s. Vinaceous brown; rump, sides and chest rather paler; crown yellow white; chin and middle of abdomen reddish white; vent, under wing coverts, outer edge of false wing, and base of primaries white; tail and wing metallic green-black; bill slender, reddish. Length  $9\frac{1}{2}$  inches. Inhab. China.

*Two-coloured Thrush.* *Turdus melaleucus*, n. s. Black; beneath greyish black; head, ears, chin, and spot on the front edge of wing, white; bill and feet yellow; bill compressed at the end; nearly as long as the head. Tarsi and feet small. Tail even. Length 10 inches; wing  $4\frac{1}{2}$  inches; bill 9 lines.

*Black-billed Myophonus.* *Myophonus nitidus*, n. s. Blue black; tips of all the feathers (except the quills and tail) with a polished bright blue spot; a few of the larger wing coverts white tipped; sides under the wings, white streaked; bill and feet black. Length 11 inches. Inhab. China, Reeves. India, Gen. Hardwicke. Like *M. metallicus*, but bill and feet black.

*Chinese Butcher Bird.* *Lanius Chinensis*, n. s. Crown, and back of neck, ash; forehead orbits and back of ears, wings and tail black; chin and throat white; rump, loins, outer edge of secondaries, outer web of outer, and tips of all, except the two middle tail feathers, bright bay; under wing coverts, chest and abdomen, pale brown; tail much graduated. Length 11 inches. Tarsi  $1\frac{1}{4}$  inch.

*Reeves's Redstart.* *Sylvia*, (*Phænicurus*,) *Reevesii*. Black; crown and nape blue ash; back of neck rather paler, chest, under wing coverts, abdomen, loins, rump, and all, (except the two middle, and outer edge of the outer,) tail feathers, bright red bay; base of outer web of secondaries white. Inhab. China.



*Goura Bunting. Emberiza Lathamii*, n. s. *Goura Finch*, Lath. Hist. Black; feathers grey edged, the abdominal feather broadest edged; head with a crest of several long linear feathers; upper and under wing coverts, quill and tail feather, (except at the tips,) bright red bay; bill and feet horn-coloured. Length  $7\frac{1}{2}$  inches.

*Female or Young.* Brown; paler beneath; middle of feathers black brown; sides blackish; chin whitish; wing and tail feathers black brown; outer edge of wing coverts, quill and outer tail feathers, inner web of quills, nearly to the top, and band down the shaft of two outer tail feathers on each side, bright red bay; under wing covert bay; bill and feet brown. Inhab. China and India.

*Pale Goat Sucker. Caprimulgus pallidus*, n. s. Black brown, minutely punctated with pale ash, spotted with bay; abdomen pale bay, black banded; vent rufous; outer quill black brown, spot on inner web of outer, and band across second, third, and fourth quill, and under wing coverts pale bay; inner primaries, secondaries and bastard wing bay and black banded; tail slightly rounded, outer feathers pale bay, middle ones black dotted. Length  $10\frac{1}{2}$  inches; tail 4 inches; bill 1 inch, 1 line. Inhab. China, Mr. Reeves. India, Dr. Horsfield.

*Wedge-tailed Partridge. Perdix sphenura*, n. s. Blue grey vermiculated and speckled with black; chin, ears, sides of neck, throat and abdomen, bay; sides and epigastrium black spotted; wing coverts and scapulars white speckled and chestnut spotted; secondaries irregularly white banded; outer ones black tipped; tail long, wedge-shaped, obscurely banded; quills brown; bill and feet dark. Length 11 inches. Inhab. China.

*Chinese Francolin. Perdix (Francolinus) maculatus*. Black with round white spots; loins, rump and tail black, white cross-banded; top of head, nape, scapulars, tips of back feathers, and under tail coverts, chestnut; middle of crown brown, feathers pale edged; chin, upper part of throat and sides of face white, with a band over the eyes, and another from the angle of the mouth to under the ears black; bill, black; feet yellow; spurs blunt. Length 12 inches. Inhab. China.

*Chinese Dunlin. Tringa (Pelidna,) Chinensis*. Bill, slightly bent down, rather longer than the head, black. Ash-coloured, feathers, white edged; crown and back of neck, brown ash, white streaked; chin, pure white; under wing coverts, rump, and beneath, white; front and side of neck, chest, and sides of body and rump, ash spotted; wing and tail feathers, ash, with narrow white edges; tail quite even; legs, dark green. Length  $10\frac{1}{2}$  inches.

*Asiatic Snipe. Scolopax Horsfieldii*, n. s. *Scol. gallinago*, Horsf. and Raffles. Exactly like the Common Snipe (*Scol. gallinago*, Pl. Enl. t. 883,) in size and plumage; but on each side of the tail there are a series of small ridged filiform arched feathers not found in the European species. Inhab. China, J. Reeves, Esq. India, Dr. Horsfield.

II. *Description of two new species of Birds discovered by Capt. HAY, in the Phillipine Islands.*

These Birds having been obtained from the Natives, who use them as plumes, were deficient of their wings and feet.

*Large Billed Pitta. Pitta macrorhynchus.* Green; head, neck, and bill black; rump, blue-green; lower part of abdomen and vent crimson; bill, large, black; head slightly crested; wings—Length  $6\frac{1}{2}$  inches. Inhab. Phillipine Islands.

*Phillipine Oriole. Oriolus Phillipensis.* Head, upper part of neck, back, epigastrium, and tail, coal black; lower part of neck, chest, belly, and rump, bright golden yellow; paler on the back of the neck; bill, yellow; wings, —? feet —? Length  $7\frac{1}{2}$  inches. Inhab. Phillipine Islands.

III. *Descriptions of three undescribed species of Birds, discovered and drawn by JOHN CRAWFURD, Esq., at Siam.*

*Siam Malkoha. Phœnicophaus Crawfordii, t. 2.* Blue-green, rather paler beneath; vent, red-brown; tips of tail feathers, white; bill and feet, greenish; orbits, moderate, red. Inhab. Siam. Length 16 inches; tail 8; bill  $1\frac{1}{2}$  inch.

*Bay Cuckoo. Coccyzus badius, t. 1.* Pale bay; paler beneath; tail, with numerous narrow, pale, and dark brown bands; end, ( $\frac{1}{3}$  an inch long) white; bill, long, green; orbits and lores naked greenish; feet, ash-brown. Length 12, tail 6, and bill 1 inch. Inhab. Siam.

*Sumatran Barbet, (Lath. Hist.) Bucco trimaculatus, t. 3.* Green; forehead, cheeks, band across the throat, quills, and tail feathers, except the two middle ones, black; nape and chin blue; cheeks with three red spots on each side; bill, black; feet, yellow. Length 6 inches. Inhab. Siam.

IV. *Description of a new species of Hornbill, from Major FARQUHAR'S Drawing.*

*Brown-tailed Hornbill. Buceros Farquhari.* Black; sides of head and neck, white; tail end, pale brown; bill, compressed; base, with an ovate protuberance; young? sides of face and neck, dark brown; bill, smaller, with an ovate protuberance extending half its length. Inhab. Malacca. It is to Major Farquhar that we are indebted to the knowledge of the *Malay Tapir*, the *Galeated Hornbill*, the *Viverra zmyzura*, Bamboo Rat, the Binturong, and many other animals.

V. *On the Genus ALECTURA of Latham, and the family MENURIDÆ.*

Dr. Latham in the last page of the last volume of his *History of Birds*, proposed to form his *New Holland Vulture* into a genus under the name of *Alectura*, but he has given no character by which to distinguish it; he very properly observes that this Bird should be placed near *Menura*.

The genus *Alecturus* of Vicillot, is now considered a *Muscicapa*.

Gen. ALECTURA, Lath. (no character.) Fam. *Menuridæ*.

Bill short, strong, convex; culmen, strongly curved from the base;

nostrils, large, suborbicular, basal, in a deep nasal groove; head and neck naked, covered with deflexed bristles; feet large, strong; legs, feathered to the knees; tarsus very strong, long, longer than the middle toe, covered with reticulated scales, and with two larger series of scales in front; spurs, 0; toes 3-1; the front ones unequal, covered with a series of scales above, and with minute scales on the side, the inner ones rather shorter than the outer, which is scarcely shorter than the middle one. The hind toe on the same line as the others; half the length of the middle one; claws, long, (half as long at the toes,) slightly curved, blunt; hinder rather longer; wings moderate, rounded; first, second, third, and fourth quill graduated, the fifth longest; tail, long, rounded, dependant.

*Latham's Alectura. Alectura Lathamii. New Holland Vulture,* Lath. Hist. 1. t. 6. not good. Black; feathers of belly, pale edged; neck, reddish, when alive. Length 29 inches; tarsus,  $4\frac{1}{2}$  inches; middle toe, 2 inches; claw,  $1\frac{1}{4}$  inch; together,  $3\frac{1}{4}$  inches; hind toes, 1 inch; claw, 1 inch.

The genera *Menura*, Shaw; *Megapodius*, Quoy and Gaimard. *Alectura*, Latham; *Alethelia* and *Talegalla* of Lesson, may with advantage be united together, into a family under the name of *Menuridae*, characterized amongst the Gallinaceous Birds by the hind toe being placed on the same level as the other toes, and peculiar for the head being more or less naked, and the claws long and slightly curved. They are of a black dull colour, and without spurs. All the genera are peculiar to New Holland and its neighbouring Islands, they appear to unite the Gallinaceous Bird to the rails.

The genus *Alectura* differs from all the others in this family, by the tarsi being reticulated.

VI. *Description of three new species of Fish, including two undescribed genera, discovered by JOHN REEVES, Esq., in China.*

Gen. LEUCOSOMA, n. g.

Fam. Salmonidæ.

Head depressed, scaleless; muzzle, very long, acute; mouth, large; two-thirds of the upper edge of the upper jaw formed by the intermaxillary bones, intermaxillas, maxilla, palate, tongue, and lower jaw toothed. Vomer toothless; branchial rays 3? Body long, slender, compressed, scaleless, first dorsal fin just before the front of the anal fin.—This genus should be inserted in M. Cuvier's arrangement directly after *Saurus*.

*Chinese White-fish. Leucosoma Reevesii, n. s.* Opaque white, when preserved in spirits pale brown, B. 3. P. 10. D. 11—O. A. 25. V. 7. C. 20. Inhab. China. In the British Museum and the collection of Gen. Hardwicke. The muzzle very long and tapering; eyes large, lateral; mouth reaching to the eyes; the maxilla shelving in over the lower jaw; lower jaw narrow, with six or eight larger teeth forming a group in front, which pass through the three holes in the upper jaw. Length 6 inches. Eaten as a relish by the English at Canton.

Gen. SAMARIS, n. g.

Fam. *Pleuronectidæ*.

Pectoral fin small, long only on the side in which the eyes are; ven-



tral fin separate, close together at the base, unequal, the one on the eyes bearing side the largest; dorsal fin commencing over the middle of the upper eye; the first rays long and free at the end. Eye on the right side close together, separated by a ridge; mouth regular; teeth small, velvet-like; body oblong, narrow. This genus is most allied to the *Soles*.

*Crested Samaris. Samaris cristatus*, n. s. Eyes on the right side; body oblong elongate, nearly two and a half times as long as broad; scales rather large, ovate, fringed with minute bristles; lateral line straight and central, first rays of dorsal fin very long, free at the end; right ventral fin lanceolate; anal fin unequal; tail slightly rounded, D. 61. P. 4. V. 5. A. 51. C. 16. Length 6 inches 9 lines; breadth 2 inches.

*Zebra Centracion. Centracion Zebra*, n. s. Skin with four rayed asperities, grey brown, in unequal dark brown cross bands, generally placed in pairs; pectoral and two dorsal fins very long, falcate; the front teeth oblong, short; outer edge rounded, five or six lobed; the hinder one broad, flattened. Inhab. Sea of China. Sometimes found in Chinese Insect Boxes, but not so commonly as *Scylium ornatum*, Illust. Ind. Zool. t. All in the British Museum.

VII. *Description of two new species of Indian articulated Animals (Annelides) discovered by Gen. HARDWICKE, in India.*

*Three coloured Glossophore. Glossophora Tricolor. Hirudo tricolor*, Hardw. MSS. Body oval; chestnut edged with pale yellow; back with two broad white between three narrow black longitudinal bands; ocular dots, five pair; submarginal anterior disk, small, lanceolate; hinder, orbicular. Inhab. Ditches, Bengal.

*Moonhead Planaria. Planaria? lunata*. Body linear, lanceolate, blackish, paler beneath; head dilated, twice as broad as the body, semi-circular in front; tail rather tapering, rounder; eyes 0. Inhab. India. Winding round the leaves of coarse grass during the rainy season. Bengal.

VIII. *Description of two new species of Serpula, and an undescribed Coral Barnacle, discovered by SAMUEL PEARCE PRATT, Esq.*

*Two-ridged Serpula. Serpula bicostata*, n. s. Shell attached, testaceous, (upper part free elevated,) polished, very obscurely concentrically wrinkled, white, sub-opaque, gradually enlarging with three distinct deep blunt longitudinal grooves, forming two narrow longitudinal ribs on the upper side of the tube. Mouth round. Inhab. Coral, Indian Ocean. Collection of Mr. Pratt.

*Beautiful Serpula. Serpula elegans*, n. s. Shell attached, testaceous, (upper part free elevated?) white sub-opaque, gradually enlarging with three short elevated longitudinal keels placed on the back, the interspace between them, and the upper surface of the enlarged bases by which the tube is attached, finely, deeply and regularly transversely grooved. Mouth round. Inhab. Indian Ocean. Collection of Mr. Pratt.

*Irregular Coral Barnacle. Pyrgoma (Daracia) Monticularia*, n. s. Shell distorted, thin; margin very irregular, lobed, greatly thickened and separated from the rest of the shell by a sharp elevated rim, mouth very small, ovate, thin edged; operculum valves large, completely closing the mouth; opercular sheath, none; tubular support subconical, deep. Inhab. Indian Ocean on *Monticularia*. Collection of the British Museum.

IX. *On the Genus PERIPATUS of Guilding.*

The Rev. Mr. Guilding has described this animal as a genus of Mollusca. Having lately examined a specimen which formed part of Sir Hans Sloan's collection, I am satisfied that it is an *Annelide*, as Dr. Shaw appears to have considered it. In the *Zoological Journal*, IV., 278, Mr. MacLeay, since the above observations were made, has remarked that it is an annulose animal, connecting the Julidæ with the Worms amongst the *Amelalolia*. What are the Worms of Mr. MacLeay? It appears rather to be the genus which unites the family of Nereidæ with the Lumbrici or Earth-worms.

*Peripatus Juliformis*, Guilding, *Zool. Jour.* ij. 4, 5, t. 14. *Neries pedata*. Shaw's MSS. *Hunara Shavianum*, Leach's MSS. Brit. Mus. Head, indistinct; tentacula, 2, attenuated, cylindrical, finely ringed; eyes on a short peduncle at the base of the tentacula; mouth below linear; body sub-cymetrical, soft, closely ringed, attenuated behind; rays thirty-three, each formed of several rings, and furnished on each side with a contracted ringed conical foot, ending in several bristles; vent posterior below. Inhab. West Indies, Jamaica. Sloane; Mus. Sloane, n. 3989.

X. *Description of a new species of AMBLYRYNCHUS of Mr. BELL, in the British Museum.*

*Short-crested Amblyrynchus. Amb. subcristatus.* Head with unequal, short, broad, pyramidal scales, (smaller over the eyebrows) back and tail with a series of rather larger, short, broad scales; and a crest of seven or eight large, short, conical processes on the back of the neck, (the base about half as wide as high,) scales short, conical, blunt, smaller on the neck and larger on the tail and limbs. Inhab. Galapagos? Length of head  $2\frac{3}{4}$ . Body  $13\frac{1}{2}$ , and tail 8 inches.

*Crested Amblyrynchus. Amb. cristatus*, Bell, *Zool. Jour.* IV. 206, t. 12. Head with high, conical scales; back and tail with a crest of long, cylindrical, conical, recurved scales; scales of back long, triangular, conical, acute. Length of head  $2\frac{1}{2}$ . Body 16, and tail 16 inches. Mexico.

XI. *Description of some new species of African Birds discovered by Capt. EDWARD SABINE, R. A. in the Collection of the British Museum.*

*Yellow-collared Weaver. Ploceus collaris.* Black; lower part of the back of the neck (nucheneum) bright yellow; chest, abdomen, and beneath chestnut brown; bill black, conical, rounded between the nostrils;

tail slightly rounded, first quill rather shorter than the second, with fourth longest; tarsus black; bill to gape  $10\frac{1}{3}$ , to forehead  $8\frac{1}{2}$ ; tarsus 10 lines. Total length 6 inches.

*Red-breasted Weaver. Ploceus nitens.* Shin blue-black, lower part of throat and chest bright crimson; wing and tail, lower part of back and abdomen black brown; bill black, (white at the tip injured,) tarsus black; tail slightly rounded. Total length  $6\frac{1}{2}$  inches. Bill to gape  $10\frac{1}{3}$ , to forehead  $8\frac{1}{2}$ ; tarsus 10 lines.

*White Rump Chatura. Chætura bicolor.* Blue-black, duller on the throat and beneath; long upper tail coverts, hinder part of chest, abdomen, vent and under tail coverts pure white with black shaft to the feathers; tail even, the shaft longely spinose; under plumage black brown; bill short, depressed. Length  $4\frac{1}{2}$ ; expanse of wing 11 inches; bill to gape 5, to front 2 lines. Inhab. Africa.

*Sabine's Thamnophilus. Thamnophilus Sabini.* Blue-black; back, rump, chin and beneath, under wing-coverts and base of the inner edge of the quills pure white; quills black, bluish edged; tail obscurely banded; bill large, conical, long; culmen very wide and rounded, extended some distance up the forehead. Young birds in moult with brown feathers intermixed with the black, and the white of the back and chest varied with brown. Length  $7\frac{1}{2}$ ; wings 3 inches; bill 13; tarsus  $11\frac{1}{2}$  lines. This bird has very nearly the bill of *Barita*, but longer, and it has the nostrils, nasal groove, the false first quill, the geographical distribution and colouring of the *Lani*, it will probably form a new section of that family.

XII. *Description of a new species of Chameleon discovered by Capt. OWEN, in Africa.*

*Three-horned Chameleon. Chameleo Oweni*, tab. 4, old and young. Pale brown, marbled and lined with black; head with three long, conical, slightly curved horns covered with a sheath, the front one placed between the nostrils, rather the largest, the side ones on the front of the eyebrows; scales rather large, pentangular; body with small, nearly uniform scales, with a few smaller scales intermingled between them, those of the dorsal line are nearly square; tail slender. The young are more distinctly marbled and the horns shorter. Inhab. Fernandoo Poo, Capt. Owen.

XIII. *Description of twelve new genera of Fish, discovered by Gen. HARDWICKE, in India, the greater part in the British Museum.*

Gen. TEMERA.

Fam. *Raiada*.

Body orbicular; ventral fins large, produced nearly square; tail very short, end compressed, finned; dorsal fin, none; most nearly allied to *Torpedo*, but differs in having no dorsal fin, in which character it is most nearly allied to *Narke* of Caup; a genus not noticed by Cuvier, which has only one dorsal fin while *Torpedo* has two.

*Hardwicke's Temera. Temera Hardwickii*, n. s. Plain brown with irregular black streaks. Inhab. Penang. Length 6 inches



## Gen. ANACANTHUS.

Fam. *Balistidae*.

Body long, lanceolate, compressed, covered with small scales; head produced, beak-shaped; mouth small; under lip one bearded; pelvis produced, baglike, with a single rather long spine in front; dorsal fin one, long; anal long; tail long, lanceolate; most allied to *Alutera* (*les Aluteres*, Cuv.)

*Bearded Anacanthus*. *Anacanthus barbatus*, Illust. Ind. Zool. Pisc. t. 1. f. 2. Brown, rather paler beneath; under part of the jaws, body and ventral pouch whitish, marbled with black lines; anal fin produced a little beyond the dorsal fin; tail nearly half as long as the body, D. 46. V. 11. A. 60. P. 8? Singapore.

## Gen. NANDINA.

Fam. *Cyprinidae*.

Dorsal fin longer than the anal, the lips with a series of beards, allied to *Cirrhinus*, (*les Cirrhines*, Cuv.)

*Hamilton's Nandina*. *Nandina Hamiltonii*. *Cyprinus Nandina*, Ham Ganges, t. 8. f. 48.

## Gen. BOTIA.

Fam. *Cyprinidae*.

Body ovate, lanceolate, compressed with small scales; head and operculum naked, with a large spine just behind each nostril; mouth small; nose produced; dorsal fin moderate, medial, opposite the ventral fins; anal fin short. All Hamilton's *Cobites* belong to this genus, and so does one of the European species.

*Almorah Botia*. *Botia Almorhæ*. Subnasal spines double; brownish with irregular pale spots; fins pale, three or four banded, P. 13. D. 11. V. 8. A. 7. C. 25. Almorah.

## Gen. DIPLOPTERUS.

Fam. *Esocidae*?

Body fusiform, compressed; mouth protractile, (toothless?) eyes large; head scaly; ventral fins placed a little before the pectoral, first ray long; pectoral small; dorsal fin posterior, placed over the second anal; anal fins two, well separated; tail rounded, free.

*Beautiful Diplopterus*. *Diplopterus pulcher*, Illust. Ind. Zool. t. 4, f. 1. Olive green, beneath purplish white with a broad purple band on each side, from the mouth passing the under half of the eyes to the centre of the tail; tail, base yellowing, end purple. P. 16. A. 8. 12. C. 16. D. 12. Length 5; height  $\frac{3}{4}$ ; breadth  $\frac{1}{4}$ .

## Gen. ACANTHONOTUS.

Fam. *Siluridae*.

Dorsal fin small, spineless over the front ray of the anal fin, with a series of small spines before it. Most allied to *Schilba*, but differs in the position of the dorsal fin.

*Hardwicke's Acanthonotus*, *Acanthonotus Hardwickii*, Illust. Ind. Zool. t. 2, f. 1. Beards eight, very long; Fish greenish-silvery; dorsal 15.—5. C. 26, P. 15, A. 74?

## Gen. AILIA.

Fam. *Siluridae*.

Body compressed; fins all spineless; fat fin very short and small over the end of the very long anal fin; ventral fin small, nearly under the pectoral; tail forked. Most allied to *Melalapterus* of Geoffroy.

*Bengal Ailia*. *Ailia Bengalensis*, Illust. Ind. Zool. Pisc. t. 2, f. 2. Silvery.—Rivers Bengal. Eaten by the natives.

## Gen. CHACA.

Fam. *Siluridæ*.

Dorsal fins 2, first anterior short, hinder long, united to the caudal and anal fins; first ray of the pectoral fin spinous, rest of the fins all soft; head very broad. Allied to *Aspredo*.

*Hamilton's Chaca*. *Chaca Hamiltonii*. *Platysacus Chaca*. Hamilton, Ganges, t. 28.

## Gen. RACONDA.

Fam. *Clupeidæ*.

Dorsal fin none; rest like *Pristigaster*.

*Russel's Raconda*. *Raconda Russeliana*. Silvery; Saugar Roads. A species distinguished from the want of the fin by the fishermen; there are two specimens in the British Museum, neither shewing the slightest indication of that organ.

## Gen. COILIA.

Fam. *Clupeidæ*.

Body tapering, compressed; dorsal fin short, over the ventrals; anal and caudal fin united; pectoral fins small; rays five, three upper long and free; rest of the characters like *Thrissa*.

*Ramarata Coilia*, *Coilia Hamiltonii*. *Mystus Ramarata*. Hamilton, Ganges, 233. Illust. Ind. Zool. t. f. yellowish. Indian Ocean.

## Gen. RATABOURA.

Fam. *Murænidæ*

Body cylindrical, lateral line straight, central; head short, mouth small; teeth conical in both jaws, equal; dorsal, anal, and caudal fin distinct; dorsal fin short, behind the middle of the body; caudal fin rounded; pectoral fin small; gill apertures small just before the pectoral fins.

*Hamilton's Rataboura*. *Rataboura Hamiltonii*, *Muræna Rataboura*. Ham. 25. Dorsal fin 22, anal 50, and caudal 60-rayed.

*Hardwicke Rataboura*. *Rataboura Hardwickii*. Illust. Ind. Zool. t. 11, f. 2. Dorsal fin 26, anal 32, and caudal 36-rayed.

## Gen. MORINGUA.

Fam. *Murænidæ*.

Body cylindrical; lateral line straight, inferior; head short; mouth small; jaws subequal; teeth of the upper jaw conical, acute, recurved, with a central row along the palate, in the lower jaw short, blunt, equal; dorsal, anal, and caudal fins united; dorsal fin commencing just before the front of the anal fin; pectoral fins small; tail compressed; vent behind the middle of the body.

*Linear Moringua*, *Moringua Linearis*, *Anguilla linearis*, Hardw. MSS. Illust. Ind. Zool. t. 11, f. 1.

*Description of three Species of TRICHIURUS in the British Museum.*

*Armed Trichiurus*. *Trichiurus armatus*. *Sawala*, Russel, Ind. fish, t. 41? not good. Head long, compressed, more than  $\frac{1}{2}$  the length of the animal; forehead depressed; jaws obliquely truncated in front; front teeth very large, barbed behind, obliquely produced; intermargillary bones very long, reaching to under the middle of the eye; body compressed, with a series of minute spines beneath; lateral line arched over the pectoral fin, and then continued below the middle about  $\frac{2}{3}$  the height of the body. Indian Ocean. Brit. Mus.



*Intermediate Trichiurus.* *Trichiurus intermedius*, n. s. Head rather short, tapering in front, compressed on the sides, rather less than one-ninth the length of the body; forehead sloping, arched, sharply keeled; jaws conical, and slightly produced in front; front teeth very long, barbed, hinder ones moderate, rather distant, equidistant, front ones small, and close set; chin slender, rounded at the end; intermaxillary bones sharply curved in front, reaching as far as under the front edge of the eye; body compressed, lateral line nearly straight, continued along rather below the centre of the body; the vent with a short broad spine behind it, and a series of very minute spines along the ventral line of the body, and partly along the tail; tail rather short, thickish. Length  $15\frac{1}{2}$  inches.

*Armless Trichiurus.* *Trichiurus Muticus*, n. s. Head short, tapering in front, rather rounded on the sides, rather less than one-tenth the length of the body; the forehead sloping, arched, sharply keeled, jaws conical, and slightly produced in front; front teeth long, incurved, simple; the hinder teeth small, close set; chin slender, slightly produced; intermaxillary bone short, curved, scarcely reaching to under the front edge of the eye; body compressed, lateral line nearly straight, continued along just below the centre, five-sevenths of the height of the body; vent without any spine behind, with a series of very minute spines at the end of the body, near the base of the tail.

Cuvier has indicated three species of Regne Animal, but so shortly that I cannot determine if any of these belong to them; when he was in this country he believed these to be new to him; nor are the descriptions of other naturalists more easy to make out.

*Description of some new Species of fresh-water Shells discovered by Capt. OWEN, R.N., on the Coast of Africa.*

*Dr. Maton's Melania.* *Melania Matoni*, n. s. *Murex fuscatus*, Maton, Linn. Trans. VIII., t. 4, f. 6, not Linn. Shell turreted, truncated, brown; upper whorls with four spiral grooves crossed by waves grooved, forming small round tubercles; lower whorl smooth, with two high, sharp, spiral keels, the upper the highest; the front of the last whorl spirally grooved; mouth ovate, narrow, slightly grooved in front; outer lip rather expanded, crenulated. Axis, 1 inch, diam.  $4\frac{1}{2}$  lines.

*Four-pearled Melania.* *Melania quadriseriata*. Shell turreted, truncated, brown; whorls nearly flat, each with four spiral ridges, crossed by transverse grooves, which form the ridges into roundish tubercles, of which those of the hindermost series of the lower whorl are the largest; the front of the last whorl smooth, spirally grooved; mouth ovate, narrow, slightly grooved in front; outer lip expanded, rounded, crenulate. Is it a variety of *M. Matoni*, as it is exactly like the apex of that species? Axis 12, diam. 4 lines.

*Capt. Owen's Melania.* *Melania Owenii*, Gray, Ency. Metrop. t. 1, f. 23. *Strombus Byronensis*, Wood. Suppl. t. 4, f. 23. Shell turreted, ventricose, subtruncated; brown varied with black; whorls flatish, with two rows of large conical, truncated tubercles on each whorl,

placed alternately with each other, the front of the last whorl with spiral ribs, the hinder of which are nodulose; mouth ovate, front rather expanded, dilated; outer lip expanded, rounded, crenulated; axis  $2\frac{1}{2}$  inches, diam. 10 lines; operculum ovate, horny; apex subspiral.

*Freeth Melania.* *Melania Freethii.* Shell ovate turreted, truncated, black, smooth, polished; whorls nearly flat; suture scarcely impressed; mouth ovate, slightly expanded in front; throat brown; axis 17, diam. 7, mouth 7 lines. Young, conical, black, turreted, truncated, very minutely spirally striated, last whorl subcarinate; axis 8, diam. 4 lines. Fernandoo Poo, dedicated to Colonel Freeth, through whose kindness I received these and many other shells. Like *M. lavigata*, but not white nor white and yellow.

*Black Neritina.* *Neritina atra.* Shell ovate, globose, thick, smooth, black; spire short, conical; apex grooved; mouth white, very oblique with regard to the axis; inner lip finely denticulated in the middle; outer lip slightly expanded, margin horizontal; axis and diam. 7 lines. Most like *N. Virginea* (and *N. reclinatus*, Say), but uniform black, and the outer lip not bent up towards the last whorl. Inhab. Fernandoo Poo.

*Owen Neritina.* *Neritina Owenii.* *Nerita Oweniana*, Gray. Wood, Cat. Suppl. t. 8, f. 8, and *N. Owenii*, f. 16? imperfect. Shell ovate, then pellucid, brown netted; mouth half ovate; inner lip smooth, the front and hinder angle of the outer and the inner lip becoming much expanded, making the shell distorted by age; spire very small, lateral often carious; operculum, thin shelly.

*Description of some Birds discovered by EDWARD BLOXAM, Esq., during the Voyage of Capt. Lord BYRON, R. N., now in the British Museum.*

*Ruddy Finch.* *Fringilla rufa.* Bloxam, Byron, Voy. 250. *F. coc-cinea*, Lath.?? Body red-foxy; lores blackish; wing and tail olive-brown; wing-covert, quills, and tail red-edged, inner edge of quills, and under wing-covert white; bill short, triangular, conic, tip straight, acute, whitish; feet brown; tarsus 9 lines. Mr. Bloxam describes "the tongue as short, tubular, and divided filaments at the end!" Inhab. Sandwich Islands.

*Bloxam Crested Warbler.* *Sylvia Bloxami.* Olive-brown; sides of neck, throat, and chest white, with a black streak down the shaft of each feather; head and ears black; forehead white-streaked, crown with a crest of from four to six long, slender, recurved feathers; outer web of the outermost, and tip of second tail-feather; the edge of the outer larger wing-coverts and of the primaries, white; belly, vent, and under wing-coverts yellowish-white; bill slender, black, end compressed, slightly nicked; base depressed, above keeled; wing short, first quill short, second rather shorter than the third and longest; tail rather long, rounded; tarsi long; toes short. Length  $4\frac{1}{2}$  inches; bill 6; tarsus 9; middle toe 6; wing 23 lines. Inhab. Chili. *Parus Chilensis*, Bloxam MSS. This bird should range with *Regulus Omnicolor*, Viellot, which



differ from the true *Reguli* in wanting the pinnated feather over the nostrils.

*Lord Byron Parrot. Psittacus (Aratinga) Byroni.* Children's MSS. Brit. Mus. Green; forehead lores to the orbits bright-red; tail-feather rufous, brown; shaft greenish black, larger quills bluish, with shaft and inner edge black; tips of crown-feathers blackish; upper mandible elongate, produced; apex acute; culmen produced. Length 17 inches; wing 9; bill  $1\frac{1}{4}$  inches. Inhab. Chili.

*Crimson Drepanis. Drepanis Byronensis.* Bill black, about as long as the head, dilated at the base, slightly curved, culmen rounded the whole length; plumage bright scarlet; wing and tail black, outer quill white-edged; secondaries scarlet-edged; vent and abdomen white; under plumage lead-colour, under wing-coverts grey. Length 6 inches; bill 9; tarsus 10; middle toes  $7\frac{1}{2}$  lines. (This may be *Nectarinea Byronensis* of Bloxam MSS.) Byron's Voy. 249, but is not *Fringilla coccinea*, Linn.

*Yellow Drepanis. Drepanis flava. Nectarinia flava.* Bloxam, Byron, Voy. 249. Bill brown, as long as the head, curved, end slender, subulate; culmen rounded, raised between the nostrils. Yellow-olive; wing and tail pale brown; feathers greenish-edged; lores brownish. Female dark olive, beneath yellowish grey; large wing-coverts, white tip.

*Drepanis coccinea, female.* Yellow-olive, brighter above; head and upper part of neck red-orange, with front of the shoulder-feather black-tipt; wing and tail black; larger wing-coverts black, yellow-edged, lower wing-coverts white; bill rather longer than the head, much compressed; culmen rounded, perhaps *Certhia ebrura*, Lath. Ind. *Hooked Billed Honey Eater*, Lath. Hist. v. 192, t. 71, f. 1.

*Description of three African Birds, in the Collection of the British Museum.*

*Stanley Bustard. Otis Stanleyi.* Above vermiculated, black and white (reddish near the neck, more minutely marked on the smaller wing-coverts) chin, abdomen, and beneath white; primaries black, inner web of the inner primaries, middle, and larger wing-coverts black and white varied; tail black, with three or four broad white bands; sides of face, neck, and chest grey, black speckled and banded; sides of the crown black; lower part of the back of the neck bright bay. Length 32 inches; bill to gape  $3\frac{1}{2}$ ; tarsus  $5\frac{1}{2}$  inches. Cape of Good Hope.

*Luzonian Spoon Bill, Lath. Hist. Platalea Tenuirostris, Temm. Man. (from). Sonn. Voy. t. 51, adult, 52. Young Var. A. Lath. Crested, white; face and throat red, naked to behind the eyes; bill greenish, with a red margin, and an impressed line near the edge; very dilated at the base, narrow in the middle, broad and rounded at the end; feet bright red; claws black. Length 3 feet; tarsus  $6\frac{1}{4}$ ; naked part of thigh 4 inches; bill 9 inches; middle  $\frac{3}{4}$ ; end  $2\frac{1}{4}$  inches wide. Central Africa, Major Denham.*

*Description of three apparently new Species of Corn Crakes, (CREX.)  
In the Collection of the British Museum.*

*Red-neck Corn Crake. Crex ruficollis.* Head, neck, chest, and upper part of back bright chestnut; back, wing-coverts, and abdomen, black, white-streaked; tail black, white spotted; quills and secondaries plain brown, outer quill short, with a narrow white outer edge; bill and feet brown. Bill to gape 6, to front 5, tarsus, 11 middle toe 14 lines. Length  $6\frac{1}{2}$  inches. Inhab. Cape of Good Hope?

*Beautiful Corn Crake Crex pulchra.* Head, neck, chest, upper part of back and tail bright chestnut-brown; chin rather paler; body black, with small round, white spots above, and larger beneath, placed in pairs; quills brown, white-spotted principally on the outer edge; bill and feet brown. Bill to gape  $8\frac{1}{2}$ , to front 7; tarsus 15; and middle toe 15 lines. Length 7 inches.

*Brown-eared Corn Crake. Crex aurita.* Above olive-brown; crown of head, front of neck, and beneath, bright chestnut; lores, orbits, and ears brown; bill rather thick, to gape 10, to front 9; tarsus  $16\frac{1}{2}$ ; middle toe 18 lines. Length 7 inches.

*Description of a new Genus of CIRRIPIDES, allied to BALANUS. In  
the British Museum.*

Gen. ELMINIUS.

Fam. Balanidæ.

Shell subcylindrical; valves thin, solid, shelly, four, the front one narrow, involute, arched, overlapping the front edge of the wide lateral ones, (which occupy the width of the two lateral ones of the genus Balanus) the hinder one the narrowest, with a broad wing on the upper part of its sides, which are overlapped by the hinder edges of the side valves; operculum four valves; valves articulated together, exactly closing the mouth; case membranaceous. This genus agrees with Balanus in shape, and with *Conia* in the number of its valves, but the valves are not porous as in that shell.

*King's Elminius. Elminius Kingii.* Shell subcylindrical, truncated; valves white, smoothish, covered with a pale brown periostraca, the front opercular valves, smooth, very obscurely grooved.

In the Zoological Journal, ij. 210, Dr. Leach has established a genus under the above name, with the character *Testa quadripartita solida*, but the species which bears the name of *Elminius petrosus* in the British Museum, distinctly shews six valves, all so very closely soldered together as to be very difficult to divide; under these circumstances I have adopted his generic name, as the character agrees with that of my shell, but the species for which he formed it must be referred to *Balanus*.

*Note on a peculiar structure in the Head of an Agama. By J. E. GRAY.*

In a skull of an animal allied to *Agama*, or *Uromastix*, in the College of Surgeons, I have observed that the Ramus (*Os. Complementaire*, Cuv. *Os. Fos. fig. c.*) of the lower jaw rubs against the lateral processes of the

pterygoid bones, so as to prevent the lower jaw from moving from side to side, and that in the species under consideration the hinder teeth of the upper jaw has a series of teeth about half the length of the outer series placed on a ridge just on the inner edge of the outer teeth, leaving a groove between the two series for the lower jaw to fit into. This Skull will doubtless form the type of a new genus, which I propose to call *Sphenodon*.

*Description of a new Genus of Ophisaurian Animal, discovered by the late JAMES HUNTER, Esq., in New Holland.*

Gen. DELMA.

Fam. Scineidæ.

Head narrow, covered with four pair and three odd central plates; chin and throat with small scales; ears distinct, pervious; body and tail tapering, subcylindrical, covered with moderate nearly uniform, smooth, regular, six-sided, slightly, imbricate scales; abdomen with four series of plate, the two central series being the broadest; vent with three subanal scales; subanal pore none; fore-feet none; hind-feet rudimentary, conical, comgressed, placed in a groove by the side of the vent; tail tapering, with three series of cross plates beneath.

*Fraser's Bipes. Delma Fraseri.* Bright olive-brown, beneath paler; head and lips black, with four narrow cross lines, one between the nostril and the eyes, two just behind the eyes, the third broader over the eyes, and the last edging the occiput. Length of head 4 lines; of head and body 2 inches, 8 lines; of tail (and reproduced) 3 inches, 8 lines. Inhab. New Holland. British Museum.

*Description of the Species of PORCELLANA, in the Collection of the British Museum.*

*Polished Porcellana. Porcellana polita.* Purplish brown polished punctulate; carpus above flat, front edge with three long serrated teeth; hinder edge with a spiny ridge near the end; forehead triangular, produced, the margin rather concave. Length of the thorax 7; breadth  $7\frac{1}{2}$  lines.

*Hairy Porcellana. Porcellaria hirsuta.* Red brown, rugulose velvety; leg and abdomen fringed with long hairs; caspus above flat, centre rugulose, front edge with five acute triangular teeth; hinder edge with a series of conical, incurved, short spines; front edge of claw crenulate at the base; forehead triangular, bent down, with a small spine over the front edge of each eye. Length of thorax 11; breadth 11 lines.

*Squamose Porcellana. Porcellana Galathina, Bosc. crust. 1, t. 6, f. 2.* Red brown, with close-set cross wrinkled, edged with short rigid hairs; carpus and claws convex; front edge of carpus with six blunt, incurved, triangular broad teeth; hinder edge with a series of small protuberances; forehead triangular, truncated, concave, with a raised denticulated edge, and a spine over the back of each eye. Length of thorax  $7\frac{1}{2}$ ; breadth 7 lines. North America.



*Green Porcellana.* *Porcellana viridis.* *Pisidia viridis*, Leach MSS. Green, with closish, cross wrinkles, edged with short, rigid hairs; legs fringed with hairs; carpus and claws rather convex, slender, the front of the carpus with four low, triangular, serrated teeth, and with a series of spines on the outer hinder edge; forehead rounded, with a central longitudinal groove.

*Lamarck Porcellana.* *Porcellana Lamarckii.* *Pisidia Lamarckii*, Leach MSS. Pale brown; thorax nearly smooth; legs and claws rugose, subquamose, subciliated; forehead triangular, bent down, with a central groove, and a slight nick before each eye; carpus short, convex, with a central tubercular ridge, front edged with three triangular teeth, those near the base largest, the hinder edge with two or three obscure teeth near the tip; one specimen only.

*Asiatic Porcellana.* *Porcellana Asiaticus.* *Pisidia Asiaticus*, Leach MSS. Red brown, pale; thorax and limbs with obscure ciliated scales, with an incurved spine behind each eye; forehead slightly produced, triangular, side edges concave, with a centre longitudinal groove; carpus rather long, convex, equal, with three long distant serrated teeth, those near the base largest (very like former, but with the spine on the side of the thorax.)

*Say's Porcellana.* *Porcellana Sayii.* *Pisidia Sayana*, Leach MSS. Pale brown, punctulate, smooth; limbs fringed with hair; forehead three-lobed, the central lobe triangular, acute, margin denticulated; thorax roundish; carpus short, triangular, with a broad angular lobe near the base in front; nearly allied to *P. Platychelas*, but the carpus shorter, and the lobes larger.

*Flat-clawed Porcellana.* *Porcellana platychelus.* *Cancer*, Linn. Pale brown; hirsute smoothish; forehead rather produced, three-lobed, central lobe longest, smooth edged, with a central furrow; limbs fringed with hair; carpus convex, rather longer than broad, with a single triangular projection at the base of the front edge. Inhab. English coast, common.

*Common Porcellana.* *Porcellana Leachii.* *Pisidia Linneana*, Leach MSS. *Cancer hexapus*, Linn. Pale brown, smooth; forehead three-lobed, centre lobe broad, smooth edged, with a central groove; limbs smooth, carpus convex, rather longer than broad, with a rather produced even edge in front, rounded and smooth behind (with sometimes a slight nick near the inner edge, forming an obscure lobe). Inhab. English coast.

*Allied Porcellana.* *Porcellana affinis.* Pale brown, smooth; forehead scarcely produced, obscure, three-lobed, central lobe broad, smooth edged; carpus convex, longer than broad, with a rather produced even edge, hinder side edged with an obscure elevated subquamose ridge. Inhab.

*Tubercular Porcellana.* *Porcellana sociata*, Say, Jour. Acad. N. S. Phil. I. 456. *Pisidia sociata*, Leach MSS. Pale brown; thorax subquadrangular, smoothish; limbs with large globular warts, pilose; forehead

rounded, scarcely produced, with a central groove; carpus short, with a large tubercle on its inner edge. North America.

The *cubitus* of most of the species ends in a spine, so that the front of the fore-leg often appears to have a spine added to those on the carpus.

Risso describes two Mediterranean species, *P. Bliceli* and *P. longimana*, which I have not seen.

*Description of three species of Notopterus, found by Gen. HARDWICKE, in the Indian Seas.*

*Ornamented Notoptere. Notopterus ornatus.* Olivegreen, side of tail many (eight or nine) spotted, lateral line slightly curved over the pectoral fin, ventral fin, each three rayed; back low. D. 8, P. 9, V. 3, A. 130.

*Chitala Notoptere. Notopterus Chitala, n. s. Mystus Chitala, Ham. Gan. Hist. 236 Cheetel, Penn. Ind. Tracts, t. 11.* Olive green, white banded, side of tail with four or five spots; upper jaw unarmed; lateral line curved, ventral fin, each four rayed; back very convex just behind the head, D. 9, P. 14, V. 4, A. 120? 130?

*Kapirat Notoptere. Notopterus Kapirat. Mystus Kapirat, Ham. Gymnotus Notopterus, Pallas, Spic. Zool. VI. t. 6, f. 2.* Lateral line straight, ventral fins united, two rayed, D. 2, 7, P. 12, V. 1, A. 110? Cuvier has only described this species.

*Description of a new species of Snipe discovered by CHARLES HARDWICKE, Esq., in Van Dieman's Land.*

*Van Dieman's Land Snipe. Scolopax Hardwickii.* Tail feathers sixteen, the four outer on each side lanceolate, becoming gradually broader, white with (four or five) black cross bands, tips subacute, the inner web of the outermost feather scarcely wider than the outer one; general colour like *Scol. Gallinago*; back rather darker and the white streaks rather broader and purer; secondaries and scapulars more acute with some oblique, pale, longitudinal bands on their tips; shaft of first quill white, the others black at the base, with a subterminal broad, pale bay band. Length 12, bill  $2\frac{3}{4}$ , tarsus  $1\frac{1}{3}$ , and middle toe  $1\frac{1}{2}$  inches.

*On the Genus SPIROGLYPHUS of Daudin.*

This genus, which was established by Daudin in his Recueil de Memoires, and noticed by Bosc. in his Vers, I., p. 86, although exceedingly common, appears to have been overlooked by all succeeding naturalists. It is doubtless nearly allied to *Vermetus*, but the habit of boring, its tube in the surface of the shell, must require it to be separate.

Gen. SPIROGLYPHUS, Daud. Fam. *Vermetidae*, Animal. ———? forming a groove for its shell in the surface of univalve shells. Tube shelly, sub-cylindrical, attenuated, irregularly spirally twisted, the upper surface alone exposed, thick, the lower surface which lines the groove formed in the shell, thin and smooth; mouth round; operculum horny, orbicular, subspiral.

*Wonderful Spirogyphus*, *Spirogyphus mirabilis*, n. s. Chemnitz. IX. t. 116, f. 999. Jun. *Serpula spirorbis*, var. Dillw. from Chemn.)

The shell, when young, is brown and pellucid, nearly regularly spiral, the animal clearing a cavity before the mouth of the shell as it proceeds; when it gets older it becomes white and opaque, transversely ridged, and at length the shell takes a curved course of considerable extent, and gradually rounds in till it gets the mouth into the centre of the spire, where it appears to remain stationary. In my collection. On *Haliotis splendens*. This may be the *Spirogyphus annulatus* of Daud, Mem. t. 28, cop. in to Bosc. l. t. 7, f. 5, but his account is so short, and his figure so indistinct, that it is impossible to determine; he describes a second species, *S. politus*, which is equally doubtful, perhaps the young of this.

Lamarck *Vermilia subcrenata*, Lam. Hist. V. 370, perhaps belongs to this genus, if so, he describes the operculum as very shortly conical. The *Spirorbis ambiguus* of Fleming, Edin. Phil. Jour. XII. t. 9. A fossil appears also to belong to this genus.

*Description of two species of Mammalia, one forming a genus intermediate between VIVERRA and ICTIDES.*

Gen. PAGUMA.

Teeth like *Viverra* in number, the grinders bluntly tubercular; the true carnivorous teeth of upper jaw with an internal lobe; the tubercular grinders nearly square, the first rather narrower externally, the last tubercular; false grinders small. The hind feet plantigrade, inflexed, sole, bald, callous; tail long, tapering. This genus has much of the colouring of the genus *Ictides* with the odour, and the teeth like the *Viverra*, but not so sharply lobed.

*Masked Paguma. Paguma larvata. Viverra larvata*, Spicileg. Zool. *Gulo larvatus*, Hamm. Smith, Griffith. Trans. Anim. King. t. Grey; band across the forehead, and one down the centre of the face, white; end of tail, blackish. China

*Pale Genette. Viverra pallida.* Neck, yellow grey brown, browner on the middle of the back and over the back of the neck, edged on each side with a narrow blackish band; and with six or seven indistinct longitudinal blackish bands on the back, and small indistinct blackish spots on the flanks and thighs; feet, purplish brown; chin and beneath, dirty white; tail, tapering, yellow brown, with seven narrow purplish brown rings and a whitish tip. Length 32; tail, 12 inches. China. Like *Viverra Rasse*, but paler; band and spot fewer, more indistinct; tail, longer and more bushy; under part of body not spotted or banded.

*Description of two species of painted Snipe, (RYNCHÆA.)*

Many authors have been induced, from the variation of the colour that the plumage of these birds undergo, to consider them as several species; but recently Herr. Temminck, and after him M. Cuvier has



considered them all as one. The two species here described appear to undergo the same changes of colour: the wing coverts in the young birds being yellow spotted, while in the adults they are olive, with black cross lines; but the length of the tarsus and the colouring of the quill appear to be permanent in all ages.

*Beautiful Painted Snipe.* *Rynchæa picta.* Primary quills rather broad, the outer one graduated, with seven broad yellow bands, the under side vermiculated, grey and black, the inner ones obsoletely yellow banded, tips and the last band like spots on the outer web, and bands on the inner web of the secondaries, white. Length  $10\frac{1}{2}$  inches; tarsus  $19\frac{1}{2}$ ; middle toe 19; bill  $33\frac{1}{2}$  lines. China, India and Africa. Young, wing coverts, yellow spotted, Brit. Mus.

*Cape painted Snipe.* *Rynchæa capensis,* Savigny Ois Egypt, t. 14, f. 4, young, pl. Enl. t. 881? Primary quills narrow, the outer ones with five broad yellow bands, under side grey, vermiculated with black and yellow banded; the spots on the outer and the bands on the inner web of the secondaries, yellow. China and India. Young, wing coverts yellow spotted, Brit. Mus.

*Description of a new species of TRICHOPHOROUS, from Brazil.*

*Mooned Trichophorus.* *Trichophorus lunatus.* Bright olive green; feathers of head, blackish edged; chin, throat and beneath, bright straw yellow, with broad black lunules; under wing coverts, pale yellow; quills, brown, outer edge greenish, inner yellow, especially near the base; crown and nape with long scattered bristles. Brazil. Forms a section of the genus which before was considered as peculiar to the old world. Distinguished by the third quill being the longest, by which character it forms a passage between the *Trichophori* and the genus *Procnias*. Collection of Mr. Deitrichschen.

*Description of two new species of WOODPECKERS, discovered by CAPT. SABINE in Africa.*

*Olive Woodpecker.* *Picus olivaceus.* Yellowish olive, darker on the sides: top of head, black and pale brown spotted; chin, throat, side of face and neck pale brown, black spotted; chest and abdomen, pale yellowish green, black banded; quill and tail, brown, outer web of outer primaries, white spotted, base of inner webs of quills and secondaries whitish black banded; under wing coverts yellowish white; scapes of quill and tail feather, above brown, beneath whitish; bill, short, conical, culmen three keeled. Africa, Capt. Sabine. Length 8; wing 4 inches; bill to front  $7\frac{1}{2}$ , to gape  $9\frac{1}{2}$ ; tarsus 6 lines.

*African Woodpecker.* *Picus Africanus.* Golden olive brown; top of head, streak from angle of mouth and from lower edge of lower jaw down side of neck, black; chin and throat, side of head and neck, white; crest and rump, scarlet; chest and beneath, blackish olive, white spotted;

tail and quill, black brown, dots on outer web and spots on inner web of quills and under wing coverts, white; bill, cestriform, culmen three keeled. Length  $8\frac{1}{2}$ ; wing  $4\frac{1}{2}$  inches; bill to gape 15, to front 13; tarsus  $7\frac{1}{2}$  lines.

*Description of some PARTRIDGES, (PERDIX,) from India, among the Drawings of Gen. HARDWICKE.*

*Hepburns Francolin. Perdix Hepburni, male? ———? female?* Black with large white roundish spots; head and upper part of neck pale brown; crown, nape, and middle of the neck black streaked; middle of back, loins and rump closely black and white banded; sides of thighs, quills, and larger wing coverts pale brown, black banded; secondaries ovate lanceolate, black with a black band between two pale brown marginal ones; vent, dark red brown; legs, pale yellow; bill, black. Length 9 inches; bill  $\frac{2}{3}$ ; tarsus,  $1\frac{1}{2}$  inches. Inhab. Odyore or Oudipore, Leut. Hepburn.

*Perdix Hepburni, var.* Amongst General Hardwicke's drawings, there is a second figure taken from a bird sent from the same part of India by the same gentleman, which differs in being all over of a pale yellow brown colour, rather redder and darker on the head and upper part of the neck, and all the parts of this specimen, which in the other bird is black, is here pale brown, except the band across the quills and the streaks on the neck which are blackish, the front of the chest is marked with a few obscured pale brown cross lunules and the feet are rather stronger and darker coloured.

*Concentric banded Francolin. Perdix Concentrica, female?* Dusky brown; feathers of upper part of body with a central and two arched white bands, parallel to the margin, often edged with darker brown, of the lower part of the body white, with a central and one (or rarely two) brown arched bands parallel to the margin; chin and sides of the face behind the ears white, black streaked; ears brown, top of head and nape with short black bands; neck, black spotted; feathers brown, white edged; chest, black dotted; quills, tail, and upper tail coverts, brown and white banded, the tail band narrowest and whitest; legs and feet, yellow brown; claws black; spurs none; bill brown. Length 12; bill 1; tarsus, 2; middle toe and claws,  $2\frac{1}{4}$  inches. Inhab. India.

*Description of three new species of HERON, (ARDEA,) discovered by General HARDWICKE, in India.*

*Black billed Heron. Ardea nigrirostris.* Pure white; feathers of the back, and base of the throat, elongated, rigid with very loose webs, reaching considerably beyond the tail; bill, black; lores, base of bill to beyond the nostrils and round the base of lower mandibles yellow green; thighs, tarsus, feet and claws, black. Length 26; bill to gape,  $4\frac{1}{4}$ ; tarsus,  $4\frac{1}{2}$ ; middle toe and claw, 4 inches. Feathers of the neck, 6 to 8; of the back 12—13 inches long.

*Pure white Heron. Ardea modesta.* Pure white; feathers of the back elongated, rigid with a very loose web, reaching considerably

beyond the tail; bill, black; lores, base of the upper jaw to the nostrils, and a short band at the base of the lower jaw, green; thighs and sides of legs, pale brown; shields on the front and hinder part of the tarsus and on the top of the toes, and the claws black. Length about 33 inches; of bill to gape,  $5\frac{1}{2}$ ; thighs,  $4\frac{1}{2}$ ; tarsus, 5; middle toe and claws,  $4\frac{1}{2}$  inches.

*Indian white Heron. Ardea Orientalis.* Snow-white; crown, plain; feathers of lower part of neck, long, lanceolate; of loins, long, with a very loose web, rather longer than the body and recurved; bill, slender, black; lores and base of both jaws for a short distance yellow green; thighs, tarsus and claws uniform black; toes, flesh colour. Length 19; bill to gape, 4 inches; thighs,  $2\frac{1}{2}$ ; tarsus,  $4\frac{1}{2}$ ; middle toe and claw, 3 inches.

These species differ from *Ardea candissima*, of America, and from *Ardea Garzetta*, of Europe, in their larger size, in the relative proportions of their parts, and in the colour of their bill and legs.

*Description of a new Genus of Percoid Fish, discovered by Mr. SAMUEL STUTCHBURY, in the Pacific Sea, and now in the British Museum.*

Gen. 1. MICROPUS.

Body ovate, compressed, skin thick, naked, with minute filiform processes, lateral line slanting, subdorsal; head ovate, suborbital bone ending in a strong spine; pre-operculum strongly toothed; opercula with two teeth; the interoperculum ending in a spine; mouth small, protractile; jaws with velvet-like teeth; palate toothless; gill rays 5; dorsal fin large, single deeply nicked, or double, hinder rays, two cut: pectoral fins, small, slightly pedicelled, upper rays very thin, lower ones short, strong, simple and jointed; ventral fins minute under the pectorals; anal fin long; tail short, rounded; allied to *Blepsias* and *Apistes*.

*Spotted Micropus. Micropus maculatus.* Dorsal fins two, close together; body covered with bristle-like processes, yellow red spotted; operculum obscurely spinose; preoperculum, 4 toothed; D. 8—12. C.  $\frac{2}{3}$ , A. 11, V.  $\frac{1}{3}$ , P. 14. Length  $1\frac{1}{2}$ , height  $\frac{2}{3}$  inches. Island of Hao.

*One finned Micropus. Micropus unipinna.* Dorsal fin 1, with a slight lobe between the spinous and dorsal rays; body villose, brown, spotless, beneath paler; operculum distinctly spined; preoperculum 4 toothed; D. 8—12, P. 14, C.  $\frac{2}{3}$ , A. 11? V.  $\frac{1}{3}$ .



*Synopsis of the new species of Nepal Insects in the collection of Major General HARDWICKE, by Rev. F. W. HOPE, M.A.*

*Cicindela Dejeanii*. Obscure purpurea, elytris punctatis vittaque flava inæquali ornatis. Long. lin. 11. Lat. lin.  $3\frac{1}{3}=4$ .

*Cicindela flavomaculata*. Supra viridi obscura, elytris macula humerali, secunda fere rotundata, tertiâque biloba ornatis. Long. lin.  $7\frac{1}{2}$ ; lat.  $2\frac{1}{2}$ .

*Cicindela pulchella*. Species *C. bicolori*, Fabr. proxima. Viridis, elytris obscure cyaneis immaculatis, marginibus elytrorum purpureis abdomineque nigro-purpurascenti. Long. lin.  $7\frac{1}{2}$ ; lat.  $2\frac{1}{2}$ .

*Cicindela chloris*. Viridiænea, elytris confertissime punctatis, tribus punctis albis marginalibus. Long. lin.  $5\frac{1}{2}$ ; lat.  $1\frac{3}{4}$ .

*Cicindela assimilis*. Præcedenti affinis. Supra nigro olivacea, elytris punctatis, tribus punctis albis marginalibus. Long. lin.  $6\frac{1}{2}=7$ ; lat.  $2\frac{1}{2}$ .

*Desera Nepalensis*. Viridi cuprea, elongata, thorace cylindrico cæruleo. Long. lin.  $5\frac{1}{4}$ ; lat.  $1\frac{1}{4}$ .

*Scarites Geryon*. Niger, tibiis anticis tridentatis elytrisque profunde striatis. Long. lin. 20; lat. 5.

*Percus Nepalensis*. Totum corpus supra nigro-æneum, elytra nigro-ænea lineisque punctis impressi. Long. lin.  $7\frac{1}{3}$ ; lat.  $2\frac{1}{2}$ .

*Calosoma Indicum*. Totum corpus nigro-æneum, elytris rugosis punctisque auratis triplici serie fortiter impressis. Long. lin. 11; lat.  $4\frac{1}{4}$ .

*Carabus Wallichii*. Oblongo-ovatus, supra niger, elytris crenato-striatis punctisque impressis in striis despositis granulisque oblongis triplici serie prominentibus. Long. lin.  $10\frac{1}{2}$ ; lat.  $3\frac{1}{2}$ .

*Chlenius Nepalensis*. Niger, capite, thorace, elytrisque nigris maculâ irregulari flavâ notatis. Long. lin.  $8\frac{1}{4}$ ; lat.  $3\frac{1}{4}$ .

*Colpodes Hardwickii*. Viridibrunneus, nitidus ore ferrugineo, antennarum tribus primis articulis rubris, cæteris fuscis et ciliatis. Long. lin.  $7\frac{1}{3}$ ; lat.  $2\frac{1}{3}$ .

*Colpodes Buchannani*. Viridiæneus, nitidus, ore ferrugineo, antennæ rufæ articulis ciliatis. Long. lin. 5; lat.  $1\frac{3}{4}$ .

*Omasus Indicus*. Niger, thorace convexo glabrato elytrisque, fortiter sulcatis. Long. lin. 7; lat.  $2\frac{1}{2}$ .

*Omasus æratus*. Æneovirens, thorace convexo posticeque aurato elytrisque fuscis et pubescentibus. Long. lin. 7; lat.  $2\frac{1}{2}$ .

*Platisma gagates*. Nigrum, thorace convexo glabrato elytrisque fortiter sulcatis. Long. lin.  $8\frac{1}{2}$ ; lat. 2.

*Sphodrus brunneus*. Depressus, elytris brunneis striatis, corpore infra brunneo, femoribus, tibiis, tarsisque rufescentibus. Long. lin.  $7\frac{1}{2}$ ; lat.  $3\frac{1}{2}$ .

*Necrophorus Nepalensis*. Ater, duabus fasciis ferrugineis undulatis, fasciaque quasi quatuor nigris maculis notatâ. Long. lin.  $8\frac{1}{2}$ ; lat.  $3\frac{1}{2}$ .

*Silpha melanura*. Atra, elytris punctatis, lineisque tribus elevatis lævibus, clypeo antice truncato. Long. lin. 8; lat. 4.

*Erotylus rubens*. Ruber, elytris striatis pedibusque nigerrimis. Long. lin.  $3\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Languiria Nepalensis*. Violacea, nigris antennis elongatis, thorace miniato, elytris chalybeo violaceis, pedibus nigris tarsisque flavis. Long. lin. 8; lat.  $1\frac{3}{4}$ .

*Eumorphus Hardwickii*. Affinis Eumorph. immarginato, Fabr. Violaceus, thorace emarginato elytrisque quadrimaculatis. Long. lin.  $6\frac{1}{2}$ ; lat. 3.

*Lucanus Nepalensis*. Niger, mandibulis valde exsertis intusque denticulatis. Fœmina mandibulis solummodo bidentatis cornuque brevi in medio capitis erecto, capiteque antice variloso differt. Long. lin. 24; lat. 6, (mandibulis inclusis.)

*Lucanus similis*. Præcedenti similis, magnitudine et madibulis differt varietas forsitan præcedentis. Long. lin. 22; lat. 6.

*Lucanus villosus*. Pubescens brunneus, mandibulis exsertis unidentatis apice bifurcatis labroque deflexo. Affinis L. cervo, Fabr. Long. lin. 24; lat. 7.

*Lucanus castanopterus*. Niger, mandibulis porrectis arcuatis et denticulatis, elytris pallide castaneis scutelloque nigro. Corpus subtus nigrum. Mas adhuc latet. Long. lin. 12; lat. 5.

*Lucanus Atratus*. Supra totus niger, mandibulis valde porrectis, corporeque subtus nigro. Long. lin.  $11\frac{1}{2}$ ; lat. 5.

*Lucanus lineatopunctatus*. Totus supra niger, elytris striatopunctatis, suturaque elevata conspicuis. Long. lin. 11; lat.  $4\frac{1}{2}$ .

*Sisyphus Indicus*. Niger, thorace convexo, clypeo sexdentato pedibus quatuor posticis longioribus femoribusque clavatis. Long. lin. 4; lat.  $2\frac{1}{4}$ .

*Copris Brahminus*. Ater, exscutellatus, capitis clypeus lunatus bidentatus posticeque thoracis dentibus affixus. Long. lin.  $13\frac{1}{2}$ ; lat.  $7\frac{1}{2}$ .

*Onthophagus rubricollis*. Niger, exscutellatus, thorace rubro, tibiis tarsisque nigris. Long. lin. 7; lat. 4.

*Onthophagus Gagatinus*. Ater, exscutellatus, occipite spina erecta gemina. Long. lin. 6; lat.  $3\frac{1}{2}$ .

*Onthophagus gagates*. Ater, exscutellatus, nitidus, clypeo rotundato et integro. Long. lin.  $5=5\frac{1}{2}$ ; lat.  $2\frac{1}{2}$ .

*Onthophagus mergacerus*. Viridiæneus, occipite bicorni, antennis pedibusque fulvis, cornu thoracis ad mergam clypei protenso elytrisque testaceis. Long. lin. 4; lat.

*Onthophagus Capella*. Ater, thorace inermi, occipite spinâ erecta gemina, corpore nigroque nitido. Long. lin.  $3\frac{1}{2}$ ; lat.  $13\frac{1}{2}$ .

*Oryctes Haworthii*. Brunneus, scutellatus, antennis flavis, cornu capitis recurvo apice trilobato. Long. lin. 9; lat.  $4\frac{1}{2}$ .

*Dynastes Hardwickii*. Niger, scutellatus, thorace quadricorni, cornu capitis erecto recurvo, elytris castaneis pedibusque nigris. Long. lin. 25; lat. 13.

*Dynastes Childreni*. Præcedenti affinis. Niger, thorace bicorni, cornu capitis brevi recurvo, elytris castaneis pedibusque nigris. Long. lin. 20; lat.  $10\frac{1}{2}$ .

*Dynastes Kirbii*. Niger, thorace bicorni anticeque acuminato, cornu capitis recurvo et trilobato. Long. lin. 25; lat. 14.

*Melolontha Indica*. Testaceus, corpore toto villosulo caudo inflexo, abdominis lateribus albo maculatis. Long. lin. 13; lat. 7.

*Melolontha abdominalis*. Testacea, thorace obscuro purpureoque coloreo elytris testaceis, tincto abdomineque grosso. Long. lin. 10; lat. 4½.

*Melolontha serricollis*. Niger, clypeo emarginato, thoracis margine serrato anterioribus tibiis 3-dentatis. Long. lin. 10; lat. 4½.

*Melolontha coriacea*. Picea, clava triphylla, antennis, et femoribus rufis elytrisque lineis tribus elevatis. Long. lin. 6½; lat. 3.

*Geniates testacea*. Testacea pilis griseis oppressis, pedibus subferrugineis tuberculo apicali, femoribus tibiisque testaceis et denticulatis. Long. lin. 5; lat. 1¾.

*Geniates assimilis*. Testacea, pedibus ferrugineis, abdomineque piceo. Long. lin. 6; lat. 2½.

*Euchlora dimidiata*. Supra tota viridis, punctata subtusque cyanea. Long. lin. 11; lat. 6½.

*Mimela splendens*. Supra tota aureo viridis, nitissima, subtus testacea, tarsis nigro-brunneis. Long. lin. 7; lat. 3½.

*Mimela bicolor*. Supra tota testacea subtusque viridis. Long. lin. 6; lat. 3.

*Mimela similis*. Præcedenti affinis, testacea elytris pallidioribus tarsisque viridibus. Long. lin. 5½; lat. 3.

*Apogonia migricans*. Nigra, clypeo reflexo, thorace elytris punctatis et nigro-æneis. Long. lin. 4½; lat. 2½.

*Apogonia ænescens*. Ænea, clypeo, thorace, elytris punctatis æneo-brunneis. Long. lin. 4; lat. 2.

*Apogonia brunnea*. Præcedenti similis, thorace virescenti, elytris brunneis differt, illius forsitan mera variatas. Long. lin. 3½; lat. 1¾.

*Popillia smaragdula*. Smaragdina, capite, thoraceque viridiæneis, elytris cupreis, abdominisque apice punctis duobus albis. Long. lin. 6; lat. 3¼.

*Popillia formosa*. Cuprea, thorace roseoaurato, elytris cupreis. Long. lin. 5½; lat. 3.

*Popillia cyanea*. Supra tota cyanea, elytris striatopunctatis. Long. lin. 5½; lat. 3.

*Popillia Beryllina*. Præcedenti affinis. Supra tota viridi-cyanea. Long. lin. 3½; lat. 2¼.

*Popillia cupricollis*. Cuprea, thorace viridiæneo elytris testaceis. Long. lin. 5½; lat. 3.

*Popillia virescens*. Viridis, thorace smaragdino elytris testaceis. Long. lin. 5; lat. 2½.

*Popillia marginicollis*. Viridis, lateribus thoracis marginatis elytris testaceis. Long. lin. 5½; lat. 3.

*Popillia nitida*. Virescens, thorace viridi, elytris virescentibus. Long. lin. 4½; lat. 2¼.

*Popillia minuta*. Viridis, elytris testaceis marginatis. Long. lin. 2½; lat. 1¾.

*Serica marginella*. Rubra, elytris nigromarginatis. Long. lin.  $2\frac{2}{4}$ ; lat.  $1\frac{1}{2}$ .

*Serica pruniosa*. Affinis *S. mutabili*, *Fabr.* Atro-brunnea, elytris striatis pubescentibus tomento tenuissimo versicolori tectis. Long. lin. 3; lat.  $1\frac{2}{4}$ .

*Serica bimaculata*. Nigra, elytris testaceis, bimaculatis, suturâque nigricanti. Long. lin.  $2\frac{1}{2}$ ; lat.  $1\frac{1}{4}$ .

*Hoplia squamigera*. Squamosa, corpore supra flavovirescente, subtusque subaurato, tibiis anticis bidentatis. Long. lin.  $3\frac{2}{4}$ ; lat.  $1\frac{2}{4}$ .

*Anomala lateralis*. Viridis, elytris testaceis, laterali tuberculo armatis. Long. lin.  $4\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Anomala testacea*. Totum corpus supra subtusque testaceum. Long. lin. 4; lat. 2.

*Anomala variegata*. Testacea, thorace maculato, elytrorum marginibus apicalibus nigricantibus. Long. lin.  $3\frac{2}{4}$ ; lat.  $1\frac{2}{4}$ .

*Acanthurus pictus*. Niger, elytris abbreviatis, in medio flavis lateribusque nigerrimis. Long. lin.  $3\frac{1}{4}$ , lat.  $1\frac{1}{2}$ .

*Trichius quadrilineatus*. Niger, thorace quadrilineato, elytrisque flavomaculatis. Long. lin. 7; lat. 3.

*Dicranocephalus Wallichii*. Pallide flavo-viridis clypeo binis curvis spinosis cornubus armato apicibus attenuatis et denticulatis. Thorax rotundatus in medio binis lineis subarcuatis et nigris marginibusque atris notatis. Elytra marginibus lineisque quatuor nigris, duabus humeralibus binisque ad apicem positis. Corpus subtus concolor ultimo segmento abdominis nigro. Pedibus rubro corallinis maculis flaveolis notatis. Long. lin. 13; lat.  $5\frac{1}{4}$ .

*Cetonia opalina*. Supra tota opalina-viridis, scutello suturaque elytrorum atris. Long. lin. 14; lat. 6.

*Cetonia Hardwickii*.\* Supra tota nigra, clypeo duobus cornubus armato, femoribus tibiisque miniatis anticis unidentatis. Long. lin. 14; lat. 6.

*Cetonia Nepalensis*. Præcedenti similis, differt postico cornu clypeo triangulo, maxillis rubris et pubescentibus, thorace nigro-olivaceo, elytris viridibus. Long. lin. 14; lat. 6.

*Cetonia neglecta*. Obscure chalcea, thorace punctato elytrisque cæno aspersis. Long. lin.  $9\frac{1}{2}$ ; lat. 5.

*Cetonia nigritarsis*. Obscure smaragdina, clypeo cornuto, elytris viridibus femoribus igneo-opalinis. Long. lin. 10; lat. 5.

*Cetonia Dalmanni*. Nigra, elytris apice rubris, pedibusque nigris. Long. lin. 9; lat. 5.

*Cetonia mutabilis*. Cæruleo-viridis, elytris lineis elevatis pedibusque pubeis. Long. lin. 8; lat.  $3\frac{2}{4}$ .

*Cetonia Bengalensis*. Supra tota nigra, clypeo cornuto, elytrisque striato-punctatis. Long. lin. 9; lat. 5.

*Cetonia auripes*. Smaragdina, elytris cretaceis maculis pedibusque aureis. Long. lin.  $8\frac{1}{2}$ ; lat.  $4\frac{1}{2}$ .

\* This is the type of a new genus, *Trigonophorus*.



*Cetonia Horsfieldi*. Affinis *Cetoniae* tricolori, Oliv. Nigra, thorace sanguineo marginato, elytris fascia interrupta flavâ. Long. lin. 6; lat. 3.

*Cetonia prasina*. Supra tota viridis thorace marginato, elytrisque maculis sparsis pallideque flavis. Long. lin. 6; lat. 3.

*Cetonia sanguinalis*. Præcedenti affinis. Viridis, thorace marginato, elytrisque cruentatis alboque maculatis. Long. lin.  $5\frac{3}{4}$ ; lat. 3.

*Cetonia spilita*. Præcedenti affinis. Obscure viridis, thorace marginato, elytrisque maculis sparsis flavis. Long. lin. 5; lat.  $2\frac{1}{2}$ .

*Cetonia confinis*. Præcedenti affinis at paulo major differt elytris viridi-purpurascensibus et punctato-striatis, maculis sparsis albis, anoque tribus maculis notato, varietas forsitan. *Cet. spilitæ*? Long. lin.  $5\frac{1}{2}$ ; lat. 3.

*Cetonia Klugii*. Thorace nigro lateribus flavo marginatis, elytrisque flavis maculis ornatis. Long. lin. 5; lat.  $3\frac{1}{2}$ .

*Campsiura Xanthorhina*. Lutea, elytris flavis, tribus lineis lateralibus nigris haud apicem attingentibus. Long. lin. 9; lat.

*Colodera penicillata*. Nigra, thorace excavato, aurata pubescenti, quatuor lateralibus lineis cupreis ornato, elytra atra auratis maculis penicillis lateralibus obsita, cauda aurantia et pilosissima Corpus subtus atropiceum pedibus concoloribus, segmentis abdominis utrinque maculis auratis ornato. Long. lin. 8; lat. 4.

*Buprestis superba*. Aurea, elytris serratis bidentatis, punctatissimis, corporeque depresso. Long. lin. 11; lat. 5.

*Buprestis 10-spilota*. Elytris bidentatis, striatis, nigro-æneis flavisque maculis decem notatis. Long. lin.  $7\frac{1}{2}$ ; lat.  $2\frac{3}{4}$ .

*Buprestis bifasciata*. Nigro-cærulea, elytris bidentatis, binisque fasciis sanguineis. Long. lin.  $6\frac{1}{4}$ ; lat.  $2\frac{1}{4}$ .

*Buprestis aurofasciata*. Aurato-purpurea serrata, elytrisque binis fasciis aureis. Long. lin.  $7\frac{1}{2}$ ; lat. 2.

*Buprestis cingulata*. Viridis, corpore cylindrico, elytris bidentatis fasciisque tribus cyaneis. Long. lin.  $4\frac{1}{2}$ ; lat.  $\frac{1}{2}$ .

*Buprestis marginicollis*. Nigro-ænea, marginibus thoracis cupreis, elytris bidentatis. Long. lin.  $4\frac{1}{2}$ ; lat.  $\frac{1}{2}$ .

*Elatér Stephensii*. Viridi-olivaceus, thorace sanguineo marginato elytrisque acuminatis. Long. lin. 16; lat.  $4\frac{1}{2}$ .

*Elatér elongatus*. Totus supra brunneus elytris elongatis et striato-punctatis. Long. lin.  $8\frac{1}{2}$ ; lat.  $1\frac{3}{4}$ .

*Elatér cænosus*. Fuscus, thorace obscure cinereo elytrisque cinereo-nebulosis. Long. lin.  $6\frac{1}{2}$ ; lat. 2.

*Elatér miniatocollis*. Similis *Elatér* ruficollis. Niger, thorace miniatonitido capite, elytris, corporeque nigris. Long. lin.  $5\frac{1}{2}$ ; lat.  $\frac{1}{2}$ .

*Elatér tetraspilotos*. Niger, elytris quatuor flavis maculis notatis. Long. lin.  $4\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Elatér trimaculatus*. Niger, thorax ruber tribus maculis nigris, elytris striato-punctatis. Long. lin. 5; lat.  $1\frac{1}{4}$ .

*Elatér miniatus*. Ruber, thorace lineâ nigra longitudinali, femoribusque nigris. Lon. lin.  $4\frac{1}{2}$ ; lat.  $1\frac{1}{4}$ .



*Elater Eschscholtzii*. Flavo-brunneus, elytris margine flavo notatis binisque luteis maculis. Long. lin. 5; lat. 2.

*Elater pulverosus*. Totus supra brunneus, elytris pubescentibus, corpore subtusque ferrugineo. Long. lin. 5; lat.  $1\frac{1}{2}$ .

*Elater crocopus*. Niger pedibus croceis. Long. lin.  $4\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Lycus triangularis*. Sanguineus, thorace nigro, pedibusque nigris. Long. lin.  $8\frac{1}{2}$ ; lat. 4.

*Lycus similis*. Præcedenti similis magnitudine et antennis antice multo crassioribus solummodo differt. Long. lin. 5; lat. 2.

*Omalysus maculicollis*. Sanguineus, thorace nigro-maculato, corpore subtusque nigro.

*Omalysus lineato-collis*. Præcedenti similis magnitudine, lineaque tenui longitudinali nigra, et pedibus brunneo ferrugineis differt. Long. lin. 6; lat. 2.

*Omalysus lineatus*. Sanguineus, thorace tuberculato-elytrisque lineatis. Long. lin. 6; lat.  $1\frac{3}{4}$ .

*Omalysus apicalis*. Niger, elytris apicalibus sanguineis. Long. lin. 6; lat. 2.

*Lampyris Nepalensis*. Obscure nigra, thorace marginato luteo elytris que nigris. Long. lin.  $8\frac{1}{2}$ ; lat.  $3\frac{1}{2}$ .

*Lampyris marginella*. Oblonga, fusca, thorace macula nigricanti, elytris que marginatis. Long. lin.  $6\frac{1}{2}$ ; lat. 2.

*Lampyris ovalis*. Nigra, thorace flavo elytris que marginatis. Long. lin. 5; lat. 2.

*Telephorus Nepalensis*. Cyaneus, capite rufo, elytris que cyaneis, femoribus rufis, tibiis tarsisque, nigro-cæruleis. Long. lin. 8; lat.  $2\frac{3}{4}$ .

*Telephorus rubricollis*. Violaceus, thorace rubro, femoribusque rufis. Long. lin.  $6\frac{1}{2}$ ; lat.  $1\frac{3}{4}$ .

*Telephorus cyanurus*. Flavo-rufus, elytris que postice violaceis. Long. lin.  $6\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Telephorus trimaculatus*. Ruber, thorace rufo, elytris que trimaculatis, apicibus que violaceis. Long. lin. 5; lat.  $1\frac{1}{2}$ .

*Telephorus unipunctatus*. Testaceus, thorace rubro elytris que postice cyaneis. Long. lin. 5; lat.  $1\frac{1}{4}$ .

*Telephorus purpurascens*. Violaceus, thorace rubro elytris que purpureis. Long. lin.  $4\frac{1}{2}$ ; lat. 1.

*Telephorus assimilis*. Luteus, antennis flavis elytrorum que apicibus nigris. T. Melanuro, Fabr., proximus. Long. lin. 5; lat.  $1\frac{1}{2}$ .

*Anisotelus lividus*. Lividus, totum corpus supra testaceum. Long. lin. 4; lat.  $1\frac{1}{2}$ .

*Anisotelus bimaculatus*. Lividus, elytris bimaculatis. Long. lin. 4; lat.  $1\frac{1}{2}$ .

*Anisotelus bispilotus*. Testaceus, elytris bispilotis.

*Maluchius bifasciatus*. Ruber, thorace in medio viridi, elytris que maculatis binisque fasciis cyaneis. Long. lin. 3; lat.  $1\frac{1}{2}$ .

*Macrocephalus hieroglyphicus*. Affinis Macrocep. cinereo, Oliv. Cinereus, nigro varius, rostro sulcato, antennisque longissimis. Long. lin.  $6\frac{1}{2}$ ; lat.  $1\frac{3}{4}$ .

*Anthribus quadrituberculatus*. Fusco cinereoque varius, elytris quatuor tuberculatis. Long. lin.  $3\frac{1}{2}$ .

*Apoderus 6-spinosus*. Rubroferrugineus, elytris 6-tuberculis maculisque nigris sparsis. Long. lin.  $3\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Apoderus spinosus*. Præcedenti affinis. Totum corpus rufo-testaceum, elytris spinosis tuberculisque nigris sparsis. Long. lin.  $3\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Apoderus flavipes*. Violaceus, antennis pedibusque testaceis. Long. lin.  $3\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Apoderus cyaneus*. Cyaneus, capite nigricanti pedibusque nigris. Long. lin. 3; lat. 1.

*Rhynchites cyaneus*. Totum corpus cyaneum, et pubescens, tarsis nigricantibus. Long. lin.  $3\frac{3}{4}$ ; lat.  $1\frac{1}{2}$ .

*Sitona bispilota*. Nigra, thorace lateribus flavis elytrisque duabus maculis flavis. Long. lin.  $3\frac{3}{4}$ ; lat.  $1\frac{1}{4}$ .

*Calandra 14-maculata*. Ferruginea, thorace maculato elytrisque octomaculatis. Long. lin. 5; lat.  $1\frac{1}{2}$ .

*Calandra 4-maculata*. Corpus supra ferrugineum maculis elytrorum exceptis femoribusque spinosis. Long. lin. 8; lat. 2.

*Calandra trilineata*. Ferruginea, thorace tribus lineis, elytrisque maculis nigris notatis femoribusque spinosis. Long. lin.  $9\frac{1}{2}$ ; lat.  $2\frac{3}{4}$ .

*Calandra Goliathus*. Fusco-brunnea cinereoque sericea, elytris striatis pedibusque nigris. Rostro excepto, lin. 27; long. lin. rostro incluso  $36\frac{1}{2}$ ; lat. 10.

*Trogosita nigricans*. Affinis T. mauritanicæ. Nigra elytris striatis femoribusque rubris. Long. lin.  $3\frac{3}{4}$ ; lat. 1.

*Trogosita cylindrica*. Ferruginea, thorace punctato elytrisque striato punctatis. Long. lin.  $4\frac{1}{2}$ ; lat. 1.

*Cucujus sanguinolentus*. Rufo sanguineus, thorace serrato elytrisque sanguineis depressis. Long. lin.  $8\frac{1}{2}$ ; lat. 2.

*Pausus Hardwickii*. Castaneo-rufus, elytris plagâ longitudinali nigra antennarum clava elongata lineari, subconvexa, basi externe in hamum producta, apiceque rotundata.

*Prionus Indicus*. Niger, thorace lævi bidentato mandibulisque unidentatis. Affinis Pr. Orientali, Oliv. at minor. Long. lin. 19; lat 7.

*Prionus subcoriaceus*. Brunneus, elytris striatis abdomineque elongato. Long. lin.  $10\frac{1}{2}$ ; lat  $3\frac{3}{4}$ .

*Monochamus cervinus*. Fuscus, thorace spinoso, antennis longissimis elytrisque fusco cervinis. Long. lin. 7; lat. 2.

*Lamia horridula*. Rufobrunnea, antennis penicellatis, thorace spinoso elytrisque pilis horridulis. Affinis C. reticulatori, Fabr. Long. lin. 14; lat. 5.

*Lamia Wallichii*. Viridisericea, antennis penicillatis elytrisque tribus fasciis nigris, binisque penicillis dorsalibus ornatis. Long. lin. 16; lat. 5.

*Lamia lateritia*. Obscure rubra, thorace subspinoso antennisque penicillatis. Long. lin. 12; lat. 4.

*Lamia cretifera*. Nigra, antennis penicillatis, thorace inermi elytrisque fascia cinerea notatis. Long. lin.  $5\frac{1}{2}$ ; lat. 2.

*Lamia penicillata.* Nigro-brunnea, thorace spinoso elytrisque depressis et flavomaculatis articuloque quarto antennarum fasciculato piloso. Long. lin. 9; lat.  $2\frac{1}{4}$ .

*Lamia Germarii.* Fusco et testaceo-pubescentibus, thorace pectoreque testaceo villosis elytrisque basi scabris bidentatis. Long. lin. 22; lat. 8.

*Callidium cretaceum.* Fusco brunneum, thorace maculis albis elytris-que variis cretaciis maculis notatis. Long. lin. 8; lat.  $2\frac{1}{4}$ .

*Callidium leucostictum.* Precedenti affine. Fusco ferrugineum, thorace lineâ albâ longitudinali elytris-que maculis albis notatis. Long. lin.  $5\frac{3}{4}$ ; lat.  $1\frac{1}{2}$ .

*Saperda rubescens.* Pallide rubens, thorace quatuor nigris maculis elytris-que rubescentibus. Long. lin.  $8\frac{1}{2}$ ; lat. 2.

*Saperda 14-maculata.* Sulphurea, thorace 6-maculato elytris-que octomaculatis pedibus-que testaceis. Long. lin.  $4\frac{1}{2}$ ; lat.  $1\frac{1}{4}$ .

*Clytus leucoscutellatus.* Rufus, thorace globoso, elytris-que strigis tribus undatis et albis. Long. lin. 6; lat.  $1\frac{1}{4}$ .

*Clytus annulatus.* Thorace rotundato virescenti elytris-que bidentatis subvirescentibus fasciisque tribus nigris primâ-que annulari. Long. lin. 6; lat.  $1\frac{1}{4}$ .

*Clytus bicinctus.* Rufus, capite nigro, thorace globoso elytris-que strigis tribus undatis et albis. Long. lin. 6; lat.  $1\frac{1}{4}$ .

*Clytus undulatus.* Rufus, thorace rotundato, elytris-que fascia irregulari flava ornatis. Long. lin.  $5\frac{1}{4}$ ; lat.  $1\frac{1}{4}$ .

*Clytus assimilis.* Summa affinitas, Call. Verbasco, Fabr. Virescens thorace trimaculato elytris-que maculatis. Long. lin. 5; lat.  $1\frac{1}{4}$ .

*Clytus albicinctus.* Niger thorace gibboso elytris-que tribus fasciis albis. Long. lin. 3; lat. 1.

*Clytus testaceus.* Testaceus, elytris duabus strigis albis vix distinctis. Long. lin. 4; lat.  $3\frac{1}{4}$ .

*Molorchus Indicus.* Niger elytris subulatis femoribus posticis valde clavatis abdomine-que flavo. Long. lin. 4; lat.  $1\frac{1}{4}$ .

*Megalopus 7-maculatus.* Rufus, thorace trimaculato elytris-que quadrimaculatis. Long. lin. 4; lat.  $1\frac{1}{2}$ .

*Crioceris unicolor.* Rubra elytris punctato striatis pedibus-que rubris. Long. lin.  $3\frac{1}{2}$ , lat.  $1\frac{3}{4}$ .

*Adorium scutellatum.* Testaceum, apicibus antennarum fuscis, abdomine-que nigro. Long. lin.  $4\frac{3}{4}$ ; lat. 3.

*Galleruca trifasciata.* Pallide flava antennis pedibus-que elytris-que trifasciatis. Long. lin.  $5\frac{1}{2}$ ; lat.  $3\frac{1}{4}$ .

*Galleruca spilota.* Prædecentibus affinis. Fuscotestacea, thorace flavo elytris-que maculatis. Long. lin. 6; lat.  $3\frac{1}{4}$ .

*Galleruca quadrifasciata.* Flava, antennis tibiisque nigris, elytris-que quadrifasciatis. Long. lin. 5; lat.  $2\frac{3}{4}$ .

*Galleruca grossa.* Nigricans, antennis thorace pedibus-que testaceis, elytris-que nigricantibus. Long. lin. 8; lat.  $4\frac{1}{4}$ .

*Galleruca chalybea.* Chalybeo violacea thorace scutello pedibus-que flavis. Long. lin.  $6\frac{3}{4}$ ; lat. 3.

*Galleruca purpurascens.* Violacea, thorace testaceo elytris que purpurascens. Long. lin. 5; lat. 3.

*Galleruca rubricollis.* Cyanea thorace rubro elytris que cyaneis pedibusque rubris. Long. lin.  $3\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Galleruca Vigorsii.* Cyanea, duabus fasciis auratis pedibusque violaceis. Long. lin. 5; lat. 3.

*Galleruca cærulans.* Oblonga, violacea, thorace viride antennis tarsisque nigris. Long. lin. 4; lat.  $2\frac{1}{4}$ .

*Galleruca Bennetti.* Thorace rubro, elytris que cæruleo testaceis. Long. lin. 4; lat. 3.

*Galleruca bicolor.* Rubrotestacea, thorace bimaculato elytris que nigromaculatis. Long. lin.  $3\frac{1}{4}$ ; lat.  $2\frac{1}{4}$ .

*Galleruca cervina.* Totum corpus cervinum. Long. lin.  $4\frac{1}{2}$ ; lat.  $2\frac{1}{2}$ .

*Galleruca scutellata.* Testacea, antennis nigris ano pedibusque flavis. Long. lin.  $3\frac{2}{3}$ ; lat. 2.

*Galleruca consentanea.* Affinis Gal. simili, Fabr. Ovato-oblonga testacea pectore nigro, abdomine rufescente pedibusque testaceis. Long. lin. 3; lat.  $1\frac{1}{2}$ .

*Galleruca tetraspilota.* Fulva thorace rufo elytris que quatuor maculis nigris pedibusque testaceis. Long. lin. 2; lat.  $1\frac{1}{4}$ .

*Galleruca flavocincta.* Nigra, thorace rubro, elytris que flava fascia ornatis. Long. lin.  $2\frac{2}{4}$ ; lat.  $1\frac{2}{4}$ .

*Galleruca miniaticollis.* Atra, thorace rubro elytris que nigris, pedibusque testaceis. Long. lin. 3; lat. 2.

*Galleruca Indica.* Testacea, thorace quadrimaculato elytris que quadrivittatis. Long. lin.  $3\frac{1}{4}$ ; lat.  $2\frac{1}{2}$ .

*Auchenia viridis.* Virens, thorace testaceo elytris que viridibus. Long. lin. 4; lat.  $1\frac{2}{4}$ .

*Auchenia cyanura.* Testacea, capite thoraceque maculatis elytris que apicibus cyaneis. Long. lin.  $4\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Auchenia sexmaculata.* Testacea, antennis fuscis elytris que sexmaculatis. Long. lin.  $3\frac{1}{2}$ ; lat.  $1\frac{1}{4}$ .

*Auchenia æruginosa.* Viridis, thorace nigro elytris que æruginosis. Long. lin. 3; lat.  $1\frac{1}{2}$ .

*Auchenia marginata.* Atra elytris sanguineo marginatis pedibusque nigris. Long. lin. 3; lat.  $1\frac{1}{2}$ .

*Ægelocerus mirabilis.* Ovato-oblongus, thorace luteo elytris que chalybeo violaceis. Long. lin.  $5\frac{2}{4}$ ; lat. 3.

*Haltica rubra.* Rubra, antennis tibiisque nigris. Long. lin.  $2\frac{2}{4}$ ; lat.  $1\frac{1}{2}$ .

*Haltica purpurascens.* Violacea, antennis nigris tarsisque subtestaceis. Long. lin.  $2\frac{1}{4}$ ; lat.  $1\frac{1}{4}$ .

*Haltica miniaticollis.* Nigro cyanea thorace miniato pedibusque ferrugineis. Long. lin. 2; lat.  $1\frac{1}{4}$ .

*Chrysomela cyanicollis.* Ovato-oblonga gibbosa, thorace cyaneo elytris que testaceis et immaculatis. Long. lin. 6; lat. 4.

*Chrysomela Indica.* Ovato-oblonga, viridis elytris rubris et immaculatis. Long. lin. 6; lat.  $2\frac{2}{4}$ .

*Chrysomela Nepalensis*. Nigro violacea thorace purpurascenti elytris æneoviolaceis et punctatis, punctis majoribus quibusdam seriatis et atris. Long. lin.  $4\frac{1}{2}$ ; lat. 3.

*Chrysomela Vishnu*. Ænea, elytris margine sanguineo fuscatis? Long. lin. 4; lat.  $2\frac{1}{3}$ .

*Chrysomela Mahesa*. Aurea, thorace tribus vittis puniceis elytrisque gibbosis, sutura binisque vittis puniceis fasciaque antice interrupta concolori. Long. lin.  $3\frac{1}{3}$ ; lat.  $2\frac{1}{3}$ .

*Chrysomela mutabilis*. Violacea, antennis pedibusque nigricantibus. Long. lin.  $3\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Chrysomela miniaticollis*. Viridi ænea thorace miniato, elytris viridibus pedibusque rufotestaceis. Long. lin. 3; lat.  $2\frac{1}{4}$ .

*Colaspis variolosa*. Ænea, antennis pedibusque nigris elytrisque æneis et variolosis. Long. lin.  $3\frac{1}{3}$ ; lat.  $2\frac{1}{4}$ .

*Eumolpus nitens*. Viridis nitens thorace elytrisque punctatis antennisque compressis. Long. lin.  $4\frac{2}{3}$ ; lat.  $2\frac{1}{3}$ .

*Eumolpus lateralis*. Præcedenti affinis, viridis, thorace elytrisque punctatus binisque lateralibus lineis elevatis. Long. lin.  $4\frac{2}{3}$ ; lat.  $2\frac{1}{3}$ .

*Eumolpus rutilans*. Igneus, thorace nigrocyaneo pedibusque nigris elytris igneorubidis. Long. lin. 3; lat.  $1\frac{2}{3}$ .

*Eumolpus splendens*. Præcedenti affinis, Igneus, thorace nigro antennis pedibusque nigris. Long. lin.  $2\frac{2}{3}$ ; lat. 2.

*Cryptocephalus Orientalis*. Rubrotestaceus, thorace nigrofasciato elytris duobus fasciis atris. Long. lin. 3; lat.  $1\frac{2}{3}$ .

*Cryptocephalus spilotus*. Flavotestaceus, capite atro, thorace nigro-lineato elytris quatuor punctis fasciaque lata notatis. Long. lin.  $2\frac{2}{3}$ ; lat.  $1\frac{2}{3}$ .

*Cryptocephalus ensifer*. Testaceus, thorace punctis duobus, elytris quatuor maculis fasciaque undulata notatis. Long. lin.  $2\frac{1}{3}$ ; lat.  $1\frac{1}{3}$ .

*Cryptocephalus triangularis*. Rubrotestaceus thorace bimaculato elytris decemmaculatis. Long. lin. 2; lat.  $1\frac{1}{4}$ .

*Cryptocephalus rubripes*. Viridis, antennis testaceis femoribusque rubris. Long. lin. 2; lat.  $1\frac{1}{4}$ .

*Cassida trilineata*. Pallida thorace tribus lineis confluentibus elytrisque flavo nigroque maculatis. Long. lin.  $2\frac{2}{4}$ ; lat. 2.

*Cassida pallida*. Rotunda, capite supra pallide testaceo subtusque nigro. Long. lin.  $2\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Coccinella miniata*. Subhemisphærica, nigra, thorace macula laterali flava elytrisque miniatis. Long. lin.  $5\frac{1}{3}$ ; lat. 5.

*Coccinella 6-spilota*. Rubra, thorace macula laterali flava elytris sexmaculis nigris notatis. Long. lin.  $4\frac{1}{3}$ ; lat.  $4\frac{1}{3}$ .

*Coccinella 15-maculata*. Affinis *C. versicolori*, *Fabr.* Hemisphærica, rufa thorace macula media nigra elytris quatuordecim maculis nigris notatis. Long. lin. 4; lat.  $3\frac{1}{4}$ .

*Coccinella 15-spilota*. Præcedenti affinis. Rufa, thorace immaculato elytris quatuordecim punctis nigris notatis. Long. lin. 4; lat.  $3\frac{1}{4}$ .

*Coccinella dimidia*. Affinis *C. dimidiatæ*, *Fabr.* at duplo major subhemisphærica, elytris rubris apice atris. Long. lin. 4; lat.  $3\frac{1}{4}$ .



*Coccinella bicolor*. Præcedenti affinis at minor. Rubrotestacea thorace macula media nigra elytris que rufis apice atris. Long. lin.  $3\frac{1}{2}$ ; lat.  $3\frac{1}{2}$ .

*Coccinella 12-spilota*. Flava, thorace maculis duabus, elytris que octomaculatis duobus communibus. Long. lin.  $3\frac{1}{2}$ ; lat.  $3\frac{1}{4}$ .

*Coccinella pubescens*. Affinis C. innubæ, Oliv. Obscure lutea thorace maculato pubescenti, elytris que septem maculis majoribus punctisque quinque in singulis notatis. Long. lin. 3; lat.  $2\frac{1}{2}$ .

*Coccinella marginicollis*. Nigra, thorace lateribus flavis elytris que septem maculis flavis notatis. Long. lin.  $3\frac{1}{4}$ ; lat.  $2\frac{1}{2}$ .

*Coccinella Straminea*. Lutea, thorace maculato elytris que quatuor maculis fulvis in singulis notatis. Long. lin.  $3\frac{1}{4}$ ; lat.  $2\frac{3}{4}$ .

*Coccinella vulnerata*. Lutea, thorace elytris que tribus pallide flavis maculis notatis. Long. lin.  $2\frac{1}{2}$ ; lat.  $2\frac{1}{4}$ .

*Coccinella uniramosa*. Flava, thorace fulvo elytris que vitta nigra notatis. Long. lin.  $2\frac{3}{4}$ ; lat.  $2\frac{1}{4}$ .

*Coccinella univittata*. Hemisphærica, elytris rubris sutura margine lineaque abbreviata nigris. Long. lin.  $1\frac{1}{2}$ ; lat.  $1\frac{1}{2}$ .

*Coccinella cincta*. Rubra, thorace nigro antice margine testaceo elytris que rubris latoque margine atrato cinctis. Long. lin.  $2\frac{1}{4}$ ; lat. 2.

*Coccinella 11-spilota*. Rubra, thorace margine testaceo elytris que maculis nigris decem notatis. Long. lin.  $2\frac{1}{2}$ ; lat.  $1\frac{1}{4}$ .

*Coccinella tetraspilota*. Rubra, capite binis albis punctis notato, thorace marginato, elytris que punctis nigris maculatis. Long. lin.  $2\frac{1}{2}$ ; lat.  $1\frac{3}{4}$ .

*Coccinella virescens*. Supra viridibrunnea, subtus que rubrotestacea. Long. lin. 3; lat.  $2\frac{1}{4}$ .

*Coccinella subglobosa*. Brunneoviridis, elytris punctatis corpore que subtus testaceo. Long. lin.  $2\frac{1}{2}$ ; lat. 2.

*Chilocorus rubidus*. Ruber, thorace nigro elytris que concoloribus nigroque marginatis. Long. lin.  $2\frac{3}{4}$ ; lat.  $2\frac{1}{2}$ .

*Cyrtoscelis piceus*. Piceus, thorace nigro, convexo elytris que lineato-punctatis. Long. lin. 6; lat.  $2\frac{1}{2}$ .

*Opatrum tuberculatum*. Elongatum, thorace tuberculato elytris que striatis fulvoque griseis. Long. lin.  $4\frac{3}{4}$ ; lat. 2.

*Tenebrio rubripes*. Oblongus, niger, elytris striatopunctatis pedibus que rubris. Long. lin. 6; lat.  $2\frac{3}{4}$ .

*Tenebrio longipes*. Ater, thorace punctato, elytris punctatostriatis, pedibus longissimis. Long. lin.  $9\frac{1}{2}$ ; lat. 3.

*Tenebrio glaber*. Nigro-brunneus, thorace glabro, elytris que substriatopunctatis. Long. lin.  $11\frac{1}{2}$ ; lat.  $4\frac{1}{2}$ .

*Blaps Bengalensis*. Nigra, scutello flavopubescenti, elytris que substriatopunctatis et acuminatis. Long. lin. 16; lat.  $6\frac{1}{2}$ .

*Blaps Indica*. Nigra, thorace depresso et marginato, elytris que subacuminatis et costatis. Long. lin. 7; lat. 3.

*Cistela lutea*. Sulphurea, antennis, tibiis, duobus ultimis segmentis abdominis atris. Long. lin.  $5\frac{1}{2}$ ; lat. 2.

*Amarygmus cyanopterus*. Oblongus, thorace nigro elytris que purpureo-cyaneis. Long. lin.  $5\frac{1}{2}$ ; lat. 3.

*Lagria basalis*. Villosa, cyaneo thorace antice parte dimidio elytrorum posticaque concolori testacea. Long. lin. 8; lat. 4.

*Lagria Nepalensis*. Villosa, thorace cyaneo elytris que aurovirescentibus, pedibusque nigris. Long. lin.  $6\frac{1}{2}$ ; lat. 2.

*Lagria quadrimaculata*. Rufa, antennis nigris, thorace rubro elytris que testaceis et quadrimaculatis. Long. lin.  $6\frac{1}{2}$ ; lat. 2.

*Lagria ruficollis*. Fusca, antennis nigris thorace rufo elytris que fusco-brunneis. Long. lin.  $4\frac{1}{2}$ ; lat. 2.

*Ripiphorus Indicus*. Ruber, antennis pedibusque nigris. Long. lin. 4. lat. 2.

*Lydus melanurus*. Niger, elytris rubrotestaceis fasciaque apicali nigra. Long. lin. 9; lat.  $3\frac{1}{2}$ .

*Lytta Nepalensis*. Nigra, capite postice miniato, elytris pedibusque nigerrimis. Long. lin. 11; lat.  $3\frac{3}{4}$ .

*Lytta rubra*. Rubens, thorace nigro elytris que rubris. Long. lin. 7; lat.  $2\frac{1}{4}$ .

*Staphylinus flavipennis*. Ater, capite thoraceque nigro, elytris que villosa aureis abdomineque nigro. Long. lin.  $7\frac{1}{2}$ ; lat. 2.

*Staphylinus unipunctatus*. Niger, capite rubro, thorace nigro elytris que violaceis. Long. lin. 5; lat.  $1\frac{1}{2}$ .

*Descriptions of eight new species of Indian Butterflies, (PAPILIO, Lin.), from the collection of General HARDWICKE, by GEORGE ROBERT GRAY, Esq.*

*Papilio Glycerion*. P. alis flavescentibus, fasciis nigris; posticis caudatis, apice nigro, lunulis marginalibus cæruleis, angulo ani striga flava. Expansio alarum 3 poll. Habitat in Nepaul.

*Papilio Philoxenus*. P. alis repandis nigris; anticis strigis albidis; posticis dentatis, caudatis, apice maculâ albâ, lunulis 5 strigâque ad angulum ani rubris. Expansio alarum,  $4\frac{3}{4}$ . Habitat in Nepaul.

*Papilio Minereus*. P. alis repandis nigrescentibus, strigis nigris; posticis caudatis, nigris, maculâ albâ suturis divisâ et lunulis 4 rubris. Expansio alarum,  $4\frac{3}{4}$ . Habitat in Nepaul.

*Papilio Agestor*. P. alis griseis, venis margineque exteriore nigris, griseo punctatis; posticis corticinis, disco punctato griseis. Expansio alarum,  $3\frac{1}{2}$ . Habitat in Sumatra

*Parnassius Hardwickii*. P. alis integerrimis albidis, basi nigris: anticis fasciis tribus nigris, quarum ultimâ maculis tribus rubris, ocellorubro nigro-circumdato in medio marginis posterioris; posticis medio ocellis duobus rubris nigro circumdati, margine posteriore ocellis quinque nigris pupillis albis, subtus pallidioribus, basi rubris. Expansio alarum,  $2\frac{3}{4}$ . Habitat in Nepaul.

*Pieris Horsfieldii*. P. alis suboblongis, integerrimis, nigris, maculis albidis triangularibus, anticis subtus maculis apicalibus tribus

flavis; posticis basi, margineque interiore flavis, subtus maculis ad marginem posteriorem flavis. Expansio alarum  $3\frac{1}{2}$ . Habitat in Nepaul.

*Pieris Agathon.* P. alis suboblongis integerrimis nigris, basi strigis albidis transversis, fasciis macularibus duabus flavis ad marginem posteriorem; posticis subtus basi maculâ flavâ. Expansio alarum . Habitat in Nepaul.

*Argynnis Childreni.* A. alis subrotundatis, subdentatis, fulvis, nigro maculatis; posticis margine posteriore viridi-cæruleo, subtus flavescenti viridi, strigis argenteis. Expansio alarum,  $3\frac{1}{4}$ . Habitat in Nepaul.

*Description of three new species of Fish from the Sandwich Islands, in the British Museum.*

*Arched Holocanthus.* *Holocanthus arcuatus.* Oblong, tail and fins rounded. Brown, paler beneath; a broad black arched band from the eye to the caudal end of the dorsal fin; the anal and caudal fin with a white edged broad black band. P. 14, D. 12—21 or 22? C. 16 or 18, A. 3—11, V. 1—6.

*Ornamented Chatodon.* *Chatodon ornatus.* Oblong, orbicular, greenish, (when dry;) head with four transverse black bands; sides with six or seven black edged broad yellow oblique longitudinal bands; hinder part of the dorsal, anal, and caudal fin with a black edged yellow marginal band; tail end slightly rounded. Length 8, height 5 inches. P. 18, D. 12—27, C. 16, A. 3—22? V. 1, 5.

*Four-spotted Chatodon.* *Chatodon 4-maculatus.* Oblong, olive black; beneath whitish, (when dry) with a white cross band before and behind the eyes, and a white spot on the middle of the back, and another near the tail; tail rounded; tail, anal fin, and edge of the dorsal fin yellow; anal and dorsal fin with a black edged longitudinal submarginal, arched band; cheek with two narrow cross bands. Length  $5\frac{3}{4}$ , height 3 inches. P. 11, D. 14, C. 16, A. 2—27, V. 4—5.

*Description of five new species of Indian Birds.*

*Hay's Bucco.* *Bucco Hayii*, n. s. Bill short, very strong, smooth, toothless, horn coloured; head rusty black, feathers pale edged, shafts rigid acute; above, black brown, feathers of back and rump obscurely pale edged; cheeks and ears rusty brown; orbits naked; chin brownish white; chest and beneath dirty silky white; thighs black behind; feet reddish. Length 6, of wing  $3\frac{1}{2}$ , of tarsus  $\frac{3}{4}$  inches, of bill to forehead 7, to gape 15 lines. Inhab. Molucca. Collection of Capt. Hay.

*Molucca Chloropsis.* *Chloropsis Moluccensis*, n. s. Back verditer green; secondaries rather bluer; quills and tail blue green; beneath, very pale yellow green; smaller wing coverts bright metallic blue green; forehead, sides of the throat bright straw colour; occiput and back of neck greenish yellow; face from the nostrils to the front angle of the



eye and throat fine velvety black; a spot on the side of the lower jaw fine dark blue; inner edge and under side of quills dusty black; under side of tail glaucous blue. Length  $5\frac{1}{2}$ , of wing  $3\frac{1}{2}$ , of tarsus 7 inches, of bill 5 lines. Inhab. Molucca. Collection of Capt. Hay.

*Olive Pachycephale*, *Pachycephalus olivaceus*. Above yellowish olive brown; head blackish grey; throat, chin, and sides of the face white varied with black; breast pale brown; sides of the abdomen and vent white; quills and larger wing coverts dark brownish with yellowish edges; feet strong; bill thick, and short; whiskers rather long, black. Length  $7\frac{1}{2}$  inches, tarsus 1 inch, 4 lines; bill to gape 8 lines. Inhab. ———. Collection of the British Museum, given by Gen. Hardwicke.

*Nepaul Pomatorhine*, *Pomatorhinus Nepalensis*. Olive brown; sides of neck and abdomen paler; chin, throat, and beneath white; bill and feet pale horn colour. Nepal. Collection of the British Museum.

*Crishna Drongo*, *Edolius barbatus*. Crishna Crow, Lath. Hist. 3. 51. t. 40. Black with green reflections, especially on the wing, tail, and breast; tail divaricate, even; the outer feathers bent upwards; forehead with three or four long reflex bristles; bill very large, as long as the head; only slightly bent down at the tip; quills, first, second and third graduated, the fourth and fifth longest and equal. Length  $11\frac{1}{2}$ , wing  $6\frac{1}{2}$ , bill  $1\frac{1}{2}$  inches.

*Description of a new genus of Hemipterous Insect, discovered by Major General HARDWICKE in India.*

Gen. PTILO CERUS.

Fam. Reduviadae.

Antennæ setaceous, moderate, inserted at the inner angles of the eyes, of four joints, first, thick, short, bent, bald; second, very long, linear; third, very short; fourth, rather longer; all covered with two-rowed hairs; beak short; exposed; head moderate; neck, narrow, distinct; eyes prominent; body short, convex; thorax narrow in front, dilated, and two lobed behind; scutellum moderate; elytra longer than the abdomen, nerved; wings short; legs moderate, fringed with a series of long hairs.

*Brown Ptilocerus*, *Ptilocerus fuscus*. Pale brown; head, thorax, and body dark; base of wing yellowish. Length  $4\frac{1}{2}$  lines. Most allied to *Holoptilus* of Serville, but the antenna is 4-jointed.

*Description of two new species of Celliferous Corals, discovered by MISS ELLIOT in the Harbour of Kinglade, near Cork.*

*Elliot's Hippothoa*, *Hippothoa Elliota*. Coral attached; irregularly branched; pearly white; cells ovate; base contracted; mouth, large, roundish, placed near the apex of the cell. Attached to *Pinna ingens*, Montagu; when alive appears like dew drops; and is easily separated from the shell by a pin; but is strongly attached when dry.—

The genus *Alecto* of Lamouroux, Expos. t. 81, f. 12, 14, (not Leach) appears to differ by the cell being cylindrical. At the same time was found *Obelia tubifera*, an interesting addition to the British Fauna.

*Lanceolate Hippothoa.* *Hippothoa lanceolata*. Coral attached, slender, dichotomously and divaricately branched, pearly white, cells slender, linear, ovate, base filiform, generally emitting a cell at right angles from the middle of each side; mouth small, round, with a raised margin, placed near the top of the cell. On *Pinna ingens*.

This species is very like *Hippothoa divaricata*, t. 10, f. 15, 16, Lamouroux Expos. but he describes and figures the cells as fusiform, and not ovate, lanceolate, and his is from a *Fucus*.

*Description of some new species of Cowries, as an addition to the Monograph in the Zoological Journal.*

*Friend's Cowry.* *Cypræa Friendii*. Shell ovate; back rather gibbous, pale reddish brown, with large red brown spots; spire elongated, conical, prominent, acute. Base, black brown, convex, rounded, produced at each end, as long as the spire behind, and attenuated in front; margin rounded; mouth, white, narrow, slightly widened in front, inner lip nearly toothless, with a few rather large conical teeth in front, the outer lip with rather large regular teeth. Columella concave in front, flat behind, without any plaits; inside white.

When worn; back with transverse wavy streaks interrupted by three narrow spiral bands. Inhab. New Holland near Swan River. My collection. Dedicated to Capt. Friend, F.R.S. to whom I am indebted for several new shells from this habitat. Length of mouth  $2\frac{3}{4}$ ; diameter of shell  $1\frac{1}{2}$ ; length of spire  $\frac{1}{2}$  an inch.

This shell has a good deal the colour and form of a *Cypræa stercoraria*, but the base is not so dilated and is coloured like *Cypræa Talpa*, and the spire is more elongated than in any Cowry that I know. The worn shell has three broad interrupted spiral bands occupying nearly the whole of the shell, the middle band being double.

*Two-warted Cowry.* *Cypræa bicallosa*. Shell oblong, ovate, pinkish brown, with large irregular bay spots; the base orange, shelving at the sides; the extremities produced, recurved, with a rather large callous tubercle over each end; the teeth large, deeply separated, twenty-two or twenty-three on each side; the outer margin rather produced, sharp, slightly pitted on each side of both extremities. Length  $1\frac{1}{2}$  inch, breadth 10 lines. When worn orange yellow. Differs from *Cyp. helvola* by being larger, with two callosities, and in the teeth being longer and more numerous. My Collection, Col. Freeth's, and that of Mr. Swainson and Mr. Tucker.

I may also remark that I have lately received from Mr. Turner two specimens of *Cypræa gangrenosa* of a large size; covered with a milk white enamel, leaving a subcentral yellowish dorsal line, but agreeing in all other respects with the common state of the species.

*Doubtful Cowry. Cypræa dubia.* Shell, backspeckled with chestnut brown, the spots closer together and forming a kind of band along the back, and at the extremities are a series of black irregular spots; the sides just above the margin rather thickened and wavy; purplish white with a large square purplish spot on the centre of the outer margin; outer lip and base flattish; inner side rather convex, obscurely shelving inwards, with four rather large teeth in front extending without interruption over the convex front of the columella, and nine or ten blunt teeth behind, the outer lip flat with twelve rather large conical teeth. Inhab———. My collection.

Very like *Cypræa erronea*, but rather larger, the teeth rather less numerous, otherwise exactly similar; the sides over the margin with scattered unequal black spots; the spire is flattish, partly exposed; front extremity slightly margined on each side. It differs from *C. erronea* in the spotting of the margin, and from *C. felina* in the number of its teeth.

*Allied Cowry. Cypræa similis.* Shell ovate; back pale pinkish brown, with a very obscure broad, rather darker central band; spire flat; suture distinct, covered by a thin callosity; margin pale whitish brown, thickened on the outer side, and especially on both sides of each extremity, obscurely waved on its upper edge; base pale whitish brown, convex, smooth, with three unequal plaits in the front; mouth rather wide, and wider in front; columella short and flat in front; teeth of the inner lip about twenty, rather large, unequal, and close together, especially on the hinder side, whitish. The outer lip much inflexed, and rather thickened, with eighteen or nineteen rather large distinct fulvous brown teeth, extended over two-thirds of the breadth of the lip.

Axis 1 inch 5 lines. Diam. 11 lines. Inhab.———. In the collection of Mr. G. B. Sowerby.

It agrees with *C. Algoensis* and *C. fusco-dentata* in shape, and in the three or four irregular plaits in the front extremity of the base, but differs from the first in the colour, breadth, and strength of the teeth of the outer lip, and from *C. fusco-dentata* in the large size, distinctness, and shortness of the teeth of the inner lip, which are not extended over the base, and in the teeth of the outer lip being more numerous and rather closer together.

*Rose-spotted Cowry. Cypræa exigua.* Shell oblong, pellucid, white, with pellucid rose-coloured spots and streaks, with transverse ridges, which are branched near the margin; the interspaces between the ridges smooth, polished; the extremities rather produced, rounded. Dorsal ridge none. Length  $2\frac{1}{2}$  lines. My collection. Allied to *Cypræa rugosa*, but is smaller, rose-spotted, and the ridges fewer, larger, and the interspaces between them smooth.

#### *Description of a new Genus of Star-bearing Corals.*

Gen. STYLASTER.

Coral subcylindrically branching with scattered cells; cell deep cylindrical, base with a central, subcylindrical tubercle with a rounded end

about one half the height of the cell; edge with a raised rim, with numerous small notches in its inner edge, each ending in a pore; surface of the coral scattered with minute simple pores and vesicular tubercles.

The structure of the cell of this genus is very particular; for in *Fungia*, *Caryophyllia*, and many of the allied genera, the cell is completely divided into several cells by numerous radiating plates. In *Porites* the internal parietes of the cells are furnished with longitudinal laminae, and the centre is filled up with perpendicular columns, whilst in *Pocillopora* the cells have the longitudinal fold of the last genus but the centre is simple and hollow, and in this the internal parietes of the cells are smooth, with the centre half filled by a long protuberance, and instead of the laminae round the parietes the margin is rounded, and furnished with pores, each communicating with the cell by a slit.

This coral has very little affinity with the genus *Oculina*, with which it has been always placed, as that genus has the same kind of cell as the *Caryophyllaei*; it must be nearly allied to *Stylophora*, but the centre column is not produced beyond the surface of the coral, which is also differently formed. Two species may be referred to this genus.

*Oculina rosea*. Rose coloured, with the cells scattered on the whole surface.

*Oculina flabelliformis*. Pale yellowish red. The coral fanshaped, the branches compressed, with the cells forming series along each side.

In *Oculina hirtella* the laminae of the star occupy nearly the whole of the cells, while in *Oculina virginea* and its allies the cells are very deep, the laminae funnel-shaped, leaving a cavity, while another *Oculina* in the Museum has very shallow laminae like those of *Pocillopora*.

*Descriptions of some new genera and species of Bats.*

*Hardwicke's Rhinopoma*. *Rhinopoma Hardwickii*. Dark brown, rather paler beneath; tail longer than the body, more than two-thirds free. Inhab. Bengal. Gen. Hardwicke's collection; the collection of the British Museum.

Gen. ISTIOPHORUS, PIT-NOSE BAT.

*Vespertilionidæ.*

The nose-plates extended behind into a lanceolate leaf, with a deep pit in the centre of the front part between the nostrils; tragus lanceolate, toothed; interfemoral membranes only margining the legs; tail none; rest like *Megaderma*.

*Pale Pit-nose Bat*. *Istiophorus flavescens*. Pale yellowish, the hairs long, irregular and silky. Length of body and head 19, of fore-arm bone 18 lines, expanse 10 inches. In the collection of the British Museum.

Gen. HIPPOSIDEROS.

Nose plate like *Rhinolophus* but shorter in front with rounded nostrils and with an elevated cross ridge behind, over which is produced a reflexed nose-leaf attached to the cross rib by three longitudinal membranaceous ridges. This genus is separated from *Rhinolophus* in not having any longitudinal caruncle, and in the nose-leaf being more complicated. It contains eight species, two of which have a pore on the forehead, as



*H. speoris* and *H. elongatus*, and the rest are without it as *H. diadema*, *H. larvatus*, *H. vulgaris* and *H. deformis*, all from Asia, and *H. tridens* from Africa.

Gen. BARBASTELLUS. BARBASTELLE.

The ears large and united together at the base over the forehead which has a bare longitudinal furrow with inflexed bald edges; the nostrils terminate with a lunate groove on their outer side extending behind the nostrils, and with a small elevated membranaceous ridge extending across the nose and uniting the back edges of the grooves together.

*The Australasian Barbastelle. Barbastellus Pacificus.* Blackish; the ears very long, nearly twice as long as the head. Inhab. the Islands of the Southern Pacific, Mr. Stutchbury. Collection of the British Museum; in spirits. I have also observed in the collection of the Linnean Society a stuffed Bat apparently of this genus, it is mouse-coloured above, and rather paler beneath, with dark membranes. It differs from the above in the ears being much shorter, and may be indicated as the *New Holland Barbastelle, B. Novæ Hollandiæ.*

Gen. PLECOTUS, Geoffroy. LONG-EARED BAT.

This genus was proposed by Geoffroy, but has not been generally adopted, however it has a very good external character in the form of the nostrils, which at once distinguish it from the common Bats, they being like the above genus furnished with a groove on the outer side, their forehead is also naked. The *P. auritus* and *P. Barbastellus* both have this character.

The Bats, the *Vespertiliones* of Geoffroy, might for convenience be divided into three genera, the true Bats, *Vespertilio*, with thin ears and membranes and a hairy face, the *Pachyotus* with thick ears and membranes and bald swollen cheeks, including the genera *Nycticejus* and *Scotophilus* and the hairy-tailed species of America, (*Lasiurus.*)

*Description of two new genera of Frogs discovered by JOHN REEVES, Esq. in China.*

Gen. HOULEMA.

Fam. *Ranide.*

Body subcylindrical; rather depressed; skin minutely warty; head small; upper jaw minutely toothed; parotids and ears indistinct; legs short; fore toes quite free, tapering to a point; hind toes long webbed to the tips. It has the teeth of a Frog, the feet of a Pipa, and the skin of a Toad. Only a single species is known.

*The Lurid Houlema. Houlema obscura.* Olive, beneath pale olive, blackish marbled.

Gen. KALOULA.

Fam. *Bombinatoride.*

Body gibbous, mouth beneath tubercular; head small; teeth none. tympanum and parotids none; legs short; toes 4-5, free to the base, subcylindrical; the last joint of the front ones dilated, ovate, truncated, of the hind ones like the lower joints, blunt.

*Beautiful Kaloula. Kaloula pulchra.* Black brown; black spotted; beneath pale; with a broad band across the forehead and the fore legs, and one on each side extending from the eye to the groin, rose red.

*Description of a new species of Bombyx from Nepal, discovered by Dr. WALLICH. In the collection of Major General HARDWICKE.*

*Wallich's Bombyx. Bombyx Wallichii.* Wings rounded, upper wings above bay; black spotted; black cross banded at the base; the hinder half of the outer end with numerous parallel slightly waved, narrow lines; hinder wing above black, with a broad yellowish margin; varied with numerous parallel wavy blackish lines; wings beneath black, with a broad yellow margin, varied with very narrow obscure wavy lines; antennæ pale brown, strongly bipectinated; body black; abdominal rings brown-edged. Length 2; expanse of wings 6 inches. Very like *Phalæna maxima Chusan*, Petiver Gaz. t. 18, f. 3. but in that figure the wavy marginal lines extend to the front edge of the wing, and the band of the base of the wing does not extend to the whole breadth.

*Description of a new genus, and some undescribed species of Crustacea.*

#### GOMEZA.

*Thorax* ovate, convex, gradually converging behind; with long spines over the eyes, and the margins denticulated. The *outer antennæ* longer than the body, ciliated above and below; eyes enclosed in a pit, longer than the stems; outer double feet palpi, with the second joint of the inner foot stalk shorter than the first, rounded, triangular, produced on its outer angle; the first joint subcylindrical; the outer foot stalk, with the first joint broad, compressed; legs 10, the first pair longest, didactyle, shorter than the body; other legs compressed, the claws slender, elongate, ciliated; abdomen of the male very slender, 5-jointed; joints short, narrow; of the female ———?

This genus is apparently intermediate between *Corystes* and *Atelecydus* of Leach, having the long antenna of the first, and the short claws, the pedipalpi, and somewhat the shape of the latter.

*Two-Horned Gomeza. Gomeza bicornis.* Pale yellow; (dry), thorax ovate convex, polished, with thick-set white granules, the front rather produced, bifid, with a long conical subulate horn over each eye; the side margin with nine or ten tubercles on each side; the front one acute and distant; the hinder ones short, blunt and approximated; the fore claws convex, external, granular. Length 11; diam. 7 lines. Inhab. Indian Ocean. Gen. Hardwicke.

*Eyed Corystes. Corystes ocellata.* Pale brown, with two red rings in the middle and two smaller in the hinder part of the sides of the thorax; thorax convex, punctate, front rather produced, slightly nicked; front of margin with four distant acute teeth; carpus of fore legs convex, with a single strong spine on its front upper edge and thumb of claw spineless grooved. British Museum. It differs from *Corystes Cassivelanus* which has the side of the thorax three-toothed, two in front and one behind.

*Spinous-footed Xantho. Xantho spinosa.* Thorax dark red, covered with close set short hairs; rather convex, covered with small roundish

granules; the front semilunar and bifid in the centre; the fore feet rather compressed, rounded, externally covered with rather larger rounded tubercles, the feet depressed, with acute subulate spines, placed along the upper ridge of the first, and scattered over the upper surface of the other joints. Length  $3\frac{1}{2}$ ; breadth  $4\frac{1}{2}$  lines. Inhab. New Holland. My collection.

*New Holland Inachus. Inachus Australis.* The beak produced, linear, bifid, with an acute broad lobe before each eye; thorax depressed; back flattish, convex in the middle and concave over the beak, with an expanded bifid lamina on each side; legs subcylindrical, the carpus, especially of the front pair ending in three compressed spines. Length 10; diam.  $8\frac{1}{2}$  lines. Inhab. Seas of New Holland. My collection.

The second joint of the legs compressed crested, the right fore arm longest; somewhat allied to *Inachus Arabicus*, Rüppel, t. 5, f. 4; but the beak is bifid; the back smooth, and the sides expanded.

*Four-toothed Ebalia. Ebalia 4-dentata.* Thorax small, convex, tubercular; front rather produced, truncated, four-toothed, the outer teeth largest; the side margin four-tubercled, the first and fourth tubercles largest and highest; the hinder edge convex, rather produced, with two tubercles placed in a central line. Legs———? Inhab. New Holland. My collection. Tubercles of back placed 1. 2. and 5. in a cross line, and 1. 1. 1. longitudinally; abdominal joints 3 to 6 united.

*Side-toothed Dromia. Dromia lateralis.* Thorax subglobose; back evenly convex; front rather produced, deeply two cut, with a central tubercle beneath; sides rather produced with two large and one hinder smaller denticulation, sides of the front edge concave, with a small tubercle over the centre of each eye. Length 7; breadth  $6\frac{1}{2}$  lines. Inhab. New Holland. My collection.

*Indian Dromia. Dromia Indica.* Thorax subglobose; back smooth, evenly convex, covered with short hairs; front bifid with an obscure central inferior tubercle; each side with five roundish tubercles, the three front on each side closest together and equidistant: upper edge of front, and of carpus tubercular. Length 19; breadth 18 lines. Inhab. Indian Ocean. Collection of Gen. Hardwicke.

Very like *Dromia Caput Mortuum*, but in it the back is grooved, the second and third tubercles on the front margin are close together, and the carpus is smooth.

*Hardwicke's Crab. Cancer Hardwickii.* Red brown; thorax convex, smooth behind, tubercular and grooved in front; front six lobed, neck with two smaller tubercles over the central, one on each side; the side slightly produced and reflex denticulated, divided into four rather distant teeth, the front and two hinder acute; the claws large subinequal; the hand convex; above granular; legs fringed; the eyes with a broad lobe before and behind below, and a small one in front above. Length  $1\frac{1}{2}$ ; breadth 2 inches. Inhab. Indian Ocean. Collection of Gen. Hardwicke.

Very like *Cancer tenax*, Rüppel, t. 2, f. 1, but front different.



*Chameleon tricornis* n.7







*Bucco trimaculatus* n. 3





*Phainopepla nitens* p. 3



*Doubtful Cowry. Cypræa dubia.* Shell, back speckled with chestnut brown, the spots closer together and forming a kind of band along the back, and at the extremities are a series of black irregular spots; the sides just above the margin rather thickened and wavy; purplish white with a large square purplish spot on the centre of the outer margin; outer lip and base flattish; inner side rather convex, obscurely shelving inwards, with four rather large teeth in front extending without interruption over the convex front of the columella, and nine or ten blunt teeth behind, the outer lip flat with twelve rather large conical teeth. Inhab———. My collection.

Very like *Cypræa erronea*, but rather larger, the teeth rather less numerous, otherwise exactly similar; the sides over the margin with scattered unequal black spots; the spire is flattish, partly exposed; front extremity slightly margined on each side. It differs from *C. erronea* in the spotting of the margin, and from *C. felina* in the number of its teeth.

*Allied Cowry. Cypræa similis.* Shell ovate; back pale pinkish brown, with a very obscure broad, rather darker central band; spire flat; suture distinct, covered by a thin callosity; margin pale whitish brown, thickened on the outer side, and especially on both sides of each extremity, obscurely waved on its upper edge; base pale whitish brown, convex, smooth, with three unequal plaits in the front; mouth rather wide, and wider in front; columella short and flat in front; teeth of the inner lip about twenty, rather large, unequal, and close together, especially on the hinder side, whitish. The outer lip much inflexed, and rather thickened, with eighteen or nineteen rather large distinct fulvous brown teeth, extended over two-thirds of the breadth of the lip.

Axis 1 inch 5 lines. Diam. 11 lines. Inhab.———. In the collection of Mr. G. B. Sowerby.

It agrees with *C. Algoensis* and *C. fusco-dentata* in shape, and in the three or four irregular plaits in the front extremity of the base, but differs from the first in the colour, breadth, and strength of the teeth of the outer lip, and from *C. fusco-dentata* in the large size, distinctness, and shortness of the teeth of the inner lip, which are not extended over the base, and in the teeth of the outer lip being more numerous and rather closer together.

*Rose-spotted Cowry. Cypræa exigua.* Shell oblong, pellucid, white, with pellucid rose-coloured spots and streaks, with transverse ridges, which are branched near the margin; the interspaces between the ridges smooth, polished; the extremities rather produced, rounded. Dorsal ridge none. Length  $2\frac{1}{2}$  lines. My collection. Allied to *Cypræa rugosa*, but is smaller, rose-spotted, and the ridges fewer, larger, and the interspaces between them smooth.

#### *Description of a new Genus of Star-bearing Corals.*

Gen. STYLASTER.

Coral subcylindrically branching with scattered cells; cell deep cylindrical, base with a central, subcylindrical tubercle with a rounded end

about one half the height of the cell; edge with a raised rim, with numerous small notches in its inner edge, each ending in a pore; surface of the coral scattered with minute simple pores and vesicular tubercles.

The structure of the cell of this genus is very particular; for in *Fungia*, *Caryophyllia*, and many of the allied genera, the cell is completely divided into several cells by numerous radiating plates. In *Porites* the internal parietes of the cells are furnished with longitudinal laminæ, and the centre is filled up with perpendicular columns, whilst in *Pocillopora* the cells have the longitudinal fold of the last genus but the centre is simple and hollow, and in this the internal parietes of the cells are smooth, with the centre half filled by a long protuberance, and instead of the laminæ round the parietes the margin is rounded, and furnished with pores, each communicating with the cell by a slit.

This coral has very little affinity with the genus *Oculina*, with which it has been always placed, as that genus has the same kind of cell as the *Caryophyllæi*; it must be nearly allied to *Stylophora*, but the centre column is not produced beyond the surface of the coral, which is also differently formed. Two species may be referred to this genus.

*Oculina rosea*. Rose coloured, with the cells scattered on the whole surface.

*Oculina flabelliformis*. Pale yellowish red. The coral fanshaped, the branches compressed, with the cells forming series along each side.

In *Oculina hirtella* the laminæ of the star occupy nearly the whole of the cells, while in *Oculina virginea* and its allies the cells are very deep, the laminæ funnel-shaped, leaving a cavity, while another *Oculina* in the Museum has very shallow laminæ like those of *Pocillopora*.

*Descriptions of some new genera and species of Bats.*

*Hardwicke's Rhinopome*. *Rhinopoma Hardwickii*. Dark brown, rather paler beneath; tail longer than the body, more than two-thirds free. Inhab. Bengal. Gen. Hardwicke's collection; the collection of the British Museum.

Gen. ISTIOPHORUS, PIT-NOSE BAT. *Vespertilionida*.

The nose-plates extended behind into a lanceolate leaf, with a deep pit in the centre of the front part between the nostrils; tragus lanceolate, toothed; interfemoral membranes only margining the legs; tail none; rest like *Megaderma*.

*Pale Pit-nose Bat*. *Istiophorus flavescens*. Pale yellowish, the hairs long, irregular and silky. Length of body and head 19, of fore-arm bone 18 lines, expanse 10 inches. In the collection of the British Museum.

Gen. HIPPOSIDEROS.

Nose plate like *Rhinolophus* but shorter in front with rounded nostrils and with an elevated cross ridge behind, over which is produced a reflexed nose-leaf attached to the cross rib by three longitudinal membranaceous ridges. This genus is separated from *Rhinolophus* in not having any longitudinal caruncle, and in the nose-leaf being more complicated. It contains eight species, two of which have a pore on the forehead, as



*H. speoris* and *H. elongatus*, and the rest are without it as *H. diadema*, *H. larvatus*, *H. vulgaris* and *H. deformis*, all from Asia, and *H. tridens* from Africa.

Gen. BARBASTELLUS. BARBASTELLE.

The ears large and united together at the base over the forehead which has a bare longitudinal furrow with inflexed bald edges; the nostrils terminate with a lunate groove on their outer side extending behind the nostrils, and with a small elevated membranaceous ridge extending across the nose and uniting the back edges of the grooves together.

*The Australasian Barbastelle. Barbastellus Pacificus.* Blackish; the ears very long, nearly twice as long as the head. Inhab. the Islands of the Southern Pacific, Mr. Stutchbury. Collection of the British Museum; in spirits. I have also observed in the collection of the Linnean Society a stuffed Bat apparently of this genus, it is mouse-coloured above, and rather paler beneath, with dark membranes. It differs from the above in the ears being much shorter, and may be indicated as the *New Holland Barbastelle, B. Novæ Hollandiæ.*

Gen. PLECOTUS, Geoffroy. LONG-EARED BAT.

This genus was proposed by Geoffroy, but has not been generally adopted, however it has a very good external character in the form of the nostrils, which at once distinguish it from the common Bats, they being like the above genus furnished with a groove on the outer side, their forehead is also naked. The *P. auritus* and *P. Barbastellus* both have this character.

The Bats, the *Vespertiliones* of Geoffroy, might for convenience be divided into three genera, the true Bats, *Vespertilio*, with thin ears and membranes and a hairy face, the *Pachyotus* with thick ears and membranes and bald swollen cheeks, including the genera *Nycticejus* and *Scotophilus* and the hairy-tailed species of America, (*Lasiurus*.)

*Description of two new genera of Frogs discovered by JOHN REEVES, Esq. in China.*

Gen. HOULEMA.

Fam. *Ranidæ.*

Body subcylindrical; rather depressed; skin minutely warty; head small; upper jaw minutely toothed; parotids and ears indistinct; legs short; fore toes quite free, tapering to a point; hind toes long webbed to the tips. It has the teeth of a Frog, the feet of a Pipa, and the skin of a Toad. Only a single species is known.

The *Lurid Houlema. Houlema obscura.* Olive, beneath pale olive, blackish marbled.

Gen. KALOULA.

Fam. *Bombinatoridæ.*

Body gibbous, mouth beneath tubercular; head small; teeth none. tympanum and parotids none; legs short; toes 4-5, free to the base, subcylindrical; the last joint of the front ones dilated, ovate, truncated, of the hind ones like the lower joints, blunt.

*Beautiful Kaloula. Kaloula pulchra.* Black brown; black spotted; beneath pale; with a broad band across the forehead and the fore legs, and one on each side extending from the eye to the groin, rose red.

*Description of a new species of Bombyx from Nepal, discovered by Dr. WALLICH. In the collection of Major General HARDWICKE.*

*Wallich's Bombyx. Bombyx Wallichii.* Wings rounded, upper wings above bay; black spotted; black cross banded at the base; the hinder half of the outer end with numerous parallel slightly waved, narrow lines; hinder wing above black, with a broad yellowish margin; varied with numerous parallel wavy blackish lines; wings beneath black, with a broad yellow margin, varied with very narrow obscure wavy lines; antennæ pale brown, strongly bipectinated; body black; abdominal rings brown-edged. Length 2; expanse of wings 6 inches. Very like *Phalæna maxima Chusan*, Petiver Gaz. t. 18, f. 3. but in that figure the wavy marginal lines extend to the front edge of the wing, and the band of the base of the wing does not extend to the whole breadth.

*Description of a new genus, and some undescribed species of Crustacea.*

#### GOMEZA.

*Thorax* ovate, convex, gradually converging behind; with long spines over the eyes, and the margins denticulated. The *outer antennæ* longer than the body, ciliated above and below; eyes enclosed in a pit, longer than the stems; outer double feet palpi, with the second joint of the inner foot stalk shorter than the first, rounded, triangular, produced on its outer angle; the first joint subcylindrical; the outer foot stalk, with the first joint broad, compressed; legs 10, the first pair longest, didactyle, shorter than the body; other legs compressed, the claws slender, elongate, ciliated; abdomen of the male very slender, 5-jointed; joints short, narrow; of the female ———?

This genus is apparently intermediate between *Corystes* and *Atelecydus* of Leach, having the long antenna of the first, and the short claws, the pedipalpi, and somewhat the shape of the latter.

*Two-Horned Gomeza. Gomeza bicornis.* Pale yellow; (dry), thorax ovate convex, polished, with thick-set white granules, the front rather produced, bifid, with a long conical subulate horn over each eye; the side margin with nine or ten tubercles on each side; the front one acute and distant; the hinder ones short, blunt and approximated; the fore claws convex, external, granular. Length 11; diam. 7 lines. Inhab. Indian Ocean. Gen. Hardwicke.

*Eyed Corystes. Corystes ocellata.* Pale brown, with two red rings in the middle and two smaller in the hinder part of the sides of the thorax; thorax convex, punctate, front rather produced, slightly nicked; front of margin with four distant acute teeth; carpus of fore legs convex, with a single strong spine on its front upper edge and thumb of claw spineless grooved. British Museum. It differs from *Corystes Cassivelanus* which has the side of the thorax three-toothed, two in front and one behind.

*Spinous-footed Xantho. Xantho spinosa.* Thorax dark red, covered with close set short hairs; rather convex, covered with small roundish



granules; the front semilunar and bifid in the centre; the fore feet rather compressed, rounded, externally covered with rather larger rounded tubercles, the feet depressed, with acute subulate spines, placed along the upper ridge of the first, and scattered over the upper surface of the other joints. Length  $3\frac{1}{2}$ ; breadth  $4\frac{1}{2}$  lines. Inhab. New Holland. My collection.

*New Holland Inachus. Inachus Australis.* The beak produced, linear, bifid, with an acute broad lobe before each eye; thorax depressed; back flattish, convex in the middle and concave over the beak, with an expanded bifid lamina on each side; legs subcylindrical, the carpus, especially of the front pair ending in three compressed spines. Length 10; diam.  $8\frac{1}{2}$  lines. Inhab. Seas of New Holland. My collection.

The second joint of the legs compressed crested, the right fore arm longest; somewhat allied to *Inachus Arabicus*, Rüppel, t. 5, f. 4; but the beak is bifid; the back smooth, and the sides expanded.

*Four-toothed Ebalia. Ebalia 4-dentata.* Thorax small, convex, tubercular; front rather produced, truncated, four-toothed, the outer teeth largest; the side margin four-tubercled, the first and fourth tubercles largest and highest; the hinder edge convex, rather produced, with two tubercles placed in a central line. Legs———? Inhab. New Holland. My collection. Tubercles of back placed 1. 2. and 5. in a cross line, and 1. 1. 1. longitudinally; abdominal joints 3 to 6 united.

*Side-toothed Dromia. Dromia lateralis.* Thorax subglobose; back evenly convex; front rather produced, deeply two cut, with a central tubercle beneath; sides rather produced with two large and one hinder smaller denticulation, sides of the front edge concave, with a small tubercle over the centre of each eye. Length 7; breadth  $6\frac{1}{2}$  lines. Inhab. New Holland. My collection.

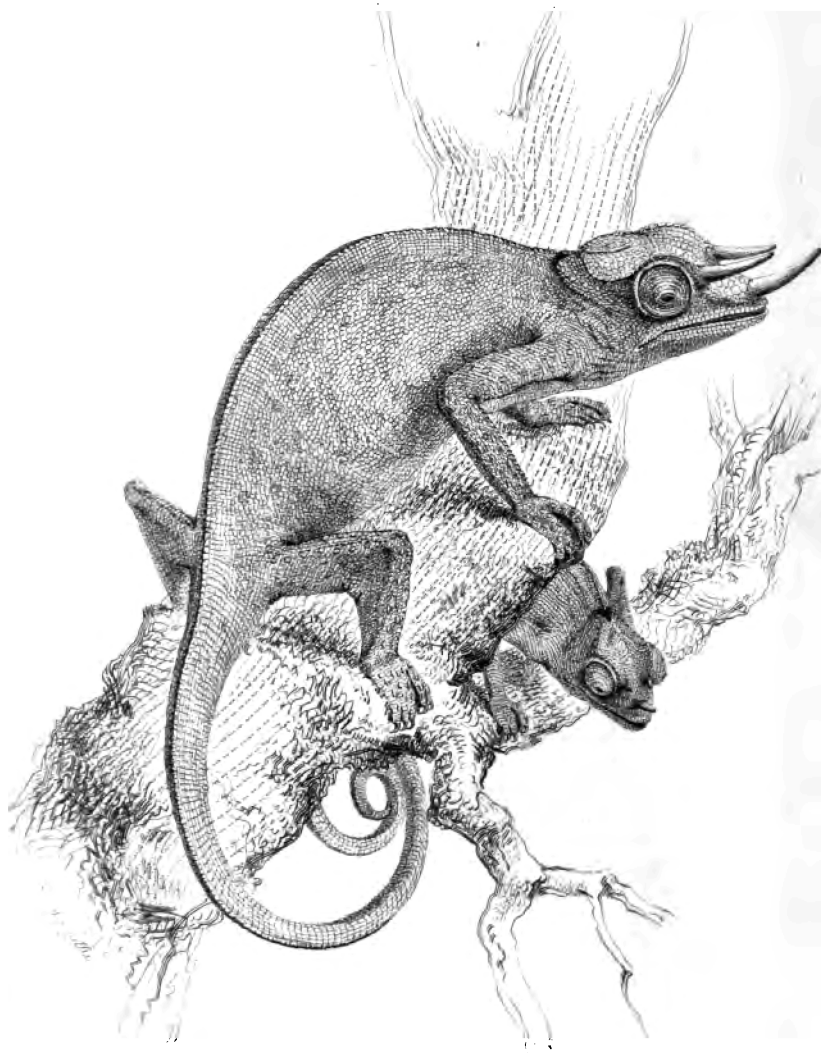
*Indian Dromia. Dromia Indica.* Thorax subglobose; back smooth, evenly convex, covered with short hairs; front bifid with an obscure central inferior tubercle; each side with five roundish tubercles, the three front on each side closest together and equidistant: upper edge of front, and of carpus tubercular. Length 19; breadth 18 lines. Inhab. Indian Ocean. Collection of Gen. Hardwicke.

Very like *Dromia Caput Mortuum*, but in it the back is grooved, the second and third tubercles on the front margin are close together, and the carpus is smooth.

*Hardwicke's Crab. Cancer Hardwickii.* Red brown; thorax convex, smooth behind, tubercular and grooved in front; front six lobed, neck with two smaller tubercles over the central, one on each side; the side slightly produced and reflex denticulated, divided into four rather distant teeth, the front and two hinder acute; the claws large subinequal; the hand convex; above granular; legs fringed; the eyes with a broad lobe before and behind below, and a small one in front above. Length  $1\frac{1}{2}$ ; breadth 2 inches. Inhab. Indian Ocean. Collection of Gen. Hardwicke.

Very like *Cancer tenax*, Rüppel, t. 2, f. 1, but front different.





*Chameleon tricornis* n.7















*Coccothraupis badius* p 3

*H. speoris* and *H. elongatus*, and the rest are without it as *H. diadema*, *H. larvatus*, *H. vulgaris* and *H. deformis*, all from Asia, and *H. tridens* from Africa.

Gen. BARBASTELLUS. BARBASTELLE.

The ears large and united together at the base over the forehead which has a bare longitudinal furrow with inflexed bald edges; the nostrils terminate with a lunate groove on their outer side extending behind the nostrils, and with a small elevated membranaceous ridge extending across the nose and uniting the back edges of the grooves together.

*The Australasian Barbastelle. Barbastellus Pacificus.* Blackish; the ears very long, nearly twice as long as the head. Inhab. the Islands of the Southern Pacific, Mr. Stutchbury. Collection of the British Museum; in spirits. I have also observed in the collection of the Linnean Society a stuffed Bat apparently of this genus, it is mouse-coloured above, and rather paler beneath, with dark membranes. It differs from the above in the ears being much shorter, and may be indicated as the *New Holland Barbastelle, B. Novæ Hollandiæ.*

Gen. PLECOTUS, Geoffroy. LONG-EARED BAT.

This genus was proposed by Geoffroy, but has not been generally adopted, however it has a very good external character in the form of the nostrils, which at once distinguish it from the common Bats, they being like the above genus furnished with a groove on the outer side, their forehead is also naked. The *P. auritus* and *P. Barbastellus* both have this character.

The Bats, the *Vespertiliones* of Geoffroy, might for convenience be divided into three genera, the true Bats, *Vespertilio*, with thin ears and membranes and a hairy face, the *Pachyotus* with thick ears and membranes and bald swollen cheeks, including the genera *Nycticejus* and *Scotophilus* and the hairy-tailed species of America, (*Lasiurus*.)

*Description of two new genera of Frogs discovered by JOHN REEVES, Esq. in China.*

Gen. HOULEMA.

Fam. *Ranidæ.*

Body subcylindrical; rather depressed; skin minutely warty; head small; upper jaw minutely toothed; parotids and ears indistinct; legs short; fore toes quite free, tapering to a point; hind toes long webbed to the tips. It has the teeth of a Frog, the feet of a Pipa, and the skin of a Toad. Only a single species is known.

The *Lurid Houlema. Houlema obscura.* Olive, beneath pale olive, blackish marbled.

Gen. KALOULA.

Fam. *Bombinatoridæ.*

Body gibbous, mouth beneath tubercular; head small; teeth none. tympanum and parotids none; legs short; toes 4-5, free to the base, subcylindrical; the last joint of the front ones dilated, ovate, truncated, of the hind ones like the lower joints, blunt.

*Beautiful Kaloula. Kaloula pulchra.* Black brown; black spotted; beneath pale; with a broad band across the forehead and the fore legs, and one on each side extending from the eye to the groin, rose red.

*Description of a new species of Bombyx from Nepal, discovered by Dr. WALLICH. In the collection of Major General HARDWICKE.*

*Wallich's Bombyx. Bombyx Wallichii.* Wings rounded, upper wings above bay; black spotted; black cross banded at the base; the hinder half of the outer end with numerous parallel slightly waved, narrow lines; hinder wing above black, with a broad yellowish margin; varied with numerous parallel wavy blackish lines; wings beneath black, with a broad yellow margin, varied with very narrow obscure wavy lines; antennæ pale brown, strongly bipectinated; body black; abdominal rings brown-edged. Length 2; expanse of wings 6 inches. Very like *Phalæna maxima Chusan*, Petiver Gaz. t. 18, f. 3. but in that figure the wavy marginal lines extend to the front edge of the wing, and the band of the base of the wing does not extend to the whole breadth.

*Description of a new genus, and some undescribed species of Crustacea.*

#### GOMEZA.

*Thorax* ovate, convex, gradually converging behind; with long spines over the eyes, and the margins denticulated. The *outer antennæ* longer than the body, ciliated above and below; eyes enclosed in a pit, longer than the stems; outer double feet palpi, with the second joint of the inner foot stalk shorter than the first, rounded, triangular, produced on its outer angle; the first joint subcylindrical; the outer foot stalk, with the first joint broad, compressed; legs 10, the first pair longest, didactyle, shorter than the body; other legs compressed, the claws slender, elongate, ciliated; abdomen of the male very slender, 5-jointed; joints short, narrow; of the female ———?

This genus is apparently intermediate between *Corystes* and *Atelecydus* of Leach, having the long antenna of the first, and the short claws, the pedipalpi, and somewhat the shape of the latter.

*Two-Horned Gomeza. Gomeza bicornis.* Pale yellow; (dry), thorax ovate convex, polished, with thick-set white granules, the front rather produced, bifid, with a long conical subulate horn over each eye; the side margin with nine or ten tubercles on each side; the front one acute and distant; the hinder ones short, blunt and approximated; the fore claws convex, external, granular. Length 11; diam. 7 lines. Inhab. Indian Ocean. Gen. Hardwicke.

*Eyed Corystes. Corystes ocellata.* Pale brown, with two red rings in the middle and two smaller in the hinder part of the sides of the thorax; thorax convex, punctate, front rather produced, slightly nicked; front of margin with four distant acute teeth; carpus of fore legs convex, with a single strong spine on its front upper edge and thumb of claw spineless grooved. British Museum. It differs from *Corystes Cassivelanus* which has the side of the thorax three-toothed, two in front and one behind.

*Spinous-footed Xantho. Xantho spinosa.* Thorax dark red, covered with close set short hairs; rather convex, covered with small roundish



granules; the front semilunar and bifid in the centre; the fore feet rather compressed, rounded, externally covered with rather larger rounded tubercles, the feet depressed, with acute subulate spines, placed along the upper ridge of the first, and scattered over the upper surface of the other joints. Length  $3\frac{1}{2}$ ; breadth  $4\frac{1}{2}$  lines. Inhab. New Holland. My collection.

*New Holland Inachus. Inachus Australis.* The beak produced, linear, bifid, with an acute broad lobe before each eye; thorax depressed; back flattish, convex in the middle and concave over the beak, with an expanded bifid lamina on each side; legs subcylindrical, the carpus, especially of the front pair ending in three compressed spines. Length 10; diam.  $8\frac{1}{3}$  lines. Inhab. Seas of New Holland. My collection.

The second joint of the legs compressed crested, the right fore arm longest; somewhat allied to *Inachus Arabicus*, Rüppel, t. 5, f. 4; but the beak is bifid; the back smooth, and the sides expanded.

*Four-toothed Ebalia. Ebalia 4-dentata.* Thorax small, convex, tubercular; front rather produced, truncated, four-toothed, the outer teeth largest; the side margin four-tubercled, the first and fourth tubercles largest and highest; the hinder edge convex, rather produced, with two tubercles placed in a central line. Legs———? Inhab. New Holland. My collection. Tubercles of back placed 1. 2. and 5. in a cross line, and 1. 1. 1. longitudinally; abdominal joints 3 to 6 united.

*Side-toothed Dromia. Dromia lateralis.* Thorax subglobose; back evenly convex; front rather produced, deeply two cut, with a central tubercle beneath; sides rather produced with two large and one hinder smaller denticulation, sides of the front edge concave, with a small tubercle over the centre of each eye. Length 7; breadth  $6\frac{1}{2}$  lines. Inhab. New Holland. My collection.

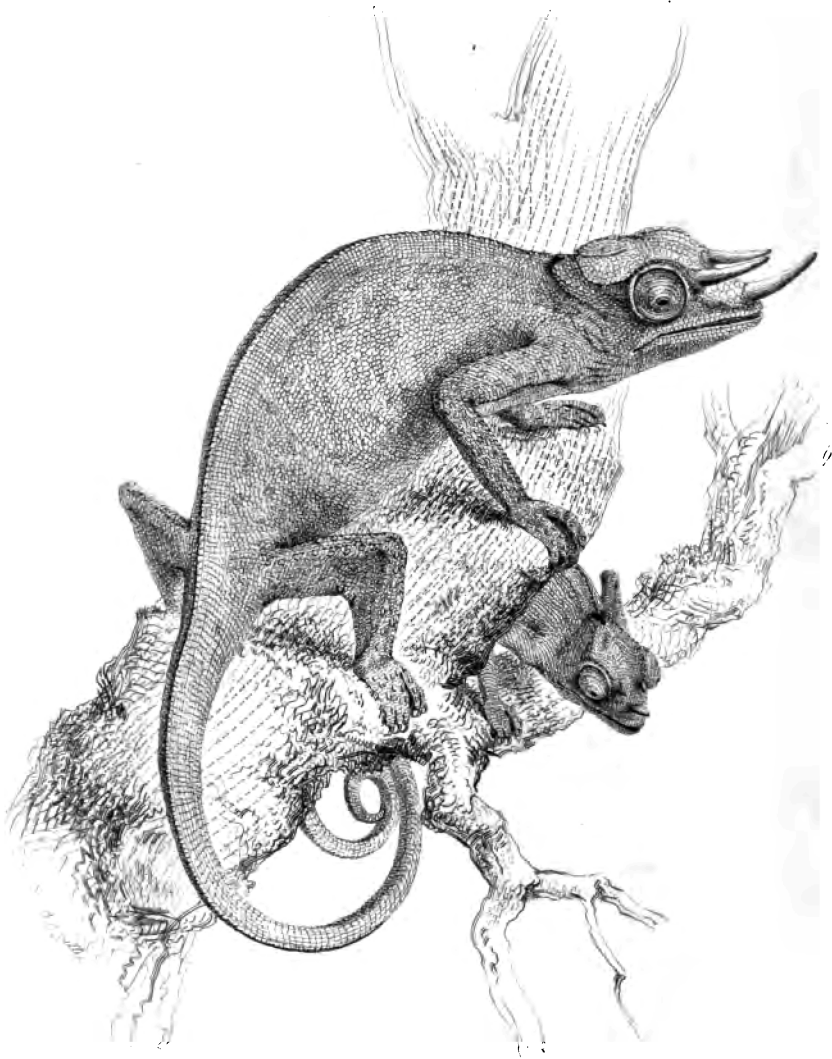
*Indian Dromia. Dromia Indica.* Thorax subglobose; back smooth, evenly convex, covered with short hairs; front bifid with an obscure central inferior tubercle; each side with five roundish tubercles, the three front on each side closest together and equidistant: upper edge of front, and of carpus tubercular. Length 19; breadth 18 lines. Inhab. Indian Ocean. Collection of Gen. Hardwicke.

Very like *Dromia Caput Mortuum*, but in it the back is grooved, the second and third tubercles on the front margin are close together, and the carpus is smooth.

*Hardwicke's Crab. Cancer Hardwickii.* Red brown; thorax convex, smooth behind, tubercular and grooved in front; front six lobed, neck with two smaller tubercles over the central, one on each side; the side slightly produced and reflex denticulated, divided into four rather distant teeth, the front and two hinder acute; the claws large subinequal; the hand convex; above granular; legs fringed; the eyes with a broad lobe before and behind below, and a small one in front above. Length  $1\frac{1}{2}$ ; breadth 2 inches. Inhab. Indian Ocean. Collection of Gen. Hardwicke.

Very like *Cancer tenax*, Rüppel, t. 2, f. 1, but front different.





*Chamaeleo tricornis* h.7



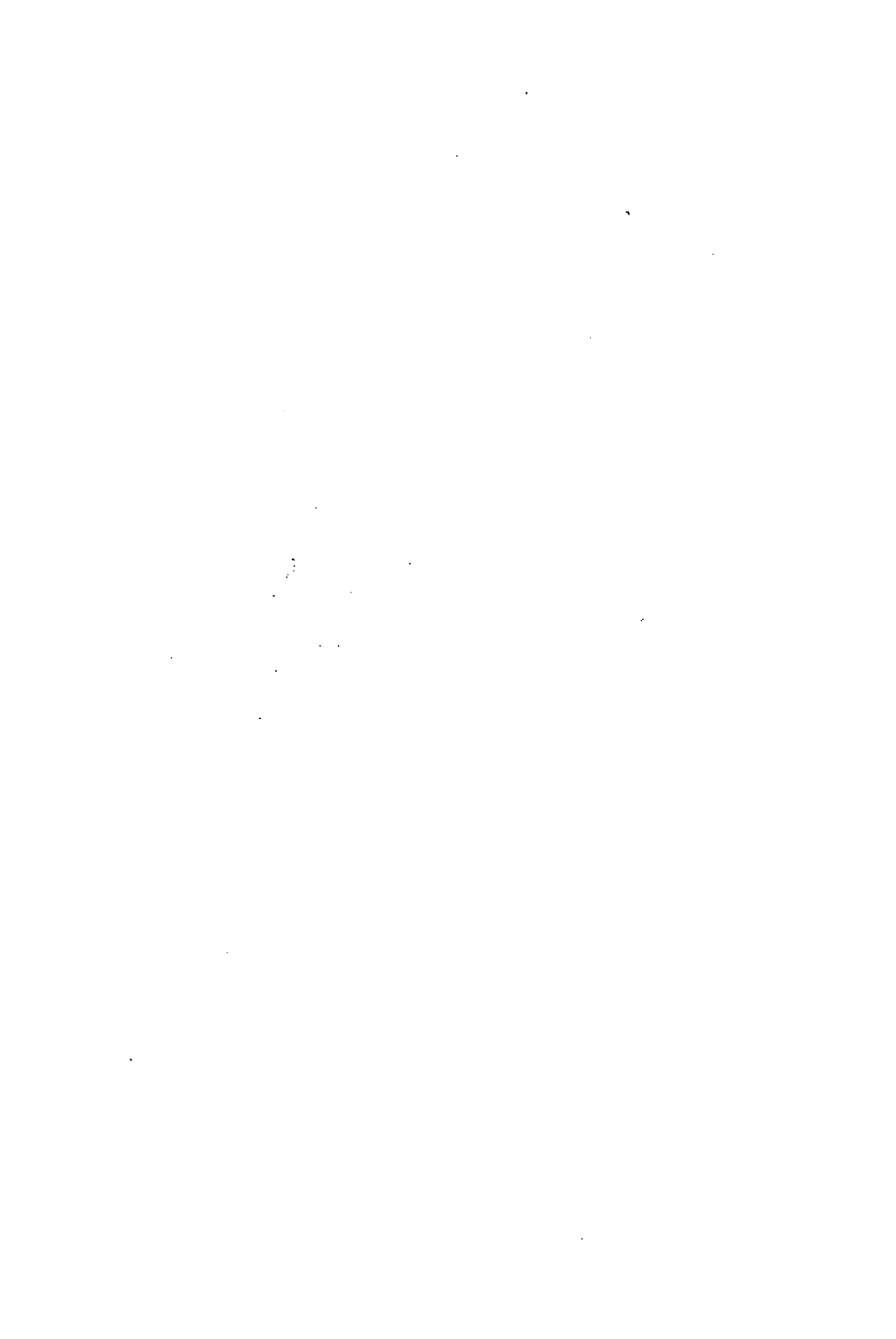






*Phainopepla Crawfordii p. 3*







*Coccyzus badius* p 3

