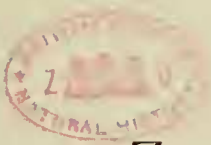


1934  
PURCHASED



# NOVITATES ZOOLOGICAE

Vol. XXXIX.

DECEMBER 1934.

No. 2.

## NEW SPECIES AND SUBSPECIES OF GEOMETRIDAE.

BY LOUIS B. PROUT.

### SUBFAM. OENOCHROMINAE

#### 1. *Petovia niphosphaeras* sp. n.

♀, 36 mm. Face blackish, becoming paler below. Vertex and antenna blackish. Thorax in front capucine yellow, above—especially on tegula—largely rufous, mixed with orange, beneath orange-yellow. Abdomen buff-yellowish, above mixed with rufous. Legs olive-brown.

*Forewing* considerably broader than in typical *Petovia*, termen much less oblique; cell  $\frac{1}{2}$ , DC not exceptionally oblique, SC<sup>1</sup> anastomosing with C and with SC<sup>2</sup>; bright vinaceous rufous, approaching English red; a black costal edge, at base very narrow, widening a little, at about 6 mm. meeting an extremely broad black border, whose proximal edge runs very obliquely (but with an outward projection in posterior-distal end of cell) to fold at 3 or 4 mm. from termen, thence oblique inward; a large white apical patch between costa and R<sup>2</sup>, anteriorly and distally somewhat rounded so as to recede slightly from costa proximally and from termen posteriorly; a much smaller subterminal white spot only separated from it by R<sup>2</sup>.—*Hindwing* broader than in typical *Petovia*, DC<sup>3</sup> less extremely oblique; coloured like forewing, excepting costa; border not oblique-edged, about 4 mm. wide; apical white spot oval or slightly reniform; posterior white spot vestigial.

Underside the same.

Tanganyika Territory: Ukami. Type in coll. Brit. Mus.

A strikingly distinct species, apparently entering the same mimetic association as *Atetis*, but structurally agreeing with *Petovia* except in the details noted above.

#### 2. *Achlora micraulax* sp. n.

♂, 35 mm. Almost exactly like a rather brightly coloured *cuprinaria* Guen. (1858). Palpus more reddish on outside. Antennal pectinations considerably shorter (only about 2). Hindwing with M<sup>1</sup> barely stalked; beneath with the ridges of hair extremely small (so that they might easily be overlooked but for their light brown colour), separated by a small furrow behind M<sup>2</sup>. Forewing with apex scarcely so acute as in *cuprinaria*. Both wings with the terminal dots more

sharply black, though minute, the fringes proximally rather brighter rose-colour, distally rather pale, but not so whitish as in *cuprinaria*. Cell-dot of hindwing large, but not more so than in occasional *cuprinaria*.

Matto Grosso: Burity, 30 miles N.E. of Cuyabá, 2,250 feet, at human perspiration, 16-22 October 1927 (C. L. Collenette), type in coll. Tring Mus.

### 3. *Ergavia oenobapta* sp. n.

♂, 33 mm. Head and palpus mixed with blackish, the head with some white scaling. Antenna with short pectinations (about 2). Thorax and abdomen dark above, pale beneath. Hindtibia with one spur.

*Forewing* rather elongate, costa straight to near apex, termen oblique, in posterior half strongly so; areole wanting; subbasal raised scaling slight; ground-colour pale, obscured by heavy blackish-fuscous irroration, in part (except distally) relieved with a sprinkling of silvery scales; veins and distal area suffused with deep brownish vinaceous and dark vinaceous brown (Ridgway, pl. xxxix); markings blackish fuscous, consisting of the moderate, raised cell-spot, costal dots and dashes and the usual three lines; antemedian thick in its anterior half, strongly outbent in cell; median shade ill-defined, irregular, near the postmedian, apparently touching it at base of  $M^2$ , strongly outbent in its anterior half; postmedian thick, still more strongly outbent: arising at  $\frac{2}{3}$  costa, it runs obliquely outward to a rather long tooth on  $R^1$ , curves inward between this and a long, slightly bifid prong at  $R^3-M^1$ , again inward (very steeply) behind  $M^1$ , almost touching  $M$  at the origin of  $M^2$ , and making a small outward projection at  $SM^2$ ; whitish subterminal spots (large dots), three anterior ones the strongest; terminal dark line not very intense; lines on fringe weak.—*Hindwing* concolorous with forewing, a little paler at base of costa and almost without silvery scales; cell-spot and distal area much as on forewing; median shade indicated, especially in posterior part, touching the cell-spot on its proximal side; postmedian very much less irregular than on forewing, only with weak sinuosities in corresponding positions.

Underside mostly suffused with slightly vinaceous fawn, the costal margin of the forewing browner and with blackish-fuscous strigulation; both wings with short blackish cell-streak, lines wanting, apical region vaguely dark-suffused.

Matto Grosso: Burity, 30 miles N.E. of Cuyabá, 2,250 feet, at light, 6-21 September 1927 (C. L. Collenette), type in coll. Tring Mus.

Easily distinguished from *exstantilinea* Prout (1932) by its structure, still more extreme postmedian line, vinaceous tone and almost unmarked underside.

## SUBFAM. HEMITHEINAE

### 4. *Mimandria cataractae rhusiodocha* subsp. n.

♂, 32 mm.; ♀, 42-46 mm. Greener than *M. c. cataractae* Prout (1917), forewing with  $SC^1$  stalked, (in *cataractae* type connate), both wings with complete, though unequal, series of red spots outside the postmedian, underside in ♂ weakly marked.

Kenya: ♂ type and 2 ♀♀ from Kibwezi, 1 ♀ from Makindu, S. of Nairobi; all in coll. Tring Mus. (W. Feather).

5. *Xenochroma palinupais* sp. n.

♀, 28 mm. Head and body mostly concolorous with wings, face more red-brown, front of thorax white; antenna shortly pectinate.

*Forewing* with costa very little curved, apex prominent, termen anteriorly straight or very faintly convex, little oblique, a pronounced angle at  $M^1$ , posterior part highly oblique, faintly sinuous, tornus rather pronounced;  $M^1$  stalked; pale brownish vinaceous, with fine and rather sparse brownish irroration; costa proximally whiter; lines brownish, with a tinge of olive; antemedian from  $\frac{1}{3}$  costa to somewhat less than  $\frac{1}{2}$  hindmargin, anteriorly curved, posteriorly straight; postmedian at well beyond  $\frac{2}{3}$ , weakly lunulate-dentate; some small and irregular terminal dots or dashes between the veins; fringe white proximally, more vinaceous distally.—*Hindwing* subquadrate, the apex, tornus and angle at  $M^1$  pronounced;  $M^1$  well stalked; concolorous with forewing; postmedian less continuous, more bent at  $M^1$  than on forewing; no appreciable terminal marks; fringe as on forewing.

Underside whiter, almost unmarked; tips of fringe suffused with pale vinaceous.

Nigeria: Gadau, 12° N., 10° E., February 1913 (Buxton and Lewis), type ♀ in coll. Brit. Mus., presented by the discoverer.

Combines nearly the shape of *candidata* Warr. (1902) with nearly the colouring of *dyschlorata* (Warr., 1914).

6. *Agathia ichnospora* sp. n.

♂, 34 mm. Face rosy above, whitish below. Palpus rather slender and smooth-scaled, with third joint unusually long for an *Agathia* ♂; pale, with upper- and innerside red. Head and front of thorax above green, somewhat mixed with white, thorax behind largely dull vinaceous; abdomen with some green admixture above (somewhat discoloured). Legs pale; hindtibia with rather strong pencil, but with the terminal process slight.

*Forewing* with costa well arched at base and near apex, termen straight, less oblique than in most *Agathia*; scale-flap to cell beneath (from proximal part of M) well developed; bright yellowish green (about "mineral green" of Ridgway); costal edge pale purplish vinaceous, with less pale vinaceous speckling; markings dark reddish brown, greatly reduced; a rather small spot in apex of cell, succeeded posteriorly by some transverse dashes which represent a sinuous line (excurved between the spot and M, incurved between the base of  $M^2$  and fold); a postmedian series of interneural dots or small spots between  $SC^5$  and  $SM^2$ , slightly excurved in its anterior half; fringe green, somewhat mixed with white, and with elongate dull-red marks opposite the veins.—*Hindwing* with the tail very small, but pronounced, the termen on either side of it almost straight; a pair of small blackish spots in tail; a postmedian series of spots such as on forewing, but with an acute indentation between  $R^3$  and  $M^1$ ; fringe as on forewing.

Underside very pale greenish, shading between sea-foam yellow and deep sea-foam green; forewing with much smoky (slightly greyer than benzo-brown) suffusion costally and strigulation in and to considerably beyond cell (densest in cell); both wings with a rather thick postmedian line (about midway between the two lines of the forewing above); fringe-marks smaller than above, smoky, not reddish.

"Boin Island," 5 August 1932 (H. Ise), type ♂ in coll. Prout, kindly presented by Mr. K. Fujimatsu, of the Gifu College of Agriculture, who has a paratype.\*

A strikingly distinct species.

#### 7. *Tanaorhinus kina embrithes* subsp. n.

Maculation beneath much heavier than in *k. kina* Swinh. (1893), forming on the hindwing an uninterrupted though irregular band, which at M<sup>2</sup> generally attains a width of fully 4 mm.

Sikkim: Gopaldhara, 3,440–3,800 feet (H. Stevens), 10 ♂♂ and 1♀ in Tring Mus.

#### 8. *Neromia aphthona* sp. n.

♂, 26 mm. Hindlegs lost, but the near relationship to *rhodomadia* Prout (Ann. Transv. Mus. viii. 150) so obvious that the systematic position cannot be doubted. Distinguishable as follows.

*Forewing* with costa more broadly white, at base with little trace of red or black scaling; basal patch and cell-dot wanting; fine white lines well developed, the antemedian straight, the postmedian unusually proximal, slightly excurved at first, then almost straight; terminal blotches enlarged, an additional one (very small) present between SC<sup>5</sup> and R<sup>1</sup>, the tornal with an irregular green centre, round which is some suffusion of ochreous- and reddish-brown, then the pale part.—*Hindwing* with corresponding distinctions, the tornal blotch with some green scaling in its centre, the single line scarcely beyond the middle of the wing, curved or bluntly bent after crossing the bases of R<sup>3</sup> and M<sup>1</sup>.

Uganda: Kalongo, 9 July 1933, at light (H. B. Johnston), type in Brit. Mus., received through the Imperial Institute of Entomology.

The specimen has died with the genitalia rather well opened; the general agreement with *rhodomadia* is borne out, notably by the large and very strong thorn on the valve, and it is possible that a fuller investigation may give to *aphthona* the status of a subspecies.

#### 9. *Syncollesis tiviae* sp. n.

♂, 26 mm. Face and palpus white in lower part, black mixed with red in upper. Vertex narrowly white, occiput green. Antenna with the pectinations rudimentary, less than diameter of shaft. Body green above, whitish green beneath.

*Forewing* anteriorly more rounded than in *idia* Prout (1931); venation nearly the same, R<sup>2</sup> arising still closer to R<sup>1</sup>; ground-colour of almost the same vivid green; postmedian line less whitish and not appreciably dark-edged proximally, only very slightly paler and more glaucescent than the ground-colour, its course different in that it is decidedly curved, approximately parallel with the termen throughout; extremely faint indications of a similarly coloured antemedian placed about the end of the cell and strongly outbent in the middle; fringe (as in *idia*) green with white tips.—*Hindwing* concolorous, costally and at base perhaps slightly more whitish, a rather strongly curved postmedian faintly indicated.

Underside similar, but not quite so uniform, the forewing becoming a trifle paler posteriorly and distally; the postmedian line (or rather, its proximal edge) faintly suggested in darker green.

\* I wrote to Mr. Fujimatsu many months ago for further elucidation of the locality, but have not yet received his reply.

N. Rhodesia : Ndola, April 1930, type ♂ in coll. Tring Mus., received from my friend Mrs. Tivy, to whom I dedicate the species.

The shorter antennal pectinations and rounder forewing prevent our regarding this as a race of *idia*.

#### 10. *Comostolopsis tmematica* sp. n.

♀, 27 mm. Near *leuconaura* Prout (1930, Réunion), larger. Face light red. Body and wings lighter and more yellowish (only a tinge bluer than deep greenish glaucous of Ridgway), white vein-markings rather broader, cell-dots wanting, postmedian line not dentate, on the hindwing strongly excurved between radial and submedian folds.

Uganda : Birunga Mountains, February 1933 (G. L. H. Hancock), 2 ♀♀; type in Brit. Mus., received through the Imperial Institute of Entomology.

### SUBFAM. STERRHINAE

#### 11. *Dithecodes inornata aniara* subsp. n.

♂♀, 26–30 mm. Smaller and darker than *i. inornata*, the irroration stronger and more reddish, perhaps more copious, the band outside the cell less broad, nearly always resolvable into two approximated lines, or a line succeeded by a narrow shade, the pale terminal dots at vein-ends (overlooked by Warren) stronger.

E. Java : Nongkodjadjar, 4,000 feet, August–December 1933 (A. M. R. Wegner), a long series in coll. Tring Mus.

Warren's description of "*Rhodostrophia inornata* (Nov. Zool., iii. 379) is poor, probably written by artificial light. The type is pinkish-buff to fawn (i.e. not like any colour in Ridgway, but certainly not "mouse-colour"), the ante-median line twice outbent, the red parts of underside confined to the ♂ (dense specialised scaling), the ♂ pectinations rudimentary, bearing long fascicles, the leg characters typical of *Dithecodes*, the distal areole at times minute or even wanting.

#### 12. *Traminda drepanodes f. rhodea* (form. nov.)

♀, 36 mm. Differs strikingly from typical *drepanodes* Prout (1915) in its very dissimilar coloration, possibly also in the slightly less produced apex of the forewing and (?) less strongly darkened fringes, in which case it may prove a separate species; but as the margins are somewhat damaged, I prefer to regard it as a remarkable modification of the species named. Forewing and hindwing above deep (somewhat dark) vinaceous, only with their costal margins respectively pale cream-buff and whitish; cell-mark smaller than in typical *drepanodes*, the oblique stripe broadly pale cream-buff, bordered proximally with narrower olive-shaded brown stripe. Underside almost typical, rather weakly marked.

Uganda : Kisaru, 25 June 1933 (H. B. Johnston), type in coll. Brit. Mus., received through the Imperial Institute of Entomology.

#### 13. *Ptochophyle bradyspila* sp. n.

♂, 22 mm. Head and body predominantly dull purplish, the body beneath paler, the abdomen with some blackish admixture on sides.

*Forewing* with costa slightly arched at base and near apex, almost straight between, apex moderate, termen smooth, gently curved, not very strongly

oblique, tornus well expressed; areole fairly large,  $SC^1$  from its apex; brownish drab; a minute black cell-dot; an indistinct, rather strongly excurved grey postmedian line traceable from costa to behind  $M^1$ , passing about midway between cell-dot and termen; a rather thick, but not very sharply defined, dark terminal line; fringe orange-yellow, red-mixed proximally.—*Hindwing* with termen rather full, but not definitely bent at  $R^3$ ; concolorous with forewing; cell-mark larger, elongate; a large, composite black spot between bases of  $R^2$  and  $M^2$ ; two slender, curved, subpunctiform dark lines between cell-mark and termen; terminal shade broader, but (at least proximally) less intense than on forewing; fringe as on forewing.

Underside paler, without definite markings; hindmargin of forewing and a terminal line on both wings whitish; fringes orange-yellow.

Madagascar: Station Perinet, 140 km. E. of Tananarivo, January 1933 (Mme. N. d'Olsonieff), type ♂ in coll. Tring Mus.

#### 14. *Ptochophyle callichroa* sp. n.

♂♀, 22–25 mm. Similar to *anthocroca* Prout (1925), but with the termen of the forewing slightly less oblique, that of the hindwing decidedly less angled at  $R^3$ , the rosy purple colour—especially in the ♀—very greatly predominating. Abdomen above purple, with only narrow (in the ♀ extremely narrow) and more or less interrupted mid-dorsal yellow markings, the yellow on the wings in the ♀ reduced to very slender interrupted strigulae or dots, in the ♂ to broader and more continuous zigzag lines or streaks, but still considerably narrower than the purple parts; in the ♂♂ the broadest yellow markings of the forewing are an extremely angular antemedian (oblique outward from costa to base of  $M^2$ , inward and slender to fold, outward to hindmargin) and two somewhat less extremely zigzag postmedian (the first with its sharpest angle outward behind  $R^3$ , the second slenderer and more interrupted, in any case with a strong angle outward in front of  $R^1$ ); the last yellow marking in both sexes consists of a rather regular series of interneural spots or large dots close to termen. Underside paler, the hindwing with much of the purple marking slight and shadowy, so as to give the yellow tone a preponderance.

Madagascar: Station Perinet, 140 km. E. of Tananarivo, December 1932 and January 1933 (Mme. N. d'Olsonieff), 3 ♂♂ and 4 ♀♀ in coll. Tring Mus.

#### 15. *Ptochophyle phanoptica* sp. n.

♂, 24–26 mm. Face and outside of palpus rosy. Vertex and scaled area of antenna white. Occiput and front of thorax variegated with ochre, purple-grey and roseate; thorax posteriorly and part of abdomen ochre to yellowish above, abdomen above with a very large central blotch, connected with a smaller posterior one, purple partly mixed with dark grey; underside of body pale cream-buff. Fore- and midleg partly rosy.

*Forewing* not very broad, costa straightish, termen slightly bowed, oblique; ground-colour pale cream-buff, smooth and slightly translucent (almost as in the ♂ of *togata* Fb., 1798) the veins finely yellower; base concolorous with thorax; costal and terminal areas yellow, mixed with bright ochre; cell-dot very small, black; markings grey, tinged with olive, "fluted" as in some *Glossotrophia* species, forming three ill-defined bands; first slight, adjoining the basal clouding;

median broad, just proximal to cell-dot, attenuated or almost interrupted in the middle; outer moderate, somewhat sinuous, bounding the yellow terminal area proximally; additional markings, partly grey, partly rosy, anteriorly and posteriorly, connecting the second and third bands; and again, anteriorly, medially and posteriorly, clouding the terminal area; fringe pale yellow.—*Hindwing* with termen very bluntly angled at R<sup>3</sup>; basal patch only represented by a rosy mark in base of cell; cell-dot minute; first two bands wanting; instead, a long purple patch (mixed with dark grey) at abdominal margin, commencing in a point at about  $\frac{2}{5}$  but widening rapidly, distally reaching a small yellow terminal patch; third grey band mixed with rose-colour, especially at costa, about 2 mm. wide, almost (in middle quite) reaching termen.

Underside pale, with the markings vague, predominantly grey; costal purple markings of forewing strengthened.

♀, 29 mm. Head, body, costal area of forewing and distal areas as in the ♂; forewing with the cell-dot; antemedian and median bands joined into a solid grey area; area between cell and outer band almost entirely occupied by a broad rosy band; hindwing with the cell-dot less small, the proximal and post-cellular areas as on forewing.

Madagascar: Station Perinet, 140 km. E. of Tananarivo, January 1933, 5 ♂♂, December 1932, 1 ♀ (Mme. N. d'Olsoufieff), all in coll. Tring Mus.

#### 16. *Ptochophyle neurina* sp. n.

♀, 27 mm. Face and palpus reddish. Fillet white. Vertex, thorax and abdomen concolorous with wings.

*Forewing* fairly broad, triangular, margins straightish; purplish grey inclining towards vinaceous, at termen deep purplish grey; costal and distal edges, some irroration and most of the veins yellow; lines yellow, antemedian angled at cell-fold, thence straight, postmedian excurved in the greater part of its course; fringe whitish buff.—*Hindwing* with termen somewhat convex, not angled at R<sup>3</sup>; slightly redder, terminally darkened; markings similar, the antemedian straight.

Underside much paler, except on forewing anteriorly; lines traceable.

Madagascar: Station Perinet, January 1933 (Mme. d'Olsoufieff), 1 ♀ in coll. Tring Mus.

#### 17. *Ptochophyle nasuta* sp. n.

♀, 24 mm. Head, thorax and abdomen above pallid vinaceous drab, the thorax and abdomen with some red-brown admixture; face and palpus red-brown.

Wings shaped nearly as in *gnamptoloma* Prout (1925), but both rather less extreme.—*Forewing* with base, costal region (as far as SC and its branches) and an irregular terminal area pallid vinaceous-drab, in places with faint red-brown suffusions or weak markings; the rest of the wing vinaceous-tawny to testaceous, with some dark irroration or suffusion; a highly irregular testaceous, distally dark-edged antemedian line discernible; indications of a dark cell-streak; postmedian line from about the base of SC<sup>2</sup>, forming a large "nose" outwards between its origin and M<sup>1</sup>, so as to reach at its extremity about 1 mm. from termen, throughout forming the boundary of the reddish area; faint brown interneural subterminal spots; terminal line and base of fringe vinaceous, the former dark-

mixed.—*Hindwing* similarly coloured, but with an elongate white cell-mark, narrower costal and somewhat differently shaped distal area, the postmedian line running straighter and less extremely oblique to its promontory about  $R^3$ ; antemedian line scarcely indicated.

Underside much more vinaceous and much less variegated, the shades running one into another; some ill-defined greyish clouding tornally on forewing and distally on hindwing; white cell-mark of hindwing distinct.

Madagascar: Station Perinet, December 1932 (Mme. d'Olsoufieff), one ♀ in coll. Tring Mus.

#### 18. *Problepsis violescens* sp. n.

♀, 37–39 mm. Very similar to *achlyobathra* Prout (1928), of which it may well prove to be a race. Body and wings more suffused with violaceous, the forewing less dark-clouded, with the ocellus and its accompanying markings more constricted (more recalling those of *transposita* Warr., 1903) though with the black marks at  $M^1$  more slender, the distal area in consequence broader.

E. Java: Nongkodjadjar, 4,000 feet, December 1933 and January 1934 (A. M. R. Wegner), 2 ♀♀ in coll. Tring Mus.

#### 19. *Scopula suna* Prout. ♂ ♀

♂♀, 28–30 mm. Face black, narrowly white below. Palpus black, narrowly pale below. Vertex and antennal shaft whitish, the latter with some dark dots; ciliation scarcely over 1. Thorax, abdomen and legs concolorous with wings, the foreleg infuscated on upper- and innerside; hindtibia dilated, with strong pencil, tarsus short (well under  $\frac{1}{2}$ ).

*Forewing* fairly broad, termen little oblique in anterior half, thence curving obliquely; whitish buff, with fine and sparse black irroration, the markings weak, somewhat more greyish buff (a little less grey than those of *flostactata* Haw., 1809); slight suffusion on basal 3 mm.; cell-mark weak, an indistinct ocellus; antemedian and median diffuse, more or less lunulate-dentate, the former rather near the cell-mark, the latter considerably beyond the middle and making a strong outward sweep after its subcostal angle inward, thus unusually far from the cell-mark, but behind  $M^1$  strongly incurved, reaching hindmargin scarcely beyond middle; postmedian finer, on an average about 3.5 mm. from termen, lunulate-dentate and with outward projection at  $SC^s-R^1$  and inward curve between  $R^1$  and  $R^3$ ; subterminal made conspicuous by shades which occupy almost the entire distal area; terminal dots sharply black; fringe pale at base, a slightly darkened bisecting line about the middle.—*Hindwing* with termen faintly erenulate in middle part, the projection at  $R^3$  hardly appreciably stronger than that at  $M^1$ ; cell-dot small, black; median shade slightly less diffuse than on forewing, making a deep inward bend between  $SC$  and  $M$  so as to form a large arc round the proximal side of the cell-dot; postmedian much nearer to cell-dot than to termen; distal area as on forewing.

Underside rather whiter, without irroration, forewing with some proximal suffusion and traces of cell-dot and (at least anteriorly) of postmedian, both wings with black terminal dots.

S. Kavirondo: Suna, May, June and September (W. Feather), 6 ♂♂ and 2 ♀♀ in coll. Tring Mus.

Very suggestive of some Palaearctic species, notably *lutcaria* Leech (1897),



which is slightly yellower-tinged. May be placed next to *vitiosaria* Swinh. (1904), which is larger, with less shortened hindtarsus, the postmedian line less proximally placed, etc.

## 20. *Scopula atricapilla* sp. n.

♂, 24 mm. Head black, face with a narrow white band below, palpus white beneath. Antenna black-scaled in its proximal part (well over  $\frac{1}{3}$ ); ciliation normal. Collar brown. Hindtibia dilated, with long, strong pale pencil; tarsus considerably over  $\frac{1}{2}$ .

*Forewing* white tinged with buff (about as in well-coloured *immutata* Linn. ♂♂), with only a few black scales; cell-dot small, black; lines brown, moderately distinct; antemedian slender, excurved between costa (at 4 mm.) and fold (at 3 mm.), again slightly excurved behind (thus angled inward at fold); median considerably beyond middle, less slender, nearly vertical from costa, bluntly bent about  $R^1$ , thence as oblique as termen but somewhat sinuous; postmedian slender, slightly lunulate-dentate, very weakly incurved between the radials and between  $M^2$  and  $SM^2$ ; subterminal shades weak; terminal dots black, minute; fringe unmarked.—*Hindwing* with termen inappreciably bent at  $R^2$ ; cell-dot very small; median shade slightly incurved proximally to it; postmedian slightly more proximal than on forewing; outer area marked as on forewing.

Underside paler, except costal margin of forewing; minute terminal dots; forewing with cell-dot and very faint traces of the lines; hindwing virtually unmarked.

Kenya Colony: Kibwezi, 30 April 1917 (W. Feather), type in coll. Tring Mus.

Less white and more strongly marked than *lubricata* (Warr., 1905), coloured almost like average *latitans* Prout (1920); hindtarsus even less abbreviated than in the latter. Very distinct in the blackened vertex, a highly exceptional character in *Scopula*, though frequent in the allied genus *Problepsis*. Sternite of 8th abdominal segment with both cerata long and slender.

## SUBFAM. LARENTIINAE

### 21. *Xanthorhoë steeleae* sp. n.

♂, 30 mm.; ♀, 33 mm. Apparently close to the South African *subspissata* (Warr, 1897, as *Polystroma*; ♀ = *brunneitrames* Prout, 1916), with the same ♂ antennal structure, the same ochreous-brown halo about the cell-dot of the forewing and very similar pattern, but with the characteristic blackish hair-tuft of the ♂ almost entirely wanting. Palpus probably darker (head lost in the ♀). Wing-pattern chiefly distinguishable by the less strong differentiation of the basal patch and median band of the forewing from its ground-colour, the blunter distal projection of the postmedian and especially the suppression of the oblique blackish mark from apex and of the almost equally blackish subterminal patch to which it leads; subterminal marked chiefly by neat white vein-dots, the lunules which connect them being mostly obsolescent.

W. Darfur: Djebel Murra, the ♂ type from Deriba Lakes, 8,000 feet, 25 April 1932, in beautiful condition, the ♀ from Dembilbil, 8,300 feet, on the S.E. side of the mountain, much torn. Both collected by Miss M. Steele. Type in coll. Brit. Mus., received through the Imperial Institute of Entomology.

22. *Perizoma eudoxia* sp. n.

♀, 28–30 mm. Face very gently rounded, moderately smoothly scaled; light green. Palpus  $1\frac{1}{2}$ , heavily scaled, 3rd joint short, partly concealed; whitish, coarsely dark-speckled. Antenna serrate. Vertex green, mixed with white. Thorax above light green, with black-brown spots, on the patagia with an irregular white band; abdomen above cream-colour, coarsely irrorated (except on hinder end of segments) with black-brown and with a mediodorsal admixture of bright sandy-brown.

*Forewing* rather elongate;  $R^1$  shortly stalked,  $SC^2$  from apex of areole or very shortly stalked with  $SC^{3+4}$ ,  $SC^5$  from apex of areole; light green; markings black-brown (in the median band mostly lighter, brighter brown), narrowly edged with white; basal patch strong, crossed by a slight green belt close to base, and with its distal edge projecting slightly in cell and rather more strongly behind; median band 4 or 5 mm. broad at costa, little over 1 mm. at hindmargin, its proximal edge angulated outward in cell and at fold, inward on M and (more weakly) in front of  $SM^2$ , oblique outward to hindmargin, its distal edge rather irregularly crenulate, toothed outward behind  $R^3$ , thence oblique inward to hindmargin; thick blackish marks at costa and hindmargin on the band at its borders and a subtriangular one on its distal part between the radials; two wavy lines in the middle of the band, distinct costally (the distal oblique outward), convergent behind, enclosing between C and M a narrow discocellular area of the green ground-colour; subterminal line white, more or less completely broken into interneural spots, accompanied proximally by a subtriangular costal dark mark, a more or less confluent pair at radials and fainter posterior ones, distally by some dark dashes, of which the three between  $SC^5$  and  $R^3$  are strong; terminal line interrupted at veins; fringe white, dark-chequered.—*Hindwing* whitish, irrorated and suffused with fuscous, leaving freer a narrow band distally to the postmedian line, and faint traces of a subterminal; postmedian line indicated, rather acutely angulated at  $R^3$ ; terminal line and fringe nearly as on forewing.

Both wings beneath more or less mottled, the forewing predominantly fuscous, the hind with more white; forewing with postmedian line and its whitish edging more or less developed in its costal half, subterminal whitish dots throughout, though only distinct as far as cellule 3; hindwing with black cell-mark and several vague wavy transverse lines.

Colombia: Sierra del Libane, 6,000 feet (H. H. Smith), 6 ♀♀ in coll. Brit. Mus.

23. *Perizoma spilophylla* sp. n.

♂, 29–32 mm. Face rounded, slightly prominent, rather noticeably oblique inward below, appressed-scaled. Palpus short (very little over 1), shortly rough-scaled. Antenna minutely ciliated. Head and body green, the abdomen pale, especially beneath.

*Forewing* broad, apex minutely falcate, termen sinuous, rather prominent about  $R^2$ – $M^1$ , then rather more oblique;  $SC^1$  well before apex of outer areole,  $SC^5$  from or somewhat proximal to its apex,  $R^1$  connate or stalked,  $DC^3$  bent to become markedly oblique,  $M^1$  well separate; asphodel green, almost without irroration; markings fuscous; basal patch small, enclosing a small green spot at extreme base, and not continued behind  $SM^2$ ; lines indicated by large costal spots (as in *Heterophleps*), nearer to one another than to basal patch and apex, the

antemedian bluntly triangular, the postmedian more rhomboid; further indications in a few minute dots on veins; no terminal line; fringe slightly paler, at least at tips, and with small fuscous dots at vein-ends.—*Hindwing* with margin rather elongate costally, curving decidedly from C to just behind SC<sup>2</sup>, where it is round-pointed, thence feebly sinuous; cell about  $\frac{1}{2}$ , DC markedly biangulate, with R<sup>2</sup> from behind middle; C anastomosing to near end of cell; SC<sup>2</sup> moderately stalked, R<sup>1</sup> rather widely separate; whitish green, greenest at termen.

Forewing beneath slightly paler green than above, with indications (generally reduced) of the costal spots and with small dots on fringe. Hindwing slightly greener than above, with a curved postmedian represented by small vein-dots, rather conspicuous anteriorly but gradually fading out posteriorly.

Argentina: Siambon, Tucuman, 1,600 m., February 1933 (R. Schreiter), 3 ♂♂ in coll. Tring Mus.

Extraordinarily like a green *Heterophleps*. Taxonomic position decidedly obscure; it can only be said that, pending further revision of the subfamily, its inclusion in *Perizoma* as now used in the New-World fauna (characters of *Euphyia* or *Anapalta* excepting the biangulate DC of hindwing) does not render that genus any more heterogeneous; several have similar face and palpus and identical venation, at least one (*costiguttata* Hulst, 1896) has similar maculation, others similar wing-shape. Only the somewhat longer cells suggest possibly a more ancestral group.

#### 24. *Perizoma tenuisecta* sp. n.

♂, 39–43 mm. Quite near to "*Antepirrhoe*" *vacillans* Warr. (1905), possibly a high-altitude race. Antennal structure similar (closely ciliate in fine fascicles, slightly longer than diameter of shaft). Abdomen more slender, less greenish, the black dorsal ornamentation rarely conspicuous.

Wings somewhat more dusky, less olive.—*Forewing* with median area generally more uniformly darkened, with little, if any, pale maculation in its central part, though the rippling of darker lines remains visible; the white boundary lines fine, but rather sharply defined, the postmedian with the projection at R<sup>3</sup> less sharp, sometimes much less sharp; the broad shades proximal to the subterminal less interrupted than in *vacillans*, with a very conspicuous pale line cutting it at R<sup>1</sup> (in *vacillans* a broad pale streak); fringe much less dark-mottled opposite the veins, the rest of the pattern (rather indefinitely described by Warren) consequently very conspicuous, namely a very fine whitish line at base, then a broader dark one, a slender but scarcely interrupted clear white one and broad dark tips.—*Hindwing* noticeably darker than in *vacillans*; fringe as on forewing.

Underside with similar distinctions.

Tucuman: San José, 2,500 m., March 1933 (R. Schreiter), 15 ♂♂ in coll. Tring Mus.

#### 25. *Trichoplites tryphema* sp. n.

"*Trichoplites latifasciaria* Leech" Prout, *Journ. Bomb. Nat. Hist. Soc.*, xxxi, 310 (1926) (err. det.).

♂, 45–47 mm. Face rounded, slightly prominent, without appreciable cone below. Palpus reaching scarcely beyond frons. Antennal ciliation minute.

Darker than "*Cidaria*" *latifasciaria* Leech (*Ann. Mag. Nat. Hist.* (6), xix, 644; Prout in Seitz, *Macrolep.*, iv, 245, t. 13c), especially in the median area of the forewing, which is decidedly less reddish, scarcely even so brightly coloured as in

Seitz' figure of *Triphosa multilinearia* (t. 13d), the strong gloss, indeed, somewhat recalling a *Triphosa*.—*Forewing* with cell-dot smaller, placed close to the darkened proximal part of the median area; the numerous subsidiary lines strongly expressed; subterminal white dot between  $R^3$  and  $M^1$  much reduced, a second one (more elongate, but very fine and slight) indicated between the medians, both succeeded distally by a vague dark spot.—*Hindwing* with  $DC^1$  (as in true *latifasciaria*) not biangulate; markings strongly expressed in tornal area.

*Forewing* beneath with the sex-hair highly developed, its densest ridge subcostal (in the genotype, *cuprearia* [Moore] more concentrating in cell and along proximal part of  $R^3$ ), but also with more delicate hair posteriorly and almost the entire wing clothed with specialised scaling.

Upper Burma: Hpimaw Fort, June 1923 (A. E. Swann), 2 ♂♂ in coll. L. B. Prout.

The true ♂ of *latifasciaria*, which I have now seen from Kunkala-shan (one in coll. Wehrli) and "W. China" (one in Tring Mus.), is much more closely like the ♀ type, rather smaller (thus definitely smaller than *tryphema* ♂), and can only by a further extension of our definition (which has already been made to cover species with non-biangulate  $DC$  of hindwing) be considered a *Trichoptiles*, as the hairiness of the forewing beneath is only rudimentary (or, more probably, vestigial), though the face, palpus, wing-shape and pattern show unmistakable phylogenetic connection.

#### 26. *Stamnodes eurypepla* sp. n.

♂ 31 mm. Closely similar to *gudialis* Prout (Nov. Zool. xxx. 201), but almost certainly distinct, as species of this group vary so little.

*Forewing* with basal patch more extended, especially along costa and hindmargin, apical patch more extended, forming a solid dark area from somewhat proximally to middle of costa to middle of apex, its proximal edge somewhat concave, weakly bent about  $M^1$ ; a whitish-buff costal dash or comma somewhat beyond middle of this area, just crossing  $SC^5$ .—*Hindwing* beneath with the white fold-streak ceasing 3 mm. before termen, the postmedian broken in its anterior half into a costal spot (just crossing  $SC^2$ ) and a rather larger one from radial fold to  $R^3$ , its posterior part, on the other hand, reaching the termen without interruption.

Peru, without more exact locality (Le Moul't), ex. coll. Ed. Brabant. Type in coll. Brit. Mus.

#### 27. *Stamnodes plancta* sp. n.

♂, 36 mm. Face whitish, tinged with black and with a large inverted brown triangle in upper part. Palpus nearly as long and heavily scaled as in *Cophocerotis (jaspeata)* Dogn., etc.; light brown, above white. Antenna closely lamellate, minutely ciliated. Head, body and legs light brown, in parts mixed with whitish.

Wings shaped nearly as in *ditissima* Th.-Mieg (*Le Nat.*, xxvi. 141, = *argenti-striga* Warr., Nov. Zool., xi. 539), the hindwing not quite so large relatively; strongly glossy.—*Forewing* drab, in some lights with a greyer tinge, the costal margin indefinitely paler and more buff (rather broadly to about two-thirds); a broad oblique whitish line from apex to  $R^3$ , very slightly incurved about  $R^1$ ; a less distinct line from costal streak just beyond middle, also running to  $R^3$ , where it is connected with the apical line by a slight pale suffusion; fringe pale brownish in

proximal half, whitish in distal; costal fringe also white towards apex.—*Hindwing* slightly greyer, with fine whitish costal streak, white costal fringe, a whitish streak from base to termen in front of cell-fold and  $R^2$ , and a second along submedian fold to two-thirds, where it branches, the main streak running to  $R^2$  nearly parallel with termen while that along  $SM^2$  becomes very fine and indefinite; fringe whitish.

Forewing beneath cinnamon-brown costally, Dresden-brown apically, the rest greyer and glossier; the apical streak (to  $R^1$  only) and costal and distal fringes pure white. *Hindwing* beneath Dresden-brown with the markings of upperside sharply white.

Ecuador: Chiguinda (C. Buckley). Type in Coll. Brit. Mus.

A very interesting species, combining the palpi (almost) of *Cophocerotis* with the antenna of *Stammodes* and the shape and facies of *Tora* Walk., especially its subsection *Synneuria* Mab. = *Lissopsis* Warr.; strikingly reminiscent of *S. triangularia* Btl.—Calv. I think Forbes is right (*Journ. N. Y. Ent. Soc.*, xxv. 60) in regarding *Lissopsis* (and therefore of course *Tora*, which he did not know) as a mere pattern-group of *Stammodes*.

### 28. *Eudule retroacta* sp. n.

♂, 25–26 mm. Head and body blackish, the abdomen slender and strongly elongate (group of *bimacula* Walk., 1854).

*Forewing* apricot orange, the markings dead black, with a slight tinge of olive-brown (blackier than in *halia*); costal edge, hindmargin to  $SM^2$  and a narrow distal border (less than 1 mm. wide at tornus, widening gradually to about 3 mm. at apex) of this latter colour; also a moderate, oblique band crossing the cell close to the end (touching base of  $M^1$ ) and terminating in the distal border at  $M^2$  and fold, confluent proximally with a further black area between M and fold, which tapers to a point near base, but is slightly continued to base along vein M; thus the ground-colour forms an elongate streak in cell, a still longer between fold and  $SM^2$  and a subapical patch with its proximal edge straightest, its distal regularly curved; fringe blackish.—*Hindwing* apricot-orange, with abdominal and posterior half of distal margin very narrowly black, apical region more broadly so.

Underside similar, but with the proximal black behind cell weaker and more blurred.

North Peru: Charape River, Tabaconas, 4,000 ft., 1912 (A. and E. Pratt), type; River Tabaconas, 6,000 feet (A., E. and F. Pratt), paratype.

Near *halia* Druce (1885), the subapical patch of forewing broader and more oblique, not cut by blackish veins. 3 ♂♂ in the Tring Museum (one from Huachuco, Peru, 3,200 m., and 2 from La Mota, nr. Cajamarca, Peru, 2,800 m., all collected by Simons, in November 1899) were misidentified by Mr. Warren as *halia*.

### 29. *Scordylia adventa* sp. nov.

♀, 26–28 mm. Head with palpus whitish, mixed—especially on face and outside of palpus—with black. Thorax and abdomen black, with more or less admixture of whitish hairs, the abdomen robust, dorsally with fine whitish-yellow segmental rings. *Hindwing* with terminal spurs only.

*Forewing* with costa only slightly shouldered at base, termen rather more oblique than in the *cruciata* group; cadmium-yellow; costal area (to SC) much

paler and more fleshy; basal area the same, but densely mixed with black, bounded by a straight oblique black line from hindmargin at about 3 mm. to costa rather nearer the base, thickening a little at costa; a short black costal mark at 4 mm.; a broad black half-band from costa just behind cell, reaching  $M^1$ ; a black border somewhat as in *placida* Druce (1893) but considerably more concave between  $R^1$  and  $M^2$ ; fringe strongly chequered black and white, behind  $M^2$  all black.—*Hindwing* rather elongate costally, termen between  $R^3$  and tornus rather straight; concolorous with forewing; base blurred with blackish; costal and apical area black, nearly as in *cruciata* Stgr. (1894), termen rather more narrowly so than in that species; a black postmedian line, sharply angulated at  $R^3$ , then incurved, finally running towards tornus but becoming obsolescent; fringe as on forewing.

Forewing beneath nearly as above, but with the apical region concolorous with hindwing; the latter mixed whitish, black and bright-brown, the black predominating as far as the postmedian, the distal area paler, especially just beyond the postmedian; a roundish pale spot just outside  $DC^2$ .

N.W. Patagonia: Leleque, territory of Chubut, 1,900 feet, December 1919. Type and paratype in coll. Brit. Mus., the latter with the postmedian costal patch more narrowed, tapering to a point.

The tibial armature is highly exceptional and if constant (as there seems little room to doubt, though each example has lost one hindleg) will necessitate the erection of a separate genus. The facies is rather that of a *Stammodes*.

### 30. *Psaliodes antesignata* sp. n.

♀, 24–25 mm. Face with the cone long, subtriangular; violet-grey. Palpus very long (at least 4); dark fuscous, the base beneath and the terminal joint light-brown. Head and body violet-grey; collar and parts of the legs light-brown.

*Forewing* moderately broad, apex blunt, termen smooth, curved and strongly oblique; both areoles ample; violet-grey; extreme costal edge light buff, intermixed with black-grey; a deep brown subbasal band, slightly indented exteriorly at both folds, accompanied proximally by a deep fleshy shade, which neither reaches base nor hindmargin; a triangular black-brown very slenderly fleshy-edged costal spot opposite  $DC$ , with some double scales at its end representing the cell-mark; a second at nearly two-thirds costa; the area between and behind these spots (i.e. specially between  $R^1$  and  $R^3$ ) suffused with deep fleshy and in middle with black-brown; terminal area very faintly suffused with brown; minute whitish dots at vein-ends; fringe violet-grey, feebly chequered with brown.—*Hindwing* moderately broad,  $DC$  biangulate, with  $R^3$  from behind middle; paler grey.

Both wings beneath slaty-grey with small black cell-dot; forewing distally with some slight buff costal marks; hindwing with feeble indications of a postmedian line of dark vein-dots.

Colombia: Sierra del Libane, 6,000 feet (H. H. Smith), 2 ♀♀, in coll. Brit. Mus.

### 31. *Psaliodes aparallela* sp. n.

♂♀, 26–29 mm. Palpus  $2\frac{1}{2}$ . Antenna in ♂ proximally thickened, deeply lamellate, minutely ciliated. Legs simple. Abdomen of ♂ beneath with long, coarse, broad-tipped scales on either side, converging in middle. Both areoles

fairly large ; discocellulars little curved, with  $R^2$  of both wings central. Head and body predominantly Sudan-brown to amber-brown (Ridgway, pl. iii, k), irregularly marked with pale olive-buff.

*Forewing* Sudan-brown in the ♂, paler (but with an amber-brown stripe beyond the postmedian) in the ♀ ; veins somewhat ochreous ; costal edge yellow-ochre dotted with blackish ; basal and median areas much darkened, suffused except in front of cell with blackish ; basal area ample, straight-edged ; median area moderate, almost straight-edged proximally, its edge more oblique than that of basal area, the intervening space white, mottled with olive-buff, and with a dark spot in cell ; cell-spot fairly large, but scarcely noticeable ; an ill-defined, less blackened triangle in median area between cell-fold and  $M^2$  ; a slightly lunulate-dentate white line bounding median band distally, its inward tooth on  $SC^5$  deep, an inward curve behind  $M^2$  narrowing the median area ; ill-defined dark wedges in cellules 6 and 7 beyond ; a large dark terminal patch between apex and  $R^2$ , its proximal edge indented on the veins so as to resolve it into a very small element before  $SC^5$ , a rather larger one before  $R^1$  and a still larger (2–2.5 mm. deep) between the radials ; a deeply lunulate-dentate dark line from  $R^2$  to torus, almost reaching termen on the veins ; fringe rather long, chequered ochreous and blackish, with an interrupted central line of dark irroration.—*Hindwing* pale vinaceous-buff or more greyish, shading off whitish at base and costa ; a feeble dark line about middle ; fringe ochreous with dark spots at vein-ends.

Forewing beneath blurred, with traces of the markings of upperside. Hindwing brighter, more ochre, with coarse dark irroration, a rather thick, sinuous postmedian (weakened or interrupted at  $SC^2-R^1$  and  $R^2-M^1$ ), incomplete subterminal (strongest posteriorly) and indications of terminal shading, especially about  $R^1$ .

Colombia : Sierra del Libane, 6,000 feet (H. H. Smith), 2 ♂♂, 3 ♀♀, in coll. Brit. Mus.

Near *tripartita* Warr. (Nov. Zool., xi. 72), which has similar but less highly developed sex-scales beneath abdomen, a strong hair pencil (not discernible in *aparallela*), the subbasal and antemedian lines parallel, etc. etc.

### 32. *Alloeoneura pastaza* sp. n.

♂, 31 mm. Close to *albicurvata* (Dogn., Ann. Soc. Ent. Belg., lvii. 390, as *Isodiscodes*).

*Forewing* above less yellowish, coloured almost exactly like a *Trichozoma* ; median band narrower than in *albicurvata* (circ. 2 mm.), rather less strongly and irregularly bent in the middle ; subterminal shades more interrupted with white between  $R^2$  and  $M^1$ .—*Hindwing* with postmedian line more sharply angulated on  $R^2$ .

E. Ecuador : Baños, Rio Pastaza, 6,000–7,000 feet (M. G. Palmer), type in coll. Brit. Mus.

### 33. *Isodiscodes renovata* sp. n.

♂, 28 mm. Face and vertex dark fuscous, both ringed round with ochreous-buff ; the postorbital rim and the short slender palpus also of the latter colour, the palpus with narrow dark fuscous mark above. Thorax and abdomen much as in *hyroglyphicata* Mssn. (*Stübel's Reise, Lep.*, p. 165, pl. ix, fig. 8).

Wings shaped and coloured as in *hyroglyphicata*, the white parts more tinged with ochreous (especially on the veins) than in Maassen's figure, but the only

specimens of his species known to me (Paramo del Tolima, 2 ♂♂) show also this tendency.—*Forewing* with the dark markings more consolidated; the five between basal and median forming a single band, only with slight dashes of the ground-colour at costa and hindmargin, and slight ochreous-whitish intersection on the veins; median band reaching costa (here nearly 2 mm. wide), solid in its central part; the three costal spots beyond confluent, the middle one large, giving birth to a double dark line, which is only interrupted at the veins; termen with a row of elongate whitish-ochreous vein-spots; fringe fuscous, with weak pale spots, the only large one being between  $R^3$  and  $M^1$ .—*Hindwing* above with faint traces of the dark curved lines of underside, especially the subterminal.

Underside much more strongly marked than in *hyroglyphicata*. *Forewing* much as above, though more blurred. *Hindwing* with black cell-dot, coarse dark irroration (leaving clearer a broad, weakly divided band beyond middle) and somewhat diffuse wavy postmedian and subterminal dark lines, the postmedian not (as in the faintly traceable line of *hyroglyphicata*) angled in middle.

Colombia: Sierra del Libane, 6,000 feet (H. H. Smith), type in coll. Brit. Mus.

#### 34. *Trotocalpe leucoparypha* sp. n.

♂, 17–18 mm. Distinguished from the genotype (*albilunata* Warr.), apart from its much smaller size, as follows.

Head, body and wings rather browner in tone.

*Forewing* much more unicolorous, the median area not or scarcely darkened, all the lines indistinct, extremely fine, the postmedian more excurved about the radials; the small blackish cell-dot present; a small apical patch—from costa to  $R^3$ —blue-white, with only a slight admixture of scales of the ground-colour; a cleaner white line at base of anterior half of fringe. Beneath without the white lunule (or pair of spots) which characterizes *albilunata*.

Bolivia: Rio Suruta, dep. Sta. Cruz, 400 m., August (J. Steinbach), 3 ♂♂ in coll. Brit. Mus.

#### 35. *Hydrelia laetivirga* sp. n.

♀, 26 mm. Group of *subobliquaria* (Moore, 1867)—genus *Autallacta* of Warren. Both wings with the angle at  $R^3$  rather sharper, about as in *lineata* (Warr., 1893). Head and body concolorous with wings; face, palpus and collar browner.

*Forewing* rather pale olive-buff, with greyer irroration; cell-dot minute, black-grey; lines brown, the median (“postmedian” in Hampson) strongest and darkest; a rather strongly curved subbasal, not reaching costa; two fine and weak between this and antemedian, both angled outward subcostally, the more proximal lost behind  $M$ , the other incurved at fold, lost behind  $SM^2$ ; antemedian from costa at 4.5 mm. to hindmargin at nearly 2 mm., gently excurved, with some pink suffusion proximally; median from  $\frac{7}{16}$  costa to  $\frac{2}{3}$  hindmargin, almost straight; postmedian slender, at costa scarcely over 1 mm. from median, straight to behind  $R^3$ , then weakly bent and becoming faintly sinuous; space between median and postmedian almost entirely filled with congo-pink or japan-rose; a faint line close beyond postmedian, not reaching hindmargin; a longitudinal dark line from median to termen behind  $R^3$ ; terminal line fine, more blackish; fringe concolorous.—*Hindwing* concolorous, with median and outer markings continued, including the pink band, but without longitudinal line.



Underside duller, ground-colour paler, forewing with ample greyish suffusion, particularly as far as the median line; both wings with minute cell-dot; median line and markings beyond as above; no pink band, nor longitudinal line.

Szechuan: Mt. Pehlinting, 6,000 feet, 50 miles N.N.W. of Chengtu, July-August (G. M. Franck), 1 ♀ in coll. L. B. Prout.

Even should the pink band prove inconstant (cfr. *Sterrha aversata* Linn., etc.), the shape of the wings, the tone, much less irregular antemedian line and other differences will abundantly distinguish this species from *subobliquaria*.

#### SUBFAM. GEOMETRINAE

##### 36. *Drepanogynis arcuifera* sp. n.

♂, 38-39 mm. Face with moderately appressed scales, partly red-brown. Palpus little over 1, more or less strongly reddish on the outside. Fillet narrowly white. Breast partly red-mixed. Thorax above concolorous with forewing, abdomen more greyish than hindwing, not robust.

*Forewing* moderately broad, apex appearing minutely falcate, on account of a very slight concavity between SC<sup>1</sup> and R<sup>1</sup> (which is near costa), termen smooth, strongly curved; SC<sup>5</sup> wanting; pinkish-buff or towards vinaceous-buff, with some yellower suffusions and with a few scattered and extremely fine greyish strigulae; markings browner; antemedian very oblique outward from costa at 6 or 7 mm., strong at first, then slighter, curving so as to cross DC<sup>3</sup> close to R<sup>3</sup> and then to return to costa little over 3 mm. from apex as a thickening postmedian line; the enclosed costal space partly suffused with a more ochreous shade; a very small ochre-suffused patch at hindmargin, representing the posterior end of median area, generally bounded distally by a short streak at about middle of hindmargin (representing the postmedian) and perhaps proximally by a slighter streak, the two apparently meeting anteriorly (at or before reaching the position normally occupied by the—here scarcely traceable—fold).—*Hindwing* rather elongate costally, termen moderately rounded, without noticeable irregularities; pale yellow-orange, in places rather warmer; abdominal margin posteriorly ecerudrab and with traces of the beginning of a dark postmedian line, running very obliquely forward from near tornus.

Both wings beneath much suffused with chamois, brightening and deepening in places; forewing pale at the extreme apex and with the beginning of the postmedian line; hindwing with a dark cell-dot and with a slightly curved line (variable in thickness) from apex, generally traceable almost to R<sup>3</sup> just outside the cell.

S. Africa: Natal National Park, March 1932 (J. Ogilvie), type received through the Imperial Institute of Entomology; also a fairly good ♂ from "Cape Colony" and a damaged one from Grahamstown, both received from the Albany Museum in 1900; all in coll. Brit. Mus.

##### 37. *Ischnopterix subalbata whitei* subsp. n.

♂, 44 mm. Differs from *s. subalbata* Dogn. (1910, French Guiana) chiefly in the presence of an irregular blackish median shade (angled outward about cell-fold, incurved posteriorly), which is also more or less developed beneath; the head and thorax above are generally whitish, but are somewhat variable.

♀ considerably larger (51 mm.), with the white markings extended in distal area.

British Honduras : La Cambre (J. Lienhart), 3 ♂♂ (including type), 1 ♀ in coll. Brit. Mus. ; Punta Gorda, May 1933 (J. J. White), 1 ♂, which called my attention to this race, though as it is somewhat damaged I have not made it the type.

### 38. *Pero collenettei* sp. n.

♂, 39 mm. Closely similar to *spitzi* Prout (1928) and with the same antennal structure. Smaller. Coloration of head and body as in dark *spitzi*, except that the hair-scales at the extremity of the abdomen are more ochreous-brown.

*Forewing* termen with the teeth at R<sup>1</sup> and M<sup>1</sup> (notably the latter) more acute ; postmedian line with the inward curve between the two folds much shallower ; distal area much less variegated, the prevailing tone somewhat olive-buff.—*Hindwing* termen with more noticeable teeth, particularly at M<sup>1</sup> ; predominantly rather dark ; postmedian line oblique outward from fold to abdominal margin ; distal area with a more conspicuous ochreous-brown patch at posterior end.

Underside much as in *spitzi* but less variegated, the paler parts less white, the bright brown patches much less developed, ill-defined.

Matto Grosso : Urucum, 15 miles S. of Corumba, 650 feet, at human perspiration, 16–23 November 1927 (C. L. Collenette), type ♂ in coll. Tring Mus.

### 39. *Pero nyctopa* sp. n.

♂, 30–36 mm. ; ♀, 37–41 mm. Head and body concolorous with wings. Antenna of ♂ with long pectinations (the longest at least 6).

*Forewing* with termen shallowly sinuate between the radials, blunt-toothed at R<sup>1</sup>, almost smooth in the oblique posterior part ; somewhat variable in colour but always dusky (deep fuscous-grey or somewhat more brownish), either nearly unicolorous or with the median area darkest, proximal and distal areas sometimes with a moderate brown admixture ; cell-mark creamy white, more or less comma-shaped, with slight blackish circumscription ; lines black, varying in their separation (at costa anything from 6 to 9 mm. apart) ; antemedian irregularly oblique outward to its acute angle at cell-fold, further with a strong outward tooth at submedian fold and strong sinuosities behind ; postmedian sharply dentate from costa to behind R<sup>2</sup>, incurved between the last tooth and a blunt double lobe at fold, again inbent at SM<sup>2</sup> ; black interneural dots close to termen.—*Hindwing* with termen quite weakly crenulate, the tooth at M<sup>1</sup> a trifle stronger ; almost uniformly dusky, the best-marked specimens showing a fairly distinct, weakly sinuous postmedian, hardly curved and little beyond the cell ; dots close to termen.

Underside slightly less dark ; both wings with weak postmedian line and traces of the admarginal dots ; cell-mark of forewing whitish, of hindwing dark (but not very strong), with whitish sealing in the middle.

British Honduras (J. J. White) : Punta Gorda (loc. typ.), 2 ♂♂, 2 ♀♀ ; Rio Grande, 2 ♂♂, 1 ♀ ; Columbia, 1 ♂, 1 ♀ ; all in coll. Tring Mus.

An unimposing species, but I know none with which to compare it.

### 40. *Aphilopota dicampsis* sp. n.

♂♀, 44–50 mm. Head and body concolorous with wings. Shaft of antenna rather dark, with a few pale spots.

*Forewing* brown, inclining to bistre or slightly more reddish, the ♀ a little darker than the ♂♂; some black irroration; costal edge dark, with very slender pale strigulae; cell-spot long and heavy, slightly longer than in *phanerostigma* Prout (1917); antemedian line from costa at 5 or 6 mm., sinuous but without any very strong curves, the strongest being inward between M<sup>1</sup> and SM<sup>2</sup>; postmedian slightly thickened on the veins, so as to project proximally, arising 4 or 5 mm. from apex, markedly incurved between R<sup>2</sup> and (just behind) M<sup>2</sup>, so as to cross R<sup>3</sup> and M<sup>1</sup> close to their base; subterminal pale, dentate, chiefly defined by a slender dark band on its proximal side; terminal line very weak, developing inconspicuous interneural spots.—*Hindwing* rather elongate costally, termen waved, not strongly convex; antemedian line wanting, the rest nearly as on forewing, only with the irregularities in the course of the postmedian a little stronger.

Underside paler; cell-spots conspicuous; traces—especially in the ♂♂—of the postmedian line, sometimes strengthened at the costa.

Kenya Colony: Kitale, April 1926, type ♂ and four others in coll. Tring Mus.; August 1925, and April 1927, paratypes, 5 April 1926, allotype ♀, in coll. Brit. Mus.; all from G. W. Jeffery.

Probably nearest to *foedata* Bastelb. (1907), Tanganyika Territory, which I know only from an uncoloured figure, but which has the lines punctiform, the postmedian nearly straight.

#### 41. *Cerurographa faceta* sp. n.

♂, 39 mm. Head mixed white and blackish-fuscous, face blackish in upper half, pale in lower; vertex strongly rough-haired. (Antennae lost, a remnant shows that the pectinations will be long.) Patagia white in front, then black. Thorax above largely black. Abdomen above more brown.

*Forewing* shaped nearly as in *bistonica* (Prout, 1922) or slightly more elongate; cell well over  $\frac{1}{2}$ ; venation slightly different from that of *bistonica* in that SC<sup>1,2</sup> are just stalked, R<sup>1</sup> well separate at origin from SC<sup>3-5</sup>, R<sup>2</sup> about central; white, with irregular, coarse irroration of brown or fuscous or in part black, and with the macular black markings laid on in transverse striation; subbasal at costa and in base of cell; antemedian at about 4 mm., forming a strong spot from costa to cell, a small one on M and an acutely triangular one posteriorly (its angle outward on SM<sup>2</sup>), slightly connected by a sinuous line; median line sinuous from a mid-costal black mark to hindmargin near postmedian, the approximated parts (behind the vaguely indicated discal ocellus) nearly filled with dark (posteriorly black) clouding; a black postmedian line oblique inward from  $\frac{5}{7}$  costa, slightly excurved behind R<sup>1</sup>, deeply incurved between the folds and again slightly between submedian fold and hindmargin; irregular dark shading outside the postmedian, then a predominantly white area, chiefly interrupted by spots and dashes which mark the distal boundary of the subterminal between SC<sup>5</sup> and R<sup>3</sup> and between M<sup>1</sup> and tornus; terminal spots elongate longitudinally, connected by a line.—*Hindwing* fuller and with more rounded termen than in *bistonica*, termen similarly subcrenulate; cell well over  $\frac{1}{2}$ ; white, with small black cell-spot, weak dark shading or irroration near hindmargin and termen, including an outwardly oblique postmedian dash at hindmargin and a slightly curved proximal-subterminal dark band between M and tornus; termen as on forewing.

Underside similarly but rather more weakly marked ; forewing with a rather large dark cell-spot.

Natal : National Park, March 1932 (J. Ogilvie), type in coll. Brit. Mus., presented through the Imperial Institute of Entomology.

The shape, cell-spots, outwardly oblique antemedian line and strong median cloudings of the forewing abundantly distinguish this species. The hairy vestiture of the legs, though not emphasized by Janse as one of the differential characters of his *Cerurographa* (*Moths S. Afr.*, i. 272), seems to me somewhat important and is well developed in *faceta*.

#### 42. *Medasina strixaria ceylonensis* subsp. n.

♂ 56-70 mm. ; ♀, 89-90 mm. Smaller than *s. strixaria* Guen. from (North) India. Less clouded with grey, particularly the ♂ ; cell-spots reduced, especially that of the hindwing, which is punctiform, not annular, that of the forewing in ♂ sharply black, in ♀ more shadowy.

Ceylon, the type ♂ from Pundaluoya, in coll. Tring Mus.

#### 43. *Alcis arisema* sp. n.

♂, 44-51 mm. Palpus rather short (less than  $1\frac{1}{2}$ ), rough, terminal joint small, but distinct. Antenna scarcely  $\frac{1}{2}$  wing-length, pectinate to nearly 40 joints, the longest pectinations 6 or more, their length decreasing gradually. Head and thorax sayal-brown to snuff-brown, with some lighter and darker admixture, palpus darker ; body beneath more buff, abdomen above with a conspicuous white spot at base, then predominantly occupied by fuscous maculation. Fore- and midlegs largely infuscated, with pale spots ; hindtibia with moderate, pale hair-pencil.

*Forewing* rather broad, termen moderately oblique, gently curved, slightly waved ; fovea moderate ;  $SC^1$  out of  $SC^2$  near base, anastomosing moderately with C, C beyond the anastomosis weak, occasionally obsolete (base of  $SC^1$  also occasionally almost obsolete, leaving nearly the venation of *Boarmia*) ; proximal and distal areas bright brown, inclining to tawny or sayal-brown, more or less mixed with blackish-fuscous, the clearest brown patch midterminal ; median area in the type form white, in fairly common aberrations more or less suffused throughout with brown, in rare cases retaining a narrow white band between median and postmedian ; two strong blackish lines, the antemedian at about 6 mm., straightish, with a slight inward bend between base of  $M^2$  and fold, the postmedian from about  $\frac{2}{3}$  costa, with two strong outward projections, the first (between the radials) the longer and rounder, the second (between  $M^1$  and fold) gradual anteriorly but producing nearly a right angle at fold, between which and hindmargin the line forms an inward curve ; a zigzag brown median line, always well expressed as a dark costal spot, subsequently very variable in strength ; cell-spot small ; an irregularly dentate white subterminal conspicuous anteriorly and posteriorly, more or less obsolete in middle ; blackish-fuscous shading proximally thereto ; terminal line strongest between the veins ; fringe weakly chequered.—*Hindwing* with termen well rounded, rather weakly eruncate ; white, with some marginal maculation concolorous with forewing ; a large or moderate dark cell-dot ; a fairly direct postmedian line from abdominal margin to  $R^1$ , more or less obsolete in front, typically conserved in a dot on  $SC^2$  ; subterminal defined by its

dark proximal shading from tornus to  $M^2$  and again by a spot on radial fold ; terminal line rather strong.

Underside similarly marked but more blurred, the brown parts greyer, the forewing with additional clouding running from the proximal area, suffusing the cell and extending to the median line, which is only developed in this anterior part.

Tibetan frontier of W. China : Tse-ku (R. P. J. Dubernard), a magnificent series in Brit. Mus. (ex coll. Oberthür).

Two smaller but closely similar ♂♂ from Szechuan have recently been received from Mr. G. M. Franck and probably represent a race. I describe them as :

**A. a. francki** subsp. n. (?? gen. II). ♂ 40 mm.—*Forewing* with proximal and distal areas more uniformly infuscated, median line on underside complete.—*Hindwing* with the marginal maculation more infuscated, confluent into a band, both on upper- and underside.

Szechuan : Pehlinting, 6,000 feet, 50 miles N.N.W. of Chengtu, July–August, type ♂ ; Vrt. Omei, 3,500 feet, 17 August 1931, 1 ♂. The latter very worn, but representing the form with median area of forewing dark-mixed.

A ♀ from Momeit, Upper Burma, 600 m. (Doherty, 1890), in coll. Oberthür, has about the size of *a. francki* but the coloration and maculation almost as in *a. arisema*, only the forewing with the postmedian considerably less bent posteriorly, the underside less suffused in the cell.

#### 44. *Iridopsis schreiteri* sp. n.

♂♀, 30–35 mm. Antennal pectination of ♂ moderately long, continuing to rather near apex (within  $\frac{1}{3}$ ). Hindtibia of ♂ moderately dilated, with hair-pencil, tarsus not much less than 1. Head and body concolorous with wings ; abdomen above with more or less distinct paired blackish spots, each pair with suggestion of pale middorsal separation.

*Forewing* rather elongate, costa straightish, termen weakly subcrenulate, gently curved, strongly oblique ; fovea less entirely obsolete than in most *Iridopsis* ; whitish grey, very copiously peppered with fuscous ; costal edge with irregular blackish spots and strigulae ; cell-spot moderate, reniform, slightly purer grey, with fine dark circumscription, sometimes darker grey almost throughout ; lines slender, inconspicuous, often interrupted ; antemedian generally thickened at costa, angled outward subcostally, thence indefinite, sometimes macular ; the usual broader and browner shade proximally to it developed or indicated ; median irregular, rather variable, originating in a costal spot opposite or shortly beyond the cell-spot, outbent at first, incurved or obsolescent behind middle, nearly always strong at hinder end, where it is very near to and parallel with the postmedian ; postmedian usually spotted or dotted at some at least of the veins, arising about midway between cell-spot and apex, very strongly oblique inward from  $R^2$  to  $R^3$ – $M^1$  close to their base, thence indefinite and sinuous, reaching hindmargin little beyond middle ; the usual brown shade indicated beyond it ; the crenulate subterminal, at least in parts, distinct and fairly broad, more or less completely dark-defined distally ; a dark spot proximally to it between  $R^2$  and  $R^3$  and oblique dark shading distally from about  $R^1$  to, or towards, termen near apex ; terminal line lunulate, developing into strong black vein-dots proximately ; fringe with a weak dark dividing-line of maculation.—*Hindwing* with termen

strongly crenulate; cell-spot similar or weaker; a double median line well developed posteriorly; postmedian with less extreme curvature than on forewing, it and often the brown shade beyond it strongly darkened at abdominal margin; subterminal dark-shaded distally and sometimes proximally; terminal and fringe as on forewing.

Underside smoother-looking, much less irrorated, the forewing brown-greyish, the hindwing paler; an oval blackish cell-spot on forewing, a small one (or dot) on hindwing; forewing with some dark dots at costa and with an ill-defined dark subterminal shade, moderate anteriorly, slender or obsolescent in posterior half; an ill-defined pale spot at apex.

Tucuman: Siambon, 1,600 m., January and February (R. Schreiter), 5 ♂♂, 5 ♀♀, in cell. Tring Mus.

Perhaps related to *piperata* Dogn. (1906), though so much smaller.

#### 45. *Iridopsis leucochitonias* sp. n.

♂, 36–40 mm. Intermediate between *muscinaria* (Snell., 1874) = *ciocolatinaria* (Oberth., 1883) and *alternata* Warr. (1904), though smaller than either. At first glance almost indistinguishable from the most warmly coloured aberrations of the former.—*Forewing* with cell-spot generally standing out more clearly, the median and postmedian markings in its vicinity less heavily macular; postmedian more equally developed throughout, always rather strongly incurved between  $M^2$  and  $SM^2$ ; subterminal white spot between  $SC^5$  and  $R^2$  undeveloped.—*Hindwing* with proximal area more sharply white, not or very little irrorated with grey; post-median on an average more angular between the radials; subterminal with somewhat more regular grey shading proximally, though not comparable to the broad blue-grey shade of *alternata*.—Underside with the dark shades chiefly subterminal, recalling those of *alternata*, though considerably narrower, on hindwing obsolete.

Carabaya, S.E. Peru: La Oroya, type ♂ and another, in coll. Tring Mus.; Santo Domingo, 4 ♂♂. Bolivia: Charaplaya, 2 ♂♂; Río Solocame, 1 ♂; Río Songo to Río Suapi, 2 ♂♂; Cochabamba.

The genitalia show a closer resemblance to *alternata* than to *muscinaria*, both in the longer uncus and the shape of the dorsal part of the valve.

#### 46. *Iridopsis mastistes* sp. n.

♂, 43–51 mm. Superficially almost or quite indistinguishable from *rupertata* (Feld., 1874). On an average less large (from Chulumani, whence the Tring Museum received both from Simons, the largest of the four *mastistes* measures 48 mm., the one *rupertata* 53 mm.; from Carabaya, where *rupertata* was only taken at higher altitudes—7,000–9,000 feet—one *rupertata* measures 49 mm., the other four 51–53 mm.).—*Forewing*, except in a few whitish, *syniaria*-like aberrations, generally more profusely irrorated or suffused with grey and brown, thus presenting a somewhat less sharply-marked appearance, in particular with less white between the double median line and the postmedian; cell-spot on an average larger and more heavily dark-suffused; postmedian often appreciably less sinuous, but quite unreliable; apical white spot generally with about the same amount of suffusion and irroration as in *rupertata* (less clear white than in *salmonaria* (Ob., 1883)).—*Hindwing* with discal lunule nearly always long, often longer than in any *rupertata* known to me.—Underside almost exactly

as in *rupertata*, typically with the fuscous subapical spot ending abruptly at or about  $R^3$ , not infrequently also with a small, generally shadowy, apical spot on the hindwing and less frequently with very faint maculation—or even the suggestion of a subterminal line—about the medians of the forewing, but never with the heavy subterminal shades of *salmonearia*.

Genitalia very distinctive; the strong, pointed, blade-like costal arm of the valve more twisted than in *rupertata* and *salmonearia*, near its base so acutely bent that its direction becomes ventrad instead of caudad; in addition, a very slender whip-like process (wanting in both the allies) arising from a hard rough patch on the innerside of the valve near its costa proximally. (In *rupertata* and *salmonearia* the pointed end of the costal arm is more produced, the tips in situ crossed for a considerable distance; in *rupertata* scarcely bent ventrad, in *salmonearia* considerably bent, but less extremely than in *mastistes*).

S. Ecuador, E. Peru and E. Bolivia, chiefly at altitudes of 3,000–6,000 feet; particularly common at Santo Domingo, Carabaya, 6,000 feet (type in coll. Tring Mus.) and La Oroya, 3,100 feet.

#### 47. *Iridopsis gaujoni* sp. n.

♂, 38–44 mm. Upper surface more suffused with brownish than in the *syniaria* (sens. str.) group, the bands which accompany the lines inclining to cinnamon, the subapical patch of the forewing in well-coloured examples approaching hazel; altogether suggestive of small, rather blurred examples of *salmonearia* (Ob.), under which name it was freely distributed by Dognin; the brown shades, however, not quite so warm as in that species, the white parts—particularly the apex of the forewing—not so clean, postmedian line of forewing scarcely ever so deeply incurved behind  $M^2$ ; cell-spots, or at least that of the forewing, generally well filled-in with grey.—Underside rather variable, typically with the subterminal bands as extended, or almost as extended, transversely as in *salmonearia*, but not so broad, on the hindwing generally more shadowy; not rarely almost or entirely obsolete on the hindwing, occasionally also on the posterior part of the forewing, in the latter case confusingly similar to the underside of the *syniaria* group.

♂ genitalia with the costal arm suffused to the valve, which tapers much as in *haploancala* Prout (1932). Conceivably a browner, more *salmonearia*-like race of that species, but the costal arm is not so produced at its tip and there are other difficulties in uniting them.

Ecuador, especially in the Loja district; type ♂ in coll. Tring Mus. There is also a short series from Popayan, Colombia (Lehmann) in the same collection.

#### 48. *Gasterocome polyspathes* sp. n.

♂, 40–42 mm. (a dwarf 35 mm.). In structure like *G. pannosaria* (Moore, 1867),  $SC^1$  and  $SC^2$  of forewing arising from the cell separately; in shape and in the more ochre-yellow tone and coarser black irroration more recalling *eurizonia* (Hmps., 1895), yet without the increase of the black clouding in median area of forewing.—Forewing with the essential markings of the allies; cell-mark as heavily black-bordered as in *pannosaria contacta* (Warr., 1899); antemedian line rather less near to subbasal than in *pannosaria*; sinuous white line beyond postmedian very slender, but not or scarcely interrupted; proximal subterminal band quaker-drab or violet-grey, neither blackish (as in *eurizonia*) nor tinged

with red (as in *pannosaria*); pale midterminal spot ( $R^3-M^2$ ) on the whole clearer. —*Hindwing* with costa not whitened as in the allies; markings nearly as in *pannosaria*, on an average heavier, the terminal band variable in the same direction as in *pannosaria*; cell-dot on an average larger than in typical *pannosaria*.

Underside recalling that of *euryzona*, except in the more solid dark border of the hindwing.

Ceylon: the type and several others from Maskeliya (G. E. Alston) in coll. Brit. Mus.; Uva and Petipola in the same collection.

#### 49. *Diplurodes shoreae* sp. n.

♂♀, 29–31 mm. Face dirty white, narrowly dark-suffused above. Palpus rather short, with 3rd joint inconspicuous. Antenna of ♂ with the fascicles 2 or slightly over. Hindtibia with hair-pencil. Lateral tufts of abdomen not very strong. Head and body concolorous with wings.

*Forewing* normally shaped, or in the ♂ rather more rounded, especially at apex; C well free in all known examples; prevailing tone grey rather than brown, the whitish ground-colour showing in the median area in a ♀-ab., while in the ♂ and one ♀-f. it is suffused with lilac-grey or pale quaker-drab, the rest of the wing in both sexes with this tone underlying the variable dark cloudings; costal spots, or at least the median, strong or moderately so; antemedian line well excurved; median oblique outward, but not, or scarcely, escaping confluence with the cell-spot, then irregularly excurved, the narrow space which posteriorly separates it from the postmedian entirely filled in some examples with blackish suffusion, much as in *parvularia* (Leech, 1889) and some *semiparata* (Walk., 1861); postmedian less sinuous than in most *Diplurodes*, in the ♂ slightly, in the ♀ somewhat more strongly, excurved between the radials; dark cloudings of distal area (when developed) placed about  $R^3-M^2$  proximally to the subterminal, between the radials distally; subterminal chiefly defined by a dentate dark line proximally and especially a costal spot; the usual terminal spots present.—*Hindwing* concolorous with forewing, in the non-clouded examples pretty uniform, in the clouded ones pale at the base, dark-mixed in median area; cell-dot black, strong; the two lines approximated, nearly parallel, thick or fine according to the individual, the postmedian not noticeably angulated in the middle; subterminal line indicated as on forewing; terminal dots present, sometimes large.

Forewing beneath whiter, almost solidly blackish from postmedian to termen, even the usual white apical and midterminal spots very slight (especially the latter); an ill-defined antemedian line or shade, which in the ♀ meets the bent median line of the hindwing, and a broad, irregularly bent median shade which obscures the large black cell-mark and is more or less connected with the dark border by shading about  $R^2$ . Hindwing of ♀ similarly coloured to forewing, with conspicuous elongate black cell-mark; of ♂ suffused with black-grey to near base, this area mostly occupied, from  $R^1$  hindward, by specialized sealing which becomes rougher near tornus.

India: Dehra Dun, U.P., 2 ♂♂, 3 ♀♀, the type ♂ 31 October 1930 (G. D. Bhasin), the two best ♀♀ bred from larvae found feeding on *Shorea robusta* (R. N. Mathur), emerged July 1933. Type in the British Museum, paratypes in my collection, kindly presented by the Forest Research Institute and College, Dehra Dun.



50. *Geolyces tanytmesis* sp. n.

♂♀, 36–41 mm. Head and body concolorous with wings. Midtibia not fringed. Hindtibia broadly dilated, with hair-pencil; tarsus abbreviated, scarcely over  $\frac{1}{2}$ .

*Forewing* with costa straightish to near apex, apex slightly produced, termen faintly sinuate, as far as the pronounced elbow at  $R^2$  not noticeably oblique, then strongly oblique, almost straight, tornus pronounced; subcostals somewhat crowded, the stalk of  $SC^{1,2}$  fairly long,  $SC^{3-5}$  arising well before apex of cell,  $M^1$  well before hindangle; fawn or towards army-brown, in variable nuances, the brightest part (an ill-defined band bounding the postmedian distally) in some specimens almost mikado-brown or orange-cinnamon; a blackish longitudinal streak from base along cell-fold and  $R^2$  almost to termen, lost at extreme end in some dusky anterior suffusion; a grey shade (sometimes with tinge of olive) in front of this line as far as the postmedian; antemedian line faint except at costa, sharply angled at the longitudinal streak; median line thick, dark, from just beyond middle of costa, very acutely angled outward just in front of the streak, forming an inward curve between this and hindmargin; postmedian subparallel with median, but more roundly bent anteriorly, chiefly expressed by black, distally white-tipped vein-dots, the interspaces showing weak and irregular grey lunules inward; between  $SC^5$  and  $R^1$  a clear buff spot just outside the postmedian, followed immediately by the costal beginning of a sinuous pale-grey subterminal; fringe mostly darkened.—*Hindwing* with termen crenate anteriorly, right-angled at  $R^3$ , thence straight to the rectangular tornus; concolorous with forewing, median area somewhat more regularly suffused with grey; a strong black cell-dot; a straightish dark proximal line; the lunulate-dentate postmedian approximately parallel with termen; white dots at the tips of its teeth; fringe as in forewing.

Underside light vinaceous-drab or slightly greyer, the cinnamon band fairly bright or at least indicated, the buff spot strong; both wings with black cell-spot, dark median (antemedian) line and traces of fine dentate postmedian.

Cameroons: Bitje, Ja River (G. L. Bates), 3 ♂♂, 1 ♀, in coll. Brit. Mus.

In shape and structure probably nearest *rufaria* Swinh. (1905), but quite different in colour and markings; in the latter respect much more like *flavimacula* Hampsn. (1910, *Mesocoela*), which has the hindwing rounded, etc.

51. *Epigynopteryx termininota* sp. n.

♂♀, 37–40. Curiously similar to *Xanthisthisa tergorinota* Prout (*Bull. Soc. Lep. Genève*, vi. 26, t. 1, f. 7), which is probably congeneric, though I placed it in *Xanthisthisa* on account of the retention of the base of  $SC^1$  of forewing. Only noticeably divergent from the detailed description and figure thereof in the points here enumerated.

Upper edge of face and outside of palpus deep fuscous, the palpus nearly 2, with 2nd joint porrect and 3rd joint rather long (nearing 1). Dorsal markings of abdomen reduced to some very small, well-isolated spots.

*Forewing* with the long stalk of  $SC^{1,2}$  connected by a short bar (in one example shortly anastomosing) with C,  $M^1$  almost connate with  $R^3$ ; ground-colour pinkish-buff to cinnamon-buff; lines rather more deeply sinuate, more sharply accompanied in the median area by small white and then black dots on the veins; dark

spot outside the postmedian and terminal maculation between the radials more pronounced, the former separated from the termen by a definitely cinnamon-buff suffusion.—*Hindwing* (concolorous with forewing) with the postmedian more sharply angulated between the radials.—Forewing beneath with the terminal mark between the radials sharply blackish-fuscous.

Fernando Po : Moka, 28 January–3 February 1933 (W. H. T. Tams), type ♂; W. Kivu; S. side of Middle Lowa Valley, S. of Walikali, 3,500 feet, forest, March 1924, wet season (T. A. Barns), 1 ♀; Uganda : Bugome Forest and Kisaru, June 1933 (H. B. Johnston), 2 ♀♀. All in coll. Brit. Mus.

The ♂ characters in this species (and therefore probably in *tergorinota*) are so exceptional for *Epigynopteryx* that a new genus will probably be demanded on a systematic revision, unless one of the kindred South American genera can contain it. Antenna almost simple (minutely ciliated); fovea well developed. The hindtibia (as in most of the group) is not dilated.

#### 52. *Epigynopteryx coffeae* sp. n.

♂♀, 30–36 mm. (probably dwarfed by breeding). Face and most of palpus blackish-fuscous; 1st joint of palpus pale, its rather long hair slightly mixed with fuscous. Antenna of ♂ with the last 6 or 8 joints non-pectinate; of ♀ simple. Hindtibia not dilated. Vertex anteriorly pale, but not so white as in *mutabilis* (Warr., 1903), occiput greyer. Thorax and abdomen concolorous with wings; abdomen with a pair of black dorsal spots at base.

*Forewing* with costa arched, termen in ♂ only very weakly sinuate between the apex (which is rather blunt) and a very slight prominence at  $R^3$ , termen in ♀ almost as extremely produced at apex and at  $R^3$  as in *molliaris* (Guen. ; Oberth., *Et. Léop. Comp.*, ix, f. 1905); much greyer than in that figure, the ochreous tint only suggested in places (chiefly in the median area) and even there scarcely so bright as in *molliaris*; slight irregular dark irroration, the amount variable individually; costal edge weakly spotted (pale and dark); cell-dot small or minute; lines fine, whitish buff, slightly brown-edged in median area; antemedian indistinct, more or less interrupted, oblique outward from costa to SC, here marked by a small black dot, thence less (sometimes scarcely) oblique, rather irregular, with appreciable dark dots at M and  $SM^2$ ; antemedian complete (not macular, as in *mutabilis*), its dark shading strongest from costa to  $SC^5$ , close to costa angled inward, about  $SC^5$  outward, much as in *molliaris*, but in its subsequent course forming a very gentle and regular curve; succeeding area rather variable, generally with a dark hindmarginal dot or spot touching the postmedian, sometimes with some rather strong zigzag or macular dark clouding proximal to the subterminal posteriorly and almost always with blackish pre-subterminal interneural dots or spots between  $SC^4$  and  $R^2$ ; subterminal from  $R^2$  hindward lost in a broadening but ill-defined pale area which runs to tornus; fringe slightly browned proximally, pale distally.—*Hindwing* with the angle at  $R^3$  weak in the ♂, better developed in the ♀ (but not quite as strong as in *molliaris*); narrowly pale costally, otherwise concolorous with forewing; a small but generally distinct cell-dot; the double postmedian straightish, close beyond it; distal area much as on forewing or slightly more clouded, the pale subterminal marking posteriorly reduced to a very broad zigzag line.

Underside with rather stronger and coarser dark irroration or strigulation,

similar or rather weaker markings, the whitish almost suppressed, the dark element of the postmedian only strong in the darkest-marked specimens (♀♀).

Kenya: Kiambu (R. H. Le Pelley), bred from larvae on coffee, December 1931, 6 ♂♂, 5 ♀♀; type and allotype in coll. Brit. Mus., received through the Imperial Institute of Entomology.

### 53. *Epigynopteryx glycera* sp. n.

♂, 31–32 mm. Face yellow below, the rest almost entirely suffused with reddish and fuscous. Palpus very little over 1, with similar colouring. Crown yellow. Antennal shaft mostly reddish, proximally mixed with fuscous, distally becoming pale; pectinations long. Collar reddish. Thorax and abdomen yellow, beneath pale. Hindtibia not dilated.

*Forewing* with costa arched, apex not acute, termen smooth, curved, anteriorly not oblique, posteriorly slightly so, tornus well expressed; SC<sup>1</sup> anastomosing at a point or connected by very short bar with C; clear yellow, without irroration; costal edge narrowly more buff; a fine, very slightly curved brown postmedian line from hindmargin at 7 mm. to R<sup>1</sup> scarcely over 2 mm. from termen; area outside it (excepting a very small backward projection of the yellow ground-colour at termen, which tapers to a point well before tornus) uniformly vinaceous-cinnamon; a small costal spot of the same colour close to apex separated off by a heavy blackish line; fringe yellow or ochre, generally rather darker than the wing.—*Hindwing* with termen smooth, curved, slightly more fully rounded in the middle but without angle or bend; postmedian line of forewing continued, almost straight across the wing to abdominal margin little behind middle; yellow proximally to the line, vinaceous-cinnamon distally; an extremely narrow yellow terminal area from costa, tapering as on forewing; fringe as on forewing.

Underside almost the same, but with the vinaceous parts rather paler; forewing with a few dark specks in anterior part and with a minute or microscopic cell-dot; hindwing with a blackish costal dot or small spot at boundary of the two colours.

Madagascar: Station Perinet, 149 km. E. of Tananarivo, January 1933 (Mme. N. d'Olsoufieff), 5 ♂♂ in coll. Tring Mus.

A very elegant little species, unique amongst the extensive *Epigynopteryx* material now known from Madagascar, especially in the entire absence of irroration.

### 54. *Trotogonia agelaea* sp. n.

♂, 28–30 mm. Near *pallidata* Warr. (1905), particularly as to the antennal structure, though the teeth may be a trifle stronger. Coloration much more as in *subornata* Warr. (1905), but with the vinaceous parts, especially on the upperside, cleaner, not dulled with violet-grey as in that species. Very distinct from both in the following particulars.

*Forewing* with the fine white antemedian almost vertical after the bend in cell (in all the other species of *Trotogonia* sinuous and oblique inward); a large and very conspicuous cell-spot, oblong and oblique, darker and more reddish than the ground-colour; the pale yellow postmedian patch freer from irroration; the dark fringe of the tornal excision inset with white both before and behind the fold, leaving blackish spots at the fold and at SM<sup>2</sup>.—*Hindwing* above without the three "purplish" or grey spots, beneath without the last (the radial) one.

Carabaya, S.E. Peru : La Oroya, 3,100 feet, 14 ♂♂, including the type ; Rio Huacamayo, 3,100 feet, 2 ♂♂ ; cell in coll. Tring Mus. A ♂ from Chaquimayo in coll. Brit. Mus.

Of the other *Trogonia* species I have seen few examples. The type, *subornata* Warr., remains unique ; of *pallidata*, Ockenden only took the type (at Santo Domingo) and 3 larger ♂♂ (at Oconeque, 7,000 feet) ; of *niphe* (Th.-Mieg, 1907, as *Drepanodes*), described from Cayenne, I only know a good ♂ from Fonte Boa, in the Tring Museum.

To Warren's generic diagnosis (Nov. Zool., xi. 70) I would add that the face is smooth, the hindtibia (unless in the type, which has lost both hindlegs) strongly dilated, with hair-pencil, the inner proximal spur long, all the rest short, especially the two outer, the stalking of  $SC^{1,2}$  of the forewing long,  $R^2$  well before middle of DC.

#### 55. *Ephoria auratilis* sp. n.

♂, 34–36 mm. Quite near *arenosa* (Butl., 1878) in shape and structure, the ♂ pectinations even more rudimentary (the longest ones shorter than the diameter of the shaft). Thorax, abdomen and wings brighter than in *arenosa*, the ground-colour almost pure deep-chrome.

*Forewing* in ♂ with moderate dark irroration costally and distally, in ♀ much clearer ; cell-mark moderate ; antemedian line less thick and more proximally placed than in *arenosa*, forming a regular and comparatively moderate curve ; postmedian rather more distally placed than in that species, forking behind  $M^1$  (rather variable in exact shape, much as in *arenosa*), remote throughout from antemedian ; subapical white markings as in *arenosa* ; ♂ with apical and terminal clouding, which in the ♀ is merely indicated.—*Hindwing* in ♂ with irroration in distal part, in ♀ clearer ; median line straight from behind middle of abdominal margin to costa close to postmedian ; postmedian slender or moderate, rather more sharply angled at radial fold than in *arenosa* ; a blackish apical spot, not crossing the postmedian, in ♂ reaching at least to  $R^1$ , in ♀ very small.

Underside more evenly irrorated, with similar markings to upper, much less variegated than in *arenosa*.

W. China : Kwanhsien, 5 and 7 August 1926 and 4 August 1928 ; Yu Chi Valley near Kwanhsien, 20 July 1928 (G. M. Franck), 3 ♂♂, 1 ♀ ; type in coll. Brit. Mus.

#### 56. *Devarodes paralogus* sp. n.

♂♀, 37–38 mm. Face white, overlaid (except at edges) with black-grey. Palpus black. Crown black, with a large orange central spot. Thorax above black ; patagia mixed with white ; tegula with an orange central spot and white edges. Abdomen above grey, mixed with black. Underside of body white, mixed with grey. Legs largely mixed with white.

*Forewing* with  $R^1$  well stalked ; black, with a roundish (slightly oval) white spot between  $SC^5$  (— $R^1$ ) and  $R^2$ , bounded proximally by DC ; fringe grey distally.—*Hindwing* black ; fringe mixed with white or whitish, the costal fringe the whitest.

*Forewing* beneath blackish, shading off to glossy drab costally and apically, the apical patch reaching  $R^3$  and the white spot ; proximal part of costa mixed with white ; white spot of upperside extended to costa ; in addition, a small subtriangular terminal spot in cellule 3. *Hindwing* dirty white with veins

darkened; a very broad dark border (drab, mixed with darker shades), reaching cell and somewhat extended proximad anteriorly; a subtriangular terminal spot in cellule 3.

Minas Geraes: Serra dos Cochios, 2 November 1919 (type), 31 December 1922 (paratype ♂ and allotype ♀), collected by J. F. Zikan, all in coll. Brit. Mus.; a paratype ♂ from the same source in coll. L. B. Prout.

The upperside is extraordinarily like that of *Mnesipenthe subcana* (Walk., 1854); the hindwing beneath recalls those of *Devexodes subraria* (Walk., 1854), and its nearest allies.

#### 57. *Hyalostenele lutescens auxomelas* subsp. n.

♂♀. Paler than *l. lutescens* Butl. (1872), from Mexico to Panama.—*Forewing* with veins M and M<sup>2</sup> blackened nearly to the junction, the abdominal margin blackened in (approximately) its distal half.—*Hindwing* with the veins almost entirely blackened (except DC), the abdominal margin as on forewing or narrowly blackened almost to base.

Peruvian Amazons: Rio Ucayali, 3 ♂♂, 2 ♀♀, the type ♂ from Contamana, in coll. Brit. Mus.

#### 58. *Ereunetea translucens* sp. n.

♂, 32–33 mm.; ♀, 35 mm. Face irregularly black above, white below, with a slight orange admixture at outside. Palpus orange, with black tip. Antenna black, the pectinations continued to near apex. Head and body orange. Fore and middle legs largely blackish. Abdomen robust, especially in ♀.

*Forewing* not quite so narrow as in typical *Ereunetea*; fovea strong, especially in ♂; cell long ( $\frac{2}{3}$ ); R<sup>2</sup> scarcely nearer to R<sup>3</sup> than to R<sup>1</sup>; thinly scaled, subdiaphanous; orange, the brightest parts inclining to ochraceous-orange or zinc-orange, at some angles of light more rufous; veins blackened, the discocellulars slightly more broadly so; distal area pale blackish, in the middle suffusedly whitish, especially between SC<sup>5</sup> and R<sup>3</sup>, the proximal boundary of the dark area fairly sharp at DC and anteriorly (where it runs obliquely inward), very vague and nearer the termen posteriorly.—*Hindwing* with cell rather over  $\frac{1}{2}$ ; concolorous with forewing, the borders narrower, with the whitish element strongest between R<sup>3</sup> and tornus.

Underside similar.

S. Cameroons: Bitje, Ja River, 2,000 feet, October–November (G. L. Bates), 3 ♂♂, 2 ♀♀, all in coll. Brit. Mus.

Rather aberrant in shape and scaling, but referable here. Evidently a member of a mimetic association, the distribution of the colours recalling the considerably larger, on the hindwing black-spotted *Acræa quirinalis* Gr.-Sm. and *iturina* Gr.-Sm., the general habitus more suggesting the Zygaenid moth *Anomocotes tenellula* Holl. All these four species have been taken together.

#### 59. *Craspedosis stenodes* sp. n.

♂, 44 mm. Very similar to *semiplaga* Warr. and *translinens* Prout (see Nov. Zool., xxx. 209), especially, in the structural characters, to the latter. Fovea still stronger. Wings narrower.—*Forewing* with costa straight from base to nearly  $\frac{1}{2}$  (in *translinens* more noticeably curved); the black ground-colour more strongly shot with blue, especially in proximal half; the transverse white band,

as in *semiplaga laticlava*, terminating at SM<sup>2</sup>, but shaped nearly as in *transtinens*.  
 —Hindwing almost throughout more strongly shot with blue than in the allies.  
 —Underside with the white band more sharply bounded distally than in *transtinens*, in which it is followed by a narrow area of an intermediate grey shade.

British New Guinea : Upper Aroa River, February 1903 (A. S. Meek).

#### 60. *Craspedosis acoelia* sp. n.

♂, 39 mm. Almost exactly like *cyanauges* Prout (1916), but with the fovea vestigial, whereas in *cyanauges* it is very highly developed. The white band of the forewing a little more broadly and regularly rounded at the anterior end than is usual in *cyanauges*; the underside with the metallic blue gloss more persistent, i.e. showing at a larger number of angles of vision and generally more extendedly.

Dutch New Guinea : Mt. Kunupi, Menoo Valley, Weyland Mountains, 6,000 feet, December 1920–January 1921 (C., F. and J. Pratt), 1 ♂ in coll. Tring. Mus., detected among a good series of duplicates from the Joicey Collection. It seems inconceivable that a mere atavistic *cyanauges* should depart so far from the normal structure; moreover the colour peculiarity, though small, has shown itself constant over a long series from both Mt. Kunupi and Mt. Goliath, some in fresher, some in less fresh condition than the *acoelia* type.

#### 61. *Milionia euchromozona* (Prout, MS.) Rothsch.

♂♀, 63–67. Structure and general habitus of *glauca* Stoll (= *glauca* Cram.). Nearest to *assimilis* Rothsch. (Nov. Zool., iv. 510; x. t. 12, fig. 18, New Hanover), of which it may perhaps prove a form. Larger. Forewing with the band, even in the ♀ (in which the width within the cell is about twice that beyond it), broader, in the ♂ only reaching DC in the middle, leaving small triangular patches of the ground-colour in the two outer corners of the cell; colour of band red, almost as in *obiensis* Rothsch. (Nov. Zool., v. 417; x. t. 12, fig. 3), not orpiment-orange as in *assimilis*, only becoming weakly orange on the underside at its hindmargin. Proximal area beneath, especially in the ♂, strongly shot with blue, as in the Molucean forms named; in the ♀ this is restricted to the extreme base and streaks along C and SC (forewing only) and M (both wings, on the forewing very narrowly).

New Ireland, 2 ♂♂, 1 ♀, all in coll. Brit. Mus. (Joicey Bequest).

By a rather unfortunate contretemps, Lord Rothschild, in erecting *M. completa* Rothsch. (*Ann. Mag. Nat. Hist.* (9), xvii. 114), has unwittingly made himself sponsor to this species. Overlooking that it then existed only in manuscript, he used it in elucidating his new species and, mentioning the type locality, gave sufficient clues for its recognition. At the same time—quite naturally, under the circumstances—he provided no actual description; hence it appeared to me that the only way in which to clarify the situation was by publishing my original description verbatim and subjoining the necessary explanations. As it is essential that the type of the species shall have been known to its author, I have labelled a ♂ in the Tring Museum as holotype.

#### 62. *Nothofidonia ansorgei saphomeris* subsp. n.

♂, 33–38 mm. Differs from *a. ansorgei* (Warr., 1901, Uganda) in having the brown-black parts of the forewing almost solid, only with a very slight speckling of

the ground-colour at extreme costa and hindmargin ; the longitudinal central band variable, but always more or less narrow, on an average about 1.5 mm. in width ; the outer streak about  $R^1$  likewise variable, occasionally obsolete or punctiform, usually short.

Kenya : Kitale, April 1926 (G. W. Jeffery), 14 ♂♂ in coll. Tring Mus., including the type. A ♂ from Lumbwa (Jeffery) in Brit. Mus. and one from Elgon dist. (F. Bryk) in my collection were formerly disregarded as mere abs. of *ansorgei*.

Differs from *xenoleuca* Prout (1928) in the yellow ground-colour, absence of black costal area of hindwing, etc.

### 63. *Semiothisa infabricata* sp. n.

♂, 28 mm. Frontal cone moderately strong. Palpus  $1\frac{1}{2}$ . Antennal joints scarcely projecting ; ciliation just over 1. Hindtibia not dilated. Head and body concolorous with forewing ; fore- and midleg dark-mottled, especially the former.

*Forewing* with termen faintly waved, straightish (but not actually concave) anteriorly ;  $SC^1$  arising from C ;  $SC^2$  free ; rather pale brownish-drab, tinged, especially in distal area, with avellaneous ; dark irroration sparse and minute ; cell-mark faint, rather elongate ; median shade excurved slightly beyond it, incurved behind middle, rather strong at costa and hindmargin, weaker between ; lines extremely fine, not strong ; antemedian bent close to costa, then straightish ; postmedian oblique outward to  $R^1$ , here right-angled, then nearly parallel with termen, slightly approaching it posteriorly ; blackish marks on postmedian at  $R^3$ , the anterior minute, the posterior moderate ; a rather larger (sometimes elongate) spot outside the latter, separated from it by a whitish dash ; subterminal faint, interrupted ; termen with interneural black dots, the posterior two elongate ; fringe scarcely mottled.—*Hindwing* with termen straightish (hardly concave) between  $SC^5$  and  $R^3$ , weakly bent at  $R^3$  ; slightly greyer than forewing ; cell-dot less elongate ; median shade obsolete at costa, darkened at abdominal margin ; postmedian fine, not dentate, slightly excurved between the folds ; no dark spots at  $R^3$  ; distal area nearly as on forewing.

Underside light brown, vaguely mottled with grey-brown and (especially on hindwing) with white, the veins on forewing distally and on hindwing more cinnamon ; cell-dots moderate, blackish ; median shade on hindwing crossing cell-dot ; a sayal-brown band outside the postmedian, on forewing mixed with grey posteriorly, on both wings enclosing some ill-defined white subterminal spots, those of forewing well developed only in cellules 6 and 7, those of hindwing ampler, only interrupted between the radials ; band of hindwing tapering towards tornus, leaving a triangular white mark between itself and the postmedian ; terminal spots fairly strong.

Nyasa : Zomba Plateau, November 1920 (H. Barlow), type ♂ ; Mt. Mlanje (S. A. Neave), a pair, larger but clearly conspecific ; all in coll. Brit. Mus.

Slightly variable, the ♀ a little recalling *duplicilinea* (Warr., 1897), the weakest marked underside (Mlanje ♂) suggesting the colour-scheme of *contaminata* Warr. (1902), the others more recalling *hypoleuca* (Prout, *Ann. Transv. Mus.*, v. 174).

64. *Semiothisa anguifera* sp. n.

♂, 36 mm. Face and palpus moderately infuscated, the former apparently without cone, the latter shortish-moderate. Antennal joints somewhat projecting, ciliation about 1, in paired fascicles. Thorax and abdomen slender, concolorous with wings. Hindtibia not dilated, the spurs long.

*Forewing* with apex sharp, termen oblique, straightish or faintly sinuous to a very slight, blunt prominence about  $R^3$ , thence considerably more oblique; fovea weak;  $SC^{1-2}$  coincident, anastomosing very slightly with C; pale (cartridge-buff or ivory-yellow), with fuscous lines or stripes, at their thickest parts almost 1 mm.; a dark, heavy subbasal, oblique outward from hindmargin to M, thence less oblique and apparently much weaker; an extremely oblique antemedian, curved in a long S-shape, arising at nearly  $\frac{2}{3}$  costa, entering cell just behind the cell-spot, its posterior inward curve crossing the base of  $M^2$ , thickening between this and  $SM^2$ , its termination on middle of hindmargin slender; postmedian less strongly curved, its anterior half being parallel with termen (at 3 mm.), its posterior sinus a little less deep than that of antemedian; dark subterminal spots on  $SM^2$  near tornus, between  $R^3$  and  $M^1$  close to postmedian line, and before  $R^1$ , indicating an oblique posterior shading to the pale apex; interneural terminal dots.—*Hindwing* elongate costally, margin rather straight and oblique from C to  $SC^2$ , straightish between this and a second bend at  $R^3$ , faintly sinuous posteriorly; whitish, slightly irrorated but without lines; terminal dots present.

*Forewing* beneath with traces of lines, but best characterized by the apical markings: postmedian strong and broad from  $R^1$  to costa, bounding a whitish apex and a purer white, very oblique streak from  $R^3$  to  $SC^5$ , the latter bounded posteriorly (distally) by oblique dark shading. *Hindwing* beneath much more spotted and clouded than above; a dark spot at costa proximally to middle, a highly sinuous median line arising from its distal end, some bright brown clouding about the veins, especially distally; terminal marks heavy, more linear than above.

Uganda: Birunga Mountains, February 1933 (G. L. R. Hancock), type ♂ in coll. Brit. Mus., presented by the Imperial Institute of Entomology.

Structurally sound, but extremely worn; the exceptionally striking pattern (somewhat reminiscent of some *Pseudomaenas*) will render it easy of recognition.

65. *Zamarada melpomene tragodica* subsp. n.

Distinguished from *m. melpomene* Oberth. (1912, Cameroons to Ivory Coast) by the much darker borders, which are quite uniformly Natal-brown to bone-brown, not variegated as in the name-typical race; both upper- and underside without the whitish marks at hindmargin close to tornus; cell-dots minute. Possibly a separate species.

Tanganyika Territory: Morogole (J. A. I. Thompson), type ♂ in coll. Brit. Mus., received through the Imperial Institute of Entomology.

As Gaede suspected (*Iris*, xxix, 117), Oberthür's statement that spurs are wanting on the ♂ hindtibia is an error of observation; all four are long (though very unequally) and remarkably slender, so that when the strong hair-tufting is in good order they can be overlooked amongst it.



66. *Lomographa tritocampsis* sp. n.

♂♀, 20–23 mm. Head and body concolorous with wings, the collar and base of antenna somewhat darkened. Ciliation of ♂ antenna very long. Hindtibia of ♂ strongly broadened, with an elongate concavity on innerside, containing a striated area, the striations extremely fine, longitudinal.

Wings shaped about as in *lala* (Swinh., 1892); paler, approaching in colour *hyriaria* (Warr., 1894), but with the irroration less coarse, the markings less dark; costal edge of forewing slenderly dark, terminal line finer and weaker than in *hyriaria*; median line better developed than in *hyriaria* and very distinct from that of *lala* or of *urbica* (Swinh., 1885), being—especially on the forewing—very definitely angled outward at the hind corner of cell, more or less incurved before and behind the angle; the postmedian (weak in the whole group) obsolete; subterminal twice outbent, nearly as in *urbica* but with the anterior bend (at R<sup>2</sup>) less deep; this line a little farther from termen than in *urbica*, running to hindmargin, not to tornus; longitudinal shades between subterminal and termen somewhat variable, generally more diffuse or less definite than in *lala*.

India, widely distributed: Khasis (type ♂ in coll. Tring Mus.), Nagas, Nepal (1 ♂ in Mus. Senckenberg.), Sikkim, S. Mangalore (Madras), Nilgiris, Ceylon.

67. *Peratophyga spilodesma* sp. n.

♂♀, 23–24 mm. Face deep brown. Palpus mixed with black on outside, with buff within. Vertex clay-colour, dark-spotted. Antenna spotted; in ♂ with rather long pectinations to well beyond middle; in ♀ shortly ciliated. Collar and extreme front of thorax clay-colour; most of thorax and abdomen deep plumbeous, beneath paler, the abdomen with clay-coloured dorsal spots.

*Forewing* rather broad, termen little oblique anteriorly, gently curving posteriorly; deep plumbeous, the markings clay-colour, the bands less markedly suffused with ochraceous in the middle than in *flavomaculata* Swinh. (1902); an ill-defined subcostal streak from base to median band, thickening into a spot at  $\frac{2}{7}$  to indicate the antemedian, which only reappears as a smaller spot on SM<sup>2</sup>; median band slightly before middle, slightly curved, formed of three large spots which are slenderly connected by a line at their proximal side; a few scattered black scales in their centre; postmedian similar, midway between median and termen, rather broader and more sinuous, the spots curving outward, the connecting lines inward; minute subterminal vein-dots; fringe ochraceous at base and veins, otherwise deep plumbeous.—*Hindwing* with similar markings, except proximally.

Underside with the markings similar but paler, more buff.

Borneo: Bidi, Sarawak, 1907–8 (C. J. Brooks), type ♂ and allotype ♀ in coll. Brit. Mus.

68. *Pycnostega areta* sp. n.

♂, 25–29 mm. Nearly related to *fumosa* (Warr., 1897, as *Hydatocapnia*). Structure similar, i.e. with the antennal pectinations short, hindtibia strongly dilated with pair-pencil, forewing with SC<sup>1+2</sup> coincident, generally free, R<sup>2</sup> from not or barely before middle of DC. Pectinations, however, a trifle shorter still (the longest not quite 2, in *fumosa* appreciably over 2).

Both wings, particularly the forewing, with costal margin relatively less shortened; colour browner, more uniform, without the darkened distal area above or beneath; cell-dots more sharply black, on forewing generally somewhat longer and narrower; the denticulate postmedian line nearer to the termen (about 3 mm. therefrom) and much more nearly parallel to it, on the forewing showing only a very slight sinus inward behind  $M^2$ , on the hindwing a rather shallow one between the radials.

W. Kivu: south side of middle Lowa Valley, S. of Walikali, 3,500 feet, forest, Mareh 1924, wet season 3 ♂♂ (including the type), 1 ♀; Upper Lowa Valley, near Masisi, 5,000–6,000 feet, forest and long grass, February 1924, wet season, 3 ♂♂, 1 ♀; Middle Lowa Valley, near Walikali, 3,000 feet, 3 ♂♂; also from E. Ituri Valley, 30 miles S. of Irumu, 3,000 feet, July 1924, 1 ♂. All collected by T. A. Barns, type and others in coll. Brit. Mus., paratypes in Tring Mus.

#### 69. *Xenostega treptostiches* sp. n.

♂, 22 mm. Head and body concolorous with wings, the face, palpus and foreleg with some blackish admixture, the abdomen with blackish dorsal spots. Hindtibia dilated, with strong hair-pencil.

*Forewing* with  $SC^1$  from stalk of  $SC^{3-5}$ , anastomosing with C and with  $SC^{3-4}$  (i.e. as in most *Xenostega* <sup>1</sup>),  $R^2$  from about one-third DC (about as in *tincta* Warr., 1899, which also has this vein less extremely displaced than in most *Xenostega*); fovea broad, heart-shaped, being indented distally by a small area with black scaling; light grey, with some sprinkling of more silvery scales; a small black cell-dot; lines olive-brownish, all angled outward, the first in cell, the others at  $R^1$ ; antemedian twice as near to median as to base; median rather thick, behind its angle deeply incurved so as to pass just proximally to the cell-dot; postmedian about midway between median and termen, running slightly outward from fold to hindmargin; beyond it (after a pale line) an irregular row of spots, only those between the radials and from  $M^1$  to hindmargin highly developed, these mainly black, brown-edged proximally, bordered distally by pale markings which indicate the position of the subterminal; terminal black dots between the veins.—*Hindwing* with termen rather less full than in the typical species, yet hardly less than in *ochracea* (Butl., 1879, as *Crocinis*; ♀ = *rimosaria* Saalm., 1891, as *Fidonia*); concolorous with forewing; cell-dot more minute; first line faint, rather nearer the base than on forewing; others continuing those of forewing but somewhat slighter; subterminal spots brown, much less developed than on forewing, but strengthened between costa and  $SC^2$ .

Forewing beneath slightly browner, except at hindmargin; foveal spot and cell-dot developed; subterminal spots larger but less sharply defined than above, slightly connected proximally by greyish shading; no lines. Hindwing paler; cell-dot faint as well as minute; no markings except the costal subterminal spot and the terminal dots.

Madagascar: Station Perinet, 149 km. E. of Tananarivo, December 1932 (Mme. N. d'Olsoufieff), type ♂ in Tring Mus.

<sup>1</sup> Warren, *NOV. ZOOLOG.*, vi, 301, writes "11 out of 12," overlooking its very slender and weak base, which is here from near the end of the cell, anastomosing strongly with C, but in most of the species it is short-stalked.

70. *Xenostega eurhythma* sp. n.

♂, 24–26 mm.; ♀, 26–28 mm. Closely related to *ochracea* (Butl., 1879). Antennal pectinations of ♂ appreciably longer. Colour much paler and less ochreous.—*Forewing* with costal edge more uniformly red-brown, without thickening and blackening towards base (only the extreme edge sometimes blackish throughout); subterminal band more regular throughout, in the ♂ strong, generally thick, in the ♀ slenderer, in neither sex with the paired spots near tornus which characterize *ochracea*; other transverse markings almost or altogether obsolete.—*Hindwing* with a similar subterminal band, almost parallel with termen throughout; cell-dot sometimes almost obsolete.—Under-side with similar distinctions.

Madagascar: Station Perinet, 149 km. E. of Tananarivo (Mme. N. d'Olsoufieff), 5 ♂♂, 3 ♀♀, in coll. Tring. Mus.

71. *Bapta araeophragma* sp. n.

♂, 30 mm. Face dark brown. Palpus rather lighter brown, mixed with white at base. Vertex and antennal shaft white. Thorax and abdomen white, above with dark irroration.

*Forewing* with apex not acute, termen slightly more oblique than in typical *Bapta*; SC<sup>1</sup> free, SC<sup>5</sup> stalked to beyond SC<sup>2</sup>, M<sup>1</sup> connate; white, irrorated with brown-grey, a few of the scales nearly black; costal edge finely light ochreous-brown; cell-dot black, about as large as in *temerata* (Schiff.); a faintly suggested line just beyond middle of hindmargin, lost anteriorly; a weak but not very slender postmedian from SC<sup>4</sup> to hindmargin, rather nearer to termen than to cell-dot, very gently excurved in a great part of its course, slightly incurved posteriorly; an extremely fine black terminal line, strongest anteriorly, where it runs round apex to SC<sup>3</sup>; fringe white, slightly greyer at tips.—*Hindwing* with cell-dot smaller; postmedian line continued; terminal line not quite reaching tornus.

Underside white, with costal edge of forewing ochreous.

Borneo: Bidi, Sarawak, 1907–8 (C. J. Brooks), type in coll. Brit. Mus. Selangor: Kuala Kubu, Bukit Kutu, 3,400 feet, August 1918, 2 worn ♂♂ submitted by the Federated Malay States Museum.

*Blaboplutodes* gen. n.

Face slightly rounded, smooth-sealed. Palpus short and slender. Tongue developed. Antenna in ♂ (probably also in ♀) unipectinate, with very long branches. Femora not hairy. Hindleg slender, with four well-developed spurs. Wings subdiaphanous, the scaling thin and hair-like. Frenulum developed.—*Forewing* with apex rounded or round-pointed, termen smooth, curved, posteriorly strongly oblique; cell about  $\frac{1}{2}$ , DC little curved, SC<sup>1+2</sup> very long-stalked, their stalk arising from C, DC<sup>1</sup> well developed, R<sup>2</sup> from before middle of DC, M<sup>1</sup> stalked or connate.—*Hindwing* with termen strongly rounded; cell about  $\frac{2}{5}$ , DC oblique posteriorly; C shortly approximated to cell near base, rather rapidly diverging, SC<sup>2</sup> separate, R<sup>2</sup> wanting, M<sup>1</sup> separate.

Type of the genus: *Blaboplutodes missilorum* sp. n.

Differs from *Plutodes* in the venation; the scaling is approached by that of *P. hilaropa* Meyr., *Tr. Ent. Soc. Lond.*, 1897, p. 75.

72. *Blaboplutodes missilorum* sp. n.

♂, 32 mm. Face above with a large dark spot in middle (abraded below). Palpus darkened on outside. Crown and patagia pale yellow. Thorax above dark fuscous, posteriorly pale yellow; abdomen pale yellow, the first somite with a pair of subdorsal fuscous spots, the second with a single middorsal one, the rest with vague paired subconfluent ones. Foreleg infuscated on upperside.

*Forewing* very pale yellow, inclining to olive-buff; base and costal margin (to SC<sup>4</sup>) dark fuscous, projecting short dashes at 4 mm. (oblique outward), 11 or 12 mm. and 13 or 14 mm. (thin); a bent mark on DC<sup>1,2</sup>; a terminal dash just in front of R<sup>3</sup>; a row of small interneural terminal dots, with a larger one at apex and a still larger at tornus; 5 or 6 extremely faint, highly crenulate greyish lines. — *Hindwing* with similar lines and terminal markings, the apical dot not enlarged; costal region free of dark markings.

Underside similar.

Rugege Forest, Ruanda District, Lake Kivu, 8,000 feet, December 1921 (T. A. Barns), type ♂ in coll. Brit. Mus.

The species must be very widely distributed, as the Tring Museum has a ♀ from Sédbiou, Senegal. A pair of a closely related species was sent to the Hill Museum from Nyasaland by Mr. H. Barlow. Very unfortunately, both the ♀♀ yet known have lost their antennae.

73. *Melinoëssa eurycrossa* sp. n.

♀, 45 mm. Head and body pale yellow, with some dusky markings, notably a narrowly dark band across upper part of face, some admixture on palpus and a large part of thorax above. Abdomen above marked with orange at base.

*Forewing* broad and relatively short, costa nearly straight, apex squared, termen rather strongly curved; maize-yellow, in places with a little orange irroration and a few dark scales; costal margin with extensive hair-brown and darker irroration and strigulation, which becomes almost solid shortly beyond the cell, and with a silvery subcostal streak; cell-ring small, long-oval, of the usual *Melinoëssa* colouring; two rather closely approximated orange (to cadmium-yellow) lines, rather broad but not concise; antemedian excurved, leaving costa at 4 mm. (blackish while crossing the irrorated area), reaching hindmargin at nearly 5 mm.; postmedian only just outside the cell, somewhat incurved before and behind the radials, from base of the median to hindmargin a little oblique outward; a very broad auburn border, its proximal boundary quitting SC 9 mm. from apex, bicurved (outward at first, then inward), finally running obliquely outward to hindmargin near tornus; contained in this border are a sinuous series of large, roughly triangular, silvery subterminal spots, silvery streaks in the veins and folds, a large maize-yellow terminal spot from R<sup>2</sup> to near M<sup>2</sup> and very slight orange maculation at apex and tornus; terminal line auburn; fringe nearly concolorous with border, whitish yellow opposite the terminal spot. — *Hindwing* moderately broad; cell-spot reduced, blackish, irrorated (not pupilled) with silver; lines still less defined, the postmedian shown as the boundary of the strongly orange-speckled proximal area; the first three silver subterminal spots very large, the one in cellule 3 small and inconspicuous, the last three fairly large; the dark colour of the border reduced to a broad edging of the first three spots, a broad streak running therefrom between the radials to termen, and some narrower

edging to the three posterior spots ; terminal line not complete ; fringe mostly pale, dark-mixed at the radials.

Underside with similar design but without silver ; the borders darker (Natalto bone-brown), the pale parts of distal area white, the subterminal wanting, the costal markings of forewing vestigial.

Cameroons : Yaunde to Yoko road, 2,000 feet, July 1921 (G. L. Bates), type in coll. L. B. Prout.

Strikingly distinct from all the forms previously known.

#### 74. *Melinoëssa asteria* sp. n.

♂♀, 43–46 mm. In structure typical—group of *croesaria* H.-Sch. (1855). Shape about as in that species, *midas* Prout (1922), etc., termen of forewing appreciably bent in the middle ; superficial aspect and even the colouring much more suggestive of *stellata* Butl. (1878), the pale buff ground-colour being retained on the forewing in a narrow antemedian band, two large, irregularly oval postmedian patches (the first from  $SC^5$  to  $R^2$ , tapering behind, the second longer, still more irregular, running from  $R^3$  virtually to hindmargin, its proximal side more curved, its posterior part extremely attenuated, but not actually separated from the principal part as in *stellata*), and an ill-defined midterminal one, on the hindwing in a postmedian patch from costa to near  $R^3$ , with an extremely attenuated continuation or resumption posteriorly, and slight or very slight apical and midterminal maculation, on both wings with some irregular buff strigulae on the brown parts ; both wings with conspicuous white, dark-edged cell-spot, the subterminal series of spots much as in *tanyglochis* Prout (1928), which, though rather broader-winged, is probably its nearest ally.—Forewing beneath marked nearly as above, though more blurred, the distal area with some dark admixture (less intense than in *tanyglochis* and *subalbida* Warr, 1905), the mid-subterminal white spot indicated, though less pure than the cell-spot. Hindwing beneath pale as far as the postmedian, but not so white as that of *subalbida* ; cell-spot indicated ; distal area moderately dark-clouded.

Cameroons : Bitje, Ja River, the type ♂ and others in Tring Mus. Gaboon : Ogove River, a dark ♂ in the same collection. Spanish Guinea, 2,500 feet (T. A. Barns), 1 ♂. E. Congo : Oso-Lowa watershed, 21 August (T. A. Barns), 1 ♂.

#### 75. *Melinoëssa aureola* sp. n.

♂, 42–46 mm. ; ♀, 48–50 mm. Also very near *croesaria* H.-Sch., forewing (as in that species) with termen less noticeably bent than in *asteria*. Colour brighter orange-yellow than in any other *Melinoëssa*, the ground-colour clear yellow, the coarse and copious irroration and the markings bright red-orange. Front of thorax and costal margin of forewing heavily and rather broadly suffused with blackish.

*Forewing* with the white cell-mark rather narrow, its dark bordering rather strong ; both lines well developed ; antemedian strongly bent at (or just behind) the end of the darkened costal area, thence straightish ; postmedian slightly curved and running outward to an acute angle at (or just in front of) the mid-subterminal spot, strongly incurved between this and submedian area, where it changes its direction very slightly, to fall almost perpendicularly on hindmargin ; subterminal maculation nearly as in *croesaria*, the enlarged spot between  $R^3$  and

M<sup>1</sup> moderate.—*Hindwing* with the black cell-dot rather sharp, generally touched with one or two silvery scales ; postmedian generally rather ill-developed, apparently about as in *croesaria* ; subterminal with central white spot materially larger than on forewing, generally subtriangular.

Underside with the dark markings more brownish than above ; hindwing in ♂ very little, in ♀ scarcely at all, paler than forewing ; the usual subterminal markings moderately strong on both wings, a good deal mixed with blackish, the pale mid-terminal spot well developed.

Sierra Leone (type ♂ in Tring Museum), Ivory Coast, Gold Coast and Nigeria, showing little variation.

From *sodaliata* Walk. (1862), abundantly distinct in the colour, the more extreme form of the postmedian line, the large mid-subterminal spot of the hindwing and the much paler hindwing beneath.

---