between veins 2 and 7 being reduced to a small spot above the base of vein 2 and a pair of spots between veins 5 and 7; the series beyond the postmedial line complete but small; cilia of both wings white at base, then with a black line through them, the tips chequered white and black.

Hab. Punjab; Nilgiris; Ceylon. Exp. 16 millim.

- B. (Sameodes). Male with a swelling on the outer side of hind tibice before the medial spurs, of which the outer is minute, the terminal spurs replaced by a small tuft of scales, the tibice being bent beyond the middle; fore wing with a large medial costal lobe on upperside; hind wing with the costa excised before the middle as well as after.
- 5082. Sameodes cancellalis, Zell. K. Vet.-Ak. Handl. 1852, p. 34.
  Stenia pipleisalis, Wlk. Cat. xvii, p. 420; Moore, Lep. Ceyl. iii, pl. 181, fig. 14; C. \$ S. no. 4238.
  Lepyrodes lepidalis, Wlk. Cat. xvii, p. 465; C. \$ S. no. 4371.
  Samea sidealis, Wlk. Cat. xix, p. 937.
  Hymenia meridionalis, Wlk. Cat. xxxiv, p. 1314.
  Sameodes trithyralis, Snell. Tijd. v. Ent. xxiii, p. 218, & xxvi, p. 134, pl. 8, fig. 4.
  Samea vespertinalis, Saalm. Ber. Senck. Ges. 1880, p. 301.

Fulvous, abdomen tinged with white; male with protrusible



Fig. 202.—Sameodes cancellalis, d. 1.

black anal tuft. Fore wing with the costal lobe of male edged by curled black scales; a quadrate hyaline spot in cell and larger spots below middle and in end of cell; a series of large hyaline spots in the interspaces between veins 1 and

7, retracted below vein 1 and bisected by the sinuous postmedial line which is retracted along vein 2; four black marks on the costa towards apex. Hind wing hyaline, with dark speck in and another below cell; a discocellular dark-edged fulvous band narrowing below the cell; a waved postmedial line bent outwards between veins 5 and 2, where it is conjoined to the marginal fuscous-suffused fulvous band, and with a series of hyaline spots beyond it from costa to vein 2; both wings with marginal black line and the cilia black and white.

Hab. Throughout Africa, India, Ceylon, and Burma; Java; Australia; Fiji. Exp. 22 millim.

SECT. II. Antennæ of male filiform and minutely ciliated; neither wing with the apex produced; hind wing of male with the cell very short, its upper part filled by a large hyaline fovea.

5083. Sameodes miltochristalis, n. sp.

Yellow or flery orange; patagia with a fuscous spot. Forewing

with a basal black spot; a highly curved antemedial band with black streaks inside it in and below cell, sometimes developed into a black patch; a black discocellular lunule; a postmedial line angled outwards to costa and beyond the cell, then incurved; a series of streaks beyond it often developed into a diffuse band; a very highly curved series of submarginal spots. Hind wing with nearly straight postmedial series of fuscous streaks.

Hab. Sikhim; Khásis; Nágas; Tenasserim (Doherty). Exp.

26 millim. Type in coll. Elwes.

# 5084. Sameodes pictalis, Swinh. A. M. N. H. (6) xvi, p. 303.

Q. Orange-yellow; palpi brownish above; abdomen reddish at base. Fore wing with the basal half suffused with fuscous, except the costal area; a hyaline spot in cell; a large hyaline discocellular spot with a larger triangular spot below it; a small hyaline speck on vein 5 beyond the cell; bright crimson suffusion on outer edge of the fuscous area beyond the cell; a minutely waved crimson postmedial line between veins 5 and 2; a pale fuscous curved submarginal band. Hind wing with the basal area suffused with crimson; dark annuli in and below end of cell, the latter with a hyaline spot beyond it; a crimson postmedial line bent outwards and waved between veins 5 and 2; a pale fuscous submarginal band.

Hab. Khásis. Exp. 30 millim.

#### Genus MEROCTENA.

Meroctena, Led. Wien. ent. Mon. 1863, p. 392.

Type, M. tullalis, Wlk.

Range. Indian, Ceylonese, and Malayan subregions.

Palpi porrect, straight, the 2nd joint fringed above and below with hair, the 3rd prominent; maxillary palpi filiform; frons rounded; antennæ of male unipectinate for one-third length, the basal joint emitting four teeth enclosing a hollow in front like the calyx of a flower; tibiæ of male with the outer spurs minute; abdomen with the anal tuft very large. Fore wing with veins 3, 4, 5 from close to angle of cell; 7 approximated to 8, 9 for some distance, 10 also approximated to 8, 9. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

5085. Meroctena tullalis, Wik. Cat. xviii, p. 649; Hmpsn. Il. Hst. ix, pl. 172, fig. 31; C. & S. no. 4079.

Bright yellow; palpi fulvous, white below. Fore wing with indistinct subbasal line, oblique antemedial line, black speck in cell, and fuscous pale-centred discocellular lunule; a medial line from vein 2 to inner margin; a postmedial line from

below costs to vein 5; a highly sinuous submarginal line with



Fig. 203.—Meroctena tullalis, 3. ].

the area beyond it rufous. Hind wing with discocellular lunule; indistinct postmedial line strongly bent outwards between veins 5 and 2, below which it is diffused; a rufous apical patch and dark streak towards anal angle; both wings with a black line at

base of cilia, which are pure white with black points.

Hab. Sikhim; Assam; Nilgiris; Ceylon; Burma; Pulo Laut;

Java; Amboina. Exp. 38 millim.

#### Genus THLIPTOCERAS.

Thliptoceras, Swinh. Trans. Ent. Soc. 1890, p. 274. Prophantis, Warr. A. M. N. H. (6) xviii, p. 113 (1896).

Type, T. cascale, Swinh.

Range. S. Africa; Japan; Indian, Ceylonese, and Malayan sub-

regions to N. Australia.

Palpi porrect, straight, and about twice the length of head, the 2nd joint fringed above and below with hair, the 3rd prominent; maxillary palpi filiform; frons rounded; hind tibis with the outer median spur minute. Fore wing produced at apex; the outer margin oblique; veins 3 and 5 from close to angle of cell; 7 well separated from 8, 9. Hind wing with the cell short; the discocellulars produced along vein 4, which is approximated to 5; 6, 7 stalked, 7 anastomosing strongly with 8.

SECT. I. (Thliptoceras). Antennæ of male with two curved teeth on basal joint forming an upturned cavity, the basal part of the shaft curved, then expanded into a cavity formed of short appressed pectinations.

5086. Thliptoceras cascale, Swinh. Trans. Ent. Soc. 1800, p. 271, pl. 8, fig. 18.
Thliptoceras variabilis, Swinh. Trans. Ent. Soc. 1890, p. 274;
Hmpsn. Ill. Het. viii, pl. 156, figs. 2-10.

Circobotys phycidalis, Snell. Trans. Ent. Soc. 1890, p. 509.



Fig. 204.
Thliptoceras cascale, &.

J. Bright straw-colour. Fore wing with indistinct slightly sinuous antemedial erect line; a discocellular speck; a postmedial minutely waved line slightly curved from costa to vein 3, then retracted to origin of vein 2. Hind wing with oblique postmedial line.

2 with the fore wing broader and less produced at apex.

A variety has the whole of the wings suffused with fuscous, leaving the costa of fore wing and cilia of both wings yellow.

Hab. Japan; Dharmsala; Sikhim; Bombay; Nilgiris; Ceylon;

**Rangoon.** Exp. 24 millim.

- SECT. II. Antennæ of male with the basal joint excised and with slight tuft of hair from inner side; fore wing less produced at apex; the costa highly arched before middle; hind wing with the inner area clothed with long hair; patagia extending beyond metathorax.
- 5087. Thliptoceras stygiale, n. sp.
- 3. Uniform black-brown; palpi below, pectus, and abdomen below white. Fore wing with faint traces of postmedial line excurved from costa to vein 3, then retracted to below end of cell; hind wing with traces of obliquely curved postmedial line.

Hab. Nágas (Doherty) Exp. 26 millim. Type in coll. Elwes.

SECT. III. (Prophantis). Antennæ of male ciliated.

5088. Thliptoceras octoguttale, Feld. Reis. Nov. pl. 135, fig. 38;
 C. & S. no. 4122.
 Pyralis smaragdina, Butl. A. M. N. H. (4) xvi, p. 411.

Head and thorax purplish brown; abdomen fulvous, the anal tuft orange. Fore wing purplish brown; a hyaline dark-edged speck in cell; two obliquely placed medial spots and a spot beyond the cell, each with an orange spot on the costa above it; the costa orange at apex; a marginal orange band, narrow from costa to vein 5, then broad and narrowing to outer angle. Hind wing purplish brown, with indistinct waved medial line and marginal orange band, broad and with a purplish spot on it at apex and narrowing to anal angle.

Hab. Natal; Sikhim; Sibságar; Nilgiris; Ceylon; Borneo;

Amboina; Australia. Exp. 22 millim.

#### Genus ARCHERNIS.

Archemis, Meyr. Pr. Linn. Soc. N. S. W. (2) i, p. 254 (1887). Protonoceras, Warr. A. M. N. H. (6) vi, p. 475 (1890). Metoportha, Meyr. Trans. Ent. Soc. 1894, p. 463.

Type, A. calliwantha, Meyr., from the Malayan region and New Guines.

Range. Formosa; India, Ceylon, and Burma; Malayan sub-

region to New Guinea.

Palpi porrect, long and straight, the 2nd joint fringed with hair below, the 3rd joint prominent; maxillary palpi long and slightly dilated with scales; from rounded; tibiæ with the outer spurs half the length of the inner. Fore wing with the apex acute; veins 3 and 5 from close to angle of cell; 10 closely approximated to 8, 9. Hind wing with the cell short; the discocellulars erect; veins 3, 4, 5 radiating from angle of cell; 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I. (Protonoceras). Male with a tuft of forwardly-directed hair between the antennæ; antennæ with the basal joint dilated, the shaft given off from its outer side, much bent near base, then with some small serrations on inner side and with long cilia.

A. Antenna of male with a long curved tuft of hair from the inner side of basal joint; the tuft between the antenna long.

5089. Archernis tropicalis, Wik. Cat. xviii, p. 670; Moore, Lep. Ceyl. iii, pl. 181, fig. 9; C. & S. no. 4276.

Fuscous; palpi white below at base; from and basal joint of



Fig. 205.—Archernis tropicalis, 3.

antennæ white. Fore wing with curved dark antemedial line; a prominent dark-edged white discocellular lunule; a sinuous pestmedial line excurved from costa to vein 2, where it is bent inwards, then out again, slightly outlined with white and by a prominent

white patch from costa to vein 6; cilia tipped with white except at middle. Hind wing with discoccllular dark lunule with white spot on its outer side; a white-edged postmedial line bent outwards between veins 5 and 2; the cilia white-tipped except at apex and middle. Underside entirely suffused with white.

Hab. Formosa; Dharmsála; Sikhim; Bombay; Nilgiris; Ceylon; Tenasserim. Exp. 22-30 millim.

B. Antenna of male without the curved tuft from hasal joint; the frontal tuft less developed.

5090. Archernis dolopsalis, Wlk. Cat. xviii, p. 602. Protonoceras fuscilunalis, Hmpsn. Ill. Het. viii, p. 134, pl. 155, fig. 22.

Differs from tropicalis in the fore wing having a dark spot in the cell and dark discocellular lunule; hind wing with no white spot beyond the discocellular lunule.

The typical male form from Ceylon and Borneo has the frontal tuft rufous and more developed than in the Nilgiri form fuscilunalis, and on the fore wing has a white spot between the two cell-spots.

Hab. Nilgiris; Ceylon; Burma; Borneo. Exp. 26-34 millim.

# SECT. II. (Archernis). Antennæ of male normal.

# 5091. Archernis humilis, Swinh. A. M. N. H. (6) xiv, p. 146.

3. Grey suffused and irrorated with fuscous brown; palpi white below. Fore wing with indistinct oblique slightly sinuous dark antemedial line; an indistinct dark discocellular speck; both wings with a dark postmedial line slightly excurved below costs and more so between veins 5 and 2, then retracted to below end of cell; a marginal series of dark specks and dark line through the cilia. Underside grey, with the marginal line reduced to specks.

Hab. Khásis; Nágas. Exp. 20 millim.

# 5092. Archernis nictitans, Swinh. A. M. N. H. (6) xiv, p. 146.

J. Ochreous grey-brown; palpi white below; frons white. Fore wing with white discocellular spot with black marks on each side of it; both wings with a minutely dentate postmedial line bent outwards between veins 5 and 2; a marginal series of dark specks and fine pale line at base of cilia. Underside whitish, with discocellular black specks; the postmedial line reduced to specks.

Hab. Khásis. Exp. 20 millim.

### 5093. Archernis obliquialis, n. sp.

J. Pale ochreous and brown. Fore wing reddish brown irrorated with black; the costal and inner areas pale ochreous; a pale ochreous oblique subbasal wedge-shaped band below the cell and an oblique antemedial band; two oblique lines from apex diverging towards inner margin and a marginal line; two fine black lines through the cilia. Hind wing fuscous, pale at base and with traces of pale postmedial line.

Hab. Sikhim (Pilcher). Exp. 16 millim. Type in B. M.

#### Genus TERASTIA.

Terastia, Guen. Delt. & Pyr. p. 211 (1854).

Type, T. meticulosalis, Guen.

Range. Neotropical and Oriental regions.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; frons flat; antennæ of male ciliated; fore tibiæ fringed with long hair; mid and hind tibiæ with the outer spurs about half the length of the inner; abdomen of male with lateral tufts on the last three segments, the anal tuft long. Fore wing long and narrow; the costs arched towards apex, which is produced; the outer margin excurved at middle; the inner margin excised before outer angle, which is lobed; vein 3 from close to angle of cell; 4, 5 somewhat approximated for a short distance; 7 curved and approximated to 8, 9. Hind wing ample; the costs highly excised before and after middle, lobed at

middle and towards apex; veins 4, 5 somewhat approximated for a short distance; the discocellulars erect; veins 6, 7 from upper angle, 7 touching 8, but not anastomosing with it.

5094. Terastia meticulosalis, Guen. Delt. & Pyr. p. 212.
Terastia subjectalis, Led. Wien. ent. Mon. 1863, p. 480; C. & S. no. 4285.
Megaphysa quadratalis, Wlk. Cat. xxxiv, p. 1527.

Pale fawn-colour. Fore wing with the basal area slightly suffused with rufous; a pale oblique antemedial bar from the costa with a dark spot on its outer side, and bounded by an inwardly-oblique hyaline band from below costa to veia 1; a prominent oblique rufous medial band with a semihyaline patch beyond it; a rufous discocellular lunule; a pale oblique bar with dark inner edge from costa before apex, continued as a band

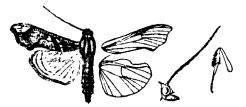


Fig. 206.—Terastia meticulosalis, S. }

formed of three waved lines to inner margin; a rufous line close to the margin. Hind wing hyaline; the costal lobe fuscous; the apical area suffused with ochreous and rufous; postmedial and submarginal curved lines obsolete from vein 3 to inner margin; a line close to the margin.

Larva bores in young stems of Erythrina.

Hab. St. Domingo; Honduras; Ceylon; Java; Philippines. Exp. 38 millim.

5095. Terastia egialealis, Wtk. Cat. xvii, p. 383; C. & S. no. 4294. Terastia proceralis, Led. Wien. ent. Mon. 1863, pp. 416, 480. Agathodes diversalis, Wtk. Cat. xxxiv, p. 1807. Megaphysa quadriferalis, Wtk. Cat. xxxiv, p. 1528.

Differs from meticulosalis in the colour being bright ferruginous. Fore wing with the inner area and apex suffused with golden yellow; no antemedial bar; the hyaline band erect and inwardly edged by a waved black line; the medial rufous band figure-of-8-shaped; the hyaline patch in the cell quadrate; the inner edge of the subapical band black, then reduced to specks below vein 6. Hind wing with the costal lobe black; the postmedial line reduced to black specks.

Hab. Dharmsála; Sikhim; Java. Exp. 40-54 millim.

#### Genus OMPHISA.

Omphisa, Moore, Lep. Ceyl. iii, p. 317 (1886).

Type, O. anastomosalis, Guen.

Range. Ching; Indian, Ceylonese, and Malayan subregions to Duke of York Island.

Palpi porrect and straight, the 2nd joint fringed with hair below, the 3rd prominent; maxillary palpi large; frons rounded; antennæ of male moderately ciliated; patagia clothed with large scales; tibiæ with the outer spurs about half the length of the inner, the mid tibiæ clothed on the outer side with spinous hair; abdomen with large lateral tufts on the last five segments. Fore wing with the costa arched towards apex which is acute; the outer margin excurved at middle; veins 3 and 5 from close to angle of cell. Hind wing with the costa slightly excised beyond the middle; the apex somewhat produced; the outer margin excurved at middle; the inner margin short; veins 4 and 5 approximated for a short distance; 6, 7 from upper angle, 7 touching 8, but usually not anastomosing with it.

5096. Omphisa anastomosalis, Guen. Delt. & Pyr. p. 373. Botys illisalis, Wlk. Cat. xviii, p. 653; Moore, Lep. Ceyl. iii, pl. 183, fig. 4; C. & S. no. 4107.

White; the head, thorax, and abdomen suffused with ochreous and rufous, leaving some paired pale spots on dorsum. Fore wing with rufous suffusion on basal area extending below median



Fig. 207.
Omphisa anastomosalis, 5.

nervure to middle of wing; hyaline patches at middle and end of cell, with a rufous-edged ochreous spot between them; a large rufous-edged ochreous patch beyond the cell; the outer area more or less irrorated and suffused with rufous; the veins rufous; a curved postmedial rufous line with an ir-

regularly dentate line beyond it enclosing a series of hyaline patches; a marginal rufous line. Hind wing with the base rufous; a dark-edged rufous irregular discocellular mark with line from it to inner margin; the outer area irrorated with rufous; two irregularly waved rufous postmedial lines; the apex, anal angle, and a marginal line rufous.

Hab. China; Sikhim; Khásis; Nilgiris; Ceylon; Burma; Andamaus; Java; Duke of York Island. Exp. 32-36 millim.

5097. Omphisa repetitalis, Snell. Trans. Ent. Soc. 1890, p. 621, pl. 19, figs. 6, 6 a.

d. Differs from anastomosalis in the cilia of both wings being streaked with fuscous at veins 3, 4 only; hind wing with apical black patch suffused with leaden grey from costa to vein 4.

continued as a black line to vein 1 c; cilia with their bases black from apex to vein 4.

Hab. Sikhim. Exp. 42 millim.

#### Genus ISCHNURGES.

Ischnurges, Led. Wien. ent. Mon. 1863, p. 418.
Nesolocha, Meyr. Trans. Ent. Soc. 1886, p. 239.
Rhectothyris, Warr. A. M. N. H. (6) vi, p. 474 (1890).

Type, I. illustralis, Led., from New Guinea.

Range. Oriental region: New Guinea.

Differs from Pyrausta (p. 429) in the antenna being four-fifths the length of the fore wing and annulated with raised rings at each joint; tibiæ with the outer spurs half the length of the inner.

5098. Ischnurges gratiosalis, Wlk. Cat. xvii, p. 357; Hmpsn. Ill. Het. ix, pl. 173, fig. 12; C. & S. no. 4246.
Asopia roridalis, Wlk. Cat. xvii, p. 371; C. & S. no. 4251.

Head, thorax, and abdomen clothed with pink, yellow, and white scales; palpi white below. Fore wing bright yellow, with pink suffusion on basal costal area; an obliquely sinuous antemedial line with a hyaline speck beyond it in the cell; a pink-



Fig. 208, Ischnurges gratiosalis, J. 1.

edged hyaline spot in end of cell with a larger spot below it, connected with the inner margin by a line, both spots with pink and dark suffusion on their inner edges and between them and the postmedial series of pink-edged hyaline spots, which consist of a bifid spot

below the costa and quadrifid spot beyond the cell; the veins of outer area, the margin, and area near outer angle pink. Hind wing yellow, with a hyaline spot below middle of cell on a pink patch; a large pink-edged dentate hyaline patch beyond the cell; the outer area suffused with pink; a pink marginal band. Underside with the ground-colour white.

Hab. N. China; Sikhim; Nilgiris; Travancore; Ceylon; Pulo Laut; Borneo. Exp. 24-30 millim.

# 5099. Ischnurges rosea, Warr. A. M. N. H. (6) xvii, p. 142.

d. Orange-yellow suffused with crimson; head yellow, palpi black above. Fore wing with series of black specks on costa, some fuscous suffusion below basal part of costa; an indistinct obliquely sinuous antemedial crimson line; an elongate fuscous annulus in cell and large dark discocellular spot. Both wings with a fine sinuous crimson postmedial line retracted at vein 2 to angle of cell, then somewhat excurved again, at vein 2 conjoined to a purplish crimson submarginal band.

Hab. Khásis. Exp. 16 millim.

- 5100. Ischnurges rufalis, Hmpen. Ill. Het. ix, p. 163, pl. 172, fig. 28.
- 3. Ferruginous red; palpi dark rufous. Fore wing with the costal and outer margins black; an indistinct sinuous ferruginous antemedial line; a black discocellular lunule; a sinuous ferruginous postmedial line excurved between veins 5 and 2. Hind wing with an indistinct oblique ferruginous postmedial line terminating on vein 2; the outer margin black; both wings with the cilia white at tips.

Hab. Ceylon. Exp. 12 millim.

- 5101. Ischnurges argentealis, *Hmpsn. Ill. Het.* ix, p. 163, pl. 173, fig. 16.
- d. Head orange; palpi white below; frons with lateral white stripes; thorax yellowish white, with four orange stripes; abdomen white, with dorsal orange stripe. Fore wing orange; the inner area pale yellow; a fuscous subcostal streak conjoined to the large fuscous reniform discocellular mark; an orange patch on inner margin near base; an extremely oblique orange line crossing the inner area; the postmedial line straight from the costa to vein 3, then recurved to origin of vein 2 and bent out again; a leaden fuscous submarginal band, wide below the costa. Hind wing with orange fasciæ along veins 2 and 3 conjoined to an oblique postmedial line; an orange fascia along vein 1 b; an orange-edged leaden fuscous marginal band from vein 6 to 2. Underside whitish.

Hab. Ceylon. Exp. 24 millim.

- 5102. Ischnurges luteomarginalis, Hmpsn. Ill. Het. viii, p. 134, pl. 155, fig. 18.
- J. Orange-yellow; palpi fulvous, white below; abdomen ringed with white. Fore wing with the costal area suffused with fuscous; an indistinct antemedial line, outwardly oblique from costa to median nervure; a black-edged white discocellular spot; the postmedial line nearly straight from costa to vein 2, then recurved to lower angle of cell and bent outwards again, the area beyond it fulvous. Hind wing with curved antemedial and nearly straight postmedial diffused lines, the area beyond the latter fulvous.

Hab. Nilgiris. Exp. 18 millim.

- 5103. Isohnurges angustalis, *Hmpsn. Ill. Het.* ix, p. 173, pl. 172, fig. 20.
- d. Ochreous; palpi black above; thorax suffused with fuscous. Fore wing very narrow, suffused with fuscous except on inner area; a large reniform medial ochreous spot in end of cell extending down to vein 1 and connected with inner margin by a black line; an ochreous discocellular lunule; a large postmedial ochreous reniform spot extending from costa to vein 2.

Hind wing semihyaline, with a black discocellular line; the postmedial line near the margin excurved between veins 5 and 2, then obsolete; fuscous patches at apex and anal angle.

Hab. Ceylon; Tenasserim. Exp. 20 millim.

#### Genus ISOCENTRIS.

Isocentris, Meyr. Trans. Ent. Soc. 1887, p. 232. Leucocraspeda, Warr. A. M. N. H. (6) vi, p. 475 (1890).

Type, I. filalis, Guen.

Range. Mauritius; Oriental region to N. Australia.

Differs from Pyrausta in the tibia having all the spurs long and equal.

### 5104. Isocentris phænicozona, n. sp.

Differs from filulis in being pale yellow; abdomen with some crimson at base and extremity. Fore wing with some crimson on base of costa; no crimson patch at end of cell; the postmedial and submarginal lines of both wings hardly waved; the marginal band crimson; the cilia yellow, with crimson bases and patches at middle and anal angle of each wing.

Hab. Khásis; Nágas (Doherty). Exp. 20 millim. Type in B. M.

5105. Isocentris filalis, Guen. Delt. & Pyr. p. 204; Snell, Tijd. v. Ent.

xxvi, p. 131, pl. vir, figs. 11, 11 a. Endotricha rhodophilalis, Wlk. Cut. xxxiv, p. 1311; Moore, Lep. Ceyl. iii, pl. 178, fig. 13; C. & S. no. 4250.

Botys amenalis, W.k. Cat. xxxiv, p. 1445. Botys auralis, Snell. Tyd. v. Ent. 1872, p. 90, pl. 7, figs. 9, 10.

Samea dives, Butl. P. Z. S. 1880, p. 682.

Orange-yellow. Fore wing with some dark suffusion at base: indistinct sinuous antemedial and medial lines, the latter with a pink and purple patch beyond it on discocellulars conjoined to one below lower angle of cell; a postmedial highly sinuous line bent



Fig. 200. Isocentris filalis, d.

inwards along vein 2 to the purple patch; a highly waved submarginal line with a purplish-pink band on its outer edge; a waved line close to the margin. Hind wing with dark discocellular lunule; a highly sinuous postmedial line very much bent inwards along vein 2

and then excurved again; a sinuous submarginal line with a purplish-pink band on its outer edge; a waved line near the margin, which is fulvous; both wings with black line at base of cilia, which are pure white.

The form rhodophilalis has the line through base of cilia crimson.

Hab. Mauritius; Formosa; Sylhet; Bombay; Coimbatore; Ceylon; Burma; Java; Celebes; Australia. Exp. 22 millim.

- 5106. Isocentris æqualis, Led. Wien. ent. Mon. 1863, p. 468, pl. 10, fig. 3.
  Isocentris undulinea, Hmpsn. Ill. Het. viii, p. 132, pl. 154, fig. 21.
- o. Fulvous; abdomen tinged with white. Fore wing with black basal speck; a curved black antemedial line; a discocellular black lunule on a diffused fuscous patch; a minutely waved postmedial line highly excurved between veins 6 and 3, then bent inwards at vein 2 and excurved again. Hind wing suffused with fuscous to the postmedial line, which is bent inwards at vein 2, then outwards again. Both wings with a minutely waved curved submarginal line, with the area beyond it pinkish; a black line at base of cilia, which are fuscous at vein 3 of fore wing, elsewhere pure white.

Hab. Sikhim; Khásis; Nilgiris; Ceylon; Burma; Celebes. Exp. 18 millim.

5107. Isocentris cœnostolalis, Snell. Trans. Ent. Soc. 1890, p. 582.
Leucocraspeda udeoides, Hmpsn. Ill. Het. viii, p. 134, pl. 155, fig. 17.
Hyalobathra dialychna, Meyr. Trans. Ent. Soc. 1894, p. 7.

Ochreous suffused with fuscous. Fore wing with indistinct dark curved antemedial line; a large fuscous discocellular patch with a highly waved line from it to inner margin; a postmedial line outwardly oblique from costa to vein 5, then minutely waved to inner margin; a minutely waved submarginal line; the apical area from beyond the postmedial line golden orange. Hind wing with indistinct dark patch at lower angle of cell; curved indistinct postmedial and submarginal minutely waved lines; both wings with the cilia black at base, pure white at tips.

Hab. Sikhim; Khásis; Nilgiris; Shan States. Exp. 26 millim.

5108. Isocentris unicolor, Warr. A. M. N. H. (6) xvi, p. 472.

Fawn colour. Fore wing with some ferruginous marks on basal inner area; an obliquely curved fine antemedial line, dark at costa, then ferruginous; a slight discocellular line; a fine postmedial line, dark and very oblique from costa to vein 5, then waved, obsolescent, and at vein 2 retracted to below angle of cell. Hind wing with fine dark minutely waved postmedial line, retracted at vein 2 to below angle of cell, then excurved again. Both wings with minutely waved black line just inside the margin; a black marginal line; the cilia pure white. Underside with the postmedial and submarginal lines represented by series of black specks.

Hab. Nagas; Ferak; Baram, Borneo; Queensland. Exp. 28

millim.

5109. Isocentris opheltesalis, Wik. Cat. xix, p. 1010; C. & S. no. 4345 (part.). Hedylepta contubernalis, Moore, Lep. Atk. p. 208; C. & S. no. 4342.

Orange-yellow; fore tarsi banded with white. Fore wing with curved antemedial line; a postmedial line outwardly-oblique from costa to vein 5, then excurved to vein 2, along which it is retracted and sinuous to inner margin. Hind wing with a minutely waved postmedial line bent outwards between veins 5 and 2; both wings with the cilia black at base, pure white at tips.

Hab. Punjab; Pareshnáth; Moulmein; Nilgiris. Exp. 22 millim.

5110. Isocentris illectalis, Wlk. Cat. xviii, p. 658; Hmpsn, Ill. Het. ix, pl. 173, fig. 9; C. & S. no. 4345 (part.) Botys albofimbrialis, Snell. Tijd. v. Ent. xxvi, p. 128. Botys nivercilialis, Swell. Midd.-Sum., iv, Lep. p. 64.

Q. Differs from opheltesalis in being fulvous. Fore wing with a discocellular line; both wings with a minutely waved submarginal line.

Hab. Sikhim; Nagas; Ceylon; Rangoon; Shan States;

Borneo; Celebes. Exp. 24 millim.

5111. Isocentris miniosalis, Guen. Delt. & Pyr. p. 362. Ebulca europsalis, Wth. Cat. xviii, p. 749; C. & S. no. 4134. Ebulea orseisalis, Wlk. Cat. xviii, p. 749.

Crimson. Fore wing with a deeper crimson basal patch; a curved deep crimson antemedial line; a discocellular spot; both wings with a postmedial line oblique from costa to vein 6, then highly excurved to vein 3, where it is retracted; a curved submarginal line; the veins near margin and a marginal line deep crimson; cilia whitish at tips.

Hab. 'N. India'; Nilgiris; Rangoon; Ceylon; Shan States.

Exp. 28 millim.

#### Genus CROCIDOPHORA.

Crocidophora, Led. Wien. ent. Mon. 1863, p. 386. Circobotys, Butl. Ill. Het. iii, p. 77 (1879). Chobera, Moore, Lep. Atk. p. 219 (1888). Mimocomma, Warr. A. M. N. H. (6) xvi, p. 473 (1895). Monocrocis, Warr. A. M. N. H. (6) xvi, p. 475. Polychorista, Warr. A. M. N. H. (8) xvii, p. 109 (1896).

Type, C. tuberculalis, Led., from N. America.

Range. N. America; W. Africa; Japan; Oriental region and

Australasian subregion.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; frons flat and oblique; antennæ of male four-fifths length of fore wing and minutely ciliated; hind tibise with the outer spurs minute; abdomen of male long, the claspers and anal tuft large. Fore wing more or less produced at apex, the outer margin oblique; veins 3 and 5 from near angle of cell. Hind wing with the cell short, the discocellulars being produced along vein 4 and veins 4 and 5 approximated for a short distance; 6, 7 stalked, 7 anastomosing strongly with 8.

- SECT. I. (Circobotys). Fore wing with the apex greatly produced and subfalcate.
- 5112. Crocidophora limbata, Moore, Lep. Atk. p. 220, pl. 7, fig. 24; C. & S. no. 4123.
- d. Red-brown; palpi white below; abdomen ochreous at base and extremity. Fore wing with the costa white for three-fourths length, with a yellow fascia below it; the outer margin bright vellow. Hind wing fuscous with a rufous tinge; the costal and inner areas whitish; the margin bright yellow from apex to vein 2.

Hab. Sikhim; Bhután. Exp. 34 millim.

- 5113. Crocidophora pallida, Moore, Lep. Atk. p. 220; C. & S. no. 4163.
- d. Only differs from sinisalis in the apex of fore wing being greatly produced and subfalcate.

Hab. Khásis; Calcutta. Exp. 32 millim.

- SECT. II. Fore wing with the apex less produced and not subfalcate.
  - A. Antenna of male not knotted and contorted or excised.
- a. Fore wing without large fans of scales on underside below median nervure and beyond upper angle of cell.
- 5114. Crocidophora sinisalis, Wlk. Cat. xviii, p. 635.
- 3. Straw-colour suffused with fuscous; palpi fulvous, white below. Fore wing with the base and costa slightly tinged with fulvous; traces of an obliquely sinuous antemedial line; an obscure speck in cell and discocellular mark; a faint postmedial line curved from costa to vein 4, then retracted along median nervure to origin of vein 2 and dentate to inner margin; the marginal area slightly darker. Hind wing yellowish semihyaline fuscous, with traces of a waved postmedial line; both wings with the cilia white at tips.

Hab. Congo; Punjab. Exp. 30 millim.

- 5115. Crocidophora fuscalis, Hmpsn. Ill. Het. viii, p. 133, pl. 154. fig. 14.
- d. Differs from sinisalis in the fore wing being somewhat broader; the costa ochreous; the cilia pale yellow; the rest of the wing darker fuscous without trace of markings. Hind wing darker fuscous without trace of markings; the cilia pale yellow.

Hab. Nilgiris. Exp. 32 millim.

5116. Crocidophora stenophilalis, Wik. Cat. xxxiv, p. 1407. Circobotys marginalis, Hmpsn. Ill. Het. viii, p. 133, pl. 155, fig. 9 (Ω).

Differs from epicrocalis in being pale orange-yellow. Fore wing without antemedial line; the postmedial line nearly straight from costa to vein 3; the marginal area only slightly tinged with fuscous from apex to vein 2 of hind wing, which has the postmedial line straight and oblique.

Hab. Nilgiris; Cambodia. Exp. 26 millim.

- 5117. Crocidophora acutangulalis, Swinh. A. M. N. H. (6) xiv p. 143.
- 3. Bright yellow; paipi orange, white below and dark at tips; the vertex of head dark; abdomen ringed with white, a white and black dorsal spot on terminal segment. Fore wing very narrow with the apex acute; the costa fuscous brown; an oblique orange antemedial line; a dark discocellular lunule with orange line from it to inner margin; a dark postmedial speck on costa, with orange line from it to vein 4; the outer area purplish fuscous and wide at apex. Hind wing with very oblique orange line meeting an oblique postmedial line at vein 2; the outer area purplish fuscous from apex to vein 2.

Hab. Sikhim; Khásis; Margharita, Assam. Exp. 24-30 millim.

- b. Fore wing broader; male with the retinaculum formed by a very large fun of leaden-coloured scales from below median nervuce, the median nervure bent upwards.
- a'. (Crocidophora). Fore wing with a large fan of leaden-coloured scales beyond upper angle of cell and vein 7 bent downwards.

# 5118. Crocidophora ptyophora, n. sp.

Fulvous orange; palpi white below; abdomen ringed with white, the anal tuft tipped with white. Fore wing bright yellow; the costal area fulvous suffused with fuscous; the fans of leaden



Fig. 210.
Crocidophora ptyophora, &. . . .

scales showing through to the upperside, a sinuous orange antemedial line; a postmedial line straight from costa to vein 3, then retracted to origin of vein 2, and outwardly oblique to inner margin; a broad purplish-fuscous marginal band. Hind wing bright yellow, with orange fascia

along median nervure met at vein 2 by an oblique postmedial line from the costa; a broad marginal purplish-fuscous band and series of marginal black specks from apex to vein 2.

Hab. Sikhim (Dudgeon); Tenasserim (Doherty). Exp. 30 millim.

Type in B. M.

- 5119. Crocidophora amonalis, Snell. Trans. Ent. Soc. 1890, p. 598.
- Joint of the dark outer area denticulate between veins 2 and 4. Hind wing suffused with rufous to the postmedial line; the inner area greyish fuscous.

Hab. Sikhim. Exp. 30 millim.

5120. Crocidophora limbolalis, Moore, P. Z. S. 1877, p. 615; C. & S. no. 4256.

Differs from acutangulalis in the fore wing being broad and slightly produced at apex; the basal costal area reddish; the discocellular lunule orange; the marginal band of both wings broad and reddish purple in tone with orange on its inner edge, excurved between veins 2 and 4 of fore wing, which has the margin and cilia orange; hind wing with the marginal black specks prominent.

Larva: a leaf-roller, and feeds on Antiaris toxicaria.

Hab. Bhután; Momeit, Burma; Tenasserim; Andamans. Exp. 20 millim.

- 5121. Crocidophora fulvidalis, Warr. A. M. N. H. (6) xvi, p. 475. Lepidoplaga uniformis, Warr. A. M. N. H. (6) xvi, p. 476.
- 3. Bright orange; palpi white below. Fore wing with traces of sinuous antemedial line; dark foveas below and beyond cell; a postmedial line slightly curved from costa to vein 2, then retracted to angle of cell and obliquely waved to inner margin; an obliquely curved diffused submarginal line. Hind wing with oblique postmedial line ending on vein 2; a submarginal line terminating on margin at vein 2.

The form uniformis is pale yellow. Hab. Khásis. Exp. 22 millim.

- 5122. Crocidophora multidentalis, Warr. A. M. N. H. (6) xvi, p. 476.
  - 3. Differs from distinctalis in being pale ochreous. Hab. Khásis. Exp. 32 millim.
- b'. (Monocrocis). Fore wing with a small postmedial glandular swelling on the costa, and an elongate groove of almost unscaled ribbed membrane above vein 7.
- 5123. Crocidophora lutusalis, Snell. Trans. Ent. Soc. 1890, p. 597.
- 3. Ochreous brown; head and abdomen more fuscous; palpi white below; frons with lateral white stripes. Fore wing with faint traces of a postmedial line excurved from vein 5 to 2, along which it is bent inwards; the marginal area slightly darker.

Hind wing with traces of an oblique postmedial line retracted along vein 2; the marginal area slightly darker from apex to vein 2.

Hab. Sikhim; Bhután; Canara. Exp. 34 millim.

5124. Crocidophora flavofasciata, Moore, Lep. Atk. p. 223, pl. 7, fig. 19; C. & S. no. 4092.

Head and thorax dull rufous; abdomen fuscous, the segments ringed with white. Fore wing dull rufous, with a postmedial straw-coloured band from subcostals of fore wing to vein 2 of hind wing, where it is bent inwards and becomes obsolescent, the edges of the band minutely dentate, the inner side toothed on vein 2 of fore wing; the outer margin ochreous with a series of dark specks; the costal and inner areas of hind wing paler.

Hab. Sikhim; Khásis. Exp. 32 millim.

- c'. Fore wing of male without sexual characters beyond the cell.
- 5125. Crocidophora evenoralis, W'lk. Cat. xix, p. 1012. Botys mandarinalis, Leech, Entom. 1889, p. 68, pl. 3, fig. 14.

Differs from ptyophora in the fan below median nervure being intermediate in length between it and anuenalis; abdomen rufous, with prominent white dorsal bands. Fore wing with the costal area prominently rufous; the postmedial line oblique, curved from costa to vein 2, then dentate; the marginal band half the width. Hind wing with the basal area fuscous to the postmedial line, which is much less produced along vein 2; the marginal band on apical area much narrower.

Hab. Japan; China; E. Pegu. Exp. 26 millim.

- 5126. Crocidophora pionealis, Snell. Trans. Ent. Soc. 1800, p. 624.
- 3. Pale fulvous; palpi white below at base. Fore wing with black speck below middle of cell and black discocellular speck; an indistinct postmedial line arising from black spot on costa, excurved to vein 3, then bent inwards to below end of cell and with a black spot on it above vein 1; a marginal series of black specks. Abdomen and hind wing whitish, the latter with marginal series of black specks.

♀ with the apex of fore wing less produced.

Hab. Sikhim; Nágas. Lap., ♂ 30,♀ 26 millim.

5127. Crocidophora fasciata, Moore, Lep. Atk. p. 223, pl. 7, fig. 20; C. & S. no. 4090.

Duli rufous with a purplish tinge; palpi fulvous, white below; abdomen ringed with white, fulvous towards extremity; wings with a postmedial orange-yellow band, wide on disk of fore wing, narrowing to costa and inner margin, on hind wing wide from

costa to vein 2, then narrowing, curved inwards and not reaching inner margin; the margin and cilia orange, the latter fuscous at middle of hind wing.

Hab. Sikhim; Khásis. Exp. 30 millim.

# 5128. Crocidophora distinctalis, Swinh. A. M. N. H. (6) xiv, p. 144.

3. Bright orange-yellow; palpi fulvous, white below; fore legs banded with fulvous. Fore wing with the costal area fulvous and fuscous; a dark discocellular spot; traces of an oblique postmedial line bent inwards at vein 3; both wings with a submarginal dark band of somewhat triangular shape.

Hab. Khásis. Exp. 32 millim.

# 5129. Crocidophora discolorata, Swinh. A. M. N. H. (6) xiv, p. 144.

3. Bright straw-colour; palpi orange, white below; abdomen ringed with white. Fore wing with the basal half tinged with fulvous: the fovea large. Both wings with a postmedial line, traight from costa to vein 3, along which it is retracted, then almost obsolete; a broad marginal fulvous band terminating at vein 3 of hind wing.

Hab. Khásis. Exp. 24 millim.

# 5130. Crocidophora pallidulalis, Swinh. A. M. N. H. (6) xiv, p. 141.

s. Very pale ochreous; palpi and collar rather darker. Fore wing with traces of waved antemedial line, of a speck in cell, and discocellular lunule; a rather more prominent obliquely curved minutely dentate postmedial line. Hind wing with traces of curved minutely dentate postmedial line.

Hab, Khásis. Exp. 30 millim.

# B. Antennæ of male slightly knotted and contorted at one-fifth from base.

- 5131. Crocidophora epicrocalis, Swinh. Trans. Ent. Soc. 1890, p. 275. Circobotys marginalis, Hmpsn. Ill. Het. viii, p. 133, pl. 155, fig. 1 (3).
- 3. Orange. Fore wing with the basal half of costal area suffused with fuscous; an erect antemedial dark line; a discocellular speck; a postmedial line excurved from vein 6 to 3, then recurved to origin of vein 2 and waved to inner margin; the outer area purplish fuscous. Hind wing with sinuous postmedial line not reaching costa or inner margin; the outer area purplish fuscous from apex to vein 2.

Q. Fore wing broader and less produced at apex; the postmedial line straight from costa to vein 3; no dark marginal area but a fine dark marginal line, and the cilia dark from the apex of fore wing to vein 2 of hind wing, which has the postmedial line

straight and oblique.

Hab. Nilgiris; Rangoon. Exp., of 22, ♀ 30 millim.

- C. (Polychorista). Antennæ of male with a curved tooth of scales from basal joint, the basal part of the shaft slightly thickened and contorted; hind wing with the base of costa expanded into a large folded lobe.
- 5132. Crocidophora calvatalis, Swinh. Trans. Ent. Soc. 1890, p. 275.
- 3. Fuscous; the head and collar tinged with fulvous; palpi fulvous. Fore wing with traces of antemedial dark line and of a postmedial line recurved from vein 5 to origin of vein 2. Hind wing with traces of oblique postmedial line.

Hab. Rangoon. Exp. 28 millim.

- D. (Mimocomma). Antennæ of male with the base of shaft excised, a tuft of hair beyond the excision.
- 5133. Crocidophora fulvimargo, Warr. A. M. N. H. (6) xvi, p. 473.
- J. Fuscous; the head, collar, and extremity of abdomen ochreous. Fore wing with the costa and apical area ochreous; an indistinct obliquely curved antemedial line; the postmedial line excurved between veins 6 and 3, then retracted to below end of cell. Hind wing with traces of oblique postmedial line; the marginal area slightly tinged with ochreous. Underside ochreous. Hab. Sikhim; Khásis; Momeit, Burma. Exp. 24 millim.

#### Genus MARUCA.

Maruca, Wlk. Cat. xviii, p. 540 (1859).

Crochiphora, Geyer, Hüln. Samml. exot. Schmett. iv, 4, p. 12 (1832), non deser.

Siriocauta, Led. Wien. ent. Mon. 1863, p. 424.

Type, M. testulalis, Geyer.

Range. The tropical and subtropical zones.

Palpi porrect and triangularly scaled; the 3rd joint hidden by hair; maxillary palpi slightly dilated with scales; from flat and oblique; antenna slightly longer than the fore wing and annulated; legs long; tibiæ with the outer spurs about half the length of inner; abdomen long. Fore wing with vein 3 from angle of cell; 4, 5 closely approximated for a short distance; 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing with vein 3 from angle of cell, which is about half the length of wing; 4, 5 closely approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

5134. Maruca testulalis, Geyer, Hübn. Samml. exot. Schmett. iv, 4, p. 12, figs. 629, 630; C. & S. no. 4229.

Hydrocampa aquatilis. Boisd., Guér.-Mén., Icon. Rèyne Anim. pl. 90, fig. 9.

Head, thorax, and abdomen fuscous brown; palpi white below.

Fore wing fuscous brown; the costal area tinged with fulvous; indistinct subbasal and antemedial lines across the cell and white



Fig. 211.—Maruca testulalis, 3. ...

spots below the cell; a lunulate black-edged white spot in end of cell; a maculate blackedged semihyaline band beyond the cell from below the costa to vein 2. Hind wing semihyaline white; the basal costal area fuscous and a spot at upper angle of cell; two

indistinct sinuous postmedial lines; a marginal fulvous-brown and fuscous band from costa to vein 1 c, its inner edge very irregular.

Hab. Neotropical and Ethiopian regions; Japan; throughout the Oriental and Australian regions. Exp. 26-30 millim.

5135. Maruca amboinalis, Feld. Reis. Nov. pl. 135, fig. 24. Siriocauta similialis, Snell. Midd.-Sum., iv, Lep. p. 73.

Differs from testulalis in being blacker. Fore wing with the basal two-thirds of costa narrowly fulvous; the spots in and below cell almost or quite obsolete; the postmedial band narrower and reduced to a spot below vein 3. Hind wing with a black speck at lower angle of cell; the marginal band terminating at vein 2.

Hab. Sikhim; Khásis; Nilgiris; Burma; Borneo; Amboina. Exp. 30-32 millim.

### Genus ADELOÏDES.

Adeloides, Warr. A. M. N. H. (6) ix, p. 299 (1892).

Type, A. cinerealis, Moore.

Range. Sikhim ; Bhután.

Palpi porrect, rather long and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales; frons rounded; antennæ minutely ciliated, at least one and a half times the length of fore wing, the basal joint dilated and bulbous in both sexes; the vertex of head clothed with rough hair; abdomen of male extending far beyond the anal angle of hind wing, the claspers large and covered by the large anal tuft; tibiæ with the outer spurs minute. Fore wing of male narrow and produced at apex; vein 3 from well before angle of cell; 4, 5 from angle. Hind wing of male extremely ample; the cell short; vein 3 from the angle; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

- 5136. Adeloides cinerealis, Moore, P. Z. S. 1867, p. 94; C. & S. no. 4217.
- d. Head and thorax grey; palpi fulvous, white below; abdomen white. Fore wing grey; the costa slightly tinged with fulvous;

faint traces of a discocellular lunule and curved postmedial line. Hind wing pure white.

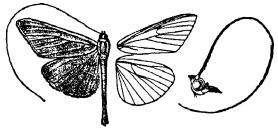


Fig. 212.-Adeloides cinercalis, &. ].

Q with the discocellular lunule and postmedial line of fore wing less obscure; hind wing with fuscous marginal band from apex to vein 2.

Hab. Sikhim. Exp., ♂ 50, ♀ 44 millim.

### 5137. Adeloïdes glaucoptera, n. sp.

3. Uniform silvery fuscous grey; palpi fulvous, white below; tibiæ and tarsi white; abdomen dorsally tinged with fulvous.

Hab. Bhután (Dudgeon). Exp. 46 millim. Type in B. M.

#### Genus TETRIDIA.

Tetridia, Warr. A. M. N. H. (6) vi, p. 477 (1890).

Type, T. caletoralis, Wlk.

Range. N.E. India; Ceylon; Burma; Malayan subregion to Celebes.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales, frons oblique; antennæ of male minutely ciliated and considerably longer than fore wing, of female about the length of fore wing; fore and mid tibiæ of male fringed with hair on outer side; the thorax with tufts of hair below near mid legs; abdomen of male with the anal tuft long. Fore wing with the apex produced; the outer margin oblique; vein 3 from near angle of cell; 4, 5 from angle; 7 well separated from 8, 9, to which 10 is approximated. Hind wing with the cell short, especially in male; vein 3 from the angle; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8; vein 6 in male curved downwards.

- 5138. Tetridia caletoralis, Wlk. Cat. xviii, p. 651; C. & S. no. 4233. Botys vinacealis, Moore, P. Z. S. 1877, p. 619; C. & S. no. 4236. Polythlipta albicaudalis, Snell. Tijd. v. Ent. xxiii, p. 221, and xxvi, pl. 8, figs. 7, 7 a, b, c.
- d. Red-brown with a vinous tinge; palpi white below; fore tibiæ and tarsi marked with white; mid tibiæ and tarsi white, the

tibial fringe of hair fulyous; abdomen with a white streak on anal tuft. Fore wing with waved antemedial black line; a waved disco-



Fig. 213.—Tetridia caletoralis, &. 1.

cellular line; both wings with a minutely crenulate post-medial line, nearly straight from costa to vein 3, then retracted to below end of cell, and on hind wing terminating at anal angle; a marginal series of black specks.

??pale ochreous rufous. Fore wing with the costa tinged with fuscous; the margin and cilia of both wings fuscous; the legs not marked with white.

Malab. Sikhim; Khásis; Sibságar; Coylon; Burma; Andamans; Borneo; Celebes. Evp. 34 millm.

#### Genus PACHYNOA.

Pachynoa, Led. Wien. ent. Mon. 1863, p. 391. Pitacanda, Moore, Lep. Ceyl. iii, p. 334 (1886).

Type, P. thoosalis, Wlk.

Range E. Africa; Oriental region.

Palpi porrect, dilated with scales above and enclosing a hollow in the male, the 3rd joint hidden by hair; maxillary palpi minute and filiform; from rounded; antennæ of male minutely serrate on upperside, pectinated on lower side, of female thickened; build stout; fore tibiæ and tarsi fringed with hair; mid tibiæ fringed with hair, hind tibiæ with a tuft of hair on outer side near base;



Fig. 214.—Pachynoa thoosalis, of. 1.

the spurs rather short. Fore wing produced at apex; the outer margin oblique; the inner margin lobed at middle; vein 1 a forming a fork with 1 b; 3 from angle of cell; 4, 5 approximated for a short distance; 10 closely approximated to 8, 9. Hind wing with vein 3 from angle of cell; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing strongly with 8.

SECT. I. (Pachynoa). Hind tibiæ of male strongly dilated before middle and at extremity, the terminal spurs absent; antennæ with the branches short; hind wing with a vesicular lobe clothed with hair on inner margin; fore wing with a large shallow foves on vein 1 above the lobe of inner margin.

5139. Pachynos thoosalis, Wlk. Cut. xviii, p. 737; Moore, P. Z. S. 1877, pl. 60, fig. 16; C. & S. no. 4170.

Pachynoa walkeri, Led. Wien. ent. Mon. 1863, p. 391, pl. 13, fig. 2.

Straw-coloured; palpi black at sides; head, thorax, and abdomen mostly suffused with fuscous; male with the anal tuft black. Fore wing with subbasal and antemedial fuscous patches which may be conjoined and occupy the whole basal area; a black spot in end of cell; the whole outer half of the wing occupied by a fuscous patch except some triangular patches on costa and outer margin. Hind wing with medial fuscous blotches from cell to inner margin, and an oblique series from costa beyond middle to anal angle; an obscure maculate submarginal line.

Hab. Sikhim; Andamans; Celebes; Amboina; Ceram. Exp. 40-

44 millim.

- SECT. II. (Pitacanda). Hind tibiæ of male not dilated, the terminal spurs present; fore wing with no foven; hind wing with no vesicle on inner margin.
  - A. Antennæ of male with the branches on lower side short.
- 5140. Pachynoa sabelialis, Guen. Delt. & Pyr. p. 326; C. & S. no. 4168.

Botys elycesalis, Wlk. Cat. xix, p. 995; C. & S. no. 4028.

Orange-yellow; palpi white below, in male quadrately dilated with leaden-coloured scales; fore legs banded with white; a white shoulder-spot; the thorax fulvous; basal half of abdomen vinous red. Fore wing with the basal area and basal two-thirds of costal area suffused with purplish; a curved fuscous antemedial line; a large purplish patch at lower angle of cell with a line from it to inner margin; a postmedial line bent outwards and maculate from vein 5 to inner margin; a maculate submarginal line bent outwards at vein 5. Hind wing paler; a fuscous medial line from vein 2 to inner margin; a maculate sinuous postmedial line from vein 6 to anal angle, and a similar submarginal line from the costato vein 2.

Hab. Kilima'njaro; Simla; Calcutta; Burma; Andamans. Exp. 32 millim.

- \*5141. Pachynoa? maccalis, Led. Wien. ent. Mon. 1863, p. 466, pl. 9, fig. 14; C. & S. no. 4064.
- 3. Head, thorax, and abdomen white; collar with paired purple-brown stripes; abdomen with dorsal and lateral series of diamond-shaped marks. Wings with yellow in the interspaces of outer area. Fore wing with short subbasal purple-brown band; a rather irregular antemedial band; bands across middle of cell and discocellulars; two strige below end of cell; a series of streaks in interspaces beyond the cell of both wings, reduced to spots towards costa, longest between veins 5 and 2, and shorter again towards inner margin; cilia chequered with brown.

Hab. Khásis. Exp. 46 millim.

5142. Pachynoa spilosomoides, Moore, Lep. Ceyl. iii. p. 334, pl. 183, fig. 10; C. & S. no. 4125.

Head, thorax, and abdomen bright yellow and white; antennæ black; collar and tegulæ with blue-black spots; abdomen with lateral black patches on 1st segment, the next four segments with dorsal and paired lateral quadrate blue-black patches, a dorsal spot on 7th and terminal segments. Fore wing bright yellow; the veins white; a blue-black basal patch; four subbasal spots; an antemedial curved maculate band; a discocellular patch; a postmedial inwardly-oblique band of blue-black patches in the interspaces, with spots beyond them from costa to vein 3. Hind wing yellow and white; the male with a black patch on middle of inner margin.

The Nilgiri female has on the hind wing three submarginal blue-black spots in the interspaces between veins 2 and 5.

Hab. Sikhim; Calcutta; Khandála; Bangalore; Nilgiris; Ceylon. Exp. 46 millim.

# 5143. Pachynoa mineusalis, Wlk. Cat. xvii, p. 481; C. & S. no. 4323.

- Q. White; the head, thorax, and abdomen slightly tinged with yellow; fore legs, thorax, and 2nd segment of abdomen spotted with black. Fore wing with some black spots on basal area; an antemedial black band; a large black discocellular spot; two small spots beyond lower angle of cell; the postmedial line highly excurved between veins 5 and 2, then retracted to below end of cell; a submarginal series of spots, the three between veins 5 and 2 displaced outwards, the spot below vein 2 displaced inwards. Hind wing with discocellular spot; a medial line from cell to inner margin; a sinuous postmedial line; a submarginal sinuous series of spots; a fine orange marginal line and line through the cilia.
  - Hab. Moulmein; Rangoon. Exp. 26 millim.
    - B. Antenna of male with the branches on lower side long.
- 5144. Pachynoa pectinicornalis, Guen. Delt. & Pyr. p. 326; C. & S. no. 4167.

Differs from sabelialis in being suffused with dull fulvous brown, the marginal area of fore wing yellower; hind wing pale, with the marginal area yellower.

Hab. Cutch; Bombay; Poona; Bengal. Exp. 34 millim.

# 5145. Pachynoa hypsalis, n. sp.

3. Head, thorax, and abdomen orange-yellow; palpi and basal joint of antenns black; thorax spotted with black; abdomen with dorsal and paired lateral series of black spots; wings pale yellow. Fore wing with the base orange, with a basal black spot and two curved series of black spots; a pale fuscous patch in end of cell;

a diffused oblique pale fuscous band bent inwards below the end of cell; traces of a pale fuscous diffused submarginal band. Hind wing with the hair on inner marginal lobe blackish; traces of pale fuscous maculate postmedial and submarginal bands.

Hab. Sikhim (Möller). Exp. 44 millim. Type in coll. Elwes.

# 5146. Pachynoa fuscilalis, Hmpsn. Ill. Het. viii, p. 133, pl. 155, fig. 2.

3. Head and thorax purplish fuscous; palpi black, white below; abdomen with the 1st segment rufous, the next three purplish, the terminal segments orange. Fore wing with the basal area purplish fuscous, with a curved dark antemedial line, extending along the costa and in the cell to the postmedial line, which is straight from the costa to vein 3, where it is retracted to below end of cell; the inner and outer areas orange; a black spot in cell and discocellular lunule. Hind wing paler; a dark mark on inner basal area; a sinuous postmedial line bent inwards at vein 2; the apex slightly suffused with fuscous.

Hab. Nilgiris. Evp. 24 millim.

#### Genus PARBATTIA.

Parbattia, Moore, Lep. Atk. p. 225 (1888).

Type, P. vialis, Moore.

Range. Sikhim.

Palpi porrect, triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; frons rounded; antennæ of male minutely ciliated; tibiæ with the outer spurs about two-thirds length of inner. Fore wing with the apex produced, the outer margin oblique; vein 3 from near angle of cell; 4,5 from angle; 7 straight and not approximated to 8, 9; male with a fovea below the cell at origin of vein 2. Hind wing with the costa lobed and fringed with hair near base; the cell extremely short and the discocellulars produced for a long way along median nervure so that veins 3, 4,5 appear to be stalked; 6, 7 from upper angle, 7 anastomosing strongly with 8.

5147. Parbattia vialis, Moore, Lep. Atk. p. 225, pl. 7, fig. 30; C. & S. no. 4538.

J. Head fuscous; palpi black, white below; thorax whitish;



•Fig. 215.—Parbattia vialis, &. . }.

white below; thorax whitish; abdomen black ringed with white. Fore wing blackish brown to the postmedial line, which is nearly straight from costa to vein 5, then incurved to middle of inner margin, the cell and area below it variegated with grey; black spots in cell and on discocellulars

and two streaks on bases of veins 3, 4; a pale band beyond the

postmedial line, very broad towards inner margin; the marginal area black-brown, wide towards costa. Hind wing pale, with a series of dark specks on the veins from costa to vein 2 just beyond the middle; the marginal area suffused with fuscous, with a series of black specks on the margin.

Hab. Sikhim. Exp. 32 millim.

#### Genus DISCOTHYRIS.

Discothyris, Warr. A. M. N. H. (6) xvi, p. 473 (1895).

Type, D. ferruginata, Moore.

Range. Sikhim.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; from rounded; antennæ of male ciliated; tibiæ with the outer spurs about half the length of inner. Fore wing with the costa arched towards apex, which is acute; the outer margin angled at vein 4; vein 3 from close to angle of cell; 4, 5 from angle, 7 curved and approximated for a short distance to 8, 9, to which 10 also is approximated. Hind wing with the outer margin produced to a point at vein 6 and excurved at middle; vein 3 from angle of cell; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8; a large tuft of hair on median nervure at lower angle of cell.

# 5148. Discothyris ferruginata, Moore, Lep. Atk. p. 209; C. & S. no. 4280.

3. Pale ferruginous; palpi white at base below. Fore wing with indistinct outwardly-oblique sinuous antemedial line; an



Fig. 216.—Discothyris ferruginata,  $\delta$ .

indistinct postmedial line highly curved from costa to vein 2 and angled outwards in interno-median interspace; the margin slightly suffused with fuscous. Hind wing pale; the area below the cell ferruginous; a postmedial dark line sinuous

from costa to vein 4, then somewhat bent outwards and waved to near anal angle; the apex slightly suffused with fuscous; the cilia blackish at base, pale at tips.

Hab. Sikhim. Exp. 22 millim.

# 5149. Discothyris vestigialis, Snell. Trans. Ent. Soc. 1890, p. 628.

3. Differs from fercuginata in the patagia being white-tipped; the fore wing paler and semihyaline; the antemedial line obliquely turved; the postmedial line oblique and strongly marked from costa to vein 6, where it is angled, then waved, reduced to specks on the veins and inwardly oblique to inner margin just beyond

middle. Hind wing with the postmedial line maculate from vein 3 to inner margin, the spots on veins 2 and 1b black and prominent. Hab. Sikhim. Exp. 22 millim.

#### Genus NOMOPHILA.

Nomophila, Hübn. Verz. p. 368 (? 1818).

Type, N. noctuella, Schiff.

Range. Universally distributed.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; frons rounded; antennæ of male with long cilia; tibiæ with the outer spurs about half the length of the inner; abdomen of male with lateral tufts on the terminal segments. Fore wing long and narrow; the apex rounded; vein 3 from well before angle of cell; 4, 5 from the angle; 10 approximated to 8, 9. Hind wing ample; veins 4, 5 closely approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

5150. Nomophila noctuella, Schiff. Wien. Verz. p. 136; C. & S. no. 4530.

Pyralis hybridalis, Hubn. Samml. eur. Schmett., Pyr. tigs. 114, 184. Nephoptervy indistinctalis, Wtk. Cat. xxvii, p. 50.

Grey-brown; palpi white below at base; abdomen with paired sublateral white stripes. Fore wing with a black streak below basal half of cell; large dark-edged brown orbicular stigmata in



Fig. 217.—Nomophila noctuella, d.

and below middle of cell and a reniform discocellular stigma; a dentate postmedial line retracted at vein 3 to below the end of cell; a more or less prominent highly dentate submarginal line and series of dentate marginal marks; a dark line through

the cilia; the wing may be suffused with grey and all the markings dark and prominent, or may be nearly uniform brown or fuscous with the markings obscured. Hind wing paler, with the apical area slightly darker; the cilia whitish at tips.

Hab. Universally distributed. Exp. 24-34 millim.

#### Genus PACHYZANCLA.

Pachyzancia, Meyr. Trans. Ent. Soc. 1884, p. 315. Acharana, Moore, Lep. Ceyl. iii, p. 285 (1885). Piloptila, Swinh. A. M. N. H. (6) xiv, p. 142 (1894).

Type, P. stultalis, Wik.

Range. The tropical and warmer temperate zones.

Differs from *Pyrausta* in the hind wings having the cell somewhat shorter and veins 4, 5 approximated for a short distance; the outer spurs half the length of the inner.

2 Đ

- SECT. I. Mid femora of male immensely dilated and clothed with large smooth scales on inner side.
- A. Fore wing of male with the basal half of costa fringed below with long thick black hair; fore legs clothed with rough hair near the femore-tibial joint.
- 5151. Pachyzancia licarsisalis, Wik. Cat. xviii, p. 686. Botys pharaxalis, Wik. Cat. xviii, p. 725; C. & S. no. 4112 (part.). Botys immundalis, Wik. Cat. xxxiv, p. 1448.

Fuscous; palpi white b low. Fore wing with outwardly-oblique



Fig. 218.—Pachyzanela licarsisalis, 3. }.

sinuous dark antemedial line; a speck in cell and discocellular lunule; a minutely dentate postmedial line bent outwards between veins 4 and 2, along which it is retracted to below end of cell. Hind wing with discocellular speck; an indistinct

minutely dentate postmedial line bent outwards between veins 4 and 2; traces of a minutely dentate submarginal line; both wings with fine pale marginal line.

Hab. Japan; China; India; Ceylon; Malacca; Borneo; Java; Australia; Fiji; Marshall Islands. Exp. 24-26 millim.

- B. (Acharana). Fore wing with no fringe of hair on underside of costa; fore legs normal.
- 5152. Pachyzancla phœopteralis, Guen. Delt. & Pyr. p. 349.
  Botys vestalis, Wtk. Cat. xviii, p. 579.
  Botys otreusalis, Wtk. Cat. xviii, p. 637; Moore, Lep. Ceyl. iii, pl. 180, fig. 11; C. & S. no. 4112 (part.).
  Botys triarialis, Wtk. Cat. xviii, p. 639.
  Botys abstrusalis, Wtk. Cat. xviii, p. 663.

Differs from *licarsisalis* in being usually slightly darker, with a slight purplish suffusion, and the discocellular spot of fore wing more prominent.

Hab. Neotropical and Ethiopian regions; Aden; throughout India, Ceylon, and Burma; Andamans; Solomons. Exp. 22-30 millim.

- SECT. II. Mid femora of male not dilated nor clothed with large scales.
- A. (Piloptila), Male with the costa of fore wing fringed below with thick black hair at base.
- 5153. Pachyzancla nigricornalis, Swinh. A. M. N. H. (6) xiv, p. 142. Greysh fuscous; palpi brown, white below. Fore wing with traces of an obliquely-waved antemedial dark line; a black

discocellular spot; a postmedial line minutely dentate from costa to vein 2 and bent outwards between veins 5 and 2, along which it is retracted, then developed into a patch above inner margin. Hind wing with discocellular black speck; a postmedial line highly bent out, minutely dentate and fine between veins 5 and 2; both wings with the cilia pale brown, with a series of fuscous specks.

Hab. Khásis. Exp. 24 millim.

- B. Male with no fringe of hair on costa below.
- a. Male with no long tuft of hair and scales from the patagia extending beyond the metathorax.

# 5154. Pachyzancla rufescentalis, n. sp.

Jork rufous; palpi white below at base. Fore wing with slight pale mark at base of inner margin; a very indistinct outwardly-oblique antemedial rufous line; an obscure discocellular lunule with pale outer edge; a minutely waved oblique postmodial rufous line excurved below costa; a marginal series of short striæ; cilia with dark line at base and through middle. Hind wing fuscous with marginal striæ from apex to vein 2; cilia pale with dark line at base. Underside with curved postmedial series of specks.

Hab. Tenasserim (Doherty). Exp. 24 millim. Type in coll.

Druce.

- 5155. Pachyzanela intensalis, Swinh. A. M. N. H. (6) xiv, p. 143. Ebulea ochripunctalis, Warr. A. M. N. H. (6) xviii, p. 111.
- 3. Head and thorax dark chestnut-red; palpi whitish below; abdomen fuscous with pale segmental rings, the anal tuft rufous. Fore wing dark chestnut, with a diffused dark patch on basal inner area; an indistinct minutely dentate oblique antemedial line; a large diffused fuscous patch beyond lower angle of cell; a minutely dentate postmedial line excurved from costa to vein 2, along which it is retracted to below angle of cell; a series of minute pale marginal specks; cilia black and rufous, the tips whitish. Hind wing fuscous, the outer area slightly suffused with rufous; traces of a curved minutely dentate postmedial line; cilia fuscous, pale at tips. Underside pale reddish, with postmedial curved series of black specks on each wing.

Hab. Sikhim; Khásis. Exp. 28 millim.

# 5156. Pachyzancla ustulalis, n. sp.

Differs from intensalis in being browner, the red suffusion confined to head, thorax, and base of fore wing. Fore wing with the discal fuscous patch smaller; the postmedial line somewhat reduced to specks and oblique from vein 3 to inner margin, not retracted. Hind wing with the postmedial line less excurved.

Hab. Ceylon (Green). Exp. 26 millim. Type in B. M.

### 5157. Pachyzancia callistalis, n. sp.

Q. Head rufous; palpi white below; thorax golden yellow and rufous; abdomen fuscous. Fore wing golden yellow suffused with bright rufous, leaving the cell, the area below it, and apical area yellow; the veins rufous; an oblique antemedial dark line from costa near base to middle of inner margin, where it is met by the postmedial line, which is very highly angled outwards to near the margin on vein 6; a marginal series of pale specks; the cilia dark brown. Hind wing dark brown, with traces of marginal series of pale specks. Underside suffused with fuscous; both wings with dark discocellular lunule and curved postmedial line. Tarsi banded black and white.

Hab. Margharita, Assam (Doherty). Exp. 28 millim. Type in coll. Elwes.

- 5158. Pachyzancla marginalis, Warr. A. M. N. H. (6) xviii, p. 115. Goniorhynchus obliquistriga, Warr. A. M. N. H. (6) xviii, p. 115.
- 3. Bright yellow; palpi and frons black-brown, the former white below; abdomen ringed with fuscous. Fore wing with the basal half of costa brown; traces of a subbasal line; a prominent erect antemedial line; a discocellular lunule conjoined to the costa, and by fascize on veins 3 and 5 to the postmedial line, which is minutely dentate from the costa to vein 2, then retracted to angle of cell; the fascia on vein 3 broad and joining at outer angle the marginal band which runs round the apex. Hind wing with discocellular spot; the postmedial line running out to acute angles on veins 5 and 3, where it touches the marginal brown line, then retracted to angle of cell; cilia of both wings brown, with an ochrous line at base.

Hab. Sikhim; Khásis. Exp. 26 millim.

# 5159. Pachyzancia subdentalis, Swinh. A. M. N. II. (6) xiv, p. 147.

of. Fuscous. Fore wing with obscure antemedial dark line; both wings with black discocellular lunule; sinuous dark postmedial line outlined with whitish most strongly towards costa, excurved and minutely dentate between veins 6 and 2; a dark maculate marginal line and whitish specks at base of cilia.

Hab. Khásis. Exp. 24 millim.

5160. Pachyzancia cynaralis, Wik. Cat. xviii, p. 672; C. & S. no. 4051.

Hapalia marginalis, *Moore, Lep. Ceyl.* iii, p. 338, pl. 182, fig. 13; C. & S. no. 4098.

Differs from agrotalis in the head and collar being fuscous. Fore wing with the basal half of costa more broadly fuscous, especially at base; a marginal fuscous band broad at apex and outer angle, indented with a sinus between veins 5 and 2. Hind wing with the apical area fuscous; a minutely dentate submarginal line; both wings with marginal series of dark specks.

Hab. Sikhim; Ceylon. Exp. 22 millim.

5161. Pachyzancia zgrotalis, Zell. K. Vet.-Ak. Handl. 1852, p. 38. Botys mutualis, Zell. t. c. p. 40; Moore, Lep. Ceyl. iii, pl. 178, fig. 15; C. & S. no. 4334 (part.).

Botys verminalis, Guen. Delt. & Pyr. p. 348.

Botys admensalis, Wik. Cat. xviii, p. 652; Hmpsn. 1ll. Het. ix, pl. 173, fig. 10; C. & S. no. 4083.

Botys basalis, Wlk. Cat. xxxiv, p. 1404; C. & S. no. 4333.

Botys apertalis, Wik. Cat. xxxiv, p. 1450. Acharana rudis, Warr. A. M. N. H. (6) ix, p. 435.

Acharana simplex, Warr. A. M. N. H. (6) ix, p. 436.

Acharana subalbescens, Swinh. A. M. N. H. (6) xiv, p. 147. Pachyzancia honestalis, Warr. A. M. N. H. (6) xvii, p. 97. Acharana subænescens, Warr. A. M. N. H. (6) xviii, p. 113.

J. Whitish with an ochreous tinge; palpi fuscous, white below; abdomen with a pair of black spots on 3rd segment. Fore wing with the costa fulvous and suffused with fuscous towards base; a black speck near base of inner margin; an outwardly-oblique sinuous antemedial line; a prominent black speck in cell, and both wings with a large discocellular spot and minutely dentate postmedial line bent outwards between veins 4 and 2, along which it is retracted to below end of cell; the margin dark; the marginal area of fore wing and apical area of hind wing sometimes broadly suffused with fuscous.

2 more uniformly ochreous tinged with fulvous.

The form rudis from Japan, China, and India is dark fuscous in tone.

Hab. W. & S. Africa; Nilgiris; Ceylon; Java. Exp. 22-30 millim.

- b. (Pachyzanela). Patagia of male with a tuft of long hair and scales extending beyond the metathorax.
- 5162. Pachyzancia stultalis, Wik. Cut. xviii, p. 600; C. & S. no. 4334 (part.). Botys basistrigalis, Wlk. Cat. xxxiv, p. 1443.

Differs from agrotalis in being uniformly darker and more suffused with fuscous. Fore wing with the antemedial line more prominent; the postmedial line of both wings with more or less prominent pale outer edge.

Hab. China; throughout India, Ceylon, and Burma; Andamans; Sumatra; Java; Borneo; Celebes; Australia. Exp. 22-28 millim.

# Genus LOXONEPTERA, nov.

Type, L. carnealis, Hmpsn.

Range. Sikhim; Assam.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; from produced to a flattened plate with rounded edge; antennæ of male minutely ciliated; tibiæ with the outer spurs minute; mid tibize of male dilated with a fold containing a tuft of long hair; abdomen of male with very large paired lateral tufts from just beyond middle. Fore wing of male with fringe of long hair on base of inner margin, which is excised towards outer angle and bears a curved tuft of hair; vein 3 from before angle of cell; 4, 5 from angle; 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing of male with fringe of hair on median nervure towards angle of cell; a small tuft below vein 2 and a fringe on vein 1 c; vein 3 from before angle of cell; 4, 5 somewhat approximated for a short distance; 6, 7 from upper angle.

# 5163. Loxoneptera carnealis, n. sp.

J. Pale flesh-colour; palpi fulvous, white at base below;



Fig. 219.—Loxoneptera carnculis, d. 1.

abdomen ochreous tinged with fuscous. Fore wing with the veins rather darker; a black discocellular speck. Hind wing fuscous, with large ochreous costal patch from before middle to near apex, joined by a curved patch below the cell from

near the base; the anal angle ochreous. Underside pale; fore wing with the cell and disk suffused with fuscous.

Hab. Sikhim (Möller); Khásis. Exp. 36 millim. Type in coll. Elwes.

### Genus PROŒDEMA, nov.

Type, P. inscisale, Wlk.

Range. N.E. India; Ceylon; Malayan subregion to N. Australia. Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; from with a rounded prominence: antennæ thickened and flattened; tibiæ with the outer spurs half the length of the inner; male with the claspers long and exserted. Fore wing rather narrow; the apex rounded; vein 3 from before angle of cell; 4,5 from angle; 7 curved and approximated to 8,9. Hind wing with veins 4, 5 approximated for a short distance; 6,7 stalked, 7 anastomosing with 8.

5164. Procedema inscisale, Wlk. Cat. xxxiv, p. 1410; Moore, Lep. Ceyl. iii, pl. 181, fig. 1; C. & S. no. 4137.

Palpi orange; head and thorax purplish brown; abdomen



Fig. 220.—Provdema inscisale, d. 1.

purphsh brown; abdomen fuscous, the basal and terminal segments tinged with fulvous. Fore wing purplish fuscous; the costal area orange-yellow, expanding before middle into a triangular patch with its apex on vein 1, and again on apical area into a patch narrowing to outer

angle. Hind wing pale brownish fuscous; the cilia yellow.

Hab. Sikhim; Ceylon; Borneo; New Guinea; Australia.

Exp. 36 millim.

### Genus PHLYCTÆNODES.

Phlyetenodes, Guen. Delt. & Pyr. p. 173 (1854). Loxostege, Hubn. Verz. p. 352 (? 1818), non descr. Spilodes, Guen. Delt. & Pyr. p. 379. Dosara, Wlk. Cat. xix, p. 828 (1859). Eurycreon, Led. Wien. ent. Mon. 1863, p. 376.

Type, P. pustulalis, Hübn., from Europe. Range. The tropical and temperate zones.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filitorm; from with a sharp conical prominence; antennæ of male almost simple; legs smoothly scaled. Fore wing with the costa arched towards apex; vein 3 from near angle of cell; 4, 5 from angle. Hind wing with vein 3 from close to angle of cell; 4, 5 from the angle and more or less approximated; 6, 7 from upper angle, 7 anastomosing with 8.

SECT. I. Hind tibie of male with the outer spurs one-half to three-fourths length of the inner.

5165. Phlyctænodes nubilalis, Hmpsn. Ill. Het. viii, p. 132, pl. 154, fig. 12.

Fuscous brown; palpi white below; abdomen ringed with white. Fore wing with indistinct sinuous ante- and postmedial lines, the latter highly excurved from vein 5 to 2, along which it is sharply retracted to near median nervure; very indistinct dark ocelli in cell and on discocellulars. Hind wing with dark spot on discocellulars; an indistinct postmedial line highly excurved from vein 5 to 2, where it is sharply retracted; both wings with a marginal series of dark spots.

Hab. Nilgiri plateau. Exp. 22 millim.

5166. Phlyct@nodes sticticalis, Linn. Syst. Nat. i, 2, p. 883; Dup. Lép. Fr. viii, pl. 215, fig. 5; C. & S. no. 4146.

Fuscous brown with a rufous tinge; palpi white below. Fore wing with grey streaks in, beyond, and below cell; a quadrate whitish spot in end of cell between the oblique orbicular and reniform stigmata, which are obscure; an irregular and minutely dentate postmedial dark line angled inwards below cell; a yellow marginal line expanding at vein 6. Hind wing more fuscous, with indistinct sinuous dark postmedial line with pale outer edge; cilia of both wings leaden grey. Underside pale ochreous, with the stigmata of fore wing prominently dark and postmedial and submarginal lines prominent on both wings.

Hab. N. America; Europe; Quetta. Exp. 24 millim.

5167. Phlyctmodes nudalis, Hübn. Samml. eur. Schmett., Pyr-Pyralis interpunctalis, Hübn. Samml. eur. Schmett., Pyr. fig. 128;

C. & S. no. 4175.

Botys unipunctalis, Dup. Lép. Fr. viii, p. 166, pl. 221, fig. 5. Botys bipunctalis, Dup. Lép. Fr. viii, p. 167, pl. 221, fig. 6. Botys pauciferalis, Wtk. Cat. xxxiv, p. 1413; C. & S. no. 4071.

3. Bright straw-colour. Fore wing quite uniform or with dark spots at end of cell and below its middle, and a sinuous postmedial series, any of which may be absent. Hind wing paler.

Q usually darker, the hind wing being tinged with fuscous and

often with traces of a postmedial line.

The whole insect is sometimes suffused with fuscous.

Hab. S. Europe; W. Africa; Syria; Aden; Punjab; Coimbatore; Ceylon. Exp. 20-24 millim.

5168. Phlyctænodes massalis. Wik. Cat. xviii, p. 792.
Dosara ceelatalis, Wik. Cat. xix, p. 829; Hmpsn. Ill. Het. ix, pl. 172, fig. 22; C. & S. no. 4536.

Ochreous; the head, thorax, and fore wing more or less completely suffused with ferruginous; palpi white below at base. Fore wing with the costa and a streak below median nervure ochreous, the latter ending in a dark spot; an oblique ochreous



Fig. 221.
Phlyetanodes massalis, &. }.

postmedial line with black on its inner edge from vein 5 to 2, sending teeth inwards at veins 5 and 2, and in the ochreous specimens with ferruginous suffusion on its inner edge from the costa to vein 5; a marginal series of black lunules; the cilia fuscous. Hind wing pale fuscous or pale ochreous,

with the marginal area slightly suffused with fuscous.

Hab. W. Africa; N.W. Himalayas; Punjab; Karáchi; Poona; Ceylon; Australia. Exp. 18 millim.

- 5169. Phlyctænodes palmalis, Swinh. P. Z. S. 1884, p. 525, pl. 48, fig. 11; C. & S. no. 4156.
- Q. Fulvous. Fore wing with a diffused fuscous band from base of costa, conjoined at inner margin to a postmedial band of fuscous suffusion on the inner edge of the sinuous white submarginal line; a series of dark marginal strige. Hind wing pale, with indistinct dark postmedial line becoming obsolete towards inner margin; some rufous suffusion and a series of dark strige on outer margin.

Hab. Aden; Karáchi. Exp. 18 millim.

# 5170. Phlyctænodes simplalis, Swinh. P. Z. S. 1889, p. 421

Q. White, head and thorax ferruginous; palpi white below abdomen banded with ferruginous. Fore wing with the costal area ferruginous; an indistinct subbasal band; an erect antemedial line; a spot in cell and lunule at end of it; a postmedial obscurely dentate band very much incurved below vein 4; a dentate

submarginal band and marginal series of spots. Hind wing with cell-speck; a postmedial band incurved below vein 4; a submarginal dentate band and marginal series of spots; both wings with the cilia ferruginous.

Hab. Sind. Exp. 20 millim.

SECT. II. Hind tibiæ of male with the outer medial and distal spurs minute.

5171. Phlyctænodes palealis, Schiff. Wien. Verz. p. 128. Phalæna flaveolata, Rott. Naturf. xi, p. 80. Pyralis selenalis, Hubn. Samml. eur. Schmett., Pyr. fig. 177. Botys anaxisalis, Wik. Cut. xviii, p. 658; C. & S. no. 4043.

Pale sulphur-yellow; palpi black; abdomen white at base. Fore wing with the costa black. Hind wing white, with an indistinct postmedial blackish band from costa to vein 2, prominent on underside; a more or less developed apical black patch. Underside of fore wing white, with the veins and costal area black; a postmedial black band and apical patch.

Hab. Europe; Syria; Japan; China; N.W. Himalayas.

Exp. 30-36 millim.

5172. Phlyctænodes verticalis, Linn. Syst. Nat. i, 2, p. 882. Pyrahs limbalis, Schrank, Fanna Boica, ii, 2, p. 64. Botys cinetalis, Treitschke, Schmett. Eur. vii, p. 97.

Pale yellow; head, thorax, and abdomen variegated with fuscous; palpi white below. Fore wing with the veins dark; an oblique sinuous antemedial line; an annulus in cell and discoccilular ovate mark; a minutely dentate postmedial line straight from costa to vein 2, along which it is retracted to below angle of cell; a minutely dentate somewhat diffused submarginal line; the costa and margin often blackish. Hind wing with dark postmedial line slightly retracted at vein 2; a more or less developed submarginal sinuous line, sometimes diffused over the whole apical area; a dark marginal line. Underside with the veins and all the markings prominently dark.

Hab. Europe; Japan; Afghanistán; N.W. Himalayas; Khásis. Exp. 30 millim.

# 5173. Phlyctænodes brevivittalis, n. sp.

3. Paleyellowish brown; palpi fulvous, white below; abdomen with fuscous dorsal bands on 2nd and 3rd segments, the next four ringed with black. Fore wing with indistinct dark antemedial line, curved from costa to median nervure, then outwardly oblique and developed into a very prominent inwardly-oblique black band from middle of interno-median interspace to inner margin; both wings with oblique minutely dentate indistinct postmedial line ending at vein 2 of hind wing; the marginal area suffused with fuscous; the cilia bright yellow.

Hab. Nágas (Doherty). Exp. 30 millim. Type in coll. Elwes.

- 5174. Phlyctænodes crocalis, Hmpen. Ill. Het. viii, p. 131, pl. 154, fig. 7.
- 3. Bright orange-yellow; head and femora fulvous, the fore tibiæ banded fulvous and white; palpi white below. Fore wing with the basal half of costa fulvous; an erect slightly sinuous antemedial fulvous line; a speck in cell and striga at end of it; an obscure postmedial dentate line highly excurved from veins 5 to 2, then bent inwards. Hind wing with dentate postmedial line excurved from vein 6 to 2, where it is bent inwards.

Hab. Nilgiris; Ceylon. Exp. 30 millim.

- 5175. Phlyctænodes perbonalis, Swinh. Trans. Ent. Soc. 1890, p. 272, pl. 8, fig. 17.
- Q. Rufous brown; head and collar fuscous. Fore wing with the costal area fuscous, with a series of dark specks on it; an indistinct antemedial sinuous line; a grey and fuscous spot in cell and lunule at end of it; an oblique postmedial line slightly excurved between veins 5 and 2; a waved submarginal line; a series of indistinct dark marks just inside the margin, one above the outer angle being largest. Hind wing with oblique nearly straight ante- and postmedial and curved submarginal lines almost meeting near anal angle; fuscous patches at apex and anal angle, and a series of obscure dark marks just inside the margin.

Hab. Rangoon. Eap. 26 millim.

#### Genus DIASEMIA.

Diasemia, Guen. Delt. & Pyr. p. 233 (1854).

Type, D. litterata, Scop.

Range. Universally distributed.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales; from rounded; antennæ annulated and ciliated, in male minutely serrate; tibiæ with the spurs long and even. Fore wing long and narrow; veins 3, 4, 5 from angle of cell; 7 well separated from 8, 9, to which 10 is approximated. Hind wing with the outer margin excised below apex; the cell short; veins 3, 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing strongly with 8.

5176. Diasemia litterata, Scop. Ent. Carn. p. 229.
Phalæna argentalis, Fabr. Ent. Syst. iii, 2, p. 240.
Isopteryx impulsalis, Wlk. Cat. xvii, p. 404; C. & S. no. 4368.

Brown and fulvous black; palpi white below at base; abdomen ringed with white. Fore wing with white antemedial band from median nervure to inner margin; a spot in end of cell conjoined to a triangular patch with dark lines on it below the cell; a postmedial white line from costa to vein 2, more or less angled inwards at vein 5 and with a spot inside it above vein 5; a series of small dentate dark marks on the margin; the cilia intersected with

white. Hind wing with a white spot in cell and another beyond the discocellulars, with a band from it to inner margin; a postmedial line from costa to vein 2, angled inwards at vein 5; cilia white and fuscous, with a dark line through them.

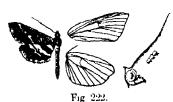
Impulsalis is a small ochreous female with a black patch on inner margin of fore wing between the antemedial and medial

white markings.

Hab. Europe; Japan; Sikhim; Ceylon. Exp. 14-20 millim.

5177. Diasemia ramburialis, Dup. Lép. France, viii, p. 343, pl. 233, fig. 6; Moore, Lep. Ceyl. iii, pl. 179, fig. 5; C. & S. no. 1369. Isopteryx melaleucalis, Wlk. Cat. xvii, p. 402. Lineodes leodocusalis, Wlk. Cat. xix, p. 947. Diasemia reconditalis, Wtk. Cat. xxxiv, p. 1325. Diasemia leucophealis, Wlk. Cat. xxxiv, p. 1326.

Black irrorated with ochrous spots; abdomen with the base



Diasemia ramburialis, 3. 3.

pale. Fore wing with small white spot in end of cell, and two spots below the angle; an oblique postmedial line excurved between veins 5 and 2. Hind wing with broad subbasal and medial white bands; a postmedial line oblique from costa to vein 5, then bent outwards to vein 2, where it

terminates; cilia of both wings chequered black and white. Hab, Universally distributed. Exp. 16-18 millim.

5178. Diasemia accalis, Wik. Cat. xix, p. 1015. Diasemia grammalis, Meyr. Trans. Ent. Soc. 1894, p. 9 (nec Doubl.).

Reddish brown; abdomen fuscous with pale rings. Fore wing with blackish antemedial mark on inner area, followed by a pale band, then a black band followed by a pale band with dark line on it and blackish patch beyond it above inner margin; obscure grey orbicular and reniform stigmata; a postmedial pale line straight from costa to vein 5, then slightly bent outwards. Hind wing fuscous black, with ochreous spot in end of cell with band from it to costa; a pale line from lower angle of cell to near anal angle; a postmedial line angled inwards on vein 5 and terminating at vein 2.

Hab. Shanghai; Dharmsála; Burma. Exp. 18 millim.

#### Genus LEPIDONEURA, nov.

Type, L. longipalpis, Swinh. Range. Khásis.

Palpi porrect, rostriform, and about twice the length of head, the 3rd joint long and hidden by hair; maxillary palpi dilated with scales; from flat and oblique; antennæ nearly as long as fore wing and almost simple; legs long and slender; tibiæ slightly fringed with hair, the outer spurs about half the length of inner; thorax of male with a large downwardly directed tuft of flattened hair from near origin of fore wing below; abdomen long and slender. wing with the costa highly arched towards apex, which is somewhat acute; vein 3 from angle of cell; 4, 5 somewhat approximated for a short distance; 7 curved and approximated to 8, 9, to which 10 also is approximated. Hind wing with the cell about half the length of wing; vein 3 from angle; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

#### 5179. Lepidoneura longipalpis, Swinh. A. M. N. H. (6) xiv, p. 208.

J. Head olive-brown, the vertex white; from with lateral white lines; palpi white below; thorax and abdomen streaked



Fig. 223.—Lepidoneura longipalpis, J. . .

white and olive-brown. Fore wing white and thinly scaled; the veins thickly scaled with ochreous and olive-brown; the costa ochreous; an oblique olive - brown streak across end of cell; short black streaks in interspaces of outer area, increasing in

length to a long streak in interno-median interspace. Hind wing semilyaline; the veins of outer area thickly scaled with ochreous; a dark marginal line except towards anal angle.

Hab, Khásis. Evp. 16 millim.

#### Genus ANTIGASTRA.

Antigastra, Led. Wien. ent. Mon. 1863, p. 419.

Type, A. catalaunalis, Dup.

Range. Europe; E. & W. Africa; India, Cevlon, and Burma. Palpi porrect, triangularly scaled, the 3rd joint hidden by hair;

maxillary palpi dilated with scales; from flat and oblique; antennæ nearly as long as the fore wing and minutely ciliated; legs long; fore femora and tibiæ of male fringed with long hair; the outer spurs half the length of inner. Fore wing with the costa arched towards apex, which is acute and produced; veins 3, 4, 5 from angle of cell; 7 well separated from 8, 9. Hind wing with the cell half the length of wing; vein 3 from angle; 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

5180. Antigastra catalaunalis, Dup. Lep. France, viii, p. 330, pl. 232, fig. 8; C. & S. no. 4131. Botys venosalis, Wlk. Cat. xxxiv, p. 1401.

Ochreous, the head and thorax suffused with fuscous; from with

lateral white lines. Fore wing with the veins orange-red;



Fig. 224.

Antigastra catalaunalis, cf. 1.

traces of a spot in cell and discocellular spot, of a curved antemedial line and postmedial line excurved from costa to vein 3, then bent inwards to below angle of cell; the marginal area orange-red; the cilia black at base, pure white at tips. Hind wing reddish towards outer margin.

Hab. Europe; Svria; Aden; E. & W. Africa, throughout India, Ceylon, and Burma. Exp. 20 millim.

#### Genus AGASTYA.

Agastya, Moore, P. Z. S. 1881, p. 378.

Type, A. hyblavides, Moore.

Range. Sikhim.

Palpi rostriform, projecting about the length of head and downcurved at extremity; maxillary palpi with a sharp tuft of hair projecting forward from extremity; frons rounded; antennæ ciliated; tibiæ with the outer spurs about two-thirds length of inner; hind tibiæ fringed with spinous hair on outer side. Fore wing broad and quadrate; the costa very much lobed at base; veins 3, 4, 5 from angle of cell; 7 straight and well separated from 8, 9, to which 10 is also approximated. Hind wing broad; the cell short; vein 2 from near angle; 3, 4, 5 approximated for some distance; 6, 7 from upper angle, 7 anastomosing with 8.

5181. Agastya hyblæoides, Moore, P. Z. S. 1881, p. 370; C. & S. no. 4524.

Agastya flavomaculata, Moore, P. Z. S. 1881, p. 370; C. & S. no. 4523.

3. Head, thorax, and abdomen dark red-brown. Fore wing with the margins broadly dark red-brown; the disk golden brown;



Fig. 225.—Agastya hyblæoides, J. 1.

a dark discocellular patch conjoined to the costal dark area; a conical yellow spot on middle of inner margin, usually with a small spot above it. Hind wing golden brown; the apical area blackbrown; a yellow submarginal spot between veins 3 and 5;

the cilia yellow from below apex to middle. Underside yellow; fore wing with the costal area, a discocellular band, and the outer area down to vein 2 black-brown; hind wing with the apical area blackish, emitting a postmedial line ending on vein 1 b and a marginal lunulate band ending on vein 2.

Hab. Sikhim. Exp. 32 millim.

#### Genus PROTRIGONIA, nov.

Type, P. zizanialis, Swinh. Range. Bombay; Ceylon.

Palpi porrect, projecting about the length of head, clothed with hair and downcurved at extremity, 3rd joint hidden; maxillary palpi with a pointed tuft at extremity; from rounded; antennæ of male somewhat thickened and flattened; tibiæ with the spurs nearly equal. Fore wing with vein 3 from before angle of cell; 4, 5 from angle; 7 straight and well separated from 8, 9. Hind wing with the cell about half the length of wing; vein 3 from before angle; 4, 5 from angle; 6, 7 from upper angle, 7 anastemosing with 8.

5182. Protrigonia zizanialis, Swinh. P. Z. S. 1885, p. 865, pl. 57, fig. 12; C. & S. no. 4472.



Fig. 226, Protrigonia zizanialis, d. 1.

Head, thorax, and abdomen pale brown; palpi blackish, white below; abdomen with dark bands. Fore wing grey thickly mottled with brown; a black streak at base of costa; an inwardly oblique black antemedial line; an elongate discocellular ring-spot; a dark submarginal line excurved from costa to vein 3; the margin fuscous; a fine marginal black

line. Hind wing pale, suffused with fuscous on outer area; a curved postmedial line.

Hab. Bombay; Ceylon. Exp. 16 millim.

#### Genus NOORDA.

Noorda, Wik. Cat. xix, p. 978 (1859).

Type, N. blitealis, Wlk.

Range. W. Africa; Aden; India; Ceylon; Burma; Andamans. Palpi porrect, the 3rd joint long and rostriform; maxillary palpi clothed with hair produced to a point in front; frons rounded; tibiæ with the outer spurs about half the length of the inner. Fore wing narrow, the apex rectangular; the outer margin erect; vein 3 from before angle of cell; 4,5 from angle. Hind wing with veins 4, 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing with 8.

# SECT. I. Antennæ of male almost simple.

5183. Noords blitealis, Wtk. Cat. xix, p. 979; C. & S. no. 4227. Scopula subjectalis, WBc. Cat. xxxiv, p. 1472.

Dark fuscous; abdomen with lateral metallic-blue and black patches on segments 3 to 8. Fore wing with white patch on base of inner area; a curved black autemedial line; two

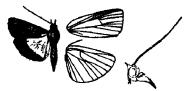


Fig. 227.—Noorda blitcalis, &. . .

black antemedial line; two leaden grey discocellular spots on a pale discal patch; a black postmedial line outwardly oblique from costa to vein 4, then bent inwards and dentate towards inner margin; a curved submarginal line with some blueblack scales on it; a black line at the base of cilia, which are

grey at tips. Hind wing hyaline, with broad black marginal band narrowing to anal angle; cilia with the tips pure white. Underside white; fore wing with broad marginal black band.

Hab. Aden and throughout the plains of India and Ceylon. Exp. 24 millim.

SECT. II. Antennæ of male with long cilia.

5184. Noorda fessalis, Swinh. P. Z. S. 1886, p. 459, pl. 41, fig. 13; C. & S. no. 4183.

Autocharis amethystina, Swinh. A. M. N. H. (6) xiv, p. 149.

3. Very pale lemon-colour, almost white; palpi and shoulders fulvous; fore legs fulvous; the tarsi white; mid tibiæ with fulvous stripe above; anal tuft fulvous. Fore wing with the costa fulvous; two black speeks in the cell below costa and one at each angle of cell, any of which may be absent; the outer area pink, pinkish brown, or blackish, bounded inwardly by a slightly sinuous black line, dentate on vein 3. Hind wing with marginal pink band from apex to vein 2, narrowing and with fuscous suffusion inside it towards apex; both wings with the cilia fuscous or pale fulvous, white towards anal angle of hind wing.

often slightly ochreous in tone; fore wing with the specks in cell obsolete; the black line inside the marginal band straight.

Hab. W. Africa; Aden; Karáchi; Mhow; Canara; Bhután; Khásis; Nágas; Margharita, Assam; Manipur; Shan States; Andamans. Exp. 16-18 millim.

#### Genus DAUSARA.

Dausara, Wlk. Cat. xvii, p. 507 (1859).

Type, D. talliusalis, Wlk.

Range. N.E. India; Burma; Andamans; Borneo.

Palpi porrect, rather long, triangularly scaled, the 3rd joint hidden by hair; maxillary palpi with a long sharp tuft from extremity; frons flattened and oblique; antennæ of male much thickened and flattened; tibiæ with the outer spurs about two-thirds length of inner. Fore wing with the inner margin lobed at middle; veins 3, 4, 5 well separated at origin; 7 curved and closely approximated for one-third length to 8, 9, to which 10 also

is approximated; male with the median nervure bent upwards, or underside a very large tuft of large scales below its basal half and a smaller tuft in middle of cell. Hind wing with the cell short; veins 3, 4, 5 well separated at origin; 6, 7 from upper angle, 7 anastomosing slightly with 8.

5185. Dausara talliusalis, Wik. Cat. xvii, p. 507.
Glyphodes marginalis, Moore, P. Z. S. 1877, p. 618, pl. 60, fig. 15;
C. & S. no. 4187.

3. Deep purplish fuscous with copper reflections; head with some white on frons and vertex; the patagia and lateral stripes



Fig. 228.—Dausara talliusalis, S. 1.

on collar white; abdomen with lateral white inarks at base. Fore wing with pearly white wedge-shaped mark on base of inner area; a broad medial pearly hyaline band edged by dark lines, the band forking towards costa, which the inner arm does not reach.

Hind wing hyaline, the inner area tinged with fuscous; a fuscous fascia from lower angle of cell to near outer margin below vein 2, where it is joined by a sinuous dark postmedial line, the area; beyond which is purplish fuscous.

The form marginalis, from the Andamans, has the antemedial band of fore wing narrow, slightly curved, and even throughout.

Hab. Nágas; Tenasserim; Andamans; Borneo. Exp. 28 millim.

#### Genus **HEMISCOPIS**.

Hemiscopis, Warr. A. M. N. H. (6) vi, p. 475 (1890). Micromania, Swinh. A. M. N. H. (6) xiv, p. 141 (1894).

Type, H. suffusalis, Wlk.

Range. India, Ceylon, and Burma; Sumatra; Borneo.

Palpi porrect, rather long and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi with a long pointed tuft in front; frons rounded; antennæ almost simple and minutely annulated; tibiæ with the outer spurs about half the length of the inner. Fore wing with the apex somewhat acute; the outer margin rounded; veins 3 and 5 from close to angle of cell; 7 straight and well separated from 8, 9. Hind wing with veins 4 and 5 approximated for a short distance; 6, 7 from upper angle, 7 anastomosing shortly with 8.

5186. Hemiscopis suffusalis, Wlk. Cat. xxxiv, p. 1471; Hmpsn. Ill. Het. ix, pl. 173, fig. 18; C. & S. no. 4159.
Botys snellomanni, Snell. Midd.-Sum. iv, Lep. p. 61.

Bright purple-fuscous; head rufous; palpi black; frons with

lateral white lines; tarsi white; abdomen fulvous towards ex-



Fig. 229. Hemiscopis suffusalis, J. 1.

tremity. Fore wing with outwardly oblique autemedial rufous line; a black postmedial patch on costa, with a large dark rufous roughly-scaled patch below it beyond the cell, traversed by the sinuous dark postmedial line which is bent inwards to the costa. Hind wing with oblique black line from median nervure,

joined by a streak in interno-median interspace; an oblique postmedial line bent outwards to outer margin above anal angle; both wings with black marginal line.

Hab. Nilgiris; Ceylon; Tenasserim; Sumatra; Borneo. Eap.

22 millim.

# 5187. Hemiscopis expansa, Warr. A. M. N. H. (6) ix, p. 396.

Differs from suffusalis in being much larger and paler; no rufous on head and abdomen. Fore wing with the postmedial line more excurved beyond the cell, the rufous suffusion confined to its inner side and extending to inner margin. Hind wing with rufous suffusion inside the medial part of postmedial line.

Hab. Simla; Dharmsála. Ecp., ♂ 26, ♀ 32 millim.

# 5188. Hemiscopis stigmatilis, Swinh. A. M. N. H. (6) xiv, p. 141.

Fuscous black with a slight purplish tinge. Fore wing with the basal and outer areas darkest, the medial area paler; curved subbasal and antemedial black lines; a postmedial line, sinuous from costa to vein 3, then retracted to upper angle of cell round the discoccllular black lunule and sinuous to inner margin; a sinuous submarginal and a marginal series of pale specks. Hind wing with obscure antemedial black line; sinuous postmedial line; the outer area darker, with pale diffused submarginal line; a fine pale marginal line. Underside greyer; fore wing with annulus round the discoccllular spot; both wings with sinuous postmedial line, with diffused black band beyond it.

Hab. Khásis. Exp., & 26, 2 30 millim.

#### Genus MECYNA.

Mecyna, Guen. Delt. & Pyr. p. 406 (1854).

Type, M. gilvata, Fabr.

Range. Universally distributed.

Palpi porrect, long and rostriform, the 3rd joint partially concealed by hair; maxillary palpi dilated with scales at extremity;

frons flat; antennæ minutely ciliated; mid tibiæ dilated with a groove containing a tuft of hair; hind tibiæ with the outer spurs about half the length of the inner. Fore wing narrow; the apex arched; veins 3 and 5 from close to angle of cell; 10 closely approximated to 8, 9. Hind wing with the cell short; veins 4, 5 closely approximated for a short distance; 6, 7 stalked, 7 anastomosing strongly with 8.

PYRALIDÆ.

5189. Mecyna gilvata, Fahr. Ent. Syst. iii, 2, p. 208. Pyralis polygonalis, Hubn. Samml. eur. Schmett., Pyr. figs. 204, 205.

Pyralis diversalis, Hulm. Summl. eur. Schmett., Pyr. fig. 102. Mecyna aversalis, Gwen. Delt. & Pyr. p. 409. pl 4, fig. 12.

Mecyna teriadalis, Guen. Delt. & Pyr. p. 410.

Mecyna deprivalis, Wlk. Cat. xix, p. 806; Moore, Lep. Ceyl. iii, pl. 179, figs. 1, 1 a (larva); C. & S. no. 4141.

Mecyna rusticalis, C. & S. no. 4142 (nec Hubn.).

Head, thorax, and fore wing pale pinkish, dark vinous, or dark



Fig. 230.—Meoyna gilvata, &.

fuscous suffused with grey, and with grey discal patch; palpi white below; abdomen orange. Fore wing with the costa darker; an indistinct obliquely curved antemedial line; a spot in cell and discocellular lunule; a minutely waved curved postmedial line,

often reduced to a series of specks: the marginal area rather darker. Hind wing orange, with marginal dark band from costa to vein 1, but often obsolescent below vein 3. Underside orange, the apical area of fore wing and costal and apical areas of hind wing suffused with pink.

Larva rather stout, green above, olivaceous below; dorsal, subdorsal, lateral, and two sublateral series of black spots, the subdorsal dotted with white, the sublateral with oblique yellow streaks between them; head and a band on legs black. Pupa red.

Hab. S. and E. Europe; Madeira; Syria; Abyssinia; Aden; Punjab; Karáchi; Nilgiris; Ceylon. Exp. 28-34 millim.

#### Genus BCOTARCHA.

Bootarcha, Meyr. Trans. Ent. Soc. 1884, p. 305.

Type, B. tanialis, Snell., from N. Australia.

Range. N.E. India; Burma; Andamans; N. Australia.

Palpi porrect, long, rostriform, and depressed at extremity; maxillary palpi large and dilated with scales; from with a conical prominence; antennæ thickened and flattened; tibiæ with the outer spurs half the length of the inner. Fore wing long and

narrow; vein 3 from before angle of cell; 4, 5 well separated at origin. Hind wing with veins 4, 5 somewhat approximated for a short distance; 6, 7 from upper angle, 7 anastomosing slightly with 8.

5190. Bœotarcha martinalis, Wik. Cat. xviii, p. 791; C. & S. no. 4154.

Botys crassicornis, Wlk. Cat. xxxiv, p. 1455.

Head, thorax, and fore wing chestnut, more or less suffused with purplish; palpi white below at base; fore legs banded rufous



Fig. 231.—Baotarcha martinalis,  $\delta$ .  $\}$ .

and white; abdomen whitish suffused with fuscous. Fore wing with bright yellow rufous edged band, in the form crassicornis broad withits inner edge sinuous, its outer edge indented at veins 3 and 5 and narrowing slightly to inner margin, in martinalis

only represented by two conjoined spots above inner margin; an indistinct paler ovate marginal area with fuscous inner edge; a marginal series of dark specks. Hind wing whitish, with the inner and outer areas suffused with fuscous.

Hab. Moulmein; Rangoon. Exp., ♂ 22, ♀ 26 millim.

# 5191. Bœotarcha hyalinalis, n. sp.

Head, thorax, and abdomen greyish white; wings semihyaline nacreous. Fore wing with slightly sinuous brown antemedial line; prominent discocellular lumule; a minutely waved postmedial-line arising from a dark costal spot and slightly excurved from vein 6 to 2; a marginal fuscous band and the cilia fuscous at base from costa to vein 2; a marginal series of white specks. Hindwing with slight marginal line or series of specks.

Hab. Bhutan (Dudgeon); Andamans. Exp. 28 millim. Type

in B. M.

#### Genus CALAMOCHROUS.

Calamochrous, Led. Wien. ent. Mon. 1863, p. 386. Notaspis, Warr. A. M. N. H. (6) ix, p. 297 (1892).

Type, C. chilonalis, Led., from Venezuela.

Range. S. America; E. Europe; N. Asia; N.E. India; Ternate. Palpi porrect, long and rostriform, the 3rd joint downcurved; frons oblique; maxillary palpi dilated with scales; antennæ of male minutely ciliated; tibiæ with the spurs fully developed. Fore wing with the apex somewhat produced; veins 3 and 5 from close to angle of cell; 6, 7 from upper angle, 7 anastomosing with 8:

SECT. I. Maxillary palpi strongly dilated with scales.

5192. Calamochrous tranquillalis, Led. Wien. ent. Mon. 1863, pp. 371, 466, pl. 9, fig. 16.

Fulvous yellow; thorax and abdomen suffused with dark brown, the latter with lateral white basal patches; a dorsal white patch on



2nd segment. Fore wing with fulvous suffusion on costal area; the medial area dark purplish brown, with a black spot in cell and lunule at end of it, the outer edge of the dark area excurved between veins 6 and 2, with a series of dark spots beyond it in the interspaces; a mar-

ginal series of dark specks. Hind wing pale yellow; the underside white.

Hab. Sikhim; Khásis; Ternate. Exp. 36-40 millim.

#### 5193. Calamochrous ferruginalis, n. sp.

Q. Head and thorax fulvous; abdomen ochreous tinged with fuscous. Fore wing yellowish, almost wholly suffused and irrorated with bright ferrnginous; a sinuous antemedial dark line angled outwards below median nervure; a dark orbicular spot in cell; a large irregular dark patch on discocellulars extending to the costa and produced to an angle below it; an obliquely curved minutely waved dark postmedial line; a dark marginal line; the cilia pale fuscous, with a dark line through them. Hind wing whitish. Underside whitish; fore wing with the blackish orbicular and discocellular patches very prominent; fuscous suffusion below end of cell; hind wing with discocellular and four postmedial dark specks.

Hab. Sikhim (Moller). Exp. 36 millim. Type in coll. Elwes.

# 5194. Calamochrous carnealis, Swinh. A. M. N. H. (6) xvi, p. 302.

Straw-yellow; palpi, head, and thorax suffused with flesh-pink. Fore wing with the costa white; the costal area and veins suffused with flesh-pink; a dark speck in cell and discocellular spot; the margin and base of cilia flesh-pink. Hind wing with slight dark marks on margin at middle. Underside of fore wing with, the subcostal and median nervures and cell-spots suffused with fuscous.

Hab. Khásis. Exp. 26 millim.

#### 5195. Calamochrous rufioostalis, n. sp. Botys quadralis, Snell. Trans. Ent. Soc. 1890, p. 572 (nec Wik.).

J. Head, collar, and patagia bright rufous; thorax and abdomen fuscous. Fore wing fuscous; the costal area bright rufous; a dark

postmedial striga from the costa; the basal inner area whitish; diffused dark spots in cell and on discocellulars. Hind wing pale fuscous, with white medial patch on costa; the underside pure white, with the apical area fuscous and traces of a dark postmedial line.

Hab. Sikhim (Knyvett). Exp. 20 millim. Type in B. M.

SECT. II. Maxillary palpi slightly dilated with scales.

5196. Calamochrous dichroma, Moore, Lep. Atk. p. 223; C. & S.

Calamochrous brevipalpis, Snell. Trans. Ent. Soc. 1890, p. 599.

- 3. Head, thorax, and abdomen dull ochreous; palpi fulvous, white below. Fore wing ochreous, suffused and irrorated with ferruginous; the costal area tinged with brown; traces of dark specks in cell and on discoccllulars; the cilia black at base, white at tips. Hind wing ochreous; the costal and anal areas tinged with fuscous. Underside of fore wing with the cell and subcostals suffused with fuscous.
- 9 with the palpi rather longer; the fore wing more ochreous; the spots in cell and on discoccilulars more prominent; hind wing whitish.

Hab. Sikhim. Ecp. 36 millim.

#### Genus METASIA.

Metasia, Guen. Delt. & Pyr. p. 251 (1854).

Type, M. suppandalis, Hubn., from Europe.

Range, Mediterranean subregion; Turkestan; Punjab; Deccan; Australia.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales; proboscis small; frons with a large rounded prominence; antennæ nearly simple; tibiæ with the spurs equal. Fore wing rather long and narrow; vein 3 from well before angle of cell; 10 well separated from 8, 9. Hind wing with vein 3 from near angle of cell; 5 from above the angle; 6, 7 from upper angle, 7 anastomosing with 8.

# 5197. Metasia sabulosalis, Warr. A. M. N. H. (6) xviii, p. 217.

3. Yellow-brown mixed with white scales; palpi fuscous. Fore wing with fuscous streak below basal half of costa; an antemedial fuscous line; a discocellular speck; a dark postmedial line nearly straight from costa to vein 2, along which it is retracted to lower angle of cell. Hind wing with postmedial line bent outwards between veins 5 and 2; both wings with dark marginal line and a line through the cilia.

2 more ochreous.

Hab. Punjab; Poona. Exp., & 12, 2 18 millim.

5198. Metasia monialis, Ersch, Hor. Soc. Ent. Ross. viii, p. 317; id. Fedtschenko, Reise Turk. p. 78, pl. 5, fig. 83.

Grey-brown; abdomen sometimes with some black on dorsum.

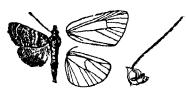


Fig. 233.—Metasia montalis, d. 1.

Fore wing very closely mottled with fine specks; some white near base; two medial greyish-white lines; a series of pale-edged black spots from beyond upper angle of cell to inner margin, incurved at vein 4; a submarginal white line excurved from costa to vein 4 and broad-

est at costa; a white striga just inside the margin from costa and another below middle. Underside white; both wings with curved brown postmedial line.

Hab. Turkestan; Campbellpur, Punjab. Exp. 26 millim.

#### Genus PIONEA.

Pionea, Guen. Delt. & Pyr. p. 367 (1854). Udea, Guen. Delt. & Pyr. p. 398. Pseudebulea, Butl. Trans. Ent. Soc. 1881, p. 587. Lepidoplaga, Warr. A. M. N. H. (6) xvi, p. 475 (1895).

Type, P. forficalis, Linn.

Range. Universally distributed.

Palpi porrect and triangularly scaled, the 3rd joint hidden by hair; maxillary palpi dilated with scales at extremity; froms rounded; antennæ of male minutely ciliated; tibiæ with the outer spurs short. Fore wing with the apex somewhat produced; vein 3 from well before angle of cell; 4, 5 from angle; 10 closely approximated to 8, 9. Hind wing with the cell short; vein 3 from angle of cell; 4, 5 closely approximated for a short distance; 6, 7 stalked, 7 anastomosing strongly with 8.

SECT. I. (Udea). Mid tibiæ dilated with a groove containing a tuft of hair.

A. Antennæ of male somewhat thickened and flattened; hind tibiæ with the outer medial spur minute.

5199. Pionea ferrugalis, Hubn. Samml. cur. Schmett., Pyr. figs. 54, 150; C. & S. no. 4149.

Scopula martialis, Guen. Delt. & Pyr. p. 398.

Scopula hypatialis, Wlk, Cat. xix, p. 1014; C. & S. no. 4151.

Scopula testacea, Butl. Ill. Het. iii, p. 77, pl. 59, fig. 15.

Fulvous yellow, more or less suffused with fuscous; palpi white below at base; from white at sides. Fore wing with waved fuscous antemedial line; an orbicular spot in cell and larger oval discocellular mark, each being usually filled in with fuscous; a

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curved postmedial minutely crenulate line with obscure dentate



Fig. 234.-Pionea ferrugalis, &. . . . . .

line beyond it; a prominent marginal series of black specks; the cilia fuscous. Hind wing ochreous, more or less suffused with fuscous; a dark spot at lower angle of cell; a curved minutely crenulate postmedial line most distinct towards costa; the apical area suffused with

fuscous; a marginal series of black specks from apex to vein 2.

Hab. Europe; Madeira; W. & S. Africa; Syria; Afghanistan; Japan; Sikhim; Nilgiris; Ceylon; Shan States. Exp. 22 millim.

5200. Pionea renalis, Moore, Lep. Atk. p. 224; C. & S. no. 4158.

Differs from ferringalis in the head, thorax, and abdomen being rufous suffused with fuscous. Fore wing bright ferruginous, with the markings prominent, especially the orbicular and discoccilular patches: a broad fuscous marginal band; both wings with prominent marginal series of black specks.

Hab. Sikhim. Exp. 22 millim.

5201. Pionea octonalis, Snell. Trans. Ent. Soc. 1890, p. 581.

Differs from ferrugalis in being dark red-brown suffused over grey. Fore wing with the black-edged orbicular and reniform spots filled in with bright rufous; the postmedial line retracted at vein 2 to lower angle of cell, sending a very long tooth outwards along vein 1, and ending on middle of inner margin. Ilind wing with the ground-colour white; the apical area fuscous.

Hab. Sikhim; Nagas. Exp. 24 millim.

B. Antenna of male not thickened; hind tibit with the outer medial spur half the length of the inner.

5202. Pionea mandronalis, Il'Ik. Cat. xix, p. 1014; Hmpsn. Ill. Het. ix, pl. 173, fig. 19; C. & S. no. 4153.

Dull reddish brown suffused with fuscous; palpi white below. Fore wing with the costa fuscous; a curved antemedial line angled above inner margin; an obscure speck in cell and discocellular lunule; a postmedial minutely waved line excurved from costa to vein 3, then retracted; the cilia fuscous. Hind wing pale semi-hyaline yellowish brown; faint traces of a curved postmedial line; a marginal fuscous band from costa narrowing to vein 3.

Hab. Dharmsála; Ceylon. Exp. 20 millim.

5203. Pionea verbascalis, Schiff. Wien. Verz. p. 121. Pyralis arcualis, Hutn. Samml. eur. Schmett., Pyr. fig. 80. Botys plumbocilialis, Snell. Trans. Ent. Soc. 1890, p. 576.

Fulvous yellow; palpi bright fulvous, white below; abdomen with pale segmental rings. Fore wing with the costal area suffused

with fulvous; a curved dark antemedial line; a speck in cell and discocellular band with a patch of fuscous beyond it; the postmedial line oblique from costa to vein 5, then slightly waved and excurved to vein 2, along which it is retracted nearly to the cell; an obscure minutely waved submarginal line; a dark marginal line; the cilia fuscous. Hind wing with slight dark patch beyond lower angle of cell; the postmedial line bent outwards between veins 5 and 2, along which it is retracted, then oblique to anal angle; an indistinct waved submarginal line; the marginal area suffused with rufous; a dark marginal line; the cilia pale.

The typical form, which occurs on the Nilgiris, has the wings much suffused with fuscous from base to the postmedial line and on marginal area, leaving a quadrate yellow spot in end of cell of fore wing; whilst plumbocitialis, from Dharmsála and Sikhim, is a

much less suffused form.

Hab. Europe; Dharmsála; Sikhim; Nilgiris. Exp. 20 millim.

5204. Pionea albicostalis, Swinh. Trans. Ent. Soc. 1890, p. 271.

Bright straw-yellow; palpi white below; white lines at side of frons and some white on vertex of head; abdomen ringed with white. Fore wing with the costa white; traces of a discocellular lunule and postmedial line excurved between veins 6 and 2, along which it is bent inwards.

Hab. Punjab; Nilgiris; Rangoon. Eup. 28 millim.

5205. Pionea aureolalis, Led. Wien. ent. Mon. 1863, p. 473; C. & S. no. 4047.

Pyralis ochrealis, *Moore, P. Z. S.* 1877, p. 614; *C. & S.* no. 4069. Paliga contractalis, *Warr. A. M. N. H.* (6) xviii, p. 113.

Orange-yellow; palpi fulvous, white below; fore tibiæ banded with white and the tarsi white; mid legs white, the tibiæ with a fulvous stripe. Fore wing with curved fulvous antemedial line; a slightly oblique medial line; a slightly sinuous and oblique postmedial line from costa to vein 2; a curved submarginal line sending a tooth inwards on vein 2. Hind wing with sinuous oblique medial and postmedial lines, the former from cell, the latter from vein 6 to near anal angle; a waved oblique submarginal line ending near anal angle.

Hab. Dharmsúla; Sikhim; Khásis; Ceylon; Andamans. Exp., 3 20-36, Q 22-34 millim.

# 5206. Pionea præpandalis, Snell. Trans. Ent. Soc. 1890, p. 573.

3. Orange-yellow; palpi fuscous, white below at the base; fore tibiæ with a white band; mid tibiæ with a white stripe. Fore wing with the veins deeper coloured; a minutely waved curved antemedial orange and fuscous line; a discocellular line; a minutely dentate postmedial line bent outwards between veins 5 and 2, then retracted to lower angle of cell; a more prominent curved dentate submarginal line. Hind wing with dentate postmedial line

retracted at vein 2 to lower angle of cell; a dentate submarginal line slightly bent inwards at vein 2.

Hab. Sikhim. Exp. 30 millim.

- 5207. Pionea leucanalis, Swinh. Trans. Ent. Soc. 1890, p. 276, pl. 8, fig. 15.
- Q. Head and thorax clothed with pink and orange scales; palpi white below. Fore wing orange, the veins with broad diffused pink fascize covering the greater part of the wing; the costal area fulvous, the costa white towards base; an obscure dark dentate oblique postmedial line reaching the inner margin before the middle; cilia with two pink lines through them. Hind wing light yellow, with pink marginal line.

Hab. Khásis; Rangoon. Exp. 24 millim.

SECT. II. (Pionca). Mid tibiæ of male not dilated.

A. Hind tibiæ of male with the outer medial spur hulf the length of inner.

5208. Pionea forficalis, Linn. Syst. Nat. i. 2, p. 882; Dup. Lép. Fr. viii, pl. 219, fig. 6; C. & S. no. 4172.

Brownish ochreous; palpi white below; abdomen pale. Fore wing slightly suffused with rufous and with the veins rufous; a brown antenedial line dentate on subcostal and median nervures, then inwardly oblique and slightly waved; two conjoined spots at angles of cell with dark outlines and grey centres; a postmedial line dentate on veins 8 and 7, then inwardly oblique and slightly sinuous; an oblique streak from the apex and minutely waved submarginal line; a waved marginal line and line through the cilia. Hind wing pale, with curved minutely waved postmedial and marginal lines.

Hab. Europe; Japan; N.W. Himalayas; Sikhim. Exp. 30 millim.

- 5209. Pionea nobilis, Moore, Lep. Atk. p. 224, pl. 7, fig. 20; C. & S. no. 4173.
- 3. Pale ochreous; head and thorax fuscous black and ochreous; palpi black, white below. Fore wing with the basal area and basal half of costa suffused with fuscous; a black spot in cell and discocellular lunule with a small fuscous mark beyond it; a fuscous strigated below origin of vein 2; a wedge-shaped black submarginal band enclosing an ochreous spot on costa, its apex on inner margin. Hind wing with discocellular speck; a very indistinct postmedial minutely dentate line bent outwards between veins 5 and 2; some slight fuscous marks on apical part of margin.

Hab. Sikhim. Exp. 28 millim.

5210. Pionea fentoni, Butl. Trans. Ent. Soc. 1881, p. 587. Botys effusalis, Snell. Trans. Ent. Soc. 1890, p. 577 (nec Wlk.).

Ochreous; palpi fuscous, white below; fore legs banded with fuscous; thorax and abdomen marked with fuscous. Fore wing

with the basal half suffused with fuscous, sometimes with a reddish tinge; a subbasal ochreous line from cell to inner margin; hyaline spots in middle and end of cell; a large ochreous patch beyond cell extending along costa towards base and bounded by the postmedial line, which is straight from costa to vein 2, then retracted to angle of cell and defined by ochreous bands inside and beyond it, the area beyond it more or less fuscous, with ochreous patches on costa and on margin expanding towards outer angle, often becoming the prevailing colour; a marginal series of dark specks. Hind wing ochreous, with discocellular speck; a postmedial line nearly straight from costa to vein 2, then retracted to below angle of cell and waved; an apical fuscous patch and slight mark at anal angle.

Hab. Japan; Simla; Sikhim; Nilgiris; Tenasserim. Exp.

30 millim.

5211. Pionea ablactalis, Wlk. Cat. xviii, p. 660; Hmpsn. Ill. Het. ix, pl. 172, fig. 6; C. & S. no. 4082.
Botys murinalis, Pagenst. Jahrb. Nassauisch. Ver. fur Nat. 1885, p. 55.

Greenish grey. Fore wing with slightly oblique antemedial dark line; a dark discocellular line; a postmedial line nearly straight from costa to vein 3, then retracted to vein 2 and sinuous to inner margin. Hind wing with discocellular line; a postmedial line excurved between veins 6 and 3; both wings with marginal black line; the cilia pure white.

Hab. Sikhim; Poona; Nilgiris; Ceylon; Burma; Borneo;

Celebes; Sumbawa. Exp. 26-30 millim.

5212. Pionea brevialis, Wik. Cat. xviii, p. 759; Hmpsn. Ill. Het. ix, pl. 173, fig. 15; C. & S. no. 4171.
Botys divisalis, Led. Wien. ent. Mon. 1863, p. 468, pl. 10, fig. 4; C. & S. no. 4053.

Udea eximialis, Wlk. Cat. xxxiv, p. 1471; C. & S. no. 4148.

Varies from bright orange-yellow to fulvous yellow; palpi white below at base. Fore wing either uniform, or with a more or less prominent outwardly-oblique sinuous antemedial line and postmedial waved line highly angled at vein 5, sometimes with a large fuscous discal patch in the angle; cilia black at base, pure white at tips. Hind wing uniform and slightly paler.

Hab. Dharmsála; Nágas; Nilgiris; Ceylon; Jones Island,

N. Australia. Exp. 22 millim.

5213. Pionea castoralis, Wtk. Cat. xviii, p. 693.
Samea purpurascens, Moore, P. Z. S. 1877, p. 615; C. & S. no. 4248.

Q. Pale fulvous suffused with fuscous; palpi blackish, white above and below; frons whitish; abdomen ringed with white, the anal tuft white tipped with fulvous. Fore wing with erect dark antemedial line, with white dark-edged spot before it in the cell and larger spot beyond it; a postmedial white speck on costa and another before apex with a dark-edged tridentate white spot below

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it from which arises a minutely waved line sharply retracted along vein 2. Hind wing with antemedial dark line angled on median nervure; a postmedial line highly angled at vein 2, along which it is sharply retracted; both wings with the cilia black at base, pure white at tips.

Hab. Nilgiris; Andamans; Borneo. Exp. 20 millim.

- B. Hind tibice of male with the outer medial spar minute.
  - a. Fore wing of male with no fans of scales below.
- Pionea gracilis, Warr. P. Z. S. 1888, p. 334 (nec Samea gracilis, Butl.); C. & S. no. 4245.
- 3. Head, thorax, and fore wing whitish, suffused with ochreous and brown; the last with highly waved antemedial line; a large elliptical stigma in cell and very large irregularly reniform discocellular stigma, each with dark edge and pale fuscous centre; some ferruginous scales below the costa and on the veins beyond the cell; a minutely dentate obsiquely curved submarginal line; a series of dark specks on the margin. Abdomen and hind wing pure white, the latter with dark cell-spot and indistinct curved postmedial line on underside.

Hab. Thandiáni, Punjab. Exp. 22 millim.

# 5215. Pionea nigrostigmalis, Warr. A. M. N. H. (6) xvii. p. 96.

Reddish brown; palpi white below; abdomen ringed with white. Fore wing with indistinct obliquely sinuous antenedial line; prominent black discocellular spot; an indistinct minutely dentate postmedial line excurved between costa and vein 3; some black specks on costa towards apex and a marginal series. Hind wing dark fuscous, with indistinct cell-speek and postmedial line; a marginal series of black specks. Underside with the costa of fore wing and the hind wing whitish, the latter with prominent cell-spot and highly curved postmedial line.

Hab. Bhután; Khásis. Exp. 18 millim.

- b. (Lepidoplaga). Fore wing of male with the retinaculum consisting of a large fan of leaden-coloured scales, and another large fan beyond the cell on bases of veins 0 and 7, each showing as a small dark fovea on upperside.
- 5216. Pionea flavofimbriata, Muore, Lep. Atk. p. 208; C. & S. no. 4255. Crocidophora flavicinctalis, Snell. Trans. Ent. Soc. 1890, p. 595. Lepidoplaga longicorpus, Warr. A. M. N. H. (6) xviii, p. 108. Lepidoplaga elongalia, Warr. A. M. N. H. (6) xviii, p. 108.
- J. Head, thorax, and abdomen brown; palpi rufous, white below. Fore wing fuscous; the costal and outer margins ochreous, diffused at apex; faint traces of an antemedial line, a discocellular spot, and postmedial line minutely waved and bent outwards between veins 5 and 2, along which it is slightly retracted; cilia ochreous.

Hind wing fuscous brown, with traces of postmedial line bent outwards between veins 5 and 2, then slightly retracted; the cilia ochreous from apex to vein 2.

Hab. Sikhim; Khásis; Calcutta; Ceylon. Exp. 24 millim.

## 5217. Pionea fuscizonalis, n. sp

3. Ochreous; head fulvous. Fore wing with the costal area tinged with fulvous; an oblique dentate postmedial line terminating at vein 2 of hind wing; a diffused fuscous submarginal band diffused to the margin at apex of fore wing and terminating on the margin at vein 2 of hind wing; a marginal series of dark specks.

Hab. Sikhim (Moller). Exp. 36 millim. Type in coll. Elwes.

c. Fore wing of male with fan of leaden-coloured scales beyond upper angle of cell below; the fan on median nervure pale, and no foveas on upperside.

#### 5218. Pionea phœnicistis, n sp.

3. Yellowish brown; palpi white below at base. Fore wing with slight rufous marks at base and at end of cell; an oblique sinuous autemedial rufous line; an indistinct sinuous rufous postmedial line nearly straight from costa to vein 2, then retracted to lower angle of cell; a very prominent oblique blackish postmedial line, with the area beyond it purplish, leaving a large ovate brown patch on the margin; a marginal series of black specks. Hind wing with oblique postmedial rufous line, met at vein 2 by a diffused line from lower angle of cell; a prominent black line from costa to margin at vein 2; the area beyond it purplish, with marginal series of black strie and black line at base of cilia. Underside whitish.

Hab. Sikhim; Blintán (Dudgeon); Khásis; Tenasserim (Doherty). Exp. 24 millim. Type in coll. Druce.

- d. Fore wing of male with the retinaculum consisting of a large fan of leaden-coloured scales, no fan beyond upper angle.
- Pionea flavicilialis, Snell. Trans. Ent. Soc. 1890, p. 596, pl. 20, figs. 5 & 5 a.
- 3. Glossy rufous; palpi below and pectus pure white; abdomen fuscous. Fore wing with indistinct waved antemedial line; a dark speck in cell; the indistinct dark postmedial line nearly straight from costa to vein 3, then retracted almost to origin of vein 2; the margin and cilia golden yellow. Hind wing with traces of dark line from costa to vein 2, with a paler shade beyond it; the cilia yellow.

Hab. Sikhim. Exp. 24 millim.

#### Genus PYRAUSTA.

Pyrausta, Schrank, Fauna Boica, ii, 2, p. 163 (1802). Syllythria, Hübn. Verz. p. 349 († 1818). Hæmatia, Hübn. Verz. p. 349. Nascia, Curt. Brit. Ent. vi, p. 509 (1840). Herbula, Guen. Delt. & Pyr. p. 175 (1854). Ebulea, Guen. Delt. & Pyr. p. 357. Gyptitia, Snell. Töd. v. Ent. xxvi, p. 138 (1883). Eclipsoides, Meyr. Trans. Ent. Soc. 1884, p. 343. Paliga, Moore, Lep. Ceyl. iii, p. 350 (1885). Protocolletis, Meyr. Trans. Ent. Soc. 1888, p. 223. Opsibotys, Warr. A. M. N. H. (6) vi, p. 474 (1890). Sciorista, Warr. A. M. N. H. (6) vi, p. 475. Micractis, Warr. A. M. N. H. (6) ix, p. 294 (1892). Glauconoc. Warr. A. M. N. H. (6) ix, p. 296. Aplographe, Warr. A. M. N. H. (6) ix, p. 301. Grypsiptya, Meyr. Trans. Ent. Soc. 1894, p. 463.

Type, P. cingulata, Linn., from Europe.

Range. Universally distributed.

Palpi porrect, triangularly scaled, the 3rd joint hidden by hair; maxillary palpi filiform; frons rounded; antennæ not more than three-fourths length of fore wing and minutely ciliated; tibiæ with the outer spurs short, the outer medial spur of hind tibiæ not more than two-thirds the length of the inner spur. Fore wing with veins 3 and 5 from close to angle of cell; 10 free or rarely anastomosing with 8, 9. Hind wing with veins 4, 5 not approximated towards origin; 6, 7 from upper angle, 7 anastomosing with 8.

- Sect. 1. (Pyrausta). Hind tibite with the outer medial spur one-half to two-thirds the length of the inner spur.
  - A. Hind tibia fringed on outer side with spinous hair.
- 5220. Pyrausta silhetalis, Guen. Delt. & Pyr. p. 166; C. & S. no. 4337.

Botys pangialis, Feld. Reis. Nov. pl. 134, fig. 25.

Pyrausta cuprealis, Moore, A. M. N. H. (5) i, p. 235; id. 2nd Yarkand Mission, Lep. pl. 1, fig. 26; C. & S. no. 4335.

Black-brown; head and legs orange; abdomen ringed with orange and with some orange on sides. Fore wing with faint traces of diffused dark ante- and postmedial bands. Hind wing with broad medial orange band not reaching the costa and narrowing to inner margin. Underside of each wing with orange fascia on inner margin meeting a medial band.

Hab. Yarkand: N.W. and E. Himalayas; Khasis. Exp.

18 millim.

# 5221. Pyrausta aurantifascialis, n. ep.

Q. Black-brown; underside of palpi, thorax, and abdomen and the legs golden yellow; abdomen with fine pale rings. Wings black-brown; fore wing with orange postmedial band from costa to vein 4, rounded at lower end; hind wing with similar band from below costs to vein 2, tapering to its lower end. Underside with the bands continued indistinctly to inner margin of each wing; fore wing with the outer area suffused with vellow; hind wing with the apex suffused with yellow; a marginal series of orange spots.

Hab. Bernardmyo, Burma (Doherty). Exp. 20 millim. Type

in coll. Elwes.

5222. Pyrausta sikhima, Moore, Lep. Atk. p. 207; C. & S. no. 4361. Porphyritis maculata, Butl. Ill. Het. vii, p. 93, pl. 134, fig. 16.

Black-brown; abdomen ringed with orange. Fore wing with some orange hair on basal area; an orange antemedial band from cell to above inner margin; a postmedial orange band composed of a large spot on disk conjoined to a small spot on inner area and speck below costa. Hind wing with medial orange band not reaching the costa and narrowing from cell to inner margin. Underside of fore wing with the basal area orange; a postmedial orange band conjoined to a fascia on inner area; hind wing with subbasal and medial orange bands.

Hab. Dharmsála; Sikhim; Nágas; Andamans. Exp. 16 millim.

5223. Pyrausta ustalis, *Hmpsn. Ill. Het.* viii, p. 138, pl. 155, fig. 7.

Red-brown suffused with fuscous; head and collar blackish; palpi white below. Fore wing with the basal costal area blackish; an obscure antemedial dark line; annuli in cell and on discocellulars. Hind wing with discocellular band; both wings with minutely dentate postmedial line bent outwards between veins 5 and 2, then retracted to below angle of cell; a marginal series of black specks.

Hab. Nilgiris. Exp. 26 millim.

## B. Mid tibice smoothly scaled.

a. Fore wing of male without foreas in and beyond end of cell.

a'. Thorax of male without large fan of scales at origin of fore wing below.

5224. Pyrausta cespitalis, Schiff. Wien. Verz. p 123; C. & S. no.

Pyralis zonana, J. C. Schaff. Icon. Ins. pl. 262, figs. 4, 5.

Tinea vestianella, Clerck, Icon. Ins. pl. 11, fig. 11.

Pyralis sordidalis, Hulm. Samml. eur. Schmett., Pyr. pl. 7, fig. 40. Pirausta intermedialis, Dup. Lép. Fr. viii, p. 350, pl. 234, figs. 1, 2. Phalema despicata, Scop. Ent. Carn. no. 579, p. 231. Herbula picarialis, Wk. Cat. xxxiv, p. 1287.

Botys tendinosalis, Brem. Lep. Ost-Sib. p. 99, pl. 8, fig. 10.

Head and thorax rufous irrorated with fuscous; abdomen fuscous ringed with white. Fore wing rufous, irrorated with fuscous and slightly suffused with grey; an irregular grey antemedial line dentate on median nervure; the orbicular and reniform with dark outline and often with a pale patch between them; a postmedial series of dark specks on a pale band excurved from vein 6 to 4 and followed by irregular patches of dark suffusion; a pale marginal band and series of black specks. Hind wing black, with orange medial patch on costa; orange postmedial and marginal bands varying in width, the former with the outer, the latter with both edges waved; cilia of both wings fuscous. Underside orange, with black spot in cell of fore wing and at end of cell of both wings; an irregularly curved postmedial line and diffused submarginal band; the marginal area tinged with rufous. The fore wing may be entirely suffused with grey, rufous, or fuscous.

Hab. Europe; Syria; Siberia; Afghanistan; Punjab: Dharmsála;

Bernardmyo, Burma. Exp. 18-22 millim.

## 5225. Pyrausta canotinetalis, n. sp.

J. Head and thorax sparsely clothed with brown hair, abdomen with grey hair, the anal tuft white. Fore wing yellowish grey, with a brown costal fascia: a brown patch on base of inner margin; an antemedial ill-defined brown band conjoined below cell to an oblique sinuous postmedial band; an oblique brown submarginal band expanding into a patch on inner margin: cilia tipped with grey. Hind wing fuscous, with diffused grey postmedial band and marginal grey line; the cilia white. Underside of fore wing fuscous: the marginal area white; hind wing white.

2 with the ground-colour of fore wing much yellower and

brighter.

Hab. Dalhousie (Harford); Kulu (Graham Young). Exp., ♂36,

♀ 28 millim. Type in B. M.

5226. Pyrausta aerealis, Hubn. Samml. eur. Schmett., Pyr. fig. 44. Pyralis opacalis, Hubn. Samml. eur. Schmett., Pyr. fig. 170. Scopulata suffusalis, Treitschke, Schmett. Eur. vii, p. 68.

Differs from canotinetalis in being more uniform brown. Fore wing with slight fuscous irroration; a dark discocellular speek and the pale waved postmedial band present. Hind wing brown, with traces of postmedial dark line and a pale patch beyond it at lower angle of cell.

Hab. Europe; Kashmir. Exp. 32 millim.

5227. Pyrausta phœnicealis, Hibbn. Zutr. i, p. 22, figs. 115, 116. Rhodaria flegialis, Wtk. Cat. xvii, p. 316. Rhodaria panopealis, Wtk. Cat. xvii, p. 318. Botys cœcilialis, Wtk. Cat. xviii, p. 581. Rhodaria ocellusalis, Wtk. Cat. xix, p. 923. Rhodaria noraxalis, Wtk. Cat. xix, p. 926. Rhodaria catenalia, Wtk. Cat. xxxiv, p. 1282. Rhodaria juncturalis, Wtk. Cat. xxxiv, p. 1283; C. § S. no. 4354. Rhodaria concatenalis, Wtk. Cat. xxxiv, p. 1284; C. § S. no. 4353. Myriostephes heliamma, Meyr. Trans. Ent. Soc. 1885, p. 448.

Orange-yellow. Fore wing more or less suffused with dull crimson; an outwardly-oblique sinuous antemedial line; a sinuous postmedial line highly excurved between veins 6 and 2, with a broad band of crimson suffusion inside it joining the antemedial

line at inner margin; a diffused crimson submarginal band and marginal line. Hind wing, with oblique line from costa beyond middle to outer margin above anal angle, the area inside it more or less suffused with fuscous; the apical area more or less suffused with dull crimson or fuscous, narrowing to vein 2.

Hab. N. and S. America; W. Indies; Africa; China; Sikhim;

Bombay Presidency; Nilgiris; Australia. Exp. 20 millim.

- 5228. Pyrausta rubritinctalis, *U arr. A. M. N. H.* (6) xvi, p. 471. Syllythra metallica, *Warr. A. M. N. H.* (6) xviii, p. 107.
- 3. Head, thorax, and abdomen orange suffused with crimson; palpi white at base. Fore wing orange thickly irrorated with purplish crimson; traces of a curved antemedial line; a discocellular spot; a highly waved submarginal line; a crimson marginal band. Hind wing pale yellow.

Hab. Khásis. Exp. 18 millim.

5229. Pyrausta sanguinalis, Linn. Syst. Nat. i, 2, p. 882.
Pyralis hæmatalis, Hubn. Samml, eur. Schmett., Pyr. tig. 178.
Pyralis auroralis, Zell. Isis, 1847, p. 647.
Pyralis virginalis, Dup. Lép. Fr. viii, p. 216, pl. 224, fig. 3.

Bright straw-yellow; patagia tinged with crimson. Fore wing with a crimson fascia on costa from base to beyond middle; a medial crimson band wide from costa to median nervure, then narrow and usually leaving a yellow discocellular spot; a broad oblique submarginal crimson band. Hind wing pale yellow, with diffused fuscous submarginal band.

The above is the form hamatalis, of which a specimen was taken

at Simla by Major Harford.

The forms sanguinatis, auroralis, and virginalis from Europe have the hind wing dark, the crimson bands broad, and the whole outer area usually crimson; in the last two forms the bands are especially wide, in virginalis the yellow on postmedial area is reduced to a line.

Hab. Europe; Syria; Simla; Kulu. Exp. 20-22 millim.

- 5230. Pyrausta cruoralis, Warr. A. M. N. H. (6) xvi, p. 471.
- 3. Head, thorax, and abdomen orange suffused with purplish crimson; palpi fulvous, white below; wings purplish crimson. Fore wing with some fuscous suffusion in cell and on outer area; the outer half of costa orange; a postmedial orange band expanding beyond lower angle of cell and on inner side below the cell. Hind wing with postmedial orange band broad from costa to lower angle of cell; mid tibiæ white on outer side.

Hab. Khásis. Exp. 18 millim.

5231. Pyrausta machoralis, Wlk. Cat. xix, p. 1013; C. & S. no. 4152.

Scopula damastesalis, Wik. Cat. xix, p. 1013; Hmpen. Ill. Het. ix, pl. 173, figs. 1,8; Cotes, Indian Museum Notes, iii, p. 94 (larva); C. & S. no. 4147.

Botys egenalis, Led. Wien. ent. Mon. vii, pp. 372, 468, pl. 10, fig. 7. Botys suavalis, WB. Cat. xxxiv, p. 1448.
Asopia rufipicta, Butl. P. Z. S. 1880, p. 682.
Paliga fuscicostalis, Swinh. A. M. N. H. (6) xiv, p. 146.
Ebulea fimbriata, Moore, Lep. Cyd. iii, p. 346; G. & S. no. 4185.
Paliga rubicundalis, Warr. A. M. N. H. (6) xvii, p. 96.

Bright yellow; palpi white below; from white at sides. Fore wing with fulvous-yellow subcostal fascia; an antemedial line oblique from costa to vein 1, where it is dentate inwards; a speck in cell and discocellular lunule; a postmedial crenulate line highly excurved between veins 6 and 2, along which it is retracted, and dentate on vein 1; a more or less prominent crenulate submarginal line. Hind wing with crenulate postmedial line bent outwards between veins 5 and 3, along which it is retracted; both wings with marginal dark line and two lines through the cilia.

The form suavalis = fascicostalis has the marginal area of forewing and of hind wing to vein 2 suffused with fuscous; rubicun-

dalis from the Khásis has all the markings pink.

Larva pale sap-green, with paired dorsal series of purplish spots; head yellow; a few erect hairs on each segment. Destructive to teak trees.

5232. Pyrausta celatalis, Wik. Cat. xviii, p. 657; C. § S. no. 4132. Botys subcrocealis, Snell. Tijd. v. Ent. xxiii. p. 208.

Bright straw-yellow; palpi orange, white below. Fore wing with a slight fulvous tinge on costal area; an antemedial fulvous line, oblique trom costa to vein 1, then erect; a discocellular line; both wings with a postmedial line excurved from costa to vein 3, then retracted. Underside with marginal fuscous band, broadest at apex of each wing.

 $\hat{Hab}$ . Formosa; Ceylon; Shan States; Pulo Laut; Borneo; Celebes. Exp., 3 22, 9 26 millim.

5233. Pyrausta ferrifusalis, *Hmpsn. Ill. Het.* ix. p. 164, pl. 172, fig. 13.

Differs from celatalis in being fulvous red; both wings with indistinct minutely waved submarginal line.

Hab. Ceylon; E. Pegu; Tenasserim. Exp. 26 millim.

# 5234. Pyrausta extinctalis, Christ. Bull. Mosc. lvi. (1) p. 20.

Differs from ferrifusalis in the postmedial line being curved at vein 3 of each wing instead of sharply angled, but hardly traceable on hind wing; neither wing with the submarginal line or darker marginal area; cilia grey at tips.

Hab. Amur; Shan States. Exp. 24 millim.

#### 5235. Pyrausta hyalodiscalis, Warr. A. M. N. H. (6) xvi, p. 471.

Q. Head orange fulvous; palpi white below; thorax and abdomen dark leaden fuscous, the anal tuft fulvous; wings dark leaden tuscous; the costal area of fere wing and marginal area and cilia of both wings orange. Fore wing with oblique sinuous antemedial black line, triangular hyaline white spot in end of cell; a medial black line excurved beyond cell. Hind wing with indistinct sinuous medial line.

Hab. Khásis. Exp. 22 millim.

# 5236. Pyrausta profusalis, Warr. A. M. N. H. (6) xvii, p. 95.

3. Rufous; wings thickly irrorated with fuscous scales. Fore wing with indistinct curved antemedial ferruginous line; a speck in cell. Both wings with discocellular lumule; a postmedial line sinuous from costa to vein 2, then retracted to lower angle of cell and angled above vein 1; a marginal series of specks. Underside pale.

Hab. Khásis; Ceylon; Tenasserim. Exp. 18 millim.

#### 5237. Pyrausta nigritalis, n. sp.

3. Glossy black-brown; palpi orange-yellow; legs ochreous. Both wings with faint traces of dark discocellular patch and of obliquely curved postmedial line.

Hab. Bernardmyo, Burma (Doherty). Exp. 18 millim. Type in coll. Elwes.

5238. Pyrausta coorumba, Hmpsn. Ill. Het. viii, p. 132, pl. 154, fig. 13. Ebulea anomalalis, Warr. A. M. N. H. (6) xviii, p. 110.

Q. Dark reddish brown; palpi white below; abdomen slightly ringed with white. Fore wing with indistinct dark antemedial line; a dark discocellular spot; a minutely crenulate postmedial line highly excurved between veins 6 and 2. Hind wing with indistinct minutely crenulate postmedial line. Both wings with marginal series of whitish specks. Underside of both wings with evenly curved postmedial series of black specks.

Larva greenish white, naked; feeds on a species of Nettle,

rolling the leaf; pupa black.

Hab. Khásis; Margharita, Assam; Nilgiris. Exp. 26 millim.

# 5239. Pyrausta tinctalis, Hmpsn. Ill. Het. viii, p. 132, pl. 154, fig. 6.

Brown suffused with purple; palpi white below; abdomen ringed with white. Fore wing with antemedial black line bent outwards below costa; traces of a large dark discocellular spot; a postmedial sinuous line highly excurved between veins 6 and 2, along which it is retracted, then sinuous to inner margin, with some white en its outer edge. Hind wing with black spots at upper and lower angles of cell; a postmedial line highly excurved from vein 6 to 3, then inwardly oblique; the outer area darker. Both wings with marginal series of black specks.

Hab. Nilgiri plateau. Exp. 26 millim.

#### 5240. Pyrausta purpurascens, Hmpsn. Ill. Het. ix, p. 102, pl. 172, tig. 14.

d. Differs from tinctalis in the fore wing being darker and much more suffused with purple; an ochreous patch on the inner edge of the postmedial line on inner area; some dentate ochreous marks beyond the postmedial line and patch on inner area. Hind wing ochreous to the postmedial line, which is indistinct and has some dentate marks on its outer edge; no spot at lower angle of cell. Both wings with marginal series of ochreous spots.

Hab. Ceylon. Exp. 30 millim.

#### 5241. Pyrausta benenotata, Swinh, A. M. N. H. (6) xiv, p. 142.

Fuscous suffused with purple; palpi and thorax white below; legs white ringed with black; abdomen of male with a white dorsal spot at extremity. Fore wing with waved black antemedial line angled below the cell; a black spot in cell and lunule on discocellulars; a prominent postmedial black line minutely dentate from costa to vein 2, along which it is sharply retracted nearly to the cell, then deutate and thicker to inner margin. Hind wing with black cell-spot; a postmedial line excurved from vein 5 to 2, along which it is sharply retracted, then straight to anal angle. Both wings with prominent white maculate line at base of cilia.

Hab, Sikhim; Khásis, Ecp. 28 millim.

# 5242. Pyransta nigrescens, Moore, Lep. Atk. p. 221; C. & S. no. 4099.

2. Fuscous with a slight purplish tinge; palpi white below. Fore wing with the costa orange-yellow from before middle to apex; an indistinct outwardly oblique curved antemedial line; a discocellular lunule; an indistinct dark postmedial line, bent outwards between veins 6 and 3, then inwards to below end of cell; cilia golden vellow. Hind wing with faint traces of postmedial line; the cilia golden yellow from costa to vein 2.

*Hab*. Sikhim. Exp. 30 millim.

5243. Pyrausta nubilalis, Hubn. Samml. eur. Schmett., Pyr. fig. 94; C. & S. no. 4068.

Pyralis silacealis, Hubn. Samml. eur. Schmett., Pyr. fig. 116. Pyralis glabralis, Haw. Lep. Brit. p. 380.

Botys zealis, Guen. Delt. & Pyr., p. 332; C. & S. no. 4106.

Hapalia kasmirica, Moore, Lep. Atk. p. 222, pl. 7, fig. 28; C. & S. no. 4097.

Hapalia lupulina, Butl. Ill. Het. vii, p. 19 (nec Clerck).

d. Head, thorax, and abdomen brown; palpi white below; abdomen slightly ringed with white. Fore wing ochreous, almost entirely suffused with fuscous and dark rufous; a highly sinuous oblique antemedial line with ochreous on its inner edge; a dark spot in cell and lunule on discocellulars, usually with an ochreous patch between them; a dentate postmedial line with dentate ochreous band beyond it; a series of ochreous streaks on the veins

of outer area. Hind wing fuscous, with an obscure minutely dentate postmedial line with broad ochreous band beyond it.

Q. Ochreous. Fore wing with hardly a trace of fuscous suffusion; the sinuous antemedial and dentate postmedial and submarginal lines obscure or prominent. Hind wing with fuscous suffusion on basal area and slight suffusion beyond the postmedial band.

Hab. Europe; N.W. Himalayas; Sikhim; Khásis; Manipur. Exp., ♂ 30, ♀ 34 millim.

- 5244. Pyrausta damoalis, Wik. Cat. aviii, p. 656; C. & S. no. 4052. Hapalia dorsivittata, Moore, Lep. Atk. p. 223, pl. 7, fig. 18; C. & S. no. 4089.
- 3. Ochreous slightly suffused with fuscous; palpi white below. Fore wing with slight fuscous streaks on costa and subcostal nervure; an oblique dark sinuous antemedial line; a dark spot in cell and lunule on discocellulars; a minutely dentate postmedial line excurved from vein 6 to 4; an indistinct highly dentate submarginal line. Hind wing pater, with indistinct dark postmedial line not reaching costa or inner margin; traces of dark submarginal dentate marks. Both wings with fine dark marginal line.

There may be dark suffusion on marginal area of both wings and

nside the postmedial line of hind wing.

2. Ochreous, without trace of fulvous suffusion.

Hab. Japan : China : Dharmsála ; Sikhim : Rangoon. Exp. 24-26 millim.

# 5245. Pyrausta occultilinea, Wlk. Cat. xxvii, p. 168.

Ochreous; palpi fulvous, white below. Fore wing with the costal area fuscous; the veins fuscous; dentate ante- and post-medial fuscous lines nearly meeting on inner margin, the former outwardly, the latter inwardly dentate; a discocellular lunule; a marginal series of specks. Hind wing whitish.

Hab. Sikhim; Borneo. Exp. 38 millim.

# 5246. Pyrausta diffusalis, Guen. Delt. & Pyr. p. 340. Botys carnealis, Dup. Lép. Fr. viii, p. 322, pl. 232, fig. 4 (nec Treitschke); C. & S. no. 4050. Botys tenuialis, Mann. Wien. ent. Mon. 1862, p. 387, pl. 3, fig. 5.

Pale fulvous, more or less suffused with fuscous; palpi white below; a white line along palpi, side of frons, and base of shaft of antenne. Fore wing with slightly curved antemedial fuscous line with pale inner edge; an indistinct speck in cell and lunule at end of it; a sinuous dark postmedial line with pale outer edge, very much excurved from vein 6 to 2, where it is sharply retracted to the median nervure. Hind wing with dark medial line with pale outer edge. Both wings with double fine marginal line.

Hab. S. Europe; Syria; Punjab. Exp. 20-26 millim.

- 5247. Pyrausta vitellinalis, Koll. Hügel's Kaschmir, iv, p. 492; C. & S. no. 4081.
  - Botys extinctalis, Led. Wien. ent. Mon. 1863, p. 467, pl. 9, fig. 18.
- 2. Fuscous with a fulvous tinge. Fore wing with indistinct oblique antemedial line; a black spot in cell and lunule at end of it: a postmedial line excurved from costa to vein 2, along which it is retracted almost to the cell, then again excurved; traces of a curved submarginal line. Hind wing with indistinct postmedial line nearly straight from costa to vein 2, where it is sharply retracted.

Hab. Kashmir; Sikhim; Rangoon. Exp. 30 millim.

- 5248. Pyrausta eriopisalis, W/k. Cat. xix, p. 1006. Glauconoe atrigenalis, Warr. A. M. N. H. (6) xvii, p. 95.
- d. Fuscous grey: palpi black above, white below. Fore wing with the base of costa fuscous; an obliquely sinuous antomedial fuseous line; a black speek in cell. Both wings with a black discocellular lunule and postmedial minutely dentate fuscous line bent outwards between veins 5 and 2, then retracted to below angle of cell.

Hab. Khásis; Borneo. Ecp. 34 millim.

- 5249. Pyrausta robusta, Moore, Lep. Atk. p. 222, pl. 7, fig. 27; C. & S. no. 4102.
- 2. Head and thorax dark brown, with a few ochreous scales: abdomen brown ringed with ochreous, the base ochreous. Fore wing ochreous, the base brown, running out to an angle on inner margin; an antemedial brown line sending a spur outwards below cell; a brown spot in cell and quadrate discocellular spot with slight brown marks beyond it; a highly crenulate postmedial line retracted at vein 2 to below angle of cell; the area beyond it dark brown, with diffused ochreous patches at costa and beyond the retracted portion. Hind wing othreous, with discocellular dark band: the postmedial band broad from costa to vein 5, then bent outwards and very highly crenulate to vein 2, with some dark streaks in the sinus, then retracted to near lower angle of cell and broad again; a diffused marginal dark band, broadest at apex, narrowing between veins 5 and 2 and again at anal angle.

Hab. Sikhim. Exp. 38 millim.

# 5250. Pyrausta griseifusa, Swinh. Trans. Ent. Soc. 1891, p. 153.

2. Straw-colour suffused with fuscous; palpi fulvous, white below. Fore wing with the costa not suffused; an indistinct oblique dark antemedial line angled on median nervure and joined at inner margin by a dentate postmedial line, which is excurved from vein 6 to 3, then oblique. Hind wing paler, with traces of a minutely dentate curved postmedial line.

Hab. N. Canara; Nilgiris. Exp. 34 millim.

5251. Pyrausta indistans, Moore, Lep. Atk. p. 223; C. & S. no. 4094.

Straw-colour suffused with brown; palpi fulvous, white below. Fore wing with indistinct antemedial line slightly dentate on vein 1; a dark spot in cell and discocellular line, with quadrate ochreous patch between them; a minutely dentate postmedial line highly excurved from vein 6 to 2, where it is much bent inwards; traces of a waved submarginal line. Hind wing with dark cell-spot; a minutely dentate postmedial line incurved at vein 2 and on an ochreous band which extends from vein 5 to anal angle; a dentate submarginal line.

Hab. Dharmsála; Sikhim. Exp. 32 millim.

5252. Pyrausta signatalis, Will. Cut. xxxiv, p. 1444; C. & S. no. 4103.

Bright straw-yellow; head and collar fulvous; palpi white below. Fore wing with a fuscous streak below basal two-thirds of costa; a subbasal line from below median nervure to inner margin; a simuous antenedial line; a dark-edged white spot in cell and larger spot on discocellulars. Hind wing with a small dark-edged white discocellular spot. Both wings with a simuous postmedial line bent outwards between veins 5 and 3, then recurved almost to origin of vein 2: a marginal fuscous grey-suffused band with waved inner edge bent outwards between veins 5 and 3 of each wing.

The Ceylon form is much more fulvous yellow.

Hab. N.W. Himalayas; Nilgiris; Ceylon; Java. Exp., ♂ 24,
 ♀ 28 millim.

# 5253. Pyrausta punctimarginalis, n. sp.

of. Pale yellow; palpi white below at base. Fore wing with the base of costa slightly tinged with fulvous; an obliquely curved antemedial line; both wings with dark discocellular lumule; the postmedial line bent outwards and minutely dentate between veins 5 and 2, then retracted to below angle of cell; a marginal series of short strike and a fine line through the cilia.

Hab. Sikhim (Moller); Celebes, Exp. 26 millim. Type in

coll. Elwes.

5254. Pyrausta inceloralis, Guen. Delt. & Pyr. p. 332; C. & S. no. 4050.

Botys melonalis, Wik. Cat. xviii, p. 702; C. & S. no. 4144. Spilodes nitetisalis, Wik. Cat. xviii, p. 773.

Botys albidalis, Wlk. Cat. xxxiv, p. 1411; C. & S. no. 4042. Botys ruficostalis, Led. Verh. zool.-bot. Ges. Wien, 1855, p. 217, pl. 3, fig. 4.

Yellowish white; head and collar bright fulvous; palpi white below. Fore wing with the basal half of costa bright fulvous; an indistinct outwardly oblique antemedial fuscous line; a fulvous speck in cell and lunule on discocellulars; a somewhat maculate postmedial fuscous line highly excurved from vein 6 to 2, then bent inwards; a marginal fuscous band widest at apex. Hind wing with obscure fuscous spot at lower angle of cell; a postmedial dentate line highly excurved from vein 5 to 2; a more or less prominent marginal band, obsolete in the Syrian and nearly so in the Aden specimens.

Hab. Syria; Aden; Congo; S. Africa; throughout India;

Java; Celebes; Australia. Exp. 30 millim.

5255. Pyrausta ciniferalis, Wtk. Cat. xxxiv, p. 1417.
Hapalia concolor, Moore, Lep. Ceyl. iii, p. 339, pl. 181, fig. 3;
C. & S. no. 4085.

- 3. Uniform grey; head and collar bright fulvous; palpi white below. Underside whitish.
  - Hab. Ceylon; Tenasserim; Borneo. Exp. 36 millim.
    - b'. (Crypsiptya). Thorax of male with large fan of scales at base of fore wing below.
- 5256. Pyrausta ceadesalis, Wlk. Cat. xviii, p. 639.
  Botys deductalis, Wlk. Cat. xviii, p. 659; Hmpsn. Ill. Het. ix, pl. 172, fig. 16; C. & S. no. 4086.
  Botys nereidalis, Led. Wien. ent. Mon. 1863, pp. 371, 465, pl. 9, fig. 7.
  Botys ausonialis, Snell. Trans. Ent. Soc. 1890, p. 578.
- 3. Uniform grey; head and collar with a slight fulvous tinge; palpi white below. Fore wing with indistinct dark spot in cell and another on discocellulars; traces of a curved postmedial line. Hind wing with more prominent curved postmedial line. Underside whiter.

Hab. Africa; Sikhim; Ceylon; Pulo Laut; New Guinea. Exp. 34 millim,

b. Fore wing of male with a glandular lobe on costa at two-thirds from base; a hyaline fovea in end of cell; vein 7 from well below upper angle of cell, 6 from below middle of discocellulars, the base of each curved downwards and with elongate foveas above them.

# 5257. Pyrausta foviferalis, n. sp.

3. Differs from incoloralis in the lines of fore wing being better defined and with a rufous tinge; the postmedial line nearly straight from costa to vein 4, then sharply retracted almost to lower angle of cell and waved to inner margin. Hind wing with the line nearly straight from costa to vein 2.

Hab. Thayetmyo, Burma (Watson). Exp. 26 millim. Type in

B. M.

- SECT. II. (Nascia). Hind tibiae of male with the outer medial spur minute.
  - A. Antennæ of male with no twoth on 3rd joint or excision at base of shaft.
    - a. Coxer of male without tufts of hair.
- 5258. Pyrausta rubellalis, Snell. Trans. Ent. Soc. 1890, p. 577. Botys coactalis, Snell. Trans. Ent. Soc. 1890, p. 577.
- 3. Rufous; palpi below and pectus pale. Fore wing with the costa orange towards apex; faint traces of an antemedial line, of a discoccellular spot, and of a postmedial line excurved from costa to vein 2, along which it is retracted; cilia orange. Hind wing fuscous brown, with traces of excurved postmedial line retracted along vein 2; the cilia orange from apex to vein 2.

Hab. Sikhim; Tenasserim. Exp. 24 millim.

5259. Pyrausta bisignata, Butl. Ill. Het. vii, p. 98, pl. 135, fig. 11.

Bright ochreous. Fore wing slightly suffused with fuscous; a black spot in cell and larger spot on discoccilulars; traces of a curved postmedial line bent inwards at vein 2. Hind wing fuscous, with the cilia bright ochreous.

Hab. Simla; Dharmsála. Exp. 24 millim.

- 5260. Pyrausta paupellalis, Led. Wien. ent. Mon. 1863, p. 469, pl. 10, fig. 6; C. & S. no. 4072.
- 3. Head, thorax, and fore wing orange-yellow; abdomen whitish. Fore wing with the costal area slightly suffused with rufous and fuscous; a dark sinuous outwardly-oblique antemedial line; a discocellular lunule; a postmedial line highly excurved from costa to vein 3, then bent inwards. Hind wing whitish, with traces of a postmedial line bent outwards between veins 5 and 2; both wings with marginal dark line.

Hab. 'India'; Ceylon. Exp. 16 millim.

5261. Pyrausta obliquata, Moore, Lep. Atk. p. 224; C. & S. no. 4136. Leucocraspeda nissoralis, Swinh. A. M. N. H. (6) xiv, p. 145.

Ochreous; palpi fulvous, white below. Fore wing with the basal half of costal area fulvous; an antemedial outwardly-oblique rufous line dentate on vein 1; a black speck in cell and discocellular lunule with a fascia from it to outer margin at vein 2; the outer area between lower angle of cell, vein 5, and outer angle suffused with fulvous; a postmedial rufous line, outwardly oblique from costa to vein 5, then dentate and retracted along vein 2 to near lower angle of cell. Hind wing with the costal area whitish; a postmedial minutely dentate line retracted along vein 2 and joined by a streak from lower angle of cell; the outer area suffused

with fulvous from costs to vein 2; both wings with marginal dark line and line through the cilia.

Hab. Sikhim; Khásis; Nágas; Ceylon; Tenasserim. Eap. 24 millim.

5262. Pyrausta coclesalis, Wlk. Cat. xviii, p. 701.

Botys itemalesalis, Wlk. Cat. xix, p. 996; C. & S. no. 4061.

Botys strenualis, Wlk. Cat. xxxiv, p. 1400; C. & S. no. 4075.

Botys interfusalis, Wlk. Cat. xxxiv, p. 1443.

Botys lentalis, Feld. Reis. Nov. pl. 135, fig. 44; C. & S. no. 4063.

Ochreous brown; palpi fulvous, white below. Fore wing with the veins and costal and outer areas darkest; an obliquely waved autemedial line: a dark



Fig. 285.—Pyrausta coclesalis, &. }

the veins and costal and outer areas darkest; an obliquely waved antemedial line; a dark discocellular speck; a postmedial dark line highly excurved from vein 5 to 2, where it is much bent inwards. Hind wing pale: the

outer area dark; a postmedial line highly excurved from vein 5 to 2, then incurved.

Larva feeds on bamboo.

Hab. China; Formosa; throughout India and Burma; Borneo; Java; Sumbawa. Exp.,  $\sigma$  28,  $\varphi$  30 millim.

## 5263. Pyrausta acutidentalis, n. sp.

Q. Ochreous suffused with brown; palpi fulvous, white below. Fore wing with indistinct outwardly oblique antemedial line; traces of a dark spot in cell and line on discocellulars; a dark postmedial line with an ochreous band on its outer edge, straight from costa to vein 3, then highly dentate and bent inwards at vein 2. Hind wing with minutely dentate postmedial line running obliquely from the costa to outer margin at vein 2 and with an ochreous band on its outer edge.

Hab. Sikhim (Dudgeon). Exp. 32 millim. Type in B. M.

# 5264. Pyrausta bambusalis, Moore, Lep. Atk. p. 222; C. & S. no. 4084.

J. Ochreous; palpi fulvous; white below. Fore wing with the costa tinged with fulvous; an oblique sinuous antemedial fuscous line; a speck in cell and discocellular lunule; a postmedial line nearly straight from costa to vein 2, along which it is retracted, then bent out again; a submarginal series of dentate fuscous marks diminishing to outer angle. Hind wing with postmedial line outwardly oblique from costa to vein 2, then retracted to cell and obsolescent; a submarginal series of dentate marks diminishing to and terminating at vein 2.

Hab. Sikhim; Khásis. Exp. 38 millim.

# 5265. Pyrausta fraudulentalis, Warr. A. M. N. H. (6) xvi, p. 474.

3. Rufous with a slight purplish tinge; palpi white below; abdomen ringed with white, the anal tuft tipped with white; wings with a broad yellow postmedial band from below costs of fore wing to outer margin of hind wing above anal angle; cilia fulvous yellow; inner area of hind wing yellowish.

Hab. Khásis. Exp. 30 millim.

## 5266. Pyrausta diniasalis, Wlk. Cat. xviii, p. 649.

Bright yellow; palpi fulvous, white below; male with the anal tuft black. Fore wing with traces of a dark subbasal line; an antemedial line across the cell; a speck at middle of cell, with an oblique line below it from median nervure to inner margin; a fuscous reniform discocellular spot with white lunule on it; a waved fuscous postmedial line, strongly bent outwards between veins 5 and 3; a waved submarginal line, bent inwards below vein 3 and with the area beyond it rufous except at apex. Hind wing with a dark discocellular spot; a waved postmedial line, strongly bent outwards between veins 5 and 3; a waved submarginal line, with the area beyond it tinged with rufous; a series of dark marginal striæ; both wings with a fuscous line at base of cilia, which are pure white at tips.

Hab. Shanghai; Dharmsála. Exp. 34 millim.

- b. Male with thick tufts of fawn-coloured hair from base of fore coxe and of white hair from the end of the coxer; mid legs with large tufts of long black and white spatulate hair from the coxee, and the tibue clothed with rough hair.
- 5267. Pyrausta bambucivora, Moore, Lep. Atk. p. 224; C. & S. no. 4129.
   Nascia arenalis, Hmpsn. Ill. Het. ix, p. 163, pl. 173, fig. 29.
- J. Flesh-colour tinted with yellow; palpi white below; frons white at sides. Fore wing with the veins slightly redder; the basal half of costa white; a faint dark speck at lower angle of cell; the cilia fuscous. Hind wing straw-colour, with the apex tinged with fuscous.

The typical specimen from Jubbulpore has the costal area of fore wing on upper and under sides suffused with fuscous, most prominently from cell to outer margin.

Larva green, turning red before pupating; lives in rolled-up leaves of bamboo.

Hab. Khásis; Jubbulpore; Ceylon. Exp. 32 millim.

- 5268. Pyrausta citrinalis, Warr. A. M. N. H. (6) ix, p. 302. Hapalia lutesiis, Butl. Ill. Het. vii, p. 19 (nec Dup.).
- 2. Bright yellow; palpi white below; from white. Fore wing with the apex very acute; a slightly deeper yellow mark at lower

angle of cell; the cilia fuscous at base, pure white at tips. Hind wing dull straw-colour.

Hab. Dharmsála. Exp. 30 millim.

- B. Antennæ of male with a tuft of hair on inner side of basal joint, the base of shaft excised, flattened, and contorted.
- 5269. Pyrausta torridalis, n. sp.
- 3. Rufous brown suffused with fuscous, except the outer third of wings. Fore wing with indistinct waved antemedial line; diffused blackish discal patch; a minutely waved postmedial line excurved from costa to vein 2, then retracted to below angle of cell and bent outwards again in interno-median interspace. Hind wing with minutely waved postmedial line, excurved from costa to vein 2, then obsolete; cilia blackish from apex of fore wing to vein 2 of hind wing.

Hab. Nágas (Doherty). Esp. 28 millim. Type in coll. Elwes.

- C. (Gyptitia). Antenna of male with a small tooth on inner side of 3rd joint; hind wing with the bases of vein 1c and median nervure fringed with long hair on underside.
- 5270. Pyrausta ochracealis, Wlk. Cat. xxxiv, p. 1446. Gyptitia gonialis, Snell. Tijd. v. Ent. xxvi, p. 138, pl. 8, fig. 9 a, b. Hapalia denticulosa, Moore, Lep. Ceyl. in, p. 337, pl. 183, fig. 8; C. & S. no. 4087.

Bright orange; palpi white below. Fore wing with indistinct oblique antemedial line slightly angled below the cell; a dark speck in the cell and elongate discocellular annulus; a sinuous postmedial line much bent outwards between veins 5 and 2, along which it is recurved to the angle of cell; a diffused fuscous submarginal dentate band bent outwards between veins 5 and 2. Hind wing with reniform discocellular mark; a postmedial line much bent outwards between veins 5 and 3; an apical fuscous patch, from which arises a diffused dentate submarginal line bent outwards between veins 5 and 2; both wings with a series of dark specks just inside the margin; the cilia pale fuscous, with a dark line through them.

Hab. Ceylon; Nágas; Burma; Java; Celebes. Exp. 28 millim.

#### Genus TEGOSTOMA.

Tegostoma, Zell. Isis, 1847, p. 581. Emprepes, Led. Wien. cnt. Mon. 1863, p. 360. Æschremon, Led. Wien. ent. Mon. 1863, p. 362.

Type, T. comparale, Hübn,

Range. Neotropical, Nearctic, and Palearctic regions; S. Africa; Afghanistan; N.W. Himalayas; North-western, Western, and Southern India.

Palpi porrect, the 2nd joint slightly fringed with hair below,

the 3rd naked; maxillary palpi minute and filiform; frons with a large flat corneous plate excised in front; antennæ of male ciliated; legs smoothly scaled. Fore wing long and narrow; male with a slight fovea on underside above the base of vein 7, which is bent downwards; vein 3 from before angle of cell; 4, 5 from angle; 6 from below upper angle. Hind wing with vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing with 8.

5271. Tegostoma comparale, Hübn. Samml. eur. Schmett., Pyr. fig. 126. Pyralis glaucinalis, Hübn. Samml. eur. Schmett., Pyr. fig. 127. Pyralis tenebrosalis, Wlk. Cat. xxxiv, p. 1235; C. & S. no. 4467. Scopula fotalis, Swinh. P. Z. S. 1885, p. 875, pl. 57, fig. 9; C. & S. no. 4150.

Head, thorax, and abdomen grey suffused with fuscous brown. Fore wing grey suffused with brown and irrorated with fuscous;



Fig 236.
Tegostoma comparale, 3. +.

dark spots at middle and end of cell: a dark medial band from median nervure to inner margin; a dark postmedial spot on costa, with an irregular line highly excurved between veins 7 and 4 arising from it; a marginal series of dark specks. Hind wing pale, with the marginal area suffused with fuscous; or wholly suffused with fuscous; a curved

dark postmedial line from costa to vein 2, where it is crossed by a pale patch.

The amount of grey, brown, or fuscous suffusion on fore wing

varies greatly.

Hab. Mediterranean subregion; N.W. Himalayas; Poona; Coimbatore. Exp., ♂ 16-20, ♀ 20-22 millim.

5272. Tegostoma flavidum, Moore, P. Z. S. 1881, p. 371; C. & S. no. 1892.

3. Head, thorax, and fore wing pale lemon-yellow; abdomen white tinged with fuscous towards extremity. Fore wing with indistinct medial and postmedial red lines, the former obsolete towards costa, the latter bent inwards. Hind wing cupreous fuscous, pale at base.

Hab. Allahabad; Punjab. Exp. 16 millim.

#### Genus NOCTUELIA.

Noctuelia, Guen. Delt. & Pyr. p. 113 (1854). Aporodes, Guen. Delt. & Pyr. p. 159.

Type, N. superba, Frr., from W. Asia and Persia.

Range. Palmarctic region; N. and W. India.

Differs from Tegostoma in the palpi typically being fringed with long hair below; the frons with a rounded prominence and no bilobed corneous plate; mid tibis fringed with spinous hair.

SECT. 1. Palpi with the 2nd joint fringed with long hair below; fore wing of male with a slight fovea on underside above base of vein 7.

5273. Noctuelia floralis, Hübn. Samml. eur. Schmett., Pyr. fig. 142. Pyralis stygialis, Treitschke, Schmett. Eur. vii, p. 176. Herbula meleagrisalis, Wlk. Cat. xvii, p. 324; C. & S. no. 4362. Eudorea transversalis, Moore, A. M. N. H. (5) i, p. 235; id. 2nd Yarkand Mission, Lep. p. 14; C. & S. no. 4298.

Greyish ochreous suffused with brown; abdomen banded with fuscous. Fore wing with diffused brown basal, subbasal, medial,

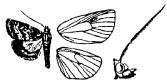


Fig. 237.—Noctuelia floralis, &.

and submarginal bands; narrow black ante- and postmedial bands overlaid with grey scales, the latter excurved between veins 6 and 4; two black discocellular spots conjoined into an oblique streak and surrounded by grey scales. Hind wing pale dull orange, with a slight dark mark at lower angle

of cell; a black-brown postmedial band angled at vein 2 and a black-brown marginal band. Underside clear ochreous; fore wing with a black spot in cell and oblique discocollular band; both wings with black postmedial line.

The European form is usually larger and darker than the Indian race meleagrisalis, the hind wing being more or less suffused with brown, in the variety stygialis both wings being wholly suffused with brown.

Hab. Europe; Syria; Yarkand; Afghanistan; N.W. Himalayas; Punjab; Sind; Bombay. Exp. 16-20 millim.

 Noctuelia fractilinealis, Ersch., Fedtschenko, Reise Turk., Lep. p. 77, pl. 5, fig. 82.

Head, thorax, and abdomen white suffused with pale brown. Fore wing pale brown, the scales pencilled with white; a dark antemedial line with white inner edge acutely angled below costa and slightly below cell; a comma-shaped white discocellular mark with black spot at lower angle of cell; a dark postmedial line with white outer edge very much excurved beyond cell; white and dark specks on costa towards apex; a dark marginal line; the base of cilia white. Hind wing brown; the cilia white.

Hab. Persia; Turkestan; Kashmir. Exp. 18 millim.

SECT. II. Palpi with the 2nd joint smoothly scaled; male with paired tufts of hair from behind the eyes meeting over vertex of head, and no fovea beyond cell of fore wing.

# 5275. Noctuelia fuscinervis, n. sp.

d. Head and thorax dingy brown variegated with fuscous

black; the 3rd joint of palpi black; the tufts behind the eyes ochrous. Fore wing dingy brown, the veins fuscous black; diffused curved fuscous subbasal, antemedial, and postmedial lines; black spots in cell and on discocellular. Hind wing pale reddish brown.

Hab. Murree (Harford). Exp. 20 millim. Type in B. M.

#### Genus **HELIOTHELA**.

Heliothela, Guen. Deit. & Pyr. p. 152 (1854).

Type, H. atralis, Hubn., from Europe.

Hange. Palearctic, Ethiopian, Oriental, and Australian regions. Palpi porrect, the 2nd joint fringed below with hair towards extremity, the 3rd prominent; maxillary palpi triangularly scaled; antenna of male somewhat thickened and minutely ciliated; legs short, the tibic smoothly scaled, with the spurs moderate; wings short and broad. Fore wing with vein 3 from close to angle of cell; 4,5 from angle: 7 well separated from 8,9: 10 free. Hind wing with vein 3 from close to angle of cell; 4,5 from angle; 6,7 from upper angle, 7 anastomosing with 8.

5276. Holiothela ophideresana, Wlk. Cat. xxviii, p. 459; C. § S. no. 4526.
Heliothela pusilla, Butl. Ill. Het. vii, p. 93, pl. 134, fig. 15.

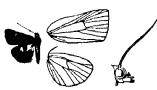


Fig. 238.

Heliothele ophideresana, 3. 3.

Black-brown; abdomen with pale rings. Fore wing irrorated with a few steel-blue scales, which form a small spot at end of cell; an oblique whitish postmedial band from costa to vein 5 and more prominent on underside. Hind wing orange-yellow, with a black medial patch from costa to lower angle of cell; a very broad

marginal black band, widest at apex and from vein 2 to anal angle.

Hab. Dharmsála; Ceylon; Madagascar; Australia. Exp. 17 millim.

#### Genus SIMÆTHISTIS, nov.

Type, S. tricolor, Butl.

Range. N.W. Himalayas; Assam.

Palpi porrect the 2nd joint fringed below with long hair, the 3rd prominent; maxillary palpi minute; frons with a rounded prominence; antennæ annulated. Fore wing with veins 3, 4 from angle of cell; 5 from well above angle; 6, 7, 8, 9, 10, 11 given off at regular intervals. Hind wing with veins 3, 4 from angle of cell; 5 from middle of discocellulars; 6, 7 from upper

angle; 8 approximated to 7 for a short distance beyond end of cell, but not an astomosing with it.

5277. Simæthistis tricolor, Butl. Ill. Het. vii, p. 95, pl. 134, fig. 18.

Black-brown with a golden tinge and irrorated with yellow scales; palpi white below at base; abdomen with pale rings. Fore

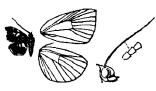


Fig. 239.
Simathistis trivolor, S. 4.

wing with a small white spot near base of cell and a large white spot in end of it; a diffused yellow patch beyond the cell; two postmedial white specks on costa. Hind wing with large white spot in end of cell, with a yellow line from it to inner margin; some diffused yellow scales beyond the cell; the cilia white below apex

and towards outer angle of each wing. Underside with the basal two-thirds of each wing suffused with golden yellow.

Hab. Dharmsála; Khásis. Exp. 16 millim.

Species recorded as Pyralidæ which are omitted.

Europe and Afghanistan.

Ambia cœuleuta, Hupsn. Ill. Hot. ix, p. 179, pl. 174, fig. 29, is a Tineid near Choreutis.

Anoristia venosella, Moore, C. & S. no. 4600, is from Yarkand. Botys annulalis, Wlk., C. & S. no. 4044. Type lost; description not recognizable.

Botys brevilinealis, Wlk., C. & S. no. 4048. Type lost; description not recognizable.

Botys dryopealis, Wlk., C. & S. no. 4054. Type lost; description not recognizable.

Botys interruptalis, Wlk., C. & S. no. 4060. Type lost; description not recognizable.

Botys inanitalis, Led., C. & S. no. 4058, is from Amboina.

Botys myrinalis, Wlk., C. & S. no. 4066. Type lost; description not recognizable.

Botys nephealis, Wlk., C. & S. no. 4067. Type lost; description not recognizable.

Botys pharisalis, Wlk., C. & S. no. 4073, is from Australia.

Cataclysta magnificalis, Hübn., C. & S. no. 4422, is from America.

Cornifrons ulceratalis, Led., C. & S. no. 4228, is from Syria.
Chilo lincusalis, Wlk., C. & S. no. 4675. Type lost; description
not recognizable.

Dapka valeusalis, Wlk., C. & S. no. 4643, belongs to the Tineides. Ebulga camillalis, Wlk., C. & S. no. 4130. Type lost; description not recognizable.

Eudorea granitalis, Moore, C. & S. no. 4296, is from Yarkand. Hapalia dialis, Wlk., C. & S. no. 4088. Type lost; description

not recognizable.

Hapalia thaisalis, Wlk., C. & S. no. 4104. Type lost; description not recognizable.

Hedylepta niobesalis, Wlk., C. & S. no. 4347. Type lost; description not recognizable.

Hapalia flavalis, Schiff., C. & S. no. 4091, is from Europe.

Honarosoma getusalis, Wlk., C. & S. no. 4608. Type lost; description not recognizable.

Hypocosmia definitalis, Rag. Ann. Soc. Ent. Fr. (6) x, p. 505, pl. 7, fig. 11, is from Venezuela.

Lacipea muscosella, Wlk., C. & S. no. 4645. Type lost; description not recognizable.

Letoa patulella, Wlk., C. & S. no. 4641. Type lost; description not recognizable.

Libuna solitella, Wlk., C. & S. no. 4706. Type lost; description not recognizable.

Midea rectalis, Wlk. xxvii, p. 21; C. & S. no. 4731=Arsacia saturalis, vol. ii. p. 567. Both the generic and specific names have priority.

Moca lithosioides, Moore, C. & S. no. 4638, is a Tineid.

Moca velutina, Wlk., C. & S. no. 4639, is a Tineid.

Myelois basifuscalis, Wlk., C. & S. no. 4559. Type lost; description not recognizable.

Myelois marsyusalis, Wlk., C. & S. no. 4561. Type lost; description not recognizable.

Myelois griseella, Moore, C. & S. no. 4647, is from Yarkand.

Myelois undulosella, Moore, C. & S. no. 4648, is from Yarkand.
Nephopteryx volusalis, Wlk., C. & S. no. 4573. Type lost; description not recognizable.

Nephopteryx argialesalis, Wlk., C. & S. no. 4574. Type lost; description not recognizable.

Nephopteryx cyllusalis, Wik., C. & S. no. 4576. Type lost; description not recognizable.

Nephopteryx etolusalis, Wlk., C. & S. no. 4577. Type lost; description not recognizable.

Nephopteryx harpaxalis, Wlk., C. & S. no. 4579. Type lost; description not recognizable.

Nephopteryx signella, Rag., C. & S. no. 4583, is from Afghanistan. Nephopteryx phycisella, Wlk., C. & S. no. 4585. Type lost; description not recognizable.

Oligostigma crassicornalis, Guen., C. & S. no. 4408, is from

Oligostigma gibbosalis, Guen., C. & S. no. 4409, is from Java, Celebes, &c.

Phakellura superalis, Guen., C. & S. no. 4198, is from America.

- Phakellura translucidalis, Guen., C. & S. no. 4199, is from America.
- Pionarmon discerptalis, Wlk., C. & S. no, 4315 = Leucinodes imperialis, Guen., is from Honduras.
- Pyrausta ostrinalis, Hühn., C. & S. no. 4336, is not Indian.
- Pyralis farinalis, Linn., C. & S. no. 4446, is from Europe and Afghanistan.
- Pyralis janiusalis, Wlk., C. & S. no. 4452. Type lost; description not recognizable.
- Pyralis palesalis, Wlk., C. & S. no. 4455. Type lost; description not recognizable.
- Rehemina phycidalis, Wlk., C. & S. no. 4139. Type lost; description not recognizable.
- Samea continentalis, Guen., C. & S. no. 4242, is from America.
- Samea geographicalis, Guen., C. & S. no. 4244, is from America. Surattha acreonalis, Wlk., C. & S. no. 4719. Type lost; de-
- Surattha acreonalis, Wik., C. & S. no. 4719. Type lost; de scription not recognizable.
- Surattha annusalis, Wlk., C. & S. no. 4722. Type lost; description not recognizable.
- Subrita bilineatella, Wlk., C. & S. no. 4642. Type lost; description not recognizable.

# APPENDIX.

This Appendix contains additions and corrections to the whole work, of which the present is the fourth volume. Species are indicated by their serial numbers, these being continuous throughout the four volumes: when a letter is added to a numeral, the species thus marked follows that to which the number belongs. Thus the place of 36a. Ocinara cyproba is immediately after 36. O. signifera, Vol. I, p. 34.

#### SATURNIIDÆ.

- 28 a. Salassa thespis, Leech, Entom. 1890, p. 112. Salassa megastica, Swinh. Trans. Ent. Soc. 1894, p. 153.
- 3. Differs from Iola in the hyaline spot of each wing being arge and lunulate; hind wing with a black edge to the white ring of the ocellus. Underside darker, with olive-yellow suffusion beyond the postmedial line.

A dark grey-brown suffused with olive-brown; the hyaline

ocellate and postmedial spots larger.

The Sikhim male has some yellow suffusion towards apex of each wing.

Hab. China; Sikhim; Khásis. Exp., 3 154-166, 2 162 millim.

 Insert Cricula multifenestrata, H.-S. Samml. aussereur. Schmett. fig. 80, which has precedence.

#### BOMBYCIDÆ.

36 a. Ocinara cyproba, Swinh. Trans. Ent. Soc. 1894, p. 154, pl. ii, fig. 1.

Pure white; antennæ pale fulvous. Fore wing with pale fuscous oblique band from lower angle of cell to inner margin; submarginal and almost marginal bands. Hind wing similar, but the medial band reduced to spots at end of cell and on inner margin; the marginal band incomplete.

Hab. Khásis. Exp. 32 millim.

#### EUPTEROTIDÆ.

- 50 a. Melanothrix nicevillei, n. sp.
- g. Head and thorax chocolate-brown; abdomen pale brown with darker rings, yellow below. Fore wing pure white; the basal area chocolate-brown, extending to middle of costa and running out to three dentitions beyond lower angle of cell; a marginal chocolate band, wide at costa, narrowing to inner margin, its inner edge darkest and waved; cilia with white patches towards outer

angle. Hind wing pure white; a marginal narrow chocolate band with waved inner edge, and series of white spots on the cilia.

Hab. Toungoo, Burma (De Nicéville). Exp. 78 millim. Type in B. M.

- 58 a. Pseudojana pallidipennis, Hmpsn. Trans. Ent. Soc. 1895, p. 278.
- 3. Pale ochreous brown irrorated with fuscous; antennæ fuscous. Fore wing with slight dark suffusion from base through the cell and extending as dentate dark marks along the subcostal and median nervules; an oblique fuscous line from costa near apex to middle of inner margin, with three lines on a brownish ground beyond it, then two other lines; a series of fuscous specks from apex on a slight band of fuscous suffusion; a submarginal series of black specks connected by traces of a crenulate line. Fore wing with antemedial oblique diffused fuscous line followed by five lines, then a diffused fuscous band; a submarginal series of fuscous specks. Hab. Tenasserim. Exp. 120 millim.

69. Omit Eupterote fasciata, Moore, from the synonymy.

- 69 a. Eupterote fasciata, Moore, Lep. Ceyl. iii, p. 544, pl. 212, fig. 1. Horanpella cinnamomea, Moore, Lep. Ceyl. iii, p. 544, pl. 212, fig. 2.
- 3. Differs from the ochripicta form of fabia in having the apex of fore wing more falcate; the rufous lines not waved.

Q wholly suffused with rufous; the apex of fore wing more acute and produced than in ochripicta, the area on each side of the

postmedial line with a purplish sheen.

Larva black, densely covered with red-brown sharply-pointed hairs—about eight fasciculated tufts to each somite—and with numerous longer white-tipped fuscous hairs; a lateral series of reddish-brown tubercles; an interrupted narrow white medial dorsal line with paired tufts of white hair meeting above it; head marked with pale yellowish; spiracles white; legs pale. Foodplants, Eleocarpus, Artocarpus, Michelia, and other trees.

Hab. Ceylon. Exp. 116 millim.

- 70 a. Eupterote axesta, Swinh. Trans. Ent. Soc. 1894, p. 157, pl. ii, fig. 2.
- 3. Differs from fabia in being buff. Fore wing with two ante-medial, one medial, and three postmedial lines reduced to spots; the double postmedial line not differentiated; the submarginal lunulate band complete. Hind wing with two medial waved lines, postmedial straight line, and prominent waved submarginal line.

op pale reddish brown, with the lines on basal area more or

less obsolete.

Hab. Khásis. Exp. 62 millim.

76 a. Eupterote calandra, Swinh. Trans. Ent. Soc. 1894, p. 157.

Differs from lineosa in being uniform bright yellow without traces of markings.

Hab. Khásis. Exp., ♂ 64, ♀ 80 millim.

#### 82. Eupterote vialis.

2 black-brown; thorax with the tips of the hairs prominently white; abdomen fulvous; the oblique line very indistinct on forewing, obsolete on hind wing.

#### 85 a. Nisaga rufescens, Hmpsn. Trans. Ent. Soc. 1895, p. 278.

3. Head, thorax, and abdomen bright rufous; wings pale rufous with a silvery-grey tinge. Fore wing with ill-defined antemedial, medial, and oblique postmedial dark rufous lines. Hind wing with indistinct broad postmedial dark rufous band composed of diffused lines.

Hab. Shimoga, Mysore. Exp. 50 millim.

### SPHINGIDÆ

#### Genus DEGMAPTERA, nov.

Type, D. mirabilis, Roths. Range. Sikhim; Khásis.

Differs from *Polyptychus* in the fore wing having the apex acute; the outer margin crenulate and produced to a point at vein 7; the inner margin deeply excised before outer angle. Hind wing with the costa slightly excised before middle, very deeply at middle, and expanding into a large lobe before apex; the anal angle lobed; veins 6, 7 hardly stalked; 8 almost touching 7 near its origin.

## 92 a. Degmaptera mirabilis, Roths. Nov. Zool. p. 542.

Deep ferruginous red, variegated with ochreous and orangeyellow. Fore wing with sinuous subbasal and antemedial lines with yellow between them; a fuscous-brown medial band from

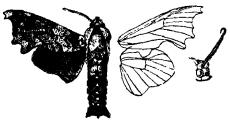


Fig. 240.—Degmaptera mirabilis, &. 1.

costs to vein 2; a small annulus at end of cell; an obliquely crenulate postmedial line; traces of an irregularly crenulate submarginal line; the area at apex and between lower angle of cell and outer angle variegated with ochreous and yellow and irrorated with ferruginous. Hind wing deep red-brown, with traces of red medial and submarginal bands. Underside variegated with ochreous and irrorated with ferruginous; both wings with distinct postmedial line.

Hab. Sikhim; Khásis. Exp. 60 millim.

- Vol. I, p. 72. Cypa olivacea, Roths. Nov. Zool. p. 70.—Probably from Borneo only; the locality Sikhim requires confirmation.
- Insert (as a synonym) Clanis gigantea, Roths. Nov. Zool. p. 96.
- Pp. 84-94. The following species placed in Charcampa have the orifice in the basal joint of palpi more or less developed, and should be placed in the genus Theretra:—120. alecto, Linn., 124. lycetus, Cram., 125. oldenlandiæ, Fabr., 126. silhetensis, Wlk., 128. insignis, Butl., 137. velata, Wlk., 139. helops, Wlk., 140. lucasi, Wlk., 141. butus, Cram., 144. pallicosta, Wlk.
- 130. Insert (syn.) Panacra hamiltoni, Roths. Nov. Zool. p. 82.
- 136. Insert Chærocampa castor, Wlk. Cat. viii, p. 152, which has priority.
- 137. Insert(syn.) Metopsilus albomarginatus, Roths. Nov. Zool. p. 78.
- 141. Insert (syn.) Deilephila cyrene, Westw. Cab. Or. Ent. p. 13, pl. 6, fig. 1.
- P. 104. Genus Psendosphinx. Insert after Diludia . . Pseudodolbina, Roths. Nov. Zool. p. 91 (1894).
- 166. Insert (syn.) Pseudodolbina veloxina, Roths. Nov. Zool. p. 91.
- 169. Insert (syn.) Meganoton cocytioides, Roths. Nov. Zool. p. 89.
  A large form of discistriya, Q. Exp. 175 millim. Very dark and suffused with rufous. Andamans; Borneo; Australia. Insert also Meganoton khasianum, Roths. Nov. Zool. p. 90.
- 181. Insert (syn.) Macroylossa burmanica, Roths. Nov. Zool. p. 68.

#### NOTODONTIDÆ.

- 210. Insert Tarsolepis sommeri, Hübn. Samml. exot. Schmett., Noct. Gen. iv, figs. 1 & 2; which has precedence.
- 211 a. Dudusa nobilis, Wlk. Cat. xxxii, p. 447.
- J. Head and thorax pale reddish brown and buff; mesothorax with a pair of black spots; abdomen brown, with some black on dorsum. Fore wing reddish brown; a black speck on white patch at base; double crenulate ante- and postmedial lines approaching each other below the cell; an oblique dark fascia from middle of costa to outer angle; a white patch between the lines on costal area; traces of a submarginal dark line; a series of white and brown marginal lunules to each wing.

Hab. N. China; Khásis; Malacca; Celebes. Exp. 80-90 millim

#### Genus PLUSIOGRAMMA.

Plusiogramma, Hmpsn. Trans. Ent. Soc. 1895, p. 278.

Type, P. aurisigna, Hmpsn.

Range. Tenasserim.

Palpi upturned, the 2nd joint broadly fringed with hair, the



Fig. 241.—Plusiogramma aurisignu. 3. 1.

3rd minute and concealed; antennæ of male bipectinated to apex. Fore wing with the outer margin somewhat excised from apex to vein 5, then oblique; vein 5 from near upper angle of cell; 6, 7, 8, 9 stalked; 10 free. Hind wing with vein 5 absent; 6, 7 stalked; 8

connected with 7 by a bar at middle of cell.

#### 212 a. Plusiogramma aurisigna, Hmpsn. Trans. Ent. Soc. 1895, p. 278.

3. Head and thorax deep chocolate; abdomen fuscous. Fore wing deep chocolate; the base of inner margin pale; a subbasal golden spot below costa; a golden mark with speck below it on discocellulars in the form of an obliquely placed 'note of interrogation'; the area between the costa beyond middle and the outer angle suffused with grey; traces of a sinuous postmedial line and a minutely waved curved submarginal line; the outer margin grey below apex. Hind wing pale; the inner and outer areas suffused with rufous brown. Underside whitish, suffused and irrorated with rufous; a minutely waved submarginal line, almost obsolete on hind wing.

Hab. Dawnat Range, Tenasserim. Exp. 40 millim.

#### Genus OMICHLIS.

Omichlis, Hmpsn. Trans. Ent. Soc. 1895, p. 279.

Type, O. rufotincta, Hmpsn.

Range. Burma.

Palpi obliquely porrect, the 2nd joint fringed with hair, the 3rd prominent; an acute frontal tuft. Fore wing with the apex acute; the outer margin angled at vein 4; vein 6 from above angle of cell; 8, 9 anastomosing to form the arcole. Hind wing with the outer margin slightly angled at vein 4; vein 5 from above middle of discocellulars; 6, 7 stalked; 8 running close along 7 at middle of cell.

## 213 a. Omichlis rufotincta, Hmpsn. Trans. Ent. Soc. 1895, p. 279.

Q. Pale grey; thorax and fore wing suffused with pale rufous; head white; the palpi black at sides. Fore wing with traces of

numerous waved rufous lines; a black spot on vein 1 near base; some black specks on the postmedial line below the costa; traces of the orbicular and reniform stigmata with rufous outlines.

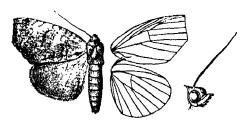


Fig. 242.—Omichlis rufotincta, Q. 1.

Hind wing reddish grey, with a slight rufous mark near anal angle.

Hab. E. Pegu, 5000 feet. Exp. 50 millim.

#### 221 a. Phalera bilineata, n. sp.

Antennæ of male bipectinate for two-thirds length.

Dark brown and grey; collar edget with black; abdomen fuscous. Fore wing with a waved black, almost basal line with small rufous patches beyond it; a waved black, almost medial line; the reniform rufous on a grey patch; some grey patches beyond lower angle of cell; a prominent postmedial black line slightly excurved beyond lower angle of cell; a very irregular indistinct submarginal band, reddish on costal, greyish on inner half. Hind wing fuscous.

Hab. Bhután, 2500 feet (Dudgeon); Khásis. Exp. 56 millim. Type in B. M.

#### 221 b. Phalera innotata, Swinh. MS.

Antennæ of male bipectinate; fore wing with vein 5 from middle of discocellulars; 6 from upper angle of cell.

S. Head and thorax black-brown; abdomen fuscous. Fore wing black-brown with a slight greyish tinge, the costal area paler and slightly purplish, tapering to apex. Hind wing pale fuscous. Hab. Khásis. Exp. 48 millim.

#### 225 a. Gargetta albovittata, n. sp.

J. Head dark brown; palpi below and shaft of antennæ whitish; thorax brown and whitish; abdomen fuscous. Fore wing fuscous, with a diffused whitish fascia on costal area leaving a dark fascia on costa from middle to near apex; the veins towards apex streaked with fuscous; a dark discocellular spot; some white specks on vein 1 and a marginal series. Hind wing fuscous, with marginal series of white specks.

Hab. Khásis. Exp. 40 millim. Type in B. M.

## 225 b. Gargetta lithosidia, Hmpen. Trans. Ent. Soc. 1895, p. 280.

3. Pale brownish ochreous. Fore wing with a rasp formed by corrugation of the membrane below the basal half of the cell, played on by the serrate costal edge of the hind wing; saffused with purplish fuscous except in the cell; a short black streak in end of cell; an almost straight ochreous submarginal line ending on outer margin above outer angle; a series of black strigæ on the margin. Hind wing whitish, slightly suffused with fuscous.

Hab. Sikhim. Exp. 40 millim.

#### 227 a. Turnaca delineivena, Swinh. Trans. Ent. Soc. 1894, p. 159.

Q. Head, thorax, and fore wing greyish white slightly tinged with purple and rufous. Fore wing with dark streaks on median nervure and veins 2, 3, 4, 6, 7; the purple and rufous suffusion most prominent on inner area and median nervure. Abdomen and hind wing brown, the latter with the costa whitish.

Hab. Khásis. Exp. 66 millim.

#### Genus EUTORNOPERA.

Eutomopera, Hmpsn. Trans. Ent. Soc. 1895, p. 280.

Type, E. argentifascia, Hmpsn.

Range. Bhután.

Palpi porrect, hairy, and not reaching beyond the frontal tuft; antennæ of male minutely serrate and fasciculate; abdomen long, with a forked anal tuft. Fore wing narrow, with the apex rounded; veins 3, 4 from angle of cell, 5 from middle of discocellulars; 6, 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 from angle of cell; 5 curved and from below middle of discocellulars; 6, 7 stalked; 8 running close along 7 to near end of cell.

#### 229 a. Eutornopera argentifascia, Hmpsn. Trans. Ent. Soc. 1895, p. 289.

d. Head yellowish white; the palpi fuscous; thorax rufous;



Fig. 243.—Eutornopera argentifascia, &. . .

abdomen pale fuscous brown. Fore wing rufous; the costa pale ochreous, with a silvery white fascia below it, widest before outer margin; a similar fascia from the end of cell to outer margin; a broader diffused yellow fascia

from base to outer margin below median nervure and vein 2. Hind wing pale ochreous suffused with fuscous.

Hab. Bhután. Exp. 44 millim.

#### Genus STENADONTA.

Stenadonta, Hmpsn. Trans. Ent. Soc. 1895, p. 281.

Type, S. cyttarrosticta, Hmpsn.

Range. Bhután.

Palpi upturned, reaching the vertex of head, the 3rd joint minute; antennæ of male ciliated. Fore wing long and narrow; the apex rounded; vein 6 from the middle of areole, which is long and narrow; 7, 8, 9 from beyond the areole, 10 from it. Hind wing with vein 5 from middle of discocellulars; 6, 7 stalked; 8 running close along 7 to near end of cell.

#### 229 b. Stenadonta cyttarrosticta, Hmpsn. Trans. Ent. Soc. 1895, p. 281.

δ. Pale reddish brown suffused with fuscous. Fore wing with the basal and discal areas suffused with rufous; very indistinct

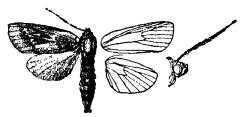


Fig. 244.—Stenadonta cyttarrosticta, d. 1.

minutely waved double ante- and postmedial lines, the latter with some dark specks beyond it; a black streak in end of cell, continued along vein 5 as a short white streak. Abdomen and hind wing dark fuscous.

Hab. Bhután. Exp. 45 millim.

## 230 a. Pydna tenebralis, n. sp.

3. Head, thorax, and fore wing ochreous irrorated with fuscous; palpi with the 2nd joint black at sides. Fore wing with curved ante- and postmedial lines, the latter incurved below vein 3, the area between them suffused with rufous, with a black discocellular speck; a fuscous shade from apex; a submarginal series of dark specks. Abdomen and hind wing fuscous. Underside pale.

Hab. Sikhim (Dudgeon). Exp. 40 millim. Type in B. M.

# 230 b. Pydna aroides, Swinh. A. M. N. H. (6) xvii, p. 360.

J. Sulphur-yellow. Fore wing with the medial area irrorated with rufous, the rest of the wing with fuscous and rufous; an indistinct antemedial line and similar postmedial line, both highly angled below the costa and reduced to specks towards inner margin, the latter minutely dentate from costa to vein 4; an oblique fuscous shade from apex to angle of postmedial line; a submarginal

series of dark specks. Hind wing bright ochreous without irroration.

Hab. Khásis. Exp. 36 millim.

- 232 a. Pydna bela, Swinh. Trans Ent. Soc. 1894, p. 159.
- ¿. Head, thorax, and abdomen bright orange irrorated with red; palpi blackish at sides. Fore wing with indistinct oblique fuscous streak from apex to end of cell: traces of a submarginal series of dark specks. Abdomen and hind wing ochreous with a slight red tinge. Underside whitish.

Hab. Khásis. Exp. 36 millim.

- 233. Pydna nana. Q with the hind wing whitish. Travancore.
- 234. Pydna pallida. Transfer to Sect. B.

Omit Pydna notata, Swinh. (v. Vol. IV, p. 25), and insert Pydna essa, Swinh. A. M. N. H. (6) xvii, p. 360.

- 236 a. Pydna crenelata, Swinh. A. M. N. H. (6) xvii, p. 361.
- 3. Grey suffused with pale brown; palpi black at sides. Fore wing with the inner area and a fascia from median nervure to outer margin suffused with brown; some black specks below basal half of costa and on median nervure; a black spot below origin of vein 2; two obscure marks beyond the discocellulars; a highly crenulated double postmedial line prominent from costa to vein 4, then obsolescent, met by an oblique rufous streak from apex; a marginal series of black specks. Hind wing fuscous brown, the cilia grey. Underside fuscous, with the costa and outer margin of each wing yellowish.

Hab. Khásis. Exp. 36 millim.

## 236 b. Pydna rosacea, n. sp.

3. Head pale; thorax and abdomen brownish ochreous. Fore wing pale pinkish; the basal inner area to end of cell brownish, with fulvous-yellow suffusion at base and on inner margin; slight ante- and postmedial series of black specks; n pale dash in cell and round discocellular spot; a prominent postmedial black spot on costa and marginal series of specks; two diffused oblique fuscous bands from near apex interrupted by the pinkish veins. Hind wing fuscous, with a pinkish tinge towards margin; the cilia pale.

The Pegu specimen is without the black specks and spot on fore wing, and has the inner of the two oblique bands from apex much

more prominent.

Hab. Khásis; Pegu. Exp. 36 millim. Types in coll. Elwes and B. M.

# 244 a. Pydna acyptera, n. sp.

Antenna of male minutely serrate; fore wing with the apex acute, the outer margin oblique.

Bright yellow; collar with a brown tinge; palpi black at sides. Fore wing irrorated with fine rufous and black scales; two indistinct crenulate rufous antemedial lines angled at middle and two similar oblique lines from apex, the inner running to middle of inner margin; a prominent medial black spot below the cell; postmedial and submarginal series of black specks on the veins. Hind wing suffused with rufous brown, except the apical and outer areas.

Hab. Khásis. Exp. 60 millim. Type in coll. Elwes.

247 a. Ramesa docilis, Wik. Cat. xi, p. 735; C. & S. no. 2039.

Greyish brown; patagia greyer; metathorax blackish. Fore wing with a broad pale fascia from base below median nervure to inner margin; black streaks in cell and on vein 1 at base; two dark curved postmedial lines, the inner very indistinct; a submarginal series of black specks.

One specimen is redder, especially from lower angle of cell of

fore wing to outer margin.

Hab. Simla; Sikhim. Exp. 34 millim.

249 will stand as **Pydna** albistriga and will form Sect. III. of **Pydna**.—Antennæ of male minutely fasciculate. Fore wing with veins 7, 8, 9 stalked. Hind wing with a fold on inner area below containing a tuft of long fulvous hair.

- Vol. I, p. 144. Anticyra is preoccupied in the order Neuroptera, so Dinara will stand.
- 256. Fentonia obliquiplaga. Antennæ of male with small fascicles of cilia.
- 258 a. Fentonia viridinota, n. sp.
- 3. Head and abdomen purplish brown; thorax and anal tuft bright yellow-green. Fore wing red-brown, irrorated with black and green; a bright yellow-green patch on middle of inner area, another on costa beyond middle with a white spot on it; a submarginal series of black specks with some white beyond those in the middle; a marginal series of green spots. Hind wing red-brown. Hab. Bhután (Dudgeon). Exp. 30 millim. Type in B. M.

## 258 b. Fentonia canifusa, n. sp.

3. Head and thorax red-brown, patagia and metathorax grey; abdomen dark red-brown, with grey on dorsum and terminal segment. Fore wing red-brown; the inner area irregularly suffused with grey; a large irregular patch of grey from apex to vein 3; an obscure grey discocellular spot; ill-defined double waved subbasal, ante- and postmedial lines. Hind wing brown suffused with grey. Underside whitish grey, except the discal area of fore wing.

Hab. Khásis. Exp. 48 millim. Type in coll. Elwes.

- 268. Stauropus perdix, Moore, Lep. Atk. p. 58, pl. 3, fig. 3; C. & S. no. 988, has precedence (see no. 1005).
- 300. Hyperæschra variegata. Transfer to Fentonia (Vol. I, p. 147), Sect. 1. b.

#### 303 a. Lophopteryx crenulata, n. sp.

Differs from saturata in the colour being brighter rufous. Fore wing with the outer margin highly crenulate; the aute- and post-medial lines more waved and less dentate; the outer area more or less suffused with ochreous. Hind wing paler, with the patch at anal angle smaller.

Hab. Yatong, Sikhim, 13,000 feet (Binyham). Exp. 44-50

millim. Type in B. M.

#### Genus LEUCOLOPHA, nov.

Type, L. undalifera, Hmpsn.

Range. Khásis.

Palpi porrect and reaching just beyond the frontal tuft; antennæ of male fasciculate, with a tuft of white hair on basal joint; tibiæ fringed with long hair. Fore wing broad, the apex acute, the inner margin evenly rounded; vein 6 from upper angle of cell; 7 from end of areole, which is formed by 9 and 10 anastomosing strongly with 8. Hind wing with veins 6, 7 stalked; 8 running along cell to middle.

## 314 a. Leucolopha undulifera, n. sp.

3. Brick-red, slightly irrorated with grey; the tuft on basal joint of antennæ pure white. Fore wing with a brown line from base of inner margin, with an upward curve to upper angle of cell, then with a downward curve to apex; a short subbasal line; a prominent straight medial line with pale outer edge not reaching

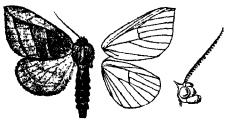


Fig. 245.—Leucolopha undulifera, S. 1.

costa; postmedial and submarginal lines angled below costa, the latter most prominent. Hind wing paler, with traces of medi and submarginal curved lines; cilia of both wings brown.

Hab. Khasis. Exp. 50 millim. Type in coll. Elwes.

#### Genus EUPLEXIDIA.

Euplexidia, Swinh. MS.

Type, E. noctuiformis, Swinh.

Range. Khasis.

Palpi upturned, the 2nd joint reaching vertex of head and thickly scaled, the 3rd oblique; antennæ of male minutely ciliated; metathorax and medial abdominal segments with dorsal tufts; tibiæ hairy. Fore wing with the apex rounded; vein 10 anastomosing slightly with 8, 9 to form the areole. Hind wing with vein 5 almost obsolete and from middle of discocellulars; 6, 7 stalked; 8 leaving the cell close to the base.

#### 314 b. Euplexidia noctuiformis, Swinh. MS.

o. Head, thorax, and abdomen pale rufous; from white; collar, tegulæ, and metathoracic tuft tipped with grey. Fore wing pale rufous irrorated with black; some grey-green and black markings on costa and a small subbasal spot; a black as-shaped mark below end of cell, with fuscous in the loop and grey-green below the top

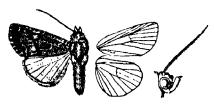


Fig. 246.—Euplexidia noctuiformis, d. 1.

grey-green below the top stroke; a speck in cell and traces of a greygreen outline to the obscure reniform stigma; a postmedial black and grey-green mark on inner margin; an indistinct sinuous whitish submarginal line. Hind wing silvery white, with a

fuscous marginal line; underside with indistinct postmedial line, incurved and obsolescent below vein 6.

*Hab.* Khásis. Exp. 38 millim.

#### 319 a. Ichthyura anastomosis, Linn. Syst. Nat. i, 2, p. 824.

- 3. Brown; the vertex of head and a triangular patch on collar and thorax dark chocolate. Fore wing with a greyish tinge on basal area; two oblique fuscous-edged grey antemedial lines; a discocellular line on an obscure round stigma; a postmedial line excurved below costa and slightly curved from vein 3 to inner margin; an obscure waved submarginal line, with some greyish patches on its inner edge from costa to vein 3, where it is bent inwards; some rufous at middle of outer area.
- 2 paler, with the thorax and fore wing ochreous in tone, the latter with the apical area rufous. Hind wing with an indistinct medial line.
  - Hab. Europe; Siberia; Ceylon. Exp., ♂ 38, ♀ 46 millim.

#### Genus ACIDON, nov.

Type, A. paradoxa, Hmpsn.

Range. Bhután.

Palpi obliquely upturned, the 2nd joint reaching apex of frontal tuft, the 3rd long and spatulate at extremity; antennæ of male fasciculate; patagia with long spatulate scales; abdomen with large dorsal tuft on 1st segment and smaller tuft on 2nd; tibiæ moderately hairy. Fore wing very long and narrow, the apex produced and somewhat falcate, the outer margin very oblique; veins 2, 3 stalked; 4 from angle; 5 from middle of discocellulars; 6 from upper angle; 7, 8, 9 stalked, 8 being curved down to near 7, then up to the costa; 10, 11 free, 10 being curved down close to 8, 9. Hind wing long and narrow; veins 3, 4 from angle of cell; 5 from middle of discocellulars; 0, 7 stalked; 8 from middle of cell.

#### 321 a. Acidon paradoxa, n. sp.

3. Head, thorax, and fore wing purplish, irrorated with fuscous; the last with sinuous antemedial and medial ochreous and fuscous lines; traces of a postmedial line terminating at outer angle; some



Fig. 247.—Acidon paradoxa, S. 1.

submarginal white specks. Abdomen fuscous with an ochreous tinge. Hind wing fuscous, pale at base and with a small mark above anal angle.

Hab. Bhutan, 2500 feet (Dudgeon). Exp. 32 millim. Type in B. M.

## CYMATOPHORIDÆ.

#### 332 a. Gaurena tenuis, n. sp.

Q. Fuscous; build slender. Fore wing with the basal area greyish, bounded by an obliquely sinuous line; small, dark-edged, grey orbicular and reniform spots; an ill-defined sinuous grey line from lower angle of cell to inner margin; an irregular grey submarginal line joined by an oblique mark from apex. Hind wing grey.

Hab. Yatong, Sikhim, 13,000 feet (Bingham). Exp. 34 millim.

Type in B. M.

# 332 b. Gaurens argentisparsa, Dudgeon, MS.

Head and thorax black and white; abdomen fuscous. Fore

wing grey irrorated with black; a black-edged white spot at base below median nervure; a white antemedial band edged by irregularly-waved black lines; a small black-edged white orbicular and large round reniform stigma, with a black-edged white band from it to inner margin, its inner edge dentate; a waved postmedial line with diffused white band beyond it forking to apex; some submarginal white specks and an irregular patch at anal angle; a marginal series of white lunules. Hind wing fuscous, with traces of postmedial and submarginal lines towards inner margin.

Hab. Yatong, Sikhim, 13,000 feet. Exp. 36 millim. Types in coll. Dudgeon and B. M.

#### 334 a. Gaurena solena, Swinh. A. M. N. H. (6) xiv, p. 431.

3. Antennæ somewhat thickened and flattened. Head, thorax, and abdomen brownish grey. Fore wing silvery grey; the medial area suffused with rufous, and with two double dark lines on it which almost meet below the cell; a nearly straight erect postmedial line; an ochreous-white costal patch before the apex, with an indistinct dentate submarginal line arising from it; a dark marginal line; the cilia intersected with black. Hind wing fuscous; the basal area and a medial band paler; cilia pale, intersected with black.

Hab. Khásis. Exp. 44 millim.

## 334 b. Polyploca bifasciata, Hmpsn. Trans. Ent. Soc. 1895, p. 281.

3. Silvery greyish-white. Fore wing with diffused ante- and postmedial fuscous bands, the former with slightly waved edges and oblique, the latter slightly excurved at middle; a fine oblique apical streak.

Hab. Sikhim. Exp. 40 millim.

## 336 a. Polyploca galema, Swinh. A. M. N. H. (6) xiv, p. 431.

J. Pale brown; palpi blackish; head and thorax darker brown. Fore wing with subbasal dark line highly angled below median nervure; an antemedial double obliquely curved line slightly widening and filled in with dark brown towards costa; the area between it and subbasal line darker than ground-colour, with an indistinct waved line on it; a small dark round spot at middle of cell, with an indistinct highly crenulate medial line curving round it; a slightly sinuous curved double postmedial line dilated and filled in with dark brown at costa; two indistinct waved submarginal lines; an oblique bent black streak from apex; a fine dentate black marginal line. Hind wing fuscous brown, with dark line through the cilia.

Hab. Khásis. Evp. 48 millim.

# 339 a. Polyploca polychromata, n. sp.

2. Head, thorax, and abdomen pale brown, the thorax variegated with rufous and dark brown scales. Fore wing with the

ground-colour pale brown, thickly irrorated with rufous and fuseous; a patch of bright yellow scales below base of cell, with some bright ferruginous beyond these; an antemedial band formed of three bisinuate dark lines; a quadrate white spot on middle of inner margin; a bright yellow fascia along vein 2; a black discocellular line; some bright ferruginous beyond cell; numerous indistinct sinuous dark lines on outer area; an oblique black streak from apex expanding into a diffused fuscous patch beyond lower angle of cell; a dentate submarginal white line; a marginal series of black specks. Hind wing pale fuscous.

Hab. Sikhim (Moller). Exp. 36 millim. Type in coll. Elwes.

Vol. I, p. 184. The genus Polyploca has the eyes hairy, whilst Palimpsestes, to which genus albicosta, Moore, and albibasis, Hmpsn., should be referred, has them smooth.

344. Insert Toxoides undulata, Moore, P. Z. S. 1867, p. 45; C. & S. no. 1650; which has precedence.

#### SESIIDÆ.

- 350. T. scolioides has the antennæ pectinated in male.
- 355 a. Sciapteron xanthozonatum, Hmpsn. Trans. Ent. Soc. 1895, p. 282.
- 5. Antennæ minutely fasciculate; hind wing with vein 5 from close to upper angle of cell. Black; palpi mostly golden yellow; frons ringed with white; collar and patagia fringed with yellow; abdomen with the 1st, 2nd, and 4th segments fringed with yellow; legs black and yellow; hind tarsi with the proximal joints fringed with black and grey hair, coxæ with some grey hair. Wings hyaline, with the veins black; the margins black; fore wing with a black discocellular band.

Q with all the segments of abdomen banded with yellow; some yellow on inner margin of each wing near base; a few orange scales beyond the discocellular band of fore wing.

Hab. Tenasserim. Exp., of 24, ♀ 30 millim.

# 377 a. Adixoa cruentata, Swinh. A. M. N. H. (6) xvii, p. 359.

Q. Head, thorax, and abdomen black; palpi marked with white and blood-red, the antennæ with blood-red; pectus whitish; abdomen marked with blood-red at sides, below, and on anal tuft; legs red and black. Fore wing with the basal half blood-red; the costa black; a broad medial black band; the outer area hyaline, with black streaks on veins and in interspaces; the margins black. Hind wing hyaline; the inner area, median nervure, and costa blood-red; a broad black discocellular band; the veins of outer area, outer part of costa, and outer margin black.

Hab. Khásis. Exp. 16 millim.

- 382 a. Aschistophleps metachryseis, Hmpsn. Trans. Ent. Soc. 1895, p. 282.
- c. Head, thorax, and abdomen blackish; palpi golden yellow below; tibiæ and tarsi black ringed with orange. Fore wing black-brown. Hind wing golden yellow, with a broad black marginal band sending a streak inwards along median nervure. Underside of both wings orange, with broad black marginal band; fore wing with the costa and inner margin blackish; a black spot on discocellulars.

Hab. Kalewa, Upper Burma. Exp. 16 millim.

## SYNTOMIDÆ.

- 403 a. Syntomoides semicincta, Hmpsn. Trans. Ent. Soc. 1805, p. 282.
- Q. Head, thorax, and abdomen black shot with green; frons dirty white, antennæ white at tips; collar and spot on patagia dull golden; abdomen with a pair of pinkish golden spots on 1st segment; a band on 5th segment, and lateral bands not meeting on dorsum on the 3rd and 4th segments. Fore wing black with a slight purple tinge; milky hyaline patches in and below cell, in the interspace above vein 2, and five patches beyond the cell, the one between veins 5 and 6 in the form of a short streak. Hind wing hyaline, with the veins and margins black.

Hab. Tenasserim. Exp. 42 millim.

## 405 a. Syntomoides quisqualis, Swinh. A. M. N. H. (6) xiv, p. 441.

Frons white; antenna tipped with white; meso- and metathorax with orange patches; abdomen with six orange bands, the extremity orange in female. Fore wing black, with a hyaline patch in cell; a large patch below the cell, sometimes with a black band across it; a large spot above vein 6 and two spots in the interspaces between veins 3 and 5. Hind wing hyaline, with the costal and apical areas broadly black; the marginal area black, and widest at vein 2.

Hab. Khásis. Exp. 36 millim.

- 407 a. Syntomoides ginorea, Swinh. A. M. N. H. (6) xiv, p. 441; id. Trans. Ent. Soc. 1895, pl. i, fig. 8.
- 3. Black; frons yellowish; antennæ white at tips; abdomen with yellow band on basal segment. Fore wing with large hyaline space in end of cell, a spot between bases of veins 2 and 3, a large space below vein 2; a streak above vein 6, with small spot above it above vein 7; an elongate spot on each side of vein 4. Hind wing with hyaline spot between end of cell and inner margin.

Hab. Khásis. Exp. 22 millim.

415. Syntomis georgina = 412. S. cyssea. The forms with the yellow and black from have been taken in coitu (Watson).

#### 433 a. Syntomis polyzonata, Hmpsn. Trans. Ent. Soc. 1895, p. 283.

Q. Antennæ whitish at tip; frons yellowish white; collar, tegulæ, and metathoracic band orange; abdomen with the bands on first and last segments broad; wings with the hyaline markings vitreous, the black areas rather wide. Fore wing with an orange spot at base; a large hyaline patch in cell, two in interno-median interspace divided by a black bar, two between veins 3 and 5, and one above vein 6 with a smaller patch above it; veins 2, 3 and 4, 5 closely approximated and without hyaline between them. Hind wing with orange patch on basal inner area; a hyaline speck in cell; a large patch below the cell and two patches between veins 3 and 5.

Hab. N. Khyen Hills. Exp. 40 millim.

447. Syntomis blanchardi = 431. S. lepcha.

#### 458 a. Syntomis plumalis, n. sp.

G. Head, thorax, and abdomen black-brown; frons, collar, and a patch on metathorax yellow; abdomen with short dorsal band on each segment and the underside yellow; wings hyaline. Fore wing with the costa and inner margin black, with some yellow scales towards base; the veins and a discocellular patch black; a marginal black band, narrow between veins 3 and 5. Hind wing with the veins, costal and outer margins black.

Hab. Toungoo, Burma (De Nicéville). Exp. 20 millim. Type

in B. M.

# 458 b. Syntomis annosa, Wlk. Journ. Linn. Soc. iii, p. 183; Swinh. Cat. Het. Mus. Oxon. pl. ii, fig. 17.

Q. Frons and tips of antennæ white; patagia with white spots; abdomen shot with dull metallic green and with a paired series of lateral white spots; wings black with slight whitish suffusion. Fore wing with large hyaline patches in and below cell; a spot in interspace above vein 2; five spots varying in size in the interspaces beyond the cell, the spot above vein 7 small. Hind wing with hyaline patch in cell; two patches below it and two beyond it.

Hab. Tenasserim; Singapore. Exp. 50 millim.

## 461 a. Syntomis penanga, Moore, Lep. E. I. C. p. 325.

Antennæ bipectinate in both sexes. Black; the frons, collar, and a patch on metathorax orange; abdomen with five orange bands. Fore wing with orange strenks from base below costa and median nervure; a large hyaline spot in end of cell, and trifid spot below the end; a spot beyond the cell, bifid in one specimen, quadrifid in another. Hind wing hyaline suffused with orange; an apical black band narrowing to anal angle.

Hab. Tenasserim; Penang. Exp. 28 millim.

#### ZYGÆNIDÆ.

#### 477 a. Chrysartona flavigula, n. sp.

3. Head, thorax, and abdomen black above, shot with brilliant metallic blue; below bright yellow; wings black, with the basal half shot with bright metallic blue, on hind wing running out to beyond the cell and to anal angle; hind wing with the cilia white.

Hab. Khásis. Exp. 20 millim. Type in coll. Elwes.

#### Genus SCAPTESYLIX.

Scaptesylix, Hmpsn. Trans. Ent. Soc. 1895, p. 283.

Type, S. hemichryseis, Hmpsn.

Range. Burma.

Palpi projecting well beyond the frons; antennæ of female minutely ciliated; tibiæ hairy, with the spurs long; wings short and broad. Fore wing with veins 2 and 3 from angle of cell; 4 from above angle; 5 from just below middle of discocellulars; 6 from near upper angle; 7, 8 stalked; 9, 10, 11 free. Hind wing with vein 2 from near angle of cell; 4 from well above angle; 5 from near upper angle; 6, 7 on a long stalk; 8 connected with 7 by a bar at middle of cell.

- 481 a. Scaptesylix hemichryseis, Hmpsn. Trans. Ent. Soc. 1895, ps 283.
  - 2. Bright golden yellow; palpi with black ring on 3rd joint;



Fig. 248. Scaptesylix hemichryseis, Q.

antennæ dark; abdomen with the extremity black. Fore wing with the outer half black suffused with purple, and with a postmedial yellow spot on costa, its inner edge slightly angled outwards at lower angle of cell. Hind wing with the outer area black, broad at costa, tapering to anal angle.

Hab. Dawnat Range, Tenasserim. Exp. 20 millim.

- 501 a. Clelea bipuncta, Hmpsn. Trans. Ent. Soc. 1895, p. 283.
- 3. Dark fuscous, suffused with very dark blue. Fore wing with two postmedial white specks on veins 4 and 7.

  Hab. Coimbatore. Exp. 14 millim.

### 501 b. Clolea metacyanea, n. sp.

д. Black; head and thorax with leaden tinge; proboscis

fulvous; abdomen shot with metallic blue-green. Fore wing with the basal area leaden colour; a broad postmedial leaden-coloured band. Hind wing metallic blue above and below, leaving the apical parts of costal and outer areas black.

Hab. Khásis. Exp. 20 millim. Type in coll. Elwes.

507 a. Goë sizala, Swinh. A. M. N. H. (6) xiv, p. 441; id. Trans. Ent. Soc. 1895, pl. i, fig. 3.

J. Head and thorax black; the frons, shaft of antennæ, and collar shot with metallic blue; abdomen greenish black. Fore wing black, with metallic blue streak below base of costa; obsolescent hyaline streaks below costa, in cell, and interno-median interspace, and in the interspaces beyond cell. Hind wing hyaline, the veins black; the costal, outer and inner margins broadly black, the outer most widely so towards anal angle.

Hab. Khásis. Exp. 28 millim.

#### Genus CHALCOSIOPSIS.

Chalcosiopsis, Swinh. A. M. N. H. (6) xiv, p. 442 (1894).

Type, C. variata, Swinh.

Range. Khásis.

Q. Palpi reaching just beyond the frons; antennæ minutely ciliated; mid tibiæ with a minute pair of spurs, hind tibiæ with a long medial pair and minute terminal pair. Fore wing short and broad; the costa arched near base; the apex produced; the outer margin excised below apex, then much excurved; vein 3 from near angle of cell; 5 from just below angle of discocellulars; 6, 7, 8 stalked; 9, 10, 11 free; 12 short. Hind wing with the outer margin excised below apex, then much excurved; vein 3 from near angle of cell; 5 from near upper angle; 6, 7 stalked.

## 515 a. Chalcosiopsis variata, Swinh. A. M. N. H. (6) xiv, p. 442.

Q. Black-brown; palpi, frons, and neck marked with white; abdomen with segmental white rings; pectus and abdomen below



Fig. 249.—Chalcosiopsis variata, 2. 1.

oblique band at vein 2; cilia white at base. Hind wing with the

pectus and abdomen below white. Fore wing with an oblique white band from costa before middle to vein 2 near outer margin; a short oblique white band from costa near apex, continued as a waved grey submarginal band sending a tooth inwards to meet the

base fuscous; a large white patch from near end of cell to near outer margin, thence obliquely waved to inner margin before middle; the outer black area shot with metallic blue; cilia with the bases white, wholly white near apex.

Hab. Khásis. Exp. 36 millim.

527. Insert Soritia bicolor, Moore, Trans. Ent. Soc. 1884, p. 355;
C. & S. no. 390; which has precedence.

#### 539 a. Heteropan leis, Swinh. A. M. N. H. (6) xiv, p. 442.

J. Very dark green. Fore wing with the cilia white at apex. Hind wing fuscous black, with a large orange patch below apical half of costa. Underside fuscous black; fore wing with a large orange postmedial patch below the costa; hind wing with a broad orange fascia below the costa interrupted by a black streak from the base.

Hab. Khúsis. Exp. 30 millim.

#### Genus HAMPSONIA.

Hampsonia, Swinh. A. M. N. H. (6) xiv, p. 443 (1894).

Type, II. pulcherrima, Swinh.

Range. Assam.

Palpi minute and porrect; from produced to a large rounded prominence; antennæ of female with the branches short and dilated at extremity; mid and hind tibiæ with minute terminal pairs of spurs. Fore wing with the costa much arched towards

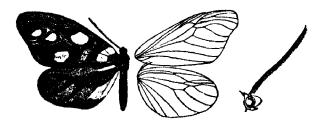


Fig. 250.—Hampsonia pulcherrima, ♀. ‡.

apex; the outer margin somewhat excised; veins 2 and 3 at even distances before end of cell, the latter curved; 4, 5 stalked and much curved; 6 from upper angle; 7, 8 stalked from 9; 10, 11 from long before end of cell. Hind wing with veins 2 and 3 at even distances before angle of cell and much curved; 4, 5 stalked and curved; 6, 7 from upper angle; 8 connected with 7 by an oblique bar; a veinlet in cell of each wing.

- 585 a. Hampsonia pulcherrima, Swinh. A. M. N. H. (6) xiv, p. 443; id. Trans. Ent. Soc. 1895, pl. i, fig. 9.
- Q. Head, thorax, and abdomen very dark metallic blue. Fore wing black, the base bluish; a golden-yellow subbasal band from costa to vein  $1\,b$ ; an obscure oblique grey antemedial band from costa to vein  $1\,b$ ; a large yellow spot in end of cell and spot in interno-median interspace below the end: the interspaces of outer area suffused with grey; a large postmedial yellow spot above vein 3 and submarginal spot above vein 4. Hind wing black; a golden-yellow fascia in base of cell, continued to apex as a broad scarlet fascia; a golden-yellow fascia on inner area to beyond middle, with four large lumulate scarlet patches between it and apex.

Hab. Khásis. Exp. 60 millim.

586. Campylotes histrionicus, Westw. Insert Campylotes excelea, Oberth. Et. Ent. xx, p. 54, pl. x, f. 178. The form excelsa, from 16,000 ft. in Sikhim, differs from altissima in the fore wing having the yellow markings obsolescent; the spots in and above end of cell hyaline, also the spot beyond end of cell above vein 5 and the submarginal lumulate spot between veins 3 and 4; the marking of hind wing hyaline, with hardly a trace of colour.

### 590 a. Isbarta cyanescens, Hmpsn. Trans. Ent. Soc. 1895, p. 284.

o. Head and thorax metallic blue, slightly marked with white; abdomen ringed with white. Fore wing with the basal half grey, with metallic blue streaks on the veins and black streaks in and below cell; the outer half black, with two whitish spots in cell, five beyond the cell followed by a spot above vein 6 and a submarginal series. Hind wing yellowish white; the cell and interspaces below slightly suffused with blue; the apical area black, with some whitish spots on its inner edge. Underside of fore wing with the veins and margins suffused with metallic blue, the white spots prominent; hind wing chrome-yellow; the costa white and black; the apical area black suffused with metallic blue, and with whitish spots on its inner edge.

Hab. Tenasserim. Exp. 62 millim.

#### 601 a. Philopator rotunda, n. sp.

Differs from basimaculata in the wings being much shorter and rounder. Fore wing with the streaks of outer area broader and filling almost the whole interspaces. Hind wing with hardly a trace of the mark in the cell, the streaks of outer area rather more developed.

Hab. Sikhim; Khásis; Nágas; Manipur. Exp., 5 40, 2 48 millim. Types in coll. Elwes and B. M.

Vol. I, p. 283. Chelura being preoccupied, substitute Genus Achelura, Kirby, Cat. Lep. Het. p. 56 (1892).

#### 610 a. Alophogaster serraticornis, n. sp.

3. Antennæ with roughly scaled serrations. Antennæ black, with the tips white; head, thorax, and abdomen scarlet, the las with black dorsal bands. Fore wing scarlet, with a large semicircular black apical patch. Hind wing hyaline, the veins black; the outer margin suffused with fuscous; some scarlet hairs on inner area.

Hab. Khásis. Exp. 30 millim. Types in coll. Elwes and B. M.

# Vol. I, p. 289. Family NEOCASTNIIDÆ.

Differs from the Castniida (Vol. I, p. 10) in the proboscis being absent. Both wings with vein 1 c absent, the cell open, and no veinlets in the cell.

#### Genus NEOCASTNIA.

Neocastnia, Hmpsn. Trans. Ent. Soc. 1895, p. 285.

Type, N. nicevillei, Hmpsn.

Range, Tenasserim; Palawan; Borneo.

Proboscis absent; palpi with the 2nd joint very slender, long, curved obliquely upwards and reaching far above vertex of head, the 3rd short; antennæ gradually thickening into an elongate club

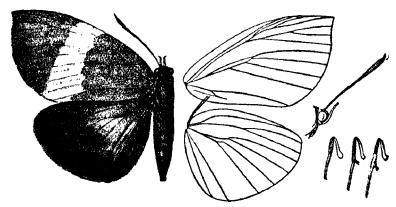


Fig. 251.—Neocastnia nicevillei, J. . . .

tapering to a point at apex; tibiæ and tarsi very thickly set with spines; mid and hind tibiæ with minute terminal pairs of spurs. Fore wing broad; the costa arched at base and towards apex, which is acute; the outer margin rounded; the inner margin lobed before middle; vein 1a joined by a spur given off from 1b; 1c absent; 2 and 3 at even distances before end of cell; 4, 5 from

a point; the cell open; 7,8 on a long stalk from 6; 9,10 on a long stalk from 11. Hind wing with the costa arched near base; the apex rectangular; the outer margin rounded; two internal veins; veins 2 and 3 shortly stalked from the median nervure; 4,5 from a point; the cell open; 6,7 from a point; 8 running along the subcostal nervure for a short distance, then suddenly arched.

- 615 a. Neocastnia nicevillei, Hmpsn. Trans. Ent. Soc. 1895, p. 286.
- Q. Head and thorax golden rufous, the vertex of head metallic blue-green; abdomen black, suffused with metallic peacock-blue above. Fore wing golden rufous, with a broad creamy-white band from costa just beyond middle to outer angle, with sinuous inner edge bent outwards just above inner margin. Hind wing black; the area from beyond and in end of cell to anal angle and base of inner margin brilliant metallic peacock-blue with deep cerulean blue shot round its edges. Underside of thorax and legs orangefulvous; the basal half of each wing shot with metallic blue; fore wing with a fulvous subapical spot.

Hab. Tenasserim. Exp. 90 millim.

#### PSYCHIDÆ.

- 630 a. Acanthopsyche (Metisa) canifrons, Hmpsn. Trans. Ent. Soc. 1895, p. 286.
- 3. Uniform dark fuscous; the frons hoary. Fore wing with veins 7, 8, 9 stalked.

Hab. Sikhim. Exp. 20 millim.

## 631 a. Acanthopsyche (Metisa) hypoleuca, n. sp.

costa dark. Hind wing with the apex whitish; cilia of both wings fuscous. Underside of hind wing white.

Hab. Ceylon (Green). Exp. 22 millim. Type in B. M.

# 638 a. Psyche (Eurycyttarus) melanostola, n. sp.

- c. Head, thorax, and abdomen clothed with black hair. Wings reddish brown, the veins and margins darker.
  - Hab. Khásis. Exp. 20 millim. Types in coll. Elwes and B. M.
- 645 a. Mahasena graminivora, Hmpsn. Trans. Ent. Soc. 1895, p. 286.
- d. Differs from hockingi in the apex of fore wing being rectangular and not produced; the outer margin erect instead of oblique.

The larva is destructive to thatching grass, and forms a rough case of large pieces of the grass longitudinally disposed.

Hab. Calcutta. Exp. 30 millim.

- Vol. I, p. 303. Diabasis being preoccupied, read Genus Stichobasis, Kirby, Cat. Lep. Het. p. 519 (1892).
- 650. Aprata mackwoodi, Moore, belongs to the *Tineida*; veins 9, 10, not 8, 9, of fore wing are stalked.

#### COSSIDÆ.

- 651 a. Cossus fuscibasis, Hmpsn. Trans. Ent. Soc. 1895, p. 287.
- Q. Head, thorax, and abdomen dark brown, the last greyish towards extremity. Fore wing with the basal two-thirds brown, irrorated with fuscous; a paler patch between median nervure and vein 1, bounded by an irregular black postmedial line, highly angled at vein 4 and sending a streak inwards above vein 1; the outer area grey, striated and reticulated with black. Hind wing with the basal half fuscous; the outer area grey, striated and reticulated with fuscous.

Hab. N. Khyen Hills, Burma. Exp. 50 millim.

- 656. Cossus stigmaticus. Transfer to Azygophleps. Hind tibiæ with a minute terminal pair of spurs.
- 665 a. Azygophleps nurella, Swinh. A. M. N. H. (6) xiv, p. 440; id. Trans. Ent. Soc. 1895, pl. i, fig. 16.
- 3. Fawn colour; frons fuscous; head reddish brown. Fore wing with the costal area silvery fuscous; the area in and below cell with a reddish tinge. Hind wing paler.

Hab. Khásis. Exp. 52 millim.

#### ARBELIDÆ.

Under 675. Arbela tetraonis insert (syn.) Arbela phaga, Swinh. A. M. N. H. (6) xiv, p. 440, and Trans. Ent. Soc. 1895, pl. i, fig. 2. Male with fuscous hind wings. Khásis.

#### HEPIALIDÆ.

- 679 a. Palpifer cærulescens, Swinh. A. M. N. H. (6) xiv, p. 440.
- d. Head and thorax dark brown; abdomen fuscous. Fore wing with a round sexual patch at base of vein 1; dark purplish brown; an ochreous spot in cell; traces of three curved maculate

dark bands; submarginal and marginal series of ochreous specks curved and running to the base. Hind wing fuscous shot with brilliant metallic blue; an ochreous patch on outer margin below apex. Underside shot with blue.

Hab. Khásis. Exp. 26 millim.

#### 679 b. Palpifer minutus, n. sp

Palpi porrect and almost straight. Head and thorax yellow-brown; abdomen fuscous. Fore wing yellow-brown, irrorated with dark brown; ante- and postmedial black and white spots on vein 1; an oblique series of five black and white spots from apex, with a marginal series below them round the outer angle to near middle of inner margin. Hind wing fuscous, the cilia yellow-brown.

Hab. Khásis. Exp. 18 millim. Type in B. M.

#### CALLIDULIDÆ.

Vol. I, p. 325. Transfer Herimba to the Thyrididæ near Hyperthyris.

## DREPANULIDÆ.

Vol. I, p. 327. The genera Deroca; Drapetodes, and Cilix have the frenulum present, very slender in the male and hardly visible in the female.

#### 698 a. Euchera orciferaria, Wlk. Cat. xx, p. 56.

Dark purplish brown; wings with some indistinct waved grey lines on basal area; a broad postmedial band of blue-grey suffusion with indistinct waved grey lines on it and waved outer edge. Fore wing with a fulvous spot on discocellulars; a submarginal blue-grey band from below apex expanding into a diffused patch at middle; a marginal line. Hind wing with blue-grey patch and marginal line at apex; an oblique blue-grey line from vein 2 to anal angle.

Hab. N. China; Tenasserim. Exp. 80 millim.

707 a. Leucodrepana nudobia, Swinh. A. M. N. H. (6) xiv, p. 435 id. Trans. Ent. Soc. 1895, pl. i, fig. 17.

Fore wing with vein 6 from angle of cell.

Dull yellowish brown. Fore wing with a black speck at each angle of cell; an ill-defined darker oblique postmedial band from below apex, with an obscure line beyond it which reaches apex;

a marginal darker band widening to inner margin, Hind wing with antemedial orange-yellow band widening to costa; traces of postmedial and submarginal lines. Underside pale.

Hab. Khásis. Exp. 32 millim.

#### Genus EMODESA.

Emodesa, Moore, Lep. Atk. p. 255 (1888).

Type, E. sinuosa, Moore.

Range. Khásis; Burma; Borneo.

Palpi porrect, slender, and reaching just beyond the frons; proboscis present; antennæ with uniseriate branches; hind tibiæ with one pair of spurs. Fore wing with the apex produced and acute; vein 6 from angle of cell; 7 and 11 from end of areole. Hind wing with the frenulum absent; the outer margin somewhat angled at vein 4; 6 and 7 separating very near the base.

707 b. Emodesa sinuosa, Moore, Lep. Atk. p. 256, pl. 8, fig. 18 C. & S. no. 4004.

Fig. 252 — Emodesa sinuosa, 3. 1.

J. White; palpi blackish; abdomen fuscous except the basal segment. Fore wing with patches of fuscous on costa; traces of three waved antemedial lines; two postmedial waved lines most prominent on disk; indistinct waved submarginal and almost marginal lines. Hind wing with waved antemedial, two medial, submarginal, and almost marginal lines.

Hab. Khásis; Tenasserim; Borneo. Exp. 24 millim.

Vol. I, p. 333. Under Drepana insert Thaleridia, Moore, Lep. Atk. p. 266 (1888); and, for Sect. III., Tridrepana, Swinh, Trans. Ent. Soc. 1895, p. 3.

## 711 a. Drepana mecasa, Swinh. A. M. N. H. (6) xiv, p. 434.

Antennæ of male with long uniseriate branches.

Grey-brown; shafts of antennæ white; abdomen of male with a white dorsal band at middle. Fore wing with a black speck at each angle of cell; a diffused fuscous band from apex to middle of inner margin with indistinct lines on it; an indistinct submarginal series of specks and marginal band. Hind wing with three indistinct antemedial lines; a medial ochreous band with black specks on it at the two angles of cell, and bounded by three postmedial lines; an indistinct submarginal series of specks and marginal band.

Hab. Khásie. Exp. 38-42 millim.

- 712. Insert (syn.) Thaleridia pruinosa, Moore, Lep. Atk. p. 267; C. & S. no. 3752.
- 724 a. Drepana leucosticta, Hmpsn. Trans. Ent. Soc. 1895, p. 287; Swinh. Trans. Ent. Soc. 1895, p. 3.
- 3. Dark purplish grey. Fore wing with a white postmedial line highly angled below the costa and running into a large white apical patch, the veins between it and the cell streaked with white; slender submarginal and marginal white lines. Hind wing with two medial white lines and two indistinct fine white lines close to the margin. Underside paler, with white apical patch to fore wing.

Hab. Sikhim; Khásis. Exp. 28 millim.

739. Insert (syn.) Albara erpina, Swinh. A. M. N. H. (6) xiv, p. 433.

#### Genus PROBLEPSIDIS.

Problepsidis, Hmpsn. Trans. Ent. Soc. 1895, p. 287.

Type, P. argyrialis, Hmpsn.

Range. Sikhim; Núgas; Tenasserim.

Proboscis present; palpi minute; hind tibiæ with two pairs of spurs. Fore wing with the apex falcate; the outer margin angled at vein 4; vein 11 from the arcole. Hind wing with the frenulum present; the outer margin slightly angled at vein 4.

- SECT. I. Fore wing with vein 6 from the areole, 10 from beyond it.
- A. Antennæ of male fasciculate; hind wing with the inner margin not excised.
- 741 a. Problepsidis argyrialis, Hmpsn. Trans. Ent. Soc. 1895, p. 287.
- J. Head, thorax, abdomen, and fore wing black-brown, the last with a few bluish silvery scales; traces of a waved double antemedial line and speck at end of cell; a postmedial line excurved beyond cell, with a brown band on its outer edge, followed by an irregular white band; a blue-grey irregularly dentate marginal band. Hind wing with the basal half fuscous; antemedial and medial lines represented by double angulate marks on inner margin; a broad postmedial white band; a somewhat maculate marginal fuscous-grey band.

Hab. Nágas. Exp. 22 millim.

- B. Antennæ of female bipectinate with short branches; hind wing with the inner margin excised towards anal angle.
- 741 b. Problepsidis albidescens, Hmpen. Trans. Ent. Soc. 1895, p. 288.
  - 2. Greyish white. Fore wing with black speck at end of cell;

a postmedial black spot on costa; an oblique fine waved line from

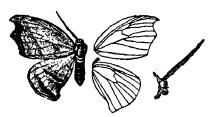


Fig. 253.—Problepsidis albidescens, Q. . .

apex to inner margin beyond middle, with a black subapical mark on it; the marginal area browner, with indistinct submarginal and marginal brown lines. Hind wing with traces of oblique subbasal line; a postmedial black band obsolescent towards costa; a diffused

submarginal line and fine marginal line. Underside with the costal half of fore wing suffused with fuscous; both wings with the veins brown; a broad blackish postmedial band and waved submarginal line sinuous towards costa of fore wing.

Hab. Sikhim. Eap. 42 millim.

SECT. II. Fore wing with vein 6 from upper angle of cell, 10 from end of areole.

741 c. Problepsidis cupreogrisea, Hmpsn. Trans. Ent. Soc. 1895, p. 288.

Q. Leaden grey with a slight coppery tinge. Fore wing with a dark ferruginous basal patch in and below cell, extending along median nervure to the angle of cell; two minute white specks on discocellulars; the apex orange, with a black spot on it; an oblique line from below apex to middle of inner margin; a dark ferruginous marginal band traversed by a fine white curved submarginal line and fine orange marginal line. Hind wing with medial and marginal broad ferruginous bands, the latter traversed by fine pale submarginal and marginal lines.

Hab. Tenasserim. Exp. 25 millim.

#### Genus STREPTOPERAS.

Streptoperas, Hmpsn. Trans. Ent. Soc. 1895, p. 289.

Type, S. luteatum, Hmpsn.

Range. Bengal.

Palpi slender, upturned, and hardly reaching vertex of head; proboscis present; antennæ of female thickened and flattened; frenulum present. Fore wing with the apex produced, recurved, and lying against outer margin; vein 3 from before angle of cell; 6 from above middle of discocellulars; 7, 8, 9 stalked and anastomosing with 10, which is given off from 11 to form the arcole. Hind wing with the outer margin straight from apex to vein 3, where it is produced to a point, then excised to anal angle; veins 3, 4, 5 from close to angle of cell.

## 741 d. Streptoperas luteatum, Hmpsn. Trans. Ent. Soc. 1895, p. 289.

2. Yellow, suffused and irrorated with red-brown. Fore wing with indistinct antemedial line highly angled in the cell; two



Fig. 254.—Streptoperas luteatum, ♀. 1.

specks at end of cell; the inner medial area yellower and crossed by numerous very indistinct waved rufous lines; an indistinct waved submarginal line; some white submarginal specks. Hind wing with the subbasal area yellow, crossed by waved rufous lines; a

black speck at end of cell; a double postmedial line, the area beyond it yellow, crossed by waved rufous lines; a more distinct submarginal waved line, and rufous marginal band from vein 3 to anal angle.

Hab. N.E. Bengal. Exp. 44 millim.

#### 747 a. Phalacra edentata, n. sp.

2. Both wings with the outer margins excised below apex; fore wing with the outer margin angled at vein 4; the areole very long, with vein 11 given off near its extremity.

Pale ochreous brown, irrorated with fuscous scales. Fore wing with fuscous spot below lower angle of cell; indistinct postmedial and submarginal series of dark specks and a marginal series of dark striæ. Hind wing with oblique antemedial dark line; a dark speck at each angle of cell; indistinct postmedial and submarginal series of dark specks and some marginal specks.

Hab. Ceylon (Pole). Exp. 26 millim. Type in B. M.

#### Genus PHALACROPSIS.

Phalacropsis, Swinh. Trans. Ent. Soc. 1895, p. 5.

Type, P. carnosa, Swinh.

Range. Khásis.

Differs from *Phalacra* in the outer margin of fore wing being slightly excised and crenulate from apex to vein 3, then very oblique; vein 10 given off from 11 and anastomosing with 8, 9 to form the arcole. Hind wing with the costa evenly arched to the point at vein 6; 7 becoming coincident with 8.

# 747 b. Phalacropsis carnosa, Swinh. Trans. Ent. Soc. 1895, p. 5, pl. i, fig. 5.

d. Fleshy grey. Fore wing with traces of numerous waved

dark lines; an ochreous fascia in end of cell, a black speck near



Fig. 255.
Phalacropsis carnosa, J. \.\

the end and fuscous mark at upper angle; a postmedial series of black specks, excurved from vein 3 to 5, with obscure ochreous and rufous band beyond them; cilia ochreous and fuscous. Hind wing redder; a prominent black cell-speck; the

waved lines before the postmedial series of specks more prominent; an indistinct sinuous submarginal line.

Hab. Khásis. Exp. 30 millim.

#### 748 a. Drapetodes croceago, Hmpsn. Trans. Ent. Soc. 1895, p. 290.

3. Bright orange-yellow; head, thorax, and abdomen marked with orange. Fore wing with the veins orange; four slightly waved orange lines before the middle; the disk clouded with fuscous; two black spots at end of cell; two postmedial curved orange lines and two dentate submarginal lines. Hind wing with the disk slightly clouded with fuscous; a black speck at end of cell; medial, postmedial, and two crenulate submarginal lines. Underside pale.

Hab. Tenasserim. Exp. 30 millim.

#### 759 a. Oreta hyalodisca, n. sp.

3. Head, thorax, and abdomen red-brown and chestnut. Fore wing red-brown, variegated with yellow-brown on apical area; a large very irregular hyaline yellow patch in and below end of cell and on disk, running out to a point between veins 4, 5, and with a small spot at its inner edge; an oblique dark submarginal line; an oblique shade from apex; some yellow spots on margin, and some black suffusion near the angle. Hind wing chestnut, slightly variegated with yellow-brown; a medial dark line, with a minute yellow-ringed black ocellus beyond its middle; some yellow on the margin at the angle. Underside pale.

Hab. Khásis. Exp. 34 millim. Types in coll. Elwes and B. M.

# 759 b. Oreta olga, Swinh. A. M. N. H. (6) xiv, p. 434; id. Trans. Ent. Soc. 1895, pl i. fig. 14.

3. Reddish brown; wings striated with fuscous. Fore wing with the outer margin slightly excised from apex to vein 4; traces of a curved antemedial band; a postmedial greyish line with rufous inner edge acutely angled on vein 5, and with dark suffusion between that point and the cell, then oblique and slightly sinuous to inner margin. Hind wing with the outer margin deeply excised between vein 2 and anal angle; a nearly straight grey medial line with rufous inner edge obsolescent on costal area; a diffused dark postmedial patch between veins 3

p. 290.

and 6. Underside yellow, with the strice prominent and some ferruginous suffusion on outer area.

Hab. Khásis. Exp. 40 millim.

- 760. Oreta moorei, Dyar, Ent. News, 1894, p. 227; marginata being preoccupied.
- Vol. I, p. 351. Transfer Camptochilus to the Thyrididæ near Camadens.

#### THYRIDIDÆ.

773. The two forms described as sexes are distinct species:—Rhodonenra polygraphalis, Wlk. Cat. xxxiv, p. 1240=marmorealis, Moore=dimiculosa, Moore, is a pure white form; whilst R. bastialis, Wlk., is a much greyer species, thickly striated with brown-pink; the range of the latter is from W. and S. Africa to India and Ceylon, of the former from India and Ceylon to N. Australia and the Solomons.

773 b. Rhodoneura argentalis, Wlk. Cat. xxxiv, p. 1522.
Siculodes argentalis, var. tuberosalis, Warr. A. M. N. H. (6)
xvii, p. 212.

White; the head and collar bronze; wings slightly striated with bronze. Fore wing with the basal area suffused with bronze, its outer edge oblique; a large oval postmedial bronze patch between veins 7 and 1; a subapical black and white ocellus with a yellow lunule on its upper edge; the apical area with prominent striæ. Hind wing with a dark speck at apex and another above anal angle; submarginal and marginal series of bronze striæ. Underside of fore wing with golden metallic scales along subcostal nervure and nervules.

Hab. Bhután; Khúsis; Ceylon; Java. Exp. 26 millim.

- Insert (syn.) Pharambara obliquistrigalis, Warr. A. M. N. H.
   xvii, p. 210.
- 780 a. Rhodoneura atristrigulalis, n. sp.
- 6. Ferruginous; collar browner; wings thickly striated with ferruginous. Fore wing with the base darker; an ill-defined outwardly-oblique medial line; a cupreous-brown patch beyond cell conjoined by a band to costa and by double lines to inner margin; an irregular line ending at outer angle and connected by spurs with the discal patch and outer margin; a line across apical area forking towards costa. Hind wing with subbasal line; a discocellular spot with reticulated lines between it and inner margin; a submarginal line connected by spurs with outer margin and the medial lines. Underside of fore wing with black and white streaks in cell and beyond upper angle.

Hab. Bhutan, 2500 feet (Dudgeon). Exp. 32 millim.

## 781 a. Rhodoneura hebra, Swinh. A. M. N. H. (6) xv, p. 18.

J. Dark chestnut variegated with grey; wings with indistinct dark reticulations and silvery-grey spots arranged in ill-defined maculate bands. Underside of fore wing with the costa striated with black; a ferruginous subcostal fascia; the cell and veins beyond it with fine black streaks; the retinaculum metallic; three ferruginous bands from cell to inner margin, and diffused ferruginous patch on middle of outer area; hind wing suffused with ferruginous.

Hab. Khásis. Exp. 26 millim.

- 786. R. vinosa = Rhodoneura tetragonata, Wlk. Journ. Linn. Soc. vii, p. 78; which has precedence.
  Insert (syn.) Rhodoneura jubralis, Swinh. A. M. N. H. (6) xvi, p. 299.
- Insert (syn.) Ithodoneura pralanis, Swinh. A. M. N. H. (6)
   xvi, p. 298. Khásis.
- 792 a. Rhodoneura melanostigmalis, Swinh. A. M. N. H. (6) xvi, p. 298.
- Q. Pale ferruginous suffused with darker dull ferruginous. Fore wing reticulated with ferruginous lines, which form patches almost covering the basal area; some black quadrate spots on costa conjoined at middle to a large black spot beyond end of cell; a submarginal black speck above vein 5; a marginal series of specks. Hind wing reticulated with ferruginous, and wholly suffused with dull ferruginous except at base which is pale. Underside similar. Hab. Khásis. Exp. 24 millim.

## 792 b. Rhodoneura semiperforata, Warr. A. M. N. H.(6) xvii, p. 211.

3. Ferruginous. Fore wing elongate and narrow, with antemedial and medial short pale bands from costa, and some specks below cell; the outer area except the costa semihyaline, with numerous ferruginous striæ; a band across apical area. Hind wing pale ferruginous with darker striæ; a subbasal band from cell to inner margin, and conjoined patches beyond the cell and below lower angle. Underside of fore wing with longitudinal short black streaks on pale costal spots; a bright ferruginous fascia below costa; black and white streaks in cell and on subcostals, and a very prominent hooked black mark beyond cell.

Hab. Khásis. Exp. 28 millim.

794 a. Rhodoneura thiastoralis, Wlk. Cat. xix, p. 893. Rhodoneura rhodosticta, Swinh. A. M. N. H. (6) xvi, p. 298.

Dark red-brown with a purplish tinge; wings evenly striated with black. Fore wing with bright pink spots on the costa; traces of five or six dark lines. Hind wing with discoccllular black speck and traces of five or six lines. Underside of fore vol. iv.

wing with bright chestnut suffusion in, below, and beyond upper angle of cell; a streak of jet-black and brilliant metallic scales on end of median nervure; the apex chestnut. Hind wing with the base chestnut.

Hab. Khásis; ? Brazil. Exp. 16 millim.

- 795 a. Rhodoneura decoratalis, Warr. A. M. N. H. (6) xvii, p. 209.
- d. Head and thorax fuscous brown; abdomen paler. Fore wing with the basal half of costal area blackish, the outer half ferruginous, the costa with white specks, two beyond middle conjoined into a larger spot; the inner area whitish, the area between cell and outer margin grey, with a submarginal black spot above middle. Hind wing whitish suffused with grey, especially between the cell and apex; rufous spots at lower angle of cell and between it and inner margin; a marginal brown band. Underside of fore wing with bright ferruginous on outer half of costa; black streaks in and beyond cell; a brown band from discocellulars to inner margin; a curved brown band across apical area; oblique black striæ on margin.

Hab. Khásis. Exp. 16 millim.

- Insert (syn.) Pharambara parcipunctalis, Warr. A. M. N. H.
   xvii, p. 210. Khásis. Exp. 26 millim.
- 797 a. Rhodoneura intimalis, Moore, Lep. Atk. p. 213; C. & S. no. 4381.

Pharambara compunctalis, Warr. A. M. N. H. (6) xvii, p. 208. Pharambara ulterior, Warr. A. M. N. H. (6) xvii, p. 212.

Very pale rufous irrorated with fuscous. Fore wing in the form ulterior with indistinct antemedial, medial, and postmedial bands of quadrate spots; a darker spot beyond discocellulars almost touching a triangular patch on the costa; the apical area suffused with fuscous; an inverted V-shaped mark above middle of outer area; two dark marginal specks above outer angle. Hind wing with the base dark; a prominent dark medial band and band from vein 3 to anal angle. Underside with the markings more prominent and rufous; fore wing with four triangular costal spots; antemedial, medial, and postmedial bands of obliquely placed quadrate patches, the medial conjoined to a dark-centred discocellular spot, the postmedial to the inverted V; hind wing with black-centred discocellular spot and medial and postmedial bands.

The rarer form intimatis has the dark markings and bands of upper and under sides very much reduced or almost absent.

Hab. Khásis; Calcutta; Ceylon; Java. Exp. 16 millim.

# 798 a. Rhodoneura setifera, Swinh. A. M. N. H. (6) xvi, p. 298.

3. Mid tibise fringed on outer side with spinous hair; hind tibise with a brush of long hair from base. Head, thorax, and abdomen dark red-brown suffused with grey; wings pale red-

brown, thickly suffused and reticulated with dark red-brown and irrorated with grey; an oblique dark brown band from below costs of fore wing, narrowing to middle of inner margin of hind wing. Underside suffused with glistening grey, the reticulations more prominent; the band only developed on fore wing and with a less prominent band before it.

Hab. Khasis. Exp. 22 millim.

- D. Wings long, the apex produced; hind wing with the outer margin straight.
- 800 a. Rhodoneura tritropha, Swinh. A. M. N. H. (6) xv, p. 17.
- J. Ferruginous; head and metathorax dark brown. Fore wing with faint dark reticulations; the costa pale, with minute black specks. Hind wing with oblique black subbasal band; an oblique chestnut postmedial band, with grey band on its outer edge expanding to anal angle, where there is a large deep black spot; the margin chestnut; both wings with dark speck near middle of inner margin, and fore wing with a dark streak before middle. Underside of fore wing with bright chestnut antemedial and subapical patches; dark chestnut patches surrounded with grey in and beyond end of cell, and two bands from cell to above inner margin; a marginal white band irrorated with fuscous from below apex to vein 5; hind wing with chestnut fascia on costa followed by two spots; a dark subbasal band from cell to inner margin; a postmedial dark band on whitish suffusion; the margin dark, and a black spot at anal angle.

Hab. Khásis. Exp. 32 millim.

- 802. Hypolamprus striatalis; omit *Pharambara intimalis*, Moore (see 797 a).
- 804 a. Hypolamprus fimbriatus, Warr. A. M. N. H. (6) xvii, p. 207.

Fulvous yellow; collar red-brown with a leaden tinge; wings with dark striæ. Fore wing with a leaden tinge on costal area, the apical part redder; a hoop-shaped dark mark from discocellulars to inner margin beyond middle and outer angle; a prominent dark line across apical area forking below costa, the outer branch curving round and becoming the marginal line. Hind wing with subbasal, medial, irregular postmedial, and a prominent marginal line. Underside of fore wing with ferruginous in cell and below costa; black streaks on subcostal nervure and nervules and white subapical spot.

Hab. Sikhim; Khásis. Exp. 24 millim.

804 b. Hypolamprus stylophorus, Swinh. A. M. N. H. (6) xv, p. 17.

Head, thorax, and abdomen bright or dark red-brown; wings with the basal two-thirds bright or dark red-brown. Fore wing with medial and postmedial dark bands from cell to inner margin on the dark area. Hind wing with the dark area terminating just beyond the middle and with rounded outer edge. Underside of fore wing with some brilliant metallic scales in and beyond the cell.

Hab. Khásis; Ceylon. Exp. 18 millim.

Insert (syn.) Eutelia siccifolia, Moore, P. Z. S. 1881, p. 375;
 C. & S. no. 2206.

## LIMACODIDÆ.

## 822 a. Macroplectra semiaurantia, n. sp.

Antennæ of male very much thickened and flattened.

Head and thorax orange irrorated with brown; abdomen dark brown. Fore wing with the basal half fiery orange suffused towards costa with brown, with a minutely dentate dark antemedial line from cell to inner margin, its outer edge minutely dentate; the marginal area suffused with orange, forming an illdefined patch on costa. Hind wing dark brown.

Hab. Khásis. Exp. 20 millim. Types in coll. Elwes and B. M.

#### 858 a. Miresa canescens, n. sp.

silvery grey with a slight rufous tinge, and irrorated with black scales; an ill-defined rufous line from costa towards apex to inner margin before middle; an ill-defined curved submarginal rufous line from costa to vein 3; costa and cilia rufous. Hind wing very pale yellow; the cilia rufous.

Hab. Ceylon (Green). Exp. 32 millim. Type in B. M.

# Genus MICROLIMAX, nov.

Type, M. pallidipuncta, Hmpsn.

Range. Ceylon.

Palpi minute and porrect; antennæ of male bipectinate, with long branches diminishing to apex. Fore wing short and very broad; the apex rounded; all the veins from cell, vein 8 running



to apex. Hind wing with all the veins from cell; 8 anastomosing with the cell near base; tibiæ without spurs.

858 b. Microlimax pallidipuncta, n. sp.

Fig. 256.—Microlimax pallidipuncta, S. . .

of. Dark brown suffused with grey. Fore wing irrorated with bright grey scales and mottled with

grey; a white band between veins 2 and 1 just beyond the middle.

Hab. Hambantota, Ceylon (Pole). Exp. 10 millim. Type in B. M.

869 should stand as Parasa hampsoni, Dyar, Ent. News, 1894 p. 227; viridis being preoccupied.

## 870 a. Parasa chlorozonata, n. sp.

3. Rufous; vertex of head and thorax bright green. Fore wing with medial green band from subcostals to inner margin, contracted at median nervure. Hind wing with the basal two-thirds yellowish white, the outer third pale rufous.

Hab. Ceylon (Pole). Exp. 24 millim. Type in B. M.

## 878 a. Ceratonema ferrugineum, n. sp.

d. Rufous: head yellow-brown. Fore wing glossy, with a diffused curved postmedial band of grey scales extremely ill-defined and diffused to outer margin below apex. Hind wing fuscous brown with a grey gloss.

Hab. Khásis. Exp. 24 millim. Type in coll. Elwes.

### 879 a. Ceratonema rufibasale, n. sp.

3. Head ochreous; thorax and abdomen bright rufous. Fore wing with the basal half bright rufous, bounded from lower angle of cell to inner margin by a silvery-white line slightly angled on veins 3 and 1 c; outer area brown, paler towards margin. Hind wing brown with a yellowish gloss.

Hab. Khásis. Ecp. 20 millim. Types in coll. Elwes and B. M.

# 880 a. Ceratonema pallidinota, Hmpsn. Trans. Ent. Soc. 1895, p. 290.

3. Head, thorax, and fore wing dark red-brown with slight purplish suffusion; abdomen, hind wing, and underside paler; hind tibiæ with thick tufts of dark purplish hair. Fore wing with a large pale patch beyond upper angle of cell and a redder patch on outer half of inner area.

Hab. Sikhim. Exp. 22 millim.

888. Insert (syn.) Altha rufescens, Swinh. A. M. N. H. (6) xii, p. 211; proposed for the specimen from Ceylon described in text.

# 891 a. Narosa uniformis, Swinh. Trans. Ent. Soc. 1895, p. 7.

Q. Antennæ minutely serrate. Uniform pale rufous; the thorax and fore wing with slight white suffusion, the latter with an oblique series of postmedial dark specks on the veins, terminating as dark tips to the scales of the tuft at middle of inner margin. Hind wing with the cilia dark near anal angle.

Hab. Khasis. Exp. 34 millim.

# 892 a. Narosa argentipuncta, Hmpsn. Trans. Ent. Soc. 1895, p. 290

o. White tinged with fulvous. Fore wing with a tuft of fulvous scales at base; some diffused fulvous along subcostal

nervure and at end of cell; an oblique diffused fulvous fascia from costa beyond middle to outer margin below apex; a silvery-white spot at lower angle of cell; some dark specks on the margin.

Hab. Ceylon. Exp. 28 millim.

## 892 b. Narosa erminea, Hmpsn. Trans. Ent. Soc. 1895, p. 291.

3. White; abdomen slightly tinged with fuscous. Fore wing with a large fuscous patch on disk, with dark specks on its outer edge, conjoined to a fulvous and fuscous apical patch and to a large fuscous medial patch on inner area, with dark marks on it and a fulvous spot on its outer edge. Hind wing slightly tinged with fuscous.

Hab. Thayetmyo, Burma. Exp. 18 millim.

#### Genus MONEMA.

Monema, Wlk. Cat. v, p. 1119 (1855).

Type, M. flavescens, Wlk., from Japan and China. Range. Japan; China; Bhután.



Fig. 257.—Monema coralina, d.

Palpi upturned far in front of frons, the 2nd joint reaching above vertex of head and somewhat smoothly scaled, the 3rd long; antennæ of male simple; tibiæ and tarsi hairy, the spurs well developed. Fore wing with the apex produced upwards; veins 7, 8, 9, 10 stalked;

11 curved and running close along 12. Hind wing with veins 6, 7 stalked.

# 893 a. Monema coralina, Dudgeon, Hmpsn. Trans. Ent. Soc. 1895, p. 290.

3. Head, thorax, and abdomen yellowish white; palpi blackbrown; thorax below and legs dark red-brown. Fore wing with the basal half yellowish white; a brown spot on inner area before middle; the outer half suffused with delicate pink; very indistinct oblique pink postmedial and submarginal lines, obsolete towards apex and inner margin. Hind wing with the inner half of wing suffused with delicate pink. Underside pink.

Hab, Bhután. Exp. 34 millim.

# LASIOCAMPIDÆ.

# 911 a. Metanastria rubra, n. sp.

Jark pinkish red-brown; palpi black; vertex of head and thorax ochreous; shaft of antennæ marked with black. Fore wing irrorated with ochreous scales; a triangular blackish shade from near base of median nervure to outer margin at apex and outer angle, leaving the costal and inner areas and vein 5 red; ill-defined ochreous ante- and postmedial bands almost obsolete, except on costal and inner areas; an obscure dark discocellular spot. Hind wing more brick-red, with the margin dark.

 $\hat{Hab}$ . Khásis. Exp. 74 millim. Type in B. M.

#### Genus ODONTOCRASPIS.

Odontocraspis, Swinh. A. M. N. H. (6) xiv, p. 439 (1894).

Type, O. hasora, Swinh.

Range. Khásis.

Differs from Bharetta in the antennæ being shorter; the mid and hind tibiæ without spurs. Fore wing with the outer margin produced to a hook at vein 6 and slight points at the other veins,

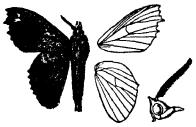


Fig. 258.—Odontocraspis hasora, J. . .

and excised below the apex and the hook. Hind wing much longer; the costa very highly arched; the outer margin crenulate.

- 925 a. Odontocraspis hasora, Swinh. A. M. N. H. (6) xiv, p. 439; id. Trans. Ent. Soc. 1895, pl. i, fig. 11.
- 3. Dark red-brown. Fore wing with fiery orange specks and spot in end of cell, two ochreous specks at end and spots beyond the end; some black suffusion below the costa towards apex; a quadrate subapical hyaline speck with triangular spot below it. Hind wing with the costal area reddish; underside with a broad postmedial bluish-white band with diffused black edges.

Hab. Khásis. Exp. 46 millim.

# 940 a. Lenodora pallidochrea, n. sp.

- 5. Pale ochreous brown. Fore wing with two obscure fuscous discocellular specks; a curved pale rufous line from just below apex to middle of inner margin, with a curved fuscous highly dentate line beyond it, appearing as a double series of specks on the veins. Hind wing whitish.
  - Hab. Khásis. Exp. 44 millim. Type in coll. Elwes.
- 949. Odonestis lineata. Insert (syn.) Metanastria fuscomarginata. Swinh. Trans. Ent. Soc. 1895, p. 27, pl. i fig. 7, and transfer to Metanastria, Sect. III.

# LYMÁNTRIIDÆ.

- 960 a. Orgyia nucula, Swinh. A. M. N. H. (6) xiv, p. 435; id. Trans. Ent. Soc. 1895, pl. i, fig. 15.
- of subbasal pale line, with a bright chestnut patch beyond it below the cell, bounded by the antemedial pale line which is angled in the cell; a minutely crenulate double postmedial line angled inwards below vein 2 and with bright chestnut patches beyond it in the interspaces; some black and white suffusion at apex. Hind wing fuscous black, with the cilia ochreous. Abdomen with the dorsal tufts very large.

Hab. Khásis; Shan States. Exp. 26 millim.

- 980. Lælia umbrina. A race from Simla is yellowish brown with the spots obsolete; and a race from Travancore is yellowish brown: female ochreous.
- 983. Omit Ptilomacra juvenis, Wlk.
- 983 a. Lalia juvenis, Wik. Cat. v, p. 1099; C. & S. no. 1336.
- 3. Differs from testacea in being browner and without rufous tinge. Forewing considerably longer and more produced at apex; a dark fascia below median nervure from base to vein 4, and another on inner margin; no blackish subapical patch. Hind wing fuscous.

Hab. Ceylon. Exp. 42 millim.

992. Insert (syn.) *Pantana luteiceps*, Swinh. A. M. N. H. (6) xvii, p. 361.

#### Genus MALACHITIS.

Malachitis, Hmpsn. Trans. Ent. Soc. 1895, p. 291.

Type, M. melanochlora, Hmpsn. Range. Bhután.



Fig. 259.

Malachitis melanochlora, d. ].

Palpi porrect, reaching just beyond the frons; antennæ of male strongly bipectinated. Fore wing with the apex produced and outer margin oblique; vein 9 given off from 10 and anastomosing with 7 and 8 to form the areole. Hind wing with the inner margin long; veins 3, 4 stalked, 5 from lower angle of cell; 6, 7 stalked.

996 a. Malachitis melanochlora, Hmpsn. Trans. Ent. Soc. 1895, p. 291.

3. Black-brown; head and thorax slightly variegated with green. Fore wing with a basal green patch; a green streak on base of inner margin, and a green fascia beyond upper angle of cell. Hind wing browner.

Hab. Bhután. Exp. 36 millim.

e areole.

- 1000 a. Dasychira postfusca, Swinh. Trans. Ent. Soc. 1895, p. 9, pl. i, fig. 12.
- o. White; antennæ with the branches rufous; abdomen suffused with fulvous above. Fore wing irrorated with fuscous; an irregular dark-edged antemedial spot on costa; an incurved irregularly dentate medial line; a more prominent dentate postmedial line, oblique from costa to vein 6, where it is highly angled, then incurved; an irregularly dentate submarginal line. Hind wing fuscous. Underside suffused with fuscous; hind wing with cell-spot and curved postmedial line.

Hab. Khásis. Exp. 46 millim.

- 1005. Stauropus (Dasychira) perdix=268. Stauropus fasciatus, and has priority.
- 1014 a. Dasychira orimba, Swinh. A. M. N. H. (6) xiv, p. 435.
- 3. Uniform olive-brown. Fore wing with a patch of ochreous and black scales at base below median nervure; an obscure large reniform stigma; a postmedial dentate line bent outwards from costa to vein 6, then inwardly oblique and reaching inner margin before middle: two obscure dentate marks beyond if below costa and an indistinct dentate submarginal line. Hind wing fuscous.
- 2 with the head and thorax greyer; the forewing browner; the postmedial line very highly and irregularly dentate, with another similar but more diffused line beyond it from apex conjoined to it towards inner margin.

Hab. Khásis. Exp., ♂ 36, ♀ 48 millim.

1014 b. Dasychira angulata, Hmpsn. Trans. Ent. Soc. 1895, p. 292.

Fore wing with the outer margin excised below apex and angled at vein 4.

d. Brownish grey irrorated with brown. Fore wing with three black specks on discocellulars and a marginal series; abdomen and inner margin of hind wing suffused with fuscous; a dark lunule at end of cell and marginal series of ill-defined dark specks. Underside white, with lunules at end of cell of each wing and a marginal series of black specks; hind wing with some dark postmedial marks.

Hab. Sikhim. Exp. 46 millim.

# 1018 a. Mardara ruficeps, n. sp.

2. Fuscous brown; head and collar rufous; anal tuft greyish. Fore wing with indistinct pale antemedial line; a dark discocellular speck; a crenulate pale postmedial line slightly bent outwards at vein 5; the marginal area and cilia of both wings tinged with yellow.

Hab. Bhutan 2500 feet (Dudgeon). Evo. 30 millim. Type in

Hab. Bhután, 2500 feet (Dudgeon). Exp. 30 millim. Type in B. M.

1022. Insert (syn.) Cyclidia decolorata, Wlk. Char. Undescr. Het. p. 96; C. & S. no. 3121.

2. Very much paler; the postmedial line of fore wing some-

times prominent and continued to costa; the apex sometimes suffused with fuscous. Hind wing whitish. Exp. 82 millim.

## 1041 a. Lymantria plumbalis, Hmpsn. Trans. Ent. Soc. 1895, p. 292.

3. Head, thorax, and fore wing leaden grey; thorax spotted with black; fore femora crimson; abdomen crimson, with a dorsal series of black spots and black anal tuft. Fore wing with indistinct lunulate subbasal and antemedial lines, two medial lines which become coincident at median nervure, postmedial and submarginal lines arising from black spots on the costa; a black lunule at end of cell; a marginal series of black spots. Hind wing dark fuscous; cilia of both wings white except at apex.

Hab. Tilin Yaw, Burma. Exp. 60 millim.

## 1051 a. Topomesa discolor, n. sp.

3. Differs from subinanis in being very pale reddish ochreous; the thorax and base of fore wing suffused with white; the latter irrorated with silvery scales; the costa rufous; a diffused dark mark on upper discocellulars instead of the spot beyond lower angle of cell; the outer margin much more excised below apex and angled at vein 4.

Hab. Ceylon (Pole). Exp. 36 millim. Type in B. M.

The genus has vein 10 arising free, then slightly anastomosing with 7, 8, 9, not stalked with them.

# 1052 a. Dactylorhyncha luteifascia, Hmpsn. Trans. Ent. Soc. 1895, p. 202.

Palpi not reaching far beyond the frons.

3. Black-brown. Fore wing with a narrow orange-yellow fascia on costa and broad fascia on inner margin; very indistinct double ante- and postmedial lines. Underside paler.

Hab. Pauk Yaw, Burma. Exp. 28 millim.

1084. Insert (syn.) Adlullia stirasta, Swinh. A. M. N. H. (6) xii, p. 214.

The form stirasta from the Shan States has the basal purplish patch of fore wing reduced to a spot.

# 1087 a. Euproctis oreosaura, Swinh. A. M. N. H. (6) xiv, p. 435.

- Q. Differs from varia in the whole fore wing being brown irrorated with black, except the costal area which is yellow, and expands into a large patch in and beyond end of cell with the black discocellular spot on it; the marginal area yellow, interrupted at middle by a tooth from the brown area. Hind wing fuscous brown; the marginal area yellow. Thorax brown, except the collar. Hab. Khásis. Exp. 62 millim.
- 1088. Euproctis flavimaculata is a Mardara=1017. Mardara irrorata.
- 1105 a. Euproctis renifera, Swinh. Trans. Ent. Soc. 1895, p. 12.
  - 2. Rufous grey-brown irrorated with fuscous; anal tuft

fulvous. Fore wing with prominent discocellular black lunule; an indistinct highly sinuous submarginal line; two or three black spots on the margin below apex. Hind wing more fuscous; cilia of both wings yellow.

Hab. Khásis. Exp. 32 millim.

### 1106 a. Porthesia stigmatifera, n. sp.

Q. Brownish ochreous irrorated with fuscous. Fore wing thickly irrorated with fuscous, except the inner medial area; traces of a rufous antemedial band and patch in cell; a more prominent blackish reniform stigma; some ill-defined postmedial and submarginal fuscous and rufous patches forming traces of bands. Hind wing with traces of medial and postmedial lines.

Hab. Bhután (Dudgeon). Exp. 26 millim. Type in B. M.

- 1116. Insert Leucoma saturnioides, Snell. Tijd. v. Ent. xxii, p. 105, pl. 8, fig. 7. Borneo; Sumatra; Java; Celebes; Australia—which has priority.
- 1124. Dendrophleps semihyalina. Q. Fore wing more rounded; veins 4, 5 from cell. Hind wing with no veinlets from vein 1 a; veins 4, 5 from cell. Pure white; the palpi, fore legs, and mid and hind tarsi bright orange. Exp. 48 millim.
- Vol. I, p. 496. Anagnia will stand, Peridrome being preoccupied.
- 1134. Insert (syn.) Neochera bhawana, Moore, Lep. E.I. C. p. 295, pl. vii a, fig. 4.

The form bhawana from Burma and Java has no white patch on hind wing, which is wholly greenish fuscous with the veins white.

1150 a. Hypsa chloropyga, Wlk. Cat. ii, p. 455. Hypsa analis, Wlk. Cat. vii, p. 1677.

Orange-yellow; palpi fuscous; patagia with a black spot; abdomen ringed with blue-back, the two last segments blue-black. Fore wing with black spots at base of costa and median nervare; red-brown spots in middle and end of cell and beyond end of cell, also below middle and end of cell.

Hab. Sikhim; Ceram; Australia. Exp. 60 millim.

## ARCTIIDÆ.

- 1201. Insert Arctia intercalaris, Eversm. Bull. Soc. Nat. Mosc. 1843, iii, p. 544, pl. 10, fig. 1 a, b; which has priority.
- 1203 a. Arctia bretaudiaui, Oberth. Ét. Ent. xx, p. 54, pl. x, figs. 179, 180.
- J. Differs from perornata in all the dark markings being reduced; fore wing with a fascia below median nervure from base

to end of cell; the submarginal band broken, the marginal very narrow. Hind wing with the discocellular lunule separate from the postmedial band; no marginal band.

Q with the wings aborted and much reduced. Hab. Sikhim, 12,000 feet. Exp. 52 millim.

Vol. II, p. 32. Sebastis, Kirby, Cat. Lep. Het. p. 383 (1892), has priority over Moorea.

1254 proves, as was expected, to belong to a distinct genus:-

#### Genus CARCINOPYGA.

Carcinopyga, Feld. Reis. Nov., Erkl. Taf. lxxv-cvii, p. 2 (1874).

Type, C. lichenigera, Feld.

Range. Ladákh.

Q. Palpi porrect and reaching just beyond the frons; antennæ simple, hind tibiæ with two pairs of small spurs. Fore wing broad; vein 3 from before angle of cell; 4, 5 from angle; 6 from

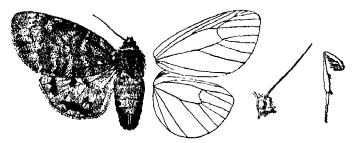


Fig. 260.—Carcinopyga lichenigera, Q. . .

upper angle; 9 and 10 anastomosing with 7, 8 to form the arcole and emitted together. Hind wing with veins 3, 4, 5 from angle of cell; 6, 7 from upper angle.

1281 a. Cyana alborosea, Wlk. = quadrinotata, Wlk. = pallens, Butl., is a distinct species, with no black edges to the bands of fore wing; male with no sexual patch on hind wing; female with veins 6, 7 stalked.

Hab. China; Sikhim; Khásis; Moulmein; Sumatra. Exp. 24 millim.

1284 a. Cyana dudgeoni, Hmpsn. Trans. Ent. Soc. 1895, p. 293.

Female with veins 4, 5 of fore wing stalked; 6 absent; one black spot. Male with no costal tuft or lobe and three black spots on fore wing; hind wing with veins 6, 7 stalked.

Differs from peregrina in the palpi being white and fuscous. Fore wing without the black edges to the ante- and postmedial crimson bands. Underside white in male, crimson in female.

Hab. Sikhim. Exp., o 26, 2 30 millim.

1285 a. Cyana javanica, Butl. Trans. Ent. Soc. 1877, p. 338.

Fore wing of male with two black spots, of female with one.

d. Differs from peregrina in the fore wing having the subbasal line irregularly waved; the antemedial line more oblique, excurved in the cell and emitting a streak to near the two black spots; the postmedial line with its costal half oblique, then waved, a red spot beyond it on costa; the marginal band not extending round the apex and with its inner edge dentate.

2 with the ante- and postmedial bands highly sinuous and with

prominent black eyes.

The form from Shan States has the red bands of fore wing broader, with no black on their edges; the hind wing more crimson.

Hab. Shan States; Java. Exp., 3 36, 2 42 millim.

### Genus BAROA, nov.

Type, B. punctivaga, Wlk., from Java.

Range. Sikhim; Khásis; Java.

Differs from Agrisius in the areole of fore wing being large and vein 10 given off from it; from Macrobrochis in vein 3 of each wing arising from angle of cell; vein 6 of fore wing from upper angle; 11 not anastomosing with 12.

1307 a. Baroa vatala. Swinh. A. M. N. H. (6) xiv, p. 436; id. Trans. Ent. Soc. 1895, pl. i, fig. 18.

d. Ochreous white with a slight fuscous tinge; palpi with the



Fig. 261.—Baroa vatala, J.

3rd joint black; collar, tegulæ, pro-,meso-, and metathorax each with a black spot. Fore wing with two black specks near base below costa; four antemedial specks, one at end of cell; a series of eight postmedial specks. Hind wing with postmedial series of specks.

Hab. Sikhim; Khásis. Exp. 36 millim.

Genus Macrobrochis.—Sect. I. B. Antenna of male with short branches dilated distally.

1308 a. Macrobrochis semirufa, n. sp.

d. Differs from metaxantha in the head and collar being dark red-brown; abdomen orange-brown suffused with fuseous above; fore wing darker, the costal and outer areas orange-brown below; hind wing uniform orange-brown.

Hab. Khásis. Exp. 54 millim. Type in coll. Elwes.

1308 b. Macrobrochis metaxantha, Hmpsn. Trans. Ent. Soc. 1895, p. 292.

2. Fuscous brown; frons, collar, and abdomen orange. Fore

wing with vein 6 from the areole; uniform fuscous brown. Hind wing orange; a fuscous-black marginal band, broad at costa, narrowing to anal angle. Underside with the thorax and basal half of costa of fore wing orange.

Hab. Bhután. Exp. 60 millim.

## 1317 a. Gnophria collitoides, Butl. Cist. Ent. iii, p. 115.

Fuscous; collar orange or fiery red; legs and abdomen below yellow. Fore wing with orange costal fascia from near base to near apex. Hind wing paler.

The Japanese form is darker than the Sikhim form, and has the costal fascia broader. In the single male the head is yellow.

*Hab.* Japan; Yatong, Sikhim, 13,000 feet. Eap., 36-40, 36-48 millim.

#### Genus LOBOCRASPIS.

Lobocraspis, Hmpsn. Trans. Ent. Soc. 1895, p. 293.

Type, L. griscifusa, Hmpsn.

Range, Burma.

Palpi upturned and reaching vertex of head; antennæ of male minutely ciliated; fore tibiæ of male thickly fringed with hair; mid and hind tibiæ without spurs and with immense tufts of long hair; the proximal joints of tarsi fringed with hair. Fore wing long and narrow; the costa nearly straight; the outer margin erect from apex to vein 4, where it is angled, then very oblique; the inner margin with a large lobe before the middle; vein 3 from before angle of cell; 6 from below upper angle; 7 from the angle; 8, 9, 10 stalked; 11 free. Hind wing with the apex rounded; veins 3, 4, 5 from close to angle of cell; 6, 7 from upper angle; male with the inner area clothed with long hair.

# 1322 a. Lobocraspis griseifusa, Hmpsn. Trans. Ent. Soc. 1895, p. 293.

Tawny ochreous; thorax and abdomen suffused with greyish fuscous; hind tibiæ of male with the tufts fuscous, mid tibiæ with



Fig. 262.—Lobocraspis griscifusa, Q. 1.

them tipped with fuscous. Fore wing with greyish-fuscous specks on costal area, which are developed into obscure spots in and beyond the cell; the whole inner area suffused with greyish fuscous, except a tawny spot on the lobe; a dark

spot on outer margin below spex. Hind wing fuscous; the cell

whitish; the margin tinged with ochreous; male with the inner area below the cell and vein 5 suffused with fuscous. Underside ochreous; fore wing with the cell suffused with fuscous, with a pale spot in it and another on discocellulars.

Hab. Yaw, Burma; Dawnat Range, Tenasserim. Eap.

44 millim.

### 1334 a. Prabhasa cana, n. sp.

J. Fore wing with the apex rectangular, the inner margin nearly straight; the fringe of scales extending to end of cell; the areole present. Head, thorax, abdomen, and fore wing greyish white with an ochreous tinge, the last with traces of a highly excurved line from middle of costa to inner margin beyond middle; slight dark streaks on veins of outer area. Hind wing yellowish white.

Hab. Khásis. Exp. 28 millim. Types in coll. Elwes and B.M.

### 1348 a. Lithosia chrysophleps, Hmpsn. Trans. Ent. Soc. 1895, p. 294.

Q. Orange-yellow; the head black; collar orange; thorax and abdomen suffused with fuscous. Forewing with the whole of the interspaces suffused with fuscous, leaving the veins, margins, and cilia orange. Hind wing uniform orange. Underside of fore wing with the disk only suffused with fuscous.

Hab. Bhután. Exp. 42 millim.

1358. Lithosia conformis. 3. Frons, vertex of head, and abdomen above orange-yellow. Fore wing whiter; underside with the base of costa blackish; the end of cell and subcostal and median nervures and nervules suffused with fuscous.

Hal. Khásis.

1367. Insert (syn.) Pelosia tetrasema, Meyr. Trans. Ent. Soc. 1894, p. 2.

## 1370 a. Lithosia sthenoptera, n. sp.

d with a fold in cell of fore wing, but without modified scales on fore and hind wings. Bright ochreous; abdomen tinged with fuscous except the anal segment, in female prominently fuscous. Fore wing very narrow in male, the costa highly arched towards apex in both sexes; hind wing somewhat paler.

Hab. Khásis. Exp., & 28, 2 34 millim. Types in coll. Elwes

and B. M.

Genus Mithuna.—SECT. II. Antennæ of male bipectinate; fore wing with vein 6 stalked with 7, 8, 9, 10.

#### 1372 a. Mithuna fuscivena, n. sp.

d. Fuscous brown. Fore wing with fuscous streaks on the

veins, diffused on costal, subcostal, and median nervures. Hind wing pale dull ochreous.

2. Head, thorax, and fore wing uniform pale dull rufous

brown.

Hab. Ceylon (Pole). Exp. 16 millim. Type in B. M.

## 1381 a. Gampola normalis, n. sp.

J. Shape and neuration as in females of the typical species. Yellowish brown suffused with grey; fore wing thickly mottled with grey; hind wing slightly paler and yellow.

Hab. Khasis. Exp. 28 millim. Type in coll. Elwes.

1386 a. Emene amnæa, Swinh. A. M. N. H. (6) xiv, p. 437, and Trans. Ent. Soc. 1895, pl. i, fig. 13.

¿. Head and thorax white spotted with black: abdomen fuscous. Fore wing white; black basal spots on costa and below median nervure; an antemedial sinuous line, broad at costa and obsolete between median nervure and vein 1; a discocellular black lunule conjoined to the double waved postmedial line, which is filled-in with fuscous from costa to vein 3 and towards inner margin, and incurved from vein 4 to inner margin; a submarginal sinuous maculate line, with lunules on it at costa and above middle; marginal spots at apex and middle of outer margin. Hind wing fuscous black.

Hab. Khásis. Exp. 22 millim.

# 1386 b. Emene diffusifascia, Swinh. A. M. N. H. (6) xvii, p. 362.

o. Grey. Fore wing with basal fuscous spot on costa; a sub-basal spot on median nervure with a semicircular mark beyond it; an antemedial spot on costa; a diffused black-brown medial band, broadest on disk; an ill-defined maculate postmedial line, with black patch beyond it on costa and smaller spots at middle and on inner margin; a marginal series of short striæ and fuscous spots at apex and middle. Hind wing slightly tinged with fuscous; underside with discocellular spot and diffused postmedial line.

Hab. Khásis. Exp. 22 millim.

# 1393 a. Oxacme marginata, n. sp.

c. Antennæ ciliated. Head, thorax, and fore wing whitish, irrorated with dark scales; abdomen blackish, clothed with white hair; the anal tuft ochreous. Fore wing with dark medial and postpatdial specks on costa and some others near apex and on outer margin above and below the angulation. Hind wing yellowish white, with the margin and base of cilia fuscous, developing into a patch at apex.

Hab. Khasis. Exp. 20 million. Types in coll. Elwes and B. M.

### Genus SICULIFER, nov.

Type, S. bilineatus, Hmpsn.

Range. Khásis.

Palpi short and porrect; antennæ of female nearly simple; tibiæ with the spurs well developed; anal tuft of female large. Fore wing with the costa much arched towards apex, which is strongly falcate; vein 2 much curved; 3 from before angle of cell; 4 absent; 6, 7, 8, 9, 10 stalked; 11 from angle of cell. Hind wing with vein 3 absent; 4, 5 and 6, 7 stalked; 8 anastomosing with the cell to middle.

## 1393 b. Siculifer bilineatus, n. sp.

2. Head and thorax dark red-brown; abdomen fuscous. Fore



Fig. 263.
Siculifer bilineatus, Q. 4

wing dark red-brown, the area towards outer angle yellowish; a straight dark slightly oblique medial line and erect postmedial line; cilia dark. Hind wing fuscous, the cilia on anal half pale.

Hab. Khásis. Evp. 20 millim. Types in coll. Elwes and B. M.

#### Genus EUCYCLOPERA.

Eucyclopera, Hmpsn. Trans. Ent. Soc. 1895, p. 294.

Type, E. plagidisca, Hmpsn.

Range. Bhután.

Q. Palpi porrect and short; antennæ minutely ciliated; tibiæ with the spurs short; abdomen with large anal tuft. Fore wing short and broadly lanceolate; the costa much arched; the outer margin oblique; veins 3, 4, 5 stalked; 6, 7, 10, and 11 from cell; 8, 9 absent Hind wing with veins 3, 4, 5 from close to angle of cell; 6, 7 on a long stalk.

1894 a. Eucyclopera plagidisca, Hmpen. Trans. Ent. Soc. 1895, \* · p. 294.

2. Head whitish; thorax and abdomen fuscous, the anal tuft

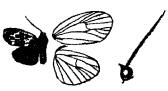


Fig. 264.
Eurgelopera plagidisca, 2. 4.

grey. Fore wing whitish suffused with fuscous; traces of sinuous subbasal and medial dark lines, the latter with a large round spot on its inner edge on disk; a dentate postmedial line from the spot to near outer angle; a diffused curved submarginal band not reaching the costa or inner margin. Hind wing fuscous,

Hab. Bhutan. Exp. 16 millim.

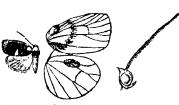
1397. Insert Diduga (Pitane) flavicostata, Snell. Tijd. v. Ent. xxii, p. 92, pl. 10, fig. 8; which has precedence. Pulo Laut.

#### Genus LOBOBASIS, nov.

Type, L. niveimaculata, Hmpsn.

Range Bhután.

Palpi porrect, extending just beyond the frons; antennæ of male ciliated. Fore wing with the costa highly arched at base, with a rounded patch of raised scales and slight fringe of hair



beyond it below the costa, and with rough hair from its extremity running round to base of inner margin; vein 2 from near angle of cell; 3, 4 stalked; 5 absent; 6 from upper angle; 7, 8 stalked; 9 absent; 10, 11 free, the latter curved. Hind wing your bread; the costs

Fig. 265.—Lobeliasis nivermaculata, 3. ;. wing very bread; the costa highly arched; a glandular patch of scales on the costal nervure and end of subcostal; vein 2 absent; 3, 4 from angle of cell; 5 absent, the cell closed; 6, 7 stalked; 8 curved up to costa.

## 1398 a. Lobobasis niveimaculata, n. sp.

3. Head yellow; the vertex of head, collar, and part of patagia and mesotherax snow-white, the rest of therax red-brown; abdomen yellow. Fore wing red-brown; the costal and outer margins yellow; a large round white spot at base of costa, and a triangular postmedial patch on inner margin. Hind wing yellow.

Hab. Bhután, 2500 feet (Dudgeon). Evp. 20 millim. Type ir B. M.

Genus Garudinia.—Sect. II. Fore wing of male with a tuft of long hair in cell below, the cell very long; vein 1 b curved upwards and 2 curved downwards so as almost to meet; 3, 4 from lower angle of cell; 8 absent. Hind wing with patches of modified scales above in cell near lower angle and below costs towards apex; the subcostal nervure fringed with scales below; the cell long, and veins 3, 4 from angle.

# 1400 a. Garudinia biplagiata, n. sp.

d. Head and thorax white; abdomen fuscous, the anal tuft ochreous. Fore wing white; a large semicircular leaden fuscous medial patch from subcostals to inner margin; a similar semilunar postmedial patch from below costs to outer angle. Hind wing pale, suffused with fuscous towards margin; the patches of scales ochreous.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 18 millim. Type in B. M.

8 stalk

Vol. II, p. 100. Under Anachrostis insert Mineugoa, Hmpsn. Trans. Ent. Soc. 1895, p. 294, for Sect. II.

## 1405 a. Anachrostis hypomelas, Hmpsn. Trans. Ent. Soc. 1895, p. 295.

3. With a tuft of long hair on upperside of hind wing from the middle of cell, directed obliquely upwards to the base. Pale yellowish brown: palpi black at sides. Fore wing irrorated with black; six black specks on costa; an annulus at end of cell; a subapical fuscous patch: a series of black marginal specks. Underside with a large black patch covering the costal half of basal two-thirds of wing.

Q without the black patch on underside. Hab. Sikhim; Bhután. Exp. 20 millim.

1406. Insert (syn.) Mimengoa edentifascia, Hmpsn. Trans. Ent. Soc. 1895, p. 295.

#### Genus GALLERIDIA, nov.

Type, G. atrisigna, Hmpsn.

Range. Ceylon.

Palpi upturned, broadly scaled, and reaching vertex of head, the 3rd joint minute; from produced to a rounded prominence; antennæ of male minutely ciliated; tibiæ with the spurs long. Fore wing long and narrow; veins 3, 4, 5, 6, and 7 well separated at origin; 8, 9 stalked; 10, 11 free. Hind wing with veins 3, 4 stalked; 5 from somewhat above lower angle of cell; 6, 7 from upper angle.

## 1407 a. Galleridia atrisigna, n. sp.

Pale brown suffused with grey and irrorated with fuscous. Fore



Fig. 266.—Galleridia atrisigna, J. 3.

wing with the costa rufous; a prominent short black fascia below end of cell; some black specks near upper angle; an oblique fuscous shade from apex; a marginal series of black specks. Hind wing brownish white, the apical area rather browner with some marginal dark specks.

Hab. Ceylon (Pole). Exp. 16 millim. Type in B. M.

## 1407 b. Galleridia fuscizonea, n. sp.

Grey-brown irrorated with fuscous. Fore wing with diffused fuscous medial band traversed by three very obscure waved dark lines; a black discocellular spot; traces of a pale crenulate submarginal line outlined with fuscous; a marginal series of dark specks. Hind wing fuscous. Underside with black discocellular spot and traces of curved postmedial line.

Hab. Ceylon (Pole). Exp. 14-16 millim. Type in B. M.

#### Genus TOLPIA.

Tolpia, Wlk. Cat. xxviii, p. 449 (1863).

Type, T. conscitulana, Wlk.

Range, Ceylon; Borneo.

Palpi porrect and reaching well beyond the frons; antennæ of male minutely ciliated; tibiæ with the spurs long. Fore wing short and broad; veins 3 and 5 from close to angle of cell; 6 from well below upper angle; 7 from the angle; 8 and 10 stalked; 9 absent. Hind wing with vein 3 absent; 5 from above lower angle of cell; 6, 7 stalked.

1467 c. Tolpia conscitulana, Wtk. Cat. xxviii, p. 450.

J. Brown suffused with fuscous; head and collar smoky black.



speck on costa; indistinct waved antemedial, postmedial, and submarginal lines arising from black specks on the costa, the first with ochreous inner edge, the two latter with ochreous outer edges; a pale discal patch. Hind wing fuscous, darkest towards outer margin.

Fore wing with subbasal black

Fig. 267.—Tolpia conscitulana, J. 5. patch. Hind wing fuscous, darkest towards outer margin.

Hab. Ceylon; Sarawak. Exp. 12 millim.

Vol. II, p. 103. Transfer Trichogyia to the Limacodidæ next

Aræogyia.

1419. Insert (syn.) Scaptesyle integra, Swinh. A. M. N. H. (6) xiv.

p. 437. This is the form from the Khásis described in text. 1439 a. Miltochrista disticha, Meyr. Trans. Ent. Soc. 1894, p. 2.

Q. Orange-red; abdomen paler. Fore wing with black dot at base; an antemedial series of four small round black spots and medial series of five spots. Hind wing pale rosy.

Hab. Shan States. Exp. 27 millim.

1445 a. Miltochrista hololeuca, Hmpsn. Trans. Ent. Soc. 1895, p. 296.

s. Pure white; palpi and a stripe on outer side of fore tibize black.

Hab. Bhután. Exp. 38 millim.

1451. Insert (syn.) Miltochrista geodetis, Meyr. Trans. Ent. Soc. 1894, p. 4.

1459. Insert (syn.) Miltochrista celidopa, Meyr. Trans. Ent. Soc. 1894, p. 3=the form calamaria.

1461 a. Miltochrista eccentropis, Meyr. Trans. Ent. Soc. 1894, p. 3.
6. Head white; palpi fuacous; thorax orange, white behind.

Fore wing white; a dark grey round subbasal spot; two curved antemedial series of five spots; a curved orange antemedial band; a black discal spot; a postmedial line excurved round cell, with all the veins beyond it streaked with black. Hind wing ochreous white; the veins streaked with fuscous towards outer margin, more shortly towards anal angle.

Hab. Shan States. Exp. 20 millim.

## 1461 b. Miltochrista umbrosa, n. sp.

3. Head and thorax ochreous, almost wholly suffused with black-brown; abdomen black and grey-brown. Fore wing with the ground-colour whitish, with a very large triangular black-brown costal patch on basal area and the irregular postmedial band diffused in places to the margin, occupying almost the whole wing except the inner basal and medial areas; a basal dark spot, subbasal and antemedial series of two spots, and a medial oblique series of six spots. Hind wing yellowish, with diffused fuscous marginal band narrowing to anal angle.

Hab. Khásis. Exp. 30 millim. Type in coll. Elwes.

## 1463 a. Miltochrista eschara, Swinh. A. M. N. H. (6) xiv, p. 438.

Q. Bright ochreous. Fore wing with a triangle formed by two black lines radiating from base of median nervure and conjoined to a medial line which is excurved at middle and joined at vein 4 by a highly curved postmedial line sending three streaks towards the apical half of outer margin; a spot near outer angle and prominent marginal line.

Hab. Khásis. Exp. 20 millim.

# 1465 a. Miltochrista nigriradiata, n. sp.

Q. Bright rose-pink; palpi and fore legs blackish. Fore wing with the base of costa black; two black spots at base; an antemedial black line excurved in cell, inwardly dentate below cell and outwardly dentate on vein 1; a straight oblique medial line; a black discocellular spot; a postmedial line excurved round cell and incurved below it, with seven streaks on the veins beyond it, the one below costa forked; all the markings very prominent.

Hab. Bhután (Dudgeon). Exp. 28 millim. Type in B. M.

- 1473. Insert (syn.) Ammatho epixantha, Meyr. Trans. Ent. Soc. 1894, p. 2. The yellow form from the Khásis and Shan States.
- 1475. Insert (syn.) Miltochrista callinoma, Meyr. Trans. Ent. Soc. 1894, p. 3.

# 1486 a. Nudaria fulvipicta, n. sp.

J. Ochreous white. Fore wing with ill-defined dark subbasal line and incomplete curved fulvous antemedial line; the area beyond middle suffused with fuscous, with a large dark-edged fulvous patch from lower angle of cell to costa; a pale dentatepostmedial line; a submarginal series of fulvous streaks on the veins ending in black marks on the margin at costa, vein 4, and inner margin; ochreous patches on the margin above and below middle.

Hab. Khásis. Exp. 16 millim. Type in B. M.

### 1488 a. Nudaria fumidisca, n. sp.

3. Yellowish white. Fore wing with fuscous markings at base; the medial inner area smoky black, connected with costa by sinuous ante- and postmedial brown lines and joined to a spot in the cell; traces of some brown submarginal markings and a prominent dark spot near outer angle. Hind wing semidiaphanous, with slight fuscous suffusion between the cell and anal angle.

Hab. Khásis. Exp. 18 millim. Types in coll. Elwes and B. M.

#### 1488 b. Nudaria promelæna, n. sp.

G. Head, thorax, and abdomen ochreous white. Fore wing fuscous brown, with irregular white fascia on base of inner margin; traces of a pale sinuous antemedial line; dark specks in end of cell and on discocellulars; a pale dentate postmedial line, angled beyond lower angle of cell and expanding into a patch on inner margin; a dentate line just inside margin expanding into a patch below apex and interrupted at middle. Hind wing ochreous white, with traces of curved postmedial line.

Hab. Khásis. Exp. 18 millim. Type in B. M.

Genus Cacyparis.—Sect. II. Fore wing with vein 7 from cell; 8, 9, 10 stalked. Hind wing with veins 3, 4 shortly stalked.

- 1496. Cacyparis læta. Insert (syn.) Tortrix fimbriana, Wlk. Char. Undescr. Het. p. 101; C. & S. no. 4749.
- J. Hind wing with small black patch on excurved part of outer margin; underside with large black patch on middle of inner area and small patch on the margin.

# 1515 a. Siglophora ferreilutea, Hmpsn. Trans. Ent. Soc. 1895, p. 296.

2. Bright orange-yellow; head, thorax, and abdomen marked with deep red. Fore wing with eight deep red dentate lines, two of the antemedial lines having ferruginous between them; a ferruginous patch on middle of inner margin; the outer area from below the apex to nearly the middle of inner margin almost completely covered by a ferruginous patch. Hind wing with the basal and costal areas white; the inner and outer areas yellow turning to ferruginous.

Hab. Sikhim. Exp. 30 millim.

## 1520 a. Nola laticineta, n. sp.

3. Differs from fragilis in the thorax and abdomen being tinged

with fuscous. Fore wing with the whole area between the anteand postmedial lines dark brown, the postmedial line angled at middle; the submarginal line bent inwards towards costa. Hind wing tinged with fuscous.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 14 millim. Type in

B. M.

## 1524 a. Nola punctilineata, n. sp.

Q. Brownish grey. Fore wing with subbasal black streak below costa; an oblique antemedial series of three black specks; a medial series of specks almost joined at inner margin by an oblique postmedial series; a submarginal waved series. Hind wing fuscous, with dark discocellular line.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 22 millim. Type in

B. M.

1528. Nola pascua. Hind wing of male with a fold on inner area containing a tuft of brown hair and some thick hair below.

## 1532 a. Nola obliquifasciata, n. sp.

Q. Head white; palpi black, white at tip; antennæ black; thorax fuscous, the patagia white-tipped; abdomen fuscous. Fore wing white; a greyish-black patch at base of costa; a broad oblique greyish-black band from middle of costa to near outer angle with waved black edges, some shining scales on it, and a dark spot below costa and white spot at middle; a dark patch on costa before apex, with traces of a sinuous submarginal line arising from it; a large triangular greyish-black patch occupying most of outer area; a marginal series of black specks. Hind wing pale fuscous. Hab. Ceylon (Green). Exp. 16 millim. Type in B. M.

1534 a. Nola marginata, Hmpsn. Trans. Ent. Soc. 1895, p. 296.

Head pure white; thorax and abdomen with a slight fuscous tinge. Fore wing pale fuscous; the costal area pale brown, with two postmedial white specks; a black speck at upper angle of cell; traces of an oblique dark medial line; a sinuous submarginal line excurved between veins 5 and 2, with the fuscous deepening to black on its inner edge and the area beyond it pale brown. Hind wing white with a slight fuscous tinge.

Hab. Bhután. Exp. 16 millim.

# Antennæ of male bipectinate.

1534 b. Nola microphasma, Butl. Cist. Ent. iii, p. 117. Rhynchopalpus grisealis, Swinh. Trans. Ent. Soc. 1895, p. 25.

Greyish white slightly suffused with brown. Fore wing with two dark specks below base of costa; an antemedial series of specks; a dark spot in end of cell; a postmedial curved series of specks and a submarginal waved series. Hind wing whiter,

Hab. Japan; Bhután; Khásis. Exp. 14 millim.

Nos. 1522. Nola denticulata, and 1533. N. major, also belong to this section; the latter has 3 18 millim., and occurs also in Sikhim, Bhután, and Burma.

## 1534 c. Nola tesselata, n. sp.

3. Head and thorax white; palpi brown at sides; vertex of thorax fuscous; abdomen brownish. For wing with the basal area white, with dark mark on base of costa, its outer edge angled below cell; the rest of wing fuscous irrorated with metallic scales; postmedial and apical almost conjoined white patches on costa and another at outer angle; traces of crenulate postmedial and submarginal dark lines angled at middle. Hind wing whitish.

Hab, Khásis. Exp. 20 millim. Type in B. M.

SECT. III. Fore wing with vein 9 present and given off from 8. 1534 d. Nola nigrisparsa, n. sp.

Q. Head, thorax, and abdomen greyish white irrorated with black; palpi blackish. Fore wing white irrorated with black; a short black streak below base of costa; three tufts of scales in the cell; an indistinct waved and curved antemedial black line; two irregularly waved medial black lines excurved beyond cell and with a blackish patch between them from costa to vein 5; an oblique line across the apex and blackish patches on outer area at middle and outer angle. Hind wing blackish fuscous.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 18 millim. Type in B. M.

# 1534 e. Nola tenebrosa, n. sp.

Q. Head and thorax brown; abdomen grey. Fore wing brown, with a broad band of purplish fuscous suffusion from middle of costa extending obliquely to base of inner area; an indistinct antennedial black line angled below costa and with a blackish patch beyond it on costa; a postmedial line sharply angled below costa and slightly on vein 4; a diffused irregularly waved submarginal line; two tufts of scales in the cell. Hind wing fuscous.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 20 millim. Type in B, M.

# 1539 a. Pisara discisignata, n. sp.

3. Head and thorax white, the head and collar tinged with rufous; the palpi fuscous; abdomen pale fuscous. Hind wing whitish, suffused with fuscous except on inner basal area, the medial area tinged with rufous, with some ill-defined fuscous spots on it and a prominent black discocellular spot, bounded inwardly by an indistinct sinuous line and outwardly by a line excurved round end of cell; traces of a submarginal line; a marginal series of dark specks. Hind wing pale fuscous.

Hab. Hambantota, Ceylon (Pole). Exp. 12 millim. Type in B. M.

# 1540 a. Pisara argentescens, Hmpsn. Trans. Ent. Soc. 1895, p. 296.

Q. Silvery grey, slightly suffused and irrorated with fuscous. Fore wing with traces of curved subbasal line; a large fuscous patch on middle of costa extending down to vein 2; an indistinct crenulate postmedial line with curved line beyond it and fuscous suffusion between them; an indistinct curved and irregularly sinuous submarginal line. Hind wing fuscous.

Hab. Sikhim. Exp. 26 millim.

## 1540 b. Pisara fuscibasalis, n. sp.

Fuscous brown and grey. Fore wing with the basal half suffused with fuscous brown, leaving a large grey patch on basal inner area; curved and slightly sinuous dark antemedial and medial lines; an indistinct postmedial line excurved from costa to vein 4, then incurved; the postmedial area grey; the outer area fuscous. Hind wing fuscous, pale at base.

Hab. Coylon (Pole); Thayetmyo, Burma (Watson). Exp. 14

millim. Type in B. M.

## 1541 a. Pisara mediozonata, n. sp.

3. Greyish white. Fore wing with a rounded brown spot on base of costa; a broad medial fuscous band irrorated with a few shining scales, and with two rounded brown spots on it at costa, a black line on its inner edge expanding towards the first brown spot and two slightly irregular black lines on its outer edge; an irregular fuscous submarginal line and a marginal line. Hind wing paler fuscous, with a dark discocellular mark.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 16 millim. Type in

В. М.

# 1541 b. Pisara seminigra, n. sp.

Q. Pure white; palpi black; abdomen tinged with fuscous towards extremity. Fore wing with a short oblique black band from costa near base, with leaden-coloured scales on it; a similar band at middle conjoined to a postmedial band of tufts of leaden-coloured scales, the area beyond it brown suffused with black; an irregular submarginal series of tufts of leaden-coloured scales. Hind wing with the outer area suffused with fuscous.

Hab. Bhután (Dudgeon). Exp. 18 millim. Type in B. M.

# 1543 a. Pisara argentisparsa, Hmpsn. Trans. Ent. Soc. 1895, p. 297.

3. Head and thorax white; abdomen suffused with fulvous and fuscous; wings white, suffused with fulvous and fuscous and irrorated with a few brilliant silver scales. Fore wing with traces of minutely dentate ante- and postmedial lines, the latter much excurved beyond cell.

Hab. Simls. Exp. 22 millim.

SECT. III. Antennæ bipectinate in both sexes; fore wing with vein 10 anastomosing with 7, 8, 9, enclosing in male a small hyaline fovea covered by a valve of scales above.

### 1545 a. Pisara gemmata, n. sp.

Head, thorax, and abdomen whitish; palpi at sides and shaft of antennæ black. Fore wing yellowish white, the costal area to beyond middle suffused with black; the outer area rufous below apex, blackish towards outer angle; the basal, costal, and outer areas irrorated with raised metallic scales; two tufts of metallic scales on discocellulars, and in male a valve above them covering the fovea and almost joined to a sinuous postmedial line of raised metallic scales; a very irregularly sinuous submarginal line of raised metallic scales. Hind wing pale fuscous.

Hab. Sikhim (Pilcher). Exp. 18 millim. Type in B. M.

#### Genus CYPHOTOPSYCHE.

Cyphotopsyche, Hmpsn. Trans. Ent. Soc. 1895, p. 297.

Type, C. ustipennis, Hmpsn.

Range. Bhután.

Palpi porrect, extending about the length of head, the 2nd joint thickly scaled, the 3rd naked; antennæ of male bipectinated with short branches to two-thirds length and with a large tuft from basal joint; the collar forming large upright paired triangular hoods extending over the head; abdomen with a pair of large corneous wing-shaped plates from base extending over dorsum. Fore wing with veins 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 and 6, 7 stalked; 5 from middle of discocellulars.

1545 b. Cyphotopsyche ustipennis, Hmpsn. Trans. Ent. Soc. 1895, p. 207.

d. Head, thorax, and abdomen clothed with greyish, dark



Fig. 268.
Cyphotopsyche ustipennis, 5.

rufous, and black scales. Fore wing grey-brown; the costal area dark fuscous; ill-defined dark streaks in the interspaces; a dark fascia from lower angle of cell to outer margin; a dark patch on outer margin below apex; the margin and cilia dark fuscous. Hind wing pale

greyish; the cilia fuscous at apex. Hab. Bhutan. Exp. 24 millim.

Larva. Early stages: creamy buff with dorsal, subdorsal, and sublateral series of small warts bearing tufts of long buff hairs; four pairs of prolegs, the 6th somite being without prolegs; the cast skins of the head are attached to a long tuft of hair projecting forward from 1st somite, so that the number of moults can be counted by the number of skins present.

The full-grown larva is snow-white, covered with a down-like

detachable substance with slight creamy tinge below; the hairs white except five or six long black hairs on thoracic somites; head buff, marked with brown striæ; a dorsal black mark on 1st somite, partly hidden by the head-bearing tuft which after the last moult bears five head-skins. The larva progresses with a jerky motion; it forms a flap-like cocoon by biting off pieces of rotten wood and bark and interlacing them with its long hairs which are left projecting; before fastening down the flap it rubs its head against it for a long time, and with much difficulty detaches the tuft and head-skins and attaches them to the side of the cocoon.

#### 1547 a. Selca ruficostata, n. sp.

Q. Grey, thickly irrorated with fuscous. Fore wing with the costal area chestnut to beyond middle, including almost the whole of the cell, in which are three tufts of raised scales and two on the discocellulars; traces of an irregular dark antemedial line; a postmedial line excurved between veins 6 and 3, then very oblique; an irregularly and highly dentate submarginal line. Hind wing dark fuscous.

Hab. Bhután (Dudgeon). Exp. 32 millim. Type in B.M.

#### AGARISTIDÆ.

Vol. II, p. 149. In the genus Eusemia transfer all, except Sect. III, to Chelonomorpha.

### NOCTUIDÆ.

- 1605 a. Heliothis hyalosticta, Hmpsn. Trans. Ent. Soc. 1895, p. 298.
- 3. Grey. Fore wing irrorated with brown; traces of a waved subbasal line; some dark specks on costa; a spot on discocellulars; a postmedial curved series of specks on the veins and a marginal series. Hind wing paler; a dark discocellular lunule; an indistinct curved postmedial line; the outer area slightly darker. Underside with the discocellular spot of fore wing deep black.

Hab. Karáchi. Exp. 22 millim.

- 1616. Transfer Arsiloncha roseana, Swinh., and the locality Bhámo, Burma, to 1615, Chariclea irrorata.
- P. 180. Raghuva. Male with glandular swelling at middle of costa of fore wing.

#### Genus TRICHANARTA, nov.

Type, T. ladakensis, Feld.

Range. Himalayas.

Palpi porrect, fringed with long hair below and reaching just beyond the large frontal tuft; eyes hairy and with long lashes; antennæ ciliated; tibiæ strongly spined; thorax and abdomen without tufts. Fore wing with the outer margin non-crenulate. Hind wing with veins 3, 4 from cell.

1619 a. Trichanarta ladakensis, Feld. Reis. Nov. pl. 108, fig. 38; C. & S. no. 1964.

Q. Grey-brown irrorated with black. Fore wing with minutely







Fig. 269.
Trichanarta ladakensis,  $\mathfrak{P}$ . \\ \\ \}.

waved antemedial line; deep black orbicular and claviform spots; the reniform large with black outline and fuscous centre; a waved dark submarginal line terminating on vein 2; a marginal series of specks. Hind wing pale yellow; the basal and inner areas irrorated with black; a discocellular speck; a fuscous submarginal

mark on apical area. Unders de almost white; the discocellular black marks and submarginal bands very prominent.

Hab. Ladákh. Exp. 20 millim.

1622. Agrotis biconica = A. spinifera, Hübn. Samml. eur. Schmett., Noct. fig. 389; which has precedence.

1627 a. Agrotis postfusca, n. sp.

Antennæ of male with fascicles of cilia at end of branches.

d. Head and thorax pale ochreous and fuscous; palpi black and rufous except the end of 2nd and the 3rd joint; abdomen fuscous, the anal tuft fulvous. Fore wing ochreous grey, with indistinct double waved antemedial line dentate inwards on vein 1; the orbicular and reniform large and grey, with a black patch between them and another betore the orbicular in cell; a large black patch beyond the reniform crossed by the double waved postmedial line; a marginal series of dark specks. Hind wing fuscous, the cilia pale. Underside with discocellular spot and sinuous postmedial line; the costal area fuscous, the inner area pale.

Hab. Ceylon (Green). Exp. 34 millim. Type in B. M.

1628. Agrotis intracta=1646, A. modesta, and has precedence.

1636. Omit Apamea nubila, Moore, from the synonymy (see 1729 a).

1679 a. Hadena agrotiformis, n. sp.

d. Grey-brown; abdomen with a white-tipped dorsal tuft on basal segment. Fore wing with traces of a short subbasal line, an indistinct crenulate antemedial line with fuscous suffusion between it and the subbasal line; the orbicular a dark annulus; claviform prominent and filled-in with fuscous; reniform very large, with fuscous centre; the postmedial line represented by a series of white and dark specks on the veins, excurved beyond cell; white specks on outer half of costa; dark streaks on veins of outer area and small triangular marginal marks between the veins. Hind wing white, with traces of a diffused submarginal fuscous band.

Hab. Ceylon (Pole). Exp. 28-30 millim. Type in B. M.

- 1681. Hadena i hastata is an Euplexia near 1714, E. adjuncta (abdomen of type wanting).
- 1693. Hadena cuprina is an Eurois=1783, which is not E. xhaly-beata (see 1783 a).
- 1696. Hadena indica is an Acronycta = A. rumicis, Linn. Syst. Nat. i, 2, p. 852. Europe; N.W. Himalayas.
- 1713. Insert (syn.) Bombycia hodita, Swinh. A. M. N. H. (6) xv, p. 6.
- 1729 a. Euplexia nubila, Moore, P. Z. S. 1881, p. 346, pl. 38, fig. 10; C. & S. no. 2057.
- 3. Red-brown suffused with purplish grey; abdomen pale brown, with rufous dorsal tufts. Fore wing with irregular black streak below base of median nervure; a double curved and waved antemedial line; the orbicular and reniform large, indistinct and ovoid; claviform black-edged and kidney-shaped; a double waved postmedial line highly excurved beyond cell, a black streak from it to the indistinct double dentate submarginal line below vein 2. Hind wing pale red-brown. Underside with indistinct cell-spot.

Hab. Sikhim. Exp. 40 millim.

- 1741 a. Euplexia chlorerythra, Swinh. Trans. Ent. Soc. 1895, p. 41, pl. i, fig. 6.
- J. Palpi black, the end of 2nd joint white; head and thorax white slightly tinged with green; abdomen black, with some white at base, on vertex, and extremity. Fore wing pale green at base; a subbasal pale rufous band with black specks on its inner edge, triangular black mark below cell, and sinuous white outer edge; the medial area pale green; a black speck below middle of cell; the orbicular and reniform white, partially edged with black and with black suffusion above, between, and below them; costa speckled with white and black; a white postmedial line incurved below vein 4 and expanding towards inner margin, the area beyond it bright rufous, becoming othreous towards the margin, with an obscure minutely dentate submarginal black line followed by a series of specks; cilia black. Hind wing fuscous black; an indistinct postmedial line; the base of cilia ochreous. Underside of fore wing and costal half of hind wing black; the margin of both wings and inner half of hind wing whitish; hind wing with cellspot and postmedial line; both wings with some submarginal specks.
  - Hab. Khásis. Exp. 36 millim.
- 1743 a. Euplexia plumbeomarginata, Hmpsn. Trans. Ent. Soc. 1895, p. 298.
- ¿. Head and collar ochreous, the latter tipped with leaden grey; thorax leaden grey and ochreous; abdomen leaden grey, ochreous at base. Fore wing ochreous white, slightly irrorated with fuscous; some black specks at base; a large oval black patch

from middle of costa to below vein 2, embracing the large U-shaped reniform with its inner arm very broad, the patch then continued to inner margin as an oblique line with some rufous on its outer edge: an irregularly dentate submarginal black line, with the area beyond it leaden grey except for an ochreous apical spot. Hind wing fuscous, with traces of pale postmedial band; both wings with a fine white line at base of cilia. Underside ochreous, mostly suffused with black.

Hab. N. Khyen Hills. Exp. 32 millim.

- 1755 is Euplexia icamba, Swinh. A. M. N. H. (6) xii, p. 260; not no. 1757.
- 1757. Rename E. viridinigra, Hmpsn., nom. nov.
- 1777. Eurois albicostata = 2537. Baniana? conjugata, and must stand as Eurois conjugata.

1780 a. Eurois chalcochlora, n. sp.

Pale vellowish olive-green. Fore wing with short sinuous subbasal line; an irregularly dentate antemedial line; the orbicular and reniform white-edged, the former small, the latter with fuscous centre and contracted at middle; a series of white spots on apical half of costa; an indistinct minutely dentate dark postmedial line and incomplete white submarginal line; a series of black marginal specks edged by white lunules. Hind wing fuscous above, with indistinct dark discocollular lunule and sinuous postmedial line; cilia olive, below whitish, the costal half irrorated with olive, the spot and line black.

Hab. Sikhim (Pilcher). Exp. 30 millim. Type in B. M.

1783=1693 and should stand as Eurois caprina, Moore.

1783 a. in Sect. III.:—

Eurois chalybeata, Wik. Cat. xxxii, p. 665; C. & S. no. 2071. Mamestra suffusa, Moore, P. Z. S. 1867, p. 52; C. & S. no. 2081.

Differs from cupring in being without the ferruginous tinge-Fore wing longer and narrower, with the reniform sometimes white; a few blue-white scales on the veins, especially at outer margin; the submarginal line slightly more incurved between veins 6 and 4

Hab. Kulu; Sikhim; Khásis. Exp., of 48-52, ♀ 58 millim.

- 1785. Eurois virens is an Agretis near A. accipiter, Feld.
- 1818 a. Acronycta gastridia, Swinh. A. M. N. H. (6) xv, p. 6.
- 2. Differs from pruinosa in the fore wing being longer; hind wing more uniformly suffused with fuscous and with indistinct discocellular lunule; the margin white towards anal angle. Under-

side of hind wing uniformly white, slightly irrorated with brown; the discocellular lunule prominent.

Hab. Murree. Exp. 42 millim.

### 1829 a. Prodenia synstictis, n. sp.

Differs from littoralis in the abdomen being white. Fore wing with the markings on basal area less prominent; the antemedial line more regular; the orbicular and reniform stigmata narrower and forming a V-shaped mark by meeting on median nervure; the median nervules slightly streaked with white; hardly a trace of grey beyond the postmedial line; the submarginal line more regular, with dark points instead of streaks on its inner edge. Hind wing pure white, without the dark marginal line.

Hab. Nilgiris (Hampson); Ceylon (Pole). Exp. 28-30 millim.

Type in B. M.

1833 a. Amyna apicalis, Moore, Lep. Atk. p. 112; C. & S. no. 2086. Ilattia cupreipennis, Moore, Lep. Atk. p. 112; C. & S. no. 2090.

A distinct species belonging to Sect. 1. without the vesicle in cell, apicalis being the brown form, cupreipennis the cupreous.

Hab. China; Sikhim. Exp., 3 30, 9 32 millim.

1835. Amyna? monilis. Transfer to Eurois; the type is a female.

## 1838 a. Callopistria variegata, Swinh. Trans. Ent. Soc. 1895, p. 44.

Q. Head, thorax, and fore wing varying from dark rufous to green and irrorated with black. Fore wing with the greater part of the medial area suffused with fuscous; some indistinct waved lines on basal area and similar postmedial and submarginal lines; two white spots beyond lower angle of cell, four on outer half of costa, and a dentate white line from costa before apex to vein 6. Abdomen and hind wing fuscous, the latter with more or less white at base. Underside grey, with black cell-spot and postmedial line.

Hab. Bhután; Khásis; Ceylon. Eap. 32 millim.

## 1839 a. Callopistria guttulalis, n. sp.

c. Fore wing with the outer margin excised below apex and excurved at middle. Very pale rufous marked with dark brown; thorax and basal area of fore wing pencilled by dark edges to groups of scales; a large dark brown anal tuft. Fore wing with an ill-defined oblique dark subbasal streak; a medial dark line acutely angled to lower angle of cell; a large indistinct reniform spot, with the minutely dentate double postmedial line bent outwards round it; an indistinct minutely dentate pale submarginal line and some dark lunules on margin; some pale specks on costa towards apex. Hind wing pale, with fuscous suffusion on outer area. Hab. Ceylon (Pole). Exp. 26 millim. Type in B. M.

- Genus Caradrina.—Sect. I. A, c. Hind wing of male with veins 3, 4 stalked; a ridge of closely-set upturned scales in cell and another on vein 1 b; inner margin with tufts of long hair.
- 1874 a. Caradrina lophophora, Hmpsn. Trans. Ent. Soc. 1895, p. 299.
- 3. Differs from quadripunctata in having two white specks at end of cell of fore wing; the postmedial line excurved round end of cell.
  - Hab. Nágas. Eup. 26 millim.
- 1947. Nonagria fuscovirens = N. (Isochlora) viridis, Staud. Rom. Mem. v, pp. 88 & 161, pl. viii, fig. 9; which has precedence. Antenna of male bipectinate.
- Vol. II, p. 287. Phycidomorpha=Rhangena, Moore, Lep. Ceyl. iii, p. 376 (1886).
- 1955. Insert Rhangena roseipennis, Moore, Lep. Ceyl. iii, p. 375, pl. 184, fig. 12; C. & S. no. 4735; which has precedence.
- 1958. L. cygnus = Leocyma tibialis, Fabr. Syst. Ent. p. 578 = L. diana, Guen. Noct. ii, p. 213; C. & S. no. 1783.
  Formosa; Tahiti; Tenga; New Caledonia.
- 1960 a. Leocyma pilcheri, n. sp.
- 3. Head and thorax white above, black below; palpi and antennæ black; paired metallic blue-black spots on collar, meso-and metathorax; legs black ringed with white; abdomen fuscous. Fore wing white; three blue-black spots on basal half of costa and three on apical half, one joined to a large discocellular spot; a small round spot in cell, one on vein 1 near base; one antemedial and three postmedial conical spots on inner margin; a small spot on cilia below apex and another above outer angle. Hind wing fuscous, with marginal white band. Underside fuscous, the marginal and inner areas white; a white postmedial spot to fore wing and incomplete medial band to hind wing.

Hab. Sikhim (Pilcher). Exp. 36 millim. Type in B. M.

- 1966-67. Diphthera vigens and D. pallida. Antennæ of male with short branches.
- 1969 a. Perciana rectilineata, n. sp.
- Q. Head, thorax, and fore wing dark brown with a purplish tinge, the last with oblique straight dark-edged ochreous ante- and postmedial lines; traces of a waved dark submarginal line; abdomen and hind wing fuscous.

Hab. Sikhim (Dudgeon). Sap. 30 millim. Type in B. M.

- 1969 b. Perciana fuscobrunnes, Hmpsn. Trans. Ent. Soc. 1895, p. 299.
- c. Head, thorax, and abdomen clothed with brown and fuscous scales. Fore wing brown; a large fuscous patch on basal half of

wing except on unner area; a waved black antemedial line; small tufts of black scales at middle and end of cell; a sinuous medial line bent inwards on median nervure; a fuscous apical patch defined by an oblique dark streak; a waved series of pale submarginal specks and marginal series of black lunules. Hind wing fuscous.

Hab. Bhután. Exp. 28 millim.

## 1977 a. Bryophila obliquifascia, Hmpsn. Trans. Ent. Soc. 1895, p. 299-

3. Greyish white with a green tinge; palpi fuscous at sides; the anal tuft ochreous. Fore wing with outwardly oblique black band with sinuous edges, terminating on vein 1 and bent outwards along it to join the crenulate submarginal line, which is excurved beyond cell and incurved below vein 2; a black spot at upper angle of cell with dark mark on costa above it; a black speck at lower angle of cell; a dark costal spot beyond the postmedial line; a marginal series of specks and spot above outer angle. Hind wing with indistinct discocellular dark lunule and highly curved postmedial line, both more distinct on underside.

Hab. Bhután. Exp. 32 millim.

## 1991 a. Erastria distigmata, n. sp.

Fuscous brown with a cupreous tinge; vertex of head and end of 2nd joint of palpi pale; tarsi with pale rings. Fore wing with short white subbasal line from costa; an antemedial series of white specks arising from a short costal line; a white annulus at upper angle of cell and round spot at lower; a postmedial minutely waved white line prominent at costa and bent outwards beyond end of cell; a waved white submarginal line. Underside with the costal and outer areas of fore wing grey. Hind wing grey, with black discocellular lunule, prominent crenulate postmedial line, and obsolescent submarginal line.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 34 millim. Type in B. M.

# 1991 b. Erastria picta, n. sp.

3. Pale red-brown; palpi at sides and patagia slightly marked with black. Fore wing with an olive tinge; the basal half of costal area fuscous; a sinuous dark antemedial line, bent outwards below cell; the orbicular, reniform, and claviform with bright pink scales on them; the area below end of cell suffused with black; a dark postmedial line angled outwards beyond end of cell, where there are a few pink scales on it, and inwards on vein 1, the area beyond it suffused with white; an oblique shade from apex and a diffused black submarginal line on medial area; cilia of both wings chequered black and white. Hind wing more ochreous, with traces of postmedial line; some dark scales on inner area and three dark marginal marks on median nervules.

Hab. Khásis. Exp. 24 millim. Type in B. M.

- Vol. II, p. 304 Hyelopsis=Maliattha, Wlk. Cat. xxvii, p. 86 (1863), which has precedence. Type, M. separata, Wlk.
- 1998. Hyelopsis renalis = Maliattha separata, Wlk. Cat. xxvii, p. 86. Sikhim; Borneo.

### 2023 a. Tarache eulepidea, n. sp.

Q. Cretaceous white; head and thorax irrorated with brown and fuscous scales; abdomen tinged with ochreous, the 1st segment suffused with fuscous. Fore wing with the basal area irrorated with brown and a few black scales; a double sinuous antemedial black line almost obsolete except near inner margin; a double sinuous postmedial black line very much excurved between costa and vein 2; the area between the ante- and postmedial lines suffused with blue-grey, olive-brown, and black, and with a black O-shaped mark on disk; outer area with large brown patches beyond the postmedial line at costa and inner margins, and small patch beyond the bend; an irregularly sinuous white submarginal line; the margin and cilia blue-grey. Hind wing fuscous; the cilia pale.

Hab. Puttalam, Ceylon (Pole). Exp. 22 millim. Type in B. M.

2036. For "Berget. Ins. Suec. i, p. 16" read "Linn. Syst. Nat. i, 2, p. 881."

### 2037 a. Tarache nigritula, n. sp.

Q. Black-brown. Fore wing with indistinct waved black and brown antemedial line; a yellowish-white speck in cell; a large yellowish-white patch just beyond middle, joined to the costa by three specks; an indistinct dentate black and brown postmedial line excurved round the white patch; a white speck on costa before apex; an indistinct waved submarginal line, the area beyond it variegated with brown and ochreous; a marginal series of black specks and an ochreous patch at outer angle. Hind wing fuscous.

Hab. Sind (Nurse); Puttalam, Ceylon (Pole). Exp. 18 millim. Type in B. M.

# 2049 a. Xanthoptera combusta, Hmpsn. Trans. Ent. Soc. 1895, p. 800.

Q. Ochreous, dark rufous, and fuscous; thorax mostly ochreous. Fore wing with the base dark; an ill-defined ochreous band before the diffused dark antemedial band; the medial area, except the costa and the disk, ochreous, with a dark spot on vein 2; an indistinct double sinuous postmedial line; a dark patch on outer margin from costa to vein 3, and a dark patch on inner margin from the postmedial line to outer margin. Hind wing with the basal two-thirds ochreous, suffused and irrorated with rufous; a sinuous antemedial line with discocellular annulus on it; the outer third dark rufous with indistinct sinuous submarginal line.

Hab. Bhután. Exp. 24 millim.

#### SECT. III. Antennæ of male bipectinated, with short stiff branches.

- 2054 a. Xanthoptera pectinicornis, Hmpsn. Trans. Ent. Soc. 1895, p. 300.
- d. Head and thorax rufous; abdomen pale. Fore wing rufous brown slightly suffused with fuscous; the orbicular and reniform represented by a few ochreous scales; a series of dark submarginal marks forming an indistinct line. Hind wing pure white, the costal and apical areas tinged with fuscous.

Hab. Calcutta; Ceylon. Exp. 18 millim.

## 2080 a. Metachrostis metallica, n. sp.

Q. Head and thorax black and chestnut-brown; abdomen black with pale rings. Fore wing with the basal area chestnut, with some black at base and a black antemedial line; the medial area black, with bands of leaden-grey suffusion on its edges; darkedged pale brown marks representing the orbicular and reniform: a pale brown and black minutely waved and curved postmedial line; outer area dark brown and black, with interrupted submarginal band of leaden suffusion; an ochreous marginal line; some pale specks on costa towards apex. Hind wing black-brown.

Hab. Ceylon (Pole). Exp. 22 millim. Type in B. M.

## 2080 b. Metachrostis albimarginata, n. sp.

Q. Pale ochreous irrorated with brown. Fore wing with indistinct double sinuous antemedial brown line; the reniform with fuscous centre and black edge, and a diffused waved black line from its inner side to inner margin, the area beyond it purplebrown; the black postmedial line very oblique from costa to vein 6, then sinuous and at vein 4 incurved, the area beyond it white, with a black patch on costal half between the postmedial and sinuous fuscous submarginal line. Hind wing fuscous brown, with diffused fuscous submarginal line, the area beyond it whitish especially at apex; both wings with a marginal black line; cilia fuscous and white.

Hab. Bhuj, Cutch (Nurse). Exp. 16 millim. Type in B. M.

- Genus Rivula.—SECT. II bis. Mid tibix of male with very long scales on inner side; hind tibiæ fringed with spinous hair on outer side.
- 2103 a. Rivula striatura, Swinh. Trans. Ent. Soc. 1895, p. 49, pl. i, fig. 10.
- 3. Pale brownish ochreous. Fore wing with obscure brown streaks at base and on veins of outer area; a dark speck at end of cell, with oblique pale striga from costa above it, and oblique rufous-brown band from it to inner margin near base; an obliquely

waved postmedial line merging into a fuscous subapical patch; some pale strigge on costa towards apex; a subapical black speck and marginal series of specks. Hind wing fuscous; the ciliarufous.

2 with the markings bright rufous; hind wing darker. Hab. Khásis. Exp. 22 millim.

- 2103 b. Rivula leucosticta, Swinh. Trans. Ent. Soc. 1895, p. 49, pl. i, fig. 1.
- J. Bright rufous. Fore wing with basal white spot on costa; three oblique antemedial white spots; a medial white spot on costa, with a large spot below it at upper angle of cell; a postmedial irregular series of dark specks with white centres, and a submarginal regular series of similar specks. Hind wing fuscous; the cilia rufous.

Hab. Khásis; Ceylon. Exp. 24 millim.

2114. E. vrryinea = Eublemma ragusana, Freyer, Neue Beitr. v, p. 92, from Europe, which has precedence.

# 2130 a. Eublemma rubiginea, Hmpsn. Trans. Eat. Soc. 1895, p. 300.

3. Dark rufous; head and collar blackish. Fore wing with slightly waved ochreous antemedial line; two black specks on discocellulars: an ochreous postmedial line with white spot on it at costa, highly angled below costa, then straight and oblique; an indistinct ochreous submarginal line angled at vein 3; an ochreous line at base of cilia; four white specks on costa towards apex. Hind wing with straight ochreous medial line and traces of dentate submarginal line; a fine ochreous line at base of cilia.

Hab. Bhután. Exp. 20 millim.

# 2130 b. Eublemma reticulata, n. sp.

Q. Reddish brown suffused with grey. Fore wing with antemedial grey line, highly angled below costa and sending a streak along subcostal nervure to join the grey postunedial line, which is outwardly oblique from costa to vein 6, then curved and running to middle of inner margin; a prominent round black discoccilular spot; some pale striæ on costa towards apex, with a dark spot below them; a minutely crenulate grey submarginal line, with black in its sinuation. Hind wing with faint traces of sinuous postmedial line and of submarginal series of black specks.

Hab. Ceylon (Pole). Exp. 18 millim. Type in B. M.

# 2130 c. Eublemma coccidiphaga, n. sp.

White suffused with pale purplish pink; head chestnut. Fore wing with indistinct curved sinuous antemedial, medial, and postmedial lines arising from brown spots on the costa, the medial line enclosing a more or less developed dark discocellular spot;

the apical part of costa brown, with some white specks on it; a minutely dentate white submarginal line excurved at middle, and with some black specks on it below costa. Hind wing with a pale medial line, slightly excurved at middle; both wings with brown marginal line; the cilia purple at tips.

Some specimens have the medial area of both wings suffused with purple-brown except on costal area of fore wing, the disco-

cellular spot white.

Larva like the figure of the European E. scitula, 'Insect Life,' vi, i, p. 6; colour pinkish or greenish. Feeds on various species of Coccids such as Lecanium and Pulvinaria; living in a case formed of their remains, the case of the young being formed of a single scale to which additions are made as required, and having a four-sided valve at anterior end.

Hab. Ceylon (Green, Pole). Exp. 24 millim. Type in B. M.

#### 2131 a. Eublemma acrapex, n. sp.

Q. Fuscous, thickly irrorated with grey. Fore wing with the apex produced and acute; a pale sinuous antemedial line angled below costa, then inwardly oblique; a slight pale discocellular mark; a pale postmedial line, very much excurred from costa to vein 2, where it is angled; a dark patch on the costa with three white specks; an indistinct highly dentate submarginal pale line. Hind wing with indistinct sinuous postmedial and highly dentate submarginal lines.

Hab. Coylon (Pole). Exp. 22 millim. Type in B. M.

# 2134 a. Troctoptera bisectalis, Wlk. Cat. xvii, p. 449; Moore, Lep. Ceyl. iii, pl. 179, fig. 12; C. & S. no. 4403.

Whitish: abdomen slightly tinged with pink and fuscous. Fore wing with pinkish patch near base from cell to inner margin; an antemedial black line outwardly oblique from costa to median nervure, then bent inwards; a prominent inwardly-oblique black medial band, with a speck before it in cell, one beyond it on costa, and two on discocellulars; a reddish patch on inner margin before outer angle; a marginal series of black specks. Hind wing with black antemedial line, with a pink and black patch beyond it and beyond end of cell bearing a white discocellular spot; a sinuous postmedial black line, the area beyond it purplish pink, with a black spot near anal angle; the cilia whitish.

Hab. Ceylon. Exp. 16 millim.

# 2134 b. Troctoptera deleta, Moore, Lep. Ceyl. iii, p. 304, pl. 179, fig. 13; C. & S. no. 4404.

White; the thorax, abdomen, and fore wing suffused with pale yellow-brown, the last with traces of curved antemedial line; a black speck in cell; an oblique red-brown band across apical area not reaching outer margin, and usually with a dark spot at its

lower end and with traces of a pale line from it to inner margin; a pale line just inside the margin angled at vein 4. Hind wing with the apical and anal areas suffused with yellow-brown; traces of an antemedial brown line; two black discocellular specks; an indistinct sinuous brown postmedial line ending on outer margin above anal angle, and usually with more or less diffused black beyond its lower part.

Hab. Ceylon. Exp. 12 millim.

Vol. II, p. 344. Zagira = Zurobata, Wlk. Cat. xxxiv, p. 1276. Type, Z. rorata, Wlk.

### 2135 a. Zurobata fissifascia, n. sp.

2. Differs from irrecta in the thorax being rufous, with a grey band behind the collar; abdomen without grey basal band. Fore wing with the grey costal fascia not extending below the cell, terminating at its end and emitting slight streaks along subcostals and vein 5, met by an oblique streak from the apex; the highly angled postmedial line white, sharply defined, and not sinuous. Hind wing with almost straight medial white line.

Hab. Ceylon (Pole). Exp. 22 millim. Type in B. M.

#### 2139 a. Zurobata plagiostola, n. sp.

Q. Differs from reticulata in being dark red-brown; head and collar red-brown: abdomen with a white line on 1st segment. Fore wing with slight grey suffusion on basal and costal areas; one subbasal dark speck in cell; the postmedial line prominent, highly excurved beyond cell, and with an oblique white line from it to outer margin, met by a white line with three of the marginal black specks on it below apex. Hind wing with the postmedial grey line prominent; an indistinct waved submarginal line instead of the angled white line.

Hab. Bhután (Dudgeon). Exp. 26 millim. Type in B. M.

- 2140. Zagira multiguttata = Zurobata rorata, Wlk. Cat. xxxiv, p. 1276; both generic and specific names having priority.
- 2144 a. Corgatha carnosa, Hmpsn. Ill. Het. ix, p. 150, pl. 169, fig. 9.
- Q. Flesh-pink, sparsely irrorated with fuscous; head and collar fulvous. Fore wing with the costa fulvous; a dark spot in cell and one at each angle; several oblique lines from below cell to inner margin; three oblique lines from apex to middle of inner margin, with a pale line between the two outer. Hind wing with these lines continued across it and situated on a more or less prominent band of brown suffusion; each wing with two dark submarginal lines, with a pale line between them; a pale line at base of cilia.

Hab. Ceylon. Exp. 22 millim.

- 2144 b. Corgatha costipicta, Hmpsn. Trans. Ent. Soc. 1895, p. 300.
- Q. Fuscous; head ferruginous, with white spot on vertex. Fore wing with the costa fuscous and pink, with subbasal, antemedial, postmedial, and apical white spots, both wings with marginal series of dark specks. Underside with traces of curved dark postmedial line on each wing.

Hab. Sikhim. Exp. 16 millim.

2145. Corgatha costinotalis=C. (Hyria) quadricostaria, Wlk. Cat. xxii, p. 667; which has precedence. Ceylon; Borneo.

#### 2145 a. Corgatha castanea, n. sp.

Chestnut. Fore wing with indistinct antemedial and medial series of black specks; a postmedial series of black specks conjoined to an indistinct waved line highly angled below costa. Hind wing with ante- and postmedial series of specks; both wings with a prominent marginal series.

One specimen has the head black, some black on abdomen and basal half of costa of fore wing; a large patch on outer margin below apex, and some diffused black markings on anal area of hind wing; some white specks on ante- and postmedial lines of fore

wing and postmedial line of hind wing.

Hab. Ceylon (Pole). Exp. 24-26 millim. Type in B. M.

### 2146 a. Corgatha castaneiceps, n. sp.

3. Grey, irrorated with black and with a very slight rufous tinge; head and collar chestnut. Fore wing with black speck in cell; traces of a sinuous antemedial line angled below costa; a discocellular spot formed by black points; a postmedial brown line with pale outer edge excurved from costa to vein 3; a submarginal series of black specks. Hind wing with nearly straight brown medial line and submarginal series of black specks; outer area of both wings browner. Underside slightly suffused with pink.

Hab. Ceylon (Pole); Borneo. Exp. 20 millim. Type in B. M.

#### Genus MIMORUZA.

Mimoruza, Hmpsn. Trans. Ent. Soc. 1895, p. 301.

Type, M. nigriceps, IImpsn.

Range. Sikhim.

Differs from Coryatha in the fore wing having no areole; veins 8, 9 stalked; 7 from cell. Hind wing with veins 3, 4, and 6, 7 from angles of cell.

SECT. I. Fore wing with vein 10 from cell.

- 2147 a. Mimoruza nigriceps, Hmpsn. Trans. Ent. Soc. 1895, p. 301.
  - 2. Brownish ochreous irrorated with fuscous; head black

abdomen with black band on basal segment. Fore wing slightly



Fig. 270.
Mimoruza nigriceps, Q. 4.

suffused wth fuscous; some black specks on costa; an obscure pale spot in end of cell; traces of minutely dentate antemedial, medial, postmedial, and submarginal lines; a marginal series of black specks. Hind wing with two black specks at end of cell; two nearly straight medial lines; some fuscous suffusion on outer

area; a marginal series of black specks.

Hab. Sikhim. Exp. 20 millim.

SECT. II. Fore wing with vein 10 stalked with 8, 9.

### 2147 b. Mimoruza rosealis, n. sp.

Q. Head, thorax, and abdomen white; palpi and frons fulvous and black; wings white slightly suffused with pink, the outer margin excised below apex and angled at middle. Fore wing with traces of waved brown antemedial and medial lines, the latter with a black patch beyond it at lower angle of cell, and an olive-brown patch on inner area; a pink speck in cell and black speck on discocellulars; a triangular olive-brown patch on costa before apex, and a semicircular patch on apical half of outer margin, a series of black specks on margin. Hind wing pinker, with medial and curved postmedial ill-defined lines; a black speck at lower angle of cell; the margin and cilia rufous.

Hab. Bhután (Dudgeon). Exp. 18 millim. Type in B. M.

### 2149. Oruza ruptifascia = 2154. O. lycaugesaria.

2150. Oruza fratercula = 2156. O. pallescens=0. (Phibalapteryx) hydrocampata, Guen. Phal. ii, p. 438; C. & S. no. 3900, which has precedence, = Acidalia posticaria, Wlk. Cat. xxxv, p. 1633, from Australia.

2153. Oruza anisodoides = **0**. (Lycauges) **postvittata**, Moore, Lep. Ceyl. iii, p. 456, pl. 201, fig. 12; C. & S. no. 3757.

#### Genus TROGACONTIA, nov.

Type, T. albifrontata, Moore.

Range. Sikhim.

Q. Palpi with the 2nd joint clothed with hair and reaching beyond the short frontal tuft, the 3rd minute; antennæ ciliated. Fore wing with the apex acute; the outer margin excised from apex to vein 4. Veins 7, 8, 9, 10 stalked. Hind wing with the outer margin slightly angled at vein 4; veins 3, 4, and 6, 7 from angle of cell.

2156 a. Trogacontia albifrontata, Moore, Lep. Atk. p. 255; C. & S. no. 3989.



Fig. 271.
Trogacontia albifrontata, Q. 1.

Q. Pale rufous; the vertex of head white. Fore wing with oblique ante- and postmedial lines; the costa and outer margin bright rufous; three white strigæ on costa beyond middle. Hind wing with medial and marginal rufous lines; cilia of both wings white at tips.

Hab. Sikhim. Exp. 24 millim.

#### Genus MICRACONTIA.

Micracontia, Hmpsn. Trans. Ent. Soc. 1895, p. 301.

Type, M. batisella, Hmpsn.

Range, Ceylon.

Palpi slender, porrect, and reaching beyond the frons; antennæ of male ciliated; tibiæ naked, with the spurs long. Fore wing with the apex somewhat produced; the outer margin rounded; vein 6 from well below upper angle of cell, 7 from the angle; 8, 9, 10 stalked. Hind wing with veins 3 and 4 from angle of cell.

2158 a. Micracontia batisella, Hmpsn. Trans. Ent. Soc. 1895, p. 302.

3. Dull olive-green with a rufous tinge: the vertex of head



Fig. 272.—Micracontia batisella, &. . .

and base of shaft of antennæ white. Fore wing with white speck on costa near base, large medial and postmedial pure white spots edged with red, and a similar spot at apex with red streak in centre; a large white patch at middle of inner area with red edge and round

red centre. Hind wing with indistinct postmedial series of rededged white specks incurved below vein 2. Both wings with maculate black marginal line and the cilia ferruginous.

Hab. Ceylon. Exp. 10 millim.

# 2159 a. Micræschus albinellus, n. sp.

Q. Differs from elatarius in the ground-colour being pure white. Fore wing with a few pink scales; an ill-defined dark fascia from below costa near base to outer angle; the costa towards apex yellow with a dark speck on it; a dark band across apex and dark marginal band with series of crimson specks on its inner edge; cilia yellow, fuscous at middle. Hind wing with two waved crimson and yellow lines; a dark marginal band suffused with silvery blue and with a crimson band on its inner edge; the cilia yellow.

Hab. Ceylon (Green). Exp. 10 millim. Type in B. M.

- 2174. Callyna? picta and the generic name Calymera must be referred to Carea, after albopurpurea, no. 2340, and will stand as Carea picta.
- 2180 a. Westermannia colisigna, Hmpsn. Trans. Ent. Soc. 1895, p. 303.
- Q. Differs from cornucopia in being grey without pink tinge. Fore wing with the comet-shaped mark extending up to the costa and its apex terminating on vein 1, its colour much browner, an elongate ochreous reniform spot on it with traces of a sinuous grey line beyond it; the indistinct submarginal line minutely dentate. Hind wing and underside grever.

Hab. Bhután. Exp. 30 millim.

- 2186 a. Brevipecten purprecotinctus, Hmpsn. Trans. Ent. Soc. 1895, p. 303.
- of. Head and thorax purplish fuscous, some of the scales tipped with grey; palpi white in front; abdomen fuscous brown. Fore wing with the basal half rufous brown, slightly tinged with fuscous at base and on inner margin; a fine oblique slightly sinuous antemedial line; the outer half suffused with purplish fuscous, bounded on inner side by a black-brown triangular mark from costa to lower angle of cell, below which is a crescentic mark with its hollow towards outer margin, then a curved line to inner margin; a fine sinuous postmedial line bent inwards at vein 2 and joining the medial markings at inner margin; a truncate triangular black-brown mark on costa before apex. Hind wing fuscous with a rufous tinge; the ciha white in parts; underside with the inner half hoary.

Hab. Simla. Exp. 32 millim.

- 2186 b. Brevipecten cosmiodes, Hmpsn. Trans. Ent. Soc. 1895, p. 304.
- Q. Reddish brown, irrorated with black and with a slight purple tinge. Fore wing with outwardly oblique antemedial and medial brown lines, with the orbicular between them; the reniform fuscous; fuscous suffusion on costal area from medial line to apex; a postmedial brown line highly angled at vein 5, then inwardly oblique and almost touching the medial line at inner margin; an indistinct waved submarginal line and fine marginal line. Abdomen and hind wing fuscous, the latter with the cilia greyish. Underside fuscous suffused with grey; both wings with indistinct ante- and postmedial curved lines.

Hab. Bhután; Ceylon. Exp. 34 millim.

### Genus METAPTYA, nov.

Type, M. sericea, Hmpsn.

Range. Cevlon.

Palpi upturned, smooth, slender, and reaching just above vertex

of head; antennæ of male ciliated; thorax with a slight crest behind collar and a long sharp crest on metathorax; abdomen with a large dorsal tuft on 2nd segment; mid tibiæ fringed with hair; hind tibiæ with a slight terminal tuft. Fore wing with the costal and inner margins arched; the outer margin very slightly angled at vein 4; veins 9 and 10 anastomosing with 8, which is given off from 7 to form the arcole. Hind wing with vein 5 from just above angle of cell; a fan of large thick scales at anal angle. Retinaculum in male bar-shaped.

#### 2186 a. Metaptya sericea, n. sp.

d. Pale grey-brown slightly irrorated with fuscous. Fore



Fig. 273.—Metaptya sericea, &.

wing with curved anteand postmedial fuscous lines, the latter with pale outer edge; a dark discocellular speck; an indistinct sinuous fuscous submarginal line; the apex with slight rufous tinge. Hind wing paler; the apical area slightly

tinged with fuscous; a fuscous mark with white speck on it above the tuft at anal angle.

Hab. Ceylon (Pole). Evp. 22 millim. Type in B. M.

### 2187 a. Doranaga soliera, Swinh. A. M. N. H. (6) xv, p. 7.

3. Differs from leucospila in the oblique line being obsolescent except that the portion retracted to costa is white; the apical white patch obsolete and replaced by white suffusion which extends over the whole outer area. Hind wing ochreous, suffused with fuscous on outer area.

Hab. Khásis. Exp. 24 millim.

#### Genus ANODONTODES.

Anodontodes, Hmpsn. Trans. Ent. Soc. 1895, p. 302.

Type, A. rotunda, Hmpsn.

Range. Sikhim.

- Q. Palpi slender, porrect, and reaching beyond the frons; antennæ ciliated; eyes naked; thorax and abdomen smoothly scaled; tibiæ hairy. Fore wing with the apex rounded; the inner and outer margins forming a continuous curve. Hind wing with vein 5 from above angle of cell.
- 2191 a. Anodontodes rotunda, Hmpsn. Trans. Ent. Soc. 1895, p. 802.
- Q. Head, thorax, and abdomen chestnut; the tegulæ reddish ochreous. Fore wing reddish ochreous; the costa and apex suffused with fuscous; traces of antemedial, medial, and two

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postmedial obliquely curved and slightly waved lines, a dark patch



Fig. 274.—Anodontodes rotunda, Q. |.

Hab. Sikhim. Exp. 46 millim.

inside the first below the median nervure; the reniform indistinct with a dark patch beyond it; the outer margin fuscous and chestnut, with a waved blue-grey line on it. Hindwing fuscous. Underside suffused with fuscous; each wing with cell-spot and two indistinct postmedial lines.

### 2193 a. Homodes fulva, n. sp.

&. Fulvous with a purplish tinge. Fore wing with the basal area irrorated with silvery purple scales; silvery purple sinuous antemedial, medial, and postmedial lines, the last excurved beyond cell, and with an indistinct dark line beyond it; a submarginal series of silvery purple spots with a tawny band inside them; a tawny marginal band, with a double series of fine black marginal striæ. Hind wing with straight antemedial and medial bands, the markings of outer area as on fore wing.

Hab. Ceylon (Pole); Borneo. Exp. 24-30 millim. Type in B. M.

### 2195 a. Gadirtha pulchra, Butl. Trans. Ent. Soc. 1886, p. 412.

Grey; collar with a narrow black line; patagia and metathorax tipped with black; abdomen with black lunule on terminal segment. Fore wing striated with fuscous and variegated with pale olive, and in cell with pale pink; a prominent nearly straight antemedial black line with indistinct irregular line on its outer edge; orbicular large and obscure; reniform large, black-edged, with brown lunule at centre and dark costal mark above it; a prominent black postmedial line from costa to outer margin at vein 1, along which it is retracted, and reaches inner margin beyond middle and almost joined by a short oblique band from costa to vein 7. Hind wing white, the veins towards margin and marginal area, especially at apex, fuscous.

Hab. Ceylon; Australia. Exp. 52 millim.

- 2199. Plotheia celtis; ♂ differs from the ♀ in the thorax and fore wing being much darker.
- 2199 a. †Plotheia stigmatophora, Hmpsn. Trans. Ent. Soc. 1895, p. 305.
- 3. Differs from celtis in the fore wing being without the two raised tufts of scales between postmedial line and outer angle. Hind wing suffused with fuscous brown; the inner area expanding into a large folded lobe containing a tuft of long hair; underside

<sup>†</sup> Described (Vol. II, p. 370) as the male of celtis.

with a large black-brown patch below median nervure from near base to inner margin.

Hab. Sikhim. Eap. 22 millim.

### 2203 a. Plotheia nigralba, Hmpsn. Trans. Ent. Soc. 1895, p. 305.

J. Fuscous black. Fore wing with large white patches at middle of costa and just before apex, enclosing black spots on the costa; indistinct waved subbasal, antemedial, postmedial, and submarginal black lines; a marginal series of grey specks.

Hab. Bhután. Exp. 26 millim.

Genus Barasa.—Sect. II. Fore wing with vein 7 from beyond the areole; male with no tuft of hair from vein 1.

#### 2218 a. Barasa alopha, n. sp.

Differs from acronyctoides in the antemedial line of fore wing being nearer the base and curved; the postmedial line nearer the base, angled inwards below the cell and outwards on vein 1.

Hab. Tanna, Bombay; Puttalam, Ceylon (Pole). Exp. 24 millim. Type in B. M.

#### 2218 b. Barasa costalis, Dudgeon, Hmpsn. Trans. Ent. Soc. 1895, p. 305.

White, slightly tinged with fuscous; palpi with the 2nd joint black at sides. Fore wing with short fuscous subbasal line; fine waved antemedial line; spot in cell; double waved medial line; irregularly dentate postmedial and submarginal lines ending close together near outer angle; a slight fuscous shade inside the margin; black specks on costa at origin of lines. Hind wing pale fuscous; underside of fore wing darker fuscous.

Hab. Sikhim; Bhután. Exp. 26 millim.

#### 2218 c. Barasa floccifera, n. sp.

3. Greyish white suffused with brown. Fore wing irrorated with a few black scales; a short black bar from base of costa; tufts of raised scales on the traces of antemedial line, in end of cell, and on the faint postmedial line, which is incurved from vein 4 to inner margin. Hind wing with some brownish hair on base of inner area; underside with indistinct sinuous postmedial line.

Hab. Bhután (Dudgeon). Exp. 26 millim. Type in B. M.

#### 2222 a. Blenina minor, n. sp.

9. Head and thorax white and fuscous; palpi banded with fuscous; abdomen tinged with fuscous. Fore wing white, irrorated with a few black scales; the inner area near base and beyond middle irrorated with olive scales; a quadrate fuscous patch near base of costa; sinuous anto- and postmedial black lines, with a quadrate fuscous patch between them on costa diffused down to vein 1; a black discocellular spot; the postmedial line arising from a fuscous

costal patch; an irregularly sinuous submarginal line; a fuscous patch on outer margin below apex. Hind wing pale fuscous.

Hab. Udagama, Ceylon (Mackwood). Exp. 26 millim. Type in B. M.

### 2222 b. Blenina xantholopha, n. sp.

3. Head and thorax grey irrorated with brown; palpi black at sides; collar edged with black; abdomen pale at base, the medial part fuscous, the extremity grey. Fore wing grey irrorated with brown; small sulphur-yellow tufts below base of median nervure, and on the small black-edged orbicular and at lower end of the large reniform; an obscure waved black subbasal line; a dentate black antemedial line becoming broad below the cell, the area before it tinged with rufous; a highly dentate irregular medial line; a postmedial dentate line excurved beyond cell and crossed by a pale brown line: a very irregularly dentate submarginal black line with white patch on it at costa; the veins streaked with black just inside margin; the costal and apical part of outer area tinged with rutous. Hind wing pale at base, the outer half suffused with black.

Hab. Khásis. Ecp. 38 millim. Type in B. M.

SECT. I. B.—Hind wing of male with the area near anal angle contorted and with tufts of long hair above and below; the veins beyond lower angle of cell and vein 6 fringed above with hair; veins 3, 4 on a long stalk in male, coincident in female.

### 2222 c. Blenina metalophota, n. sp.

Differs from *minor* in the abdomen being fuscous and fringed with white towards extremity. Fore wing with no definite fuscous patch between the ante- and postmedial lines, the latter recurved to costa; a marginal series of black specks. Hind wing paler and semihyaline; the tufts of hair in male fuscous and ochreous.

Hab. Khásis Exp. 36 millim. Type in B. M.

- Vol. 11, p. 380. Argyrothripa=Ptisciana, Wlk. Cat. xxxiii, p. 912 (1865).
- 2225. Argyrothripa lilacina = Ptisciana seminivea, Wlk. Cat. xxxiii, p. 912. Borneo.
- 2226 a. Ptisciana olivana, Swinh. A. M. N. H. (6) xvii, p. 362.
- Jark olive-green; head grey. Fore wing with traces of waved lines on basal area and of a rufous antemedial band from costa to below cell; a white discocellular line; a semicircular dark purplish patch occupying most of outer area, crossed by two curved lines with dark-red suffusion on their outer side, and by a dentate submarginal line with a black speck on it below apex. Abdomen and hind wing black-brown. Underside black-brown; the costa of fore wing pale.

Hab. Khasis. Exp. 28 millim.

#### 2232 a. Ptisciana niphea, n. sp.

Q. Head and thorax pure white; abdomen with an ochreous tinge. Fore wing pure white; a small triangular black subbasal spot on costa with traces of a waved line from it, beyond which are short black streaks in and below cell; traces of a medial waved line, with a fuscous patch beyond it on inner margin; a pale olive-green waved line from before middle of costa to beyond lower angle of cell, then becoming erect; a large fuscous postmedial patch from costa to vein 5, with a tridentate black mark beyond it on the irregular obsolescent submarginal line, which emits two black teeth on veins 2 and 3; a black patch on margin below apex. Hind wing tinged with fuscous towards margin.

Hab. Ceylon (Pole). Exp. 20 millim. Type in B. M.

#### 2232 b. Ptisciana lichenosa, n. sp.

3. Head and thorax white; palpi with rufous and black scales at sides; collar tinged with green; abdomen fuscous. Fore wing with black-edged green patch at base of costa; the basal half white tinged with green, bounded by a waved oblique black line; the outer half reddish brown irrorated with black; a waved postmedial line angled on vein 6; an obscure waved submarginal line; a white apical patch. Hind wing pale suffused with fuscous, especially on apical area.

Hab. Khásis. Exp. 24 millim. Type in B. M.

## Genus DENDROTHRIPA, nov.

Type, D. rufipuncta, Hmpsn.

Range. Kångra; Ceylon.
Palpi upturned, the 2nd joint reaching vertex of head, the 3rd well developed; antennæ of male ciliated; abdomen without dorsal tufts. Fore wing with the apex rectangular; veins 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 stalked; 5 absent.

# 2236 a. Dendrothripa rufipuncta, n. sp.

5. Greyish brown. Fore wing with two somewhat irregular fine black antemedial lines, the area between them somewhat



Fig. 275.

Dendrothripa rufipuncta, 3.

paler; a rufous spot at lower angle of cell, with a tuft of scales below it and an oblique black striga from costa above vein 2; an indistinct minutely dentate postmedial line excurved beyond cell, bent inwards, and with a rufous spot in its sinus below vein 2; traces of a submarginal minutely-dentate black line; a

marginal series of black specks. Hind wing whitish, suffused with brown towards margin; the cilia ochreous.

Hab. Kángra (Hocking). Exp. 20 millim. Type in B. M.

#### 2236 b. Dendrothripa atrifasciata, n. sp.

2. Pale grey-brown. Fore wing with deep black fascia from base of costs along median nervure and expanding at lower angle of cell; indistinct pale ante- and postmedial lines, the latter excurved beyond cell. Hind wing whitish.

Hab. Nawalapitiya, Ceylon (Pole). Exp. 16 millim. Type in B.M.

2242. Clettharra vitea must be placed in a new genus :-

### Genus LOPHOTHÉIPA, nov.

Type, L. vitea, Swinh.

Range. E. Himalayas: Bombay; Ceylon.

Palpi upturned, the 3rd joint long; from with a tuft of scales; antenna simple; metathorax and abdomen with large dorsal tufts

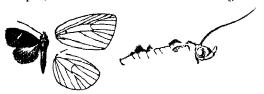


Fig. 276.—Lophothripa vitea, &. 1.

of scales. Fore wing with transverse ridges of scales; veins 8 and 9 anastomosing to form a long arcole. Hind wing with veins 3, 4 stalked; 5 present.

Allied to Chlumetia; one specimen has the basal area of fore wing ferruginous.

2249. Clettharra floccifera is the & of 2237, C. valida.

### 2253 a. Sarrothripa chlorana, n. sp.

3. Head and thorax dark green; abdomen black, with three white dorsal tufts towards base. Fore wing dark green irrorated with black, forming a broad diffused medial fascia, the medial part of which is mixed with rufous and white scales; an obscure white subbasal line running out to an acute angle below cell, where it is connected by a streak with the postmedial white line which arises from costa before middle, runs out to an acute angle beyond cell and is then dentate to inner margin; a ferruginous patch at outer angle mixed with white scales on its inner side, and with a minutely dentate line above it just inside the margin, becoming obsolescent towards costa. Hind wing fuscous black.

Hab. Sikhim (Dudgeon). Exp. 24 millim. Type in B. M.

Vol. II, p. 388. Under Ingura insert Callingura, Butl. Entom. 1894, p. 284, for Sect. II. B.

### 2258 a. Eutelia picticolor, n. sp.

Head ochreous; thorax black variegated with green; abdomen black and brown. Fore wing with the basal area black variegated

with green and brown and crossed by subbasal and antemedial brown lines; the outer half green variegated with pinkish, brown, and fuscous, and crossed by several indistinct lines; a prominent claviform black mark filled-in with brown beyond the cell; the postmedial line angled outwards beyond it, and with a white spot on fuscous patch beyond it on vein 3; a blackish patch on costa before apex and on outer margin below apex. Hind wing dark red-brown; the cilia and some marks near anal angle rufous. Underside fuscous and pale ochreous, variegated on outer area with rufous; hind wing with discocellular spot and four waved lines.

Hab. Nilgiris; Ceylon (Pole). Exp., 3 22, 2 26 millim. Type in B. M.

### 2258 b. Eutelia stictoprocta, Hmpsn. Trans. Ent. Soc. 1895, p. 304.

3. Dark red-brown; abdomen below with a white spot on 2nd segment and another on anal flap. Fore wing with the basal area rather darker, except on costal area which is pale; faint traces of numerous waved oblique lines; the elongate reniform with pale edge and dark centre; traces of the triangular mark on costa before apex. Hind wing with the base pale; the outer area fuscous brown, with a pale mark at anal angle. Underside with the black discocellular lunule very prominent; traces of a minutely dentate postmedial line; some dark and pale marks on inner area near anal angle.

Hab. Sikhim. Exp. 30 millim.

### 2269 a. Eutelia viridinota, Swinh. Trans. Ent. Soc. 1895, p. 52.

3. Reddish brown. Fore wing with the reniform pale green and conjoined to a pale spot on costa; traces of numerous waved lines, of which the most distinct are postmedial and submarginal lines, the former angled at vein 5; a pale-edged chocolate-brown spot on costa before apex. Hind wing fuscous with the base pale; slight dark marks on inner margin above anal angle.

Hab. Sikhim; Khásis. Exp. 34 millim.

# 2281 a. Risoba flavipennis, Hmpsn. Trans. Ent. Soc. 1895, p. 804.

Fore wing with vein 7 from beyond the areole.

Q. Head and thorax orange-yellow; palpi fuscous; antennæ brownish; abdomen pale. Fore wing orange-yellow, very slightly irrorated with dark scales; a dark speck in cell and two on discocellulars; traces of a pale medial line and curved postmedial line; two grey patches on outer margin above and below middle, irrorated and edged with brown. Hind wing yellowish white, with marginal grey-speckled fuscous band not reaching anal angle.

Hab. Bhután. Exp. 38 millim.

2289. Stictoptera chalybea, Butl., will stand for the species, as S. albodentata is a synonym of 2294, Gyrtona hylusalis.

Vol. II, p. 416. Read Ectogonitis for Goniocraspidum, which is preoccupied.

### 2322 a. Churia viridipicta, n. sp.

Grey-brown; vertex of head and collar yellow-green. Fore wing irrorated with black; ante- and postmedial waved fuscous lines; some yellow-green on base of costa and middle of inner area; irregular patches on postmedial line sending off a spur towards apex; a dark discocellular speck; submarginal and marginal series of black specks. Hind wing fuscous.

Hab. Khásis. Exp. 32 millim. Type in B.M.

#### 2336 a. Carea albirufa, n. sp.

of. Differs from purpurea in the head, thorax, and fore wing being bright brick-red; abdomen white suffused with fuscous, the extremity pink. Hind wing pure white; the apical part of margin pink. Underside white; the apical area of both wings pink.

Hab. Puttalam, Ceylon (Pole). Exp. 30 millim. Type in B. M.

#### 2340 a. Carea rectimarginata, n. sp.

Fore wing with the apex acute, the outer margin straight.

3. Head and thorax pale brown, with paired rufous dorsal fasciæ; abdomen pale with a fuscous tinge. Fore wing pale brown irrorated with black, and with an olive tinge on costal area; a rufous fascia on inner margin; a black discocellular speck. Hind wing pale, the inner area suffused with fuscous. Underside irrorated with black and with black discocellular spot to each wing; fore wing with subcostal fuscous fascia.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 36 millim. Type in

P. 427. Beara has the antennæ bipectinate in male for half their length.

# 2357 a. Trisula dudgeoni, n. sp.

Q. Head, thorax, and abdomen variegated with buff-brown and black scales. Fore wing with the basal area buff; with velvety-black patches on costa and inner area and a streak on median nervure, and bounded by a waved black line; the rest of the wing leaden grey; an ochreous stigma in end of cell; pink suffusion on medial area below cell; a highly dentate black postmedial line on a brown ground, and with an oblique diffused black band inside its costal half; a pale-edged black submarginal line, angled inwards at wein 5. Hind wing fuscous and grey, with traces of discocellular lunule and postmedial and submarginal lines, which are more distinct on underside.

Hab. Bhutan (Dudgeon). Exp. 56 millim. Type in B. M.

- 2363. Insert (syn.) Catocala pudica, Moore, 2nd Yarkand Mission, Lep. p. 12; C. & S. no. 2281. Ladákh.
- Vol. II, p. 446. Under Sypna insert Daddala, Wlk. Cat. xxxiii, p. 974 (1865).
- 2385 a. Sypna quadrisignata, Wlk. Cat. xxxiii, p. 974; Waterhouse, Aid, ii, pl. 160, fig. 5.

=replicata, Feld.,=apicalis, Butl.,=plana, Moore,=floccosa,

Differs from 2386, which must stand as Sypna lucilla, Butl.,= obscurata, Butl.,= renisigna, Moore, in the antennæ of male being fasciculate and the hind wing having the apex broadly ochreous. The two species have similar range of variation.

- 2394 a. Hypocala holcona, Swinh. A. M. N. H. (6) xv, p. 9.
- $\mathcal{Q}$ . Differs from biarcuata in the black submarginal line being entirely obsolete.

Hab. Andamans. Exp. 40 millim.

2402. Nyctipao hieroglyphica. The male stridulates loudly in flight, and the abortion of the large glandular scent-organ of the hind wing is probably in connection with the development of this habit.

Before 2405 insert:—

- "SECT. III. Male with no glandular patch or abortion of costal area of hind wing."
- 2406. Nyctipao gemmans. Insert (syn.) Nyctipao ophristiymaris, Hmpsn. Trans. Ent. Soc. 1895, p. 305.
- J. The white submarginal band of both wings replaced by an obscure ochreous line and bidentate white patch on costa of fore wing.

Hab. Bhután. Exp. 76 millim.

- 2408 a. Nyctipao jaintiana, Swinh. A. M. N. H. (6) xvii, p. 362, is the form with the white postmedial line from the Khásis and Jaintia Hills, and is probably a distinct species.
- 2419 a. Polydesma glenura, Swinh. A. M. N. H. (6) xv, p. 10; id. Trans. Ent. Soc. 1895, pl. 1, fig. 4.
- d. Head, thorax, and abdomen yellowish brown, with a few darker brown scales. Fore wing suffused with fuscous brown, leaving the inner area and a diffused oblique submarginal band from apex ochreous brown; somewhat indistinct double waved subbasal and antemedial lines filled-in with ochreous; the orbicular and reniform large and ochreous, the former oblique and oval, the latter with a blackish lunule on it expanding on lower

portion; an indistinct double minutely waved postmedial line excurved beyond cell; some pale specks on costa towards apex; an irregularly dentate and sinuous submarginal pale line, with some dark dentate marks on its inner edge; cilia rufous. Hind wing fuscous, the cilia pale; underside with discocellular spot.

Hab. Khásis. Exp. 50 millim.

2429 a. Polydesma fraterna, Moore, is a small grey-brown form, which may be a distinct species; male with a rounded lobe on inner margin of fore wing.

Hab. Khásis; Bombay; Nilgiris; Ceylon; Australia. Exp.

48 millim.

### 2431 a. Polydesma virens, Butl. Trans. Ent. Soc. 1881, p. 192.

Differs from biformis in the thorax being mostly brown. Fore wing with the green areas irrorated with black; an irregularly waved antemedial black line beyond the subbasal red-brown patch, and an irregularly dentate curved line inside the postmedial red-brown markings, which are continuous; the medial line almost obsolete; some subapical black streaks. Hind wing darker at base, with irregularly sinuous postmedial line.

Hab. Japan; Sikhim. Exp. 48 millim.

2439. Polydesma terminigera. Male with tuft of raised scales on fore wing at base of costa and an oblique flap of raised scales from middle of costa across end of cell. Bhután.

### 2450 a. Melipotis heliothidia, n. sp.

d. Head, thorax, and abdomen white; palpi and metathorax tinged with brown; abdomen with dorsal fuscous bands and two pairs of lateral black spots. Fore wing grey irrorated with rufous; the inner margin whitish; sinuous subbasal and antemedial indistinct brown lines, the latter with some blackish marks inside it; orbicular and renitorm white-edged, the latter obscured by a diffused blackish patch extending to the costa; a postmedial minutely dentate rufous line incurved at vein 3; a submarginal series of prominent dentate black and white spots and a series of marginal black lunules. Hind wing white, with large black discocellular spot; an irregular submarginal black band interrupted at vein 2 and diffused outwards along the veins to the marginal series of black lunules. Underside of both wings with large black discocellular spots.

Hab. Bhuj, Cutch (Nurse). Exp. 36 millim. Type in B. M.

### 2453 a. Lyncestis metaleuca, n. sp.

5. Differs from amphix in the hind wing having no marginal band; a few marginal specks and the veins fuscous towards apex.
Hab. Bhui, Cutch (Nurse). Exp. 31 millim. Type in B. M.

- Vol. II, p. 481. Under Catephia insert *Premusia*, Wlk. Cat. xv, p. 1780 (1858).
- 2464 a. Catephia lichenea, Hmpsn. Trans. Ent. Soc. 1895, p. 306.
- Q. Head, thorax, and abdomen pale brown on vertex, blackish at sides. Fore wing verditer-green suffused with leaden grey; the inner area pale brown; the orbicular small and brownish, the reniform indistinct, with dark edge; traces of numerous waved lines, of which the most distinct is the dark dentate postmedial line and the submarginal line which has some dark dentate marks on it; a marginal series of black specks. Hind wing with the base white, the outer two-thirds black; cilia pale brown. Underside with the basal area whitish; hind wing with black discocellular spot.

Hab. Bhután. Exp. 38 millim.

- D. (Premusia.) Palpi of male with the 3rd joint recurved over head, hollowed-out on inner side, and enclosing tufts of long hair; the tibic with immense tufts and inner margin of hind wing clothed with long hair.
- 2465 a. Catephia intrahens, Wik. Cat. xv, p. 1780.

Head and thorax pale brown and black; abdomen pale brown. Fore wing rufous and blackish brown: a basal green spot; a small quadrate black spot in cell with the rufous orbicular beyond it; a broad postmedial blackish band with waved green edges, its outer edge toothed at vein 4, its inner edge with green band inside it, at vein 2 it is retracted to median nervure and expands into a large patch occupying the whole medial area below the cell; a rufous band beyond the blackish band, with traces of a crenulate dark line on its outer edge. Hind wing with the basal half white; the outer half black. Underside with the basal half of wings whitish, with black discocellular spots.

Hab. Bhután; Borneo. Exp. 46 millim.

**2537**=1777, see p. 510.

2538. The figure represents a new species from the Khásis, which hardly differs from polyspila except in the pectinate antennæ—2538 a. Baniana pectinata, n. sp.

Vol. II, p. 516. Borsippa = Bocula, Guen. Noet. iii. p. 295 (1852), for Sect. III. Type, B. caradrinoides, Guen.

2543 a. Bocula orthosiana = punctilineata = diffisa (Hab. Assam; Burma; Bombay; Nilgiris), which is represented in the figure, belongs to Group A, and is distinct from the more ochreous pallens = marginata from Bengal, Bombay, and Ceylon, with the sexual characters in the male as described.

### 2546 a. Bocula caradrinoides, Guen. Noct. iii, p. 296.

Red-brown. Fore wing with fine oblique slightly sinuous antemedial, medial, and postmedial lines; a black speck in cell, and round discocellular spot sometimes reduced to a black and ochreous speck; a slightly curved ochreous submarginal line with dark outer edge; a prominent marginal series of dark and ochreous specks. Hind wing duller brown; underside with cell-spot.

Hab. Ceylon; Java. Exp. 34 millim.

#### 2552 a. Plecoptera ferrilineata, Swinh. MS.

Q. Leaden grey; the head and collar ferruginous. Fore wing with the medial area irrorated with black scales; an antemedial slightly oblique minutely dentate ferruginous line; the orbicular and reniform dull ferruginous; an obscure medial line highly angled below costa; a diffused postmedial band with dark specks on its outer edge; a marginal series of black specks. Hind wing fuscous; cilia of both wings brown.

Hab. Khásis. Exp. 32 millim.

#### 2552 b. Plecoptera holostoma, Swinh. A. M. N. H. (6) xv, p. 10.

Palpi with the 3rd joint long and reaching far above vertex of head.

3. Differs from *luteiceps* in being grey-brown; head and collar black. Fore wing with the costa ochreous; the ante- and post-medial lines edged with ochreous, the latter further from the reniform and obtusely angled; an indistinct lumulate submarginal line. Hind wing with indistinct medial line; both wings with ochreous line at base of cilia. Underside dark.

· Hab. Bhután; Khásis. Exp. 32 millim.

# 2591 a. Thermesia sthenoptera, Swinh. A. M. N. H. (6) xv, p. 12.

Antennæ with the bristles arising from serrations.

J. Purplish fuscous. Fore wing narrow, with ochreous specks in and at end of cell; traces of waved antemedial line and oblique straight medial line; more prominent crenulate postmedial and submarginal lines. Hind wing with crenulate curved medial line on a diffused rufous patch; a submarginal series of white specks. Underside irrorated with white.

Hab. Khasis. Exp. 30 millim.

- 2605. Insert Isehyja ferrifracta, Wlk. Journ. Linn. Soc. vii, p. 177; which has precedence.
- 2618. Bematha extensa is found in Bhutan and North Borneo.

2642. Insert (syn.) Adris sikhimensis, Butl. A. M. N. H. (6) xv, p. 126; the Sikhim form described in the text.

#### Genus BASILODES.

Basilodes, Guen. Noct. ii, p. 358 (1852).

Type, B. pepita, Guen., from N. America.

Range. Nearctic Region; Bombay.

Palpi straight and porrect, the 2nd joint fringed with hair above, the 3rd hairy, reaching well beyond the frons, which has a large rounded prominence hollowed out in front; antenne thickened and flattened; metathorax with thick tufts of hair; tibiæ slightly hairy; abdomen without dorsal tufts. Fore wing broad; the costa moderately arched; the apex more or less produced; the outer margin excurved at middle; the inner margin lobed near base and slightly at outer angle; the arcole very short; vein 5 of each wing from well above angle of cell.

- 2689 a. Basilodes chrysosticta, Hmpsn. Trans. Ent. Soc. 1895, p. 306.
- Q. Violaceous grey. Fore wing with short subbasal black line from costa; sinuous antemedial and very highly excurved medial lines, terminating in a pale golden-yellow patch extending from cell to inner margin, irrorated with ferruginous and crossed by the double waved ante- and postmedial lines and the single medial



Fig. 277. — Basilodes chrysosticta, Q.  $\downarrow$ .

line; the double waved postmedial line arises from the costa near the apex, below which it crosses a yellow patch and has three white spots on its outer edge, beyond which is a dark submarginal line bent inwards at vein 3, and a single marginal white spot below the apex. Hind wing with a fuscous tinge, whitish on underside.

Hab. Bombay. Exp. 42 millim.

2697 a. Calesia proxantha, Hmpsn. Trans. Ent. Soc. 1895, p. 306.

Hind wing of male with a hyaline streak between the bases of veins 2 and 3, which are bent, and vein 3 shortly stalked with 4.

d. Head and collar orange; the 3rd joint of palpi black; antennæ fuscous; legs orange, with black spots at end of tibiæ; thorax and wings uniform silky mouse-colour; abdomen scarlet.

Hab. Kalewa, Upper Burma. Exp. 36 millim.

### 2706 a. Mecodina ferrugineiceps, n. sp.

J. Very dark brown irrorated with blue-grey; head and collar ferruginous. Fore wing with the base of costal area ferruginous; traces of an antemedial line; a white discocellular line; a sinuous white postmedial line bent inwards to costa and with a non-irrorated band inside it; a dark quadrate patch on costa before apex with ferruginous spot below it. Hind wing with sinuous white medial line; a lunulate rufous submarginal line angled at middle.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 30 millim. Type in B. M.

- Vol. III, p. 8. The figure 4 represents 2725, Zethes perturbans, Wik.
- 2720. Insert (syn.) Sanys flexus, Moore, Lep. Atk. p. 175; C. & S. no. 2764.
- 2722 = Saraca pannosa, Moore, Lep. Atk. p. 182; C. & S. no. 2724.

#### 2723 a. Zethes apicinota, n. sp.

Dark brown and grey, sometimes with a slight rufous tinge. Fore wing with an indistinct waved antemedial line; a postmedial pale line sharply angled beyond cell, then incurved and with diffused fuscous on its inner edge; a pale-edged quadrate dark patch on costa before apex, with three white costal specks on it and with a pale-edged black speck below it. Hind wing with discocellular speck; a pale medial line with a diffused fuscous band on its inner edge and series of pale-edged dentate black marks beyond it, the one above middle large and triangular; both wings with dark marginal line. Underside of both wings with traces of medial and submarginal lines and a minutely waved grey medial line.

Hab. Bhután (Dudgeon); Borneo; Java. Exp. 26 millim. Type in B. M.

- 2725. Omit Saraca pannosa, Moore, from synonymy.
- 2734. Refer Z. costalis to beginning of Egnasia.
- 2739 a. Zethes rufipennis, Hmpsn. Trans. Ent. Soc. 1895, p. 307.
- 3. Ferruginous red; palpi dark; a dark tuft on 1st abdominal segment. Fore wing with slightly darker subbasal band edged by waved pale and dark lines; an irregularly dentate dark antemedial line; the reniform large, ochreous and with dark edges; a double postmedial line highly angled on vein 4 and sending a dark streak from that point to the angle of outer margin, a grey patch

below costa and indistinct crenulate line beyond the double lines; a series of dark specks just inside the margin. Hind wing with discocellular black speck; a double dark postmedial line, with indistinct irregularly crenulate line beyond it; a series of dark specks just inside the margin. Underside greyish.

Hab. Bhután. Exp. 40 millim.

2742. Z. ocellata. Refer to Egnasia next 2751, E. tripuncta.

#### 2744 a. Egnasia ruficeps, n. sp.

3. Palpi bright rufous; vertex of head pale; thorax and abdomen grey-brown, the anal tuft ochreous. Fore wing grey-brown and fuscous irrorated with black; slight rufous suffusion near base; an oblique bright rufous sinuous antemedial line from below costa; traces of a sinuous fuscous medial line; an obscure brown and black discocellular lunule; a large pale-edged dark postmedial triangular patch with three pale costal specks on it, the irregularly dentate oblique postmedial line from its apex to inner margin, and the submarginal line from its outer side and angled on vein 4; the inner half of outer area suffused with rufous; a series of dark marginal specks inside apical past of margin and a fine crenulate marginal line. Hind wing rufous irrorated with black; an indistinct dentate postmedial line and two black spots near anal angle.

Hab. Ceylon (Pole). Exp. 38 millim. Type in B. M.

- Vol. III, p. 19. Hyperlopha has vein 5 of hind wing from near lower angle of cell; and H. compactilis has a tuft on inner side of 3rd joint of palpus.
- 2761. Omit Sanys flexus, Moore, from synonymy. See 2720, p. 536.

### 2763 a. Capnodes caustiplaga, n. sp.

Q. Grey-brown suffused with pink. Fore wing with minute dark specks in cell and on discocellulars; traces of a sinuous brown postmedial line; a submarginal line highly angled below costa, then double and ending at outer angle, the area beyond it fiery red with two dentate yellow marks near outer angle; some dark specks just inside margin. Hind wing similar, but the red patch small.

Hab. Bhutan (Dudgeon). Exp. 32 millim. Type in B. M.

#### 2782 a. Raparna uncifera, n. sp.

3. Head and collar fuscous brown; thorax purplish grey; abdomen pale brown. Fore wing dull purple; an oblique black subbasal band from subcostals to inner margin, with a hook on outer side; an indistinct discocellular band; traces of a sinnous

postmedial line represented by ochreous scales. Hind wing fuscous brown.

Hab. Hambantota, Ceylon (Pole). Exp. 24 millim. Type in B. M.

#### 2782 b. Raparna crenulata, n. sp.

Both wings with the outer margin crenulate and produced to a point at vein 4.

Q. Grey-brown; head and collar chestnut. Fore wing with some dark specks on basal area; an ill-defined double medial line angled below costa; a waved postmedial line with series of dark specks beyond it. Hind wing with dark discocellular speck; double sinuous ferruginous medial line; a waved postmedial line with series of dark specks beyond it; a prominent black patch at anal angle.

Hab. Bhután (Dudgeon); Borneo (Wallace). Exp. 26 millim. Type in B. M.

### Genns PROGONIA, nov.

Type, P. reniferalis, Hmpsn.

Range. Ceylon.

Palpi upturned, the 2nd joint reaching above vertex of head, the 3rd long with a tuft on inner side, in male sharply bent over the head; antennæ with long bristles and cilia; fore tibia covered by a sheath containing masses of flocculent scales. Fore wing with veins 3, 4, 5 from close to angle of cell; 6 from below apper angle; 7, 8, 9, 10 stalked. Hind wing with veins 3, 4 stalked; 5 from angle of cell; 6, 7 stalked.

# 2793 a. Progonia reniferalis, n. sp.

d. Grey mottled with brown. Fore wing with subbasal black costal striga; a highly crenulate antemedial line arising from



Fig. 278.

Progonia reniferalis, 3. 1.

an oblique costal striga; an oblique dark chocolate reniform spot with ochreous centre and traces of fuscous liue from it to inner margin; a dentate postmedial line, very oblique and straight from costa to vein 6; an irregularly dentate pale submarginal line; a mar-

ginal series of dark specks. Hind wing paler; with indistinct postmedial line angled at vein 2; traces of a pale waved submarginal line; a marginal dark line, and otherous line at base of cilia.

Q with the reniform mark obsolescent. Hab. Ceylon (Pole). Exp. 22 millim. Type in B. M.

2800. Omit Egnasia nubifascia and Ceylon and insert under 2804, Adrapsa scopigera.

### 2834 a. Mastigophorus prunalis, n. sp.

σ. Reddish brown slightly suffused with purple; palpi fuscous slightly mottled with grey. Fore wing with indistinct waved antemedial and medial lines; a white speck in cell and large fuscous speckled ochreous discocellular patch: a double postmedial sinuous line angled below costa and excurved round lower angle of cell. Hind wing fuscous brown; both wings with sinuous submarginal series of white specks. Underside fuscous, with submarginal series of pale specks.

Q. Fore wing with two discocellular black specks replacing the

ochreous patch.

Hab. Puttalam, Ceylon (Pole). Exp. 36 millim. Type in B. M.

# 2840 α. Falcimala lativitta, Moore, P. Z. S. 1883, p. 20; C. & S. no. 4297.

Q. Palpi with the 2nd joint much more thickly clothed on both sides with long hair. Pale yellowish brown; palpi red-brown at base; abdomen with the dorsal tuft dark. Fore wing irrorated with red-brown; two brown subbasal spots; a curved rufous antemedial line bent outwards below costa; the medial area brown, bounded by a pale discocellular lunule with two black specks on its outer edge and a curved rufous line from it to inner margin, a diffused rufous sinuous submarginal line arising from a brown patch on costa; a marginal series of dark specks; the cilia rufous. Hind wing whitish; underside with discocellular spot.

Hab. Sikhim. Exp. 24 millim.

### 2840 b. Falcimala ochrealis, n. sp.

J. Head, thorax, and abdomen bright ochreous and black. Fore wing bright ochreous irrorated with black; a black patch at base of costa followed by a black streak; an oblique black wedge-shaped mark from middle of costa to beyond lower angle of cell, and embracing a discocellular black mark; some black specks on costa towards apex; the marginal area black, narrowing to apex and below middle; a marginal series of ochroous specks. Hind wing fuscous black.

Hab. Bhután, 2500 feet (Dudyeon). Exp. 16 millim. Type in B. M.

## 2843 a. Nagadeba pictalis, n. sp.

Q. Chestnut-brown; head, thorax, and abdomen variegated with white. Fore wing with the basal area variegated with white; traces of a waved antemedial line and of a medial line angled on median nervure; two dark discocellular specks; some white specks on costa towards apex; some white suffusion and three black specks below apex; a crenulate white marginal line. Hind wing with the basal area suffused with fuscous; traces of a waved white medial line; a dentate grey postmedial line on a deep black irregular band; a crenulate white marginal line.

Hab. Bhután (Dudgeon). Exp. 22 millim. Type in B. M.

#### Genus NICEVILLEA.

Nicevillea, Hmpsn. Trans. Ent. Soc. 1895, p. 307.

Type, N epiplemoides, Hmpsn.

Range. Burma.

- Q. Palpi upturned and smoothly scaled, the 2nd joint nearly straight except at base and reaching above vertex of head, the 3rd long; antennæ with cilia and fine bristles; tibiæ with medial and distal tufts of long scales and a similar tuft at end of 1st tarsal joint. Fore wing with the costa nearly straight; the apex produced and acute; the outer margin minutely crenulate and highly angled at vein 4. Hind wing with the outer margin nearly straight and minutely crenulate from the apex to vein 3, and from thence to anal angle extremely truncate and with two excisions; veins 3, 4, 5 from close to lower angle of cell; 6, 7 from upper angle.
- 2845 a. Nicevillea epiplemoides, Hmpsn. Trans. Ent. Soc. 1895, p. 307.
- Q. Brownish grey, irrorated with brown scales; the tufts on legs grey and brown. Fore wing with some black specks on costa and another in cell; a fine brown line from origin of vein 2 to inner margin near base; a postmedial oblique fine brown line; a subapical black spot and another on inner margin near outer



Fig. 279.—Nicevillea epiplemoides, ♀ 1.

angle. Hind wing with speck in cell; a fine oblique medial brown line; two obscure yellowish lumulate spots with fuscous inner edge between veins 2 and 4 above a waved fuscous line from anal angle to vein 5; both wings with traces of brown marginal line. Underside with traces of curved dark medial line and submarginal specks to fore wing; hind wing with a dark spot on costa towards apex.

Hab. Dawnat Range, Tenasserim. Exp. 44 millim.

2848. Hydrillodes transversalis=2879. Catada vagalis.

Vol. III, p. 56. Under Nodaria insert Lysimelia, Wlk. Cat. xvi, p. 201 (1858); and Anitha, Wlk. Cat. xxxiv, p. 1206 (1865). 2855 a. Nodaria mundiferalis, Wlk. Cat. xxxiv, p. 1206.

Yellow; head and thorax tinged with fulvous. Fore wing with some dark rufous at base of costa; two black specks at the angles of cell; traces of a postmedial series of dark specks on the veins; a submarginal series of small white lumulate spots; the marginal area suffused with dark rufous; the cilia fuscous. Hind wing whitish in male, fuscous in female; traces of a discocellular lumule and postmedial line angled at vein 2; the marginal area suffused with brown. Underside suffused and irrorated with brown; hind wing with discocellular lumule, cremulate postmedial line, and submarginal series of white specks.

Hab. Bhután; Borneo. Exp. 22 millim.

2856. Insert (syn.) *Herminia dolosa*, Butl. A. M. N. H. (5) iv, p. 446.

2857 a. Nodaria grisealis, Schiff. Wien. Verz. p. 120.

Differs from erecta in the submarginal line of fore wing being bent outwards to the apex.

Hab. Europe; Japan; Sikhim. Exp. 24-26 millim.

2858 a. Nodaria erythropoda, n. sp.

3. Differs from erecta in being ochreous; the tufts on fore tibia orange-red. Fore wing with the antenedial line extremely oblique; the postmedial line more oblique and angled beyond the cell. Hab. Bhután (Dudgeon). Exp. 36 millim. Type in B. M.

2870. Nodaria lysimeloides = N. neleusalis, Wlk. Cat. xvi, p. 201. Borneo.

### Genus STHENISTIS, nov.

Type, S. gyrtoniformis, Hmpsn.

Range, Ceylon.

Palpi upturned, the 2nd joint thick, the 2nd and 3rd curved over vertex of head; antennæ of male ciliated; abdomen long. Fore wing narrow in male; vein 6 from below angle of cell, 7 & 8 stalked; 9, 10, 11 from cell. Hind wing with voins 3, 4 from angle of cell; 5 from middle of discocellulars; 6, 7 stalked.

### 2874 a. Sthenistis gyrtoniformis, n. sp.

d. Head and thorax pale and dark brown, abdomen paler.



Fig. 280.
Sthenistis gyrtoniformis, d. 4

Fore wing pale brown, thickly marked with short dark brown streaks in the interspaces, the inner margin paler, also the outer area except towards costa; traces of an antemedial line appearing as a wedge-shaped mark on inner margin; a dark speck at lower angle of cell, with an obscure oblique line from

it to inner margin. Hind wing fuscous brown.

Q. Fore wing broader, with the inner and outer areas prominently paler.

Hab. Ceylon (Pole). Exp. 22 millim. Type in B. M.

Vol. III, p. 61. Under Catada insert Micreremites, Warr. A. M. N. H. (6) viii, p. 66.

2875 a. Catada fatua, Warr. A. M. N. H. (6) viii, p. 65.

Pale greyish suffused with fuscous; palpi black at base. Fore wing with the outer margin excised below apex; traces of a subbasal line; the medial area black, bounded by sinuous ante- and postmedial lines, the latter excurved and enclosing a black spot beyond cell, then incurved; pale submarginal specks on costa and above middle. Hind wing with the outer margin excised below apex; a sinuous dark medial line and pale sinuous submarginal line, becoming obsolescent on the pale costal area. Underside with the basal half of wings suffused with black.

Hab. Khásis. Exp. 18 millim.

2879. Insert (syn.) Hydrillodes transversalis, Moore, P. Z. S. 1877, p. 613; C. & S. no. 2974.

### Genus HÆMATOSTICTA, nov.

Type, H. sanguiguttata, Hmpsn.

Range. Ceylon.

Palpi upturned and reaching vertex of head, the 2nd joint fringed with long scales in front, the 3rd naked and acute; antennæ of male minutely ciliated; tibiæ with the spurs long. Fore wing with the apex rounded; vein 3 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle; 8, 9, 10 stalked from before end of cell, with a minute areole at their base; 11 absent. Hind wing with veins 3, 4 stalked; 5 from near middle of discocellulars; 6, 7 stalked.

### 2886 a. Hæmatosticta sanguiguttata, n. sp.

Pale olive-brown; head grey irrorated with black; thorax and



Hamatosticta sanguiguttata, &.

abdomen with paired blood-red spots. Fore wing with the costa grey, irrorated and spotted with black; both wings with subbasal, antemedial, medial, postmedial, and submarginal series of blood-red spots, the postmedial excurved beyond cell of fore wing; each wing with a discocellular red and

black spot, most prominent on hind wing; fore wing with fuscous and grey marginal patches at and below apex and above outer angle; both wings with marginal series of black striss.

Hab. Ceylon (Green). Exp. 12 millim. Type in B. M.

### 2887 a. Aræopterum fasciale,

3. Head and collar white; palpi black; thorax and abdomen fuscous. Fore wing pale fuscous; the costal area suffused with white; a dark mark with two white specks on it on costa before apex; an oblique white postmedial line and indistinct waved submarginal line. Hind wing pale fuscous, with black-edged medial band with whitish suffusion beyond it; an indistinct submarginal white line.

Hab. Oeylon (Green). Exp. 12 millim. Type in B. M.

#### Genus PTYORHYNCHA.

Ptyorhyncha, Hmpsn. Trans. Ent. Soc. 1895, p. 308.

Type, P. argyresthis, Hmpsn.

Range. Bhután.

Q. Palpi with the 2nd joint straight, oblique and fringed with hair above, the 3rd upturned, with a very large tuft on inner side; a slight frontal tuft; antennæ of female nearly simple; tibiæ hairy. Fore wing with the costa much arched; the outer margin excised below apex, produced to a hook at vein 4, then excised to outer angle; vein 8 given off from 7 and anastomosing with 9, which is given off from 10 to form the arcole. Hind wing with the anal angle truncate; vein 5 from lower angle of cell.

# 2895 a. Ptyorhyncha argyresthis, Hmpsn. Trans. Ent. Soc. 1895, p. 308.

Q. Deep chestnut. Fore wing thickly covered with fine striæ, the basal two-thirds with a silvery sheen except the costal area and a sinuous medial band, the outer edge of this area sinuous; a patch of bright silvery suffusion on outer area above middle connected

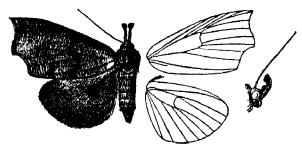


Fig. 282.—Ptyorhyncha argyresthis, ♀. ∤

with the outer angle by a sinuous band; a marginal series of silvery striæ. Hind wing reddish brown suffused with fuscous, and with numerous fine dark striæ on outer area; a marginal series of silver specks; cilia of both wings red at tips.

Hab. Bhután. Exp. 66 millim.

Vol. III, p. 68. Read Ectogonia for Camptochilus (præccc.).

### 2904 a. Marapana rectilineata, n. sp.

Q. Palpi oblique, the 3rd joint naked. Pale ochreous suffused with brown and irrorated with fuscous and pink; wings slightly tinged with pink. Fore wing with indistinct straight brown antemedial line; a black speck in cell; a waved medial line excurved at middle; an oblique striga at upper angle of cell; both wings with a double straight postmedial line highly angled below costa of fore wing; an indistinct irregularly waved submarginal line; a marginal series of black specks. Hind wing with indistinct waved antemedial line and black speck at lower angle of cell.

Hab. Puttalam, Ceylon (Pole). Exp. 24 millim. Type in B. M.

### 2928 a. Hypena subvittalis, Wlk. Cat. xxxiv, p. 1143.

Dark red-brown. Fore wing irrorated with grey; traces of a ferruginous antemedial line outwardly oblique from costa to above vein 1, where it is angled; an indistinct medial ferruginous line running out to a sharp angle at lower end of cell; the tufts of raised scales at middle and end of cell usually with some black scales round them, and often with a black fascia between them and beyond them curved up to apex. Abdomen and hind wing fuscous.

Hab. Ceylon; Java; Australia. Exp. 22 millim.

### 2936 a. Hypena acypera, n. sp.

Palpi with the 2nd joint long, the 3rd upturned, long, naked except for a triangular tuft of scales at middle.

of. Pale ochreous brown irrorated with fuscous; palpi blackish at sides and with the tuft on 3rd joint black. Fore wing with small tufts of black and white scales at middle and end of cell; an oblique line from median nervure to inner margin near base; an oblique postmedial whitish line with dark inner edge; a sinuous submarginal line joined by an oblique streak from apex, and with a white spot and dark patch above middle.

2 with barely a trace of the submarginal markings. Hab. Bhután (Dudyeon). Exp. 24 millim. Type in B. M.

2938. Hypena divaricata = 2927. H. lignealis.

### 2941 a. Hypena nocturnalis, Swinh. A. M. N. H. (6) xvii, p. 363.

3. Differs from tenebralis in being fuscous irrorated with grey and without the rufous tinge. Fore wing with the obliquely sinuous antemedial line more distinct; the postmedial line with pale outer edge and straight except for a slight bend inwards at lower angle of cell; a sinuous submarginal line in continuation of the black specks below costa. Underside of fore wing with two subapical black and white specks.

Hab. Khasis. Exp. 36 millim.

- 2942. For Hypena dentilineata read H. denticulata.
- 2953. Hypena castanealis is a variety of 2952. H. divisalis.
- 2961. Hypena modesta=2976. H. thermesialis.
- 2979. Hypena triangularis is a variety of 2977, H. occata, which is the common and widespread form, whilst absimilis and triangularis are varieties found on the Khásis; the last name has precedence for the species.

#### Genus HARITALOPHA.

Haritalopha, Hmpsn. Trans. Ent. Soc. 1895, p. 309.

Type, H. biparticolor, Hmpsn.

Range. Bhután.

Palpi oblique and clothed with hair, the 2nd joint reaching the apex of the sharp frontal tuft, the 3rd long; autennæ ciliated; thorax with a sharp triangular tuft above; abdomen with large conical tuft on 2nd segment followed by smaller tufts. Fore wing with the apex acute and produced; the outer margin excised from apex to vein 4. Hind wing with vein 5 from middle of discocellulars; 3, 4 and 6, 7 from angles of cell.

- 2988 a. Haritalopha biparticolor, Hmpsn. Trans. Ent. Soc. 1895, p. 309.
- 3. Head and thorax red-brown with a purplish tinge; abdomen fuscous. Fore wing purplish red-brown; traces of a curved antemedial line; a dark line on discocellulars; a rufous postmedial line angled at vein 5, then sharply recurved, the area beyond it greyish



Fig. 283.—Haritalopha biparticolor, S. . . .

fuscous with a brown mark at middle of outer margin; cilia brown. Hind wing fuscous, with a pale streak with dark mark above it above anal angle. Underside grey; an indistinct postmedial line recurved below vein 5 on fore wing, evenly curved on hind wing. Hab. Bhután. Exp. 46 millim.

Vol. III, p. 95. Under Chusaris insert Tipasa, Wlk. Cat. xxvii, p. 129 (1863).

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### 2996 a. Chusaris nebulosella, Wik. Cat. xxvii, p. 129.

3. Head, thorax, abdomen, and fore wing pale ochreous irrorated with olive-brown and fuscous. Fore wing with traces of antemedial line; a white spot at lower angle of cell; a double curved postmedial line; the outer area slightly suffused with pink; an indistinct pale submarginal line with some black marks on it at middle and near outer angle; a marginal series of black specks. Hind wing bright pink. Underside of fore wing suffused with pink; hind wing ochreous, with pink discocellular spot and irroration.

Hab. Ceylon; Borneo. Exp. 18 millim.

### 3002 a. Chusaris aurantilineata, n. sp.

Q. Black. Fore wing with orange and black subbasal speck below costa; some orange specks on costa; a minutely waved antemedial orange line with black spot on it below cell; a black discocellular spot; a postmedial orange line slightly angled at lower end of cell; an indistinct smuous orange submarginal line angled outwards at middle; a marginal series of black and orange specks; abdomen and hind wing fuscous.

Hab. Ceylon (Pole). Exp. 21 millim. Type in B. M.

# 3006 a. Arrade vitellialis, Wlk. Cat. xvii, p. 386; C. & S. no. 4295.

3. Fuscous. Fore wing with the basal half brown, bounded by an inwardly oblique pale line with the area beyond it fuscous black, becoming brown again towards the blackish marginal band, which has a pale waved line on its inner edge.

Hab. Moulmein. Exp. 24 millim.

# 3008 a. Hypenagonia leucosticta, Hmpsn. Trans. Ent. Soc. 1895, p. 309.

3. Differs from vexataria in the palpi being longer, the 2nd joint more thickly fringed with long hair, the 3rd long, slender and upturned; abdomen banded with fuscous and white. Foregving with more prominent lines and diffused bands; two white-edged black specks on discocellulars; a prominent short white subapical streak. Hind wing with much more prominent black lines and diffused fuscous bands which have no rufous tinge; a submarginal black and white line to both wings.

Hab. Bhután. Exp. 16 millim.

### Genus PROLOPHOTA, nov.

Type, P. trigonifera, Hmpsn.

Range. Ceylon.

Palpi porrect, extending about twice the length of head, the 2nd joint fringed with long hair above, the 3rd upturned and triangularly scaled; frons with a tuft of hair; antennæ of male ciliated; mid tibiæ slightly fringed with hair; hind tibiæ with a slight tuft at extremity and slight tufts at lower ends of the tarsal joints. Fore wing with the apex acute; the outer margin excised to vein 4.

where it is angled; veins 8, 9, 10 stalked. Hind wing with the outer margin angled at vein 4; veins 3, 4 from angle of cell; 5 from just above angle; 6, 7 from upper angle.

### 3008 b. Prolophota trigonifera, n. sp.

3. Pale ochreous slightly irrorated with fuscous; palpi fulvous; wings with a few black specks. Fore wing with indistinct waved antemedial and medial lines, the former arising from a black speck on costa, the latter from a small triangular spot; an

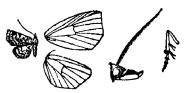


Fig. 284.—Frolophota trigonifera, &. 1.

indistinct annulus in cell; a dentate postmedial line excurved beyond cell; a large dark fulvous triangular patch on costa beyond middle, with three white specks on it; traces of a dentate submarginal line with slight fuscous suffusion beyond it; a marginal series of black specks. Hind wing with nearly straight antemedial line; two indistinct waved postmedial lines; the margin suffused with fuscous; a marginal series of black specks.

Hab. Hambantota, Ceylon (Pole). Exp. 16 millim. Type in B. M.

### URANIIDÆ.

3025. Pseudomicronia caelata=Micronia oppositata, Snell. Tijds. v. Ent. xxiv, p. 84, pl. 9, fig. 6.

### EPIPLEMIDÆ.

3041 a. Epiplema inhians, Warr. A. M. N. H. (6) xvii, p. 214.

Differs from irrorata in the general colour being dark brown. Fore wing with the apical area rufous; the postmedial line very acutely angled on vein 4 of both wings, defined by black on inner side on fore wing and on outer side of hind wing; hind wing with an elongate white mark in cell.

Hab. Sikhim; Khásis. Exp. 18 millim.

# 3042 a. Epiplema albipunctata, Warr. A. M.N. H. (6) xvii, p. 212.

Q. Dark brown with a leaden tinge. Fore wing with anteand postmedial lines highly excurved and defined on inner side by black below costa, the latter with two pale specks above inner margin; a dark subapical speck and incomplete lunule at the excision. Hind wing with incomplete dark antemedial line; a pale postmedial line defined by brown, produced to an acute angle on vein 4 and with dark marks on its inner side below the angle; three white subapical specks and two minute streaks with dark spots below them at the lower tail.

Hab. Khásis. Exp. 26 millim.

### 3051 a. Epiplema ochreofumosa, Warr. A. M. N. H. (6) xvii, p. 215.

Thead and thorax fuscous brown, the vertex of head white; headomen yellowish white, the base dark. Fore wing pale, suffused and irrorated with purplish fuscous, the area near postmedial line and the outer area except at apex least suffused; a ferruginous discocellular spot; a dark postmedial line with ferruginous on its inner edge, oblique from costa to vein 4 where it is angled; a submarginal series of brown striæ. Hind wing yellowish white, slightly irrorated and striated with brown; the base brown; a postmedial rufous line running out to a rounded projection near margin on vein 4, with ferruginous suffusion beyond the excurved part and on tail, which has a minute white streak and black speck; a dark marginal line between the tails.

Hab. Khásis. Exp. 28 millim.

### 3053 a. Epiplema sponsa, Swinh. A. M. N. H. (6) xvi, p. 293.

Q. Head, thorax, and basal segments of abdomen grey and fuscous, the last with the terminal segments darker; wings grey, striated with fuscous, the basal half of fore wing and whole of hind wing suffused with pale yellow-brown. Fore wing with waved ante- and postmedial lines approaching each other at middle and filled-in with dark grey except at middle; a black discocellular spot; some grey suffusion beyond the medial band and three obliquely placed submarginal medial spots on a grey patch. Hind wing with grey suffusion from base below cell to outer margin; an indistinct antemedial line angled outwards below the prominent black discocellular spot; four lunules on medial part of outer margin, the two upper black filled-in with rufous.

Hab. Khásis. Exp. 24 millim.

3054. Omit from synonymy Erosia lanigera, Hmpsn., which is the female of 3064, Dirades unicauda, Hmpsn., p. 132.

### 3061 a. Epiplema argentisparsa, n. sp.

Fore wing with the outer margin crennlate. Hind wing with the costa excised and with tufts before and beyond the excision; the outer margin with a tail at vein 4 and points at veins 2 and 7.

Q. Very dark leaden grey irrorated with silvery blue; abdomen with some rufous on dorsum; wings with the lines rufous and black. Fore wing with curved antemedial and waved postmedial lines; a sinuous submarginal line from costa to vein 2. Hind wing with antemedial maculate line; a postmedial line angled at vein 4 and with black and rufous marks on its inner edge; a rufous and black lunulate marginal band.

Hab. Bhutan (Dudgeon). Exp. 28 millim. Type in B. M.

SECT. 111. Antennæ of male serrate and fasciculate; fore wing with the outer margin evenly rounded; hind wing with a fold on inner area containing a tuft of hair.

### 3063 a. Epiplema scopocera, n. sp.

Differs from tenebrosa in the submarginal line of fore wing being much more irregular and bent inwards between veins 5 and 6; hind wing with the postmedial line straight and oblique from costa to vein 4 where it is sharply angled; the lunulate marginal marks more prominent and marked with chestnut between the tails. Underside of hind wing white in male.

Hab. Ceylon (Green). Exp. 18-22 millim. Type in B. M.

- SECT. IV. Antennæ of male bipectinated; outer margin of fore wing evenly curved, of hind wing produced to points at veins 7 and 4.
- A. Fore wing with no fovea; hind wing with no lobe at base of costa.

### 3063 b. Epiplema nigrifrons, n. sp.

J. Whitish irrorated with fuscous brown; frons black; antennæ with the branches blackish; wings slightly striated with brown. Fore wing with prominent dark striæ on outer half of costa; an obsolescent postmedial ferruginous line highly excurved below costa, the area beyond it more striated and suffused with brown; a dark band just inside the margin from below apex to vein 4. Hind wing more uniformly irrorated and striated; an indistinct subbasal line; a discocellular line and black speck at lower angle of cell; a postmedial line double from costa to vein 4 where it is strongly angled, then recurved and with a rufous band on its inner edge; a brown and black marginal band between the points and a spot at vein 4: underside white.

Hab. Toungoo, Burma (De Nicéville). Exp. 30 millim. Type in B. M.

B. Fore wing of male with a foven below base of cell; hind wing with a lobe at base of costa articulating with the retinaculum as well as the frenulum.

# 3063 c. Epiplema pectinicornis, Dudyeon, MS.

Grey-brown; vertex of head white; wings with numerous dark striæ. Fore wing with postmedial rufous line angled beyond lower angle of cell; a submarginal lunulate dark mark below apex. Hind wing with ill-defined antemedial line; a postmedial rufous line defined by fuscous on inner side and acutely angled at vein 4; a pale marginal line with rufous inside it and three black spots between veins 5 and 2.

Hab. Sikhim; Bhutan (Dudyeon). Exp. 26 millim. Type in B. M.

### 3064 a. Dirades lituralis, Warr. A. M. N. H. (6) xvii, p. 214.

Q. White, slightly irrorated and striated with brown and black-fore wing with broad blackish medial band, its inner edge indented by an angle at middle, its outer defined by a slightly sinuous rufous line; the apex brown, with a series of four submarginal black specks below it. Hind wing with traces of dark antemedial line, acutely angled at middle, and of a sinuous rufous postmedial line; a brown lunule defined by black below upper tail and brown and black speck below lower.

Hab. Khásis. Exp. 18 millim.

- 3066. Dirades conifera, 3067. D. leucocera. The males have the venation of hind wing as in Sect. I. A.
- 3070 a. Gathynia fumicosta, Warr. A. M. N. H. (6) xvii, p. 215.
- 3. Head, thorax, and abdomen fuscous. Fore wing with the costal area fuscous, the apex ferruginous; a ferruginous fascia below costa; the inner two-thirds of wing greyish, with obscure medial and submarginal curved lines. Hind wing with the costal half whitish tinged with ferruginous, and crossed by oblique medial and postmedial ferruginous lines; the inner half rufous, with the fold pale.

Hab. Khásis; Nágas. Exp. 22 millim.

Vol. III, p. 136. Atossa being preoccupied, read Nossa, Kirby, Cat. Lep. Het. p. 56 (1892).

#### GEOMETRIDÆ.

Vol. III, p. 164. Under Stegania insert Orthobrachia, Warr. Nov. Zool. 1895, p. 121, for Sect. II.; and Hydatocapnia, Warr. Nov. Zool. 1895, p. 143, for Sect. I. A.

### 3141 a. Stegania micans, n. sp.

c. Very dark purplish grey, irrorated with glistening scales; branches of antennæ and a band between their bases ferruginous; anal tufts grey. Fore wing with a patch beyond cell and the costal area ferruginous, with grey striæ towards apex; a dark discocellular striga; indistinct waved ferruginous antemedial and postmedial lines, the latter excurved beyond cell. Hind wing with indistinct waved ferruginous postmedial line. Underside with the basal two-thirds ochreous; fore wing with the apex rufous with dark striæ; the outer margin angled at middle.

Hab. Bhután, 2500 feet (Dudgeon). Exp. 32 millim. Type

in B. M.

#### Genus LITHINA.

Lithina, Hübn. Verz. p. 338 (1818?).

Type, L. petraria, Hübn., from Europe.

Range. Europe; Kashmir.

Palpi potrect, thickly fringed with hair and reaching just beyond the frons, which is smooth and rounded; antennæ of male thickened and flattened; hind tibiæ dilated, with a fold containing a tuft of long hair; scaling smooth. Fore wing with the apex somewhat produced; vein 3 from near angle of cell; 7, 8, 9, stalked; 10 anastomosing with 11 and then with 8, 9 to form a double areole. Hind wing with vein 3 from near angle of cell; 6, 7 from upper angle.

# 3184 a. Lithina triumbrata, Warr. Nov. Zool. 1895, p. 131.

3. Pale ochreous brown. Fore wing irrorated with fuscous; an indistinct somewhat oblique antemedial line with dark spots on median nervure and vein 1: an indistinct postmedial dark line

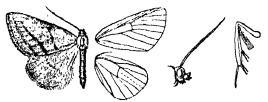


Fig. 285.-Lithina triumbrata, d. 1.

with short dark streaks on the veins, excurved below costa, incurved from vein 5 to inner margin. Hind wing paler, with traces of medial line; underside with postmedial line, with short dark streaks on the veins.

Hab. Gurais Valley, Kashmir. Exp. 42 millim.

Vol. III, p. 187. Under Eurytaphria insert Psilotaphria, Warr Nov. Zool. 1895, p. 154, for Sect. II.

### 3199 a. Eurytaphria xanthoperata, n. sp.

3. Head yellow; thorax, abdomen, and wings brown irrorated with glittering scales, and with a few dark strim. Fore wing with an indistinct highly curved antemedial dark line; a discocellular speck; a postmedial line excurved from costa to vein 2, then recurved; the costa, margin, and cilia yellow. Hind wing with discocellular speck and indistinct curved postmedial line; the margin and cilia yellow.

Q with the cilia of both wings, not the margin, yellow. Hab. Ceylon (Green). Exp. 20 millim. Type in B. M.

# 3199 b. Eurytaphria pachyceras, n. sp.

5. Antennæ thickened and flattened, in female simple.

Head reddish brown; thorax and abdomen dark brown. Fore wing pale brown striated with dark brown; the basal area, the inner side of the postmedial line, and the area near outer angle suffused with fuscous; a dark discocellular speck; an indistinct minutely waved pale postmedial line. Hind wing wholly suffused with fuscous; a dark discocellular speck and minutely waved dark postmedial line; the cilia brown. Underside pale brown, with dark discocellular speck and minutely waved postmedial line to each wing.

Q without the fuscous suffusion, so that the striation and postmedial lines are more distinct; fore wing with some rufous suffusion on inner side of the postmedial line and a dark spot

beyond it below middle.

Hab. Sikhim; Bhután, 2500 feet (Dudgeon). Exp., 3 22, 2 24 millim. Type in B. M.

3211. Spilopora divaricata. Antennæ of male bipectinate, with short branches; hind tibiæ not dilated. China.

3211 a. Spilopera ochreifusca, Hmpsn. Trans. Ent. Soc. 1895, p. 310.

Fore wing with the outer margin dentate below apex as well as angled at vein 4.

\$\delta\$. Brownish ochreous irrorated with fuscous. Fore wing with the basal half purplish fuscous, emitting an irregular broad fascia from lower angle of cell to the fuscous marginal area which extends from vein 5 to inner margin, leaving the apex ochreous; an antemedial curved series of dark specks; an oblique diffused waved postmedial band not reaching the costa; a sinuous submarginal series of dark specks. Hind wing with black cell-spot; a diffused fuscous medial band; the marginal area fuscous. Underside with a reddish tinge; a diffused dark postmedial line; a submarginal series of dark specks, with the area beyond them grevish.

Hab. Bhután. Exp. 34 millim.

- 3225 = Zamarada scriptifasciata, Wlk. Cat. xxvi, p. 1566; and omit translucida, Moore.
- 3226. Z. cosmiaria = Zamarada translucida, Moore, Lep. Ceyl. iii, p. 432, pl. 197, fig. 2; C. & S. no. 3515. Borneo; Java. Moore's type is from Java; Walker's translucida MS. = scriptifasciata from Borneo.
- 3226 a. Zamarada minimaria, Swinh. A. M. N. H. (6) xvi, p. 293.
- Q. Head, thorax, and abdomen grey and brown, the anal tuft pink; wings yellowish hyaline, with a broad marginal leaden-grey band irrorated with silver, inwardly edged by a sinuous rufous line slightly excurved at middle on each wing, and with traces of a rufous submarginal line. Fore wing with some ochreous and

brown on the costa; an annulus at end of cell and two ochreous and rufous lines from cell to inner margin before the middle. Hind wing with an antemedial ochreous and rufous band from cell to inner margin.

Hab. Karachi. Exp. 18 millim.

3226 b. Zamarada xanthyala, n. sp.

3. Head ferruginous; collar pale yellow; thorax and first segments of abdomen ferruginous and pale vinous, distal part of abdomen ochreous. Fore wing brassy hyaline yellow; costa slightly tinged with ferruginous; a dark discocellular speck; the inner and outer areas broadly vinous, crossed by obscure ferruginous bands, the inner edge of outer area sinuous. Hind wing similar, the inner edge of the outer area more highly sinuous, the hyaline area running out beyond lower angle of cell.

2 with the inner and outer areas of wings more orange in

tone.

Hab. Sikhim (Pilcher); Sandakan, Borneo (Pryer). Exp. 30 millim. Type in B. M.

3236 a. Macaria fumipennis, Hmpsn. Trans. Ent. Soc. 1895, p. 310.

of. Differs from fasciata in being much darker; head and antennæ with hardly a trace of fulvous; abdomen slightly tinged with fulvous towards extremity; wings much suffused with fuscous. Fore wing with some fulvous suffusion on costa, expanding into a patch beyond the angle of the postmedial line, with a black patch on it; the medial band of both wings leaden grey instead of white. Hind wing with the black patches beyond the postmedial line large and on olive-brown suffusion. Underside with large patches of fulvous suffusion at base of each wing, extending along costa of fore wing to apex and expanding into a large postmedial patch.

Hab. Bhután. Exp. 44 millim.

3267 a. Hyposidra polia, Hmpsn. Trans. Ent. Soc. 1895, p. 310.

Grey with a brown tinge, and sparsely irrorated with black scales. Fore wing with an indistinct medial brown band, more prominent in the male than the female and defined outwardly by a sinuous white line angled at vein 4; a pale waved submarginal line with some brown on its inner edge, almost obsolete in female. Underside with indistinct curved postmedial line to each wing.

Hab. Ceylon. Exp., ♂ 30, ♀ 40 millim.

#### Genus ORPHNE.

Orphne, Hübn. Verz. p. 314 (1818?).

Type, O. tenebraria, Esp.

Range. Europe; N.W. Himalayas.

Palpi porrect, projecting beyond the frons and clothed with long

hair; frons with a rounded prominence; antennæ of male bipectinate; scaling smooth. Fore wing with the costa arched at base and towards apex, which is rounded; vein 3 from well before angle of cell; 9 given off from 10 and anastomosing with 8, which arises from 7 to form the arcole. Hind wing with vein 3 from well before angle of cell; 6, 7 from upper angle; 8 connected with 7 by an oblique bar.

3284 a. Orphne tenebraria, Esp. Schmett. Eur. 51, 6. Geometra torvaria, Hubn. Samml. eur. Schmett. figs. 366-9. Parascotia olivacea, Warr. Nov. Zool. 1895, p. 129.

Dark brown. Fore wing with traces of pale antemedial band; both wings with indistinct dark discocellular spot; an indistinct

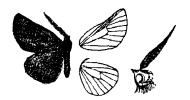


Fig. 286.—Orphne tenebraria, J. J.

pale waved submarginal band. Underside with curved white postmedial band to each wing, broadest towards costa of fore wing; the apex of fore wing with some white marks. Abdomen white below.

Hab. Europe; Spiti. Exp. 38 millim.

Vol. III, p. 228. Under Leptomiza insert Occelophora, Warr. Nov. Zool. 1895, p. 150.

### 3332 a. Heteromiza leucogonia, Hmpsn. Trans. Ent. Soc. 1895, p. 311.

of. Antennæ with very short branches. Differs from cruentaria in the abdomen having rufous dorsal marks. Fore wing with the basal and inner areas thickly spotted with rufous; a large oblique spot from costa to lower angle of cell and smaller spots below and beyond end of cell; no oblique postmedial line, but the outer area very broadly rufous with irregular inner edge; a large greyish patch on costa before apex, with a black-edged silvery-white claviform mark on its lower edge and two similar specks on outer edge. Hind wing spotted with rufous; large spots in and below end of cell; a large patch at apex conjoined to an irregular patch at anal angle.

Hab. Khásis, Exp. 48 millim.

3360. Insert (syn.) Boarmia difficaria, Wlk. Cat. xxi, p. 490; C. & S. no. 3319.

Vol. III, p. 257. Under Boarmia insert Blepharoctenucha, Warr. Nov. Zool. 1895, p. 126, for Group II. Sect. I. D.

#### 3394 a. Boarmia coremiaria, n. sp.

J. Antennæ with very long fascicles of cilia. Red-brown irrorated with grey and fuscous. Fore wing with black striæ on costa; obliquely curved ante- and postmedial series of black specks; a black discocellular speck and speck on costa above it; a white speck below vein 5 beyond the postmedial series; traces of a submarginal waved line arising from a black spot below costa; a marginal series of specks. Hind wing with two medial series of specks: traces of a submarginal waved line; a marginal series of specks. Underside with basal half whitish, crossed by antemedial and medial dark lines, dilated on fore wing; the outer area fuscous, with a whitish spot at apex.

Hab. Ceylon (Green). Exp. 30 millim. Type in B. M.

#### 3397 a. Boarmia thricophora, Hmpsn. Trans. Ent. Soc. 1895, p. 311.

3. Hind wing with a thick fringe of long hair on inner margin. Pale rufous and grey, slightly irrorated with fuscous. Fore wing with blackish antemedial, medial, and postmedial spots on the costa, from the last of which a curved series of specks arises; an indistinct dentate submarginal line, with blackish patches inside it just above middle and towards inner margin. Hind wing with sinuous medial line; a whitish dentate submarginal line, with blackish patches inside it above middle and towards inner margin; both wings with marginal series of black specks. Underside ochreous, with diffused fuscous on outer area of fore wing except at apex and outer angle; hind wing with a fuscous patch at apex Hal. Sikhim. Exp. 28 millim.

3401. B. comparataria = Boarmia exclusaria, Wlk. Cat. xxi, p. 490; C. & S. no. 3321; which has precedence. Ceylon.

#### 3454 a. Boarmia leucodontata, n. sp.

J. Olive-brown irrorated with fuscous and grey. Fore wing with antemedial black line angled below costa and with a rufous hand inside it; a discocellular black spot with traces of a line excurved round it, then oblique; an obliquely curved postmedial line with rufous band beyond it; a dentate white submarginal line, with blackish streaks from it to outer margin; a marginal series of black specks. Hind wing with subbasal black line; a discocellular spot; medial line with rufous band beyond it; the outer area more irrorated with fuscous, with dentate submarginal white line; a crenulate marginal black line. Underside paler olive, striated with black; fore wing with black spot in cell; both wings with large discocellular spot and diffused fuscous submarginal band; the apex of fore wing whitish.

Hab. Ceylon (Green). Exp. 32 millim. Type in B. M.

- 3487 a. Medasina reticulata, Hmpen. Trans. Ent. Soc. 1895, p. 311.
- 5. White irrorated with brown; abdomen with brown bands; anal tuft ochreous; wings striated with brown. Fore wing with a brown patch at base of costa; two curved antemedial lines; a fascia along median nervure; a medial line conjoined to a discocellular lunule and at inner margin to a postmedial brown band, with a dentate white line on it which again is conjoined to a highly irregular dentate submarginal line. Hind wing with oblique antemedial line; a discocellular lunule; a postmedial band from cell to inner margin, with a white line on it; an ill-defined submarginal line; both wings with a fine brown marginal line.

  Hab. Sikhim. Exp. 30 millim.
- 3583. Rambara ochreicostalis = R. luminaria, Hübn. Zutr. iv, p. 35, figs. 757, 758, and Zanclopteryx zincaria, Guen. Phal. ii, p. 16.
- 3588. Insert (syn.) Camptogrammu blitearia, Wlk. Cat. xxvi, p. 1716; C. & S. no. 3894.
- Vol. III, p. 335. Under Dysethia insert Dysethiodes, Warr. Nov. Zool. 1895, p. 106, for Sect. I. B.
- 3596 a. Dysethia longiramus, Hmpsn. Trans. Ent. Soc. 1895, p. 312.
- 3. Antennæ bipectinated with long branches to three-fourths length. Rufous brown. Fore wing slightly suffused with grey; an indistinct diffused dark rufous antemedial line. Hind wing paler, with indistinct cell-specks; the marginal area of both wings slightly darker. Underside brownish ochreous; fore wing with the costa fulvous; the outer area slightly darker; hind wing with black cell-speck and traces of a postmedial curved line.

Hab. Sikhim. Exp. 28 millim.

- 3617 a. Eubolia roseicilia, Hmpsn. Trans. Ent. Soc. 1895, p. 312.
- c. Pale yellowish grey irrorated with fuscous; palpi and legs tinged with crimson. Fore wing crossed by seven or eight nearly straight indistinct dark lines; a submarginal series of indistinct white spots, the three below apex with crimson on their edges; the cilia crimson. Hind wing white, with the cilia crimson. Underside of fore wing suffused with fuscous, except the marginal area; hind wing with dark discocellular speck.

Hab. Bhután. Exp. 34 millim.

- P. 346. Under Phibalapteryx insert Pseudocollix, Warr. Nov. Zool. 1895, p. 118.
- P. 349. Under Cidaria insert Hysterura, Warr. Nov. Zool. 1895, p. 115.
- 3643. Omit cingala, Moore, the species standing as Cidaria multilinea, *Hmpsn*.

- 3673 a. Cidaria griseiviridis, Hmpsn. Trans. Ent. Soc. 1895, p. 312.
- o. Antennæ bipectinate, with short stiff branches bearing fascicles of cilia. Head, thorax, and abdomen green and black. Fore wing with numerous indistinct waved black lines; the basal area pale rufous and green; the medial area fuscous, with a large patch of grey suffusion on the disk beyond cell bounded by the postmedial line, which is slightly angled at vein 6 and very strongly at vein 4, then highly crenulate to inner margin; a black cell-speck; outer area green, with a large rufous patch on costa beyond the postmedial line; a blackish subapical patch; some rufous streaks on the veins and blackish patches on margin. Hind wing fuscous, with traces of cell-speck and waved lines, which are more distinct on underside.

Hab. Bhután. Exp. 28 millim.

3673 b. Cidaria cingala, Moore, Lep. Ceyl. iii, p. 489, pl. 207, fig. 10; C. & S. no. 3806.

Differs from *grisciviridis* in the male having the branches of antennæ long; hind wing darker fuscous brown.

Hab. Ceylon. Exp. 24-30 millim.

- 3679 a. Cidaria plumbeotincta, Swinh. A. M. N. H. (6) xvi, p. 207.
- 3. Head and thorax black and leaden grey; abdomen rufous, with some leaden grey on dorsum. Fore wing pale rufous, with the basal, costal, and apical areas black suffused with leaden grey; traces of numerous waved lines, of which some of the postmedial form a rufous and white band on the apical patch. Hind wing fuscous, with the cilia and a patch at anal angle rufous. Underside fuscous irrorated with grey.

Hab. Khásis. Exp. 22 millim.

- 3680. Insert (syn.) Coremia buda, Swinh. A. M. N. H. (6) xvi, p. 297.
- 3704. Larentia seriata, Moore, = L. affinis, Moore, Lep. Atk. p. 277; C. & S. no. 3837; which has precedence.
- 3711. Rename Larentia fulvimacula, nom. nov., and omit the locality Sikhim.
- 3730. Insert (syn.) Amnesicoma simplex, Warr. Nov. Zool. 1895, p. 113.
- 3731. Rename Photoscotosia metachryseis, nom. nov.; the male sometimes has the white patch.
- 3731 a. Photoscotosia obliquisignata, Moore, P. Z. S. 1867, p. 657; C. § S. no. 3823.
- Q. Differs from metachryseis in being much redder brown. Fore wing with the waved lines prominent and not interrupted; the antemedial line slightly angled on median nervure; the postmedial

line not bent outwards beyond lower angle of cell and without white specks on the veins; the discocellular mark elliptical and oblique; no oblique medial patch from costa; the apical streak short; the submarginal line prominent. Hind wing with the whole costal area orange.

Hab. Sikhim. Exp. 52 millim.

- 3740 a. Callabraxas trigoniplaga, Hmpsn. Trans. Ent. Soc. 1895, p. 312.
- 3. Fore wing with a tuft of long hair below base of median nervure; hind wing with vein 5 from below middle of discocellulars, which are angled. Head black; thorax and abdomen orange, with paired dorsal black spots. Fore wing with the basal area rufous, with indistinct grey lines on it and waved edge; the rest of the wing grey, with a white medial band forked and enclosing a large triangular rufous patch from costa to lower angle of cell, and a small spot on inner margin; a lunulate white submarginal line; the area at outer angle rufous. Hind wing white, with a dark patch at lower angle of cell; some dark marks near middle of inner margin; a dark patch at anal angle, with a waved white line on it. Hab. Nepal. Exp. 52 millim.

3752 a. Gymnoscelis polyodonta, Swinh. A. M. N. H. (6) xvi, p. 296.

3. Head, thorax, and abdomen clothed with black, rufous, and pale scales; wings pale, variegated with red-brown and crossed by very numerous minutely dentate black lines, of which the ante-and postmedial are slightly the most prominent, the latter angled at vein 6 and more prominently at vein 4 of each wing.

Hab. Khásis. Exp. 26 millim.

- 3759. C. deletarius = 3761. Chloroclystis filicata.
- 3759 a. Chloroclystis rufinigra, Swinh. A. M. N. H. (6) xvi, p. 296.
- J. Pale rufous; the head, collar, 1st segment of abdomen above, and the terminal segments black; wings with traces of numerous waved lines. Fore wing with the basal costal area black; a quadrate black spot in end of cell and another beyond the end, met by some black suffusion irrorated with grey from the apex; postmedial and submarginal series of black specks, the latter with a larger spot at middle. Hind wing with a black mark near base of inner margin; a discocellular lunule; indistinct medial series of specks; a submarginal series and a very large black patch with some white specks on it from anal angle to middle of outer area.

Hab. Khásis. Exp. 22 millim.

- 3763 a. Chloroclystis subtrigalba, Swinh. A. M. N. H. (6) xvi, p. 294.
- 5. Pale rufous suffused with grey; head and terminal half of abdomen black. Fore wing with the basal half of costs black

suffused with grey; medial and submarginal black patches on costa; traces of numerous pale waved lines; a few black scales on veins of outer area; a black patch beyond cell, with the indistinct postmedial line curved round it; a submarginal waved grey line, with fuscous patches on it at middle and outer angle. Hind wing with numerous indistinct waved lines; a medial black patch on inner margin and a smaller patch at anal angle. Underside of fore wing fuscous, with indistinct angled postmedial band outlined with whitish; hind wing white, with angled antemedial line and postmedial band.

Hab. Khásis. Exp. 16 millim.

#### 3767 a. Chloroclystis sinuosa, Swinh. A. M. N. H. (6) xvi, p. 295.

3. Pale fuscous suffused with grey. Fore wing with indistinct waved subbasal, antemedial, and medial lines; a prominent black postmedial line highly angled at vein 4. Hind wing with postmedial line excurved below costa and highly excurved between veins 4 and 2; both wings with the marginal area darker fuscous. Hind wing with the outer margin much excised from veins 6 to 4, then crenulate to anal angle.

Hab. Khásis. Eap. 12-15 millim.

#### 3769 a. Chloroclystis acygonia, Swinh. A. M. N. H. (6) xvi, p. 295.

3. Fuscous brown, slightly irrorated with black and with a faint rufous tinge. Fore wing with indistinct subbasal and curved antemedial lines; both wings with prominent black white-edged postmedial line, produced to a very acute angle at vein 4; traces of a pale waved submarginal line.

Hab. Khásis. Exp. 18 millim.

#### 3774 a. Chloroclystis nigrilineata, n. sp.

Grey, with a slight olive-green tinge. Fore wing of male with the dilation of costa and fringe of hair slight and placed beyond the middle; a black spot near base of costa; waved black ante-and postmedial lines, the latter angled at vein 4; a minutely dentate whitish submarginal line. Hind wing with waved black ante- and postmedial lines, the latter indented at vein 5; a minutely waved whitish submarginal line. Underside with diffused pale fasciæ in the interspaces.

Hab. Ceylon (Green). Exp. 18 millim. Type in B. M.

## 3785 a. Eupithecia melanolopha, Swinh. A. M. N. H. (6) xvi, p. 296.

d. Fuscous and pale rufous; abdomen with some white on basal segments. Fore wing with the base of costa dark rufous; a large medial subtriangular black patch from costs, embracing the tuft of black scales; postmedial and submarginal slightly sinuous white lines, the former double near inner margin and the latter expanding into a white spot; a small patch of rufous suffusion on costs inside the submarginal line, and the whole area near outer

angle dark rufous. Hind wing fuscons; medial and submarginal white lines prominent towards inner margin; the inner area irrorated with dark rufous and a prominent spot on inner margin between the two lines.

Hab. Khásis; Ceylon. Exp. 18 millim.

- 3788 a. Eupithecia nigrinotata, Swinh. A. M. N. H. (6) xvi, p. 296.
- 3. Pale rufous brown; abdomen with some black at base. Fore wing with large black patches on costa at base, before middle, and one at middle, forming with the large cell-spot a triangular mark; traces of waved lines. Hind wing with some fuscous on base of inner area; a diffused fuscous medial line and a small spot near anal angle.

Hab. Khúsis. Exp. 16 millim.

- 3795 a. Eupithecia chlorophora, Swinh. A. M. N. H. (6) xvi, p. 295.
- 3. Head and thorax pale; the palpi collar, and patagia bright green; abdomen grey-brown, with the dorsal tufts and terminal segments fulvous. Fore wing with the base green, with white spots on its outer edge; the rest of the wing brown; several antemedial waved black lines, of which the two outer are angled and filled-in with green below costa; a black cell-spot followed by three waved lines; a sinuous white postmedial line excurved from vein 6 to 3, with some waved lines beyond it and met by a bright green fascia from apex. Hind wing pale fuscous, with traces of four lines which are more prominent on underside.

Hab. Bhután; Khásis. Evp. 20 millim.

- 3812 a. Sauris interruptata = triscriata Q (nec 3) is a distinct species belonging to Sect. III. C, but without the tuft on hind tibie.
- 3813. Sauris lineosa = 3807, S. normis, and belongs to Sect. 1.
- 3815. Sauris proboscidaria. S without the long abdominal and tibial tufts of hair.

## 3818 a. Hydrelia rufinota, n. sp.

Grey with a slight lilacine tinge. Fore wing with traces of numerous waved lines; rufous marks on costa at the medial and postmedial lines, the last with series of dark specks on it, and a rufous and fuscous mark at middle. Hind wing with traces of numerous waved lines on outer half.

Hab. Sikhim, 12,000 feet (Dudgeon). Exp. 32 millim. Type in B. M.

### 3831 a. Hydrelia cingulata, n. sp.

Q. Head, thorax, and abdomen fuscous irrorated with white. Fore wing grey; a curved antemedial dark line followed by a rufous band; a rufous postmedial band with waved dark edges; a bubmarginal minutely waved rufous band; a series of dark

marginal marks. Hind wing whitish; an indistinct sinuous antemedial line; a double waved postmedial line; a submarginal line and a marginal series of specks.

Hab. Yatong, Sikhim, 10,000 feet (Bingham). Exp. 32 millim.

Type in B. M.

SECT. IV. Fore wing with the outer margin slightly excurved at middle. Hind wing with it excised below apex.

#### 3831 h. Hydrelia crocearia, n. sp.

3. Differs from pictaria in being yellower. Fore wing with no silvery markings, the basal patch short and even, no cell-spot; a lunulate brown patch beyond the cell from below costs to vein 3; two waved submarginal brown lines. Hind wing yellow, whitish at base; antemedial, medial, and two submarginal brown lines.

Hab. Yatong, Sikhim, 10,000 feet (Dudgeon). Exp. 30 millim.

Type in B. M.

#### 3831 c. Hydrelia sanguiflua, n. sp.

Bright yellow; head, thorax, and abdomen suffused with pink. Fore wing suffused with pink and with patches of purple to beyond middle of costa and outer angle; the apical area pink, with a diffused purplish sinuous line on its inner edge. Hind wing with traces of waved antemedial and medial fuscous lines; the outer area with irregular patches of pink and purple.

Hab. Yatong, Sikhim, 10,000 feet (Bingham). Exp. 28 millim.

Type in B. M.

Vol. III, p. 415. Under Venusia insert Discolovia, Warr. Nov. Zool. p. 105, for Sect. II.

3848 a. Cambogia phonicosoma, Swinh. A. M. N. H. (6) xvi, p. 294. Hind wing with voins 3 and 4 well separated at origin.

3. Head, thorax, and abdomen grey and pink. Fore wing with the base pink, its outer edge much excurved in cell; an antemedial grey-green band with waved edges; a very wide medial pink band with sinuous outer edge, running out to near the margin between veins 5 and 2 and followed by an obscure fuscous line; a black discocellular lunule and indistinct waved postmedial line; a series of black marginal specks. Hind wing pink; the outer area grey-green; the pink area bounded by a sinuous white line angled at vein 4; a black discocellular speck and traces of two medial waved lines.

Hab. Khásis. Exp. 22 millim.

3858. Insert (syn.) Craspedia rufistigma, Warr. Nov. Zool. 1895, p. 93.

3859. Insert (syn.) Cruspedia erubescens, Warr. Nov. Zool. 1895,, p. 92.

- 3860. C. opsinaria=Craspedia patularia, Wlk. Cat. xxxv, p. 1633; C. & S. no. 3944; (See 3883.) Sikhim; Nilgiris. And insert (syn.) Craspedia rufilinea, Warr. Nov. Zool. 1895, p. 92.
- 3861. Insert (syn.) Craspedia sordida, Warr. Nov. Zool. 1895, p. 93.
- 3883. Omit from synonymy Acidalia patularia, Wlk.
- 3907 a. Acidalia ptyonopoda, Hmpsn. Trans. Ent. Soc. 1895, p. 313.
- 3. Mid tibiæ fringed with long pink hair, especially towards extremity; hind tibiæ dilated, with a fold and immensely developed tuft of pink hair, but with no tuft from extremity and without spurs.

Pale ochreous; head black; the wings with black cell-specks; two indistinct waved antemedial lines, two postmedial and one submarginal

Hab. Bhután. Exp. 20 millim.

#### 3909 a. Acidalia phonicoptera, n. sp.

3. Hind tibus and tarsi very much thickened, flattened, and spirally twisted, the joints invisible: hind wing elongate triangular, the anal two-thirds of outer margin being folded over on underside.

Head and thorax greenish-ochreous; abdomen suffused with purple-red above. Fore wing purple-red, the basal half of costal area ochreous, with a few red scales; waved antemedial, medial, and submarginal ochreous bands. Hind wing with straight oblique antemedial ochreous band and waved postmedial band.

Hab. Ceylon (Green). Exp. 16 millim. Type in B. M.

## 3911 a. Acidalia gemmaria, n. sp.

- Q. Frons dark brown; vertex of head chestnut; thorax olive; abdomen chestnut. Fore wing clive, with shining scales and a few black specks; a bright red submarginal band from vein 5 angled outwards on vein 3, then bent inwards and filled-in with bright purple towards inner margin. Hind wing with bright red discocellular spot and curved postmedial line, followed by a broad bright purple band with minutely waved outer edge; some grey suffusion on margin.
  - Hab. Puttalam, Ceylon (Pole). Exp. 18 millim. Type in B.M.
- 3923 a. Chrysocraspeda phœnicozona, Hmpsn. Trans. Ent. Soc. 1895, p. 313.
- 3. Antennæ minutely ciliated; hind tibiæ short and thick, with tufts of short hair from extremity; the tarsus curved and apparently unjointed, with thick tufts of hair from inner side. Fore wing with veins 3, 4 stalked: hind wing with the underside entirely clothed with rough hair and with the inner margin fringed with long hair.

Head and thorax olive-grey, the frons and collar dark purple; abdomen grey tinged with purple. Fore wing olive-grey, with some purple specks on costa; the basal half with numerous

indistinct waved purple bands and lines not reaching the costa; a broad purple marginal band sending a point inwards on vein 5 and with some grey on it at apex. Hind wing olive-grey, almost entirely covered by ill-defined waved purple bands.

Hab. Sikhim; Khásis. Exp. 20 millim.

- 3924. Ephyra inverata = E. (Thalera) albannularia, Wlk. Cat. xxii, p. 554; C. & S. no. 3474—which has precedence.
- 3926. Omit from synonymy Anisodes pullida, Moore.
- 3932. A. intermixtaria = Anisodes pallida, Moore, Lep. Ceyl. iii, p. 445, pl. 201, fig. 11; C. & S. no. 3575.—The Khási form intermixtaria has the dentate fuscous lines more prominent than in the smaller Southern form.
  - Hab. Khásis; Nilgiris; Ceylon; Borneo. Exp. 26-30 millim.
- Vol. III, p. 452. Under Erythrolophus insert Craspediopsis, Warr. Nov. Zool. 1895, p. 93, for Sect. 11. B.
- 3953. Insert (syn.) Craspediopsis bimaculata, Warr. Nov. Zool. 1895, p. 94.
- 3957 a. Rhodostrophia semipurpurascens, n. sp.

Antennæ of male minutely serrate and fasciculate.

3. Rufous; head with the vertex white; thorax purplish. Fore wing with the basal two-thirds purplish fuscous, with fine pale striæ and sinuous outer edge; a waved postinedial purplish line angled outwards below apex and with an oblique mark from its angle to outer margin; the median nervules and outer angle purplish. Hind wing redder, with traces of sinuous ante- and postmedial dark lines; a black cell-speck, short purplish streak at anal angle, and a marginal line.

Hab. Bhután, 6000 feet (Dudgeon). Exp. 26 millim. Type in B. M.

- 3958. Insert (syn.) Rhodostrophia curvata, Warr. Nov. Zool. 1895, p. 98.
- 3964. Insert (syn.) Rhodostrophia olivacea, Warr. Nov. Zool. 1895, p. 99.
- 3966. Insert (syn.) Rhodostrophia bicolor, Warr. Nov. Zool. 1895, p. 98.

The form bicolor has the band of fore wing bright pink in male, the whole fore wing suffused with pink in female; hind wing with the ground-colour pale yellow.—Kashmir.

- Vol. III, p. 458. Under Timandra insert Gnamptoloma, Warr. Nov. Zool. 1895, p. 95, for Sect. II.
- 3973. Timandra mundissima = T. (Thalassodes) chlorozonaria, Wlk.

  Cat. xxii, p. 554; C. & S. no. 3452—which has precedence.

  2 0 2

#### 3995 a. Euschema flavidiscalis, Warr. Nov. Zool. 1895, p. 86.

G. Head black and white; collar yellow; thorax purple and white; abdomen yellow. Fore wing deep purple, with pale blue patch in cell met by an oblique fascia from base of inner margin; a curved medial series of three blue patches merging into a white patch on inner margin; a discocellular band; an oblique series of quadrate blue spots, the two between veins 3 and 5 displaced towards the margin. Hind wing golden yellow, with an oblique basal purplish band; a white medial costal patch; a discocellular purple patch; the apical area purple, with pale blue spots beyond upper angle of cell and four submarginal lunules; a postmedial purple band from vein 3 to inner margin; a submarginal series of purple spots from vein 4 to anal angle.

Hab. Burma. Exp. 80 millim.

4029 a. Pseudoterpna hypoglauca, Hmpsn. Trans. Ent. Soc. 1895, p. 313.

Olive yellow, thickly irrorated and striated with fuscous. Fore wing with traces of waved ante- and postmedial lines with black specks on the veins, the former with an obscure rufous patch inside it on inner area, the latter bent inwards at vein 2 and with obscure rufous patches beyond it; traces of a submarginal series of specks and more prominent marginal series. Hind wing with obscure discocellular mark; traces of a waved postmedial line with black specks on the veins and obscure rufous patches beyond it; a marginal series of black specks. Underside grey, thickly irrorated with fuscous and with prominent black cell-spots.

Hab. Dalhousie. Exp. 60 millim.

4039. Insert (syn.) Thalassodes fimbriaria, Wlk. Char. Undescr. Het. p. 97; C. & S. no. 3456.

4047 a. Agathia gigantea, Bull. A. M. N. H. (5) vi, p. 217. Agathia diversiformis, Warr. Nov. Zool. 1894, p. 388.

Differs from codina in the green area of the fore wing sending a tooth into the postmedial band, which is much browner, between veins 3 and 4. Hind wing with brown patch on middle of inner margin; the inner edge of the postmedial brown area dentate from costa to vein 3, with no white beyond it on costa, and only a little green inside the margin, rather wider at apex. Underside with fuscous inner edge to the postmedial striated area, widening to costa of each wing and angled at vein 4 of fore wing.

Hab. Sikhim; Assam; Sumatra; Java. Exp. 54 millim.

4059. Omit Thalassodes leucospilota, Moore, Lep. Ceyl. iii, p. 427, pl. 194, fig. 4; C. & S. no. 3461; and the word 'leucospilota' after Ceylon form. (See 4107.)

And insert Thalera costipunctata, Moore, Lep. Ceyl. iii, p. 428, pl. 195, fig. 4; C. & S. no. 3477. (See 4134.)

4059 a. Hemithea alboundulata, Von Hedeman, Hor. Ent. Ross. xiv, p. 511, pl. 3, fig. 8.

Differs from tritonaria in being blue-green. Fore wing with slight dark cell-speck; both wings without the dark marginal line; the white specks slight; the cilia green.

Hab. Amur; China; Khásis. Exp. 32 millim.

#### Genus AFRENA.

Afrens, Hmpsn. Trans. Ent. Soc. 1895, p. 314.

Type, A. esmeralda, Hmpsn. Range. Assam; Tenasserim.

Palpi porrect, the 2nd joint reaching well beyond the frons and thickly scaled, the 3rd long; frons smooth; antennæ of male bipectinated with short branches for two-thirds length; abdomen without dorsal tufts; hind tibiæ with two pairs of spurs. Fore wing somewhat acute at apex; vein 3 from angle of cell; 6, 7, 8, 9, 10, 11 stalked. Hind wing with the frenulum absent in female; the outer margin angled at vein 4; veins 3, 4 from lower angle of cell; 4, 5 from upper angle.

4070 a. Afrena esmeralda, Hmpsn. Trans. Ent. Soc. 1895, p. 314.

Brilliant emerald-green; palpi black and grey; antennæ ochreous. Fore wing with the costa whitish speckled with black; an indistinct slightly oblique yellowish-green antemedial line; two

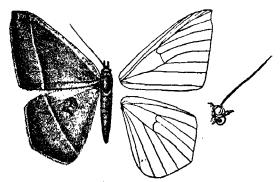


Fig. 287.—Afrena esmeralda, Q. 1.

brown specks on discocellulars; a straight obtique pale postmedial line with yellowish-green inner edge; a chestnut apical patch. Hind wing with a pale chestnut patch at end of cell on which the discocellulars show as a dark bracket-shaped mark; a pale postmedial straight line with yellowish-green inner edge; cilia of both wings white at tips. Underside suffused with white.

Hab. Khásis: Tenssserim. Exp. 62 millim.

Vol. III, p. 498. Omit "Sect. I." &c. to "angle of cell."

4080 a. Euchloris rectifasciata, n. sp.

Head orange fulvous; fore legs crimson in front; thorax and abdomen whitish; wings yellow-green. Fore wing with the costa white; a straight somewhat oblique postmedial white band; a marginal white band. Hind wing with straight white band just beyond the middle and a marginal band; underside white.

Hab. Puttalam, Ceylon (Pole). Exp., & 14, 2 20 millim.

Type in B. M.

- Vol. III, p. 500. Transfer nos. 4085-89—E. pyrrhogona, subtiliaria, signifera, ovifera, and efformata—to Eucrostes, p. 504, in which genus the first two will form Sect. II., primarily distinguished by the length of palpi, the last three being typical.
- 4107. T. albomaculata=Thalassodes leucospilota, Moore, Lep. Ceyl. iii, p. 427, pl. 194, fig. 4; C. & S. no. 3461.
- 1115 a. Thalassodes nigrifrons, n. sp.
- 3. Yellow-green with slight grey suffusion: palpi, a line behind the eyes, vertex of head, and shafts of antennæ white; from blackbrown; fore wing with the costa ochreous speckled with black; both wings with traces of waved green ante- and postmedial lines. Underside whitish.
  - Hab. Puttalam, Ceylon (Pole). Exp. 32 millim. Type in B. M.
- 4134. Omit from synonymy Thalera costipunctata, Moore.

#### PYRALIDÆ.

- 4335. Heterographis uniprinctella=4331. H. suboblitella.
- 4436. Parorthaga euryptera=Arnatula melanophia, Stgr. Isis. v, pl. iii, fig. 22, & vi, p. 78, Siberia; which takes precedence for both genus and species.
- 4049. Cataclysta mesorphna = 4651. C. blandialis.

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