### THE MOTHS OF INDIA.

# SUPPLEMENTARY PAPER TO THE VOLUMES IN "THE FAUNA OF BRITISH INDIA." SERIES IV, PART V.

BY

SIR GEORGE F. HAMPSON, BART., F.Z.S., F.E.S.

(Continued from page 911 of this Volume).

CATOCALINÆ.

2443a. Homoptera eremochroa, n. sp.

Q. Head, thorax and abdomen pale grey-brown; palpi white, the extremity of 2nd joint and the 3rd joint blackish; pectus, legs and ventral surface of abdomen white, the fore tarsi black ringed with white. Forewing brownish grey irrorated with black, the costa with numerous black striæ with slight whitish streaks between them; subbasal line represented by black points on median nervure and vein 1; antemedial line black, minutely waved and slightly excurved; reniform a minute lunule with traces of a blackish line from it to inner margin; postmedial line indistinctly double, slightly bent outwards below costa and incurved at discal fold, incurved below vein 4 and excurved at vein 1; subterminal line indistinctly double filled in with grey, angled outwards at vein 7 and excurved at middle; a minutely waved black line just before termen with series of black points in the interspaces. Hindwing brownish grey with dark striæ on inner margin; traces of four waved dark lines on terminal half; a lunulate black line just before termen; cilia whitish with a brown line through them; the underside white irrorated with pale brown except on basal and inner areas, a slight discoidal point and waved blackish terminal line.

Habitat.—Bombay, Deesa (Nurse). Exp. 24 mill. Type in B. M. 2446a. Homoptera ruficolora, n. sp.

ochreous; antennæ blackish; tarsi blackish ringed with whitish. Forewing bright rufous; subbasal line deep rufous, double, waved, from costa to median nervure; antemedial line deep rufous, minutely waved, inwardly oblique; medial line minutely waved, excurved; postmedial line indistinctly double, oblique from costa to vein 6, slightly incurved at discal fold, incurved and minutely waved below vein 4; subterminal line indistinct, brown, excurved below vein 7 and at middle; a terminal series of slight brown striæ. Hindwing greyish white, the veins and terminal area suffused with bright rufous; a postmedial series of minute dark

streaks on the veins and a striga at inner margin with another dark striga before it; a terminal series of slight brown striæ; the underside ochreous white, the costal area slightly irrorated with red-brown.

Habitat.—Madras, Gooty (Campbell). Exp. 32 mill. Type in B. M. 2526b. Hypætra pulcherrima, Butl., A. M. N. H., 1892, p. 298.

tepesceus, Swinh., A. M. N. H. (7) xvi, p. 152 (nec Wlk.). Head rufous; palpi brown; sides of frons deep brown with fine whitish streaks above; thorax rufous and deep brown; abdomen brown, the dorsal crests rufous. Forewing brown with a violaceous tinge; a black spot on costal area near base finely defined by whitish; a broad deep black antemedial band from costa to just above inner margin, its inner edge defined by a fine whitish line and angled outwards in cell, its outer edge by a whitish band diffused outwardly; a blackish spot on costa above end of cell; an oblique cocked-hat-shaped mark just beyond the cell finely defined by whitish, its upper extremity curved up to below costa and its lower bent inwards to lower angle of cell, its outer edge forming the postmedial line, angled upwards from its lower extremity into cell, then excurved and forming two small black lunules finely defined by white on inner area, a rufous shade beyond it; a small blackish spot below costa towards apex; the terminal area rather darker. Hindwing uniform brown.

Habitat.—Andamans, Port Blair; Singapore; Borneo; Br. N. Guinea. Exp. 50 mill.

2527a. Нуржтва нетегодрарна, п. sp.

d. Antennæ bipectinate with moderate branches, the apical part simple; hindwing with fold between veins 6.7 clothed with glossy scales on upper side. Head, thorax and abdomen reddish brown; tarsi pale. Forewing reddish brown suffused with grey except medial part of costal area; subbasal line represented by a small curved black mark from costal with point below it; a large irregularly triangular black antemedial patch from cell to just above inner margin, its apex connected with the costa by a sinuous line with small black spot before it below the costa; a black point in middle of cell; two sinuous red-brown indistinct medial lines, oblique from costa to lower angle of cell, where there is a black point, and with small diffused spot on its inner edge on discocellulars, below the cell incurved to submedian fold, then bent outwards, an oblique black bar beyond it from costa; an irregular obliquely placed cocked-hat-shaped black patch beyond the cell, its upper extremity forming an oblique line to below the costa and its lower curved inwards to below angle of cell, then with bisinuate line to inner margin; subterminal line indistinct, irregularly waved, angled inwards at discal and submedian folds and with oblique black striga on it below costa; the terminal area somewhat redder brown. Hindwing grey brown with glossy scaling between veins 6.7 and slight dark subterminal

marks at veins 2 and 1; the underside greyer with slight brown postmedial striga below vein 2.

Habitat.—Burma, Tenasserim, Moolayit. Exp. 48 mill. Type in B. M. 2490a. Ophiusa Rubida, Wlk., Journ. Linn. Soc. Zool. vii., p. 179 (1864).

Head and tegulæ deep chocolate red; thorax greyish brown; pectus pale rufous; legs fuscous mixed with grey; abdomen fuscous, the extremity and ventral surface pale grey. Forewing deep chocolate red, the medial area with a greyish gloss to median nervure; a terminal whitish band irrorated with brown, bent outwards to apex and narrowing to tornus; a fine dark antemedial line, very oblique from costa to below the cell, then obsolete; a black point in middle of cell; two minute grey discoidal spots defined by chocolate; a slight dark postmedial line very oblique from costa to vein 6, then obsolete; an indistinct diffused waved brown subterminal line; a fine waved line just before termen; a slight dark terminal line; cilia fuscous with series of whitish points at base. Hindwing fuscous black; an oblique bluish white band from middle of costa to above tornus; the termen narrowly whitish from below apex to submedian fold with a waved brown terminal line; cilia white; the underside grey-white, the terminal area suffused with fuscous, broadly at apex. narrowing to tornus.

Habitat.—Assam, Khásis, Jaintias ; Borneo. Sarawak. Exp. 76 mill. 2491a. Ophiusa lacteicincta, n. sp.

Q. Head and tegulæ deep chocolate red; thorax greyish; pectus whitish tinged with rufous; legs grey-brown; abdomen fuscous brown, the extremity grey, the ventral surface whitish tinged with rufous. Forewing grey-brown tinged with chocolate deepening towards the brownish white terminal band which is bent outwards to apex and narrows to tornus; a fine dark subbasal line from costa to submedian fold; ante- and postmedial lines dark-brown, very oblique, the latter slightly curved; a black point in middle of cell; two minute grey discoidal spots defined by brown, a diffused brown subterminal line; a fine waved brown line just before termen; a slight brown terminal line. Hindwing greyish brown, the termen and cilia brownish white from apex to vein 1; the underside brownish white, the terminal area tinged with brown.

Habitat.—Assam, Shillong (Rawlings). Exp. 76 mill. Type in B. M.

### PLUSIANÆ.

2667α. Plusia exquisita. Feld. Reis. Nov. pl. 110, f. 30 (1874).

Head and thorax whitish mixed with brown; metathorax with some black scales; tarsi brownish ringed with white; abdomen white slightly tinged with red-brown. Forewing whitish mostly suffused with rufous brown and slightly irrorated and striated with black; a waved white

subbasal line from costa to vein 1 defined by black on inner side; a waved black antemedial line defined by white on inner side and with blue-grey lunules before it in submedian interspace; orbicular pure white, elongate elliptical and conjoined to a large oblique elliptical white spot below the cell; reniform narrow, defined by white and strongly constricted at middle, a black spot above it on costa; postmedial line black, slightly defined by white on outer side, minutely waved below costa, then oblique, somewhat dentate, and angled outwards at vein 3, some blue-grey beyond it between veins 5 and 2; subterminal line black, defined by brown on inner side and white on outer, excurved below costa, angled inwards in discal fold, then somewhat dentate, a fine black terminal line with narrow brown band before it, defined by white strize on inner side; cilia chequered brown and white. Hindwing bright yellow with broad fuscous terminal band; cilia chequered brown and white.

Habitat.—Natal; Cape Colony; Baluchistan, Quetta. Exp. 36 mill. 2677a. Plusia megaloba, n. sp.

Q. Head fiery red; palpi and antennæ rufous, the latter with the basal joint whitish; thorax rufous, the tegulæ tinged with fiery red and the metathorax with brown; tarsi with slight pale rings; abdomen greyish rufous, the dorsal crests fiery red, the basal crest tipped with black. Forewing rufous with a greyish tinge, the medial area, except towards costa, and the medial part of terminal area suffused with brilliant cupreous red; subbasal line represented by an oblique golden striga from costa defined on each side by some cupreous red; the stigma below the cell silvery white forming a small oblique elliptical spot conjoined to a large conical spot beyond it; orbicular slightly defined by silver, round, open above; reniform with silver bar on inner edge and angled mark on outer; postmedial line slight, silvery defined by brown on inner side, erect, sinuous, some whitish points beyond it on costa; an indistinct irregularly dentate subterminal brown line; cilia grey-brown. Hindwing cupreous brown with a greyish tinge; cilia brown at base, grey at tips.

Habitat.—Assam, Khasis (Badgley). Erp. 26 mill. Type in B. M. 2681a. Plusia chalcopasta, n. sp.

Hind tibiæ and 1st joint of tarsi of male fringed with long hair; abdomen with lateral tufts of very long hair.

Head and thorax bronze-brown slightly mixed with greyish, the tegulæ, patagia and metathoracic crests tipped with whitish scales; tarsi slightly ringed with whitish; abdomen red-brown. Forewing purplish grey-brown suffused with golden bronze, the lines golden bronze; subbasal line slight, oblique, from costa to median nervure; antemedial line inwardly oblique, sinuous, a bisinuate striga from it to near postmedial line below the cell, with some purplish grey above it in and below the cell; orbicular and reniform with faint bronze annuli, the former round, the latter oblique elliptical;

postmedial line oblique, slightly incurved below discal fold; subterminal line more golden with some cupreous bronze on its inner side and dark suffusion before it and beyond it at apex, excurved from below costa to vein 6, then oblique; a terminal series of slight golden striæ. Hindwing fuscous brown with a reddish bronze gloss; cilia whitish with a dark line near base; the underside grey irrorated with brown, the terminal half suffused with brown except the termen.

Habitat.—N. India (Walhouse); Madras, Gooty (Campbell), Nilgiris (Lindsay, Hampson); Ceylon, Maskeliya (de Mowbray), Pattipola (Green). Exp. 42-48 mill. Type in B. M.

Genus OMORPHINA.

Type.

Omorphina, Alph. Hor. Soc. Ent. Ross., XXVI., p. 452 (1892)...aurantiaca. Proboscis fully developed; palpi obliquely porrect, slender, the 1st and 2nd joints fringed with long hair in front, the 3rd rather long; frons smooth; eyes small, reniform; antennæ of male ciliated; head and thorax clothed with rough hair only and without crests; tibiæ clothed with long hair; abdomen with some rough hair at base but without crests. Forewing short and broad, the apex rounded, the termen evenly curved; veins 3 and 5 from near angle of cell; 6 from upper angle; 9 from 10 anastomosing with 8 to form the arcole; 11 from cell. Hindwing with veins 3·4 from angle of cell; 5 fully developed from above angle; 6·7 from upper angle; 8 anastomosing with the cell near base only.

2688a. Omorphina aurantiaca, Alph. Hor. Soc. Ent. Ross., XXVI., p. 452 (1392); id. Rom. Mém. ix., p. 41, pl. 1 f. 2. Staud. Cat. Lep. pal., p. 220.

Head, thorax and abdomen black clothed with bright rufous hair; palpi and legs with fuscous hair mixed, the anal tuft pale rufous. Forewing bright rufous, the basal half slightly suffused with fuscous; traces of a sinuous dark antemedial line; orbicular and reniform defined by deep rufous, the former round, the latter narrow; a deep rufous postmedial line, slightly bent outwards below costa, then waved, incurved at discal fold and strongly below vein 4; a minutely waved rufous subterminal line; cilia deep rufous. Hindwing bright orange yellow; the base and inner area suffused with black, confluent with the black discoidal lunule; a narrow black terminal band; cilia pale rufous, with dark line near base; the underside with the blackish suffusion confined to inner area.

Habitat-Tibet; Sikkim. Evp. 24 mill.

NOCTUINE.

2300. Cosmophila mesogona.

Larva. Semi-looper. Grass green with numerous black-centred white

spots; dorsal and lateral stripes dark-green with pale edges. Food plant wild raspberry in the leaves of which it spins up when pupating. (W. H. Campbell).

2303a. Cosmophila figlina, Butl., Ill. Het. B. M. vii., p. 71, pl. 131, f. 2 (1889).

J. Forewing with the termen slightly excurved at middle.

Head and thorax rufous tinged with brown; palpi whitish in front; lower part of frons whitish; antennæ with the basal joint whitish in front; pectus and legs yellowish tinged with rufous; abdomen grey-brown, the basal crest rufous tipped with whitish, the anal tuft tipped with white, the ventral surface yellowish tinged with rufous. Forewing yellow mixed with red, the costal area, cell, and the area from lower angle of cell to termen between vein 5 and submedian fold red-brown with a greyish tinge; a whitish mark at base of inner margin; antemedial line blackish, oblique, waved, excurved at median nervure and above inner margin; orbicular and reniform diffused brown, undefined, the former round with a white point in centre, the latter lunulate; postmedial line black, waved, oblique from costa to below vein 7, at vein 3 retracted to lower angle of cell and again excurved below submedian fold; an indistinct waved subterminal line defined on inner side by brown suffusion, incurved between veins 6 and 4 and below vein 3. Hindwing grey-brown; cilia whitish; the underside whitish with the costal half tinged and irrorated with red, a slight waved postmedial line.

Q. Forewing more uniform purplish brown.

Habitat—Punjab, Dharmsála; Assam, Khásis; Сеуlon, Maskeliya. Madulsima; Вигма, Rangoon. Esp. 38 mill.

2318. CHURIA ARCUATA. del. Anomis figlina.

2441a. POLYDESMA NODUNA; Swinh. A.M.N.H. (7), xvi., p. 152 (1905).

Q. Head and thorax dark sap-green mixed with white; pectus and legs pale red-brown, the tarsi fuscous ringed with white; abdomen pale red-brown, the ventral surface whitish. Forewing dark sap-green irrorated with white; a diffused white fascia below base of cell, the medial area whitish from below costa to above submedian fold, the postmedial costal area whitish; subbasal line defined on each side by whitish, excurved below costa and angled inwards in cell; antemedial line defined on inner side by white to submedian fold, slightly incurved from costa to median nervure, angled inwards in submedian fold, then double and excurved above inner margin; a black discoidal lunule; a rather diffused straight medial line interrupted in cell; postmedial line double filled in with white, oblique and minutely waved from costa to vein 6, inwardly oblique to submedian fold, then excurved and angled inwards on vein 1, some white points beyond it on costa; an oblique dentate white line defined by dark scales on inner side from costa near apex to submedian fold, where

there is a wedge-shaped blackish mark beyond it; subterminal line dentate, black defined by white lunules on inner side and connected by slight dark streak with a terminal series of faint striæ; cilia with a fine whitish line at base. Hindwing whitish suffused with glossy ochreous, the veins and terminal area dark-brown; a discoidal lunule, and sinuous postmedial line angled outwards in submedian fold; a subterminal series of white striæ; a white patch at termen and on cilia with a dark patch above it; cilia with a fine pale line at base; the underside whiter irrorated with brown, a black discoidal lunule, sinuous postmedial line, and broad dark terminal band.

Habitat—Ceylon. Esp. 42 mill. 2522a. Isoura Metaphæa, n. sp. Palpi with the 3rd joint long.

Q. Head, thorax and abdomen red-brown with a purplish tinge; palpi at base, pectus, legs and ventral surface of abdomen whitish tinged with fulvous, the tarsi fuscous with pale rings. Forewing red-brown with a purplish tinge; subbasal line represented by a small black spot below costa, the antemedial line by a black striga from costa, a spot in cell nearer base, and sometimes a slight striga below submedian fold; orbicular represented by a small black spot, the reniform by black points on its inner and outer edges: a more or less incomplete minutely waved black medial line bent inwards to costa; postmedial line represented by a double series of slight black lunules with another series beyond it, bent inwards to costa, then nearly erect; an incomplete minutely waved black subterminal line slightly excurved below vein 7. Hindwing with the basal area brownish ochreous, the rest of wing fuscous brown with a diffused brownish ochreous postmedial band not reaching costa or inner margin; cilia paler; the underside ochreous white with blackish postmedial band from below costa, where it is angled outwards, to submedian fold; the terminal area suffused with fuscous.

Habitat,—Ceylon, Colombo (Mackwood), Kandy (Green). Exp. 44 mill. Type in B. M.

2543b. Bocula sinifera, n. sp.

Q. Head and thorax red-brown; legs suffused with fuscous; abdomen fuscous brown, the ventral surface whitish suffused with red-brown. Forewing red-brown tinged with fuscous; two indistinct diffused incurved medial lines; a slight pale discoidal spot with minute brown lunule on it: an indistinct pale incurved postmedial line; a pale subterminal line, oblique from costa just before apex to vein 7, then excurved, then strongly bent inwards between veins 6 and 4 and excurved to inner margin near tornus, defined by black on outer side from costa to vein 4, strongly in the sinus: a terminal series of slight pale points; cilia greyish at tips. Hindwing fuscous brown, the cilia greyish: the underside greyish suffused and

irrorated with brown, a slight discoidal lunule and indistinct diffused curved postmedial line.

Habitat.—Assam, Khásis. Exp. 40 mill. Type in B. M.

2544 b. Bocula Macoma, Swinh., A. M. N. H. (7) xviii., p. 410 (1906).

J. Head and thorax pale rufous slightly irrorated with fuscous; palpi fuscous; forelegs and the tarsi fuscous; abdomen greyish dorsally suffused with fuscous. Forewing pale rufous slightly irrorated with fuscous; a black point on median nervure at origin of vein 2; traces of a very oblique sinuous medial line; postmedial line represented by a very oblique series of minute dark points on the veins; an oblique sinuous fuscous fascia from apex to vein 5 just beyond the postmedial line with a straight black line diffused on outer side from its extremity to inner margin near tornus, the area beyond it tinged with fuscous to the indistinct diffused sinuous subterminal line; a terminal series of small black lunules. Hindwing pale brown suffused with fuscous; the underside grey irrorated with brown, the terminal area suffused with fuscous to vein 2, a slight discoidal lunule and indistinct diffused curved postmedial line.

Habitat-Assam, Khásis. Exp. 28 Mill.

2555. Acantholipes hypenoides insert (Syn.) Rivula magniplagu. Swinh, A. M. N. H. (7) xvi., p. 622 (1900).

### Genus Masca.

 Type.

 Masea, Wlk., xvi. 8 (1858)
 abactalis.

 Phagytra, Wlk., xxxiv. 1508 (1865)
 abactalis.

Probosis fully developed; palpi obliquely upturned, the 2nd joint reaching to about vertex of head and moderately scaled, the 3rd moderate: from smooth; eyes large, rounded; antennæ of male ciliated; head and thorax clothed with hair and scales and without crests; fore femora and tibiæ of male broadly fringed with hair, the 1st joint of tarsus with tuft of hair; mid tibiæ broadly fringed with hair; hind tibiæ broadly fringed on both sides with hair and with tuft of very long hair from base: abdomen without crests. Forewing with the apex rectangular, the termen slightly angled at vein 4; veins 3 and 5 from near angle of cell; 6 from upper angle; 9 from 10 anastomosing with 8 to form the arcole; 11 from cell. Hindwing with veins 3·4 from angle of cell; 5 from above angle: 6·7 from upper angle; 8 anastomosing with the cell near base only.

2616a. Masca abactalis, Wlk., xvi., 9 (1858).

Phagytra leucogastralis, Wlk., xxxiv., 1508 (1865).

Metria platypoda, Feld., Reis. Nov., pl. 120, f. 44 (1873).

Head and thorax white mixed with reddish-brown; antennæ ringed brown and white: hindlegs with the tufts of hair black at tips; abdomen

white with lateral brownish streaks. Forewing with the basal half white tinged and irrorated with brown; the terminal half suffused with fuscous brown; traces of an oblique antemedial line with more prominent spots below the cell and above inner margin; an obscure very oblique dark spot in middle of cell and discoidal spot constricted at middle; the dark terminal area angled inwards below the cell; a minutely dentate postmedial line bent outwards below costa, oblique below vein 4, and angled inwards in submedian fold; two subterminal white points near apex and traces of a subterminal line; a terminal series of dark striæ. Hindwing white, the terminal half of costal area broadly fuscous, on terminal area extending to vein 3; a postmedial series of minute black streaks on veins 5 to 1; a terminal series of black striæ; the underside thickly irrorated with fuscous brown except inner area and terminal area below vein 5, a black discoidal point, curved diffused medial brown band and double postmedial series of brown points.

Habitat.—Assam, Khásis; Singapore; Borneo; Philippines; Java: Amboina; Ceram; New Guinea. Exp. 46 mill.

2747a. Egnasia mesotypa, Swinh., A.M.N.H. (7), xvii., p. 550 (1906).

Head, thorax and abdomen dull reddish brown; palpi irrorated with fuscous, the tuft on 3rd joint black; pectus and ventral surface of abdomen greyish irrorated with fuscous. Forewing dull reddish brown tinged with grey and irrorated with fuscous; a dark oblique antemedial line, incurved in cell; a small round white spot in middle of cell defined by fuscous; an inverted comma-shaped discoidal whitish mark defined by fuscous and with reddish spot in lower part; a dark postmedial line oblique from costa to vein 6, then minutely waved, oblique below vein 5 and with traces of another line beyond it; a curved dentate subterminal line; a fine black terminal line; cilia brown at base, whitish at tips except at middle. Hindwing dull reddish brown tinged with grey and irrorated with fuscous; a whitish discoidal mark defined by black, its outer edge twice indented and with small round spot beyond its lower extremity; a dark slightly sinuous medial line; a dentate subterminal line; a fine black terminal line; cilia brown at base, whitish at tips, intersected by brown at the points; the underside paler with indistinct diffused line beyond the medial line.

Habitat.—Assam, Khásis. Exp. ♂ 24, ♀ 30 mill.

2748a. Egnasia tenella, n. sp.

3. Head, thorax and the abdomen creamy white, back of head with two brown points, the thorax slightly irrorated with brown, the abdomen faintly tinged with brown; palpi with the extremity of 2nd joint and the 3rd joint ringed with brown; tarsi brownish ringed with white. Forewing creamy white slightly irrorated and striated with brown; a curved subbasal brown striga from costa; antemedial line brown, waved: the discocellulars with

two brown striæ and two blackish points; a faint medial line excurved to discocellulars; postmedial line brown, excurved from costa to vein 4, then slightly incurved; two minute dark streaks on costa towards apex and traces of a minutely waved white subterminal line with series of blackish points on its outer edge; a fine brown terminal line; cilia tinged with rufous. Hindwing creamy white slightly irrorated with brown; a black discoidal point enclosed by the faint medial line which forms an elliptical annulus round it; a curved brown postmedial line; subterminal line represented by a double series of small brown spots except towards costa, with whitish points between them; a fine brown terminal line; cilia tinged with rufous.

Habitat.—Burma, Maymyo. Exp. 26 mill. Type in B. M. 2762a. Capnodes subapicalis, Swinh., A.M.N.H. (7), xvi., p. 154. (1905).

Q. Head and thorax fuscous irrorated with white, tibiæ and tarsi pale rufous; abdomen pale rufous dorsally irrorated with fuscous and whitish. Forewing pale rufous irrorated with a few black scales; a blackish patch at base of costa; a black point in middle of cell; an indistinct medial line, strongly incurved below the cell; two black discoidal points edged with whitish; an indistinct dentate rufous postmedial line, oblique towards costa and strongly incurved below vein 4; traces of a waved subterminal line towards tornus; a semicircular brown line from below costa towards apex to termen at vein 5, defined by white on outer side, and connected by diffused fuscous streaks with small subterminal black spots defined by white, below this semicircular patch is a series of black points before termen; a fine black terminal line; cilia marked with fuscous towards apex and with fine black line near tips. Hindwing pale rufous irrorated with a few black scales; two obliquely placed black discoidal points; a minutely waved rufous line from below middle of costa to tornus with a black spot beyond it at tornus; a series of black points just before termen; a fine dark terminal line; the underside yellowish white irrorated with rufous, two discoidal black points, a curved dentate rufous postmedial line, and series of black points just before termen.

Habitat.—Assam, Silchar; CACHAR. Exp. 36 mill.

2772. RAPARNA DIGRAMMA.

Larva.—Fuscous thickly spotted with pale green; intersegmental olive-green bands; an olive-green dorsal stripe with spots on it; an interrupted subspiracular pale green line; the 12th somite somewhat swollen, with an orange band; ventral surface dull green; head flat, bright red; four pairs of prolegs. Food plant. Ochna squarrosa, 5. (W. H. Campbell.)

### HYPENINÆ.

28196. BLEPTINA HETEROPALPIA, n. sp.

Antennæ of male minutely serrate and with fascicles of long cilia, some-

what contorted and fringed with scales above at middle; palpi with the Brd joint long, from outer extremity of 2nd, oblique, bent forward at extremity, fringed with long hair behind and short scales in front; fore tibia without sheath; forewing with large costal fold on underside.

3. Head and thorax fuscous brown mixed with grey; tarsi with slight pale rings; abdomen grey suffused with fuscous brown. Forewing grey tinged with brown and irrorated with black; an indistinct sinuous black antemedial line; a diffused black medial shade not extending to costa; reniform whitish with brown centre, elliptical; postmedial line diffused, blackish, incurved below end of cell; subterminal line indistinct, whitish defined on inner side by blackish suffusion, angled outwards at vein 7 and with blackish patch before it, excurved at middle; a terminal series of black points. Hindwing whitish tinged with brown, traces of a diffused antemedial line and curved postmedial and subterminal lines; a terminal series of black striæ; the underside whitish irrorated with brown, a black discoidal lunule, the postmedial and subterminal lines more distinct.

Habitat.—Madras, Palnis (Campbell). Exp. 28 mill. Type in B. M. 2828. BLEPTINA TRIANGULIFERA insert (Syn), Macna pratextata, Hering Stett. Ent. Zeit. xliv., p. 98, pl. 1, f. 1 (1903).

2833b. Mastigophorus indentifascia. Swink., A. M. N. H. (7) xvii., p. 283 (1906).

Fuscous brown; palpi with the tuft of hair on inner side ochreous; tarsi ringed with whitish. Forewing with the area to postmedial line greyish fuscous; antemedial line represented by slight dark suffusion; a small deep black spot in middle of cell and rather large deep black discoidal lunule; postmedial line fuscous defined by greyish on outer side, excurved from costa to vein 4, then incurved and minutely waved, subterminal line grey, angled inwards at discal fold and incurved in submedian interspace; a terminal series of slight black lunules. Hindwing with small blackish discoidal spot, postmedial line fuscous defined by grey on outer side, minutely waved, excurved at middle; subterminal line greyish, obsolete towards costa, excurved from vein 6 to 3, then incurved; a terminal series of black striæ; the underside grey irrorated with fuscous, the terminal area suffused with brown, a black discoidal spot, curved minutely waved medial line and pale curved subterminal line defined on each side by fuscous.

Habitat.—Bhutan; Assam, Khásis. Ecp. 40 mill.

Under Mastigophorus insert *Oxenanus*, Swinh. Cat. Het. Mus. Oxon, ii. p. 201 (1900) for Sect. ii. Type brontesalis.

2838a. Mastigophorus magniplaga, Swinh., A. M. N. H. (7) xvi, p. 624 (1905).

\$\mathcal{G}\$. Red brown. Forewing with black point at base of costa and subbasal point below the cell, an indistinct pale antemedial line slightly bent inwards to costa, with black point before it in cell and spot beyond it on costa: a large rounded black discoidal patch truncate above and defined by ochreous, with dark brown patch above in on costa and slight oblique pale band beyond it touching its outer edge; postmedial line very indistinct. dark, minutely crenulate, excurved from costa to vein 4, then oblique, a diffused dark patch beyond it on costa; a terminal series of black points. Hindwing with indistinct diffused pale postmedial band with the slight curved brown postmedial line on it; a slight dark terminal line; the underside greyish brown with small black discoidal spot, minutely crenulate postmedial line, and indistinct minutely crenulate subterminal line.

Habitat.—Sikhim; Assam, Khásis. Evp. 42 mill.

2868b. Nodana discosticta, n. sp.

Antennæ of male knotted and contorted at middle; fore tibia with the sheath covering the basal joint of tarsus only, fore and hind legs with a large tuft of hair from femero-tibial joint.

- d. Head, thorax and abdomen ochreous brown tinged with purplish grey; legs with the tufts ochreous. Forewing brown mixed with purplish grey and with slight dark irroration, the costal edge darker; subbasal line blackish, from costa to median nervure; antemedial line black, minutely waved, bent inwards to costa: a round black discoidal spot; postmedial line black, minutely dentate, excurved from costa to vein 4, then incurved. subterminal line whitish, defined on each side by fuscous, almost straight; a terminal series of black points; cilia with a fine pale line at base. Hind wing grey suffused with brown; an indistinct discoidal bar and straight postmedial line from vein 6 to inner margin; subterminal line whitish defined on inner side by fuscous, the white not extending to costa, almost straight from costa to submedian fold where it is angled; a terminal series of black points; cilia with a pale line at base; the underside whitish irrorated with brown, a black discoidal lunule, the postmedial line slightly angled outwards at vein 6 and inwards at discal fold, the subterminal line diffused and slightly angled at veins 5 and 2.
  - 2. Rather deeper ochreous brown.

Habitat.—Ceylon, Kandy (Green), Peradeniya (Green). Exp. 34 mill. Type in B. M.

### Genus PILIPECTUS.

Type.

Pilipectus, Beth-Bakn. A. M. N. H. (8) vi., p. 443 (1910) . . . . occilata. Proboscis fully developed; palpi upturned, the second joint reaching to about vertex of head and moderately fringed with hair in front, the 3rd long and slender; fronts smooth, with tuft of hair; eyes large, round;

antennæ of male ciliated; thorax clothed with scales mixed with long hair, the tips of patagia with very long hair, without crests; mid tibiæ moderately fringed with hair, the hind tibiæ fringed on both sides with long hair, the inner spurs very long; abdomen with some long hair at base and crest on basal segment. Forewing with the apex rounded, the termen rather oblique below vein 4, not crenulate, the inner margin with numerous scale-teeth of scales and long hair; vein 3 from before angle of cell; 5 from above angle; 6 from just below upper angle; 9 from 10 anastomosing with 8 to form the areole; 11 from cell. Hindwing with veins 3.4 from angle of cell; 5 fully developed from just above angle; 6.7 from upper angle; 8 anastomosing with the cell near base only.

2874b. PILIPECTUS CYCLOPIS, n. sp.

- 3. Head and thorax ochreous white tinged with rufous and mixed with chocolate-brown scales; pectus and legs white, the latter suffused with brown; abdomen white dorsally tinged with brown, the crest at base brown. Forewing covered with fine chocolate-brown and white striæ and with numerous coarser white striæ, the basal half with the dark markings blackish; the veins whitish, antimedial chocolate-red marks above and below vein 1; a chocolate-red patch suffused with plum-colour beyond the cell, an orange spot on its lower part with white point above it, divided by whitish striæ from a semicircular chocolate-red patch defined by whitish beyond it, its middle part suffused with plum-colour and with some white in centre, two fine dark streaks above it below costa; the apex pale rufous without striæ; the termen with blackish marks irrorated and striated with white, the three towards apex small triangular spots, a large triangular patch at vein 5, wedge-shaped patch below vein 3, and rounded patch above tornus. Hindwing white, the apical area suffused with brown. Underside of forewing brown, the tornal area white.
- Q. Hindwing almost wholly suffused with brown, the cilia white slightly tinged with brown.

Habitat.—Ceylon, Haldamulla (Mackwood), Matale (Pole); SINGAPORE; BORNEO, Sarawak. Exp. 44 mill.

No. 1497. Cacyparis prunifera, Swinh. from Sikhim belongs to this genus, the forewing has the outer part of the postmedial patch extending from just below costa to below vein 3 and with yellow marks on it in the interspaces except between veins 6 and 5; P. ocellata, B.-Baker. from New Guinea has the fuscous on termen of hindwing in male extending to tornus.

1407j. Tolpia argentescens, n. sp.

Head, thorax and abdomen brownish ochreous with a slight silvery gloss; palpi blackish except at tips; tarsi blackish ringed with white. Forewings ochreous with a slight silvery gloss irrorated with rufous, the terminal area suffused with rufous, the costa dark-brown to middle where it expands into a patch; subbasal line represented by a black striga from costa and a point

in cell; antemedial line brown, oblique from costa to a small black spot in middle of cell, then erect, waved; medial line brown with small black spot on costa, erect, sinuous, with a small white discoidal spot on its outer edge; postmedial line red-brown defined on outer side by whitish, oblique to vein 6, slightly incurved at discal fold, then excurved, incurved below vein 4; subterminal line whitish defined on inner side by red-brown, excurved below vein 7 and at middle; some black striæ on costa towards apex and on termen. Hindwing ochreous white tinged with brown; a fine brown terminal line; the underside with the costal area suffused with brown, a blackish discoidal striga.

Habitat.—Ceylon, Kandy (Green). Exp. 14 mill. Type in B. M.

2904c. MARAPANA CAUTIPERAS, n. sp.

Head and thorax white mixed with grey-brown; palpi with the 2nd joint red-brown at sides, the 3rd with fuscous ring near tips; frons red-brown at sides; forelegs fuscous in front; abdomen white dorsally suffused with rufous except at base, the basal crest red-brown. Forewing white tinged with rufous, the costal area suffused with brown towards base; a large quadrate patch of red-brown mixed with fiery red and grey on terminal part of costal area, extending down to vein 4 and on inner part to vein 3; subbasal line white, excurved below costa and ending at submedian fold: antemedial line white slightly defined on inner side by rufous, angled outwards at subcostal and median nervures, then oblique; traces of a waved brown medial line; postmedial line white, very oblique and sinuous to vein 4, then inwardly oblique, some white points beyond it on costa; subterminal line white with diffused white patch before it at costa and defined on outer side by brown on the dark area, angled outwards at veins 7 and 4 and slightly incurved at submedian fold, where there is a rufcus point on its outer edge; a series of black points just before termen; a fine black terminal line. Hindwing whitish suffused with brown; a dark discoidal point; a whitish postmedial line; traces of a sinuous punctiform subterminal line, a series of black points just before termen and a fine black terminal line; cilia pure white; the underside white irrorated with fuscous, a black discoidal spot, indistinct rufous postmedial line, faint punctiform subterminal line, and series of black points before termen.

Habitat.—Ceylon, Kandy (Mackwood); Singapore (Ridley). ♀. Exp. 34 mill. Type in B. M.

2904d. MARAPANA DIPLOGRAMMA, n. sp.

of. Head and tegulæ red-brown slightly tinged with grey; thorax and abdomen grey-brown. Forewing grey-brown suffused with reddish brown on basal costal area, beyond the antemedial line, on postmedial area except towards inner margin, and on terminal area; subbasal line pale, inwardly oblique, from costa to submedian fold; antemedial line double filled in with whitish erect. slightly incurved in cell; a double discoidal

bar filled in with whitish; postmedial line double filled in with whitish, oblique below vein 4; an oblique grey-white shade from costa before the subterminal line which is indistinctly double filled in with whitish, slightly incurved at discal fold, excurved at middle, and incurved below vein 4. Hindwing grey suffused with fuscous brown; an indistinct postmedial line; cilia pale rufous; the underside whitish irrorated with reddish brown, a dark discoidal lunule, somewhat diffused sinuous postmedial line, and series of points just before termen.

Habitat.—Ceylon, Ambalangoda (Pole). Exp. 22 mill. Type in B. M. 2915b. Rhynchina leucogonia, n. sp.

Q. Head and thorax brown mixed with grey-white, the metathoracic crest tipped with black; abdomen whitish suffused with brown, the basal crest tipped with black; pectus and ventral surface of abdomen white irrorated with brown. Forewing whitish tinged with purple and suffused with brown and irrorated with black; a diffused whitish fascia above vein 1 to postmedial line where it is met by an oblique whitish band from apex; antemedial line very indistinct, excurved below costa, then oblique and angled inwards on vein 1; a white point at lower angle of cell; postmedial line indistinct, double, angled outwards below costa, then very oblique, some white points beyond it on costa; subterminal line slight. clark, dentate with black streaks, before it below veins 7.6, defined by whitish on inner side below vein 5, with a slight black mark at submedian fold, then with a pure white lunule before it; a terminal series of black points; cilia with slight white lunules in the crenulations. Hindwing reddish brown; the underside whitish tinged with red-brown, a slight discoidal lunule and indistinct curved postmedial line.

Habitat.—Madras, Horsleykonda (Campbell). Exp. 34 mill. Type in B.M. 2928b. HYPENA THERMOPHEA, n. sp.

of 3rd joint; pectus and base of legs whitish; tarsi fuscous ringed with whitish; abdomen grey-brown tinged with rufous, the basal crest tipped with grey, the ventral surface whitish. Forewing dark red-brown irrorated with black; an indistinct waved rufous antemedial line defined by ochreous on inner side; obscure blackish spots at middle of cell and on discocellulars: postmedial line rufous slightly defined by ochreous on outer side, minutely waved, oblique from costa to vein 4, then incurved; a subterminal series of slight black points, and a terminal series. Hindwing uniform reddish brown with a cupreous gloss; the underside with the inner half greyish.

Habitat.—Вомвах, Ratnagiri (Jayakar). Exp. 30 mill. Type in В. М. 2929а. Нурема мезодгамма, п. sp.

Q. Head and thorax black-brown mixed with grey; palpi whitish below; antenne ringed with whitish; pectus whitish; tarsi fuscous ringed

with white; abdomen black-brown mixed with grey and with whitish segmental lines, the crests blackish, the ventral surface whitish. Forewing reddish brown mixed with some grey and thickly irrorated with black, the terminal area darker; points of raised black scales with whitish scales in centre at middle of cell and on discocellulars; the postmedial line almost medial, oblique, whitish, defined on inner side by rufous, then by some black scales, some grey points beyond it on costa; subterminal line indistinct, oblique and blackish from costa to vein 6 where it is met by an oblique black streak from apex, then greyish, slightly incurved at discal fold and strongly at submedian fold, a terminal series of black striæ. Hindwing fuscous brown with a greyish tinge; a terminal series of black striæ; cilia whitish at tips; the underside whitish irrorated with redbrown, a blackish discoidal point and terminal series of minute black lunules.

Habitat.—Madras, Gooty (Campbell). Exp. 16 mill. Type in B. M. 2985b. Hypena molybdota, n. sp.

d. Head and thorax glossy black-brown ; abdomen pale brown ; palpi white at tips; tarsi ringed with white. Forewing black-brown with a leaden gloss and irrorated with a few white scales; antemedial line black from median nervure to inner margin, waved; a minute rufous spot defined by black in upper part of middle of cell, reniform small, triangular, rufous defined by black; a waved medial shade from lower angle of cell to inner margin; postmedial line black, minutely waved, excurved below costa and at middle, angled inwards at discal fold, incurved below vein 3 and excurved above inner margin, subterminal line white, minutely waved slightly excurved below vein 7 and at middle; a terminal series of minute black lunules defined on inner side by white scales. Hindwing fuscous; a slight waved black postmedial line on inner area; subterminal line whitish, incurved at vein 2; a terminal series of black points; the underside whitish thickly irrorated with fuscous brown, a small discoidal spot, indistinct dark waved postmedial line, and waved whitish subterminal line defined on outer side by fuscous.

Habitat.—Madras, Palnis (Campbell); Travancore, Pirmád (Mrs. Imray). Exp. 30 mill. Type in B. M.

2985 b. Hypena atrirena, n. sp.

Q. Head, thorax and abdomen reddish brown tinged with grey; palpi black-brown, white at tips; sides of frons black-brown; forelegs tinged with fuscous. Forewing grey suffused with reddish brown; antemedial live indistinct, dark, oblique, waved; a whitish point in middle of cell; reniform black defined by some whitish scales, attenuated above and rounded below; postmedial line slight, dark, minutely dentate, slightly bent outwards below costa and incurved at discal fold and below vein 4; subterminal line indistinct, pale, minutely waved, excurved below vein 7

and at middle; a terminal series of black striæ. Hindwing grey suffused with brown; traces of antemedial and medial lines; a terminal series of dark striæ; the underside with slight dark discoidal bar and traces of waved postmedial and subterminal lines.

Habitat.—Ceylon, Wellawaya (Green). Exp. 22 mill. Type in B. M. 2988a. Hypena abnormalis, n. sp.

Palpi of male with tuft of ochreous hair from 1st joint in front, the 2nd joint with tuft of long hair from base above, curved forward before the fringe of hair; antennæ serrate and fasciculate; the cell with fold on underside containing a tuft of long yellow hair; the fore coxæ and femora with tufts of hair, the fore tibia with small streak covering the base of torsus.

3. Head and thorax fuscous brown; abdomen whitish tinged with brown. Forewing grey suffused with reddish brown and irrorated with fuscous; traces of an erect dark antemedial line; postmedial line dark, excurved below costa and at middle and incurved at discal fold and below vein 4; faint traces of a dark subterminal line, angled outwards at vein 7; a terminal series of black points. Hindwing white faintly tinged with brown except the costal area to beyond middle, the inner area strongly tinged with brown; the underside white slightly irrorated with brown, a dark discoidal point and terminal line from apex to vein 2.

Habitat.—Ceylon, Hatigala (Green). Exp. 28 mill. Type in B. M.

2990. Britha biguttata insert (syn.) Hypena colabalis, Feld., Reis. Nov., pl. 120, f. 29 (1874).

2996b. Chusaris Rubrirena, n. sp.

9. Head, throax and abdomen rufous mixed with some ochreous white; palpi with some black on outer side of 2nd joint at base and extremity, the 3rd joint white with black ring near extremity; tarsi banded with black. Forewing ochreous suffused with rufous and irrorated with brown especially on costal area; a brown antemedial mark on costa with traces of the antemedial line arising from it, oblique, sinuous; reniform oblique, with red centre defined by black except above and whitish bar before it, some dark suffusion beyond it and a blackish striga above it from costa; postmedial line white and oblique from costa to vein 6, then obsolescent, strongly angled inwards in submedian fold, a blackish patch beyond it on costa; subterminal line white slightly defined on inner side by red suffusion, angled inwards below costa and at discal fold, the area beyond it suffused with red and with slight diffused black streaks from below costa to vein 4; a terminal series of small black spots defined on inner side by white lunules; cilia white with some black at apex and middle and black line through them between those points. Hindwing blood-red, the terminal area tinged with brown; a slight dark discoidal point, indistinct curved white postmedial line with slight oblique black striga before it at inner margin, and subterminal series of slight dark spots towards tornus

with oblique black striga on a white mark before them above inner margin; a series of blackish points just before termen; cilia whitish with blackish line near tips from apex to discal fold; the underside whitish suffused with rufous, traces of waved red medial and postmedial lines, and of a waved white subterminal line defined on inner side by brown and on outer side towards costa, a terminal series of black lunules.

Habitat.—Ceylon, Kegalle (Alston). Exp. 18 mill. Type in B. M. 3008b. Hypenagonia flavisigna, n. sp.

Palpi projecting about one and a half times length of head.

Q. Head, thorax and abdomen dark-brown mixed with grey; palpi with oblique pale band on 2nd joint. Forewing dark-brown mixed with grey; a slight dark subbasal line, angled outwards below costa, then oblique; a slight dark antemedial line, obliquely excurved from costa to median nervure, then oblique; an oblique diffused medial black band from upper angle of cell to inner margin; a minute whitish discoidal lunule; postmedial line indistinct and whitish on costal half, yellowish on inner half, bent outwards below costa and incurved below vein 4, a irregular yellow mark with slight black marks on its edges beyond it between veins 6 and 4, and some white points on costa; a subterminal series of small triangular black spots with white striæ on their inner side; cilia mixed with white at tips. Hindwing grey and yellowish thickly irrorated with dark-brown; a black medial band from upper angle of cell to inner margin; a maculate black postmedial line with some yellow before it; an indistinct blackish subterminal line; a series of black striæ slightly defined on inner side by grey just before termen; a fine black terminal line; cilia mixed with white at tips; the underside white mixed with some yellow and thickly irrorated with black, a small black discoidal spot, medial and postmedial lines, and diffused subterminal shade.

Habitat.— Ceylon, Kalutava (Alston). Exp. 16 mill. Type in B. M. 3008c. Hypenagonia longipalpis, n. sp.

Palpi projecting about three times length of head, the 3rd joint upturned and tufted with hair at middle.

Head, thorax and abdomen yellowish mixed with rufous and a few black scales; palpi with oblique black line near extremity of 2nd joint, the 3rd joint with black band at middle; tegulæ with some black at tips; tarsi ringed with black. Forewing yellowish mixed with rufous and irrorated with black; a slight waved black subbasal line from costa to median nurvure; a fine minutely waved black antemedial line; a brown medial band edged by slight dark lines, the outer edge slightly angled outwards at lower angle of cell below the minute white discoidal lunule; postmedial line fine, black defined on outer side by white, oblique from costa to vein 6, slightly angled inwards at discal fold, incurved and minutely waved below vein 4, the costa beyond it with alternating black and whitish

streaks; the postmedial area with curved series of black points and in female a rounded spot in discal fold with diffused streak from its outer edge to tips of cilia; a subterminal series of small black spots, excurved at middle; a fine waved black terminal line; cilia with whitish line at base of cilia. Hindwing yellowish and white mixed with rufous and irrorated with black; a brown medial band from below costa to inner margin, edged by blackish lines; a postmedial series of black points with minute yellowish lunules on their outer sides; a subterminal series of small black spots defined on inner side by whitish; a fine waved black terminal line; cilia with a whitish line at base and black line at middle; the underside with waved black medial, postmedial and subterminal lines, black discoidal bar, and series of small spots before termen.

Habitat.—Ceylon, Puttalam (Mackwood), Haputale (Alston). Exp. 18 mill. Type in B. M.

3008b. HYPENAGONIA BRACHYPALPIA, n. sp.

Palpi projecting about the length of head.

Q. Head, thorax and abdomen white; palpi and hinder part of thorax tinged with rufous; fore femora and tibiæ tinged with fuscous; abdomen with rufous band at base and slight fuscous bands towards extremity. Forewing white tinged with rufous except on costal area; antemedial line with black point at costa, then slight, rufous, incurved in cell and excurved in submedian interspace; two black discoidal points; a rather diffused oblique rufous line from lower angle of cell to inner margin; postmedial line fine, brown, with black point at costa, strongly bent outwards below costa, then oblique, slightly incurved at discal fold and somewhat sinuous below vein 4; two slight black streaks on costa towards apex; subterminal line slight, whitish, slightly angled inwards below costa and with rufous mark on its outer edge at middle; a terminal series of black striæ with small rather dentate white marks before them; cilia with fuscous spot at middle. Hindwing white; a diffused rufous antemedial line except on costal ar.a; a black discoidal spot; the medial area with some fuscous irroration; an inwardly oblique dark line from costa towards apex to discal fold; a double very minutely waved subterminal line, the inner line blackish, the outer brown and rather diffused towards apex; a fire black subterminal line except at apex; the underside white slightly irrorated with fuscous, a black discoidal point and slight sinuous postmedial line.

Habitat.—Ceylon, Labugama (Mackwood). Exp. 14 mill. Type in B. M. 3014z. Medistoppera albisigna, n. sp.

J. Head and tegulæ brownish white, the palpi brown irrorated with black, the frons with brown lateral bars, some brown between antennæ and two black points at back of head, the tegulæ black at middle and tips: thorax and abdomen grey-brown irrorated with a few black scales. Forewing grey-brown irrorated with a few black scales; traces of a strongly

excurved antemedial line; orbicular near end of cell, round, defined by black except below; a comet-shaped mark at end of cell, its upper extremity extending to near costa and its lower to near postmedial line above vein 3, defined by black except above, a white spot on its inner side on discocellulars, a white line on its outer edge and some rufous in centre, some black suffusion beyond it and a slight white streak above its upper extremity; postmedial line black, dentate, oblique from costa near apex to vein 3, angled outwards at vein 7 and inwards at discal fold, a fuscous mark below vein 2; some white points on costa towards apex; subterminal line slight, grey defined on inner side by black striæ, excurved at middle, and angled inwards at discal and submedian folds; a fine waved black terminal line with an ochreous white mark before it below vein 3 and blackbrown spot below 2. Hindwing fuscous brown, the cilia whitish; the underside grey thickly irrorated with brown, a slight dark discoidal striga and indistinct pale curved postmedial line.

Habitat.—Madras, Horsleykonda (Campbell). Exp. 24 mill. Type in B. M.

2103a. RIVULA COGNATA, n. sp.

Mid and hind tibiæ of male fringed with long hair on outer side, the mid tibia with fold containing a tuft of long hair; abdomen with lateral tufts of hair near base meeting ventrally; hindwing with the termen deeply excised at submedian fold, the tornus lobed, the inner area with a fold containing a tuft of black scales on upperside just beyond middle.

- d. Head and thorax red-brown, the patagia ochreous white; pectus and legs ochreous white; abdomen dark-brown mixed with some grey. Forewing ochreous white irrorated with dark-brown, the terminal area suffused with red-brown, the costa dark-brown; subbasal line represented by a whitish striga from costa; antemedial line whitish, angled inwards in cell, then with a large patch of black-brown suffusion before it; a whitish discoidal point on a diffused brown spot; postmedial line whitish slightly defined on inner side by brown, bent outwards below costa near apex, then minutely waved, oblique and incurved below vein 4, some oblique white striæ beyond it from costa; subterminal line represented by a small wedge-shaped whitish mark from costa with black point at its apex, then by a series of black points with whitish points on their inner side and by a whitish striga at tornus. Hindwing fuscous brown; a slight whitish line at base of cilia; the underside ochreous white irrorated with brown, a slight dark discoidal spot and indistinct postmedial line from costa to vein 4.
  - Q. Thorax and ground colour of forewing uniform red-brown.

Habitat.—Bombay, N. Kanara, Karwar (Bell); Ceylon, Kandy (Green). Exp. 18 mill. Type in B. M.

The structure of R. basalis is similar, but the postmedial line of forewing is straight from below apex to inner margin.

2103b. RIVULA SIMULATRIX, n. sp.

Structure of male similar to R. basalis and cognata, but abdomen and hindwing normal.

- \$\delta\$. Head, thorax and abdomen pale ochreous yellow. Forewing pale ochreous yellow, the terminal area tinged with rufous; antemedial line whitish defined on outer side by a fine brown line and on inner by rufous suffusion except at costa, excurved from costa to submedian fold, then oblique; a whitish point at upper angle of cell on a diffused rufous spot; postmedial line whitish slightly defined on each side by brown, strongly bent outwards below costa, then oblique, straight, some oblique whitish strice beyond it from costa; subterminal line represented by a whitish striga from costa, then by a series of black points with whitish points on their inner side and a whitish striga at tornus. Hindwing ochreous white tinged with brown especially on terminal area, a fine dark terminal line; the underside ochreous white irrorated with red-brown.
- Q. Head, thorax and abdomen red-brown; forewing entirely suffused with red-brown, with deep red-brown suffusion before antemedial line; hindwing dark red-brown, the cilia rufous.

Habitat.—Ceylon, Dickoya (Green), Pundaloya (Green), Nawalapitiya (Pole). Exp. 18-20 mill. Type in B. M.

2103d. RIVULA PROCRITA, Swinh. A. M. N. H. (7), xvi., p. 621 (1905). Forewing with vein 10 absent or very short.

Q. Head and thorax white or pale brown mixed with dark red-brown; palpi, pectus, and legs brown, tarsi blackish slightly ringed with white; abdomen fuscous, whitish at base. Forewing white or pale brown slightly irrorated with brown; a red brown patch on costa near base with the indistinct irregularly waved antimedial line arising from its outer edge and expanding into a patch at inner margin; a medial red-brown band expanding into a triangular patch at costa, narrowing at lower angle of cell and expanding into a wedge-shaped patch at median nervure with a >shaped black mark on it; postmedial line arising from outer edge of the band, bent outwards below costa, incurved below vein 4 and joining the band at inner margin; terminal area red-brown with two white points on costa, an indistinct blackish subterminal line excurved below vein 7 and at middle, a white spot beyond it at apex with five black marks below it and some small white spots towards tornus; a terminal series of black points with white striæ on their inner sides. Hindwing fuscous brown with a slight pale line at base of cilia; the underside whitish tinged with brown, the terminal area suffused with brown, a fuscous discoidal lunule and curved postmedial line.

Habitat.—Assam, Khásis; Bali. Exp. 22 mill.

### URANIADÆ.

3045d. Epiplema fulvihamata, n. sp. (pl. G., f. 14).

Forewing with the termen very slightly angled at vein 6, hindwing with the costa excised beyond middle and produced to points at veins 6 and 4.

Head and thorax red-brown tinged with purplish grey; palpi above and frons black; pectus and legs whitish, the forelegs fuscous above; abdomen grey tinged with brown, the medial segments with blackish dorsal marks. Forewing greyish suffused with purple-brown and striated with blackish; traces of an interrupted waved antemedial line bent inward to costa; postmedial line double tinged with fulvous and oblique from costa to vein 5, then indistinct, pale, and incurved from vein 4 to submedian fold, then defined by black on inner side and slightly excurved; a terminal black point below apex, then a dark band with diffused black and fulvous on its inner edge, angled outwards at vein 6 and ending on termen at vein 2. Hindwing with the costal half purplish, the inner half purplish grey-brown striated with black; a fulvous streak in lower part of cell hooked on discocellulars and with some black beyond its angle; postmedial line ochreous, defined on inner side by brown from costa to discal fold and below vein 4 by black and fulvous, oblique and slightly sinuous from costa to vein 4 where it is acutely angled outwards, then nearly straight; a whitish line from termen at vein 7 to termen at vein 2, defined by black on outer side and produced to termen as short white streaks at discal fold and veins 4.3; the underside brownish white slightly striated with black.

Habitat.- CEYLON, Kandy, Peradeniya (Green); Pulo Laut (Doherty). Evp. 22 mill. Type in B. M.

### GEOMETRIDÆ.

### BOARMIANÆ.

3148a. SYNEGIA CONFLAGRATA, n. sp.

Q. Head, thorax and abdomen fiery red mixed with yellow; palpi brownish; frons yellow below and with red and brown bars above; antennæ brown, the shaft above and a line between their bases pure white; pectus and legs ochreous and brownish, the forelegs brown; ventral surface of abdomen whitish. Forewing yellow and fiery red almost entirely suffused with fuscous brown, leaving some of the ground colour at base, as irroration on medial costal area, as ante and postmedial patches on inner margin, as a semicircular patch on termen from apex to vein 4, and lunulate spots towards tornus; an interrupted red and yellow antemedial line, excurved below costa; a postmedial white spot in submedian fold at the apex of the patch on inner margin; some brown striæ on termen; cilia yellow intersected with brown towards apex and at middle. Hindwing yellow suffused with fiery red; some brown at base; a dark discoidal point

with the indistinct sinuous brown medial line just before it; postmedial line double, fiery red filled in with yellow, waved; a strong brown subterminal line, angled outwards to termen at discal fold and produced as streaks to termen at veins 4, 3, 2; the underside ochreous, a brown subbasal line except towards costa, medial line brown, waved, double towards inner margin, the discoidal point just beyond it, postmedial line brown, curved, waved, the subterminal line connected at discal fold with a lunulate patch on termen.

Habitat.—Madras, Nilgiris (Andrewes). Erp. 36 mill. Type in B. M. 3235. MACARIA SUBALBATARIA.

Larva.—Bistre brown; two black dorsal lines with a white line between them; two fine lateral black lines; ventral surface paler; head bistre brown with black spots. 6 (W. H. Campbell).

3236a. MACARIA HONORIA, n. sp.

Head and thorax dark-brown mixed with some grey; palpi ochreous at base and white at tips: from with white points at sides, antennæ with the basal point white in front; pectus yellow, legs yellow irrorated with brown, the tibiæ and tarsi brown above; abdomen yellow, dorsally dark-brown except at extremity. Forewing purplish grey irrorated and striated with dark-brown, the basal and costal areas suffused with brown, the medial area pale grey except towards costa; an oblique antemedial dark-brown bar from costa; a small black-brown discoidal spot; postmedial line darkbrown, strong oblique and slightly sinuous to vein 7, then bent inwards to discal fold, then slightly oblique, a patch of black-brown above its angle on costal area, then a band of dark-brown suffusion beyond it emitting a diffused fascia from the angle of the line to termen; a terminal series of black-brown points; cilia brownish with white line at base, chequered with dark-brown towards apex. Hindwing purplish grey striated with brown; the basal area suffused with brown, a whitish subbasal spot in cell, its outer edge incurved before the small round black discoidal spot placed on the paler medial area; postmedial line blackish, almost straight, a broad band of brown suffusion beyond it and rather wedge-shaped black patches between veins 6.7 and 4.3, the former extending at extremity to discal fold; the terminal area with dark-brown patch between veins 6 and 4; a terminal series of slight dark lunules; cilia whitish at base, brownish at tips, dark between veins 6 and 4. Underside of both wings with the basal area pale striated with brown, the terminal area fuscous brown with white subapical spot on forewing, the hindwing with some white striæ near inner edge of the dark area and on apical area and an irregular white patch striated with brown at middle of termen.

Habitat.—Madras, Nilgiris (Andrewes). Exp. 42 mill. Type in B. M. 3326b. Garæus flavipicta, n. sp.

d. Head and thorax fiery red; antennæ with the shaft whitish, the



## THE MOTHS OF INDIA.

# EXPLANATION OF PLATE G.

1.	Arbela theivora.	23.	Ufeus carnea.
2.	Celama leucoscopula.	24.	Anytus leucocyma,
3.	., mesotherma.	25.	Tichestra serrata.
4,	,. rufimixta.	26.	Dichonia chlorata.
5.	,. dentilinea.	27.	Chloroclystis plicata.
6.	Rœselia pallidiceps.	28.	Prasinoxena metaleuca.
7.	Zia ectrocta.	29.	Melissoblaptes monochroa.
8.	Ilema atrifrons.	30.	Crambus endopolia.
9.	Halone flavinigra.	31.	., neurigrammalis.
10.	Asura phantasma.	32.	., albiceps.
11.	., toxodes.	33.	Chilo aræalis.
12.	,. fulvimarginata.	34.	Prorophora dialeuca.
13.	Neasura taprobana.	35.	Heterographis augentescens.
14.	Epiplema fulvihamata.	36.	Nephopteryx rhodobasalis.
15.	Cidaria nyetichroa.	37.	Thermopteryx rubrifusa.
16.	Gymnoscelis lobata.	38.	Spatulipalpia albistrialis.
17.	Chloroclystis dentatissima.	39.	Lepidogma chlorophilalis.
18.	polygraphata.	40.	Macalla eumictalis.
19.	Utetheisa pulchelloides.	41.	Trichophysetis umbrifusalis.
20.	Episilia elavata.	42.	Bostra mesaleucalis.
21.	arenacea.	43.	Oligostigma andreusialis.

44. Massepha rufescens.

22. Lycophotia poliades.



Horace Knight del.et lith.

West, Newman chromo.



branches brownish, abdomen yellow tinged with red and brown. Forewing fiery red with a few dark striæ, the medial area with diffused yellow patches on costal area and below the cell and an oblique yellow bar from costa before the angle of postmedial line, the costal edge yellowish on basal area; a diffused brownish antemedial line oblique from costa to median nervure, then slightly waved; a black discoidal point; postmedial line dark slightly defined by violaceous on outer side, acutely angled outwards below costa, then oblique; the apex brownish with some violaceous irroration. Hindwing fiery red sparsely striated with black, the terminal area with a faint violaceous gloss; medial area yellow, narrowing towards costa and with slight red marks on its outer edge towards inner margin, bounded by the dark postmedial line which is excurved and minutely waved from vein 4 to inner margin. Underside of both wings yellow striated with black and with diffused patches of rufous suffusion especially on tornal area of forewing and apical area of hindwing which has the postmedial line excurved between veins 4 and 2.

Habitat.—N. Assam, Dibrugrah (Ward). Exp. 38 mill. Type in B. M. 3528a. Abraxas diversicolor.

Larva.—Dull fuscous; a pale yellow dorsal stripe interrupted at the junction of the somites; spiracular line red with a series of minute red specks above it; head prominent, glabrous, red; legs and preanal claspers red, anal segment and anal claspers whitish. Food plant Rhododendron. (W. H. Campbell).

#### LARENTIANÆ.

3643a. CIDARIA NYCTICHROA, n. sp. (Pl. G., f. 15.)

of. Head, thorax and abdomen reddish brown mixed with some grey and black, the tegulæ, prothorax and abdomen with blackish bands, the metathorax with black crest; pectus, legs and ventral surface of abdomen brownish white, the fore tibiæ and tarsi black with pale rings. Forewing reddish brown suffused with a black and with numerous minutely waved black lines, the double antemedial line and the postmedial line rather more prominent, the latter excurved below costa and at middle; a waved greyish subterminal line and black terminal line. Hindwing red-brown suffused with black and with numerous waved black lines except on costal area which is greyish; a black terminal line; the underside whitish irrorated with fuscous, curved sinuous medial and postmedial blackish lines and a broad diffused subterminal band.

Habitat.—Madras, Palnis (Campbell). Exp. 28 mill. Type in B. M. 3738. Photoscotosia venipicta insert (syn.) Eustroma pilosa, Th. Mieg. Le Nat. 1910, p. 34.

3747b. Pomasia punctaria, n. sp.

2. Head white with blackish bars above from and between antennæ,

the back of head and tegulæ yellow, the latter with blackish patches; palpi blackish banded with white; antennæ brown, the basal joint white in front; thorax brown with white patches on patagia; pectus and legs yellow, the fore and mid tibiæ and tarsi banded with brown; abdomen dark-brown with dorsal series of white spots and segmental lines, the extremity and ventral surface orange-yellow. Forewing brown with numerous waved white lines with series of small spots between them, the apical area and termen with the markings orange-yellow; a white discoidal annulus with white point in centre; the termen with a series of orange lunules concave towards base. Hindwing brown with numerous waved white lines with series of small spots between them, the terminal area with the markings orange-yellow.

Habitat.—Madras, Nilgiris (Andrewes). Evp. 24 mill. Type in B. M. 3754. Gymnoscelis subtrigosa, insert Eupithecia substristigera, Wk., XXXV., 1879, (1866); which has precedence.

Larva.—Black; two yellow-green dorsal lines conjoined at the junctions of the somites by bands of the same colour; a spiracular series of yellow-green spots and a few similar spots on the ventral surface; head black, glabrous. Feeds gregariously on a species of low-growing Fig. (W. H. Campbell.)

3755a. Gymnoscelis lobata, n. sp. (P1. G., f. 16.)

Hind tibia with long inner medial spur, the outer spur absent: hind-wing of male with costal lobe folded over on underside, the inner area folded over on underside and grooved.

3. Head, thorax and abdomen ochreous mixed with reddish brown, the underside ochreous whitish, the fore tibiæ and tarsi fuscous ringed Forewing greyish ochreous irrorated with fuscous; subbasal line represented by slight double dark striæ from costa; antemedial line slight, waved, inwardly oblique, a waved dark band beyond it with the black discoidal striga on its outer edges; a faint double minutely waved medial line; postmedial line double, minutely waved and obliquely curved, with fuscous suffusion on its inner side; subterminal line pale, minutely waved, with fuscous suffusion on its inner side, the area beyond it purple; a fine dark terminal line; cilia ochreous and fuscous. Hindwing greyish ochreous irrorated with fuscous; traces of double waved ante and postmedial lines; a rather punctiform blackish subterminal line, the area beyond it tinged with purple; a fine black terminal line; cilia ochreous and fuscous. Underside of forewing suffused with purple except the inner area to beyond middle, a curved whitish postmedial band with deeper purple before and beyond it; hindwing whitish, the costal fold fulvous, an obliquely curved purple postmedial band from costa to vein 4 and a terminal band.

Q. Head and abdomen more fulvous; wings tinged with green; forewing with the suffusion before postmedial and subterminal lines rufous, no purple on termen; the underside with the purple replaced by brown.

Habitat.—Ceylon, Madulsima (Vaughan), Maskeliya (Alston), Ambawela (Green), Hakgala (Green). Exp. ♂ 18, ♀ 20 mill. Type in B. M. 3770b. Chloroclystis dentatissima, Warr., Nov. Zool., v., p. 428 (1898). (Pl. G., f. 17.)

Head, thorax and abdomen grey tinged with reddish brown; palpi fuscous towards tips; fore tarsi brown ringed with whitish. Forewing grey suffused and irrorated with brown; subbasal line represented by a black striga from costa, the antemedial line by black striæ from costa and inner margin and at median nervure, inwardly oblique; a blackish point on middle of costa; postmedial line faint, waved, with short black streaks on the veins, oblique from costa to vein 6, angled inwards at discal fold and oblique below vein 4; subterminal line whitish, minutely dentate, defined on inner side by slight dark streaks on the veins; a terminal series of black striæ with minute streaks before them in the inter spaces. Hindwing grey suffused and irrorated with brown; indistinct minutely waved, subbasal antemedial and medial lines; postmedial line blackish, curved, slightly incurved at discal fold, with another faint line beyond it; subterminal line whitish defined on inner side by brown, minutely dentate; a terminal series of black striæ; the underside brownish white with curved dark medial and postmedial lines except on inner area, a fine black terminal line.

Habitat.—Ceylon, Peradeniya (Green), Colombo (Mackwood); Cocos Keeling I; Key Is; N. Australia, Port Darwin. Exp. 18-22 mill.

3770c. Chloroclystis polygraphata, n. sp. (Pl. G., f. 18.)

Head, thorax and abdomen grey mixed with fuscous and tinged in parts with rufous; palpi, sides of frons, pectus and legs blackish, the tarsi slightly ringed with white. Forewing grey, slightly tinged with reddish brown and irrorated with fuscous; subbasal line double, curved, from costa to submedian fold, the inner line indistinct, antemedial area with two indistinct waved lines, the antemedial line black, diffused and oblique to median nervure, then minutely waved, the medial area with two lines. oblique to just below cell, then minutely waved; a strong black postmedial lunule with blackish patches above it on costa and black points below it on veins 3 and 2; postmedial line fine, on a pale band slightly angled outward at vein 6, oblique to below vein 4, then minutely waved, a diffused lunulate dark line beyond it; subterminal line whitish defined on each side by fuscous, minutely waved; cilia fuscous intersected with whitish. Hindwing grey tinged with brown; a black mark on base of median nervure and two spots an inner margin; two obscure antemedial lines angled outwards at middle and interrupted in submedian inter space; postmedial line double.

the inner line with slight dentate black marks before it on median nervules, angled outwards at middle, then incurved and minutely waved; subterminal line double, maculate, oblique from costa to vein 3 where it is obtusely angled; a series of fuscous spots just before termen from apex to vein 3; cilia tinged with ochreous and with series of fuscous spots at base. Underside of both wings suffused with fuscous brown; hindwing with obscure maculate postmedial line excurved at middle.

Habitat.—Ceylon, Hakgala (Green). Exp. 28 mill. Type in B. M. 3773b. Cloroclystis plicata, n. sp. (Pl. G., f. 27.)

Forewing of male with the costa folded over on upperside from before middle to towards apex.

Head, thorax and abdomen grey suffused with reddish brown, palpi blackish except at base, the tips of 3rd joint white. Forewing grey suffused with red-brown and with some black irroration on the veins; antemedial line indistinct, double, waved; three oblique blackish striæ from medial part of costa; postmedial line indistinct, double, minutely waved, excurved to vein 4, then oblique; subterminal line grey, minutely waved, with slight black streaks before it below costa and at middle and beyond it in the inter spaces; a terminal black line. Hindwing grey suffused with red-brown, the median nervure and veins beyond lower angle of cell irrorated with black to the indistinct double whitish postmedial line which is excurved at middle; an indistinct dentate whitish subterminal line; a black terminal line.

Habitat.—Ceylon, Hakgala (Green), Ohiya (Green), Newara Eliya (Mackwood), Horton Plains. Exp. 26 mill.

#### ACIDALIANÆ.

3925. Ephyra validaria, insert (syn.) 4076a. Geometra rufifrontaria. 3971a. Timandra flavisponsaria, n. sp.

Head rufous; antennæ whitish towards base and with white bar between their bases; thorax yellow tinged with rufous; legs rufous; abdomen yellow tinged with rufous. Forewing ochreous yellow, the costal and terminal areas suffused with rufous and irrorated with blackish; antemedial rufous points on median nervure and vein 1; a minute rufous discoidal spot; traces of an oblique postmedial line defining the rufous terminal area, obsolete towards costa and excurved between vein 5 and submedian fold; subterminal line with diffused oblique blackish streak from apex, then represented by a series of black points; a fine red-brown terminal line; cilia rufous. Hindwing ochreous yellow slightly striated with brown, the terminal half suffused with rufous; an oblique red-brown medial line with rufous band beyond it and fuscous patch on costal area; a brown postmedial line excurved between veins 4 and 2; a fine red-brown terminal line; cilia rufous. Underside of both wings tinged with rufous

and prominently striated with blackish, the postmedial line black, excurved between veins 5 and 2, a black terminal line; forewing with black discoidal spot.

Habitat.—Madras, Wynâd (Cardew), Nilgiris (Andrewes); Burma, Katha (Bingham). Exp. 30 mill.

### PYRALIDÆ.

### GALLERIANÆ.

4141c. Prasinoxena metaleuca, n. sp. (Pl. G., f. 28).

3. Head, thorax and abdomen white, the patagia green. Forewing apple-green with two brownish grey discoidal points and one in discal fold beyond the cell; the costal edge brown towards apex; cilia white with waved brown line at base and fuscous tips. Hindwing white. Underside of forewing with the fringe of hairy scales on and beyond median nervure ochreous white.

Habitat.— Ceylon, Kandy (Mackwood). Exp. 16 mill. Type in B. M. 4144c. Melissoblaptes monochroa, n. sp. (Pl. G., f. 29).

3. Head, thorax and abdomen brownish white. Forewing pale brownish ochreous, sparsely irrorated with black; a subbasal black point in cell; a series of black points on costa towards apex and on termen from apex to vein 2. Hindwing uniform pale brownish ochreous.

Habitat.—Ceylon, Ambalangoda (Pole). Exp. 32 mill. Type in B. M.

### CRAMBINÆ.

4156b. CRAMBUS ENDOPOLIA, n. sp. (Pl. G., f. 30).

3. Head and thorax pale grey-brown; pectus, legs and abdomen whitish tinged with brown. Forewing pale grey-brown, the inner area paler to submedian fold, the veins beyond the cell slightly streaked with whitish and defined above and below by faint brown streaks; traces of a brown point at middle of vein 1 and discoidal point; an indistinct highly curved postmedial brown line. Hindwing white tinged with brown; the underside with the inner area whiter.

Habitat.—Ceylon, Wellawaya (Green). Exp. 26 mill. Type in B. M. 4169a. Gramus neurigrammalis, n. sp. (Pl. G., f. 31).

Head and thorax white, sides of palpi, antennæ and patagia golden bronze; abdomen white faintly tinged with ochreous. Forewing white; a diffused golden bronze fascia on costal area to subterminal line and another on median nervure to well beyond angle of cell; a black discoidal spot; the veins beyond the cell defined by fine golden bronze streaks; a double highly curved subterminal line with small wedge shaped black-brown mark beyond it on costa; a black-brown terminal line. Hindwing white with a slight bronze terminal line from below alex to submedian fold.

Habitat.—Ceylon, Ambalangoda (Pole). Exp. 3 16,  $\cite{D}$  18 mill. Type in B. M.

4178b. CRAMBUS ALBICEPS, n. sp. (Pl. G., f. 32).

2. Head and thorax grey tinged with brown, the vertex of head whitish; abdomen white tinged with brown. Forewing grey tinged with reddish brown and thickly irrorated with brown; a slight blackish discoidal point and blackish terminal line; cilia with a silvery gloss. Hindwing white tinged with brown, the cilia white; the underside white faintly tinged with brown.

Habitat.—Ceylon, Haputale (Alston). Exp. 18 mill. Type in B. M. 4202c. Chilo arealis, n. sp. (Pl. G., f. 33).

Forewing with vein 8, 9, 10 stalked, 11 anastomosing with 12.

3. Head, thorax and abdomen pale ochreous yellow; forelegs brownish, the tibia and tarsus whitish in front. Forewing pale ochreous yellow slightly irrorated with brown and the veins defined by faint brown streaks; traces of an oblique antemedial brown line from vein 2 near base to vein 1; a triangular blackish discoidal spot with a brownish streak from it to termen; postmedial line rather oblique and formed of faint dark streaks from costa to vein 6, then very oblique to middle of inner margin and minutely dentate; two black points on termen above tornus. Hindwing white; the underside with the costal area tinged with ochreous.

Habitat.—Madras, Palnis (Campbell). Exp. 26 mill. Type in B. M. 4203. Chilo simplex.

Larva.—Pinkish grey sparsely covered with fine hairs; two faint pale brown dorsal stripes; a diffused lateral band of the same colour; a supraspiracular series of small black specks; in some cases the whole body is suffused with brown; head red, glabrous; thoracic plate horny. Feeds in the heads and stems of the great millet and Holcus spicatus, boring down into the head as the ear is formed and settling in the stem in which it pupates; the whole upper part of the plant rots; very destructive. (W. H. Campbell).

4205. Chilo suppressalis, insert (syn). Chilo auricilia Dudgeon. J. Bomb. Soc. xvi., p. 405 (1905).

Food plant Sugarcane.

ANERASTIANÆ.

4279α. Ambala albivenalis, n. sp.

Maxillary palpi flattened against froms; antennæ of male strongly laminate and with ridge of scales in sinus at base of shaft; hindwing with veins 3 and 5 stalked to near termen.

Head and thorax white mixed with rufous; abdomen white dorsally suffused with fulvous yellow at base. Forewing ochreous tinged with rufous and slightly irrorated with black, the veins prominently streaked with white; an antemedial black point on vein 1; a postmedial black point

on vein 1 and usually an oblique striga between veins 5 and 2; a terminal series of slight black points. Hindwing white with a faint ochreous brown tinge; the cilia pure white.

Habitat.—Ceylon, Puttalam. (Pole) 1  $\sigma$ , 1  $\Omega$ , Haputale (Alston) 1  $\sigma$ , Kegalle (Alston) 1  $\sigma$ . Exp. 12-20 mill.

4285a. Anerastia castanealis, n. sp.

Q. Head, thorax and abdomen chestnut-red; pectus, legs and ventral surface of abdomen paler, the tarsi fuscous ringed with white. Forewing pale chestnut-red, deeper red towards costa; the ante-and postmedial lines represented by traces of short deep red streaks. Hindwing white, the costa and termen slightly tinged with brown; the underside with the costal area tinged with brown.

Habitat.—Ceylon, Kegalle (Alston). Exp. 16 mill. Type in B. M. 4299a. Saluria hemiphæalis, n. sp.

Head and thorax fuscous, the metathorax rufous; abdomen grey dorsally tinged with rufous. Forewing with the costal half fuscous, the inner half rufous, the costal area with a white fascia tapering to a point just before apex. Hindwing semihyaline whitish tinged with brown; cilia whitish with a brown line through them.

Habitat.—Ceylon, Haldamulla (Mackwood), Haputale (Alston). Exp. 22·26 mill. Type in B. M.

4304b. CRITONIA OCHRACEALIS, n. sp.

Palpi of male oblique, the 2nd joint hollowed out to receive the brush like maxillary palpi; antennæ serrate, with large tuft at base of shaft.

Head and thorax brownish ochreous; abdomen ochreous. Forewing ochreous with a brownish tinge below costal area from base to apex; the costal edge blackish at base; a blackish antemedial point on vein 1; an ill-defined blackish discoidal spot; an oblique postmedial series of blackish points on the veins; an oblique blackish bar from apex and terminal series of black points. Hindwing semihyaline ochreous, the costal area tinged with brown towards apex; a fine dark terminal line. Underside of forewing suffused with fuscous brown, except on inner and terminal areas, more extensively suffused in female.

Habitat.—Punjab; Kangra Valley (Dudgeon); Madras, Nilgiris (Andrews). Exp.  $\upred{3}$  26,  $\upred{2}$  30 mill. Type in B. M.

4312. Polyacha depressella insert (syn). Polyocha saccharella (Dudgeon) J. Bomb. Soc. xvi, p. 405 (1905).

This belongs to Sect. II; but the forewing has veins 4.5 approximated for some distance and veins 10 from the cell, hindwing with veins 3 from angle of cell and 8 free.

Larva on sugarcane.

4326α.—HETEROGRAPHIS ARGENTESCENS, n. sp. (Pl. G., f. 35).

Q. Head and thorax rufous with some silvery scales; antennæ blackish

abdomen ochreous brown. Forewing ochreous mostly suffused with bright rufous; traces of an oblique dark antemedial line with silvery scales before it towards inner margin; an oblique medial band of silvery suffusion; an indistinct oblique dark postmedial line with band of silvery suffusion beyond it; the inner margin blackish from near base to a dark brownish batch at tornus; cilia silvery whitish at tips. Hindwing ochreous brown, the cilia silvery white except at base.

Habitat.—Ceylon, Kegalle (Alston). Exp. 20 mill. Type in B. M.

### PHYCITINÆ.

### Genus PROROPHORA.

Type.

4335b. Prorophora dialeuca, n. sp. (Pl. G., f. 34).

Palpi extending twice the length of head.

Q. Head, thorax and abdomen grey suffused with brown. Forewing grey suffused with brown and slightly irrorated with fuscous; a white streak above median nervure from before middle of cell to termen at discal fold, emitting minute spurs on bases of veins 4·3; slight fuscous medial marks on median nervure and vein 1, and a postmedial series of minute diffused streaks on the veins, oblique below vein 4; the veins slightly streaked with whitish towards termen which is more strongly irrorated with brown. Hindwing semihyaline white, the termen faintly tinged with ochreous brown.

Habitat.—Ceylon, Elephant Pass (Mackwood), Jaffna (Mackwood). Exp. 24 mill. Type in B. M.

### Genus HYPHANTIDIUM.

Type.

Hyphantidium, Scott., Proc. Zool. Soc., 1859, p. 207 . sericaria.

Assara, Wlk., xxvii, 79 (1863) . . . . albicostalis.

Cateremna, Meyr., Pr. Linn. Soc., N. S. W., vii, p. 156

(1882) . . . . . . microdoxa.

Seneca, Hulst., Trans. Am. Ent. Soc., xvii, p. 177 (1890). tumidella.

4345. Hyphantidium albicostalis, Wlk., xxvii, 80 (1869); Rag. Rom.

Mém., viii, p. 73, pl. xxv., f. 14.

Euzophera subterebrella, Snell., Tijd. V. Ent., xxiii, p. 250 (1880); id., xxvii, p. 54, pl. v., f. 12.

nivricostella, Hmpsn., Moths. Ind., iv., p. 74 (1896).

4354a. NEPHOPTERYX NEPHELOALIS, n. sp.

Q. Head, throax and abdomen grey suffused with brown; pectus and ventral surface of abdomen whitish; tarsi blackish ringed with white. Forewing grey suffused with brown; some diffused whitish from base of costa followed by a dark shade; an oblique whitish diffused antemedial bard with the slight double brown antemedial line on its outer edge followed by a blackish shade from costa to median nervure; two obliquely placed blackish discoidal spots; subterminal line whitish defined on each side by dark lines and with slight oblique dark shade from its inner side at costa, slightly excurved at middle and very minutely waved: a terminal series of blackish points. Hindwing pale suffused with brown; cilia whitish with a brown line near base.

Habitat.—Ceylon, Trincomali (Green). Exp. 20 mill. Type in B. M. 4359d. Nephopteryx rhodobasalis, n. sp. (Pl. G., f. 36.)

Antennæ of male with large tuft of scales from basal joint and sinus at base of shaft but without tuft of scales in it; the tibiæ broadly scaled; large black anal and genital tufts with some silvery scales in them.

Head and thorax ochreous tinged with rufous; tibiæ and tarsi banded with blackish; abdomen fuscous, ochreous at base. Forewing with the basal area whitish tinged with pink and rufous and with dark patches on costa at base and before middle; antemedial line double, oblique, formed of raised blackish and silvery scales; the rest of wing fuscous mixed with greyish; two obscure discoidal spots with some whitish before and beyond the lower; subterminal line indistinct, double filled in with whitish, the inner line minutely dentate, slightly incurved below costa; a terminal series of black points; cilia with a fine whitish line at base followed by a dark line. Hindwing semihyaline whitish, the veins and a terminal line brown; cilia with a dark line near base.

Habitat.—Ceylon, Madulsima (Vaughan). Exp. 18 mill. Type in B. M. 4359e. Nephopteryx acrobasella, n. sp.

Maxillary palpi of male dilated with scales and flattened against the frons; antennæ with sinus at base containing a tuft of scales; thorax with tufts of long hair from below base of hindw ng.

Head and thorax grey mixed with some red and pale olive brown, the tarsi fuscous ringed with white; abdomen brownish ochreous with grey and fuscous bands. Forewing grey irrorated with purplish red; some olive ochreous on basal inner area; the first line medial, blackish, oblique, straight, with a conical olive ochreous band before it, not quite reaching costa, and defined on inner side by band of raised blackish, red and silvery

scales from cell to inner margin; two black discoidal points; an olive ochreous postmedial band from submedian fold to inner margin; subterminal line whitish defined on inner side by black and on outer by red, almost straight, oblique; a fine black terminal line; cilia whitish with an ochreous line at base followed by a fine dark line. Hindwing semihyaline whitish tinged with brown; a blackish terminal line; cilia with a dark line near base.

Habitat.—Ceylon, Hambantota (Bainbrigge-Fletcher). Exp. 18 mill. Type in B. M.

4370d. Nephopteryx ferreotingta, n. sp.

Q. Head, thorax and abdomen grey-brown mixed with whitish; tarsi fuscous ringed with white; abdomen with brownish dorsal bands towards base, the anal tuft ochreous, the ventral surface white. Forewing white, thickly irrorated and suffused with grey-brown and with some rufous especially on inner area before and beyond the subterminal line; antemedial line ill-defined, whitish, with diffused black patch before it on inner half and diffused white patch beyond it, oblique from costa to submedian fold, then incurved: two indistinct conjoined brown discoidal points; subterminal line white, slightly angled inwards at discal and submedian folds; a terminal series of blackish points; cilia with a white line near base. Hindwing semihyaline whitish, the costal area tinged with brown; a fine brown terminal line and line near base of cilia.

Habitat.—Ceylon, Matale (Pole). Exp. 20 mill. Type in B. M.

Genus THERMOPTERYX, nov.

Type.—T. rubrifusa.

Palpi upturned, the second joint reaching about to vertex of head and moderately fringed with scales in front, the third short; maxillary palpi slightly dilated with scales; frons smooth; antennæ of female almost simple; tibiæ slightly fringed with hair. Forewing with veins 2-3 on a long stalk; 4-5 closely approximated for about half their length and not in line with median nervure; 6 from upper angle; 8-9 stalked and 10 closely approximated to them for about half its length. Hindwing with vein 3 from angle of cell; 4-5 strongly stalked; 6-7 from upper angle; 8 not anastomosing with 7; the cell about half length of wing.

4382a. Thermopteryx rubrifusa, n. sp. (Pl. G., f. 37.)

Q. Head, thorax and abdomen grey-white suffused in parts with rufous; palpi fuscous. Forewing grey-white irrorated with rufous; a patch of rufous suffusion on basal costal area; the inner area suffused with rufous from before middle where it extends almost to costa and thence obliquely to termen between veins 3 and 2; a patch of rufous suffusion at apex; two rufous discoidal points; a greyish subterminal line, slightly bent outwards at discal fold, then minutely waved; a terminal series of

rnfous points. Hindwing semihyaline white, the costal area faintly tinged with rnfous towards apex.

Habitat.—Ceylon, Trincomali (Green). Exp. 28 mill. Type in B. M. 4383c. Myelois atrimaculalis, n. sp.

Q. Head, thorax and abdomen grey mixed with red-brown, the pectus, legs and ventral surface of abdomen greyer. Forewing grey suffused with red brown; a small subbasal black spot below costa; small antemedial black spots just below costa and on vein 1; a rather large blackish spot at lower angle of cell with two black points above it a minutely dentate postmedial dark line from below costa to submedian fold, the veins beyond it with slight dark streaks ending in minute terminal black points. Hindwing greyish tinged with brown especially on apical area.

Habitat.—Ceylon, N. C. Province (Pole). Exp. 18 mill. Type in B. M. 4385a. Physita umbratalis, n. sp.

3. Head and thorax grey-brown mixed with some fuscous; abdomen grey-brown; the tarsi with slight pale rings. Forewing grey suffused with fuscous-brown; antemedial line diffused, brown, curved, with black points before it on median and submedian nervures; a black discoidal point; the veins of postmedial area with short black streaks; subterminal line grey defined on inner side by black and on outer by red-brown; a terminal series of black points; cilia grey with brown lines at base and middle. Hindwing greyish white with fine brown lines on termen and near base of cilia.

Habitat.—Madras, Horsleykonda (Campbell). Exp. 18 mill. Type in B.M. 4389c. Phycita Melanosticta, n. sp.

Q. Head, thorax and abdomen grey suffused with brown; tarsi fuscous ringed with white; ventral surface of abdomen white. Forewing grey suffused with brown and clouded in parts with fuscous; the first line medial, double, brown filled in with white and defined on outer side by white, slightly excurved below costa and with short black streak before it above vein 1; a slight curved black striga on upper discocellular and a blackish shade beyond the cell bent inwards below vein 4; postmedial line white, rather oblique from costa to vein 4 and slightly angled inwards in submedian fold; a terminal series of dark points, cilia whitish with a fine brown line near base. Hindwing semihyaline white, the costal area tinged with brown towards apex; a fine brown terminal line and line through the cilia.

Habitat.—Ceylon, Peradenya (Green), Habarana (Green). Exp. 22-24 mill. Type in B.M.

4393a. Phycita mimella, Rag., Bull. Soc. Ent. Fr. 1889, p. ccxviii; id. Rom. Mém. vii, p. 163, pl. viii, f. 3.

Q. Head, thorax and abdomen grey mixed with brown, the tarsi with pale rings. Forewing grey tinged in parts with brown and rather thickly

irrorated with black; antemedial line indistinctly double, oblique from costa to submedian fold and incurved at vein 1, a brownish patch before it in and below the cell, defined on inner side by a black bar; two small black discoidal spots; postmedial line indistinct, brown defined on outer side by whitish, arising below costa, oblique to vein 6, then minutely waved and somewhat bent outwards to inner margin, an oblique blackish shade beyond it from costa; a terminal series of black points; cilia white tinged with brown. Hindwing semihyaline white, the veins and costa towards apex tinged with brown; a fine brown terminal line from apex to vein 1: cilia with a fine brown line near base from apex to vein 1.

Habitat.—Ceylon, Kegalle (Alston); New Guinea, Port Moresly. Exp. 18 mill.

44216. Spatulipalpia albistrialis, n. sp. (Pl. G., f. 38.)

Palpi of male with the second joint strongly dilated with a fold enclosing the brush-like maxillary palpi and fringed with hair on outer side at extremity; from hollowed out; antennæ with the basal joint large, the shaft with sinus at base enclosing a large tuft of scales, then laminate; the vertex of head with ridge of scales; forewing with veins 8, 9, 10 stalked; hindwing with the lower angle of cell very strongly produced to half the length of wing, the median nervure and discocellulars closely approximated, veins 3, 4, 5 from angle, 4, 5 closely approximated for about one-third length.

3. Head, thorax and abdomen bright rufous, the second joint of palpi in front, the basal joint of antenne and tuft of scales in sinus, and the tegulæ at middle ochreous; tibiæ and tarsi banded with dark brown. Forewing bright rufous with fine blackish streaks on the veins; a silvery whitish streak below base of cell; antemedial line silvery whitish, strongly angled outwards in cell, then running inwards as a streak above median nervure to near base and on inner area represented by an oblique streak to inner margin with a streak from it above vein 1 to postmedial line; a silvery whitish streak in lower extremity of cell and short streaks in the interspaces beyond the cell; a blackish discoidal spot; postmedial line silvery whitish, arising from costa near apex, acutely angled inwards in discal fold and outwards at vein 5, then oblique to just above vein 1 to which it is slightly bent outwards; a fine black terminal line; cilia whitish at base and tips with fine red lines through them, brown at middle. Hindwing whitish tinged with brown; cilia with whitish line at base followed by a brown line.

Habitat.—Ceylon, Maskeliya (Alston), 1 & type. Exp. 20 mill. 4421c. Spatulipalpia albicostalis, n. sp.

3. Head and tegulæ white slightly tinged with brown; thorax and abdomen pale brown, the anal tuft, pectus, legs and ventral surface of abdomen white tinged with ochreous. Forewing pale ochreous brown, the

costal area white slightly irrorated with brown; obliquely placed antemedial dark points on and below costa; a slight white discoidal striga; a straight punctiform postmedial dark line slightly defined on outer side by whitish, and punctiform terminal line; a fine whitish line at base of cilia. Hindwing pale tinged with brown; a fine brown line near base of cilia.

Habitat.—Ceylon, Poyahawelle (Alston). Exp. 16 mill. Type in B. M. 4425a. Cryptoblabes scotochroalis, n. sp.

Q. Head and thorax dark cupreous brown with a greyish glose; abdomen greyish suffused with brown; pectus, legs and ventral surface of abdomen whitish mixed with fuscous, the fore legs fuscous, the tarsi fuscous with slight pale rings. Forewing dark cupreous brown with a silvery grey glose; antemedial line rather strong, white, oblique from below costa to inner margin towards which it is diffused on inner side; subterminal line slight, whitish, somewhat excurved at middle then oblique; a faint greyish terminal band; cilia greyish. Hindwing greyish tinged with brown especially on the veins; cilia pale brownish with a white, line at base.

Habitat.—Ceylon, Kegalle (Alston). Exp. 14 mill. Type in B. M. 4427a. Cryptoblabes flavizonalis, n. sp.

Q. Head and thorax brownish white; palpi black at side; a black-brown band between antenne; abdomen yellowish with lateral fuscous marks and dorsal black points on basal sogments; the terminal segments fuscous with whitish bands; pectus, legs and ventral surface of abdomen white mixed with some fuscous, the tarsi fuscous ringed with white. Forewing white slightly irrorated with black, the inner area suffused with purple-red; obliquely placed subbasal black points below costa and cell; an antemedial olive-yellow band expanding on inner half and defined on each side by black lines overlaid by silvery scales; two black discoidal points; subterminal line white defined on inner side by a red line blackish and angled outwards below costa and on outer by a rather diffused black line overlaid by silvery scales with some red on its outer edge; a terminal series of black points; cilia whitish with brownish lines near base and tips. Hindwing white tinged with brown especially on the veins; the cilia whitish with a faint brownish line near base.

Habitat.—Ceylon, Kegalle (Alston). Exp. 12 mill. Type in B. M.

## EPIPASCHIANÆ.

4538α. Lepidogma chlorophilalis, n. sp. (Pl. G., f. 39.)

Q. Head and thorax green mixed with rufous and a few black scales; palpi black at tips; antennæ blackish except at base; tibiæ and tarsi banded with black; abdomen ochreous tinged with brown and with obscure blackish bands except at base. Forewing sap-green irrorated with black; the terminal half of costa red, the medial area sometimes irrorated with red; subbasal line represented by black points below costa and cell; some

black below the cell and on inner margin before the rather diffused oblique waved antemedial line; a discoidal tuft of black scales; postmedial line black defined on outer side by whitish, dentate, excurved from below costa to vein 2; subterminal line represented by a pale green band defined on inner side by dark green or blackish suffusion and on outer by a terminal series of dark green lunules; cilia chequered white and black. Hindwing pale almost wholly suffused with fuscous; a curved minutely waved diffused dark postmedial line defined on outer side by whitish; the termen purplish red with a terminal series of small black lunules; cilia whitish chequered with black from apex to vein 2; the underside whitish suffused with purplish brown, especially on terminal area, a curved dentate dark postmedial line.

Habitat.—Ceylon, Maskeliya, (Pole), Madulsima (Vaughan). Exp. 30 mill. Type in B. M.

4438b. LEPIDOGMA MELANOLOPHA, n. sp.

Q. Head, thorax and abdomen pale reddish brown; palpi black with pale ring at base and extremity of third joint; tibiæ and tarsi black ringed with white. Forewing pale reddish brown sparsely irrorated with black; the costal area suffused with black to the postmedial line, the subbasal and antemedial lines represented by pale bars on it; a prominent tuft of black scales at upper angle of cell: a faint diffused fuscous shade beyond and below the cell; postmedial line black, strongly excurved below vein 6 and slightly incurved below vein 3; a terminal series of black striæ and a fuscous shade on terminal area above tornus; cilia fuscous with a pale line at base. Hindwing pale reddish brown suffused with fuscous; a subterminal black bar at vein 2 defined on outer side by whitish; a blackish terminal line; cilia fuscous with a pale line at base; the underside ochreous whitish irrorated with fuscous especially on costal area, the terminal area tinged with fuscous, a pale postmedial line obliquely curved to submedian fold near termen.

Habitat.—Ceylon, Kegalle (Mackwood). Exp. 20 mill. Type in B. M. 4545b. Macalla brachyscopalis, n. sp.

Male with the antennal process short and hardly extending behind the head.

o. Head and thorax olive-green with some black scales; palpi mostly black; antennal process black at tip; tarsi black with pale rings; abdomen olive green with some black scales, tinged with rufous and largely mixed with black towards extremity. Forewing olive-green irrorated with black expecially towards costa, the terminal area slightly ringed with rufous; a pale oblique antemedial striga from costa; a discoidal tuft of black scales; postmedial line blackish defined on outer side by pale olive, oblique from costa to vein 5, excurved to vein 2, then again oblique to near tornus; a terminal series of small triangular black spots; cilia chequered olive and

blackish, with a fine pale line at base. Hindwing pale silky olive tinged with fuscous especially on terminal area; a terminal series of small triangular black spots; cilia with a fine pale line at base.

Habitat.—Ceylon, Maskeliya (Alston). Exp. 22 mill. Type in B. M. 4446b. Macalla Eumictalis, n. sp. (Pl. G., f. 40.)

Head, thorax and abdomen greyish mixed with rufous and black; tarsi black with pale rings. Forewing greyish tinged with olive and in parts with rufous especially on medial area and irrorated with black, the apical area suffused with black; some black suffusion on base of inner margin and on costa before middle; antemedial line represented by a ridge of raised black scales, inwardly oblique from costa to vein 1, then bent outwards above inner margin; a sinuous medial ridge of black scales from cell to nner margin; a discoidal tuft of black scales and a diffused oblique ridge of scales from lower angle of cell to vein 1; postmedial line black, dentate, oblique from costa to vein 4, then erect and angled inwards at vein 2, a whitish patch before it beyond the cell; a terminal series of rather triangular blackish spots with a slight whitish patch before them at middle; cilia chequered rufous and blackish. Hindwing olive tinged with rufous and fuscous; cilia with a fine pale line at base.

Habitat.—Ceylon, Maskeliya (de Mowbray). Exp. ♂ 34, ♀ 40 mill. Endotrichinæ.

4504α. TRICHOPHYSETIS UMBRIFUSALIS, n. sp. (Pl. G., f. 41).

- Q. Head, thorax and abdomen white, the last faintly tinged with brown; palpi with some black scales; two black points between antennæ; fore tibiæ, the spurs and tarsi with black points. Forewing white with a faint brownish tinge on inner area except towards base and on terminal area; a black point below base of vein 1; an indistinct double curved brownish antimedial line with black points at costa and submedian fold; an indistinct double curved brownish postmedial line; a minutely waved fuscous line from costa towards apex to termen at vein 3, the area beyond it suffused with brown. Hindwing white, the terminal area tinged with brown; a double brown antemedial line with black spot on its outer edge in submedian fold; a double brown postmedial line with black spot on its inner edge at submedian fold almost touching the antemedial spot, and black point at inner margin; cilia brown; the underside with indistinct double subterminal line from costa to vein 3 with black spot on its inner side at costa.
- ab. 1. Abdomen more suffused with brown and irrorated with black; forewing with the inner half from before middle suffused with brown and irrorated with black; hindwing with the inner area from before middle and the terminal area suffused with brown and black.

Habitat.—Madras, Nilgiris, Ootacamund (Cardew), Ouchterlong Valley (Andrewes). Exp. 22 mill. Type in B. M.

## PYRALINÆ.

45461. STEMMATOPHORA ÆDALIS, n. sp.

Q. Head, thorax and abdomen brownish grey irrorated with black; the tarsi with slight pale rings. Forewing grey tinged with brown and thickly irrorated with fuscous; antemedial line white, almost obsolete towards costa, angled outwards on median nervure and oblique towards costa and inner margin; postmedial line whitish, excurved at middle and above inner margin; a fine pale line at base of cilia. Hindwing grey suffused with brown, the inner area slightly tinged with purplish; a slight curved whitish postmedial line; a fine dark terminal line: cilia whitish with dark lines near base and tips; the underside grey tinged with purplish and thickly irrorated with fuscous, a curved white postmedial line defined on inner side by fuscous.

Hibitat—Madras, Horsleykonda (Campbell). Exp. 22 mill. 4610a. Bostra sarcosia, n. sp.

J. Head and thorax brownish ochreous; palpi blackish at tips; antennæ with the shaft ringed with black towards base; pectus and legs tinged with reddish and with black mixed, the tarsi black with pale rings; abdomen brownish ochreous irrorated with black, the anal tuft with some black, the ventral surface tinged with purplish red towards extremity. Forewing brownish ochreous with a slight flesh-coloured tinge and sparsely irrorated with black; a series of black points on costa; a black discoidal point; postmedial line formed of black scales, excurved to vein 3, then incurved; a terminal series of black striæ; cilia purplish red with black lines near base and tips. Hindwing ochreous irrorated with fuscous; a rather difused fuscous curved postmedial line; a terminal series of black points: cilia purplish red with black lines near base and tips; the underside with the costal and terminal areas irrorated with black, a black discoidal point.

Habitat—Ceylon, Galgama (Mackwood). Exp. 14 mill. Type in B. M. 4611a. Bostra mesoleucalis, n. sp. (Pl. G., f. 42).

3. Head and thorax pale olive slightly tinged with rufous and with some blackish scales; legs whitish; abdomen whitish irrorated with black. Forewing pale olive, the medial area white irrorated with black, the terminal area irrorated with black; some diffused purplish red on base of median nervure; an oblique white antemedial line defined on inner side by purplish red suffusion; postmedial line white defined on inner side by diffused purplish red wedge-shaped patches at discal and submedian folds, oblique from the costa to vein 6, excurved to vein 4, then incurved; a blackish terminal line: cilia with a fine white line at base. Hindwing pale olive irrorated with fuscous; a blackish terminal line; cilia with a white line at base.

Habitat.—Ceylon, Maskeliya (Alston). Exp. 20 mill. Type in B. M.

## HYDROCAMPINÆ.

4645c. NYMPHULA GRISEALIS, n. sp.

Q. Head and thorax grey tinged with brown; palpi with the 2nd joint fuscous at sides; abdomen reddish brown, the ventral surface grey. Forewing glossy brownish grey, the terminal area suffused with fuscous brown, a diffused brownish discoidal spot. Hindwing pale brownish grey; cilia of both wings with pale line at base followed by a darker line.

Habitat.—Ceylon, Peradeniya (Green). Exp. 18 mill. Type in B. M. 4671a. Oligostigma and Reusialis, n. sp. (Pl. G. f. 43).

Q. Head and thorax whitish mixed with yellow-brown and fuscous scales; antennæ ringed with black; abdomen yellow mixed with brown and black and with whitish segmental rings. Forewing whitish suffused in parts with yellow and thickly irrorated with black; a double oblique fuscous postmedial line filled in with whitish from costa to vein 3, with fulvous orange suffusion before it, met at vein 3 by an oblique fulvous orange streak from origin of vein 2; a whitish streak from middle of inner margin, bent upwards to submedian fold in which it extends to the terminal band, some fulvous orange above it below origin of vein 2; an orange terminal band defined on inner side by a black line with a white line before it from costa to the whitish streak; cilia brownish white with a fuscous line near base. Hindwing orange, the base whitish with a diffused brown subbasal line; a diffused double brown medial line filled in with white; a white subterminal band defined on inner side by diffused brown and on outer by a black line; some slight black stire before the black terminal line forming at apex two spots with a white point between them: cilia brownish white; the underside paler, the subterminal band arising at discal fold.

Habitat.—Madras, Nilgiris (Andrewes). Exp. 18 mill. Type in B. M. 4681a. Oligostigma Chrysozonalis, n. sp.

Q. Head and thorax ochreous white; abdomen brownish ochreous with white segmental lines, the ventral surface white. Forewing brownish ochreous; a round orange discoidal spot defined by fuscous, a black point above it on costa, an indistinct oblique whitish band from before it to vein 1 and some whitish beyond and below it, an obscure orange streak on medial part of vein 1; postmedial line slight, dark, slightly defined by whitish on outer side, erect from just below costa to vein 2, then bent outwards to inner margin near tornus where it is met by a black line from median nervure just before end of cell, bent outwards below submedian fold, a golden yellow terminal band with fine black line on its inner edge from just below costa to above tornus with a white band before it with dark line on its inner edge; a terminal series of black points. Hindwing white; a fuscous brown band from costa beyond middle to inner margin near base;

a golden yellow terminal band with dark line on its inner edge excurved below costa, then slightly sinuous; two black terminal lines with some white between them, the inner slight and with some whitish before it at apex and from the lobe to tornus, both interrupted at the lobe on which there are two black points with silvery white points before them: cilia white with slight fuscous line through them and some fuscous at the lobe.

Habitat.—Madras, Palnis (Campbell). Exp. 24 mill. Type in B. M. 4700a. Daulia argyrostrotalis, n. sp.

3. Head and tegulæ orange; palpi brownish at base; frons brownish with slight white lateral line; antennæ brownish; thorax brownish mixed with silvery white; abdomen white irrorated with brown. Forewing brownish grey irrorated with silvery scales and with obscure orange rufous markings; some orange rufous on basal area, a rather diffused antemedial line, a discoidal lunule and a diffused incurved postmedial band; the terminal area rather yellower with a silvery subterminal band on it. Hindwing brownish grey irrorated with silver; some orange yellow below and beyond lower angle of cell; a small dark spot below the angle of cell and another above tornus; a diffused incurved dark band from costa beyond middle to termen at vein 2 towards which it has some silver markings on it; a silver terminal band from below apex to vein 2 with some yellow before it, cilia yellow with brown tips from apex to vein 2, then pale.

Habitat.—Ceylon, Maskeliya (Alston). Exp. 26 mill. Type in B. M.

Genus CENOLOBA.

Cenoloba, Wlsm. Ent. Mo. Mag. xxi, p. 175 (1885).

Type C. obliteralis, Wlk., from Australia.

Proboscis fully developed; palpi porrect, typically extending about three times length of head and with the fird joint porrect, the 2nd joint fringed with hair below produced to a point at extremity, the 3rd naked; maxillary palpi about half the length of labial palpi, typically triangularly scaled; frons rounded; antennæ minutely serrate and ciliated. Forewing elongate, narrow, the termen deeply cleft to one half, the segments lanceolate; vein 1 simple; 2 and 3 stalked; 4 from angle of cell; 5, 6 obsolete; 7 from upper angle; 8, 9, 10, 11 stalked. Hindwing elongate and gradually dilated, the termen deeply cleft, the segments lanceolate; vein 2 from before angle of cell; 3, 4 stalked from angle; 5 to base of cleft from middle of discocellular; 6, 7 shortly stalked; 8 anastomosing with 7 to three-fourths of wing.

4751d. CENOLOBA TAPROBANA, n. sp.

Palpi about twice the length of head, the 3rd joint set on at an angle; maxillary palpi almost filiform.

White; antennæ yellowish; tarsi with brownish rings. Forewing with some dark points on costa; indistinct yellowish antemedial, medial and

postmedial bands from below costa to inner margin; a slight dark discoidal striga on outer edge of the medial band; the extremity of the lower lobe yellowish. Hindwing with antemedial and postmedial yellowish bands, the extremities of the lobes yellowish.

Habitat.—Ceylon, Trincomali (E. E. Green). Exp. 10 mill. Type in B. M.

## Pyraustinæ.

4768a. Massepha Rufescens, n. sp. (Pl. G., f. 44).

Hindwing with veins 4, 5 strongly stalked.

Q. Head, thorax and abdomen dark-brown mixed with yellowish white the frons and head between antennæ paler; palpi yellowish white, the 1st and 2nd joints banded with brown; legs yellowish white tinged with brown. Forewing reddish brown irrorated with dark brown on inner area; the costa and terminal area pale yellow; antemedial patches of diffused black scales below the cell and vein 1; a discoidal whitish patch with a brown striga on discocellulars; an oblique brown postmedial line defined on outer side by a whitish band. Hindwing red-brown, the basal half irrorated with dark-brown and greyish scales; an indistinct oblique dark discoidal spot; an indistinct sinuous brown postmedial line faintly defined on outer side by greyish; the apex pale yellow; the underside whitish, the costal half suffused with brown, a dark spot in cell near base and prominent discoidal lunule, the postmedial line more distinct.

Habitat. - Madras, Nilgiris (Andrewes). Exp. 16 mill. Type in B. M. 4783. Rehimena Phrynealis.

Larva. Pale grass-green; skin semi-transparent; somites well-defined; dorsal stripe slightly darker green; a few fine black specks on the head and 2nd somite; ventral surface and legs much paler; head ochreous yellow. Feeds spun up in the leaves of a creeper. (W. H. Campbell.)

4850α. Nosophora mesosticta, n. sp.

3. Head and thorax brown, the frons, vertex of head and tegulæ with some whitish; pectus and legs ochreous white with some brown; abdomen brown with white dorsal bar at base, the ventral surface white. Forewing brown; a small white spot in middle of cell and a bar beyond the cell expanding into a rounded patch between veins 4 and 2. Hindwing brown with round white spot beyond the cell.

Habitat.—Assam, Khásis. 1 & type. Exp. 28 mill.

4834a. BOCCHORIS ALBINALIS, n. sp.

Head and thorax pure white, the patagia with rufous point; fore tibize with rufous band at extremity; abdomen white dorsally tinged with rufous. Forewing pure white; a subbasal rufous striga from costa and slight curved mark above inner margin; antemedial line double, rufous, oblique and sinuous; medial line double, rufous, enclosing a rufous discoidal

striga, the inner line incurved and the outer line excurved below the cell; postmedial line rufous, double towards costa, excurved to vein 3, then incurved; subterminal line rufous, incurved, from costa to vein 3, a rufous terminal line; cilia with a slight rufous line at middle. Hindwing semi-hyaline white; a double rufous medial line arising below costa, obliquely curved and enclosing a white discoidal bar; postmedial line rufous, slightly excurved at vein 5 and ending at vein 2 on the sinuous rufous subterminal band; a rufous terminal line and fine rufous line near base of cilia.

The Muscat specimen has the subterminal line of forewing continued to inner margin and closely approximated to the postmedial line; the postmedial line of hindwing double, the line through the cilia of both wings stronger and the cilia of forewing tinged with rufous at apex and middle.

Habitat.—Arabia, Muscat (Jayaker); Bombay, Kutch (Swinhoe). Exp. 18-20 mill. Type in B. M.

4878a. Phryganodes stygialis, n. sp.

Abdomen of male slightly dilated towards extremity with exsertible dorsal fringe of white hair, the anal segment very long.

3. Head, thorax and abdomen deep fuscous brown; palpi white at base; pectus, legs and ventral surface of abdomen white, the fore legs fuscous in front, the fore tibiæ and tarsi banded with white. Forewing deep fuscous brown; a minutely waved blackish antemedial line; a small black spot in middle of cell and discoidal lunule; postmedial line black, incurved below costa, bent outwards and minutely dentate between veins 5 and 2, then bent inwards to below end of cell and sinuous to inner margin. Hindwing deep fuscous brown with a slight greyish tinge; postmedial line blackish, oblique and minutely waved from costa to vein 2, then bent inwards and sinuous to inner margin; the underside whitish tinged with brown, a small black discoidal spot, the postmedial line not waved.

Habitat.—Ceylon, Maskeliya (Alston), Haputale (Alston). Exp. 30 mill. Type in B. M.

4894a. DICHOCROCIS MACROSTIDZA, n. sp.

Head, thorax and abdomen orange-yellow; tegulæ, shoulders and patagia with black spots; fore coxœ and fore and mid femora blackish the fore tibiæ and the tarsi banded with black; abdomen with dorsal and subdorsal series of black spots, the anal tuft of male black. Forewing orange-yellow; a black spot at base of costa; antemedial black spots at costa, below cell and on inner margin; a black spot in middle of cell and discoidal bar; an oblique postmedial maculate band from costa to discal fold and an incurved series of three spots from below lower angle of cell to inner margin; an oblique series of seven spots from below costa towards apex to inner margin and three subterminal spots between veins 3 and 2. Hindwing orange-yellow; a black discoidal spot and two obliquely

placed spots above middle of inner margin; three obliquely placed postmedial spots from below costa to discal fold, a series of eight spots from below costa towards apex to above tornus, and three subterminal spots between veins 5 and 2.

Habitat.—Burma, Rangoon (Scott), Khyen Hills (Watson). Exp. 28·32 mill. Type in B. M.

4911a. NACOLEIA PACHYTORNALIS, n. sp.

Hindwing of male with groove in submedian fold on upperside, the underside with tuft of long pinkish hair from base of inner margin, the inner area forming a large hollowed out vesicle towards tornus, with small curved tuft of hair at middle of vein 1 and fringes of thick scales towards tornus.

d. Head ochreous; thorax grey suffused with purplish brown; abdomen brownish ochreous; palpi whitish at base and with brown band at middle; pectus and legs white tinged with ochreous. Forewing grey tinged with purplish and irrorated with brown; traces of a sinuous dark antemedial line; a dark discoidal lunule constructed at middle; postmedial line dark, excurved to vein 4, then bent inwards to lower angle of cell and oblique to inner margin; cilia grey and fuscous with a pale line at base. Hindwing brownish grey irrorated with fuscous except on costal area; an ill-defined whitish antemedial band; a dark postmedial line, excurved to vein 4, then bent inwards to lower angle of cell: cilia fuscous with whitish lines at base and middle; the underside yellowish white with indistinct curved dark postmedial line.

Habitat.—Madras, Horsleykonda (Campbell). Exp. 20 mill. Type in B. M.

4920α. NACOLEIA OCHRIZONALIS, n. sp.

Head brown mixed with ochreous; palpi ochreous with blackish band on second joint; thorax cupreous brown; pectus and legs ochreous, the fore tibiæ with blackish band; abdomen cupreous brown, the extremity and ventral surface ochreous. Forewing cupreous brown, the costa except towards base and the termen and cilia ochreous; antemedial line rather diffused, oblique from costa to median nervure; a black point in middle of cell and small discoidal lunule; postmedial line rather diffused, blackish, at vein 4 bent inwards to below angle of cell, then erect. Hindwing cupreous brown, the termen and cilia ochreous; a blackish discoidal striga; postmedial line indistinct, blackish, slightly bent outwards between veins 5 and 2, then bent inwards and oblique to above tornus.

Habitat.—Sikhim (Pilcher); Assam, Khásis. Exp. 30 mill. Type in B. M.

4928α. NACOLEIA FUSCIFUSALIS, n. sp.

Head, thorax and abdomen fulvous yellow mixed with fuscous; palpi black, white at base; pectus, legs and ventral surface of abdomen white,

the fore tibiæ with fuscous band. Forewing fulvous yellow irrorated and suffused with fuscous especially on basal area and terminal area except above tornus; antemedial line blackish, bent outwards at median nervure, a small annulus in middle of cell and discoidal lunule defined by blackish; terminal half of costa with short black streaks; postmedial line black, incurved at discal fold, excurved between veins 5 and 2, then retracted to below end of cell and again excurved above inner margin, a blackish patch beyond it above inner margin and the terminal area blackish from apex to vein 3; a terminal series of small black spots; cilia yellow with a black line near base and some fuscous at middle. Hindwing fulvous yellow, the terminal area suffused and irrorated with blackish except a patch below middle; some black at extreme base and a black discoidal spot; postmedial line black, excurved between veins 5 and 2, then retracted to below the discoidal spot and straight to inner margin; a series of black points just before termen: cilia yellow with some fuscous at middle; the underside with the blackish on terminal area confined to apical area.

Habitat.—Ceylon, Rambukkhana (Alston); Woodlark I. (Meek). Exp. 14 mill. Type in B. M.

4928b. NACOLEIA LEUCOSEMALIS, n. sp.

J. Head, thorax and abdomen pale yellow mixed with black except on terminal half of abdomen which has a black bar at base of anal segment and lateral series of black points; antennæ ringed with black; pectus, legs and ventral surface of abdomen whitish, the fore tibiæ with blackish band. Forewing yellow thickly irrorated with black, the costa and termen less thickly irrorated; a subbasal black striga from costa; antemedial line black, waved; a white spot in middle of cell and narrow discoidal lunule defined by black; postmedial line blackish with black spot at costa, excurved between veins 5 and 2, then retracted to below the discoidal lunule and straigth to inner margin; a terminal black line from apex to vein 3. Hindwing yellow thickly irrorated with black except at termen; a small black discoidal spot, sinuous blackish postmedial line, and slight blackish terminal line from apex to vein 3; the underside with the postmedial line excurved between veins 5 and 2.

Habitat.—Ceylon, N. Centr. Province (Pole). Exp. 12 mill. Type in B. M. 4942b. NACOLEIO CONISOTA, n. sp.

Q. Head, thorax and abdomen pale reddish brown, the head and front of thorax tinged with black; pall white at base; pectus, legs and ventral surface of abdomen pale. Forewing ochreous suffused with reddish brown and irrorated with fuscous, the basal half of costal area blackish; antemedial line dark, excurved in submedian interspace; a black point in middle of cell and two discoidal bars; some black points on medial part of costa; postmedial line black, excurved between veins 5 and 2, then retracted to below end of cell and excurved above inner margin; a

terminal series of blackish points. Hindwing ochreous tinged with redbrown and irrorated with fuscous; a small blackish discoidal spot; postmedial line blackish, excurved between veins 5 and 2, then retracted to below end of cell and oblique to tornus; a terminal series of blackish points.

Habitat.—Madras, Nilgiris (Andrewes). Exp. 22 mill. Type in B. M. 4942c. Nacoleia megaspilalis, n. sp.

Head and thorax cupreous brown mixed with white; abdomen banded white and cupreous brown. Forewing whitish; the basal area suffused with cupreous brown; an oblique, slightly irregular dark antemedial line; a quadrate cupreous brown spot in middle of cell conjoined to another below the cell; a equadrate cupreous brown patch in and beyond end of cell with small spot above it on costa and another beyond it on costa; postmedial line rather diffused and maculate, oblique from costa to vein 5, bent outwards and somewhat dentate between veins 5 and 2, then retracted to below angle of cell; terminal area suffused with brown and with a white patch between veins 5 and 2 leaving two small wedge-shaped brown spots on termen. Hindwing white; a diffused brown line close to base; a discoidal point; a diffused rather maculate medial line; a diffused rather maculate postmedial line bent outwards and somewhat dentate between veins 5 and 2; teminal area suffused with brown and with white patch between veins 5 and 2 leaving two small wedge-shaped brown spots on termen.

Habitat.—Madras, Horsleykonda (Campbell); Queensland, Dawson Dist. Ranöe (Barnard). Esp. 20 mill. Type in B. M.

4983a. Sylepta agraphalis, n. sp.

Sylepta denticulata, Hmpsn. Moths Ind. iv., p. 338 (part).

d. Head, thorax and abdomen grey-brown, the head whiter; palpi black, white at base and tips; pectus, legs and ventral surface of abdomen whitish. Forewing grey-brown; a slight dark antemedial mark on costa and oblique whitish line defined on outer side by fuscous from cell to inner margin; a small whitish spot at middle of cell and curved discoidal striga both defined by fuscous; postmedial line represented by a small fuscous spot at costa with two small whitish spots below it, then by a series of small fuscous spots with whitish points on their outer side, excurved between veins 5 and 2, then bent inwards to below end of cell and oblique to inner margin; a terminal series of minute blackish points and a fine pale line at base of cilia followed by a dark line. Hindwing greybrown; an oblique dark discoidal striga; a slight dark postmedial line defined on outer side by whitish, bent outwards between veins 5 and 2, then retracted and oblique to above tornus; a terminal series of blackish striæ and fine pale line at base of cilia.

Habitat.—Внитам (Dudgeon) ; Assam, Khásis. Exp. 32 mill. Туре in В. М.

4989a.—Sylepta microsema, n. sp.

d. Head and thorax dull greyish brown; palpi fuscous, white at base, bdomen pale brown; pectus, legs and ventral surface of abdomen white, the fore tibiæ with slight fuscous band. Forewing brown with a slight cupreous tinge; antemedial line indistinct, dark, oblique, from costa to median nervure, then more erect; a pale point in middle of cell and slight whitish discoidal lunule both defined by dark-brown; postmedial line dark-brown, slightly incurved below costa and oblique to vein 2, then retracted to below end of cell and excurved at vein 1. Hindwing brown with a slight cupreous gloss; a faint dark discoidal bar; postmedial line very indistinct, dark, slightly excurved between veins 5 and 2, then retracted to below end of cell and oblique to above tornus; the underside brownish white.

Habitat.—Ceylon, Puttalam (Pole); SINGAPORE (Ridley); LOUISIADES, St. Aignan (Meck). Exp. 28 mill. Type in B. M.

4990. Sylepta adductalis.

Larra.—Attenuated at extremities, the divisions of somites strongly marked, dull pinkish green; head small, dull green. Feeds spun up in the leaves of Ealsam. (W. H. Campbell.)

4994. SYLEPTA PSEUDOVIALIS, n. sp.

Sylepta ovialis, Hmpsn. Moths Ind. iv, p. 340 (nec. Wlk.)

I ead, thorax and abdomen fuscous brown with a slight cupreous gloss; palpi black-brown, white at base; pectus, legs and ventral surface of abdomen white, the fore tibiæ with fuscous band at extremity and the tarsi tinged with fuscous above. Forewing fuscous brown with a slight cupreous gloss; traces of a whitish antemedial line from cell to inner margin with a more or less distinct spot beyond it in cell; a quadrate white spot in end of cell; postmedial line forming an eliptical white spot from below costa to vein 5 where it is very slightly bent outwards, then slight, whitish, at vein 2 bent inwards to below end of cell, then more distinct and slightly excurved. Hindwing fuscous brown with a cupreous gloss; a faint dark discoidal lunule; postmedial line with small white spot below costa, then slight, whitish and bent outwards between veins 5 and 2, then bent inwards to below end of cell and more distinct and oblique to above tornus; cilia with a fine white line at base; the underside with the basal and inner areas whitish, a dark point in middle of cell and discoidal lunule, the postmedial line more distinct,

Habitat.—Sirhim (Dudgeon, Pilcher); Bhutan (Dudgeon); Assam, Khásis; Ceylon (Green); Borneo, Sarawak (Shelford), Pulo Laut (Doherty). Exp. 30 mill. Type in B. M.

5008a. GLYPHODES CAPRINIODES, n. sp.

Head tegulæ and shoulders fulvous brown, the rest of thorax white; palpi white at base and in front; pectus, legs and abdomen white; the fore tibiæ fulvous. Forewing semihyaline white, the costal area fulvous