

The smaller "nymph" (*Tramea*?) (fig. 2) is only 19 millims. long. Uniformly very shining, brown, with a tinge of blackish above; pale greyish yellow beneath. Eyes deep black. Mouth-parts even still more prominent than in the form above described: mandibles thickly sprinkled with small blackish dots; the interlocked edges without visible teeth. Head above with an oblong depression behind the region of the ocelli, with a lateral extension on each side, dilated, and forming broad shallow pits, in which the antennæ are inserted. Pronotum with a broad yellowish median band; its posterior edge raised and rounded. Anterior rudimentary wings narrow, extending over the hinder margin of the 7th segment; posterior very broad at the base in the anal portion, network distinct, the apices extending to beyond the middle of the 8th segment. Abdomen very short and broad; each ventral segment with two small blackish spots, having a tendency to form two lines on the terminal segments; alate lateral portions extremely broad; 8th and 9th segments each produced laterally and posteriorly into a lanceolate acute process, with fine spines on the outer edge, that on the 8th extending to about the apical margin of the 9th, that on the latter equally long, and extending beyond the anal processes. Median dorsal anal process lanceolate, strong, curved downward, its dorsal edge with long blackish spines towards the apex. Lateral superior processes slender and spiniform, blackish at the tips, as long as the dorsal. Lateral inferior processes much longer, stronger, and nearly straight, furnished with long and strong black spines, inferiorly at the base with long yellowish spiniform hairs. Legs much longer than in the form above described, more slender, pale brownish, but with a faint blackish line on the femora and tibiæ externally, and with blackish tubercles on their edges, whence arise short yellowish spines.

This "nymph" is evidently in its last stage before the exclusion of the imago. The neuration of the hind wings is distinct; and the position of the triangle warrants the belief that it pertains to *Tramea*.

Upon comparing these "nymphs" with those of two familiar European species, viz. *Plathemis depressa* and *Diplax striolata*, the most striking feature is the greater prominence of the mouth-parts, the longer and more slender legs, and the absence of the dorsal dentate crest on the abdomen. *P. depressa* has the angles of the apical segments not produced into processes; but in *D. striolata* the processes are very evident, and approach the forms here described.

X. LEPIDOPTERA, ORTHOPTERA, and HEMIPTERA.

By A. G. BUTLER.

The following list contains not only the species collected by Commander W. E. Cookson, but also some Hemiptera discovered by Charles Darwin, Esq., during the visit of the "Beagle," and recently deposited in the British Museum.

Among the species most worthy of note may be especially mentioned a beautiful little moth (*Cydosia sylpharis*, n. sp.) obtained by Commander Cookson, and certainly the most splendidly coloured form of that genus yet described.

LEPIDOPTERA.

1. DEIOPEIA ORNATRIX, var.

Noctua ornatrix, Linnæus, Syst. Nat. ii. p. 829.

One specimen, Albemarle Island, June 23, 1875.

This is the less heavily marked form of the species, also taken in the Galapagos Islands by Darwin.

2. CYDOSIA SYLPHARIS, sp. n.

Primaries dark metallic green; an abbreviated subcostal longitudinal streak, a much longer longitudinal submedian streak, an interrupted longitudinal internal streak, a basicostal litura, several costal spots, a large oblique subapical spot, and a congregation of dots upon the disk towards the external angle silvery white; a spot above the end of the cell, and a second at external angle, bright golden; secondaries hyaline whitish, the veins brown; the borders brownish grey, diffused internally; discoidal cell and area beyond it greenish iridescent; thorax metallic green, spotted with white; body bronzy, greenish towards its anal extremity, white at the sides, primaries below shining brown, secondaries hyaline, with the veins and borders brown; pectus brown, spotted with white, anterior coxæ golden; venter bronzy green, with a central series of large white spots; expanse of wings 1 inch 2 lines.

One example, Albemarle Island, June 23, 1875.

This and the preceding species, although sent in spirit, are in very fair condition.

There are also in Commander Cookson's collection two larvæ of a *Sphinx* moth, two of a Geometer, and a pupa of (apparently) a Pyralide, from Charles Island.

ORTHOPTERA.

1. PANCHLORA SURINAMENSIS.

Blatta surinamensis, Linnæus, Syst. Nat. ii. p. 687.

Charles Island (2 adult, 2 immature).

2. PERIPLANETA AMERICANA.

Blatta americana, Linnæus, Syst. Nat. ii. p. 687.

Charles Island (2 adult examples).

3. AGRÆCIA COOKSONII, n. sp.

♀. Above piceous or black, mottled with testaceous; head almost uniformly black; frons castaneous, testaceous at the sides; mandibles black, castaneous at the base; under surface of the body testaceous; oviduct testaceous, its outer half blackish along the margins.

Head dull, nearly smooth, rather broader than the prothorax, an obtuse prominence between the antennæ; antennæ about twice the length of the body; eyes very prominent; frons shining, punctured in the middle; mandibles deeply grooved externally; thorax rugose, with lateral carina; wings undeveloped; abdomen obovate, dorsally

carinate, terminal appendages above short, curved, subpyriform; oviduct much compressed, very acute, curved upwards, not so long as the abdomen; anterior coxæ with a short anterior external fusiform spine; anterior femora with three increasing denticles towards the distal extremity of their infero-interior margin; tibiæ with seven pairs of short acute spines along their inferior margins; middle coxæ without spine; posterior femora with four denticles; posterior tibiæ with ten pairs of short acute spines. Length of the body 11 to 20 lines, oviduct 5 to 7 lines.

Three examples, Charles Island; two examples, Albemarle Island, June 23rd.

The type is from Charles Island; it is the largest and most nearly adult example sent; the smaller examples are much paler.

4. *ACRIDIDIUM MELANOCERUM*.

Acrididium melanocerum, Stål, Eug. Resa, p. 326.

Five examples, Charles Island; three examples, Albemarle Island.

5. *ACRIDIDIUM LITEROSUM*.

Acrididium literosum, Walker, Cat. Derm. Salt. iv. p. 620.

Two examples (one immature), Charles Island.

6. *VATES*? sp. (larval form).

Two examples, Charles Island.

HEMIPTERA.

1. *SCIOCORIS GALAPAGOËNSIS*, n. sp.

Olive-brown, depressed, densely punctured; head rounded and slightly narrowed in front, slightly notched in the middle of its anterior margin, angulated in front of the eyes, rounded behind, about as long as the thorax; thorax deeply excavated in front, depressed at the sides; scutellum longer than the head and thorax together, linguiform; corium of hemelytra extending beyond the end of the scutellum, the pellucid area being consequently extremely small; abdomen reddish brown, clouded with blackish; legs rather slender, testaceous, all the femora with a black internal spot: length 4 lines.

One imago, Charles Island (*W. E. Cookson*).

There is also what I believe to be an immature form of this species; but it is too little developed for accurate determination.

2. *ANASA OBSCURA*.

Anasa obscura, Dallas, Cat. Hemipt. p. 505.

Three examples, Galapagos Islands (*Darwin*).

The particular island is not specified.

3. *NYSIUS MARGINALIS*.

Nysius marginalis, Dallas, Cat. Hemipt. p. 556.

Charles and James Islands (*Darwin*).

This appears to be a common species. It is described by Stål (Eug. Resa, p. 252) as *Cymus galapagensis*; but the form of the head, with its extremely prominent eyes, seems to agree far better with *Nysius*.

4. *MIRIS LINEATA*, n. sp.

Form and size of *M. ruficornis*; pale flesh-colour or pinky white; femora of legs testaceous; head oblong, subconical, abruptly conical in front, about two thirds the length of the thorax; the latter widening hindwards; scutellum cordiform, nearly as long as the head; a central longitudinal well-defined carina from the front of the head to the apex of the scutellum, bordered on each side by a grey line, a grey streak also running from the back of the eyes to the hinder margin of the thorax; abdomen rose-colour, with a central longitudinal carmine line which extends to the anal extremity, and with a lateral similar line which terminates at the antipenultimate segment; hemelytra longer than the abdomen, longitudinally plicate; base of antennæ, and tibiæ of legs, hairy: length $5\frac{1}{2}$ millimetres.

Two examples, Charles Island (*Darwin*).

Mr. Darwin obtained three examples of the larval condition of what is apparently an allied species from James Island.

5. *CAPSUS SPOLIATUS*.

Capsus spoliatus, Walker, Cat. Hemipt. Heteropt. vi. p. 112. n. 254.

Charles and James Islands (*C. Darwin*).

6. *CAPSUS NIGRITULUS*.

Capsus nigrutilus, Walker, Cat. Hemipt. Heteropt. vi. p. 112. n. 255.

Charles Island (*C. Darwin*).

Walker's type is quite black, but apparently not naturally so; two other examples recently obtained, but also collected by Mr. Darwin, are tawny, with bright castaneous spots on the outer margins of the hemelytra.

7. *CAPSUS QUADRINOTATUS*.

Capsus quadrinotatus, Walker, Cat. Hemipt. Heteropt. vi. p. 113. n. 256.

Charles and James Islands (*C. Darwin*).

Evidently a common species.

8. *CAPSUS DARWINI*, n. sp.

Head conical, broader than long; thorax trapezoidal, convex, nearly twice as wide behind as it is long; scutellum rectangularly triangular, slightly longer than the thorax; hemelytra considerably longer than the abdomen; antennæ about the length of the entire body. Colour testaceous, antennæ blackish towards the tips; head, thorax, and corium of hemelytra above, and the sides of pectus below, longitudinally streaked with parallel black lines; membrane with two black spots on the costa, the first at the apex of the corium, and

the other halfway between the latter and the apex of the membrane : length of body $2\frac{1}{2}$ millimetres, of entire insect with the wings closed 4 millimetres.

Three specimens, Charles Island (*C. Darwin*).

A very pretty and well-marked species.

9. *MONANTHIA CYTHARINA*, n. sp.

Filiform, general aspect and coloration of *M. debilitata*.

Head pyramidal, white, the central area longitudinally subcylindrical, with a central carina, reticulated with brown ; thorax much wider than long, with compressed angular lateral wings, subsinuate in front, centre of anterior margin deeply excavated, three well-defined longitudinal keels, the central one straight, the two lateral ones concave ; brown, with white borders and keels, the whole surface reticulated with darker brown ; scutellum cordiform, brown, with darker reticulations, a central longitudinal white keel ; basal half of hemelytra broad and externally strongly convex ; apical area narrower and less convex ; each hemelytron with a longitudinal fusiform area enclosed by a keeled margin, from the base to the middle ; central area brown, with the keels and a central Λ -shaped marking white ; costal borders white, with a quadrate spot near the base and several at apex dark brown ; the whole surface reticulated with dark brown ; legs and antennæ testaceous : length 3 millimetres.

One specimen, James Island (*C. Darwin*).

HEMIPTERA HOMOPTERA.

1. *ISSUS VARIUS*.

Issus varius, Walker, Cat. Homopt. ii. p. 372.

James and Charles Islands (*C. Darwin*).

2. *ISSUS ROSTRIFER*, n. sp.

Head conical, rostriform when viewed laterally, leaf-like above, with a marginal and a central longitudinal ridge ; pronotum considerably wider than long, convex in front, concave behind, with a prominent tubercle behind the antero-interior angle of each eye ; meso- and metanotum narrow, irregular, with a central longitudinal carina ; scutellum triangular with sinuated sides, and narrow marginal ridge ; abdomen laterally compressed, somewhat depressed at base, so that the scutellum, seen laterally, forms with the metanotum a projecting tubercle ; tegmina semicircular, reticulated ; colour testaceous, head above brightest in tint : length 3 millimetres.

Charles Island (*C. Darwin*).

3. *DELPHAX SUBSTITUA*.

Delphax substitua, Walker, Cat. Homopt. ii. p. 354. n. 21.

Charles and James Islands (*C. Darwin*.)

4. *DELPHAX VICARIA*.

Delphax vicaria, Walker, Cat. Homopt. ii. p. 355. n. 23.

Charles and James Islands (*C. Darwin*).

5. DELPHAX SIMULANS.

Delphax simulans, Walker, Cat. Homopt. ii. p. 355. n. 24.

Charles and James Islands (*C. Darwin*).

6. DELTOCEPHALUS OBLIQUUS.

Acocephalus obliquus, Walker, Cat. Homopt. iii. p. 851. n. 23.

7. JASSUS PLANUS, n. sp.

Above sordid testaceous; pronotum in front, and head, ochraceous, the latter with a greyish spot in the centre of the ocelli; tegmina pale testaceous, hyaline; pectus and venter pale testaceous; rostrum and legs sandy yellow; eyes brown; ocelli black: head very broad, exceedingly short from the vertex hindwards, convex in front, concave behind; thorax convex in front, the sides converging, subsinuate, and ending in a truncate slightly convex line behind; scutellum triangular, all the sides slightly sinuate; tegmina extending considerably beyond the abdomen, rather narrow, distinctly convex in front; rostrum extending to the second pair of coxæ, broad and angulated at base, its basal article centrally tumid; hind tibiæ with about seven external strong spines: length of body 3 millimetres, including the tegmina $4\frac{1}{2}$ millimetres.

One example from Charles Island (*C. Darwin*).

8. JASSUS LUCIDUS, n. sp.

Shining mustard-yellow; tegmina whitish, transparent; wings white; head broad, exceedingly short from the vertex hindwards, convex in front, concave behind; thorax transverse, much broader than long, very convex in front, less so behind; scutellum triangular; tegmina extending considerably beyond the body, rather narrow, slightly convex in front; rostrum nearly as in preceding species, but narrow at base; hind tibiæ densely spined: length of body about $2\frac{1}{2}$ millimetres, including the tegmina about $3\frac{1}{2}$.

One example, James Island (*C. Darwin*).

The specimen being somewhat damaged, I have been unable to take absolutely definite measurements.

9. JASSUS STRIOLARIS, n. sp.

Head testaceous, above with a central and lateral longitudinal line and a spot on each side between them, black; frons with a central line and the ocelli black; thorax black, with two central dots in front, and two U-shaped markings on the posterior half, testaceous; scutellum testaceous; tegmina black, with longitudinal testaceous veinings; body below black; legs testaceous: structure as in *I. planus*: length of body 3 millimetres, including the tegmina $4\frac{1}{2}$ millimetres.

Charles Island (*C. Darwin*).

XI. ECHINODERMATA. By EDGAR SMITH.

I. ECHINI.

1. CIDARIS THOUARSII, Val.

2. TOXOPNEUSTES SEMITUBERCULATUS, Val.