

Catalogue of the described Hemiptera Heteroptera and Homoptera of Ceylon, based on the Collection formed (chiefly at Pundaloya) by Mr. E. Ernest Green. By W. F. KIRBY, F.L.S., F.E.S., Assistant in Zoological Department, British Museum (Natural History), S. Kensington, S.W.

[Read 19th March, 1891.]

(PLATES IV.-VI.)

DURING the residence of Mr. E. Ernest Green in Ceylon, he formed a large collection of insects of all Orders, part of which, including a fine series of Hemiptera Heteroptera and Homoptera, he has liberally presented to the British Museum. Most of these were obtained at Pundaloya, in the hill-country; but some, more especially among the aquatic species, are from Nitagala, in the north central part of the island, and a few are from Nawalapitya, Kandy, Colombo, and other places. Where no locality is mentioned in the following pages, it may always be inferred that the insect is from Pundaloya, unless the habitat is indicated as doubtful.

Mr. Green's collection proved to contain so large a proportion of the species already known from the island, that I thought it would be rendering a real service to science to publish a complete list, adding descriptions of most of the new ones. Such lists of species from a restricted locality are of great value, as they form a more satisfactory basis for future work than in the case of more extensive Faunas.

Nearly all the larger species already known from Ceylon are represented in Mr. Green's collection; but although he obtained a fair number of the smaller species likewise, yet, as these must be extremely numerous in Ceylon, and the few which have been described were mostly obtained from localities different from those where Mr. Green collected, it is perhaps not surprising that his collection not only contained a much larger number of new species among the smaller species than among the larger (which might reasonably have been expected in any case), but that comparatively few of the smaller species which have already been described could be found among his specimens. However, I was glad to find representatives of the interesting genera *Macropes* and *Ossa* of Motschulsky.

I have not ventured to describe the whole of the smaller species obtained by Mr. Green. In some cases it would be desirable to compare them with other species which have already been

described, but which are not at present in our collection. In others, the insects appear to belong to genera different from any with which I could compare them; and so large a number of new genera have been proposed of late years, both in Heteroptera and Homoptera, that it would be very unwise to create new genera wholesale, until those already proposed have undergone a thorough and much-needed revision, which at present I have no time to attempt. I have, however, been obliged to propose a few new genera myself in the present paper; and I wish to call special attention to two extraordinary new forms among the Reduviidæ, *Dicephalus* and *Formicoris*. In *Dicephalus* the head and thorax are segmented in such a manner as hardly to give it the appearance of a genuine insect; and the position of the ocelli on the front of the hinder lobe of the head is also very remarkable. *Formicoris*, on the other hand, is the exact counterpart of a black spiny ant of the genus *Hoplomyrmus*, Gerst. (|| *Polyrhachis*, Smith); and no one who did not notice its structure would imagine it to be anything else.

Too little is known of the Hemipterous and Homopterous Faunæ of the countries nearest to Ceylon to allow the relations of the Cinghalese Fauna to be discussed in the present paper. We may regard it as likely that many of the Cinghalese species will prove to be peculiar to the island, and that many of the smaller ones especially will prove to be confined to very restricted localities.

Much, no doubt, remains to be done before even the larger species which inhabit Ceylon can be regarded as approximately known, while it may reasonably be expected that the smaller species will eventually be estimated by thousands rather than by hundreds. I will now proceed to give a brief sketch of what has already been done to systematize our knowledge of the Hemiptera of the island.

The first list was published by Walker in Tennent's 'Ceylon' (vol. i. pp. 292-293, 2nd edit. 1859), and includes only 42 Heteroptera and as many Homoptera. But although Walker was, in general, a very good bibliographer, this list was probably compiled in haste, for it is extremely unsatisfactory, and is very far from including all the species which had been described from Ceylon at the time. Many of the names are MS., representing species which Walker intended subsequently to describe, but did not, and which cannot now be always identified with certainty; and a few appear to have been erroneously recorded from Ceylon.

This list was reprinted, almost verbatim in 1863, by Motschulsky (Bull. Soc. Imp. Nat. Moscou, xxxvi. (3) pp. 74-115), who added descriptions of 28 new Hemiptera and 28 new Homoptera, besides giving references to 3 more Hemiptera and 10 Homoptera published by himself in his 'Études Entomologiques,' viii. (1859), pp. 108-115. He makes scarcely any other additions to Walker's list; but the localities of his own new species are, in most cases, carefully indicated.

A much better list of the Hemiptera Heteroptera of Ceylon was, however, published by Anton Dohrn in 1860 in the Stett. ent. Zeit. xxi. pp. 399-409. He enumerates 112 species, of which 39 are described as new. However, this list likewise contained a number of MS. species.

In the present paper, which I believe may be regarded as fairly complete, I have raised the number of described Cinghalese species of Hemiptera Heteroptera to 285 (38 new), and of Homoptera to 187 (59 new).<sup>\*</sup> In accordance with my usual practice in faunistic papers, I have abstained from describing many new genera, and I avoid long descriptions, as far as possible. The species are grouped under the more important families, smaller subdivisions being omitted.

All the species in the following list of which the British Museum possesses specimens from Ceylon are marked (\*), and all those contained in Mr. Green's collection are marked (†). Some of the latter had been labelled, and one or two described, by the late Mr. Atkinson. I am indebted to Mr. Green for information respecting the habits, localities, &c. of several species; and these paragraphs are marked with his initials.

## HEMIPTERA HETEROPTERA.

### PENTATOMIDÆ.

#### †\*CANTAO OCELLATUS.

*Cimex ocellatus*, *Thunb. Nov. Spec. Ins.* p. 60, f. 72 (1783).

A very common and variable species throughout the Indo-Malayan region. It is gregarious, and often found in numbers (20 or 30 together) collected on a single branch of a tree (*E. E. G.*).

\* It will be noticed that two or three of these species have been recorded from Ceylon on somewhat doubtful authority, and their actual occurrence in the island requires confirmation.

## √ \*†CALLIDEA PERPLEXA.

*Tectocoris perplexa*, Hope, *Cat. Hemipt.* p. 4, n. 11 (1837).

*Cimex nobilis*, Sultz. (*nec Linn.*) *Gesch. Ins.* pl. xi. f. c (1776).

*Cimex nobilis*, pt., *Fabr. Sp. Ins.* ii. p. 338, n. 2 (1781).

Mr. Green's specimens are labelled "Putlam."

A very common species in India and Ceylon, and it likewise occurs in Burmah and Siam. Many of the older authors mention Java as the locality; but this probably arose from its being usually mistaken for *Cimex nobilis*, Linn., which is a common species in Java, China, &c., but apparently not found in India proper.

Hope appears to have been the first author who discriminated between the two species; but as they are now placed in different genera, most recent authors have retained the specific name *nobilis* for both, calling one *nobilis*, Linn., and the other *nobilis*, Fabr., which does not appear to be quite correct.

The Cinghalese specimens are of an emerald-green, rarely inclining to violet-blue on the pronotum and at the base of the scutellum, and never with the green of the whole insect replaced by violet, but frequently with a strong coppery lustre over the pronotum and a great part of the scutellum. The normal spotting is as follows:—Two blue-black spots on the pronotum and five on each side of the scutellum, three near the median line, and two near the margin; but all these spots are variously developed in different specimens, and are not unfrequently entirely obsolete. I believe these variations to be merely colour-varieties of one species.

## √ \*†CALLIDEA ERICHSONI.

*Callidea Erichsoni*, *Germ. Zeitschr. Ent.* i. p. 113 (1839).

Usually confounded in collections with *C. Stockerus*, Linn., which does not appear to occur in Ceylon. In some specimens the black stripe at the tip of the scutellum is obsolete.

This species is found swarming on trees (*Phyllanthus*, sp.) and sucking the berries (*E. E. G.*).

## \*†CALLIDEA BENGALENSIS.

*Callidea bengalensis*, Hope, *Cat. Hem.* p. 15 (1837).

Two specimens of this common Indian species are in Mr. Green's collection. One of these was labelled "*Chrysocoris patricia*, Fabr." ‡ and Dohrn doubtless refers to the same species under

‡ *Cimex patricius*, Fabr. *Suppl. Ent. Syst.* p. 527 (1798).

the name of "*Callidea patricia*;" but I am not convinced of the correctness of the identification.

∇ \*†CALLIDEA SUPERBA.

*Callidea superba*, *Dall. List Hem. Ins. B.M. i. p. 23, n. 6 (1851).*

Described from Ceylon. The specimen from Amboina recorded by Walker is quite distinct from *C. superba*, being very differently punctured.

∇ \*CALLIDEA SPILOGASTRA.

*Callidea spilogastra*, *Walk. Cat. Het. Hem. B. M. i. p. 30, n. 22 (1867).*

Described from Ceylon (Thwaites' Collection).

∇ \*†CALLIDEA RAMA, sp. n. (Plate IV. fig. 3.)

Long. corp. 13–15 millim.

*Upperside.* Emerald-green, slightly glossed with blue towards the edges and with coppery in the middle, but only in certain lights; and with large blue-black markings. Head with two deep longitudinal furrows, subparallel, but slightly narrowed beyond the middle in front, entirely blue-black, except a slight green line on each side at the extremity, where the frontal ocellus stands; ocelli red; antennæ black.

Thorax thickly punctured; but the punctuation is variable, and in the middle of the pronotum and sometimes of the mesonotum is hardly perceptible. Pronotum with three large transverse blue-black spots, the outer ones oval, the middle one more irregular, and sometimes connected by a broad band intersected by a green line with the double central mark on the mesonotum. Mesonotum with two broad longitudinal stripes in the middle, more or less connected, being only partly separated by a central green line; on each side of these is a longitudinal band, sometimes broken into two spots; and the lateral tubercles also stand on blue-black spots. Scutellum with two curved transverse bands at the base, nearly connected, a large hastate spot in the middle, two large spots on each side, and a large trapezoidal spot before the extremity. The exposed portion of the wings is blue-black.

Under surface much more strongly punctured towards the sides; head beneath green, punctured, antennæ and a central stripe black, proboscis red, lower mouth-parts of a tawny yellow; sternum green, coxæ and trochanters sometimes marked with tawny yellow, femora red nearly to the knees; knees and tibiæ green above, blackish beneath; tarsi blue-black. Abdomen

beneath mostly tawny yellow, the middle of the basal segments black; a magenta-coloured stripe above the spiracles, which are blue-black, and form the upper side of an oval, which is directed forwards, and is green in the middle and blue-black at each extremity; terminal segments black, spotted with green on the sides.

A very handsome species, allied to *C. superba*, Dall., but smaller and differently coloured.

Pundaloya.

#### HOTEA CURCULIONIDES.

*Pachycoris curculionides*, Herr.-Schäff. *Wanz. Ins.* iii. p. 106, pl. cvii. f. 331 (1836).

Abundant throughout the Indo-Malayan and a great part of the Austro-Malayan Region, and recorded from Ceylon by Dohrn.

X \* (?) *TRIGONOSOMA CONFUSUM*, sp. n.

Long. corp. 11 millim.

Leather-coloured above, thickly punctured, a yellow line visible from one shoulder-projection to the other (in front of which the thorax and head fall away perpendicularly), and also round the projecting rim of the abdomen, which extends just beyond the scutellum. Head and front of thorax paler than the upper part, the front of the thorax thickly marked with black punctures, which are crowded together in such a way as to give the appearance of irregular transverse mottling. Thorax above with large obtuse lateral angles, projecting slightly forwards and outwards; on the hinder border of the thorax is a black stripe, not extending to the sides, but throwing out four square projections in front. Scutellum unspotted, but with a shallow bowl-shaped space at the base lighter than the rest. Under surface tawny brown, mottled with darker, especially on the sternum; legs paler tawny, unspotted; antennæ wanting. (N.B. The measurement given is from the crest of the thorax.)

Described from a specimen presented to the British Museum by a Mr. Paul in 1849. Some of his insects (including the few Hemiptera) are said to have come from Ceylon, and others from Egypt. The present specimen was referred by Dallas to *T. Desfontainei*, Fabr., and by Walker to *T. Fischeri*, Herr.-Schäff. (of which *T. Baerensprungi*, Stål, is regarded as a synonym); but it does not agree well with the descriptions of any

of these insects. It is, however, very similar to *T. falcatum*, Cyr., for which Walker gives the localities "S. France, Sicily, Ceylon;" while the British Museum contains specimens from Egypt and Trebizond. I should not be surprised to find that the present species was really from Egypt, and not from Ceylon; and possibly Walker may have originally regarded it as *T. falcatum* (of which it might almost be a dark variety) before he identified it as *T. Fischeri*; and consequently noted Ceylon as a locality for *T. falcatum*. The occurrence of the genus in Ceylon still requires confirmation.

PODOPS OBSCURUS.

*Podops obscurus*, *Dall. List Hem. B. M. i. p. 52* (1851).

Noted by Walker as found in Ceylon; but this requires confirmation. The type is from Tenasserim.

\*†COPTOSOMA SPHÆRULA.

*Thyreocoris sphærulea*, *Germ. Zeitschr. Ent. i. p. 25, n. 2* (1839).

*Coptosoma ellia*, *Walk. Cat. Het. Hem. B. M. i. p. 87, n. 32* (1867).

||*Coptosoma ceylonica*, *Motsch. Bull. Mosc. xxxvi. (3) p. 74* (1863).

*Coptosoma minima*, *Atk. Journ. As. Soc. Beng. lvii. p. 342* (1889).

*Nura Ellia* (*Motschulsky*); *Pundaloya* (*Green*).

Originally described from Java, but equally common in India, China, and Ceylon.

\*COPTOSOMA LATICEPS.

*Coptosoma laticeps*, *Dall. List Hem. Ins. B. M. i. p. 68* (1851).

Described from Ceylon (Gardner's collection).

\*†COPTOSOMA BRUNNEUM.

*Coptosoma brunnea*, *Atk. J. A. S. B. lvii. p. 342* (1889).

Closely allied to *C. laticeps*, and perhaps not truly distinct; but in all Mr. Green's specimens of *C. brunneum* the front of the thorax is transversely darker than the rest, and more or less completely defined from it by the surrounding paler markings.

\*†COPTOSOMA CEYLONICUM.

*Coptosoma ceylonicum*, *Dohrn, Stett. ent. Zeit. xxi. p. 399* (1860).

The single specimen obtained by Mr. Green does not quite agree with Dohrn's description, but is probably a mere variety.

\*†COPTOSOMA CRIBRARIUM.

*Cimex cribrarius*, *Fabr. Suppl. Ent. Syst. p. 531* (1798).

Mr. Green's specimen is labelled "Putlam." A common East-Indian species.

## \*†COPTOSOMA NOBILE.

*Coptosoma nobile*, *Dohrn, Stett. ent. Zeit.* xxi. p. 400 (1860).

Described from Ceylon.

## COPTOSOMA ATOMARIUM.

*Thyreocoris atomarium*, *Germ. Zeitschr. Ent.* i. p. 27, n. 6 (1839).

Recorded from Java, the Philippines, and Ceylon (Dohrn's list), but apparently not a very common species.

## TROPIDOSTYLUS FASCIOLATUS.

*Tropidostylus fasciolatus*, *Stål, Svensk. Handl.* (2) xiv. (4) p. 15 (1876).

Described from Ceylon. A single immature specimen in Mr. Green's collection possibly belongs to this species.

## \*†BRACHYPLATYS SILPHOIDES.

*Cimex silphoides*, *Fabr. Ent. Syst.* iv. p. 86, n. 24 (1794).

*Brachyplatys cingalensis*, *Stål, Æfv. Vet.-Akad. Förh.* xii. p. 181 (1855), xiii. p. 54 (1856).

A common species in the East Indies. The measurements given by Stål slightly exceed those of the specimens before me; but I have little doubt of the correctness of the identification.

## \*†BRACHYPLATYS SUBÆNEA.

*Plataspis subænea*, *Hope, Cat.* p. 17 (1817).

*Thyreocoris septus*, *Germ. Zeitschr.* i. p. 32, n. 19 (1839).

Common in the East Indies.

## BRACHYPLATYS VAHLII.

*Cimex VahlII*, *Fabr. Ent. Syst.* iv. p. 89, n. 41 (1794).

Included in Dohrn's list as Cinghalese. I have not seen a specimen from Ceylon, as that mentioned by Walker really belongs to *B. subænea*.

## \*†CANTHECONA INSULARIS, sp. n. (Plate IV. fig. 4.)

Long. corp. 15 millim.

Testaceous, covered above and below with reddish-brown punctures; abdomen with the dorsal surface dark reddish brown, shading into blackish at the extremity, the sides rufo-testaceous, ventral surface testaceous, slightly varied with black on the sides and terminal segment, and with a black spot on the middle of the penultimate segment; legs slightly hairy, femora more or less



reddish, and front femora with a rather strong spine about the middle; membrane fusco-hyaline, with a hyaline space on the costa before the tip, and another on the hind margin; thoracic spines black, nearly straight in front and emarginate behind, giving them a sub-bifid appearance. Antennæ rufo-testaceous, slightly darker towards the extremity.

Allied to the Indian *C. furcillata*, Wolff; but that species has the upper surface and the antennæ varied with black, and the thoracic spines are more slender and distinctly directed forwards.

\*† *ASOPUS MACTANS.*

*Cimex mactans*, *Fabr. Spec. Ins.* ii. p. 366, n. 168 (1781).

Two specimens of this well-known and variable East-Indian species from Kandy have much more extensive dark markings above than any of those before me from other localities. One of these has a curved black line, depressed in the middle, bending from one of the inner angles of the prothorax to the other; and the other specimen has two bands on the tegmina, one forming a long triangle covering nearly the whole of the inner half of the tegmina, and the other above the hinder part of the first, forming a thick line pointed at each end.

*ÆTHUS OBLONGUS.*

*Cydnus oblongus*, *Ramb. Faune de l'Andalusie*, ii. p. 115 (1842?).

A South-European species, included in Dohrn's list as Cinghalese.

*ÆTHUS SCUTELLATUS.*

*Æthus scutellatus*, *Dohrn, Stett. ent. Zeit.* xxi. p. 400 (1860).

Described from Ceylon.

\*† *ÆTHUS CEYLONICUS.*

*Æthus ceylonicus*, *Mayr, Reise d. Novara, Hem.* p. 9 (1866).

*Æthus nigroæneus*, *Walk. Cat. Het. Hem. B. M.* i. p. 158 (1867).

Marked "Putlam" in Mr. Green's collection.

\*† *ÆTHUS VARIANS.*

*Cimex varians*, *Fabr. Syst. Rhyng.* p. 187, n. 16 (1803).

*Æthus cyrtomenoides*, *Dohrn, Stett. ent. Zeit.* xxi. p. 400 (1860), teste Signoret.

Seems to be common in Ceylon.

## \*ÆTHUS MAURUS.

*Æthus maurus*, *Dall. List Hem. Ins. B. M. i.* p. 118, n. 18 (1851).

A specimen of this common East-Indian species is recorded by Walker from Ceylon, from Cuming's collection.

Differs from *Æ. varians* in having only the tarsi ferruginous.

## \*ÆTHUS OMICRON.

*Æthus omicron*, *Walk. Cat. Het. Hem. B. M. iii.* p. 534 (1868).

Described from Ceylon (*Thwaites*).

Closely allied to *Æ. maurus*, but rather smaller.

## \*ÆTHUS BADIUS.

*Æthus badius*, *Walk. Cat. Het. Hem. B. M. i.* p. 159, n. 73 (1867).

One specimen from Ceylon in the British Museum, collected by Dr. Thwaites. Also occurs in India and China.

## \*ÆTHUS APICALIS.

*Æthus apicalis*, *Dall. List Hem. Ins. B. M. i.* p. 120, n. 20 (1851).

A common Indian species.

## ÆTHUS (?) MINUTUS.

*Cydnus (?) minutus*, *Motsch. Bull. Mosc. xxxvi.* (3) p. 75 (1863).

Described from Ceylon (Colombo and Mount Patannas).

## \*†AGONOSCELI NUBILIS.

*Cimex nubilus*, *Fabr. Syst. Ent.* p. 712, n. 74 (1775).

A common East-Indian species; but the type specimen is said (probably erroneously) to have come from the Cape.

## \*ERTHESINA FULLO.

*Cimex Fullo*, *Thunb. Nov. Spec. Ins.* p. 42, pl. ii. f. 57 (1783).

*Erthesina fullo*, *Atk. J. A. S. B. lvii.* p. 5 (1888).

This species is very common, and very widely distributed throughout Eastern Asia; it is usually confounded with the next.

## \*†ERTHESINA GUTTATA.

*Cimex guttatus*, *Fabr. Mant. Ins.* ii. p. 291, n. 121 (1787).

*Erthesina guttata*, *Atk. J. A. S. B. lvii.* p. 6 (1888).

The localities given by Atkinson are India, Siam, and Ceylon; Mr. Green's specimens are from Kandy.

## \*†HALYS DENTATA.

*Cimex dentatus*, *Fabr. Syst. Ent.* p. 702, n. 28 (1775).

A very common Indian species. Mr. Green's specimens are from Mataratta.

## \*†MORMIDEA FLORENS.

Mormidea florens, *Walk. Cat. Het. Hem. B. M.* ii. p. 263, n. 62 (1867).

A well-known and rather variable East-Indian species. Mr. Green's collection contains a specimen from Pundaloya, with a reddish-tawny stripe running across the front of the thorax from the tip of one projection to the tip of the other. The projecting angles beneath are of the same colour, edged outside with black. The round spot at the end of the scutellum is of a distinctly greenish white. Without a larger series from various localities, it is impossible to determine whether this Cinghalese form should be regarded as a species or not.

## \*†MORMIDEA SIMILIS, sp. n.

Long. corp. 8 millim. ; lat. 5 millim.

Greenish olive, with large punctures ; antennæ and legs paler ; shoulder-angles broad, moderately long and pointed ; thorax with a transverse, smooth, black depression at the extremity ; basal angles of the scutellum with large ivory-white smooth spots, between which a pale pear-shaped mark, punctured with black, rises from a semicircular ivory-white mark with only a few punctures, at the tip of the scutellum ; tegmina with a reddish shade, most distinctly seen as an oblique red streak, less strongly punctured than the rest ; projecting part of the corium hyaline.

Under surface paler than above and much less strongly punctured, with scattered black spots.

Closely allied to the Indian *M. socia*, Walk., but in that species there is no red shade on the tegmina, the scutellar spots are much less sharply defined, and the under surface is marked with smaller and more regular dots. In *M. contigua*, Walk., from Java, the reddish shade extends over the greater part of the tegmina, and the shoulder-angles are longer and more acute.

The type is labelled "Putlam."

## \*† (?) ÆSCHRUS OBSCURUS.

Æschrus obscurus, *Dallas, List Hem. Ins. B. M.* i. p. 221, n. 1 (1851).

A somewhat rare species, recorded from India and Java. An immature specimen in Mr. Green's collection, without special locality, seems to be referable to this insect.

## EYSARCORIS DUBIUS.

*Eysarcoris dubius*, *Dall. List Hem. Ins. B. M. i. p. 227, n. 7 (1851)* ;  
*Atk. J. A. S. B. lvii. p. 40 (1888)*.

Described from Tenasserim. Dohrn mentions a supposed variety from Ceylon.

## \*†EYSARCORIS GUTTIGERUS.

*Cimex guttigerus*, *Thunb. Nov. Spec. Ins. p. 32, pl. ii. f. 47 (1783)*.

Common in China and India. Mr. Green's specimens are labelled "Putlam."

## \*†ANTESTIA CONCINNA.

*Rhaphigaster concinna*, *Dall. List Hem. Ins. B. M. i. p. 285 (1851)*.

Two specimens in Mr. Green's collection, one reddish and the other greenish olive.

## \*†ANTESTIA PUNCTATISSIMA, sp. n.

Long. corp. 7 millim. ; lat. 4 millim.

Testaceous, thickly covered with black punctures arranged more or less in lines ; head above with two black median lines, slightly diverging in front, two others on each side, meeting at half the length to form a single thicker stripe on each side in front, and another short black stripe beneath each eye ; pronotum with the angles not very prominent and with the punctures arranged in irregular transverse lines ; scutellum with the centre irregularly punctured, the margins more thickly and regularly, and the apex with a large impunctate, smooth, bone-coloured spot. Corium with the punctures most linear towards the borders, and a nearly impunctate space close to the extremity near the costa, and another on the inner margin, between which is a black spot, about the middle, from which a dusky space, shaded with reddish, extends to the inner margin. Under surface rufo-testaceous ; the front half and hind border of the pectus, and the sides of the pectus and abdomen, thickly punctured with black ; the thoracic angles and the extremities of the sutures of the abdomen are distinctly spotted with black.

In Mr. Green's collection, without special locality. Allied to *A. quadrimaculata*, Walk., from Celebes.

## \*†HALYOMORPHA PICEUS.

*Cimex piceus*, *Fabr. Syst. Rhyng. iv. p. 115, n. 138 (1794)*.

*Halyomorpha piceus*, *Atk. J. A. S. B. lvii. p. 23 (1888)*.

*Halys timorensis*, *Hope, Cat. p. 22 (1837)*.

*Pentatoma trivialis*, *Dohrn, Stett. ent. Zeit. xxi. p. 400, n. 22 (1860)*.

Common in the East Indies, and rather variable in colour. A long list of synonyms is given by Atkinson (*l. c.*).

Mr. Green's specimens are from Pundaloya and Nawalapitya.

\*†PENTATOMA CONTINGENS.

*Pentatoma contingens*, *Walk. Cat. Het. Hem. B. M.* ii. p. 302, n. 121 (1867).

The type is from Hong Kong. This insect is perhaps a variety of *P. gutta*, Dall., likewise a Chinese species.

Mr. Green's Cinghalese specimens are rather variable, and in the darkest specimens the pale spot at the tip of the scutellum has entirely disappeared. They are labelled "Putlam."

\*†PENTATOMA TAPROBANENSIS. (Plate IV. fig. 1.)

*Pentatoma taprobanensis*, *Dall. List Hem. Ins. B. M.* i. p. 244, n. 27 (1851).

A very distinct and well-marked insect, common in Ceylon.

Gregarious; found on the bark and trunks of orange-trees (*E. E. G.*).

PENTATOMA LEMUR.

*Pentatoma lemur*, *Dohrn, Stett. ent. Zeit.* xxi. p. 401, n. 25 (1860).

Described from Ceylon.

\*†PENTATOMA (?) CORINNA, sp. n. (Plate IV. fig. 12.)

Long. corp. 11 lin.; lat. 7 lin.

Brown, thickly covered with darker punctures; head rather long, with two central grooves, front bifid; pronotum deeply emarginate before the lateral angles, rendering them nearly straight in front; they are prominent, moderately long, and slightly obtuse at the tips. Under surface paler, mottled and speckled all over with black; ventral surface of abdomen with obsolete blackish markings, and sometimes with a zigzag row of blackish markings on each side. Legs, especially femora, distinctly marked with black dots. Terminal segment of abdomen quadrifid, the four projections rather pointed and of equal size. Antennæ slender, set with short bristles, 5-jointed; joints 3 and 4 of equal length, 2 shorter, and 4 shorter than 2.

Pundaloya.

This species hardly appears to belong to any genus represented in the British Museum; but so large a number of genera of *Pentatomidæ* have been proposed on slight characters that I am unwilling to add to their number until they have undergone thorough investigation.

## \*†STRACHIA FIMBRIATA.

*Cimex fimbriatus*, *Fabr. Mant. Ins.* ii. p. 295, n. 162 (1787).

Var. *Pentatoma crossota*, *Dall. List Hem. Ins. B. M.* i. p. 352, n. 49 (1851).

A common and wide-ranging East-Indian insect, in both forms.

## \*†STRACHIA CRUCIATA.

*Cimex cruciatus*, *Fabr. Ent. Syst.* iv. p. 119, n. 153 (1794).

*Strachia geometrica*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 75 (1863); *Nietn. Enemies of Coffee Tree*, p. 18 (1861).

*Strachia velata*, *Walk. Cat. Het. Hem. B. M.* ii. p. 329, n. 62 (1877).

*Strachia subacta*, *Walk. l. c.* n. 63 (1877).

Feeds on the berries of the coffee-tree (*E. E. G.*). A variable species; I think I am correct in placing the above names together.

Mr. Green's collection includes two specimens of a very pretty variety, with all the darker parts green, and the lighter ones indistinctly outlined in pale yellow. The tegmina are reddish, with the black markings present or absent, and the costa green.

## \*†STRACHIA PICTA.

*Cimex pictus*, *Fabr. Syst. Ent.* p. 715, n. 93 (1775).

A common Indian insect. Mr. Green's specimens are without special locality.

## \*†BATHYCELIA INDICA. (Plate IV. fig. 15.)

*Bathycoelia indica*, *Dall. List Hem. Ins. B. M.* i. p. 270, n. 3 (1851).

The type is from North India. Mr. Green's specimens are chiefly from Nawalapitya, but one is labelled "Putlam."

A most variable species; fawn-colour; buff spotted with green or dark blackish green. Easily recognizable by the curious black puncture at the basal angles of the scutellum. The closely allied African species *B. thalassina*, Herr.-Schäff., varies in colour in precisely the same manner.

## \*†CATACANTHUS INCARNATUS.

*Cimex incarnatus*, *Drury, Ill. Ex. Ent.* ii. pl. xxxvi. f. 5 (1773).

*Catacanthus incarnatus*, *Atk. J. A. S. B.* lvii. p. 71 (1888).

A common insect throughout the whole Indo-Malayan region, from the Corea to Borneo.

## \*†ZANGIS DORSALIS. (Plate IV. fig. 2.)

*Rhaphigaster dorsalis*, *Dohrn, Stett. ent. Zeit.* xxi. p. 401, n. 28 (1860).

*Zangis virginea*, Stål, *Vet. Akad. Handl.* (2) xiv. (4) p. 93 (1876).

A handsome species, perhaps peculiar to Ceylon.

Stål makes two species of this, but the three specimens before me agree equally well with Dohrn's description and with the points on which Stål separates his *Z. virginea*.

Frequently flies into the rooms at night, attracted by the light (*E. E. G.*).

\*†RHAPHIGASTER VIRIDULUS.

*Cimex viridulus*, *Linn. Syst. Nat.* i. p. 414, n. 28 (1758).

*Cimex prasinus*, *Linn. Faun. Suec.* p. 249 (1761).

Var. *Cimex torquatus*, *Fabr. Syst. Ent.* p. 710, n. 65 (1775).

Common in most parts of the Old World. Mr. Green's collection contained a specimen of the var. *torquatus*, with the front of the head and thorax bordered with dull orange.

Nawalapitya.

\*†RHAPHIGASTER REPELLENS, sp. n. (Plate IV. fig. 9.)

Long. corp. 11 lin. ; lat.  $6\frac{1}{2}$  lin.

Rather long and narrow ; very dark reddish brown above and reddish below ; legs and antennæ rufo-testaceous. Upper surface somewhat rugose and thickly punctured ; angles of the pronotum short, distinct, straight, pointed at the tip, but not very acutely, and the extreme point pale ; membrane fuscous or fusco-hyaline. Pectus thickly punctured ; ventral surface of abdomen much more finely ; subterminal segment of the abdomen with strong sharp lateral projections.

Pundaloya.

Not closely allied to any species in the Museum.

RHAPHIGASTER FLAVOLINEATUS.

*Rhaphigaster flavolineatus*, *Hope, Cat.* p. 31 (1837).

A widely-ranging species, included in Dohrn's list as Cinchalese.

\*†RHAPHIGASTER SORDIDA, sp. n.

Long. corp. 11 millim. ; lat. 7 millim.

Greenish testaceous, thickly covered with small brown or reddish-brown punctures over the whole of the upper surface and on the pectus ; scutellum reddish, a little greener on the sides before the extremity, which is rather broad and obtusely rounded ; a small black spot at the basal angles of the scutellum ; abdomen beneath with an irregular band of black blotches on each side of

the central line, meeting in a black blotch on the penultimate segment; there is also a zigzag series of narrower reddish or blackish submarginal markings; terminal segment ending in four pointed cones of nearly uniform size. Shoulder-angles not very prominent. Antennæ slender, unicolorous, as long as the width of the thorax.

Pundaloya.

Allied to *R. flavescens*, Walk., from an unknown locality; but this species is without distinct black markings on the under surface of the abdomen, and the terminal abdominal lobes are less regular.

\*† TESSERATOMA PAPILLOSUM.

*Cimex papillosus*, *Dru. Ill. Ex. Ent.* i. pl. xlii. f. 2 (1773).

Var. *Tesseratoma clara*, *Walk. Cat. Het. Hem. B. M.* iii. p. 404 (1868).

A common East-Indian species. Mr. Green's specimen is from Kandy.

EUSTHENES CUPREUS.

*Tesseratoma cuprea*, *Hope, Cat.* p. 27 (1837).

A common East-Indian species, noted by Walker as Cinghalese.

\*MATTIPHUS ÆRUGINOSUS.

*Mattiphus æruginosus*, *Stål, Trans. Ent. Soc. Lond.* (3) i. p. 600 (1863); *Atk. Journ. As. Soc. Beng.* lviii. p. 71 (1889).

A rare species in collections, and apparently confined to Ceylon.

\*† PYCANUM PONDEROSUM.

*Pycanum ponderosum*, *Stål, Æfv. Vet.-Akad. Förh.* x. p. 234 (1854), xiii. p. 63, pl. i. f. a (1856).

Recorded from India and Malacca. A single immature specimen from Kandy, probably belonging to this species.

\*† CYCLOPelta SICCIFOLIA.

*Spongopus siccifolius*, *Hope, Cat. Hem.* p. 26 (1837); *Atk. J. A. S. B.* lviii. p. 89 (1889).

*Cyclopelta tartarea*, *Stål, Æfv. Vet.-Akad. Förh.* x. p. 234 (1854), xiii. p. 64 (1856).

A common Indian species. Mr. Green's specimens are from Kandy.



## \*† ASPONGOPUS JANUS.

*Cimex janus*, *Fabr. Syst. Ent.* p. 714, n. 85 (1775).

*Aspongopus janus*, *Atk. J. A. S. B.* lviii. p. 88 (1889).

A common East-Indian species, originally described by Fabricius as American. Mr. Green's specimens are labelled "Torigan, Jan. 1890."

## \*ASPONGOPUS OBSCURUS.

*Cimex obscurus*, *Fabr. Ent. Syst.* iv. p. 107, n. 106 (1794).

*Aspongopus obscurus*, *Atk. J. A. S. B.* lviii. p. 88 (1889).

A common East-Indian species.

## \*† ASPONGOPUS NIGRIVENTRIS.

*Aspongopus nigriventris*, *Hope, Cat. Hem.* p. 26 (1837).

A common East-Indian species.

## \*† PLACOSTERNUM TAURUS.

*Cimex taurus*, *Fabr. Spec. Ins.* ii. p. 344, n. 34 (1781).

*Placosternum taurus*, *Atk. J. A. S. B.* lvii. p. 159 (1888).

Var. (?) *Placosternum alces*, *Stål, Vet.-Akad. Handl.* (2) xiv. (4) p. 107 (1876); *Atk. Journ. As. Soc. Beng.* lviii. p. 160 (1888).

Var. (?) *Placosternum urus*, *Stål, l. c.* (1876).

A common East-Indian insect. Until a long series of specimens are compared from various localities, it seems to me hazardous to attempt to separate the various forms into species, especially as some of the specimens in the series in the British Museum exhibit the characters which Stål assigns to the true *P. taurus* in much higher degree than the actual type of Fabricius.

Mr. Green has met with the smallest form on trunks of trees; it is a hill-country form (Pundaloya) and has an odour of Jargonelle pears. The largest form is a low-country insect (Colombo), and a middle-sized form occurs at Nawalapitya, at an intermediate elevation.

Mr. Green regards them as distinct species, but he has only met with the small form himself; and I do not think that we have sufficient information to decide the question positively, at present.

## \*(?) PHYLLOCEPHALA ÆGYPTIACA.

*Pentatoma ægyptiaca*, *Lef. Mag. Zool.* i. pl. 20 (1831).

The only authority for the occurrence of this species in Ceylon is a specimen in the British Museum from Mr. Paul's collection, which, in all probability, is really from Egypt.

## COREIDÆ.

## DALADER ACUTICOSTA.

*Dalader acuticosta*, *Amyot & Serv. Hist. Nat. Hém.* p. 188, pl. iv. f. 7 (1843).

A common East-Indian species, recorded as Cinghalese by Dohrn.

## \*†DALADER PLANIVENTRIS.

*Acanonicus planiventris*, *Hope, Cat.* ii. p. 8 (1842).

Occurs in North India, Siam, and Ceylon. Mr. Green's specimen was without special locality.

Hardly distinct from the last species.

## \*†MICTIS PHASIANA.

*Cimex phasianus*, *Fabr. Spec. Ins.* ii. p. 361, n. 136 (1781).

*Myctis punctum*, *Hope, Cat.* ii. p. 10 (1842).

A common East-Indian species, but originally described by Fabricius as S.-African. Mr. Green's specimens are from Kalawawa (North Central Province), Colombo, and Nawalapitya.

## \*MICTIS CASTANEA.

*Mictis castanea*, *Dall. List Hem. Ins. B. M.* ii. p. 389 (1852).

The type is from Ceylon.

## \*MICTIS LATA.

*Mictis lata*, *Dall. List Hem. Ins. B. M.* ii. p. 390 (1852).

Recorded from Hong Kong, Malacca, and Ceylon.

## \*MICTIS VALIDA.

*Mictis valida*, *Dall. List Hem. Ins. B. M.* ii. p. 398 (1852).

Described from Ceylon. Remarkable for the very strong spines on the legs.

## \*TREMATOCORIS LOBIPES.

*Myctis lobipes*, *Hope, Cat.* ii. p. 11 (1842).

Recorded from Ceylon by Walker.

## \*†TREMATOCORIS CALCAR.

*Mictis calcar*, *Dall. List Hem. Ins. B. M.* ii. p. 397 (1852).

Occurs in India and Ceylon.

## \*BRACHYTES BICOLOR.

*Brachytes bicolor*, *Westw. Hope, Cat.* ii. p. 8 (1842).

A common Indian insect. There is a specimen in the British Museum from Ceylon, presented by Dr. Templeton.

PHYSOMERUS GROSSIPES.

*Lygæus grossipes*, *Fabr. Mant. Ins.* ii. p. 135, n. 4 (1787).

A well-known East-Indian species; recorded as Cinghalese by Dohrn.

\*†HOMŒOCERUS MARGINIVENTRIS.

*Homœocerus marginiventris*, *Dohrn, Stett. ent. Zeit.* xxi. p. 402, no. 40 (1860).

Described from Ceylon.

Two specimens in Mr. Green's collection from Pundaloya. The male differs in having the antennæ almost entirely yellow, only slightly browned towards the extremities of the joints, the lateral angles of the thorax much more sharply produced, and the abdomen much less speckled with black beneath, and with the lateral margins unspotted. It may be a distinct species; but I do not like to describe it as new, in the absence of a series.

\*†HOMŒOCERUS ANTENNATUS, sp. n. (Plate IV. fig. 6.)

Long. corp. 13 millim.

Head and front of pronotum rufo-testaceous, hinder part of pronotum, scutellum, and corium with the ground-colour paler, but so thickly speckled and reticulated with black as to look darker. Antennæ with joints 1 and 4 of equal length, the 2nd only slightly shorter, and the 3rd about half as long as the first. Antennæ reddish brown at the base, shading into black about the middle of the second joint; extreme base of the second joint, a ring at the base of the third, and a much broader one just beyond the base of the fourth, pale yellow. Lateral angles of the pronotum hardly prominent; lateral margins with a black line; the front of the prothorax with two black dots on each side of the pale median line, conspicuous under a strong lens. Towards the hinder part of the pronotum the punctures are much larger and darker, and are arranged in irregular undulating transverse lines. Scutellum and corium thickly punctured with black, the punctures along the nervures arranged in lines; edges of the scutellum and corium narrowly testaceous, and the tip of the scutellum bone-colour. Membrane fuscous, black at the base. Under surface rufo-testaceous; pectus with the punctures uni-

colourous; ventral surface of abdomen hardly punctured, the stigmata marked with black dots.

Allied to *H. marginiventris*, but the shoulder-angles less prominent.

In Mr. Green's collection, without special locality.

*HOMŒOCERUS LÆVILINEUS.*

*Homœocerus lævilineus*, *Stål, Svensk. Akad. Handl.* (2) xi. (2) p. 60 (1873).

Described from Ceylon.

I should have referred the male noticed under *H. marginiventris* to this species, but that the description appears to imply that the lateral angles of the thorax are less instead of more prominent in *H. lævilineus*.

*HOMŒOCERUS CINGALENSIS.*

*Tliponius cingalensis*, *Stål, Œfvers. Vet.-Akad. Förh.* xvi. p. 465 (1859).

*Homœocerus singhalensis*, *Stål, Vet. Akad. Handl.* (2) xi. (2) p. 60 (1873).

Recorded from China (Amoy) and Ceylon.

\*†*HOMŒOCERUS SIGNATUS.*

*Homœocerus signatus*, *Walk. Cat. Hem. Het. B. M.* iv. p. 97, n. 19 (1851).

*Homœocerus biplagiatus*, *Stål, Vet. Akad. Handl.* (2) xi. (2) p. 59, n. 14 (1873).

Described by Walker from Ceylon, and by Stål from Bombay. Mr. Green's specimen is from Kandy.

\*†*HOMŒOCERUS WALKERI*, sp. n.

*Homœocerus fascifer*, var. (?), *Walk. Cat. Hem. Het. B. M.* iv. p. 94, n. 13.

Long. corp. 19 millim.

Head, thorax, scutellum, under surface, the extreme base of the tegmina, and a narrow line disappearing beyond the middle of the costa dirty yellow; basal joint of antennæ brownish, second yellow, with the tip black, the rest wanting. Thorax granulated; a blackish line on each side of the head and along the lateral ridges of the thorax above; hinder part of thorax and tegmina dark brown; abdomen above reddish, the lateral margins yellow, rather broadly edged within with black. A cream-coloured spot in the

middle of the tegmina, and a linear one within it (sometimes continuous with it, and extending to the inner margin).

Much resembles *H. signatus*, Walk.; but the lateral angles of the thorax are less produced.

Occurs in India, Penang, and Ceylon.

I cannot make Stål's description of his *Tliponius fascifer* from Manilla agree with this insect.

\*†HOMEOCERUS PROMINULUS.

Ceratopachys prominulus, *Dall. List Hem. Ins. B. M.* ii. p. 501, n. 3 (1852).

Described from India. Mr. Green's collection contained a single specimen without special locality, labelled "*H. biplagiatus*."

\*†(?) VERLUSIA RHOMBEA.

Cimex rhombeus, *Linn. Syst. Nat.* i. (2) p. 718, n. 22 (1767).

A single immature specimen in Mr. Green's collection, without special locality, apparently belonging to this common European species.

\*ACANTHOCORIS SCABRATOR.

Coreus scabrator, *Fabr. Syst. Rhyng.* p. 195, n. 19 (1803).

Common in the East Indies; but only included in the present list on the authority of a specimen received from Capt. Parry with the locality Ceylon.

\*†ACANTHOCORIS ANTICUS.

Acanthocoris anticus, *Walk. Cat. Hem. Het. B. M.* iv. p. 118, n. 15 (1871).

Common in Ceylon, and perhaps peculiar to that island.

\*†ANISOMELIS ORIENTALIS.

Anisomelis orientalis, *Dall. List Hem. Ins. B. M.* ii. p. 454, n. 8 (1852).

A common species in Siam, and throughout the Eastern Archipelago. The locality of Mr. Green's specimens was not indicated.

\*†PLINACHTUS ACICULARIS.

Alydus acicularis, *Fabr. Syst. Rhyng.* p. 251, n. 14 (1803).

Leptoscelis ventralis, *Dall. List. Hem. Ins. B. M.* ii. p. 458, n. 10 (1852).

Described by Fabricius from Tranquebar, and said to be a very variable insect. Mr. Green's specimen, which is simply labelled

“Ceylon,” is much more varied with red than the type of Dallas’s species, which is also from Ceylon. A full series is much wanted.

PLINACTUS PELTASTES.

*Plinactus peltastes*, *Stål, Stett. ent. Zeit.* xxii. p. 144 (1861).

Described from Ceylon.

SERINETHA DALLASI.

*Serinetha Dallasi*, *Dohrn, Stett. ent. Zeit.* xxi. p. 402, n. 42 (1860).

Described from Ceylon.

\*†SERINETHA AUGUR.

*Cimex augur*, *Fabr. Spec. Ins.* ii. p. 366, n. 167 (1781).

Common in India and Ceylon.

\*†SERINETHA ABDOMINALIS.

*Lygæus abdominalis*, *Fabr. Syst. Rhyng.* p. 227, n. 111 (1803).

Common in India and the Eastern Archipelago.

\*†SERINETHA TAPROBANENSIS.

*Serinetha taprobanensis*, *Dall. List Hem. Ins. B. M.* ii. p. 461, n. 6 (1852).

Hardly distinct from *S. abdominalis*.

One of the commonest species in Ceylon (*E. E. G.*).

\*†SERINETHA COXALIS, sp. n.

Long. corp. 14 millim.

Red; antennæ, except at extreme base beneath, scutellum, membrane, legs except the coxæ, pectus, and ventral surface of abdomen except at the sides and extremity, black.

Exact locality not specified.

Easily recognizable by the conspicuous red coxæ on a black background.

\*LYBAS TURPIS.

*Lybas turpis*, *Walk. Cat. Hem. Het. B. M.* iv. p. 150, n. 5 (1871).

Described from Ceylon. (Collected by Dr. Templeton.)

Very like a species of *Homæocerus* in appearance.

\*†CAMPTOPUS LINEARIS.

*Cimex linearis*, *Fabr. Syst. Ent.* p. 710, n. 62 (1775).

*Alydus clavatus*, *Dohrn, Stett. ent. Zeit.* xxi. p. 402, n. 43 (1860).

A common East-Indian species.

The extent of black on the pectus and ventral surface of the abdomen varies; but the middle line of the pectus at least is always black, though the abdomen itself varies from rufo-testaceous to black; but even in the latter case the sides are always pale.

Mr. Green's specimens are from Pundaloya and Nitagala.

\*†CAMPTOPUS VENTRALIS.

*Alydus ventralis*, *Hope, Cat. Hem.* ii. p. 20 (1842).

*Alydus major*, *Dohrn, Stett. ent. Zeit.* xxi. p. 402 (1860).

Occurs in India, Ceylon, China, and Japan.

In some specimens the pleural spots are obsolete, and in others (representing *Alydus major*) there is a broad cream-coloured stripe on the lower part of the head, running below the eyes, and a long constricted spot (sometimes divided into two) on the meso- and metapleuræ, besides some smaller intermediate dots of the same colour.

\* (?) LEPTOCORISA ANGUSTATA.

*Cimex angustatus*, *Fabr. Mant. Ins.* ii. p. 308, n. 300 (1787).

Occurs in the East Indies and Australia.

A single damaged specimen from Ceylon stands under this name in the Museum collection, obtained from Dr. Templeton; but it hardly appears to differ from the following species.

\*†LEPTOCORISA VARICORNIS.

*Gerris varicornis*, *Fabr. Syst. Rhyng.* p. 260, n. 2 (1803).

Common throughout the tropics of the Old World.

Always found in grass-fields (*E. E. G.*).

Mr. Green's specimens are from Pundaloya and Nawalapitya.

\*†CLETUS FEMORALIS, sp. n.

Long. corp.  $10\frac{1}{2}$  millim.

Head and thorax above granulated, with a pale median line; antennæ castaneous, joints 1 and 2 beneath and the base of joint 4 blackish; head blackish above, which colour extends to the base of the thorax, the sloping portion of which is testaceous, granulated with black; and there is a transverse row of black spots just above the dusky portion at the base; hinder part of the thorax darker brown, the projecting angles acute, nearly straight in front, the ridges of the thorax behind sinuated and denticulated; scutellum and corium nearly concolorous with the thorax, but the latter shading into reddish, and edged with a red line; a

white dot at the end of the scutellum, and another, more distinct, within the inner edge of the red line bounding the corium; membrane fusco-hyaline. Abdomen black, edged with yellow. Under-side yellowish, the thorax strongly granulated with brown; a row of black dots along the sides of the thorax and abdomen and others on the median line of the throat; the spotting of the abdomen is somewhat irregular, but there is first a semicircle of rather large dots, within which are irregular smaller ones, and on each of the two following segments there is a transverse row of small dots at the base and another of larger ones at the extremity. Hind femora very distinctly spotted beneath, the other legs less so.

Allied to *C. calumniator*, Fabr., and *C. punctulatus*, Dall., but easily recognized by the peculiar arrangement of the spots, and by the spotted hind femora. A single specimen taken by Mr. Green at Mungphe.

\*†CLETUS BIPUNCTATUS.

*Coreus bipunctatus*, Hope, *Cat.* ii. p. 23 (1842).

Described from India. Mr. Green's specimen is labelled "Putlam." Dohrn's two species which follow are closely allied to this.

\*†CLETUS BISTILLATUS.

*Cletus bistillatus*, Dohrn, *Stett. ent. Zeit.* xxi. p. 403 (1860).

Described from Ceylon. Mr. Green's specimen is without special locality.

I am not quite certain whether the specimen which I have referred to this species really belongs to it, as there is little or no red at the extremity of the corium.

\*†CLETUS ELONGATUS.

*Cletus elongatus*, Dohrn, *Stett. ent. Zeit.* xxi. p. 403, n. 47 (1860).

Described from Ceylon.

\*†CLETOMORPHA (?) DENTICULATA, sp. n.

*Cletomorpha denticulata*, Atkinson, *MS.*

Long. corp. 7-8 millim.

Brown, granulated; front of the thorax sloping and, as well as the head, paler—in the smaller specimen intersected by a whitish median line, and with the lateral borders and hind border of the pale portion of the thorax whitish; hinder part of the thorax, scutellum, and corium darker brown, the latter with a narrow white fascia, hardly divided into spots, running from two



thirds of the length of the costa to the inner margin. Antennæ and legs testaceous; the first joint of the antennæ much thickened but hardly as long as the second; the third distinctly shorter, the fourth much shorter, forming an oval club. Spines of the thorax strong, concolorous; lateral margins before the spine with two small teeth near together in front, and three large isolated ones behind; lateral margins behind the spine with three or four small teeth; hinder edge of thorax concave. Membrane hyaline (possibly darker towards the base). Abdomen blackish, with large, dull yellow marginal spots; abdominal angles produced. Underside brown in the larger specimen and pale in the smaller one, indistinctly speckled with darker.

Described from two specimens (labelled "Putlam"), one much larger and darker than the other, in Mr. Green's collection. There is a third, without locality, among the series of specimens in the British Museum, referred (erroneously I think) to *C. lanciger*, Fabr., by Walker.

\**CLETOMORPHA WALKERI*, sp. n.

Long. corp. 5 millim.

Much resembles the last species, but rather shorter and broader.

Head and thorax dark brown, granulated; the sloping part of the thorax with the back and sides, and a median line extending to the head, testaceous; thoracic spines very acute; the lateral margins of the thorax in front entirely unarmed, behind with two or three minute teeth, the last forming a distinct angle; hinder edge of thorax slightly concave. Scutellum with the extreme base testaceous, expanding into spots at the sides; the tip may also possibly be testaceous. Inner angle of the corium with one or two small white spots, representing the inner part of the fascia in the last species. Antennæ, membrane, abdomen, legs, under surface, &c. as in the last species; but with a rather more distinct row of black dots on the sides of the abdomen.

The type of this species is a specimen from Ceylon, referred to *C. lanciger*, Fabr., in Walker's Catalogue.

Three other specimens placed under *C. lanciger* by Walker, one of which is from Pulo Penang, resemble this species in shape; but the sloping part of the thorax and the head are testaceous above (not blackish in the middle), there are no pale markings on

the scutellum, and the fascia on the corium consists of three very distinct small white spots. It may be called *Cletomorpha benita*.

\*†CLAVIGRALLA HORRENS.

*Clavigralla horrens*, *Dohrn, Stett. ent. Zeit.* xxi. p. 403, n. 48 (1860).

Described from Ceylon. Mr. Green's specimens are from Pundaloya and Nitagala.

In some of the specimens of what I take to be this species, a series of white markings runs along the whole side of the body from below the eye to the extremity of the abdomen, which is spotted and blotched with white.

CLAVIGRALLA CONCOLOR.

*Clavigralla concolor*, *Dohrn, Stett. ent. Zeit.* xxi. p. 403, n. 49 (1860).

Described from Ceylon.

\*†RHOPALUS RUBICUNDUS.

*Corizus rubicundus*, *Sign. Ann. Soc. Ent. France*, (3) vii. p. 86, n. 15 (1859).

Described from Ceylon. One of Mr. Green's specimens is labelled "Haragam."

I believe I have correctly identified this species; but all the specimens before me are red and black, and not one can be correctly called "jaune doré plus ou moins orange," as Signoret describes his species. Dohrn's MS. name, adopted by Signoret, applies much better to the insect than Signoret's description, which may have been taken from discoloured specimens.

\*†RHOPALUS (?) FUNERALIS, sp. n. (Plate IV. fig. 7.)

Long. corp. cum tegm. 3 millim.

Head, pronotum, and scutellum black, with large round punctures and short scattered bristles; tegmina brown, the part immediately bordering on the scutellum black and deeply pitted; corium with a large, triangular, ivory-white spot just beyond the base, which is marked with much smaller punctures; costa ivory-white, membrane brown with paler borders; legs and antennæ black or reddish brown, tibiæ white above, front femora slightly thickened.

Nitagala.

A small narrow species, only referred to the genus *Rhopalus* provisionally.

## LYGÆIDÆ.

## \*†LYGÆUS MILITARIS.

*Cimex militaris*, *Fabr. Syst. Ent.* p. 717, n. 103 (1775).

A very widely-distributed species in the Old World.

Mr. Green's specimen was without special locality.

## \*†LYGÆUS HOSPES.

*Lygæus hospes*, *Fabr. Syst. Ent.* iv. p. 150, n. 50 (1794).

Recorded from India and China.

## \*†LYGÆUS ARGENTATUS.

*Lygæus argentatus*, *Fabr. Syst. Rhynq.* p. 228, n. 120 (1803).

Recorded from India, Burma, and Ceylon.

## \*LYGÆUS LEUCURUS.

*Lygæus leucurus*, *Fabr. Mant. Ins.* ii. p. 299, n. 202 (1787).

Recorded from the Island of Amsterdam, Philippines, Lombok, and Ceylon (from Dr. Thwaites' collection).

## \*†LYGÆUS SERVUS.

*Cimex servus*, *Fabr. Mant. Ins.* ii. p. 300, n. 207 (1787).

Common in the tropics of the Old World.

## LYGÆUS MACULATUS.

*Lygæus maculatus*, *Dall. List Hem. Ins. B. M.* ii. p. 545 (1852).

Described from India. Dohrn includes it in his list as Cinghalese.

## \*†LYGÆUS QUADRATOMACULATUS, sp. n. (Plate IV. fig. 13.)

Long. corp. cum tegm. 10 millim.

Head and thorax above red; head with the tip black and two large black spots on the vertex between the eyes; pronotum with a black transverse stripe on each side; mesonotum with the greater part of each side filled up by a large square black spot; scutellum black, with a red longitudinal line; corium dark greyish brown, with a round, deep black spot in the middle; membrane blue-black, with the tips bordered first with testaceous and beyond with clear hyaline; antennæ and legs black, the latter covered with grey pile; head and pectus red, the pleura with two rows of 3 black spots on each side; proboscis black; abdomen clothed beneath with dark grey pile.

Pundaloya.

A handsome species, allied to *L. argentatus*; but the latter has no black spot on the tegmina, and only one row of black spots on the pleura on each side, besides other differences in marking, &c.

**NYSIUS SUBCINCTUS.**

*Nysius subcinctus*, *Walk. Cat. Hem. Het. B. M. v. p. 70, n. 31* (1872).

Described from Ceylon.

**NYSIUS PALLIPENNIS.**

*Nysius pallipennis*, *Walk. Cat. Hem. Het. B. M. v. p. 71, n. 32* (1872).

Described from Ceylon.

**NYSIUS CEYLANICUS.**

*Heterogaster ceylanicus*, *Motsch. Bull. Mosc. xxxvi. (3) p. 73* (1863).

Described from Ceylon (Nura Ellia, Patannas, and Colombo).

**\*HETEROGASTER SIGNIFER.**

*Heterogaster signifer*, *Walk. Cat. Hem. Het. B. M. v. p. 74, n. 12* (1872).

Described from Ceylon.

**HETEROGASTER SEMICRUCIATUS.**

*Coryzus semicruciatius*, *Motsch. Bull. Mosc. xxxvi. (3) p. 77* (1863).

Described from Ceylon (Nura Ellia).

The description seems to agree with *H. signifer*, Walk.

**HETEROGASTER (?) BREVICOLLIS.**

*Coryzus brevicollis*, *Motsch. Bull. Mosc. xxxvi. (3) p. 77* (1867).

Described from Ceylon (Nura Ellia).

**RHYPAROCHROMUS (?) CRASSICEPS.**

*Rhyparochromus (?) crassiceps*, *Dohrn, Stett. ent. Zeit. xxi. p. 404, n. 57* (1860).

Described from Ceylon.

**\*†RHYPAROCHROMUS TESTACEIPES.**

*Rhyparochromus testaceipes*, *Walk. Cat. Hem. Het. B. M. v. p. 101, n. 160* (1872).

Perhaps identical with *R. (?) crassiceps*, Dohrn.

## \*†RHYPAROCHROMUS LEUCOCERAS.

Rhyparochromus leucoceras, *Walk. Cat. Hem. Het. B. M.* v. p. 102, n. 158 (1872).

Apparently the commonest species of the genus in Ceylon. Resembles the descriptions of *Dieuches punctipes* and *femoralis*, Dohrn, in several particulars.

Found under stones and rubbish, such as decaying leaves (*E. G.*).

## RHYPAROCHROMUS BREVIS.

Rhyparochromus brevis, *Motsch. Bull. Mosc.* xxxvi. (3) p. 78 (1863).

Described from Ceylon (Patannas).

## RHYPAROCHROMUS FUSCONERVOSUS.

Rhyparochromus fusconervosus, *Motsch. Bull. Mosc.* xxxvi. (3) p. 79 (1863).

Described from Ceylon (Colombo).

## RHYPAROCHROMUS SINGALENSIS.

Rhyparochromus singalensis, *Dohrn, Stett. ent. Zeit.* xxi. p. 404 (1860).

Described from Ceylon.

## \*†RHYPAROCHROMUS GREENI, sp. n.

Long. corp. 8 lin.

Dark brown; head, antennæ, front of pronotum, scutellum, under surface, and femora black; hinder part of pronotum and corium dark reddish brown; front and lateral margins of pronotum and costa of corium testaceous; antennæ with the third joint shortest, and white at its extremity; hind part of pronotum and pectus strongly punctured, abdomen beneath much more finely; membrane brown, with small whitish mottlings; tibiæ and tarsi reddish brown.

Closely allied to *R. sordidus*, Fabr., but darker.

Pundaloya.

## DIEUCHES PUNCTIPES.

Dieuches punctipes, *Dohrn, Stett. ent. Zeit.* xxi. p. 405, n. 61 (1860).

Described from Ceylon.

## DIEUCHES FEMORALIS.

Dieuches femoralis, *Dohrn, Stett. ent. Zeit.* xxi. p. 405, n. 62 (1860).

Described from Ceylon.

## \*†PLOCIOMERUS DISCOGUTTATUS.

*Plociomerus discoguttatus*, *Dohrn, Stett. ent. Zeit.* xxi. p. 404, n. 58 (1860).

Described from Ceylon.

## \*†PLOCIOMERUS BENGALENSIS.

*Rhyparochromus bengalensis*, *Dall. List Hem. Ins. B. M.* ii. p. 572, n. 34 (1852).

A rather large species, with the lateral margins of the thorax concolorous. Recorded from Hong Kong, Cambodia, India, and Ceylon, but apparently not very common anywhere.

Mr. Green's specimen is without locality.

## PLOCIOMERUS UNDULATUS.

*Plociomerus undulatus*, *Dohrn, Stett. ent. Zeit.* xxi. p. 404, n. 59 (1860).

Described from Ceylon.

## PLOCIOMERUS NIETNERI.

*Plociomerus Nietneri*, *Dohrn, Stett. ent. Zeit.* xxi. p. 404, n. 60 (1860).

Described from Ceylon.

## \*†PLOCIOMERUS INCISUS.

*Rhyparochromus incisus*, *Walk. Cat. Hem. Het. B. M.* v. p. 100, n. 158 (1872).

Described from Ceylon. Mr. Green's specimen is from Nitagala.

Possibly the same as *P. Nietneri*, Dohrn; but a good series of the closely allied species of *Rhyparochromus* and *Plociomerus* would be needed to clear up the synonymy of the Cinghalese species, which appear to be rather numerous.

## PLOCIOMERUS PUNCTULATUS.

*Plociomerus punctulatus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 79 (1863).

Described from Ceylon (Colombo), but said to be also found in Egypt.

## PLOCIOMERUS FLAVIPES.

*Plociomerus flavipes*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 80 (1863).

Described from Ceylon (Colombo).

## PLOCIOMERUS GENICULATUS.

*Plociomerus geniculatus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 81 (1863).

Described from Ceylon (Colombo).

## PLOCIOMERUS BISPINUS.

*Plociomerus bispinus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 81 (1863).

Described from Ceylon (Nura Ellia).

I have not been able to recognize any of Motschulsky's Cinghalese species of *Plociomerus* among the specimens before me.

## \*†MACROPUS SPINIMANUS.

*Macropus spinimanus*, *Motsch. Études Ent.* viii. p. 108 (1859); *Bull. Mosc.* xxxvi. (3) p. 82, t. 2. f. 19 (1863).

Described from Ceylon. Mr. Green's specimen is from Nitagala.

## MACROPUS DENTIPES.

*Macropus dentipes*, *Motsch. Études Ent.* viii. p. 108 (1859).

Described from Ceylon.

## \*†OXYCARENUS LÆTUS, sp. n.

Long. corp. 4 lin.

*Female.* Black, hairy, deeply punctured; sides of abdomen both above and below bright red nearly to the tip and marked with red between; corium hyaline, with yellowish nervures and a dusky spot at the tip; membrane and wings hyaline; sides of pectus spotted with dull red; tibiæ and first joint of tarsi yellow; four hinder tibiæ banded with black at base and tip; front femora spiny beneath.

Closely allied to the common S. European and African *O. tardus*, Hahn (= *O. lavateræ*, auct. ; ? Fabr.).

The type is from Hambantotta.

## OXYCARENUS (?) LUGUBRIS.

*Stenogaster (?) lugubris*, *Motsch. Études Ent.* viii. p. 108 (1859).

Described from Ceylon, and said to be common.

## \*ISCHNODEMUS CENTRALIS.

*Ischnodemus centralis*, *Walk. Cat. Hem. Het. B. M.* v. p. 132, n. 31 (1872).

Described from Ceylon.

## \*OPHTHALMICUS CINCTICORNIS.

Ophthalmicus cincticornis, *Walk. Cat. Hem. Het. B. M. v. p. 138, n. 32* (1872).

Described from Ceylon.

## \*OPHTHALMICUS DISPAR.

Ophthalmicus dispar, *Walk. Cat. Hem. Het. B. M. v. p. 139, n. 33* (1872).

Described from Ceylon.

## \*OPHTHALMICUS DISCIFER.

Ophthalmicus discifer, *Walk. Cat. Hem. Het. B. M. v. p. 139, n. 34* (1872).

Described from Ceylon.

## CYMUS BASICORNIS.

Cymus basicornis, *Motsch. Bull. Mosc. xxxvi. (3) p. 90* (1863).

Described from Ceylon (Colombo).

## GEOCORIS MARGINICOLLIS.

Geocoris marginicollis, *Dohrn, Stett. ent. Zeit. xxi. p. 405, n. 63* (1860).

Described from Ceylon.

## ANTHOCORIS FUNEBRIS.

Anthocoris funebris, *Motsch. Bull. Mosc. xxxvi. (3) p. 88* (1863).

Described from Ceylon (Nura Ellia).

## ANTHOCORIS PARALLELUS.

Anthocoris parallelus, *Motsch. Bull. Mosc. xxxvi. (3) p. 89* (1863).

Described from Ceylon (Nura Ellia and Colombo).

## ANTHOCORIS TANTILLUS.

Anthocoris tantillus, *Motsch. Bull. Mosc. xxxvi. (3) p. 89* (1863).

Described from Ceylon (Colombo).

## \*XYLOCORIS FUMIPENNIS.

Xylocoris fumipennis, *Walk. Cat. Hem. Het. B. M. v. p. 160, n. 15* (1872).

Described from Ceylon.

## PYRRHOCORIDÆ.

## \*†ODONTOPUS COQUEBERTI.

Lygæus Coqueberti, *Fabr. Syst. Rhyng. p. 222, n. 86* (1803).

Common in the East Indies; varies a little in size.

Mr. Green's specimens are from Colombo.



## \*†ODONTOPUS VARICORNIS.

*Cimex varicornis*, *Fabr. Mant. Ins.* ii. p. 298, n. 194 (1787).

Recorded from India, Ceylon, and Java.

Mr. Green's specimen is from Kandy.

## \*†ODONTOPUS LINEATIPES.

*Odontopus lineatipes*, *Stål, Œfv. Vet.-Akad. Handl.* xv. p. 441 (1858).

*Dysdercus lineatipes*, *Dohrn, Stett. ent. Zeit.* xxi. p. 405, n. 65 (1860).

A very handsome species. Mr. Green's specimen is without locality.

## \*†DYSDERCUS CINGULATUS.

*Cimex cingulatus*, *Fabr. Syst. Ent.* p. 719, n. 108 (1775).

Abundant from India to Australia. The typical form, with black legs and a black band on the front of the thorax, seems to be scarcer in Ceylon than the redder varieties.

Mr. Green's specimens are from Pundaloya and Hambantotta.

## \*†DINDYMUS SITA, sp. n. (Plate IV. fig. 18.)

Long. corp. 13 millim.

Rufo-testaceous, inclining to sanguineous towards the lateral margin of the thorax, and at the edges of the corium, especially beneath; clothed with fine yellowish-grey pubescence, most thickly on the pectus; antennæ black, the basal half of the last segment white. Thorax with the front and sides of nearly equal length, but widened behind, so that the hind border is about half as long again as the others; the lateral margins are slightly raised, and a groove runs across the middle, behind which the thorax is closely and thickly punctured, as are also the edges of the corium bordering on the scutellum. Membrane fusco-hyaline, with a large oval black spot at the base. The rostrum extends to the middle coxæ. Femora rufo-testaceous; knees, tibiæ, and tarsi blackish; front femora thickened and denticulated, several of the intermediate teeth being larger than the others.

Pundaloya.

Much resembles a species from Hong Kong, Philippines, Dorey, &c., ticketed *Dysdercus monostigma* by Walker; but all the specimens of the latter species are much longer and narrower, with the antennæ black, or with the penultimate segment, and some-

tines also the basal ones, inclining to red; and there is generally a black line at the base of the scutellum.

*MELAMPHAUS FULVOMARGINATUS.*

*Dysdercus fulvomarginatus*, *Dohrn, Stett. ent. Zeit.* xxi. p. 405, n. 66 (1860).

Described from Ceylon.

\*†*MELAMPHAUS LATERALIS.*

*Melamphaus lateralis*, *Walk. Cat. Het. Hem. B. M.* vi. p. 13, n. 4 (1873).

Described from Ceylon. Mr. Green's specimens are from Deltota.

I suspect that a large series would show that *Dysdercus fulvomarginatus*, Dohrn, and *Melamphaus marginalis*, Walk., are nothing more than discoloured specimens of this insect, which will then represent the normal form of the species, for which, however, Dohrn's name must then be retained; indeed, one of Mr. Green's specimens was actually labelled *D. fulvomarginatus* by the late Mr. Atkinson.

\*†*MELAMPHAUS MARGINALIS.*

*Melamphaus marginalis*, *Walk. Cat. Het. Hem. B. M.* vi. p. 14, n. 6 (1873).

Described from Ceylon. Mr. Green's specimen is from Nawalapitya.

\**MELAMPHAUS RUBIDUS.*

*Melamphaus rubidus*, *Walk. Cat. Het. Hem. B. M.* vi. p. 14, n. 7 (1873).

Described from Ceylon.

Singularly resembles a Reduviid in Mr. Green's collection.

\*†*PHYSOPELTA GUTTA.*

*Lygæus (Pyrrhocoris) gutta*, *Burm. Nova Acta Acad. Leop.-Carol.* xvi. *Suppl.* p. 300, pl. xli. f. 10 (1834).

A common East-Indian species.

Mr. Green's specimen is without special locality.

CAPSIDÆ.

*CAPSUS SEMICLUSUS.*

*Capsus semiclusus*, *Walk. Cat. Het. Hem. B. M.* vi. p. 118, n. 275 (1873).

Described from Ceylon.

*CAPSUS SUBIRRORATUS.*

*Capsus subirroratus*, *Walk. Cat. Het. Hem. B. M.* vi. p. 119, n. 277 (1873).

## CAPSUS INCISURATUS.

*Capsus incisuratus*, *Walk. Cat. Hem. Het. B. M.* vi. p. 121, n. 282 (1873).

Described from Ceylon.

## CAPSUS ALBIPES.

*Capsus albipes*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 82 (1863).

Described from Ceylon (Patannas).

## \*†CAPSUS RAVANA, sp. n. (Plate IV. fig. 10.)

Long. corp. 7 millim.

Testaceous, more or less mottled and speckled with reddish; head and pronotum with longitudinal reddish or brownish stripes; pronotum longitudinally striated, with the shoulder-angles rather prominent; scutellum punctured, brownish, with three pale longitudinal lines meeting at the tip; tegmina and wings hyaline; carina with the nervures yellowish towards the base and red towards the extremity, enclosing a large yellow space, of a long triangular form, on the costa at the extremity of the corium. Antennæ reddish, thickened towards the extremity of the second joint, and the terminal joints darker, as are likewise the tarsi.

Pundaloya, very common.

Somewhat approaches the genus *Lopus*.

## \*†CAPSUS RAMA, sp. n.

Long. corp. 8-10 millim.

Yellow, vertex with a slender black line between the eyes, and meeting behind them; pronotum blackish at the base, and with narrow black central and marginal lines, or with three short black lines at the base, the central line reddish, and the lateral lines reddish, black only at the base; pale part of the pronotum transversely striated, the hinder margin black, the lateral angles not produced. Scutellum transversely striated, more or less black towards the base and extremity, and divided by a deep groove. Wings hyaline, the corium with brown nervures; the costal nervure, and the opaque space at the extremity of the corium reddish, the latter yellowish in the centre. Antennæ reddish brown, darker or lighter, the second joint not distinctly thickened, joints 3 and 4 narrowly yellow at base. Legs yellowish, tarsi black, hind

femora dotted with brown, hind tibiæ red. Under surface of body yellow, with a narrow red line on each side.

Pundaloya.

Allied to *Capsus lineifer*, Walk.

\*†CAPSUS ANTENNATUS, sp. n.

Long. corp. 7-8 millim.

Head and pronotum testaceous, finely punctured, pronotum frequently varied with brown in the middle or behind; antennæ with the last three joints more or less black at the extremities, and the second often black in the middle as well; scape sometimes likewise black; scutellum brown, tip usually testaceous; corium brown, set with short white bristles; costa broadly testaceous, intersected by a large reddish-brown spot just before the extremity; legs testaceous, more or less dotted with brown, and with two obsolete brown bands towards the tip of the hind femora; legs with longer bristles than the other Cinghalese *Capsi*. Pectus blackish in the middle; ventral surface of the abdomen variable in colour, reddish, testaceous, or blackish.

Pundaloya.

\*†CAPSUS LANKANUS, sp. n.

Long. corp. cum tegm. 4 millim.

Head and thorax black, antennæ with the base of the first and third joints white; eyes white, clavus black; corium chestnut-brown, with a white transverse band near the base, and another preceding the tip, which is blackish; membrane and wings subhyaline; abdomen beneath with a broad white transverse band at the base.

The type is from Nitagala.

#### DERÆOCORIS RUBROVULNERATUS.

*Deræocoris rubrovulneratus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 83 (1863).

Described from Ceylon (Nura Ellia).

#### DERÆOCORIS VIRIDANUS.

*Deræocoris viridanus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 83 (1863).

Described from Ceylon (Nura Ellia).

#### DERÆOCORIS PICEONIGER.

*Deræocoris piceoniger*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 84 (1863).

Described from Ceylon (Colombo).

## LEPTOMEROCORIS SIMPLEX.

*Leptomerocoris simplex*, *Walk. Cat. Hem. Het. B. M.* vi. p. 145, n. 107 (1873).

Described from Ceylon.

## LEPTOMEROCORIS ALBIVIRIDESCENS.

*Leptomerocoris albiviridescens*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 85 (1866).

Described from Ceylon (Patannas).

## LEPTOMEROCORIS (?) PISTACINUS.

*Leptomerocoris (?) pistacinus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 85 (1863).

Described from Ceylon (Patannas).

## LEPTOMEROCORIS (?) ALBOFASCIATUS.

*Leptomerocoris (?) albofasciatus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 86 (1863).

Described from Ceylon (Patannas).

## \*†LEPTOMEROCORIS PUNCTATUS, sp. n.

Long. corp. 5 millim.

Testaceous; pronotum more yellow; a band of 3 large, nearly connected black spots runs from behind each eye to the lateral angles of the pronotum, and there are 4 more conspicuous black spots arranged in a semicircle in front of the pronotum. Scutellum and corium longitudinally striped with black and testaceous: towards the extremity of the corium is a red spot on the costa bordered with yellow, and with a black spot before and behind. Membrane with the nervure black and a short black streak beyond it.

Exact locality not stated.

## LIOCORIS GLABRATUS.

*Liocoris glabratus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 87, pl. ii. f. 20 (1863).

Described from Ceylon (Nura Ellia and Patannas).

## \*MONALOCORIS BIPUNCTIPENNIS.

*Monalocoris bipunctipennis*, *Walk. Cat. Hem. Het. B. M.* vi. p. 159, n. 2 (1873).

Described from Ceylon.

## \*†HELOPELTIS ANTONII.

*Helopeltis Antonii*, *Sign. Ann. Soc. Ent. France*, (3) vi. p. 502, pl. xii. f. 2 (1858).

Common on tea, cocoa, and cotton in Ceylon; particularly injurious to cocoa (*E. E. G.*).

Several closely allied species are met with in Java, New Guinea, &c.

## TINGIDIDÆ.

## \*DICTYONOTA CINGALENSIS.

*Dictyonota cingalensis*, *Walk. Cat. Hem. Het. B. M.* vi. p. 178, n. 14 (1873).

Appears to be a common species in Ceylon.

## MONANTHIA SUBOVATA.

*Monanthia subovata*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 91 (1863).

Described from Ceylon (Colombo).

This species is probably allied to *Dictyonota cingalensis*, Walker.

## \*†MONANTHIA (?) ATRA.

*Monanthia atra*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 91 (1863).

Described from Ceylon (Patannas).

Taken by Mr. Green at Nitagala.

## MONANTHIA (?) TINGOIDES.

*Monanthia (?) tingoides*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 92 (1863).

Described from Ceylon (Nura Ellia).

## \*†ELASMOGNATHUS GREENI, sp. n. (Plate IV. fig. 5.)

Long. corp. 6 millim.

Narrow, linear, deep black; antennæ (except the scape and terminal joints, which are black) and the legs (except the black tarsi) rufo-testaceous; the front of the thorax also shows a tendency to this colour. Head with three strong spines above; antennæ with the first two joints short and broad, third very long and slender, fourth half as long as the third and pubescent. Thorax with two large lateral lobes, projecting upwards and forwards, very coarsely rugose; on the median line runs a continuous carina, and there are also lateral ones, interrupted by the lobes; tegmina black, with long vitreous spots along the costa,

interrupted in the middle and at the tip, and a row of smaller ones in the middle of the hind margin.

A much larger and narrower species than the Indian *E. Helferi*, Fieb.

Pundaloya and Nitagala. Found on wild pepper (*E. E. G.*).

\*†*ELASMOGNATHUS PALLIDA*, sp. n.

Size and shape of *E. Greeni*, which it closely resembles except in colour. Pale testaceous; head black above; spines and antennæ pale, terminal joint of antennæ black, except at the base; thorax with the front and the lateral appendages nearly white; rest of thorax and tegmina slightly browner, except on the margins, which are rather broadly vitreous; legs testaceous; tarsi slightly darker.

Nitagala.

Perhaps only a variety of *E. Greeni*.

\*†*TINGIS GLOBULIFERA*. (Plate IV. fig. 11.)

*Tingis globulifera*, *Walk. Cat. Hem. Het. B. M.* vi. p. 182, n. 27 (1873).

Mr. Green's specimens are from Nitagala and vary a little in depth of colour.

The types are from Madras, where the insect is stated to live on heliotrope.

\*†*BRACHYRHYNCHUS ORIENTALIS*.

*Brachyrhynchus orientalis*, *Lap. Hém.* 54.

*Crimia nigra*, *Dohrn, Stett. ent. Zeit.* xxi. p. 406, n. 71 (1860).

An abundant species throughout the East Indies.

Mr. Green's specimens are from Colombo and Pundaloya.

\**CRIMIA VERRUCICOLLIS*.

*Crimia verrucicollis*, *Walk. Cat. Hem. Het. B. M.* vii. p. 13, n. 6 (1873).

Described from Ceylon.

\**CRIMIA LATERALIS*.

*Crimia lateralis*, *Walk. Cat. Hem. Het. B. M.* vii. p. 14, n. 7 (1873).

Described from Ceylon.

\**CRIMIA RUBRESCENS*.

*Crimia rubescens*, *Walk. Cat. Hem. Het.* vii. p. 14, n. 8 (1873).

Abundant from India to Australia.

Mr. Green's collection contained specimens of two species of *Crimia*, apparently distinct from any of the foregoing, but which I do not describe because they are immature.

## CIMICIDÆ.

## \*CIMEX LECTULARIUS.

*Cimex lectularius*, *Linn. Syst. Nat.* i. p. 441, n. 1 (1758).

A cosmopolitan species; but there is some reason to believe that it was originally confined to Africa, where it has always been known by the name of Bug, or at least to the tropical and sub-tropical regions of the Old World, and that it was introduced into America by slave-ships, and brought thence to Northern Europe. It was known to Aristotle as occurring in the Mediterranean Region in his time; but I believe the earliest recorded date of its having been observed in England is 1503.

Nevertheless Mr. C. O. Waterhouse informs me that an insect which cannot be distinguished from this is found in the Lower Tertiaries of Scotland; but even granting that the identification is correct, this insect, like the rest of the then existing fauna and flora, would almost certainly have been driven out or exterminated by the Glacial Period; and we cannot therefore admit that the observation proves more than that the insect may have been an inhabitant of Scotland at some former period.

## REDUVIIDÆ.

## \*†LESTOMERUS HORRIDUS, sp. n. (Plate IV. fig. 16.)

Long. corp. 20 millim.

Blue-black, sparingly clothed with long bristles; extremities of tibiæ and tarsi showing a tendency to shade into rufo-testaceous; wings rudimentary; inner portion of tegmina testaceous; abdomen with testaceous marginal spots on the front of each segment both above and below; front femora thickened; vertex grooved; frontal lobe of thorax with a shallow groove at the back and with three shallow oblique depressions on each side; hinder lobe not grooved.

The type is not quite mature.

Allied to *L. affinis*, Serv.; but this is a shorter and broader insect, with the abdominal margins unspotted.

Except that the legs are black, it has likewise much resemblance



to *Pirates ruffemur*, Walk., which should perhaps be referred to the present genus.

Konigala, Jan. 1890 (*E. E. G.*).

\*PIRATES RUFFEMUR.

*Pirates ruffemur*, *Walk. Cat. Hem. Het. B. M.* vii. p. 119, n. 76 (1873).  
Described from Ceylon.

\*†PIRATES CUMINGI.

Rascelius Cumingi, *Dohrn, Stett. ent. Zeit.* xxi. p. 407, n. 95 (1860).

Described from Ceylon.

Mr. Green's specimens are without special locality. They are labelled "*Sirthenes flavipes*, Stål."

PIRATES CINGALENSIS.

*Peirates cingalensis*, *Dohrn, Stett. ent. Zeit.* xxi. p. 408, n. 97 (1860).

Described from Ceylon.

PIRATES FUSCICORNIS.

*Peirates fuscicornis*, *Dohrn, Stett. ent. Zeit.* xxi. p. 408, n. 98 (1860).

Described from Ceylon.

\*†PIRATES STIGMATIVENTRIS, sp. n.

Long. corp. 10 millim.

Black; the antennæ, coxæ in great part, base of femora, knees, tibiæ and tarsi, and under surface of abdomen, besides a line running below the rim of the pronotum and below the wings, rufo-testaceous; tegmina abbreviated in the specimens described, black and pointed, hardly extending for more than a third of the length of the abdomen; abdomen above black, with the lateral edges spotted with rufo-testaceous, and two pale spaces at the extremity of the last two dorsal segments, each containing a round black spot; abdomen beneath rufo-testaceous, the colour extending up the median line of the pectus; last two dorsal segments shining black in the middle; spiracles placed on black spots, between each of which are two small black dots; the black colour of the pectus extends round the base of the hind coxæ, where it ceases. Within the rim of the upper surface of the abdomen, and also on the median line, are rows of small, raised, paler dots.

Nitagala.

Allied to *P. fuscicornis*, Dohrn, and to *P. ypsilon* (infra); but differs in the colour of the legs, antennæ, abdomen, &c.

\*†PIRATES YPSILON, sp. n. (Plate IV. fig. 8.)

Long. corp. 13 millim.

Dull black; antennæ testaceous; scape dark reddish brown; scutellum with a Y-shaped carina, the part behind the branches of a more velvety black. Tegmina dull black, with a large testaceous blotch on the middle of the inner margin; inner margin to half the distance to the base, and the centre of the tegmina beyond to the crossing of the nervures (which at this point are slightly testaceous), velvety black. Rostrum shining black, testaceous at the extremity. Abdominal margin spotted with testaceous. Legs testaceous, the base of the coxæ, the trochanters, the front femora, and the basal half of the four hinder femora black; tibiæ blackish above towards the tips.

Allied to the last two species.

Pundaloya. Found under decaying leaves (*E. E. G.*).

PIRATES QUADRINOTATUS.

*Reduvius quadrinotatus*, *Fabr. Ent. Syst. Suppl.* p. 544 (1798).

||*Peirates biguttatus*, *Dohrn, Stett. ent. Zeit.* xxi. p. 407, n. 96 (1860).

Recorded from India and Ceylon.

\*†PIRATES PICTUS.

*Pirates* (?) *pictus*, *Herr.-Schäff. Wanz. Ins.* viii. p. 63, pl. 268. f. 827 (1848).

Recorded from India, China, and Ceylon.

The locality of Mr. Green's specimens is not noted.

EUMERUS INSIGNIS.

*Eumerus insignis*, *Reuter, Act. Fenn.* xii. p. 317 (1881).

Described from Ceylon.

PROSTEMMA CARDUELIS.

*Prostemma carduelis*, *Dohrn, Stett. ent. Zeit.* xix. p. 229, pl. i. f. 8 (1859).

Described from Ceylon.

NABIS CRIBRATICOLLIS.

*Gorpis cribraticollis*, *Stal, Œfv. Vet.-Akad. Förh.* xvi. p. 377 (1860).

Described from Ceylon.

## \*ACANTHASPIS QUINQUESPINOSA.

Reduvius quinquespinosus, *Fabr. Spec. Ins.* ii. p. 382, n. 27 (1781).

Recorded from India and Ceylon.

## \*†ACANTHASPIS TERGEMINA.

Platymeris tergemina, *Burm. Handb. Ent.* ii. p. 233, n. 2 (1839).

Recorded from India and Ceylon.

This is either a variable species or else there are several closely allied forms. A good series of the *Acanthaspides* of Ceylon would be very interesting.

Generally found about houses; the larva probably lives among dust and dirt (*E. E. G.*).

## \*†ACANTHASPIS ANGULARIS.

*Acanthaspis angularis*, *Stål, Œfv. Vet.-Akad. Förh.* xvi. p. 188 (1860).

Described from Ceylon.

Mr. Green's specimen is from Colombo.

## \*†ACANTHASPIS HELLUO.

*Acanthaspis helluo*, *Stål, Ann. Soc. Ent. France*, (4) iii. p. 50 (1863).

Recorded from India and Ceylon.

The locality of Mr. Green's specimen is not recorded.

## \*ACANTHASPIS PICTIPES.

*Acanthaspis pictipes*, *Walk. Cat. Hem. Het. B. M.* vii. p. 176, n. 52 (1873).

Described from Ceylon.

## ACANTHASPIS BISTILLATA.

*Acanthaspis bistillata*, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 443 (1858).

Described from Ceylon.

## ACANTHASPIS FUSCONIGRA.

*Acanthaspis fusconigra*, *Dohrn, Stett. ent. Zeit.* xxi. p. 407, n. 89 (1869).

Described from Ceylon.

## \*REDUVIUS DIVISICOLLIS.

*Reduvius divisicollis*, *Walk. Cat. Hem. Het. B. M.* vii. p. 197, n. 51 (1873).

Described from Ceylon. The type appears to be a discoloured specimen.

\*†*APECHTIA METAPYRRHA.*

*Apechtia metapyrrha*, *Reuter, Act. Fenn.* xii. p. 321 (1881).

Described from Ceylon.

## OPINUS PYRRHUS.

*Lenæus pyrrhus*, *Stål, Öfv. Vet.-Akad. Förh.* xvi. p. 187 (1860).

Described from Ceylon.

## \*† (?) OPINUS RUGICOLLIS.

*Opinus rugicollis*, *Walk. Cat. Hem. Het. B. M.* viii. p. 3 (1873).

Described from Ceylon. Mr. Green's collection contains an immature specimen from Maskaleya which appears to belong to this species.

## CERILOCUS DISCOLOR.

*Cerilocus discolor*, *Stål, Stett. ent. Zeit.* xxii. p. 146 (1861).

Described from Ceylon.

## TIARODES ELEGANS.

*Tiarodes elegans*, *Stål, Ann. Soc. Ent. France*, (4) iii. p. 55 (1863).

Described from Ceylon.

## \*†TIARODES VARICOLOR.

*Tiarodes varicolor*, *Stål, Ann. Soc. Ent. France*, (4) iii. p. 55 (1863).

Recorded from the Philippines, Java, Penang, and Ceylon.

Mr. Green's specimen, which seems to belong to this variable species, is without special locality.

Genus *DICEPHALUS*, g. n.

The entire insect sparingly clothed with short diverging hair.

*Head*.—Eyes rounded, very prominent, as broad as the front lobe of the pronotum.

Frontal lobe commencing at the back of the eyes, with nearly parallel sides and subtruncated in front.

Hinder lobe broader and shorter, forming a long oval, very convex above, and with a very large ocellus on each side in front.

Antennæ 4-jointed, rising in a stout oblique process on each side of the frontal lobe; scape thickened, about three times as long as broad; second joint the longest, about four times as long as the scape and fully half as long again as the third joint; fourth joint about as long as the third and pointed at the tip.

Rostrum 4-jointed, short and broad at the base; the last joint conical, pointed.

Pronotum trilobate, each lobe distinctly wider than the preceding; front lobe slightly grooved in the middle; middle lobe more deeply, but not quite to the back, and with a shallow oblique groove on each side.

Scutellum triangular.

Metanotum with a short thick spine at each of the hinder angles.

Abdomen as broad as the hinder lobe of the pronotum, depressed, strongly keeled beneath.

Tegmina moderately long and broad; costa and inner margin nearly straight, the latter slightly oblique; hind margin rounded; costal nervure only indicated at the base, but throwing off a slender hairy line close to, and nearly parallel with, the costa, and curving round so as to enclose a long cell close to the basal half of the costa; subcostal rising just beyond the base and throwing off another slender line enclosing a large cell close to the hinder half of the costa, and then continued as a slender line parallel to the hind margin; the middle of this cell is connected beneath by a short transverse nervure with the upper outer cell formed by the median nervure, which rises near the base and ramifies to form two upper and one lower cell; the upper outer cell throws out two nervures to the hind margin, and is connected by a transverse nervure below with the anal nervure, which latter is continued to the boundary line on the hind margin. The outer nervures are apparently double, from being fringed with short black bristles on each side; towards the costa there are also more scattered black bristles, and the costa and hind margin are also fringed with short hairs.

Wings with the subcostal nervure forming a long cell, from the extremity of which a nervure runs to the hind margin; another nervure descends from the middle of the cell and curves outwards to the hind margin; and there is also a lower simple nervure.

*Legs.*—Front and hind femora slightly thickened and carinated; front tibiæ flattened and much widened at the extremity, which is cut off square, and armed with three sharp spines on the lower edge; front tarsi 2-jointed, the terminal joint consisting apparently of one long, sharp, curved spine, but on very careful examination the extremity is seen to consist of two short claws;

middle tibiæ thickened towards the extremity; middle and hind tarsi apparently consisting of one long joint with two claws, but actually 2-jointed.

\*†DICEPHALUS TELESCOPICUS, sp. n. (Plate IV. figs. 14, 14 a.)

Long. corp. 5 millim.; exp. tegm. 10–11 millim.

Varies from chestnut-brown to blackish; head in front of antennæ, rostrum, legs, and abdomen, at least at the sides, rufotestaceous; coxæ, trochanters, and knees testaceous.

Pundaloya.

This very remarkable little species seems to have been quite overlooked by previous observers, in spite of its abundance.

Found flying in bright sunshine in open glade of jungle near felled timber. Flight sustained; three or four insects found frequently playing together like common flies in a room, or like Ephemeridæ (*E. E. G.*).

\*PETALOCHEIRUS MALAYUS.

Petalochairus malayus, *Stål, Œfv. Vet.-Akad. Förh.* xvi. p. 191 (1860).

Recorded from India, Ceylon, and Pulo Penang.

PETALOCHEIRUS BRACHIALIS.

Petalochairus brachialis, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 444 (1858).

Described from Ceylon.

\*†CONORRHINUS RUBROFASCIATUS.

Cimex rubrofasciatus, *De Geer, Ins.* iii. p. 349, pl. xxxv. f. 19 (1773).

Common in the warmer parts of both hemispheres.

Mr. Green's specimen is from Nawalapitya.

\*†OPISTOPLATYS INDICUS.

Opistoplatys indicus, *Walk. Cat. Hem. Het. B. M.* viii. p. 20, n. 2 (1873).

Recorded from India and Ceylon.

Mr. Green's specimen is from Hambantotta.

\*†ONCOCEPHALUS CINGALENSIS.

Oncocephalus cingalensis, *Walk. Cat. Hem. Het. B. M.* viii. p. 26 (1873).

Walker's description is taken from a discoloured specimen. Mr. Green's specimens are from Putlam.

## ONCOCEPHALUS NABOIDES.

Oncocephalus naboides, *Walk. Cat. Hem. Het. B. M.* viii. p. 27, n. 17 (1873).

Described from Ceylon.

## STACCIA PLEBEIA.

Staccia plebeia, *Stål, Berl. ent. Zeitschr.* x. p. 166 (1866).

Described from Ceylon.

## \*SASTRAPADA BIPUNCTATA.

Sastrapada bipunctata, *Walk. Cat. Hem. Het. B. M.* viii. p. 28, n. 7 (1873).

Described from Ceylon.

## CANTHESANCUS TRIMACULATUS.

Canthesancus trimaculatus, *Amyot & Serv. Ins. Hémipt.* p. 389, pl. vii. f. 20 (1843).

Included in Dohrn's list as Cinghalese ; but originally described from Java. Dohrn's specimens may have belonged to *C. helluo*, Stål.

## \*CANTHESANCUS HELLUO.

Canthesancus helluo, *Stål, Ann. Soc. Ent. France*, (3) iii. p. 44 (1865).

Described from Ceylon.

## CANTHESANCUS FALLENI.

Theodelmus Falleni, *Stål, Öfv. Vet.-Akad. Förh.* xvi. p. 378 (1860).

Described from Ceylon.

## PYGOLAMPIS FÆDA.

Pygolampis fæda, *Stål, Öfv. Vet.-Akad. Förh.* xvi. p. 379 (1860).

Described from Ceylon.

## \*†ECTRICHODIA LINNEI.

Ectrichodia Linnei, *Stål, Öfv. Vet.-Akad. Förh.* xvi. p. 178 (1860).

Ectrichodia discrepans, *Walk. Cat. Hem. Het. B. M.* viii. p. 46, n. 33 (1873).

Recorded from India and Ceylon.

Mr. Green's specimen has no locality label.

## \*†SCADRA FUSCICRUS.

Scadra fuscicrus, *Stål, Öfv. Vet.-Akad. Förh.* xvi. p. 183 (1860).

Described from Ceylon.

## SCADRA ANNULICORNIS.

*Scadra annulicornis*, *Reuter, Act. Fenn.* xii. p. 309 (1881).

Described from Ceylon.

## \*†SCADRA CINCTICORNIS, sp. n.

Long. corp.  $12\frac{1}{2}$  millim.

Coral-red; antennæ black, setose, second and third joints with a yellow ring just beyond the base; head and pronotum rugose; pronotum laterally striated and with the crossing and lateral grooves rather deep, but the median depression ceasing before the extremity, and the cross grooves ceasing before the median depression; a black spot on each of the hind lobes of the pronotum, a large spot on the inner angle of the corium like an obtuse-angled triangle with its acute angles truncated; the membrane, the tibiæ, and last joint of the tarsi all black; femora red, basal joints of tarsi and claws pale yellow; ventral surface of abdomen with a row of five rather large black spots in the middle and one on each side, the last three spots of the lateral rows confluent.

Closely allied to *S. fuscicrus*, Stål, from which the banded antennæ and much more coarsely punctured pronotum are amply sufficient to distinguish it.

## \*ANTIOPA PUMILA.

*Antiopa pumila*, *Stal, Ann. Soc. Ent. France*, (4) iii. p. 47 (1863).

Described from Ceylon.

## LARYMNA PILICORNIS.

*Reduvius pilicornis*, *Fabr. Mant. Ins.* ii. p. 311, n. 29 (1787).

Recorded from India, Ceylon, and Sumatra.

## \*†SYCANUS COLLARIS.

*Reduvius collaris*, *Fabr. Spec. Ins.* ii. p. 380, n. 15 (1781).

A common species in South-eastern Asia.

## SYCANUS RECLINATUS.

*Sycanus reclinatus*, *Dohrn, Stett. ent. Zeit.* xx. p. 98 (1859).

Described from Ceylon.

## \*†SYCANUS (?) MILITARIS, sp. n.

Long. corp. 21 millim.

Red, very hairy; antennæ except at base, tibiæ except at base, tegmina except a portion of the costal margin near the base, and



the whole of the under surface of the abdomen except the lateral margins, black or blue-black; the tip of the rostrum and the pleura are also marked with blackish. Front lobe of pronotum very uneven, and with a wide groove in the middle; hind lobe very coarsely granulated, lateral margins strongly expanded, but not pointed or spined.

The head is a little shorter than in typical *Sycanus*.

Putlam.

HARPACTOR NIGRORUBER.

Reduvius (*Harpactor*) *nigroruber*, *Dohrn, Stett. ent. Zeit.* xxi. p. 406 (1860).

Described from Ceylon.

\*†HARPACTOR BICOLORATUS, sp. n.

Long. corp. cum tegm. 11 millim.

Red and black, hairy; head red, the following parts black:—the antennæ, rostrum above, and last joint, a central streak running backwards from the rostrum and diminishing between the eyes to a mere line, but followed by a broad band covering the whole of the occiput except a narrow lateral line; there is also a slender black line running backwards on the sides of the head behind each eye. Thorax red; all the sutures, the greater part of the front of the hinder lobe of the pronotum, except at the margins, and a great part of the pleura and pectus, black; legs black, coxæ red, marked with a black spot. Scutellum black, the apex red. Tegmina blue-black, iridescent; the costa of the corium broadly red. Abdomen red, the sutures on the ventral surface rather broadly black, and a black central line on the terminal segment beneath.

Probably allied to *Harpactor nigroruber*, *Dohrn*.

Hambantotta.

HARPACTOR SORDIDEPENNIS.

Reduvius (*Harpactor*) *sordidepennis*, *Dohrn, Stett. ent. Zeit.* xxi. p. 406 n. 80 (1860).

Described from Ceylon.

\*†HARPACTOR OBSCURUS, sp. n.

Long. corp. 9–10 millim.

Dull brown, with a slight æneous shade, especially on the tegmina; under surface darker; basal joint of antennæ and hind

tibiæ (except a black ring at the base of the latter) reddish; femora and four front tibiæ spotted and streaked with testaceous; abdomen black, lateral margins broadly spotted with testaceous, and there is also at least one row of smaller testaceous spots on each side of the abdomen.

Much resembles the Chinese *H. impressicollis*, Stål, but smaller, and with the pale markings less distinct.

Pundaloya.

*ALCMENA ANGUSTA.*

*Alcmena angusta*, Stål, *Æfv. Vet.-Akad. Förh.* xvi. p. 195 (1860).

Described from Ceylon.

*ENDOCHUS ALBOANNULATUS.*

*Endochus alboannulatus*, Stål, *Æfv. Vet.-Akad. Förh.* xvi. p. 194 (1860).

Described from Ceylon.

\*†*ENDOCHUS CINGALENSIS.*

*Endochus cingalensis*, Stål, *Stett. ent. Zeit.* xxii. p. 135 (1861).

♀. *E. consors*, Stål, *l. c.* (1861).

Common in Ceylon.

Frequents cinchona-trees; a pair taken *in coitû*, proving *E. consors* to be the same species (*E. E. G.*).

Mr. Green's collection contains a single specimen of an allied species, uniform rufo-testaceous in colour; but it is not in sufficiently good condition to describe.

*RIHIRBUS TROCHANTERICUS.*

*Rihirbus trochantericus*, Stål, *Stett. ent. Zeit.* xxii. p. 132 (1861).

Described from Ceylon.

*EUAGORAS FUSCISPINUS.*

*Euagoras fuscispinus*, Stål, *Æfv. Vet.-Akad. Förh.* xxii. p. 135 (1861).

*Darbanus fuscispinus*, Stål, *Æfv. Vet.-Akad. Förh.* xvi. p. 194 (1860).

Described from Ceylon.

*MYOCORIS GILVUS.*

*Myocoris gilvus*, *Burm. Trans. Ent. Soc. Lond.* ii. p. 104 (1837-1840).

Recorded from Java, Sumatra, and Ceylon.

## Genus FORMICORIS.

Head extending for about half its length in front of the eyes, in a broad truncated cone; eyes very prominent, ocelli very small, placed on the vertex nearly opposite the hind border of the eyes; head with the postocular part narrowed obliquely, and then forming a short and very distinct neck; antennæ nearly as long as the body, slender, situated on the sides of the upper part of the head, halfway between the eyes and the extremity, slender; the scape about as long as the breadth of the head; third joint twice as long as the scape, second slightly longer than the third, fourth slightly curved and nearly as long as the second and third together. Rostrum stout, extending as far as the hind coxæ. Thorax spinose, rounded in front. Legs long and slender, unarmed; tarsi 3-jointed; claws bifid. Tegmina rudimentary. Abdomen subglobose, pointed at each end, much wider than the head or thorax, with the lateral edges raised and extremely prominent.

I cannot fix the exact affinities of this remarkable insect; but I place it provisionally near *Myocoris*, which it resembles in the form of the head. It is undoubtedly one of the *Reduviidæ*, and is of extreme interest on account of its extraordinary resemblance to the black spiny arboreal ants of the genus *Hoplomyrmus*, Gerst. (*Polyrhachis*, Smith), so common in the East Indies. *F. inflatus*, or a closely-allied species, seems to be common in all parts of India, as well as in Ceylon (*cf.* Proc. Ent. Soc. Lond., July 1891).

FORMICORIS INFLATUS, sp. n. (Plate IV. figs. 17, 17 a.)

Long. corp. 7 lin.

Dull black, coriaceous, very finely pubescent; tegmina abbreviated, not extending beyond the contracted base of the abdomen, longitudinally ridged, and with very large punctures between, the outer tips whitish. Thorax with a strong spine on each side at the base of the tegmina, and a third rising between them at the tip of the scutellum. Tarsi whitish, the last joint on the four hind legs darker. Abdomen smooth, shining, slightly iridescent, sericeous (red in an immature specimen). The last joint of the antennæ testaceous.

Nitagala.

ZELUS ARMATISSIMUS.

*Polididus armatissimus*, Stål, *Æft. Vet.-Akad. Förh.* xvi. p. 376 (1860).

Described from Ceylon.

\*†*ISANTHA ARMIPES*.

*Harpactor armipes*, *Stål, Efv. Vet.-Akad. Förh.* xii. p. 189 (1855).

*Isantha armipes*, *Stål, Stett. ent. Zeit.* xxii. p. 138 (1861).

Described from Ceylon.

*SINEA HOPLITES*.

*Sinea hoplites*, *Dohrn, Stett. ent. Zeit.* xxi. p. 405, no. 74 (1860).

Described from Ceylon.

*SINEA JAVANENSIS*.

*Sinea javanensis*, *Amyot & Serv. Ins. Hémipt.* p. 376 (1843).

Included in Dohrn's list as Cinghalese.

*SINEA PELTASTES*.

*Sinea peltastes*, *Dohrn, Stett. ent. Zeit.* xxi. p. 406 (1860).

Described from Ceylon.

## EMESIDÆ.

\*†*PLOCARIA OCLATA*.

*Plocaria oculata*, *Reuter, Act. Fenn.* xii. p. 338 (1881).

Described from Ceylon.

Mr. Green's specimen is from Nitagala.

*GARDENA MELANARTHURUM*.

*Gardena melanarthrum*, *Dohrn, Linn. Ent.* xiv. p. 214 (1860).

Described from Ceylon.

*EMESA HENRICI*.

*Emesa Henrici*, *Dohrn, Linn. Ent.* xiv. p. 218 (1860).

Described from Ceylon. Dohrn speaks of this species as the slenderest of all insects.

*EMESA INVISIBILIS*.

*Emesa invisibilis*, *Dohrn, Linn. Ent.* xiv. p. 219, pl. i. f. 7 (1860).

Described from Ceylon.

## GERRIDÆ.

*GERRIS NITIDA*.

*Hydrometra nitida*, *Mayr, Verh. zool.-bot. Ges. Wien*, xv. p. 443 (1865)

Described from Ceylon.

\*†*GERRIS PECTORALIS*.

*Hydrometra pectoralis*, *Mayr, Verh. zool.-bot. Ges. Wien*, xv. p. 443 (1865).

Described from Ceylon.

Mr. Green's specimens of this species are from Pundaloya; but most of his water-bugs are from Nitagala, Pundaloya being rather dry.

GERRIS ARMATA.

*Gerris armata*, *Spin. Essai sur les Ins. Hém.* p. 65 (1837).

Described from Ceylon.

GERRIS ADELAIDIS.

*Gerris Adelaidis*, *Dohrn, Stett. ent. Zeit.* xxi. p. 408, n. 105 (1860).

Described from Ceylon.

\*†CYLINDROSTETHUS FIEBERI.

*Cylindrostethus Fieberi*, *Mayr, Verh. zool.-bot. Ges. Wien*, xv. p. 444 (1865).

Described from Ceylon.

Mr. Green's specimen is from Nitagala.

\*†PTILOMERA LATICAUDATA.

*Gerris laticaudata*, *Hardw. Trans. Linn. Soc. Lond.* xiv. p. 134, pl. vi. f. 1-4 (1825).

*Ptilomera cingalensis*, *Stål, Œfv. Vet.-Akad. Förh.* xii. p. 190 (1856).

Mr. Green's specimens are from Pundaloya.

HALOBATES STÅLI.

*Halobates Ståli*, *Dohrn, Stett. ent. Zeit.* xxi. p. 408, n. 103 (1860).

Described from Ceylon.

HALOBATES BREVIS.

*Metrocotis brevis*, *Mayr, Verh. zool.-bot. Ges. Wien*, xv. p. 445 (1865).

Described from Ceylon.

NEPIDÆ.

\*†BELOSTOMA INDICA.

*Belostoma indica*, *St.-Farg. & Serv. Encycl. Méth.* x. p. 272 (1825).

Common throughout the warmer parts of the Old World.

\*†DIPLONYCHUS RUSTICUS.

*Nepa rustica*, *Fabr. Syst. Ent.* p. 691, n. 2 (1775).

Common throughout the East Indies.

\*†NEPA RUBRA.

*Nepa rubra*, *Linn. Syst. Nat.* i. p. 440, n. 2 (1758).

Common throughout the East Indies.

NEPA FLAVOVENOSA.

*Nepa flavovenosa*, *Dohrn, Stett. ent. Zeit.* xxi. p. 409 (1860).

Described from Ceylon.

\*†*NEPA MACULATA*.

*Nepa maculata*, *Fabr. Syst. Ent.* p. 692, n. 5 (1775).

An East-Indian species, not previously recorded from Ceylon. Mr. Green's specimens are from Nitagala.

\*†*RANATRA SORDIDULA*.

*Ranatra sordidula*, *Dohrn, Stett. ent. Zeit.* xxi. p. 409 (1860).

Several specimens, collected by Mr. Green at Nitagala, in the North Central part of Ceylon, where water-bugs were more plentiful than at Pundaloya. None of the specimens are quite so large as the dimensions given by Dohrn.

\*†*CERCOTMETUS ASIATICUS*.

*Cercotmetus asiaticus*, *Serv. Ins. Hém.* p. 441 (1843).

Recorded from Java and Mount Ophir (Malacca). Mr. Green's specimen is from Nitagala.

\*†*NAUCORIS* (?) *PUNCTATISSIMA*.

Long. corp. 7 millim., lat. 4 millim.

Rufo-testaceous, very thickly punctured; eyes black, with a yellow line behind; pronotum with two longitudinal impressions in the middle, and one in front, and often with a black line on the hind border; scutellum black; corium reddish brown or blackish, the costa broadly rufo-testaceous or yellowish, and there is frequently a detached yellow spot near the middle. Membrane blackish. Under surface blackish, except the margins, the legs, and the middle of the under surface of the head and abdomen.

Appears to be common in Ceylon. The extremely thick punctation and the depressions on the thorax give it almost a rugose appearance. It is narrower than the other species of the genus.

Pundaloya.

Found on wet rocks by running water (*E. E. G.*).

\**NOTONECTA SIMPLEX*, sp. n.

Long. corp. 11–11½ lin.

Testaceous; face, under surface, and legs more inclining to reddish; a deep oval black depression behind each eye; pronotum with a blackish transverse band towards the under edges; the front of the scutellum sometimes blackish; wings apparently black, and showing through the membrane and part of the corium; a black spot sometimes visible near the outer extremity of the corium.

Allied to *N. lutea*, Müll.

Ceylon. Received from Dr. Templeton.

## \*NOTONECTA TEMPLETONII, sp. n.

Long. corp. 10 millim.

Much resembles *N. simplex*, but smaller and darker. Testaceous; face, legs, and under surface more inclining to reddish; black postocular spots smaller and rounder than in *N. simplex*; pronotum with a reddish or blackish transverse band in front, and traces of a dusky band behind; scutellum more or less blackish in front; corium testaceous, with three black bands, the first covering nearly the whole of the basal area, and the second covering the whole of the central area between the two black veins, except at the base; the space between these bands is also filled up with black at the extremity; the third band is formed by a long black spot towards the outer margin of the extremity of the corium. Wings showing through the membrane black.

Ceylon. Received from Dr. Templeton.

## \*†NOTONECTA ABBREVIATA, sp. n.

Long. corp. 8 millim.

Testaceous; vertex slightly darker, postocular depression only marked with one or two inconspicuous black dots; pronotum and scutellum black, the latter widely bordered with testaceous on the sides; corium with the basal half of the tegmina and the costa (narrowly) testaceous; the outer half blue-black, this colour extending further towards the base on the median area (where it ends in a concavity on the basal side) than nearer the margins. Wings showing black through the membrane.

In Dr. Templeton's and Mr. Green's (Nitagala) collections. Probably allied to *N. indica*, Fabr., from Sumatra.

## CORIXIDÆ.

## CORIXA ALBIFRONS.

*Corixa albifrons*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 94 (1864).

Described from Ceylon (Colombo).

## HEMIPTERA HOMOPTERA.

## CICADIDÆ

How much remains to be done in Entomology, even among the larger species of insects, may be seen from the fact that only 7 species of Cicadidæ were known from Ceylon before

Mr. Green's visit. He obtained 9 species in all, of which 4 are new, thus raising the present number to 11.

\*†PÆCILOPSALTRIA SUBRUFÆ.

Oxypleura subrufa, *Walk. List Hom. Ins. B. M. i. p. 25, n. 7* (1850).

Pseudopsaltria subrufa, *Dist. Mon. Or. Cic. p. 9, pl. i. f. 1 a, b* (1889).

A rather scarce species, recorded from India and Ceylon.

No locality noted by Mr. Green.

\*†PÆCILOPSALTRIA OCTOGUTTATA.

Tettigonia 8-guttata, *Fabr. Ent. Syst. Suppl. p. 515* (1798).

Pæcilopsaltria octoguttata, *Dist. Mon. Or. Cic. p. 10, pl. i. f. 5 a, b* (1889).

Common in all parts of India. The specimen obtained by Mr. Green (without special locality) is the largest on record, measuring no less than 88 millim. in expanse of tegmina. Mr. Distant gives the dimensions as 73 to 80 millim.; but the range is greater, as the smallest example in the Museum measures only 68 millim.

\*†PÆCILOPSALTRIA WESTWOODI.

Platypleura Westwoodii, *Stål, Trans. Ent. Soc. Lond. (3) i. p. 571* (1863).

Pæcilopsaltria Westwoodii, *Dist. Mon. Or. Cic. p. 15, pl. i. f. 18 a, b* (1889).

A very pretty species, confined to Ceylon. The wings are dark brown with reddish nervures, and the hind margin is orange, as well as a broad band, bending outwards and irregular in its outline, which runs from the costa nearly across the dark part of the wing. The inner marginal fold is dark brown, with a very narrow grey edging.

Mr. Green's specimens are from Kandy.

\*†COSMOPSALTRIA LARUS.

Dundubia larus, *Walk. List Hom. Ins. B. M. Suppl. p. 7* (1858).

Cosmopsaltria larus, *Dist. Mon. Or. Cic. p. 44, pl. v. f. 1 a, b, pl. iv. f. 18* (1889).

Common in India and Ceylon. Closely allied to the Indian *C. vibrans*, Walk., but smaller, and rather more heavily marked.

Mr. Distant has pointed out that this is the insect figured by Sir Emerson Tennent under the name of the "Knifegrinder" in his 'Natural History of Ceylon,' p. 432.



## \*†DUNDUBIA STIPATA.

*Dundubia stipata*, *Walk. List Hom. Ins. B. M. i. p. 51* (1850).

♂. *D. clonia*, *Walk. l. c. p. 66* (1850).

Described from Ceylon. Mr. Green's specimens are from Kandy.

## \*†DUNDUBIA MIXTA, sp. n.

Long. corp. 30 millim.; exp. tegm. 97 millim.

*Female*. Head black; body mostly black above and ferruginous below; sericeous. Head, especially on the back and face, covered with white pubescence, and with the following reddish markings:—two spots at the back of the vertex, obliquely behind the two hinder ocelli, each enclosing a black dot, two short stripes on each side in front of the vertex, and two spots below each, between the eye and the projecting lateral angle of the vertex; a triangular spot on the upper part of the face, soon followed by a stripe, broad above and narrow below, on the median line; the lateral ridges of the face (narrowly reddish, the space between sericeous); the base of the clypeus in the middle and a cone on the median line running from it; and the rostrum, except the tip and a line on the upper surface, which are black. The pronotum has a broad reddish stripe in the middle of the front lobe; the hind lobe is greenish, the lateral curved carina being reddish, running from the black portion of the pronotum, and marked with black behind; the propectus is black in the middle and rufo-testaceous on the sides, and densely pubescent. Mesonotum black, with two reddish or rufo-testaceous stripes, broadest behind, and extending in a point to the front margin; the lateral margins are rufo-testaceous, clothed with gilded pubescence; and the cruciform elevation is rufo-testaceous, the lateral depressions being greenish. Abdomen black above, densely clothed on the sides of the three basal segments with white pubescence, of which faint traces are also seen on the following; the sixth segment has a narrow rufo-testaceous line, interrupted in the middle, at the extremity. Pleura rufo-testaceous; pectus mostly blackish in the middle; abdomen beneath rufo-testaceous, laterally bordered with white pubescence; ovipositor darker; terminal segment black on each side at the extremity and densely hairy; two small reddish spots on each side of the ovipositor on the black part of the terminal segment. Legs red; in the front pair, the base of the coxæ, the under surface of the femora, and all the tibiæ and tarsi, except the basal half of the former above, are

black; the four hinder legs are also marked with black, but less extensively. Front femora slightly thickened, with two very long spines on the under surface, one near the base, and the other at three-fourths of the length; just beyond the second is another small tooth. A small pectoral spine just in front of the insertion of the tegmina, which are hyaline, with the costal area to beyond the radial area rufo-testaceous; beyond this, the subcostal area, though surrounded by blackish nervures, is also rufo-testaceous; basal area green; nervures rufo-testaceous towards the base, darker towards the margins; the second apical area projecting distinctly beyond the others. Wings hyaline, green at the base, nervures brown, the costal and two others of the principal nervures being pale, especially towards the base.

Not closely allied to any other species before me. I regret that I have only a single specimen to describe from.

Exact locality not recorded.

#### POMPONIA RANSONNETI.

*Pomponia Ransonneti*, *Dist. Ann. Nat. Hist.* (6) i. p. 372 (1888); *Mon. Or. Cic.* p. 72, pl. vii. f. 20 a, b (1890).

Described from Ceylon.

#### \*†POMPONIA GREENI, sp. n. (Plate V. fig. 11.)

Long. corp. 23 millim.; exp. tegm. 65 millim.

*Male.* Green and reddish brown, the greater part of the insect clothed with pale gilded or silvery pubescence.

Head and thorax green; pectus and pleura whitish with pubescence; vertex with the whole centre black, this colour branching out in front between the eyes and the upper part of the face; a yellow dash at the back of the vertex, and one on each side of, but not adjoining, the front ocellus; face with a green triangle at its base, below which the centre is black, broadly at first, but afterwards diminishing; in the middle of the broad black upper part is a large oval yellow spot, and a little below it is a short yellow dash; there is a smaller oval spot in the middle of the clypeus, which is largely black on each side of it; rostrum yellow. Pronotum green, with a yellower stripe not quite reaching the extremity, and surrounded with black, broadly in front, and more narrowly behind, the broadest point being contiguous with a black figure of 8 marking on each side, beyond which again is a black dot. Mesonotum green, with a

central black stripe, connected at the base with a band of half the length on each side, extending half across the pronotum, and angulated out on each side, the intermediate space being buff. Beyond this is another buff space on the front edge, in the middle of which stands a short black streak, followed by a long black band, edged on each side with buff, especially in front, and nearly touching two large spots which stand at the hinder edge of the mesonotum, on each side of the central streak. There is also a short black oblique streak on each side of the mesonotum, at the front margins; and other black markings along the lateral sutures; a yellow or buff spot on the summit of the cruciform space. Abdomen reddish brown, sericeous, the lateral margins obscurely spotted with greenish; the sutures, stigmata, and apical segment blackish. Ventral surface with the front edge of the abdomen and the terminal segment blackish; legs greenish, femora streaked with black and reddish; tip of femora and base of tibiæ with black rings, front tibiæ varied with buff and blackish; front tarsi black; tips of other tibiæ and tarsi inclining to buff. Tegmina hyaline, nervures mostly red, those at the base green; at the extremity of the radial area is a pale space, before and behind which the nervures are black; the membrane is also edged above by a black vein below a red one, and in one or two other parts of the wing the veins shade into black; on the first branch of the nervure bounding the radial area below is a singular black pointed widening of the nervure on each side, at about one third of its length from the fork. There is a brown spot at the extremity of the three upper ulnar areas, and six submarginal spots near the extremities of the marginal nervures.

In one specimen the wings are beautifully iridescent, which is not the case to anything like the same extent in the others.

Pundaloya and Hematelta.

Possibly allied to *P. Ransonneti*, Dist., also from Ceylon, but which I only know from the description; *P. Ransonneti*, however, seems to be a much larger insect, and less brightly coloured.

Only met with at a very high elevation (*E. E. G.*).

\*†POMPONIA ELEGANS, sp. n.

Long. corp. 31 millim.; exp. tegm. 63 millim.

*Male*. Green, clothed with gilded or silvery-white scale-like

pubescence. Head in the immediate neighbourhood of the ocelli black. Pronotum with a green stripe on the middle, entirely surrounded with a brown border, which somewhat resembles a wine-glass in shape; this is bordered with green, but the two oblique lobes on each side beyond are brown. Scutellum green, with three broad brown stripes in the middle, united at the base, the central one extending to the cruciform appendage, and the outer ones only half as far; beyond these, on each side, is a broad irregular stripe curving outwards, and on reaching the borders of the scutellum extended outwards as a black edging for a short distance, and inwards as far as the cruciform appendage, before each front angle of which stands a black spot, the cruciform appendage itself being yellowish. Abdomen covered with deep golden pubescence, with more or less silvery pubescence on the sides and towards the middle of the segments; on the terminal segments and beneath it is whiter. Tegmina greenish hyaline; costa and basal cell green, the latter edged below with a brown nervure as far as the radial area extends; nervures mostly green, interrupted with black spaces towards the base, costa, and middle; towards the apex they are brown. All the cross-nervures and most of the forks of the nervures are marked with fuscous spots, and there is a row of submarginal fuscous spots on the nervures within the apical areas, which run very regularly. Membrane white. Wings hyaline, with greenish nervures and white membrane. Legs ferruginous brown, hind legs more green; front femora incrassated, with two not very large teeth; hind tibiæ with three short spines. Rostrum black at the tip, extending rather beyond the hind coxæ; drums divergent at the extremity, and extending to the end of the first segment of the abdomen.

Kandy.

Not closely allied to any other species before me.

\**CICADA NUBIFURCA.*

*Cicada nubifurca*, *Walk. List Hom. Ins. B. M., Suppl.* p. 23 (1858).

Described from Ceylon.

\*†*CICADA APICALIS*, sp. n. (Plate V. fig. 1.)

Long. corp. 12–14 millim.; exp. tegm. 34–42 millim.

*Female.* Dull reddish brown, with greyish pubescence; the head, the middle and sides of the pronotum and scutellum, and

the base of the abdomen and of its terminal segment dull yellowish green; under surface yellowish testaceous, a blackish stripe on the outside of the front tibiæ; front femora with three very large spines; hind tibiæ with three small ones. Wings hyaline, with brown nervures; tegmina with the basal cell clear, a brown spot at the apex of the wing, and the cross nervures closing the two upper ulnar areas likewise more or less distinctly marked with brown; costa and membrane dull yellow; wings hyaline, the lower internal area brown, hyaline at the tip, and the upper area hyaline, brown at the tip.

Closely allied to *C. nubifurca*, Walk., but distinguished at once by the brown apical spot.

Kandy and Aviswella (July 1888).

#### FULGORIDÆ.

##### \*† HOTINUS MACULATUS.

*Fulgora maculata*, *Oliv. Encycl. Méth.* v. pp. 563, 568, n. 5 (1790).

Mr. Green's specimen has no locality label.

##### \*HOTINUS FULVIROSTRIS.

*Hotinus fulvirostris*, *Walk. List Hom. Ins. B. M., Suppl.* p. 41 (1858).

Described from Ceylon.

Perhaps a variety of the last species.

##### \*†HOTINUS COCCINEUS.

*Hotinus coccineus*, *Walk. List Hom. Ins. B. M., Suppl.* p. 42 (March 1858).

*Hotinus guttifer*, *Stål, Æfv. Vet.-Akad. Förh.* xv. p. 448 (Nov. 1858).

Seems to be a common species in Ceylon and rather variable.

Mr. Green's specimens are from Kandy, Dambool, and Putlam.

##### \*† HOTINUS INSULARIS, sp. n. (Plate VI. fig. 4.)

Long. corp., absque caput, 14 millim.; caput cum proc. 16 millim.

Buff or brown, speckled with black; abdomen black above; tegmina rufous-brown, with pale spots; wings orange, bordered with black. Head with the protuberance brown, rather large and long for the size of the insect, waved beyond the middle, and curved rather suddenly upwards at the apex; apex, which is smooth and shining, yellowish. Under surface with three

yellowish carinæ extending to the tip; two other carinæ run below the eyes and extend nearly to the tip, where they unite with two others, running between the eyes on the vertex, converging rapidly to the middle of the length of the protuberance, and then running subparallel till they meet those running below the eyes, at their termination before the tip. Another carina runs on the median line above between the others for a short distance. The head, thorax, and legs are buff, speckled and reticulated all over with black; there is a conspicuous black spot on a buff ground in front of each eye. Abdomen black above; ventral surface and under surface of legs clearer buff, much more sparingly and distinctly spotted with black; a red spot on each side of the last ventral segment of the abdomen. Tegmina rufous-brown, with brown nervures, which become reddish towards the tips; they are marked with obsolete dusky spots towards the margins, and with numerous pale spots on the disk. On the under surface the tegmina are redder, and the pale spots are distinctly red. Wings orange, shading into red on the costa, and with a broad border, which is black towards the inner margin, and fusco-hyaline, with red nervures, towards the apex.

Allied to *H. coccineus*, but abundantly distinct.

Dambool.

\*†PYROPS AFFINIS.

*Fulgora affinis*, *Westw. Trans. Linn. Soc. Lond.* xviii. p. 144, n. 18, pl. xii. f. 6 (1841).

*Pyrops Dohrni*, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 449 (1858).

||*Fulgora punctata*, *Gray, Griffith's Anim. Kingd.* xv. pl. xc. f. 1 (1832).

*Pyrops punctata*, *Walk. List Hom. Ins. B. M.* ii. p. 268, n. 3 (1851).

Common in the East Indies.

Colombo, Oct. 1887 (*E. E. G.*).

\*†APHANA SANGUINALIS.

*Aphana sanguinalis*, *Westw. Ann. Nat. Hist.* (2) vii. p. 208 (1851).

Described from Ceylon. Prof. Westwood describes the rostrum as black; but it is red in Mr. Green's specimen, which is without special locality.

\*†DICHOPTERA HYALINATA.

*Fulgora hyalinata*, *Fabr. Syst. Ent.* ii. p. 315, n. 12 (1781).

Common in India and Ceylon. Mr. Green's specimens are from Kandy.

## \*STACOTA BREVICEPS.

Dictyophora breviceps, *Walk. List Hom. Ins. B. M., Suppl.* p. 68 (1858).

Described from Ceylon.

## STACOTA COMPTELLA.

Stacota comptella, *Stål, Berl. ent. Zeitschr.* iii. p. 325 (1859).

Described from Ceylon.

## \*†STACOTA RUFITARSIS, sp. n.

Long. corp.  $8\frac{1}{2}$  lin.; exp. tegm. 22 lin.

*Female.* Grass-green; the sutures of the head and thorax, the tarsi, and the spines of the hind tibiæ reddish; clypeus with a red transverse line at the summit, from which descend three red lines, one central, the others submarginal; claws and a line on the front tibiæ blackish; tegmina subhyaline, slightly clouded towards the hind margin; nervures green, pitchy in the submarginal area, which is edged outside by a yellowish line; wings clear hyaline, with pitchy nervures; costal nervure green; a black spot on the pleura, just below the base of the wings.

A pretty species, larger than either of those previously described. It seems to be nearest allied to *S. comptella*.

Pundaloya.

## \*†DICTYOPHORA ALBIVITTA.

Dictyophora albivitta, *Walk. List Hom. Ins. B. M.* ii. p. 319, n. 34 (1851).

Described from Bengal. The specimens from Ceylon are darker than than the type (which is perhaps somewhat faded), but appear to belong to the same species.

## \*†DICTYOPHORA PERCARINATA, sp. n.

Long. corp. 11 millim.; exp. al. 18–20 millim.

Head and thorax red or yellowish, with bright green carinæ; head about one fourth longer than from its base to the end of the scutellum; process with the extreme tip dusky; two lateral carinæ above, and the commencement of a central one at the base; beneath green, with two red lines near the middle. Pronotum and scutellum each with five green carinæ; sides of prothorax with a green carina behind each eye. Abdomen green, with a row of black spots above on the central line; legs rufotestaceous, coxæ and tarsi blackish; hind tibiæ greenish, armed with three spines. Tegmina and wings hyaline, with green

nervures, darker towards the hind margin; stigma clouded towards the costa, and enclosing four transverse nervures.

Allied to *D. pallida*, Walk. Appears to be a common species in Ceylon.

Putlam.

\*†*DICTYOPHORA VIRIDISTIGMA*, sp. n.

Long. corp. 8 lin.; exp. tegm. 20 millim.

Head pointed in front, but only twice as long as the eyes, and with no horn. Head and thorax lined with bright green and red; vertex with a red central and two lateral stripes running between the eyes, and continued on the face to the base of the rostrum; sides of head yellowish, antennal tubercles dull green. Prothorax with a green central carina, a green band extending behind the eyes to the red tegulæ, and the sides green. Mesonotum bright green; abdomen and under surface dull yellowish green, with one or two brighter green markings under the wings; legs rufo-testaceous, with more or less of the femora and tibiæ green. Tegmina and wings clear hyaline, with brown nervures, the former with the costa and inner margin very narrowly bordered with red; stigma very large, green, crossed by two veins in the middle.

Not closely allied to any described species.

Pundaloya.

\*†*DICTYOPHORA* (?) *EGREGIA*, sp. n. (Plate V. fig. 4.)

Long. corp. 19 millim.; cap. cum cornu, 9 millim.; exp. tegm. 28 millim.

Dull brown, speckled with black; apex of metanotum green; abdomen varied with testaceous yellow. Tegmina brownish hyaline, with two brown spots, one on the stigma, and one at the apex; wings clear hyaline, with a brown shade at the extremity. Underside paler, a line below the wings and the lateral abdominal carinæ black; legs greenish, tarsi reddish, claws and spines on hind tibiæ black; femora dotted with black. Head and frontal protuberance of a very remarkable shape; mesonotum produced behind in a truncated cone, tricarinate, the carinæ continued over the pronotum, and the two lateral ones running forward on the head between the eyes. Eyes long, oval; head continued, with the sides nearly parallel, about one and a half times as far beyond, and then suddenly constricted. The horn



is more than twice as long as the part of the head already described; on the upper side are two lateral diverging carinæ, so that its apex is broader than its base. On the lower surface the head is continued so far back that the base of the rostrum (which extends as far as the middle of the abdomen) lies just in front of the anterior coxæ. At this point the head is tricarinate, but below the eyes the lateral carinæ are angulated outwards, and gradually disappear towards the base of the horn. At this point, too, is a long double carina in the middle, ending in a point at the base of the horn. Here rises another double carina, longer and narrower than the first, meeting in a point at both ends, and extending just beyond the expanded upper part of the rostrum.

Not closely allied to any known species.

Pundaloya.

Genus SYMPLANA, g. n.

Resembles *Dictyophora*, but with very different neurulation.

Head and thorax above with a wide depression on the median line; head curved up beyond the eyes, the end of the frontal prominence pointed, as seen from the side; face very long, with five carinæ. Tegmina rather long and narrow, vitreous, with longitudinal simple nervures; at about five-sixths of their length they are crossed by transverse nervures (not extending to the last space on the inner margin), and then by a straight nervure quite across, so that a row of three (or, by bifurcation, four) cells is formed, running from the costa nearly across the wing; beyond these, the upper nervures are forked towards the costa at and before the tip. Legs simple, rather long and slender.

\*†SYMPLANA VIRIDINERVIS, sp. n. (Plate VI. fig. 11.)

Long. corp. cum tegm. 7-8 millim.

Green, brighter above, and inclining to yellowish below, the wide groove on the head and thorax above, and a slender line on the inner margin of the tegmina, bright scarlet; tegmina hyaline, with green nervures; wings hyaline; claws black.

A very delicately formed and coloured species, which does not seem to be uncommon in Ceylon.

Pundaloya.

\*†OSSA DIMIDIATA.

*Ossa dimidiata*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 107, pl. ii. f. 23 (1863).

A single very poor specimen in Mr. Green's collection.

Mount Patannas (*Motschulsky*); Pundaloya (*Green*).

## CIXIIDÆ.

\*†CIXIUS NUBILUS. (Plate V. fig. 13.)

*Cixius nubilus*, *Walk. List Hom. Ins. B. M., Suppl.* p. 80 (1858).

The type-specimen is unset and in very poor condition, and the species is consequently undeterminable by the original description, and I therefore redescribe it.

Long. corp. 4-4½ millim.; exp. tegm. 10-11 millim.

Brown; orbits, some lines on the thorax, and the incisions of the abdomen (narrowly) whitish; legs testaceous. Tegmina light brown, varied with black and subhyaline markings; all the nervures white, and marked with single or double rows of black spots, from each of which proceeds a single hair; at the extremity of each nervure, just before the margin, which is whitish, the extreme outer edge being brown, stands a distinct white spot. The principal subhyaline or whitish markings are firstly two large and one small space on the costa, separated by darker spaces, and followed by a large stigma-like mark, which is light brown, edged with pale at each extremity. The first of these, which sometimes coalesces with the second after crossing the first nervure, runs down in a point half across the wing; below and beyond its lower part stand some black markings, and there is another on the inner margin, surrounded with a clear space. Beyond this is an oblique clear spot rather below the middle of the wing, and a smaller one near the inner margin, separated by a black spot. Beyond the third vitreous spot on the costa a blackish line, forming a slight curve towards the base, runs nearly to the inner margin; it is bordered on the outer concavity with pale. Beyond this is a conspicuous oblique black spot on the inner margin, and two small black spots (sometimes connected into a short, slightly zigzag line) about the middle of the wing. Between the stigmoidal spot and the tip of the tegmina is a large dusky space, with a white dot near its upper edge, and its inner side narrowly edged with pale. Beyond it is a white band, more or less divided in two by an oblique spot opposite the hind margin, but not quite extending either to the costa or the inner margin. Wings iridescent subhyaline, with brown nervures.

This species is difficult to describe intelligibly, but should be easily recognizable by the white nervures, bearing setiferous black dots and ending in a submarginal series of white spots.

Pundaloya.

## \*†CIXIUS STIGMA.

*Cixius stigma*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 105 (1863).

Nura Ellia and Patannas (*Motschulsky*); Pundaloya (*Green*).

An unusually large species.

## BRIXIA SUBFASCIATA.

*Brixia subfasciata*, *Stål, Berl. ent. Zeitschr.* iii. p. 320 (1859).

Described from Ceylon.

## \*†BRIXIA TORTRICIFORMIS, sp. n. (Plate V. fig. 12.)

Long. corp.  $4\frac{1}{2}$  lin.; exp. tegm. 12 millim.

Brown above, metanotum and base of abdomen paler; thorax tricarinate, the carinæ on the pronotum and the inner edge of the two contiguous interocular carinæ pale yellowish white; pronotum and mesonotum edged behind with an oblique lateral stripe of the same colour. Under surface yellowish white, the hinder part of the four converging carinæ on the face, a stripe on each side within the two innermost, where they recede to meet the outer ones, a stripe below each eye, and the antennæ above, brown. Tegmina yellowish, subhyaline, clouded with lighter or darker brown; nervures brown or yellow, set with long setæ; costal area subhyaline to beyond the middle, with four oblique light-brown bars; under the inner extremity of the second stands another light-brown blotch, but from its outer extremity a continuous wide curve runs outwards and inwards to the inner margin, where it is darker; it rests on the uppermost of two narrow parallel blackish lines, which occupy the basal half of the inner margin; within it two oblique blackish dashes rise, the outermost is followed by a short curved line beyond it parallel to the curve, the innermost is surmounted by three long brown veins, between the two lowermost of which is a brown dash. On the costa the 4th transverse stripe is followed by a long subhyaline space, the middle of which is interrupted by a brown patch, marked on the outer side below with yellow; beyond this the costa and upper half of the hind margin are edged with brown, but a long and a short black line first descend from this, followed near the apex by a large brown blotch edged with whitish, narrow above and broad below; beyond the tip the brown margin of the wing becomes double, and then angulates inwards, and ceases in a light brown shade covering the wing below the apical blotch. Just above the hinder angle stands the head of a black blotch, which curves to a point on the outer part of the inner margin,

like a comma. Just within this a black streak, bifid below, rises from the inner margin, within which is a pale brown line, surmounted by 3 more brown lines about the middle of the tegmina. Wings fuscous; the neuration is rather peculiar: the subcostal nervure runs very near the costa, and throws off two branches upwards; the two next longitudinal veins are also forked; the subcostal is connected with the next by a straight transverse nervule, and on the other side rises an oblique nervule which extends to the hind margin, crossing the upper fork of the third longitudinal nervule.

A pretty little species, much resembling a *Tortrix*, and very difficult to describe. It appears to belong to Stål's genus *Brixia*; but I cannot make it conform to the description of his Cinghalese *B. subfasciata*; nor does he mention the setose veins in his definition of the genus or species.

Nawalapitya.

PTOLERIA ARCUIGERA.

*Ptoleria arcuigera*, Stål, *Berl. ent. Zeitschr.* iii. p. 321 (1859).

Described from Ceylon.

GENUS BRIXIOIDES, g. n.

Head narrower than the thorax; antennæ inserted below the hinder part of the eyes, and emitting a long seta; no ocelli observed. Thorax tricarinate, front of head projecting beyond the eyes, and viewed from above apparently bifid; but this appearance is really caused by the ends of two very prominent ridges running between the eyes in front, and forming a very long and conspicuous groove. Legs slightly compressed; hind tibiæ bispinose, and widened at the extremity, which is armed with a row of strong spines. Tegmina subopaque, with the apex rounded and the hind margin sloping outwards to the much more prominent hinder angle; costal area with numerous cross nervures, the principal nervures forked, and the outer part of the tegmina with numerous transverse nervures. Wings hyaline, with most of the nervures forked.

A genus of doubtful position, of the general appearance of an *Aphrophora*, but the cross-nervures in the costal area approach it to the *Flatidæ*, and the strongly bicarinated front to *Brixia*.

\*†*BRIXIOIDES CARINATUS*. (Plate V. fig. 9.)

Long. corp. 4 lin. ; exp. tegm.  $13\frac{1}{2}$  millim.

Testaceous ; head and thorax above with broad black markings on each side of the central carina, and sides of thorax with several longitudinal black dashes ; abdomen blackish in the middle and on the sides. Frontal carina and legs nearly white, with numerous transverse black striæ. Under surface of body testaceous, with two black lines on the pleura, the lower one macular ; ventral surface of abdomen mostly black in the middle. Tegmina buff, slightly transparent, with 12 or 15 oblique light brown striæ on the costa, intersecting the cross nervures, which are nearly straight, and concolorous with the tegmina. The region of the anal angle is infuscated, and the third and fifth of the striæ from the tip converge and extend nearly to the anal angle ; the two outermost striæ are directed obliquely inwards instead of outwards, but the last curves outwards again to the hinder angle, where it is almost divided into black spots ; and between it and the extremities of the 3rd and 5th stripes (which are also brown) beyond the costal region are several more black dots. The brown bars towards the base of the tegmina are variable in number, even on opposite sides of the same specimen. On the rest of the tegmina the nervures are sparingly dotted with dark brown ; and there are two much larger spots placed obliquely about the middle of the basal third of the tegmina. Wings hyaline, clouded towards the lower part of the hind margin. Pundaloya.

## DELPHACIDÆ.

\*†*DELPHAX ERNESTI*, sp. n. (Plate V. fig. 14.)

Long. corp. cum tegm. 4-5 lin.

Testaceous ; head, face, and thorax strongly tricarinated : tegmina subhyaline, with a broad brown bar at one-fourth of their length, running from the costa obliquely forwards to the inner margin ; this is followed by a row of three black dots, the first considerably below the costa, and the last resting on the inner margin ; the outer half of the tegmina is clouded, leaving a semilunular vitreous space on the costa, below which the shade is darkest ; round the apex of the wing are eight black dots, two of which stand on the costa, within the clear space, and there is another isolated spot near the inner margin at about half its length. The nervures of the tegmina are set with hairs, and in

the clouded space are black, spotted with testaceous. Wings hyaline.

Appears to be a common species.

Pundaloya.

\*†DELPHAX SIMPLEX, sp. n.

Long. corp. cum tegm. 5 millim.

Testaceous; head, face, and thorax tricarinate; tegmina yellowish subhyaline, with a row of spots all round, except on the basal half of the costa, and 4 or 5 additional spots in the middle of the wing, mostly placed on the longitudinal nervures.

Pundaloya.

DELPHAX MARGINALIS.

*Delphax marginalis*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 108 (1863).

Described from Ceylon (Nura Ellia and Patannas).

DELPHAX UNISTRIGOSUS.

*Delphax unistrigosus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 108 (1863).

Described from Ceylon (Patannas).

DELPHAX SORDESCENS.

*Delphax sordescens*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 109 (1863).

Described from Ceylon (Colombo).

DELPHAX VENOSUS.

*Delphax venosus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 109 (1863).

Described from Ceylon (Colombo).

DELPHAX ALBICOLLIS.

*Delphax albicollis*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 110 (1863).

Described from Ceylon (Colombo).

DELPHAX COLORATUS.

*Delphax coloratus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 110 (1863).

Described from Ceylon (Colombo).

MESTUS MORIO.

*Mestus morio*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 111, pl. ii. f. 24 (1863).

Described from Ceylon (Patannas).

MESTUS TESTACEUS.

*Mestus testaceus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 112 (1863).

Described from Ceylon (Nura Ellia and Patannas).

## MESTUS (?) NIGROPUNCTATUS.

Mestus (?) nigropunctatus, *Motsch. Bull. Mosc.* xxxvi. (3) p. 112 (1863).

Described from Ceylon (Patannas).

## DERBIDÆ.

## DERBE FURCATOVITTATA.

Derbe furcatovittata, *Stål, Vet. Akad. Förhandl.* xii. p. 191 (1855).

Described from Java; included in Motschulsky's list as Cinghalese.

## DERBE (?) NITAGALENSIS, sp. n. (Plate V. fig. 3.)

Long. corp. 4 lin.; exp. al. 18 millim.

Orange-tawny, with a white line on the median line of the head and thorax; the orbits and sides of the head are mostly white, and there are two white stripes on each side of the thorax above; the outermost, as well as two narrower ones on the pleura, extending more or less over the femora. Tegmina with the subcostal nervure and its branches broad, and orange-tawny beyond the middle, the other nervures paler, mostly whitish, and with the cells and spaces between the nervures filled up with irregularly alternating long stripes of brown and subhyaline, the arrangement of which can be better seen in the figure than described. Wings about half the length of the tegmina, and very similarly marked.

*Hab.* Nitagala.

## DERBE (?) CRENATONERVOSA.

Derbe (?) crenatonervosa, *Motsch. Bull. Mosc.* xxxvi. (3) p. 113, pl. ii. f. 25 (1863).

Described from Ceylon (Nura Ellia).

## \*† THRACIA PTEROPHOROIDES.

Derbe (Thracia) pterophoroides, *Westw. Ann. Nat. Hist.* (2) vii. p. 210 (1851).

Described from Ceylon; Mr. Green's specimens are from Nawalapitya.

## \*† THRACIA CUMULATA.

Thracia cumulata, *Walker, Journ. Linn. Soc. Lond., Zool.* x. p. 139 (1863).

Described from Amboina and Bouru. Mr. Green's specimens from Nawalapitya do not appear to be distinct.

## \*†THRACIA CEYLONICA, sp. n.

Exp. tegm. 27 millim.

Testaceous; the tip of the second joint of the antennæ and the carinæ of the abdomen, especially towards the extremity, marked with bright red; a large white waxen spot on each side between the base and the tegulæ; abdomen black beneath. Tegmina brownish hyaline, with brown nervures; the costal, subcostal, and apical nervures bright red; costal area yellowish, a brown space in the middle of the subcostal area within the cross nervure; most of the oblique nervures running from the lowest red nervure thickened and more or less clouded at their origin; a brown spot at the end of the subcostal space, and another at the tip of the tegmina; the two upper nervures branching from the extremity of the subcostal space are red and thickened, and the two lower ones brown, red only at the extremity, tip edged with a narrow red line, inner margin with a brown one; but all four are marked with white before the tip. Wings very small and pointed, not extending much beyond the two anal nervures on the tegmina; brownish hyaline, with the nervures and the tip brown, the former red towards the costa.

Exact locality not noted.

Allied to *T. ephemeralis*, Walk., from New Guinea.

## \*†THRACIA LANKANA, sp. n.

Exp. tegm. 22 millim.

Head and pronotum yellowish above, the former with four brown marks across the middle, the two innermost rounded, and four brown streaks behind; abdomen testaceous, with brown spots on the sides; terminal segment marked with bright red. Under surface testaceous; abdomen with black transverse lines in the middle. Tegmina hyaline, with brown nervures; the nervures towards the costa and apex, including that bounding the apex, and the base of the nervure bounding the inner margin, bright red; front of costa with a white waxen basal streak; costal area yellow, enclosing a row of long brown dashes from one-third of the length of the tegmina to the apex, which is more squarely truncated than in *T. ceylonica*. Wings very short, not extending much beyond the lowest anal nervure on the tegmina; all the nervures bright red.

Allied to *T. ceylonica*, but sufficiently distinct.

Nawalapitya.



\*†THRACIA (?) OBSOLETA, sp. n. (Plate V. fig. 7.)

Exp. al. 28 millim.

Body brown above; vertex and antennæ tawny yellow; hinder raised ridge of pronotum, a narrow central carina on scutellum, and terminal segment of abdomen white. Under surface white. Tegmina moderately broad, hyaline, the nervures pale testaceous, often shading into white, especially beneath, those towards the costa and inner margin darkest. The hinder angle is rounded off, but is sufficiently distinct to separate the lower part of the hind margin, running from the truncated apex, from the inner margin. A dusky spot covers the base of the tegmina, and there is a blackish spot on the inner margin at  $\frac{2}{5}$  of its length, at the extremity of the first anastomosing nervure. Beyond this, at the next fork, 3 or 4 dusky spots can just be discerned running up towards the middle of the wing, and then three more, directed outwards. Wings hyaline, with white nervures, extending as far as the hinder angle of the tegmina.

Hardly congeneric with the other species, having broader tegmina and much larger wings. The specimens were ticketed "*Phenice*" by the late Mr. Atkinson; but on the whole seem to agree better with *Thracia* in their characters.

Pundaloya.

\*†PHENICE MÆSTA.

Derbe (*Phenice*) *mæsta*, *Westw. Ann. Nat. Hist.* (2) vii. p. 209 (1851).

Described from India. Appears to be common in Ceylon.

Mr. Green's specimens are from Colombo.

Gregarious; frequents the leaves of the sycamore (*E. E. G.*).

PHENICE PUNCTATIVENTRIS, sp. n. (Plate V. fig. 6.)

Long. corp. 3 lin.; exp. al. 14 millim.

Yellow, with green lines, more or less distinct and sometimes obsolete, between the eyes, and on the sutures of the head, thorax, pleura, and abdomen. Abdomen with a double row of black spots on each side above. Tegmina brown, with a broad vitreous band on the costa, and another, commencing on the basal third of the inner margin, and then filling up the whole of the middle of the tegmina, to the hind margin, where it is marked with two brown spots; in the central vitreous band there are four or five short brown dashes on the transverse nervules. The vitreous part of the costa is marked on the outer half with small brown marginal dots, and the brown outer part of the

inner margin with small vitreous marginal dots. Wings narrow, half the length of the tegmina, subhyaline, with two conspicuous brown dashes on transverse nervures—one near the base on the inner margin, and the other subcostal, at half the length of the wing.

*Hab.* Nawalapitya (very common).

Allied to *P. mæsta*, Westw.

*ERANA NIGRICORNIS.*

*Erana nigricornis*, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 449 (1858).

Described from Ceylon.

*GENESTIA VITRICEPS.*

*Genestia vitriceps*, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 450 (1858).

Described from Ceylon.

ISSIDÆ.

*LUSANDA FISSICEPS.*

*Lusanda fissiceps*, *Stål, Berl. ent. Zeitschr.* iii. p. 322 (1859).

Described from Ceylon.

*CALISCEELIS EXIMIA.*

*Calisceelis eximia*, *Stål, Berl. ent. Zeitschr.* iii. p. 323 (1859).

Described from Ceylon.

\**EURYBRACHYS DILATATA.*

*Eurybrachys dilatata*, *Walk. List Hom. Ins. B. M.* ii. p. 392, n. 25 (1851).

Described from Ceylon.

\**EURYBRACHYS TOMENTOSA.*

*Cicada tomentosa*, *Fabr. Syst. Ent.* p. 683, n. 10 (1775).

Occurs in India and Ceylon.

\*†*EURYBRACHYS SPINOSA.*

*Cicada spinosa*, *Fabr. Ent. Syst. Suppl.* p. 520 (1798); *Coqueb. Illust. Ins.* p. 35, pl. ix. f. 4 (1799).

An Indian species, but the locality given by Fabricius is Mauritius. Coquebert's figure is either much better than the description of Fabricius, or else he figured a different insect, although Fabricius afterwards cited his figure. Mr. Green's specimens are from Putlam.

*EURYBRACHYS FRATERNA.*

*Eurybrachys fraterna*, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 450 (1858).

Described from Ceylon.

## EURYBRACHYS CRUDELIS.

Eurybrachys crudelis, *Westw. Ann. Nat. Hist.* (2) vii. p. 208 (1857).

Described from Ceylon.

## \*†EURYBRACHYS WESTWOODII, sp. n. (Plate VI. fig. 1.)

Exp. tegm. 44-55 millim.

Head, pronotum, and scutellum dull green, inclining to yellowish behind, and speckled with brown; front testaceous; legs dilated, green, tibiæ more or less speckled with black; hind femora and tarsi black. Abdomen red above, pale green beneath, with broad dark green bands on the front of each segment, and lateral spots beyond; apex densely covered with white waxy efflorescence. Tegmina with the hind margin curved outward; costa one sixth shorter than the inner margin, dull white, reticulated and slightly clouded with brown; basal third green, interspersed with white, and partly following the general outline of the hind margin, and marked in the middle and at its extremity opposite the middle of the hind margin, and on the inner margin, with some irregular black spots; along the costa runs a row of small black dots, interrupted beyond the green part of the tegmina, then recommencing in a single or irregularly double row, becoming larger as they continue to curve round the hind margin; on the inner margin they become a more regular double series, ending in one large spot at about three fourths of the length of the inner margin. Wings white, with the basal third blood-red, the costa beyond tinged with green; three large round black spots towards the extremity of the wing, and some very small black submarginal dots beyond. Underside: tegmina with the green at the base much deeper, without white markings, but more or less spotted and reticulated with black; the rest of the wing is whiter and hardly reticulated with brown, which renders the submarginal spots more distinct.

Resembles *E. pulverosa*, Hope, in the colour of the tegmina, and *E. crudelis*, Westw., in the colour of the wings.

Kandy.

## NICIDUS FUSCONEBULOSUS.

Nicidus fusconebulosus, *Stål, Öfv.-Vet. Akad. Förh.* xv. p. 451 (1858).

Described from Ceylon.

## \*†HEMISPHERIUS SCHAUMI.

Hemispærius Schaumi, *Stål, K. Vet.-Akad. Förhandl.* xii. p. 191 (1855).

Described from Ceylon.

## \*†HEMISPHERIUS BIPUSTULATUS.

Hemispærius bipustulatus, *Walk. List Hom. Ins. B. M., Suppl.* p. 95 (1858).

Described from Ceylon. A fresh specimen (not marked with special locality) is green, with the tegmina finely punctured, but not reticulated, and with two slender subparallel red lines on the front.

## \*HEMISPHERIUS DUBIUS.

Hemispærius dubius, *Bull. Ann. Nat. Hist.* (4) xvi. p. 97, pl. iv. f. 17 (1875).

Described from Ceylon.

## \*†HEMISPHERIUS HERBACEUS, sp. n.

Long. corp.  $5\frac{1}{2}$ , lat. 4 lin.

Green, finely punctured; front with two parallel black lines, widest in the middle, and separated by a yellowish stripe; tegmina green, finely punctured, slightly transparent and reticulated, base of costa with two parallel rufous-brown lines, and a very narrow yellowish edging continued round the rest of the tegmina, except on the inner margin; pectus, pleura, and abdomen with black stripes, those on the abdomen transverse; legs green, lined with black; tarsi testaceous, claws black.

The black stripes on the face distinguish this species from any other known from Ceylon.

Pundaloya.

## \*†PTERILIA CEYLONENSIS.

*Pterilia ceylonensis*, *Stål, Berl. ent. Zeitschr.* iii. p. 332 (1859).

Not an uncommon species.

## FLATIDÆ.

## Genus MICROCHORIA.

A genus of uncertain position, apparently belonging to the Flatidæ by the majority of its characters, but with a superficial resemblance to *Dichoptera*.

Head large, but slightly narrower than the pronotum, and

about two fifths as long as the total length of the insect, being slightly contracted at rather less than half its length beyond the eyes, and produced into a long, pointed, slightly compressed cone. Antennæ placed below the eyes. Tegmina opaque, with no stigma; costal area with numerous cross nervures; the longitudinal nervures on the disk branched, and with faint traces of cross nervures beyond the middle; tegmina hyaline, with the nervures branched, but with two spaces on the upper part of the wing (not to speak of the inner marginal region) open from the base to the hind margin; below the second is the only cross nervure, at about two thirds of the length of the wing. Head and thorax tricarinate above as far as the constriction; beyond this the terminal cone is compressed, and carinate above; below the head and cone have two strong median carinæ. Legs moderately stout.

\*†*MICROCHORIA ABERRANS*, sp. n. (Plate V. fig. 10.)

Long. corp. 8 lin., exp. al. 16 millim.

Testaceous, tegmina with numerous black dots on or near the nervures, chiefly near the costa and towards the hind margin, before which is a more or less continuous line of spots; wings hyaline; claws black.

An inconspicuous, but very remarkable species.

Pundaloya.

\*†*ELASMOCELI PLATYPODA*, sp. n. (Plate VI. fig. 3.)

Long. corp. cum tegm. 7 millim.

Black; head yellowish white, front narrow, bifid, with a central black line, and two oblique black lines on each side; face with transverse black bands; front femora and tibiæ very broad and flattened, carinated above and below, and the femora with a lateral carina, above which they are banded with yellowish white; below there are a few small irregular spots, but the tibiæ are regularly spotted with yellowish white both on the upper and lower margins. Middle femora and tarsi much less expanded, banded alternately with black and yellowish white. Tarsi and hind legs yellowish white; tips of femora and some spots on the lower surface of the hind femora and tibiæ brown; hind tibiæ with two spines in the middle, and an expanding carina below. Thorax with a yellowish dash on each side at the back of the pronotum, and a yellowish spot on each side near the extremity of the metanotum. Tegmina dark brown, with a white spot in the middle, and a row of white spots, mostly oblique, and varying in

size, on the costa and hind margin; there are also a few other small white spots and dots on the inner margin and disk. Wings brown.

Probably allied to *E. tagalica*, Stål, from the Philippines.

Exact locality not recorded.

\*†*ELASMOCELI*(?) *RADIANS*, sp. n. (Plate VI. fig. 2.)

Long. corp. 4 millim., cum tegm. 6 millim.; exp. tegm. 12 millim.

Body above dark brown; thorax tricarinate; head white in front beyond the middle of the eyes; vertex as broad as the width of the eyes, bifid in front; head, pectus, and legs white, legs not expanded; femora broadly black in the middle, tibiæ narrowly ringed with black; ventral surface of abdomen blackish. Tegmina dark brown; costa and hind margin white, broken into spots by the ground-colour radiating into it, most broadly on the hind margin; there are also numerous narrow undulating dashes running from the inner margin, especially towards the base. The outer half of the dark part of the tegmina inclines to red towards the costa, and is marked with three large black spots, imperfectly differentiated from the ground-colour; between these and the inner margin are some smaller ill-defined dark dots and dashes. Wings brown.

Differs from typical *Elasmoscelis* in the broader vertex and non-appendiculate legs; but I prefer to leave it provisionally in that genus, to which it appears nearly allied.

Pundaloya.

Found on *Bambusa*. Larva with two long spiral caudal appendages formed of a white waxy secretion (*E. E. G.*).

*TAMBINIA LANGUIDA*.

*Tambinia languida*, Stål, *Berl. ent. Zeitschr.* iii. p. 317 (1859).

Described from Ceylon.

*TAMBINIA DEBILIS*.

*Tambinia debelis*, Stål, *Berl. ent. Zeitschr.* iii. p. 317 (1859).

Described from Ceylon.

*TAMBINIA RUFO-ORNATA*.

*Tambinia rufo-ornata*, Stål, *Berl. ent. Zeitschr.* iii. p. 317 (1859).

Described from Ceylon.

## \*†PHALÆNOMORPHA EROSIPENNIS.

*Phalænomorpha erosipennis*, *Stål, Öfv. Vet.-Akad. Förh.* xv. p. 451 (1858).

There is a whitish insect, varied with green, in Mr. Green's collection from Kandy; and a greenish insect, with a curved dark line running from the base to the tip, in the Museum collection; and I refer these, with some doubt, to this species. The latter was ticketed "*Elidiptera perplexa*" by Walker, but does not seem to have been described. Stål's descriptions are often very poor, and quite insufficient to identify his species, which may account, in part, for the virulence of his attacks on Walker, whose work he persistently ignored, instead of forwarding science by endeavouring to elucidate it.

## PHALÆNOMORPHA NIETNERI.

*Phalænomorpha Nietneri*, *Stål, Öfv. Vet.-Akad. Förh.* xv. p. 452 (1858).

Described from Ceylon.

## \*†PHALÆNOMORPHA EMERSONIANA.

*Elidiptera Emersoniana*, *Walk. List Hom. Ins. B. M., Suppl.* p. 73 (1858).

*Pœciloptera Tennentina*, *Tennent, Nat. Hist. Ceylon*, p. 433, fig. (1861).

Described from Ceylon. Appears to be a variable species.

Found on lichen-covered trunks of trees (*E. E. G.*).

Pundaloya and Nawalapitya.

## \*†PHALÆNOMORPHA INCONSPICUA, sp. n.

Long. corp. 6 millim.; exp. tegm. 16 millim.

Greenish, slightly varied with rufous above; prothorax more distinctly green, abdomen more inclining to yellowish, head beneath and legs rufo-testaceous. Head extending for more than half its length beyond the eyes, angulated on each side and then rounded in front; face with a central carina; hind tibiæ with two spurs; tegmina about four times as long as broad, pale brown, with brown or green nervures, the latter chiefly towards the base or in the interior of the outer half of the tegmina; costal and apical areas very broad, the cross nervures placed close together and but slightly oblique. Wings pearly white, with testaceous nervures, those towards the base and the second from the inner margin green.

Allied to *P. Emersoniana*, but much smaller, and with the costal and apical areas much wider.

Pundaloya.

\*†*PHALÆNOMORPHA PARVA*, sp. n.

Long. corp. 5 millim. ; exp. tegm. 14 millim.

Testaceous ; abdomen broad below, with white transverse stripes ; head and thorax slightly mottled with black ; head and mesothorax dull yellow. Head extending for about half its length beyond the eyes, truncated, hardly produced beyond the lateral angles ; tegmina about three times as long as broad ; costal and apical areas very broad, with nearly straight cross-nervures, but distinctly narrower towards the tip ; all the nervures testaceous spotted with brown. Wings dirty white, with testaceous nervures.

Allied to the last species.

Pundaloya.

*PHALÆNOMORPHA* (?) *ABDOMINALIS*, sp. n. (Plate V. fig. 16.)

Long. corp. 7 lin. ; exp. tegm. 17 millim.

Head and pronotum brown ; mesonotum reddish brown, darkest in the middle ; head, pectus, and legs more yellowish ; abdomen greenish above, shading into yellow on the sides and beneath, laterally compressed, and much raised in the middle. Tegmina brown ; costa arched ; a strong rounded projection on the inner margin towards the base, but beyond the middle both the costa and inner margin form a long shallow concave curve, rendering this part of the tegmina narrowest ; the costal region is more or less pale, with numerous cross-nervures ; at two thirds of its length the pale space, which is there greenish above, extends downwards for a third of the width of the tegmina, and is bounded outside by an oblique brown shade running from just within the apex. Several of the nervures on the upper part of the central area of the tegmina are infuscated before the middle. The apex and hinder angle are distinct, but rounded off ; the marginal area is not very well defined, but is broadest at the hinder angle. Wings fusco-hyaline.

Not closely allied to any described species.

Exact locality not specified.

*CHRONEBA PALLIFRONS*.

*Chroneba pallifrons*, Stål, *Berl. ent. Zeitschr.* iii. p. 520 (1859).

Described from Ceylon.



\*†SELIZA BIsectA, sp. n. (Plate V. fig. 5.)

Long. corp. cum tegm. 8 millim.

Castaneous above, testaceous below; head and thorax broadly black in the middle above; tegmina dark brown; costa slightly arched, and the subcostal nervure more so, rendering the costal area rather narrow, but the apical area is very broad, and the space between the nervures lighter than the central area; internal area bounded by a very distinct testaceous streak along the fold; wings dark fuscous.

Not closely allied to any described species; except in the shape of the head, in which it agrees with *Ricania*, it much resembles a *Phalænomorpha*.

Putlam.

\*†SELIZA NIGROPUNCTATA, sp. n.

Long. corp. cum tegm. 7 millim.; lat. max. tegm.  $3\frac{1}{2}$  millim.

Head and pronotum chocolate-brown above; face rather lighter, with testaceous lateral and central carinæ; under surface of body testaceous; tegmina brown with black veins, blackening towards the rounded projection on the base of the inner margin and towards the hinder angle of the central area; the inner marginal area towards the base, and the basal third of the central area, with numerous large raised black granules; the costal and marginal areas very broad, but broadest at the apex; cross-nervures nearly straight.

Much resembles *Pæcilopectera punctifrons*, Walker (which is referred to *Seliza* by Walker in a MS. note); but the nervures are darker, and the costal and submarginal areas broader.

\*†RICANIA FENESTRATA.

*Cercopis fenestrata*, *Fabr. Syst. Ent.* p. 688, n. 1 (1775).

*Cicada hyalina*, *Fabr. l. c.*, App. p. 832 (1775).

Appears to be very common in Ceylon. Mr. Green's specimens are from Pundaloya.

\*†RICANIA TENEBROSUS.

*Ricania tenebrosus*, *Walk. List Hom. Ins. B. M.* ii. p. 406, n. 7 (1851).

Common in the East Indies; probably a variety of *R. speculum*, Walk. Mr. Green's specimens are from Putlam.

\*†RICANIA ANGULATUS, sp. n.

Exp. al. 24 millim.

Brown; head wanting; thorax and pectus black; legs tes-

taceous. Wings brown, subhyaline; tegmina darkest on the costa, with a hyaline mark in the middle, larger and more obtuse at the extremity than in *R. striatus*; obliquely from the apex a hyaline band runs down to the fold; it commences rather narrowly, and widens; at rather more than half its length it is angulated obtusely inwards, and then rectangularly downwards, both angles being fairly well marked, especially the second. Wings with a similar vitreous band running from the costa, where it is broadest, three fourths across the wing towards the anal angle.

Differs from *R. fasciata*, Amyot, in the shape of the band.  
Pundaloya.

\*†*RICANIA STRIATUS*, sp. n.

Exp. al. 30 millim.

Dark reddish brown; pronotum and costa of tegmina more or less distinctly blackish; legs testaceous. Tegmina with a hyaline spot on the middle of the costa, forming a long triangle, the basal side twice as long as the marginal. Two blackish lines beyond the middle of the wing, the outer one bordered first outside, and then crossed and bordered inside by a narrow reddish line; half-way between this and the hind margin is another more regular narrow reddish line.

Allied to *R. obscura*, Fabr.

Aniswella, July 1888; and Putlam.

An allied species from Ceylon has been identified by Walker (doubtfully, and almost certainly erroneously) with *Pæciloptera pulverulenta*, Guérin, described from Campeachy Bay. I do not care to describe Walker's Cinghalese insect from a single specimen, not in the best condition.

\**SCARPANTA TENNENTINA*.

*Pæciloptera Tennentina*, *Walk. List Hom. Ins. B. M., Suppl.* p. 111 (1858).

*Elidiptera Emersoniona*, *Tennent, N. H. Ceylon*, p. 433 (1861).

Described from Ceylon.

\*†*SCARPANTA LATIPENNIS*, sp. n. (Plate VI. fig. 9.)

Exp. tegm. 25 millim.

Body and tegmina yellow (faded leaf-colour). Tegmina very broad, the costa strongly arched, and the angles rounded off; the inner margin likewise curved strongly outwards near the base making the outline that of an obtuse-angled triangle, with the

angle itself rounded off; at nearly three fourths of the distance from this bend to the hinder angle is a black spot on the inner margin; and at about three fourths of the length of the hind margin is a black spot, from which a series of small disconnected irregular black markings run up towards the middle of the wing; there are also some very small scattered black specks and obsolete dusky mottlings on other parts of the tegmina. Tegmina beneath pale yellowish green, irregularly irrorated with white; all the black spots and specks are covered with white, especially those running from the hind margin, which are rather broader than above; from the inner side of the last dark spot a series of whitish markings runs towards the tip; a series of smaller ones runs from the spots on the inner margin through the transverse dark spots, also towards the tip, and there are several other whitish mottlings on other parts of the tegmina; these are not well-defined clear white spots, but more or less subobsolete and suffused in appearance. Wings white, subhyaline, the nervures concolorous.

Closely allied to *S. Tennentina*.

One specimen from Kandy.

\*†PÆCILOPTERA GLAUCA, sp. n. (Plate VI. fig. 14.)

Exp. al. 27-31 millim.

Tegmina pale bluish grey, hind marginal area paler; hind wings more grey, iridescent. Body white, scutellum and legs black; abdomen covered with white feathery waxy excrescences.

Allied to *P. tineoides*, Oliv., but more uniform in colour and with broader wings. It is not unlike *Scarpauta Tennentina* in shape.

Gregarious. Frequents various species of *Eugenia* (E. E. G.).  
Pundaloya.

\*†PÆCILOPTERA QUADRATA, sp. n. (Plate VI. fig. 8.)

Exp. tegm. 16-21 millim.

Grass-green; tarsi ferruginous. Tegmina with the costa slightly arched, and the tip and hinder angle nearly rectangular, the former slightly rounded off; inner margin oblique for the basal fourth, then suddenly curved outwards at more than a rectangle, and thence running at a very slight curve to the hinder angle. The costa, hind margin, and outer fourth of the inner margin, as well as the basal angle of the last, narrowly edged with orange; beneath the orange line the costa is more broadly

bordered with yellow. Nervures green, subcostal nervure running parallel to the costa for some distance, and then curving round parallel to the hind margin, but leaving a broader space between the line and the hind margin than between the line and the costa; but before reaching the inner margin it curves suddenly inwards, and ceases just above the point where the orange line ceases on the inner margin. The last nervure from the base near the inner margin is more distinctly green than the others, and its neighbourhood is granulated with green. Wings pearly white, nervures slightly greenish. On the under surface of the tegmina is a transverse curve, hardly visible above, branching from the costal nervure before the upper curve, and then running downwards and obliquely inwards towards the same point on the inner margin.

Allied to *P. truncata*, Linn., but the costal area is much broader, besides other differences.

Putlam.

\*†PHRONIMA MARGINELLA.

Fulgora marginella, *Oliv. Enc. Méth.* vi. pp. 566, 575, n. 43 (1791).

Recorded from India, Cambodia, and Ceylon.

\*†PHRONIMA DELTOTENSIS, sp. n.

Long. corp. 10 lin.; exp. tegm. 50 millim.

Head and body testaceous, yellower beneath; the summit of the eyes, the antennæ except the base of the scape, which is reddish brown, the four hind tibiæ except more or less of the base above, and the tarsi except the claws, deep black. Tegmina testaceous, the costal edge with a narrow yellow line. Wings opaque white, with testaceous nervures.

Larva reddish brown, with the antennæ and legs darker, and covered with white waxy appendages.

Allied to *P. inornata*, Walk., from Tenasserim, Siam, and Burmah, but with darker legs and antennæ.

Deltota.

\*†FLATA STELLARIS.

Pæcilopectera stellaris, *Walk. List Hom. Ins. B. M.* ii. p. 454, n. 39 (1851).

*Cicada ocellata*, *auct. nec De Geer, Fabr.*

Common in Ceylon. The specimens differ slightly in the spotting, but this is known to be a variable character.

Mr. Green's specimens are from Pundaloya.

By an extraordinary error, this species has been identified by most authors with *Cicada ocellata*, Fabricius (afterwards erroneously referred by him to *Flata*), which is identical with that of De Geer, whose figure, which Fabricius quotes, probably represents a species of *Platypleura* allied to *P. Kämpferi*, Fabr. Although there might be some doubt whether the description of Fabricius really applies to De Geer's insect, yet Fabricius would hardly have applied the term "major" to *P. stellaris* when he included his *ocellata* in the genus *Cicada*.

\*†PHYLLYPHANTA ALBOPUNCTATA, sp. n. (Plate VI. fig. 5.)

Exp. tegm. 30 millim.

Green, tarsi ferruginous. Tegmina slightly shaded with white beyond the middle, and with the centres of many of the cells pale; four conspicuous rows of whiter spots; of these, two are longitudinal, starting close together near the base, about the centre of the wing, and then diverging as the tegmina broaden, so as to maintain nearly uniform distances from the costa and inner margin respectively, these extend to rather beyond the middle of the tegmina; the other two rows of whitish spots are transverse, rising towards the tip of the costa, the innermost running obliquely inwards and downwards for two thirds of the width of the tegmina, and the other running nearly straight downwards for a rather longer distance opposite the hind margin. Under surface much whiter, with the rows of spots smaller, more distinct, and further extended. Tegmina with the costa edged with yellow, and the hind margin (more narrowly) with tawny; costa gradually arched, tip acute, rather more than rectangular; hind margin very slightly convex and concave to the very acute and much projecting hinder angle; inner margin with a strong rounded projection near the base, and then gradually curved outwards to the hinder angle; wings pearly white, with a strong projection on the costa near the base, rather more pointed than that on the inner margin of the tegmina.

Not closely allied to any species in the Museum.

\*†PHYLLYPHANTA ACUTIPENNIS, sp. n. (Plate VI. fig. 6.)

*Flata acutipennis*, *Atkinson*, MS.

Exp. tegm. 23-30 millim.

Head, body, and tegmina green above; head and pronotum with a broad rusty longitudinal band, blackish on the median

carina itself; face and under surface whitish or pale green; tarsi ferruginous. Tegmina green, veins green (sometimes yellowish towards the base of the inner margin), the centre of the cells often whitish; costa gradually arched, apex nearly rectangular; inner margin obtusely angulated at about five sixths of its length, then gradually curved outwards and downwards to the hinder angle, which is long and very acute; hind margin nearly straight. A rusty yellow line runs round the wing from the base of the costa to the angle near the base of the inner margin; on the basal half of the costa it is bordered below with pale yellow, and from thence nearly to the hinder angle it is dotted within with brown. On the inner margin the yellow border is edged outside, from the basal angle to two-thirds of the distance to the hinder angle, with a dark brown line, above which stand white dots; this is followed by a conspicuous black spot, running up a little into the wing, and beyond by a row of brown dots extending nearly to the hinder angle. Wings satiny white, subhyaline. Tegmina more or less whitish beneath.

A very common species in Ceylon; one of Mr. Green's specimens had been ticketed with the name "*Flata acutipennis*" by Mr. Atkinson, which I have adopted. I cannot find that it has been published.

Allied to *P. productus*, Spin.

Pundaloya.

\*† PHYLLYPHANTA DUBIA, sp. n.

Exp. tegm. 25 millim.

Very like *P. acutipennis*. Front of head rather more pointed; head and pronotum with a black longitudinal carina, bordered with tawny yellow; sides of pronotum with some tawny streaks; tegmina grass-green, with tawny nervures, the cells not centred with white above, beneath paler, but hardly whitish, and the centre of the cells distinctly paler; tegmina with a pale yellow edge, from the base of the costa to the basal angle on the inner margin; dotted with black from beyond the middle of the costa to the hinder angle, and round as far as the large blotch on the inner margin; beyond this and the basal angle is a black line broken at regular intervals. Otherwise as in *P. acutipennis*.

Possibly a variety of *P. acutipennis*.

Putlam.

## \*†MINDURA HEMEROBII.

*Ricania Hemerobii*, *Walk. List Hom. Ins. B. M.* ii. p. 425 (1851).

Described from Ceylon. Mr. Green's specimens are from Pundaloya and Nawalapitya.

## \*†NOGODINA GREENI, sp. n. (Plate V. fig. 15.)

Long. corp. 9 millim.; exp. tegm. 28 millim.

Head and thorax mostly testaceous above, the latter with two black carinæ, diverging behind, the space between these and the central testaceous stripe brown; a black spot on each side in front; abdomen yellow at the sides (greenish at the base) and brown in the middle; marginal carinæ and last two segments black; a white spot at the base of the terminal segment. Face testaceous, with the frontal and lateral carinæ very narrowly black; three testaceous carinæ, diverging and disappearing at a level with the lower boundary of the eyes, which are black in the middle, bordered with yellowish; rostrum black at the base and extremity. Under surface of body pale greenish; coxæ spotted and hind femora lined beneath with black; tarsi and spines of hind tibiæ blackish; abdomen brownish in the middle, and with the sides of the terminal segments black. Tegmina and wings hyaline, with brown nervures; hind margins bordered with smoky brown; tegmina with a large oblong stigma, enclosing a square vitreous spot on the subcostal space; there is also a brown spot at the tip, and another within it; another, confluent with the brown border, stands rather below the middle of the hind margin; and the inner margin is broadly brown, from the point where it forms a rounded projection near the base to the hinder angle; the nervures nearest the inner margin are broad and brown, and the cross-nervures rising before the hinder angle are also slightly clouded.

Somewhat resembles *Mindura Hemerobii*, Walk.

Deltota.

## CERCOPIDÆ.

## PENTHIMIA RUFOPUNCTATA.

*Penthimia rufopunctata*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 94 (1863).

Described from Ceylon (Nura Ellia and Patannas).

## \*†PENTHIMIA MELANOCEPHALA.

*Penthimia melanocephala*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 95 (1863).

Nura Ellia (*Motschulsky*); Pundaloya (*Green*).

## \*†CALLITETTIX AFFINIS.

*Callitettix affinis*, *Atk. Journ. As. Soc. Bengal*, lvii. (2) p. 335 (1889).

Very common in Ceylon.

The apical third of the tegmina, within the black edging, is fuscous, reticulated with red of nearly the same shade as the rest of the tegmina. This point is omitted in the original description of the species.

## \*†CALLITETTIX CAPITATA.

*Callitettix capitata*, *Stål, Öfvers. K. Vet.-Akad. Förh.* xxii. p. 15, n. 3 (1865).

*Phymatostetha insignis*, *Dist. Trans. Ent. Soc. Lond.* 1878, p. 322.

A very common and variable species in Ceylon; the colour of the pronotum varies from red to black; the red at the base of the tegmina is generally more or less lined with black, and sometimes almost obliterated; and the outer part of the tegmina varies from black to subhyaline fuscous.

Mr. Green's specimens are from Pundaloya and Putlam.

## \*†PHYMATOSTETHA INCONSPICUA.

*Phymatostetha inconspicua*, *Butl. Cist. Ent.* i. p. 267 (1874).

Common in Ceylon.

## \*†CERCOPIS INCLUSA.

*Cercopis inclusa*, *Walk. Cat. Hom. Ins. B. M.* iii. p. 658, n. 29 (1851); *Stål, Öfv. Vet.-Akad. Förh.* xxii. p. 147 (1861).

Common in Ceylon. Mr. Green's specimens are from Kandy.

## \*†COSMOCASTA TAPROBANENSIS.

*Cosmocasta taprobanensis*, *Atk. J. A. S. B.* lvii. p. 333 (1889).

A very common insect in Ceylon.

Frequents *Strobilanthus* (*E. E. G.*).

## \*†COSMOCASTA GREENI.

*Cosmocasta Greeni*, *Atk. J. A. S. B.* lvii. p. 334 (1889).

Described from Ceylon.

## Genus RHINASTRIA, g. n.

Vertex much depressed in front, filled up in the middle behind by a broad ridge, on the sides of which the ocelli are placed, which are about equally distant from each other and from the eyes; front produced downwards into a compressed carinated beak,



obtusely pointed below, not unlike that of a puffin in shape; antennæ placed between the base of the beak and the eyes; pronotum nearly smooth, slightly depressed laterally in front, angles not very prominent; scutellum rather large. Tegmina with the costa carinated, convex beyond the middle, a deep groove marked by a black nervure running from near the costa towards the hinder angle; apical third of tegmina reticulated; legs rather long and stout; front femora slightly longer than the others.

Allied to *Cosmocarta*.

\*†*RHINASTRIA BICOLOR*, sp. n. (Plate VI. fig. 12.)

Long. corp. cum tegm. 10 millim.

Tawny; eyes, antennæ, the nervure mentioned in the description of the genus, and the hinder costal and apical margin of the tegmina, as well as the spaces between the nervures on the terminal third, the knees, tarsi, and some spots on the sides of the ventral segments of the abdomen, black.

Aniswella, July 1888.

\*†*PHILENUS HIRSUTUS*, sp. n.

Long. corp. 8-9 millim.

Brownish testaceous, front transversely striated, separated by a broad undivided medial space; two black spots, slightly showing above, just below the middle of the convex and somewhat flattened rim of the head; antennæ, tips of hind tibiæ, and tarsal claws black. Tegmina pointed, with a pale oblique fascia on the costa before the tip, a black spot at the tip, and another, in a pale ring, on the inner margin, at the extremity of the principal nervure; in one specimen, a great part of the outer two thirds of the tegmina is blackish on the costa, as far as the oblique band; it is intersected at about two thirds of the length of the costa by a square pale patch on the costa, nearly connected with the point of a pale subtriangular mark in the middle of the tegmina; the hinder portion of this dark space is concave towards the middle of the tegmina, and runs narrowly towards the inner margin on the basal side of the pale space. The whole insect is so thickly covered with short pale bristles as to entirely conceal the sculpture.

Extremely similar to *Aphrophora alni* in external appearance.

Putlam.

## APHROPHORA LINEATOCOLLIS.

*Aphrophora lineatocollis*, *Motsch. Études Ent.* viii. p. 110 (1859).

Described from the mountains of Ceylon.

## \*†APHROPHORA FACIALIS, sp. n.

Long. corp. cum tegm. 7–8 millim.

Testaceous, but covered with large, deep, round, brown pits, which give the whole insect a brown appearance; head brown, with the central carina and a spot on each side behind pale, and some pale smooth spaces surrounded with brown in front of the prothorax, borders of scutellum also pale; an indistinct pale spot, bordered with darker, sometimes visible in the middle of the costa of the tegmina; front with deep brown punctures in transverse rows, giving it the appearance of being transversely striated; it is more or less varied with black, sometimes entirely blackish, except at the lower extremity, but more often with two large blackish lateral spots (sometimes united) about the middle, and smaller ones below. Legs brown, indistinctly banded with paler.

Not unlike our common *Philænus spumarius*, L.

Pundaloya.

## \*PTYELUS COSTALIS.

*Ptyelus costalis*, *Walk. List Hom. Ins. B. M.* iii. p. 707, n. 13 (1851).

*Ptyelus concolor*, *Walk. l. c.* p. 715, n. 26 (1851).

Recorded from India and Ceylon.

## \*†CLOVIA PERDUCTALIS, sp. n. (Plate V. fig. 2.)

Long. corp. cum tegm. 9–11 millim.

Warm reddish brown above, thickly punctured; head broad, obtusely pointed, the rim of the head and the base of the inner margin and tip of the tegmina sometimes blackish; tegmina in the middle sometimes varied with yellowish; head carinated above: a conspicuous yellowish stripe, pointed at both ends, but with nearly parallel sides for much of its length, commences a little behind the front of the head and ceases at the tip of the scutellum; it entirely covers the scutellum, except a triangular space on each side at the base. Under surface more or less yellowish.

Pundaloya.

\*†*CLOVIA HUMERALIS*, sp. n.

Long. corp. cum tegm. 8 lin.

Head, pronotum, and scutellum dull testaceous; head and pronotum with two dull reddish stripes, rather wider behind, on each side of the median line; a shorter one, darker behind, within and behind each eye. Head with the front reddish, below which is a blackish half-circle; otherwise testaceous beneath, as are also the sides of the thorax and abdomen and the legs beyond the middle of the femora; otherwise the under surface of the body is blackish. Tegmina pointed in the middle, so that there is no proper hind margin, chestnut-brown, with a testaceous stripe on the basal third of the costa, broadest at the extremity; a slender, transverse, submarginal stripe at the extremity of the costa, preceded by another broad transverse stripe running from the costa just below the tip, and ceasing in a point before reaching the inner margin; on the outer half of the inner margin there are some smaller and more irregular testaceous spots and streaks, which run up to the middle of the tegmina on the basal side.

Allied to *C. exclamans*, Walker, from Sarawak, but with longer and more pointed tegmina.

Pundaloya.

\*†*CLOVIA PERSTRIGATA*, sp. n.

Long. corp. cum tegm. 10 millim.

Upperside dark chestnut-brown, with five slender testaceous stripes between the eyes, and an outer one on each side, interrupted by the eyes, passing backwards and inwards over the vertex, pronotum, scutellum, and adjacent part of the tegmina. Tegmina with a large testaceous spot on the costa about two fifths of the distance between the base and the tip; a testaceous submarginal stripe at the extremity, running from about three fourths of the length of the costa before the tip, preceded by a wide testaceous band, at first running obliquely backwards and inwards, and then suddenly angulated backwards towards the tip, where it ceases in a point; between its starting-point and the costa are three short testaceous lines. Under surface chocolate; the borders of the head and thorax black, edged with testaceous within; legs testaceous, the hind tibiæ striped with black, and the tips of the hind tibiæ and tarsi black.

Allied to the last species.

Pundaloya.

## \*†CLOVIA BIPUNCTATUS, sp. n.

Long. corp. cum tegm. 8 lin.

Testaceous, with about six reddish lines, the outer ones interrupted by the eyes, passing backwards to the scutellum and tegmina; tegmina with a reddish-brown stripe, broadest behind, running from the base to beyond the middle, and with two slender lines above it; the tip is edged on each side with the same colour, and preceded by a curved stripe from the costa which ceases before quite reaching the tip; at about three fifths of the length of the costa another stripe runs inward and backward, and then turns at an angle to the inner margin; on the inner margin, rather beyond the point on the costa from whence the curved line runs towards the tip, is a well-marked oval black spot. Underside more rufo-testaceous, with a broad testaceous stripe which runs beneath the head and eyes, bordering the head and thorax.

Allied to *C. perstrigata*.

Pundaloya.

## MACHÆROTA GUTTIGERA.

*Machærota guttigera*, *Westw. Trans. Ent. Soc. Lond.* 1886, p. 332, pl. viii.

Described from Ceylon.

## MEMBRACIDÆ.

## OXYRHACHIS INERMIS.

*Oxyrhachis inermis*, *Stål, Öfv. Vet.-Akad. Förh.* xxvi. p. 283 (1869).

Described from Ceylon.

## \*OXYRHACHIS INDICANS.

*Oxyrhachis indicans*, *Walk. List Hom. Ins. B. M., Suppl.* p. 128 (1858).

Described from Ceylon.

## LEPTOBOLUS CURVISPINUS.

*Leptobolus curvispinus*, *Stål, Öfv. Vet.-Akad. Förh.* xxvi. p. 284 (1869).

Described from Ceylon.

## LEPTOBOLUS AURICULATUS.

*Leptobolus auriculatus*, *Stål, Öfv. Vet.-Akad. Förh.* xxvi. p. 285 (1869).

Described from Ceylon.

## CENTROTUS REPONENS.

*Centrotus reponens*, *Walk. List Hom. Ins. B. M.* ii. p. 604, n. 14 (1851).

Described from Tenasserim, but included in Walker's list as Cinghalese. It seems to differ from *C. taurus*, Fabr., chiefly in the thicker and more recurved lateral thoracic horns.

It is curious that hardly any of the described *Centroti* included in Walker's list of Cinghalese species were obtained by Mr. Green. Several others mentioned by Walker are MS. only, never having been described.

## \*CENTROTUS (♀) MALLEUS.

*Centrotus malleus*, *Walk. List Hom. Ins. B. M.* ii. p. 613, n. 41 (1851).

A very distinct and remarkable species, which should certainly form a new genus, and appears to be allied to *Machærota*.

Described from Ceylon.

## CENTROTUS SUBSTITUTUS.

*Centrotus substitutus*, *Walk. List Hom. Ins. B. M.* ii. p. 605, n. 16 (1851).

Described from Bengal, but included in Walker's list as Cinghalese.

## CENTROTUS TERMINALIS.

*Centrotus terminalis*, *Walk. List Hom. Ins. B. M.* ii. p. 604, n. 13 (1851).

Described from China; included in Walker's list as Cinghalese.

## \*†CENTROTUS LEUCASPIS.

*Centrotus leucaspis*, *Walk. List Hom. Ins. B. M., Suppl.* p. 158 (1858).

The commonest species in Ceylon.

## \*†CENTROTUS ATRICOXIS, sp. n.

Long. corp. cum tegm.  $7\frac{1}{2}$  millim.; exp. corn. 5 millim.

Black, rugose-punctate, sparingly clothed with short golden hairs; scutellum concolorous. Thoracic lateral horns moderately thick, arching, and slightly recurved; central horn curved backwards and downwards, as long as the abdomen; short lateral angles in front of the base of the tegmina very acute. Legs

castaneous, coxæ black, tips of tibiæ and tarsi inclining to blackish. Tegmina dark chestnut, broadly black at the base and for two thirds of the length of the costa, and the nervures mostly black, except towards the extremities.

Allied to *C. substitutus*, Walker.

Nawalapitya.

Another specimen, which I can hardly consider distinct, has shorter and thicker horns, and the tomentum is white rather than golden. It is covered beneath with a white waxy exudation, as is frequently the case in these insects. The horn is also more depressed.

\*CENTROTUS DECIPIENS, sp. n.

Long. corp. cum tegm. 6 millim. ; exp. corn. 3 millim.

Black, punctuation rather finer than in *C. flavipes*; lateral thoracic horns acute, slightly recurved, moderately long and slender; central horn raised at the base and then curved backwards, as in *C. leucaspis*, Walk., nearly to the end of the tegmina, which are yellowish hyaline; pectus in the specimen described with waxy efflorescence, which is continued round the sides of the pronotum and the base of the scutellum; tegmina yellowish hyaline, the nervures nearly concolorous, base black, and the costa to the tip rather broadly black; coxæ black; legs rufo-testaceous; hind legs pale testaceous.

Nearest to *C. leucaspis*, from which it differs, *inter alia*, in the colour of the legs and in the white border of the pronotum &c. This is one of Walker's MS. species, which he has ticketed, and which I think it well to take the present opportunity of putting on permanent record.

Ceylon; particular locality not recorded.

\*†CENTROTUS FLAVIPES, sp. n.

Long. corp. cum tegm. 7 millim. ; exp. corn. 4 millim.

Closely allied to *C. atricoxis*, of which it may be a variety. The structure is nearly the same, but the tomentum is white, not golden; the legs are testaceous, shading into reddish brown on the tips of the tibiæ and the tarsi, and the tegmina are lighter, the nervures, except those on the black portion, being castaneous. The pectus and pleura are covered with a white waxy exudation.

Nawalapitya.

## CENTROTUS RECTANGULATUS, sp. n.

Long. corp. cum tegm. circa 5 millim. ; exp. corn. 3 millim.

Dark brown or blackish ; knees, tibiæ, and tarsi rufo-testaceous ; pronotum narrowly bordered with white at the sides ; lateral thoracic horns broad, directed obliquely outwards and upwards, but only slightly backwards, the extremity shortly and broadly trifid, the middle projection longest and most acute ; central spine broad at the base and rising obliquely upwards, and then turned backwards and downwards at a rectangle ; the hinder part is slender, acute, longer than the body, and sometimes inclines to testaceous in the middle. Scutellum armed with two short spines. Tegmina hyaline, the nervures towards the base whitish, and those towards the extremity broadly brown ; a large brown spot at the tip and another at the hinder angle.

Allied to *C. pilosus*, Walker, but darker, and with differently marked tegmina.

A common species in Ceylon.

Pundaloya.

Perhaps allied to Stål's genus *Leptobolus*.

## \*†CENTROTUS GRANULATUS, sp. n.

Long. corp. cum tegm. 10 millim. ; exp. corn.  $6\frac{1}{2}$  millim.

Entirely dull black, with fine yellowish pubescence ; a testaceous spot on each side of the base of the scutellum and another on the inner margin of the tegmina at three fifths of its length. Thoracic lateral horns broad and flattened, projecting obliquely forward and upward beyond the level of the head, suddenly and squarely truncated at the extremity, bicarinate both above and below, besides the lateral carinæ ; central spine rather broad at the base, nearly straight, and depressed to the level of the tegmina, extending for one fourth of its length beyond the pale spot on the tegmina ; a well-marked dorsal and two lateral carinæ, the latter coalescing at half their length ; pronotum with numerous conspicuous raised black points.

This species and the next have no near allies, but have a distant resemblance to the Australian *C. decisus*, Walker.

Pundaloya.

## \*†CENTROTUS BIOCULATUS, sp. n.

Long. corp. cum tegm.  $7-8\frac{1}{2}$  millim. ; exp. corn. 5-6 millim.

Deep black ; structure nearly the same as in *C. granulatus*, but

the thorax is thickly and coarsely but uniformly granulated, without isolated raised points; the lateral horns are more upright, not passing beyond the head, and the central spine has only one lateral carina on each side. There are two conspicuous white spots in front of the pronotum before the horns, and two more at the base of the scutellum. Tegmina black, the nervures rufo-testaceous at the extremity, and the inner margin broadly hyaline, except at the base and tip.

Allied to *C. granulatus*.

Pundaloya.

\*†CENTROTUS BUBALUS, sp. n.

Long. corp. cum tegm. 6 millim.; exp. corn. 4 millim.

Deep black; horns long and slender, rising upwards and outwards, and then bent more downward and backward at the tips; central spine rising obliquely upwards nearly to the level of the lateral horn, and then curved over nearly at a right angle and extending almost to the end of the tegmina, the extremity showing a slight upward tendency. Tegmina yellowish hyaline, with whitish nervures; costa black at the base for three fourths of its length, and then brown, after an interruption, to the tip; hind margin more narrowly black for half its length; a dusky spot on the costa and inner margin before the extremity; pleura with a white waxy exudation which extends rather broadly over the sides of the pronotum and the base of the scutellum; legs testaceous (front legs rufo-testaceous), with the tips of the tibiæ and tarsi blackish.

Resembles *C. albovenosus* in many respects; but the form of the spine is very peculiar and characteristic.

Pundaloya.

\*†CENTROTUS IMITATOR, sp. n.

Long. corp. cum tegm. 5 lin.; exp. corn. 3 millim.

Deep black, thickly and rather finely punctured; pectus with white waxy efflorescence, which extends along the borders of the pronotum and invades the base of the scutellum; lateral spines moderately long and slender, almost horizontal; central spine slightly raised at the extremity and gradually curved backwards, as long as the body. Legs rufo-testaceous; coxæ black; tarsi inclining to blackish; hind legs pale testaceous. Tegmina yellowish hyaline, with whitish nervures; costa with a broad black band for three fourths of its length, towards the extremity of



which it is bordered outside with yellowish; the inner margin is also more narrowly black for some distance from the base; a narrow blackish or rufo-testaceous border extends round the rest of the wing, interrupted for a short space beyond the black stripe on the inner margin; before the tip and hinder angle is a more or less conspicuous brown spot.

Nearly allied to *C. decipiens*. I have retained Walker's MS. name for the present species.

Pundaloya.

\*†CENTROTUS CUPREUS, sp. n.

Long. corp. cum tegm. 5-6 millim.; exp. corn. 2½ millim.

Uniform cupreous; lateral thoracic horns short, not very acute; pectus covered with a white waxy efflorescence; usually a white dot on each side at the base of the scutellum, and another on the inner margin of the tegmina at two thirds of their length; spine slender, pointed, depressed in the middle, and extending to half the distance between the white spot on the inner margin and the tips of the tegmina. Legs rufo-testaceous. The tegmina are sometimes lighter towards the tips: one specimen has some white waxy spots near the costa at three-fifths of their length, a vitreous spot on the costa beyond, and a yellowish subhyaline space, marked inside with a brown spot, at the extremity of the inner margin; but these differences are hardly sufficient to be regarded as specific in the absence of a series for comparison.

Appears to be a common species in Ceylon.

Pundaloya.

ANOMUS RETICULATUS.

*Anomus reticulatus*, *Fairm. Ann. Soc. Ent. France*, (2) iv. p. 521, pl. vii. fig. 32 (1846); *Motsch. Études Ent.* viii. p. 109 (1859).

Described from Brazil. Stated by Motschulsky to occur in Ceylon (?).

ANOMUS MUCRONICOLLIS.

*Anomus mucronicollis*, *Motsch. Études Ent.* viii. p. 109 (1859).

Described from Ceylon.

\*†ANOMUS TUBERCULATUS.

*Anomus tuberculatus*, *Motsch. Études Ent.* viii. p. 109 (1859).

The specimen which I refer to this species has the thorax very thickly clothed with hair, a character which Motschulsky does not mention.

## TETTIGONIDÆ †.

## \*TETTIGONIA PAULLULA.

*Tettigonia paullula*, *Walk. List Hom. Ins. B. M., Suppl.* p. 219 (1858).  
Described from Ceylon.

## \*†TETTIGONIA PUPULA, sp. n. (Plate VI. fig. 10.)

Long. corp. cum tegm. 5 millim.

Head orange-red above, with a large oval black spot on the hind border, and a smaller black spot in front, just visible from above; pronotum red on the sides in front; a middle stripe, widening behind, and the hind border black; scutellum with a wide testaceous band in the middle, and black on the sides; face and under surface of body testaceous; a stripe on each side of the face, the knees, and front tibiæ at least, red. Tegmina black for two-thirds of their length, and fuscous beyond, inclining to fusco-hyaline on the edges; the inner margin is broadly bordered with red, nearly as far as the black colour extends, and the base of the costa is also more or less red.

Pundaloya.

Closely allied to *T. paullula*, Walk., and perhaps a variety of it. The type of *T. paullula* is in very bad condition, but there are two additional black spots on the face, the scutellum is testaceous, with two black spots at the base, and the red colouring on the tegmina is either absent or obliterated.

## \*†TETTIGONIA GEMINA.

*Tettigonia gemina*, *Walk. List Hom. Ins. B. M. iii.* p. 737, n. 27 (1851).

Originally described from Java.

The exact locality of Mr. Green's specimens is not recorded.

## \*†TETTIGONIA FRONTALIS, sp. n.

Long. corp. cum tegm. 6-7 millim.

Head yellow; front with a very large oval blackish spot, extending from a little below the two black ocelli to the base of the rostrum, except on the margins. Pronotum black; tegmina purplish black, sometimes clothed with a green scaling; costa

‡ I have shown in *Proc. R. Dublin Soc.* vi. pp. 580, 581, that the type of *Tettigonia*, Linn., is an Orthopterous insect, *Gryllus verrucivorus*, L., to which the generic name must be restored. I cannot, without analyzing the generic synonymy of the *Homoptera*, discover what name should be substituted for *Tettigonia* in that suborder, and therefore retain it provisionally in the present paper.

broadly yellow; wings fuscous. Under surface black; pleura longitudinally, and abdomen transversely, lined with yellow; legs yellow; front coxæ, and hind femora nearly to the tip, black; hind tibiæ lined above with green or brown.

Pundaloya.

\*†TETTIGONIA PULCHELLA, sp. n. (Plate VI. fig. 13.)

Long. corp. 5 millim.; exp. al. 12 millim.

Vertex (except a red band behind the black ocelli and the red occipital ridge) and pronotum dirty yellow, the latter mottled with brown; scutellum forming a sharply-defined equilateral triangle; abdomen bright yellow at the base, with black markings, and black at the extremity; anal appendages bordered with red. Under surface and legs yellowish; extremity of abdomen and a line on the hind tibiæ black. Tegmina light yellowish brown, with pale pink spots and streaks bordered with black, largest and palest on the costa and inner margin; on the costa there are five blotches, the third, fourth, and fifth largest, and crossing the costal area, but all separated by small black spaces on the costa; towards the base the spotting is confused, but from the second, fourth, and fifth spots rows of about five spots (including those on the costa and inner margin) cross the tegmina, the middle spot being linear, or at least longer than the others; nearer the hind margin is another row of four spots, alternately linear and lunular, and nearest the apex is an incomplete ring, broken on the basal side. Wings light brown, with alternating lighter and darker bands.

Udagama.

\*LEDRA RUGOSA.

*Ledra rugosa*, *Walk. List Hom. Ins. B. M.* iii. p. 816, n. 13 (1851).

Described from Ceylon.

\*†LEDRA SCUTELLATA.

*Ledra scutellata*, *Walk. List Hom. Ins. B. M.* iii. p. 812, n. 6 (1851).

Described from "East Indies."

Mr. Green's specimens are without special locality.

\*†PETALOCEPHALA CONICA.

*Ledra conica*, *Walk. List Hom. Ins. B. M.* iii. p. 823, n. 30 (1851).

Described from Ceylon.

Mr. Green's specimens are from Nawalapitya.

## \*†LEDROPSIS DIMIDIATA.

*Ledropsis dimidiata*, *Stål, Œfv. Vet.-Akad. Förh.* xv. p. 452 (1858).

Described from Ceylon.

Mr. Green's specimen from Hewaietta is much darker than those previously in the Museum Collection (which were placed, without a name, under *Petalocephala*); it is olive-green, with nearly opaque tegmina, with a yellow costa.

## \*GYPONA PRASINA.

*Gypona prasina*, *Walk. List Hom. Ins. B. M., Suppl.* p. 258 (1858).

Described from Ceylon.

## \*†GYPONA STRIATA, sp. n.

Long. corp. cum tegm. 10 millim.

Yellowish green (perhaps grass-green during life); tarsi, front tibiæ, and front of the head, which is semicircular, reddish, the latter usually edged in front with black. Pronotum and scutellum transversely striated. Wings clear hyaline.

Resembles *G. prasina*, but in the latter species the front of the head is more pointed, and the pronotum is not striated.

Pundaloya.

## IDIOCERUS (?) SUBOPACUS.

*Idiocerus* (?) *subopacus*, *Motsch. Études Ent.* viii. p. 110 (1859).

Described from the mountains of Ceylon.

## PEDIOPSIS APICALIS.

*Pediopsis apicalis*, *Motsch. Études Ent.* viii. p. 110 (1859).

Described from Ceylon (Colombo).

## JASSUS FUSCONERVOSUS.

*Jassus fusconervosus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 97 (1863).

Described from Ceylon (Patannas).

## JASSUS LATRUNCULARIUS.

*Jassus latruncularius*, *Motsch. Études Ent.* viii. p. 111 (1859).

Described from Ceylon (Nura Ellia).

## JASSUS PAUPERCULUS.

*Jassus paupercula*, *Spångb. Œfv. Vet.-Akad. Förh.* xxxiv. (9) p. 35 (1878).

Described from Ceylon.

## JASSUS (?) CURTULUS.

*Jassus* (?) *curtulus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 98 (1863).

Described from Ceylon (Patannas).

\*†*ACOCEPHALUS PORRECTUS.*

*Acocephalus porrectus*, *Walk. List Hom. Ins. B. M., Suppl.* p. 262 (1858).

Described from Ceylon.

In Mr. Green's specimen from Pundaloya the head and thorax are marked with longitudinal dull orange stripes, faintly indicated in Walker's type, though not noticed in his description.

*SELENOCEPHALUS LIMBATICEPS.*

*Selenocephalus limbaticeps*, *Stål, Öfv. Vet.-Akad. Förh.* xv. p. 453 (1858).

Described from Ceylon.

*DELTOCEPHALUS RUBROLINEATUS.*

*Deltocephalus rubrolineatus*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 98 (1863).

Described from Ceylon (Patannas).

*DELTOCEPHALUS VARIEGATUS.*

*Deltocephalus variegatus*, *Motsch. Études Ent.* viii. p. 112 (1859).

Described from Ceylon (Nura Ellia).

*DELTOCEPHALUS ELONGATO-OCELLATUS.*

*Deltocephalus elongato-ocellatus*, *Motsch. Études Ent.* viii. p. 113 (1859); *Bull. Mosc.* xxxvi. (3) p. 99 (1863).

Described from Ceylon (Colombo and Patannas).

*DELTOCEPHALUS DISTINCTUS.*

*Deltocephalus distinctus* (sic), *Motsch. Études Ent.* viii. p. 112 (1859).

Described from Ceylon (Colombo).

*DELTOCEPHALUS GUTTULATUS.*

*Deltocephalus guttulatus*, *Motsch. Études Ent.* viii. p. 113 (1859).

Described from Ceylon (Colombo).

*DELTOCEPHALUS DORSALIS.*

*Deltocephalus dorsalis*, *Motsch. Études Ent.* viii. p. 114 (1859).

Described from Ceylon (Colombo).

*DELTOCEPHALUS (?) TRANSPARIPENNIS.*

*Deltocephalus (?) transparipennis*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 100 (1863).

Described from Ceylon (Nura Ellia).

## PLATYMETOPUS LINEOLATUS.

*Platymetopus lineolatus*, *Motsch. Études Ent.* viii. p. 114 (1859).

Described from Ceylon (Nura Ellia).

## PLATYMETOPUS ARCUATUS.

*Platymetopus arcuatus*, *Motsch. Études Ent.* viii. p. 115 (1859); *Bull. Mosc.* xxxvi. (3) p. 100 (1863).

Described from Ceylon (Nura Ellia).

## THAMNOTETTIX SUBRUFUS.

*Thamnotettix subrufa*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 100 (1863).

Described from Ceylon (Colombo).

## THAMNOTETTIX FUMOSA.

*Thamnotettix fumosa*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 101 (1863).

Described from Ceylon (Patannas).

## THAMNOTETTIX NIGROBIMACULATA.

*Thamnotettix nigrobimaculata*, *Motsch. Études Ent.* xxxvi. (3) p. 101 (1863).

Described from Ceylon (Nura Ellia).

## \*†THAMNOTETTIX NIGROMACULATA.

*Pediopsis nigromaculatus*, *Motsch. Études Ent.* viii. p. 111 (1859).

*Thamnotettix nigropicta*, *Stål, Öfv. Vet.-Akad. Handl.* xxvii. p. 740 (1870); *Atkinson, Journ. As. Soc. Bengal*, lvii. p. 338 (1889).

Colombo (*Motschulsky*); Pundaloya (*Green*); Philippines (*Stål*); India, Borneo, Sumatra (*Atkinson*).

“One of the small green insects that suddenly appear towards the end of the rains (September usually) in Calcutta. During the few days that they occur they may be found at night in considerable heaps beneath the lamps in the public streets, and they disappear as abruptly as they come. *T. bipunctata*, Fabr., appears at the same time.” (*Atkinson*.)

*T. bipunctata*, though a well-known Indian species, does not seem to have been yet recorded from Ceylon.

## DIOMMA OCHRACEA.

*Diomma ochracea*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 102 (1863).

Described from Ceylon (Patannas).

## TYPHLOCYBA MACULIFRONS.

*Typhlocyba maculifrons*, *Motsch. Bull. Mosc.* xxxvi. (3) p. 103 (1863).

Described from Ceylon (Colombo).

## CONOMETOPUS INSPIRATUS.

Conometopus inspiratus, *Motsch. Études Ent.* xxxvi. (3) p. 104, pl. ii. f. 22 (1863).

Described from Ceylon (Patannas).

## PSYLLIDÆ.

## DIRAPHIA (?) INDICA.

Diraphia (?) indica, *Motsch. Bull. Mosc.* xxxvi. (3) p. 114, pl. ii. f. 26 (1863).

Described from Ceylon (Nura Ellia).

## LIVILLA (?) NERVOSA.

Livilla (?) nervosa, *Motsch. Bull. Mosc.* xxxvi. (3) p. 114, pl. ii. f. 27 (1863).

Described from Ceylon.

## PSYLLA OCVLATA.

Psylla oculata, *Motsch. Bull. Mosc.* xxxvi. (3) p. 115 (1863).

Described from Ceylon (Nura Ellia).

## APHIDÆ.

## APHIS COFFEÆ.

Aphis coffeæ, *Nietn. Enemies of Coffee Tree*, p. 16 (1861).

Described from Ceylon.

## SIPHONOPHORA ARTOCARPI.

Siphonophora artocarpi, *Westw. Proc. Ent. Soc. Lond.* 1890, p. xxii.

Found on the bread-fruit tree in Ceylon.

## COCCIDÆ.

## \*†LECANIUM MANGIFERÆ.

Lecanium mangiferæ, *Green, E. M. M.* xxv. p. 249 (1889).

Pundaloya (*Green*); also occurs in Demerara (*Douglas, Ent. M. M.* xxv. p. 251), and may be expected to occur wherever the mango is grown.

## \*†LECANIUM COFFEÆ.

Lecanium coffeæ, *Walk. List Hom. Ins. B. M.* iv. p. 1079, n. 58 (1852); *Nietn. Enemies of Coffee Tree*, p. 6 (1861).

Common, and destructive, in Ceylon.

## \*†LECANIUM VIRIDE.

Lecanium viride, *Green, Obs. on Green Scale Bug* (1886); *Ent. M. Mag.* xxv. p. 248 (1889).

Common, and highly injurious, in Ceylon.

## LECANIUM NIGRUM.

*Lecanium nigrum*, *Nietn. Enemies of Coffee Tree*, p. 9 (1861).

The largest species, but less injurious now than formerly (*Green*).

## PSEUDOCOCCUS ADONIDUM.

*Coccus adonidum*, *Linn. Syst. Nat.* i. p. 455, n. 2 (1758).

*Pseudococcus adonidum*, *Nietn. Enemies of Coffee Tree*, p. 4 (1861).

Probably a cosmopolitan species.

## \*†COCCUS (?) FLORIGER. (Plate VI. fig. 7.)

*Coccus floriger*, *Walk. List Hom. Ins. B. M., Suppl.* p. 305 (1858).

Described from Ceylon.

This and the following species appear to be among those alluded to by Nietner ('*Enemies of Coffee Tree*,' p. 5) as belonging to the genus *Dorthisia*.

## \*†COCCUS (?) LANIGER, sp. n. (Plate V. fig. 8.)

Long. corp. cum append. 16 lin. ; lat. 13 lin.

Colour apparently vinaceous ; but the upper surface is entirely covered with a yellowish-white flocculent mass exactly resembling sheep's wool, in the middle of which are seen a central row, and two concentric series between this and the sides, of whiter and more condensed waxy matter. Under surface with long lateral layers of white wax completely surrounding the insect, below the woolly covering of the upper side.

Pundaloya.

## EXPLANATION OF THE PLATES.

## PLATE IV.

## HEMIPTERA HETEROPTERA.

- Fig. 1. *Pentatoma taprobanensis*, Dall., p. 84.  
 2. *Zangis dorsalis*, Dohrn, p. 85.  
 3. *Callidea Rama*, Kirb., p. 76.  
 4. *Canthecona insularis*, Kirb., p. 79.  
 5. *Elasmognathus Greeni*, Kirb., p. 109.  
 6. *Homæocerus antennatus*, Kirb., p. 90.  
 7. *Rhopalus funeralis*, Kirb., p. 97.  
 8. *Pirates ypsilon*, Kirb., p. 113.  
 9. *Rhaphigaster repellens*, Kirb., p. 86.  
 10. *Capsus Ravana*, Kirb., p. 106.  
 11. *Tingis globulifera*, Walk., p. 110.  
 12. *Pentatoma (?) corinna*, Kirb., p. 84.



- Fig. 13. *Lygæus quadratomaculatus*, Kirb., p. 98.  
 14, 14 a. *Dicephalus telescopicus*, Kirb., p. 117.  
 15. *Bathycælia indica*, Dall., p. 85.  
 16. *Lestomerus horridus*, Kirb., p. 111.  
 17, 17 a. *Formicoris inflatus*, Kirb., p. 122.  
 18. *Dindymus Sita*, Kirb., p. 104.

## PLATE V.

## HEMIPTERA HOMOPTERA.

- Fig. 1. *Cicada apicalis*, Kirb., p. 131.  
 2. *Clonia perductalis*, Kirb., p. 161.  
 3. *Derbe* (?) *nitagalensis*, Kirb., p. 142.  
 4. *Dictyophora* (?) *egregia*, Kirb., p. 135.  
 5. *Seliza bisecta*, Kirb., p. 152.  
 6. *Phenice punctativentris*, Kirb., p. 144.  
 7. *Thracia* (?) *obsoleta*, Kirb., p. 144.  
 8. *Coccus* (?) *laniger*, Kirb., p. 175.  
 9. *Brixoides carinatus*, Kirb., p. 140.  
 10. *Microckoria aberrans*, Kirb., p. 148.  
 11. *Pomponia Greeni*, Kirb., p. 129.  
 12. *Brixia tortriciformis*, Kirb., p. 138.  
 13. *Cixius nubilus*, Walk., p. 137.  
 14. *Delphax Ernesti*, Kirb., p. 140.  
 15. *Nogodina Greeni*, Kirb., p. 158.  
 16. *Phalænomorpha* (?) *abdominalis*, Kirb., p. 151.

## PLATE VI.

HEMIPTERA HOMOPTERA (*continued*).

- Fig. 1. *Eurybrachys Westwoodii*, Kirb., p. 146.  
 2. *Elasmoscelis* (?) *radians*, Kirb., p. 149.  
 3. *Elasmoscelis platypoda*, Kirb., p. 148.  
 4. *Hotinus insularis*, Kirb., p. 132.  
 5. *Phyllyphanta albopunctata*, Kirb., p. 156.  
 6. *Phyllyphanta acutipennis*, Kirb., p. 156.  
 7. *Coccus* (?) *floriger*, Walk., p. 175.  
 8. *Pæciloptera quadrata*, Kirb., p. 154.  
 9. *Scarpanta latipennis*, Kirb., p. 153.  
 10. *Tettigonia pupula*, Kirb., p. 169.  
 11. *Symplana viridinervis*, Kirb., p. 136.  
 12. *Rhinastria bicolor*, Kirb., p. 160.  
 13. *Tettigonia pulchella*, Kirb., p. 170.  
 14. *Pæciloptera glauca*, Kirb., p. 154.
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