

NEW AMERICAN *URANIIDAE* AND *GEOMETRIDAE* IN THE TRING MUSEUM.

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FAMILY *URANIIDAE*.

SUBFAMILY EPIPLEMINAE.

Symphytophleps gen. nov.

♂. *Forewing*: elongate; costa slightly curved at base and before apex, which is blunt; outer margin oblique, faintly curved, as long as inner margin, which is strongly sinuous, convex in basal half, concave beyond middle before the anal angle, which is rectangular.

Hindwing: short and broad; costa sinuous, excised at middle, the apex truncate to vein 7, which, as well as vein 6, is shortly toothed; outer margin indented in middle, the anal angle rounded.

Antennae simple, minutely serrate beneath; palpi porrect, short, with appressed scales, the terminal segment acute; tongue and frenulum present; legs short and stout; abdomen short and thick (possibly damaged).

Neuration: forewing, cell less than half of wing; discocellular vertical, straight in upper half, concave in lower; vein 2 shortly before end of cell, 3 and 4 on a long stalk; 5 from angle of discocellular, just above the middle; 6 and 7 from upper angle of cell; 8, 9 very long stalked, from same point as, or even shortly stalked with, 10; 11 from one-half. Hindwing, cell short and very broad; vein 2 from beyond one-half; 3, 4 long stalked; 5 from middle of discocellular; 6, 7 short stalked; 8 arched at base.

Type: *S. latifascia* spec. nov.

1. *Symphytophleps latifascia* spec. nov.

Forewing: dull grey, freckled with darker; the lines blackish, most distinct below middle; first from about one-fourth of costa to one-third of inner margin, strongly excurved in cell, so that the lower course is oblique parallel to outer margin; outer line from quite three-fourths of costa, outcurved above and reaching inner margin at five-sixths; space between the lines on inner margin blackish brown with traces of other lines; a median cloud from costa towards anal angle; a black cell-mark; a black submarginal dash between veins 6 and 7; fringe grey.

Hindwing: with inner line bisinuate, from one-fourth of costa to about middle of inner margin; outer line double, waved below costa, the interval on inner margin darker, as in forewing; a black dot at top of discocellular.

Underside dark-freckled grey, without markings.

Face, palpi, thorax, and abdomen blackish; shoulders and patagia pale grey.

Expanse of wings: 38 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

The markings in costal half of forewing are somewhat obscured, owing to the worn state of the specimen.

FAMILY GEOMETRIDAE.

SUBFAMILY CYLLOPODINAE.

2. *Josia discrepans* spec. nov.

Forewing: velvety black, with a broad deep yellow streak from base to termen, its upper edge nearly straight, its lower somewhat curved, narrower in its terminal fifth, its end blunt; the fringe black.

Hindwing: black, the inner margin and the outer from anal angle to vein 4 deep yellow, the edge of the black portion evenly curved from base to vein 4; fringe black from apex to vein 4, the rest deep yellow; a narrow yellow costal stripe from base to four-fifths.

Underside like upper, but the yellow portions rather wider.

Palpi, antennae, a spot at top of face, the shoulders, patagia, and dorsum shining black; face and vertex, and the anal tuft pale ochreous; base of patagia externally, and a broad stripe down middle of thorax and dorsum deep yellow; venter and pectus pale ochreous.

Expanse of wings: 26 mm.

1 ♂ from Pozuzo, Huánuco, Peru, 800—1000 m. (Hoffmanus).

3. *Oricia augusta* spec. nov.

Forewing: velvety black, with the veins concisely yellow; from middle of costa to vein 1 at two-thirds a golden yellow blotch, swollen in middle, blunt-pointed below; on each side of it and along outer margin the yellow veins are interrupted by the black ground-colour; fringe black.

Hindwing: golden yellow, with a broad black border from apex to anal angle; broadest at apex, deeply excurved at middle, and truncate at anal angle.

Underside of forewing brown-black, with the yellow blotch broader; costal edge yellow to middle; tips of fringe white; hindwing yellow; the dark margin interrupted by a yellow tooth at costa; a slight dark basal streak along subcostal vein.

Palpi whitish in front, black laterally; face yellow; shoulders black, with lateral orange spots and a pale dot at middle; patagia dark with yellow edges; thorax and abdomen black, with yellow dorsal stripe and the latter with yellow lateral stripes; venter whitish.

Expanse of wings: 35 mm.

1 ♂ from Humayta, Rio Madeira, July—September 1906 (Hoffmanns).

4. *Oricia dominula* spec. nov.

Forewing: uniform olive-brown, with the veins yellow; a pale yellow wedge-like streak from costa beyond middle across the discocellular to just below vein 3; an elongate club-shaped yellow blotch from base along submedian interval to beyond middle; fringe dark brown; inner margin finely yellowish.

Hindwing: black, with the centre pale yellow from base to three-fourths of wing, where it is rounded; its upper edge is diffuse, and its lower indented at vein 2; along submedian fold is a streak of black scales; inner margin and fringe yellow.

Underside brown-black; forewing with both yellow blotches enlarged; hindwing with the yellow centre twice as wide; a yellow costal streak from base to beyond middle, which is also present on upperside.

Palpi laterally black, yellowish in front; face yellow; vertex brownish; shoulders brown, with three yellow spots; patagia streaked brown and yellow; thorax and abdomen blackish, with yellow dorsal stripe, the latter also with yellow lateral stripes.

Expanse of wings : 35 mm.

1 ♂ from La Soledad, Province Entre Rios, Argentina, close to frontier of Uruguay, April 1905 (Miss Britton).

5. *Oricia fulva* spec. nov.

Forewing : fulvous brown, much browner than *priverna* Cram. ; the basal half dull fulvous; the veins in both areas paler; from costa at two-thirds a narrow oblique cream-coloured wedge-shaped mark ending on vein 5.

Hindwing : dull orange, with a purplish brown border shaped as in *priverna* ; the costa with some brownish scaling.

Underside of forewing with an orange-yellow blotch along inner margin as in *priverna*, the costa remaining brown; the pale costal streak enlarged, running to vein 3, and emitting a spur inwards to discocellular; hindwing as in *priverna*, but in both wings the dark tints are brown, not black.

Head and thorax dark brown; abdomen paler, greyer brown; the venter cream-white.

Expanse of wings : 48 mm.

1 ♀ without locality label.

6. *Oricia imitatrix* spec. nov.

Forewing : dark purple-brown, the veins showing scarcely paler; a fusiform yellow transverse blotch at three-fifths, extending from subcostal vein to submedian fold; fringe concolorous.

Hindwing : with a central curved broad yellow fascia with waved edges from vein 8 to inner margin, where it is narrowed and dusted with blackish scales.

Underside with the blotches larger and deeper yellow; forewing with a whitish streak along median vein and inner margin; hindwing with one along costa and median vein.

Palpi black with basal segment white; face white; collar yellow; thorax and abdomen like wings, the latter with yellow dorsal spots.

Expanse of wings : 36 mm.

2 ♂♂ from Humayta, Rio Madeira, July—September 1906 (Hoffmanns).

This species is remarkably like *Ephialtias monilis* Hüb.

7. *Oricia projecta* spec. nov.

Forewing : olive-brown, with the veins yellowish; on the middle of the inner margin an oblique cream-white blotch, the inner edge parallel to costa, the outer to outer margin, the apex rounded and touching cell-fold, the outer edge bent on vein 2; beyond upper end of cell a similarly coloured blotch.

Hindwing : cream-colour, with a broad black marginal border from before apex to anal angle, its inner edge waved and with a sinus beyond cell; base brownish.

Underside like upper, without the yellow veins.

Head and thorax brown varied with pale spots and streaks; the patagia with pale edges; abdomen (rubbed) apparently dingy whitish with darker dorsal and lateral stripes.

Expanse of wings: 44 mm.

1 ♀ from Humayta, Rio Madeira, July—September 1906 (Hoffmanns).

8. *Oricia scissa* spec. nov.

Forewing: dark olive-brown, with the veins all yellow; from middle of costa a yellow wedge-shaped streak runs to submedian fold at three-fourths, the ground-colour on each side of it darker and interrupting the yellow veins; fringe pale brown.

Hindwing: deep yellow, the inner margin below cell and vein 2, a square blotch at apex above vein 4, and the margin between 2 and 4 narrowly brown-black; fringe dark brown; the extreme inner margin and its fringe yellowish.

Underside dark brown; forewing with an obliquely edged basal patch yellowish; a broad deep yellow band of uniform width from middle of costa nearly to anal angle; hindwing like upperside, but the dark areas brown; inner margin more broadly yellowish.

Face and vertex yellow; palpi yellow with the tips black; thorax and patagia streaked alternately olive-brown and dull yellow; dorsum brownish cinereous, edged by a broad orange lateral stripe; venter cream-colour; legs grey and whitish.

Expanse of wings: 40 mm.

Both sexes from Fonte Boa, Upper Amazons, May to July 1906 (Klages).

In this species vein 10 is stalked with 7, 8, 9, instead of rising free.

9. *Phaeochlaena biorbiculata* spec. nov.

Forewing olive-brown, with the veins yellowish, and two round whitish spots, one at lower end of cell between the cell-fold and base of vein 2, the other submarginal, crossed by veins 5 and 6; fringe brown.

Hindwing: cream-white, with broad black costal and outer marginal border, and the base diffusely brown; the veins and fold also streaked with brown across the white area.

Underside similar; both wings brown.

Palpi yellowish; face white; antennae black; patagia with yellow spot at base; thorax and abdomen brownish cinereous.

Expanse of wings: ♂ 28 mm.; ♀ 35 mm.

A long series from Fonte Boa, Upper Amazons, May to July 1906 (Klages).

The species differs from *Ph. tendinosa*, the type of the genus, in having vein 10 stalked with 7, 8, 9, and the antennae of the ♀ are shortly bipectinate.

10. *Polypoetes vidua* spec. nov.

Forewing: semitransparent, sparsely scaled, black, with the veins delicately white; a white semihyaline narrow streak from base to beyond middle between median vein and submedian fold; a white blotch beyond cell between vein 6 and the stem of 3, 4, its upper edge oblique; a small white tridentate mark before apex, caused by the swelling of veins 7, 8, 9, which rise nearly all together; fringe black.

Hindwing: with all the margins black, of uniform width, enclosing a broad white pyriform space, with diffuse black scales at base.

Underside duller black with similar white markings, the hindwing also with the costa narrowly and the inner margin broadly dusted with bluish white scales.

Head, thorax, and abdomen black; an orange spot at base of patagia laterally; segments of abdomen with whitish rings.

Expanse of wings: 26 mm.

1 ♀ from Limbani, Carabaya, Peru, November 1901, wet season (Ockenden); very much like *P. bistellata* Dogn. from Argentina; but the white area of hindwings is broader and the veins of forewing are white. I have seen another ♀ from Limbani, and 2 ♂♂ from Aqualani, referred at the time to *bistellata*.

11. *Scotura fulviceps* ab. *quadripuncta* nov.

Differs from the type form of *fulviceps* Feld., figured as a *Cymopsis*, in having a fourth white spot beyond the end of cell above the large outer spot, which in the type form is rounded and reaches vein 5, but in the aberration is flattened and bounded by vein 4; at base of cell is also a distinct white spot.

2 ♂♂ from Fonte Boa, Upper Amazons, May 1906 (Klages), along with a fair number of the type form.

12. *Scotura fusciceps* spec. nov. and ab. *obstructa* nov.

Forewing: black, with the veins hardly paler; a dull whitish blotch beyond lower angle of cell embracing the forking of veins 3 and 4, the veins across it also white; fringe black.

Hindwing: black, with a whitish elongated blotch from base to three-fourths of wing, the median vein, vein 2, and the stalk of 3, 4, showing black along it.

Underside duller black, with the pale areas in both wings more extensive and bluish white in tint.

Head and thorax blackish; abdomen blackish with a strong bluish tinge.

Expanse of wings: 30 mm.

1 ♂ from Fonte Boa, Upper Amazons, July 1906 (Klages).

Distinguished at once by its dark head.

In the ab. *obstructa* the pale blotch of forewing is absent on the upperside, but equally distinct below; in the hindwing the central white area is wider, occupying the whole width of the cell, whereas in the type it is limited above by the cell-fold.

1 ♂ taken along with the type.

13. *Scotura intermedia* spec. nov.

Like *S. nigrata* Warr. in the forewing; in the hindwing the smoky grey patch along middle of wing, which in *nigrata* is white on the underside only, is in the present species white both above and below, with the edges diffuse.

Expanse of wings: 32 mm.

Both sexes from the Aroewarwa Creek, Maroewym Valley, Surinam, July to September 1905 (Klages).

Resembles *S. nervosa* Schaus, but the white area in hindwing more restricted, and not reaching base.

14. *Scotura leucophleps* spec. nov.

Forewing : blackish, with the veins all pale ; the fringe black.

Hindwing : slaty black, with an elongated central white wedge-shaped streak from base, its point near outer margin between veins 3 and 4.

Underside black, with the veins towards outer margin of both wings distinctly white ; the white central area of hindwing ampler.

Head and palpi fulvous ; thorax and abdomen blackish.

Expanse of wings : 30 mm.

1 ♂ from Tuis, Costa Rica.

15. *Scotura longigutta* spec. nov.

Forewing : dull blackish, with all the veins pale grey, as in *nervosa* and *venata*.

Hindwing : deep brown-black, with a long drop-shaped central white blotch including the outer half of cell, its outer edge running from subcostal near the forking of veins 6 and 7 to the forking of veins 3 and 4, its lower edge parallel to upper along vein 2, both ends rounded.

Underside of forewing with a small white blotch beyond end of cell ; hindwing with the white blotch ampler, pyriform, running narrowly to base ; the inner margin pale grey.

Head and palpi deep orange ; thorax and abdomen brownish fuscous.

Expanse of wings : 30 mm.

5 ♂♂, 1 ♀ from Fonte Boa, Upper Amazons, May to July 1906 (Klages).

16. *Stenoplastis eximia* spec. nov.

Forewing : olive-black, the veins distinctly yellow ; basal area milky white, bounded by a vertical blotch from costa to median at one-third, and another from median to inner margin at two-fifths ; base of costa and cell smoky grey, and a streak on each side of the submedian fold ; on the discocellular a yellowish white vertical streak broadening downwards, and above it on each side of vein 11 some diffuse white scales ; the starting-point of veins 7, 8, 9 swollen into a yellow spot ; a submarginal series of faint whitish lunules between the veins.

Hindwing : pure white, with a black blotch on outer margin from costa to vein 2 ; beyond which the fringe is black, but white below.

Underside like upper, but the veins yellow only just before margin ; basal area of forewing wholly white except costa.

Face, palpi, and base of patagia orange-yellow ; thorax (rubbed) blackish ; abdomen white in basal half, black towards anus, wholly white beneath.

Expanse of wings : 34 mm.

1 ♂ from Cushi, Province Huánuco, Peru, 1900 m. (Hoffmanns).

Allied to *S. jipiro* Dogn.

SUBFAMILY GEOMETRINAE.

Anomphax gen. nov.

Near *Paromphacodes* Warr., from which it is separated by the absence of frenulum and the rudimentary tongue ; the costa of forewing is more curved, so that the wing appears ampler ; the antennae of the ♀ are bipectinate, though

more shortly than in the ♂ ; in *Paromphacodes* they are serrate only. Neuration identical ; in the hindwing the costal and subcostal are very closely approximated for half of cell, without any anastomosis.

Type : *Anomphax gnoma* Butler (*Omphax*).

In Guenée's genus *Omphax* even the ♂ has simple antennae.

17. *Anomphax gnoma*.

Omphax gnoma Butler. Tr. E. S. 1882, p. 367.

The two examples from Chili described by Mr. Butler as ♂♂ are both ♀♀, the pectinated antennae having misled him ; as a rule Chilean insects are not met with east of the Andes ; but I have lately seen a ♀ from Salta, Argentina, which cannot be separated, as far as I can see, from Butler's Chilean *gnoma*. This specimen was taken in February 1905 by J. Steinbach.

18. *Dichorda uniformis* spec. nov.

Like *D. remotaria* Wlk. from N. America, but with shorter and broader wings, the outer margin less oblique, the two lines ending on inner margin of forewing at one-third and two-thirds ; in the hindwing the line, instead of ending close above the anal angle, runs to inner margin a little beyond the middle and is nearly central ; the green tint is without any admixture of yellow.

Expanse : 22 mm.

2 ♂♂ from Caparo, Trinidad, December 1905 (Klages).

Eualloea gen. nov.

Forewing : elongate ; costa slightly arched at base, strongly convex before apex, which is depressed and acute ; outer margin crenulate, concave between apex and vein 4, thence oblique, veins 4 and 3 forming a blunt projection.

Hindwing : with inner margin long, the anal angle nearly square ; outer margin produced to a short blunt tail at vein 4, and with a smaller tooth at veins 3 and 6.

Antennae in ♂ quite simple, lamellate ; palpi short, porrect ; tongue and frenulum present ; hindtibiae with four spurs ; abdomen without dorsal tufts.

Neuration : forewing, cell not half as long as wing ; discocellular vertical above, then incurved and oblique below ; first median nervule at quite two-thirds, second and third from lower end of cell ; 5 from the upper fourth of discocellular, 6 shortly stalked with 7, 8, 9, 10 ; 11 just before them, anastomosing with 12, and approximated to 10 ; hindwing with 3, 4 and 6, 7 stalked ; 5 from close below upper end of cell.

Type : *Eualloea subbifasciata* spec. nov.

Distinguished from *Neocrasis* Warr. from S. America and from the palaearctic genera *Gelasma* Warr. and *Episothalma* Swinh. by the simple antennae, and from *Euxena* Warr., with which it agrees in the antennae, by the absence of dorsal crests.

19. *Eualloea subbifasciata* spec. nov. and ab. *suffusa* nov.

Forewing : dull greenish grey ; the median area suffused with darker, and the whole surface striated with darker green ; lines thick, darker grey-green ; first, slightly curved, at one-fourth, edged towards base with paler ; outer lunulate-dentate, from two-thirds of costa to two-thirds of inner margin, forming a bifid

projection on veins 4 and 3, and with a deep sinus between 3 and 1; a dark green, thicker, submarginal shade parallel to outer line; cell-spot diffusely dark green; fringe (worn) dull green.

Hindwing: like forewing, but the outer margin deeper shaded.

Underside whitish, freckled in forewing with dull olive; both wings with the outer and submarginal lines forming thick olive-green bands, broader below costa of forewing.

Head, thorax, and abdomen pale green; upper part of face dull reddish.

Expanse of wings: ♂ 40 mm.; ♀ 48 mm.

2 ♂♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., November 1904, wet season (Ockenden), type; 1 ♀, January 1905; 2 ♂♂ from Fonte Boa, Upper Amazons, November and June 1906 (Klages); 1 ♀ from Pebas, Amazons, November 1906 (de Mathan). The Fonte Boa specimens, ab. *suffusa*, are clouded with dull olive-green, and show very little of the pale ground-colour.

20. *Gelasma dealbata* spec. nov.

Forewing: dull olive-green; the costa yellow, speckled with purple; the lines whitish, lunulate-dentate; the inner obscure at one-fourth; the outer from two-thirds of costa to quite three-fourths of inner margin, incurved below vein 3 and slightly insinuate beyond cell; a faint dark green cell-mark; fringe pale yellowish green, with dark chequering beyond veins.

Hindwing: with the outer half white, the postmedian line and a diffuse submarginal shade, both lunulate-dentate, olive-green; a series of olive-green lunules along margin; fringe whitish with dark olive-green mottlings.

Underside whitish green; an interrupted dark marginal line on forewing and as far as vein 5 on hindwing, where it is preceded by a fuscous blotch; fringes pale green mottled with fuscons; costa of forewing yellow with purple speckling.

Face and palpi above brown; vertex, thorax, and abdomen dull green; fillet and antennal shaft white.

Expanse of wings: 25 mm.

2 ♂♂, 2 ♀♀ from La Oroya, R. Inambari, Carabaya, Peru, 3100 ft., September 1904—January 1905 (Ockenden); also from Tinguri and Oconeque.

21. *Gelasma subrufescens* Warr. and ab. (?) *pallescent* nov.

Of this species, described by me from three specimens only, in the *Proceedings of the United States National Museum*, vol. xxx. p. 417 (1906), I have lately seen a long series from Tinguri and La Oroya, Peru and Fonte Boa, Upper Amazons; in the majority of cases the dorsum is marked with a double blackish spot on segments 3 and 4, and often with dark scaling beyond; a single ♀, from Fonte Boa, is rather larger, with the abdomen tinged with red, and has the antennae pectinated, but not so strongly as in the ♂. The whole of these specimens are dull olive-green, and opaque. Of the form which I propose to call ab. *pallescent* I have seen only four specimens; these are rather larger than typical *subrufescens*, quite pale green, and semidiaphanous, with scarcely any reddish tinge beneath; but they all show traces of the dark dorsal spots. Of these, two are from Oconeque and one from La Union, R. Huacamayo, Peru; the fourth, from Sapucay, Paraguay, shows the dorsal blotches well marked.

In the original description "Underside of forewing dull **gray**" is a misprint for dull rosy.

22. *Halioscia ruptimacula* spec. nov.

Closely resembling *H. congener* Warr. (*Oospila*), from Rio Demerara, British Guiana, described in *Nov. Zool.* vii. p. 136, but differing in the following particulars :

The cell-spots in both wings are round, not elongate; the dark blotch on outer margin below apex of forewing is narrower, and distinctly divided by a pale submarginal line, as in *H. procellosa* Warr.; that at anal angle is shorter and deeper, more rounded. In the hindwing the long apical blotch is broken up into two smaller and shorter blotches, one at apex, the other beyond cell, and the anal blotch is much reduced in size.

Expanse of wings : 32 mm.

1 ♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., December 1904, wet season (Ockenden).

23. *Hemithea decipiens* spec. nov.

Forewing : dull grey-green; the costa dotted purplish and yellowish; the lines pale, the outer dentate-lunulate, at about one-third and two-thirds, the median area slightly darker; cell-spot dark green, large; marginal line purplish, interrupted at end of veins by rather large yellow spots; fringe grey-green in outer half, the basal half yellowish, chequered with dark grey beyond the veins.

Hindwing : similar, without inner line.

Underside whitish green; the apex of hindwing (and sometimes the anal angle of forewing) with a dark blotch reaching vein 5.

Head, thorax, and abdomen greenish; vertex white; palpi and forelegs tinged with reddish; dorsum slightly marked with grey.

Expanse of wings : ♂ 18 mm.; ♀ 20—22 mm.

1 ♂ from La Oroya, R. Inambari, Carabaya, Peru, 3100 ft., December 1905, wet season (Ockenden), type; 2 ♂♂ from R. Huacamayo, Peru, June 1904, dry season (Ockenden); 2 ♀♀ from Aroewarwa Creek, Maroewym Valley, Surinam, April to June 1905 (Klages); 1 ♀ from Caparo, Trinidad, December 1905 (Klages); 1 ♀ Port of Spain, Trinidad (Birch).

Antennae of ♂ subserrate and pubescent merely; otherwise indistinguishable from *Gelasma*.

24. *Hydata radiata* spec. nov.

Forewing : very pale hyaline green; the costal streak, the cell, the inner margin, and a submarginal band pale fawn-colour; this band is crossed by a fawn-coloured streak above vein 6, and is connected by a short streak above vein 4 with the cell; a fawn-coloured marginal shading; fringe pale green with yellow base; across the central hyaline area two darker lines can be traced, the outer one excurved above.

Hindwing : fawn-colour, with a curved green band at one-third and a dull yellow wavy dentate one at two-thirds; fringe green.

Underside very pale green, the dark markings showing through in forewing only.

Thorax and abdomen fawn-colour; face, vertex, and antennae white.

Expanse of wings : 27 mm.

2 ♂♂ from Cushi, Province Huánuco, Peru, 1900 m. (Hoffmanns).

The outer margin of hindwing is bluntly prominent at vein 6.

25. *Hydata scripturata* spec. nov.

Forewing: semitransparent pale green; base of costa broadly brownish; lines finely black; inner line at one-third, wavy dentate, preceded by a black blotch in the cell and a larger blotch oblique from near base of cell to inner margin at one-third; outer line concisely lunulate-dentate from three-fourths of costa to three-fourths of inner margin, projecting outwards between veins 3 and 4, preceded by a large irregular black blotch on the discocellular, and followed by blackish blotches between the veins, that above 6 being long and prominent; fringe green.

Hindwing: similar, with the black lines and markings intensified; a black blotched and dentate fascia between the two lines.

Underside pale green, with the black markings partially visible.

Vertex, thorax, and dorsum olive brownish; fillet white; face brown and white; antennae white.

Expanse of wings: 17 mm.

1 ♂ from La Oroya, R. Inambari, S.E. Peru, 3100 ft., December 1905, wet season (Ockenden).

The outer margin of hindwing projects squarely between 3 and 4, and is dentate at veins 1 and 6.

Leptolopha gen. nov.

Like *Lissochlora* Warr., but the dorsum is not simple and smooth, as in that genus, but bears tufts of pale yellowish or greenish curved broad hair-scales on segments 3-7.

Type *Leptolopha flavilimes* Warr. (*Lissochlora*).

These tufts are of a much more flimsy character than the metallic red tufts of *Racheolopha*, and appear liable to be soon rubbed off; even when fresh, being of the same colour as the rest of the dorsum, they are easily overlooked.

26. *Leptolopha flavilimes* and ab. *decorata* nov.

Lissochlora flavilimes Warr., Nov. Zool. xi. p. 21 (1904).

When I described this species I entirely overlooked the dorsal tufts. Since then I have seen a considerable number, differing some of them both in markings and size, but agreeing in the possession of the dorsal tufts, which must all be transferred to *Leptolopha*. On comparison with these others I find that in *flavilimes* the yellowish margin of both wings shows a tendency to run inwards along the veins; in most cases this is very slight and inconspicuous; but in one example the yellow intrudes to such an extent that the green ground-colour forms a continuous festoon of lunulate projections between the veins; besides which, in this form, ab. *decorata*, the ground-colour itself is darkened by rufous olive scales sprinkled over both wings.

1 ♂ from Fonte Boa, Upper Amazons, 1906 (Klages).

27. *Leptolopha nigripunctata* spec. nov.

Closely allied to *L. flavilimes* Warr., but the hindwing has a black spot at the lower end of discocellular; in the forewing there is no red-brown apical patch running out into the fringe, but a concise oblique dash at the extremity of the

green ground-colour ; in both wings the inner edge of the yellow marginal area is straight, and the yellow does not run in along the veins ; the costal streak of forewing is broader and paler.

1 ♂ La Oroya, Carabaya, Peru, November—December (wet season) 1904 ; 1 ♂ Tinguri, Carabaya, Peru, August (dry season) 1904 (type) ; 1 ♂ La Union, R. Huacamayo, Peru, November 1904 (Ockenden) ; agreeing in size, 24 mm., with the females of *flavilimes*, which are on the average a little larger than their males.

28. *Leptolopha permagna* spec. nov.

Much larger and broader-winged than either *flavilimes* or *nigripunctata* ; costal margin of forewing broadly yellow ; the yellow marginal area of both wings without any reddish internal edging ; the apex of forewing without any red tinge ; the cell-spot large, oblique, dark green ; in the hindwing the cell-mark is yellowish, extending the whole length of discocellular, but much broader and plainer in the upper half.

Face and forelegs fulvous ; vertex and antennal shaft snow-white ; collar yellow.

Expanse of wings : 36 mm.

2 ♀ ♀ Tinguri, Carabaya, Peru, 3100 ft., August 1904, dry season (Ockenden), type ; and 1 ♀ from La Oroya, R. Inambari, Carabaya, Peru, 3100 ft., November—December 1904, wet season (Ockenden).

29. *Lissochlora albilineata* spec. nov.

Forewing : bright green, traversed by numerous pale striae ; costal edge white ; veins all finely white ; both lines white ; the inner fine, at one-fourth, slightly angled outwards on the median vein ; the outer broad, slightly curved, from four-fifths of costa to two-thirds of inner margin ; fringe shining white ; a large oval reddish brown cell-spot.

Hindwing : with both lines curved, the outer, as in forewing, farther from outer margin on the inner margin than on costa.

Underside paler green, the white lines and dark cell-spots showing through.

Palpi white, the terminal segment fuscous ; face white with the upper part green ; fillet and antennae white ; vertex, shoulders, and patagia green ; thorax and abdomen whitish ; the dorsum reddish-tinged, and with a square brown-black blotch on second segment ; venter, pectus, and legs white, the foretibiae blotched with brown-black.

Expanse of wings : 44 mm.

1 ♀ from Limbani, Carabaya, Peru, 9500 ft., May 1904, dry season (Ockenden).

30. *Lissochlora* (?) *marcida* spec. nov.

Forewing : pale yellowish green, more yellow towards costa ; the lines pale, obscure ; first curved from one-fourth of costa to one-third of inner margin, followed by a shade of deeper green ; outer at quite three-fourths, bent on vein 6, then straight to inner margin, preceded by a deeper green shade ; cell-spot black ; fringe yellowish green.

Hindwing : with the outer line only, at two-thirds, curved parallel to the margin ; cell-spot black.

Underside of forewing pale olive-green, with a broad deeper marginal border ;

the inner margin whitish ; hindwing whitish, with a broad olive-green border, and a small patch below lower end of cell ; cell-spots black.

Head, thorax, and abdomen pale yellowish green ; the dorsum slightly marked with reddish.

Expanse of wings : 30 mm.

1 ♀ from Fonte Boa, Upper Amazons, October 1906 (Klages).

Wings all very smoothly scaled, without darker speckling. It is referred to *Lissochlora* provisionally, in the absence of the male.

31. *Melochlora affinis* ab. *abscondita* nov.

Differs from the type of *affinis* Warr., from French Guiana, in having no dark markings on the upperside, those of the underside remaining the same. The present is probably the ordinary form of the species, and the single specimen from the Maroni River exceptional.

2 ♂♂, 1 ♀ from La Oroya, R. Inambari, S.E. Peru, 3100 ft., November 1904 to March 1905, wet season (Ockenden), type ; 6 ♂♂, 1 ♀ from Fonte Boa, Upper Amazons, May—August 1906 (Klages) ; and 1 ♂ from Aroewarwa Creek, Maroewym Valley, Surinam, April 1905 (Klages).

The species may be distinguished by the course of the outer line, which is parallel throughout to the outer margin on the forewing and slightly curved on hindwing ; and the outer margin of the hindwing is more curved, less elbowed than in other species of the genus.

32. *Melochlora discata* spec. nov.

Forewing : deep green ; the lines and cell-spot brown ; inner line at one-fourth, vertical and waved ; outer straight and oblique, from costa before apex to two-thirds of inner margin ; cell-spot small ; fringe paler green, with a black-brown apical spot.

Hindwing : with the line slightly curved and median ; cell-spot large, deep black, covering the discocellular, and edged on both sides with deep red.

Underside whitish green, without markings, except in the hindwing, where there is a blackish blotch below discocellular from median vein to submedian fold, the dark centre of the cell-spot also showing through.

Face and palpi pale green ; shoulders and patagia deep green ; thorax and abdomen ochreous, the base of dorsum greenish ; vertex white ; antennae reddish.

Expanse of wings : 31 mm.

1 ♂ from La Oroya, R. Inambari, Peru, 3100 ft., September 1904, dry season (Ockenden).

The outer margin of hindwing is visibly but bluntly elbowed at middle, of forewing scarcely bulged. *M. neis* Druce also has the lines brown, and shows in addition some brown exterior clouds, but is without the large red-marked cell-spot of hindwing, which well characterises the present species.

33. *Melochlora tenuis* spec. nov.

Forewing : bright pale green, semitransparent ; the costal edge with a few black specks ; basal area edged by some black striae below middle of wing ; marginal area with a broad dull black band with deeper black edges, marginal from anal angle to vein 4, then becoming submarginal, not reaching above vein 6, except

the edges, which are continued as striae towards 7; fringe green, black below vein 4.

Hindwing: similar, but the band is represented only by its inner edge, and a black blotch with some scattered striae at apex, along which the fringe is also black.

Underside the same; but the subbasal striae coalescent into a blotch.

Head, thorax, and abdomen pale green, the last with a black belt at base; antennal shaft white, the pectinations black.

Expanse of wings: 37 mm.

1 ♂ from Belmont, Port of Spain, Trinidad (E. Lafond).

Closely related to *M. vagilinea* Warr. from French Guiana, from which it is separated by the absence of any red markings.

34. *Miantonota consimilis* spec. nov.

This species is very close to *M. dentilinea* Warr. (*Racheospila*), but differs as follows:

The marginal line of both wings is much finer, less distinctly red; the fringes are not chequered beyond the veins, but have their basal half shining white and their apical half grey; the forewing is proportionately broader, with the apex more prominent, and the hindwing is elbowed at middle, not rounded; the abdomen is ochreous, possibly greener when fresh; and instead of the white spots on segments 2 and 4 (not 1 and 3 as in the original description) bears a quadrate brown spot only on segment 2. Moreover, the teeth of the outer line of the wings are externally less prominently white, and internally are marked with brown instead of green.

2 ♂♂ from La Oroya, R. Inambari, Carabaya, Peru, 3100 ft., September 1904, dry season (Ockenden).

35. *Miantonota erina* Dogn. ab. *disjuncta* nov.

In his description of *Achlora erina*, M. Dognin (*Ann. S.E. Belg.* 1896, p. 143) speaks of one specimen which bore traces of a lunulate darker festoon connecting the series of dark points which form the outer line; these connecting lunules are distinct in all three specimens of the ab. *disjuncta*; but while in *erina* the points on veins 6, 7, and 8 are conjoined and individually lost in a black zigzag blotch ending in the apex, in the aberration there is no blotch, but the three points on these veins are distinct and black in a straight line, the uppermost on vein 8 lying well before the apex, and these three black points are not tipped externally with white, as is the case with all those on the lower veins. In the dorsal markings of the abdomen, moreover, the ab. *disjuncta* differs from typical *erina*, and agrees more nearly with the ab. *bipunctata* Dogn. (*Ann. S.E. Belg.* 1908, p. 17), the ♂ having a small blackish spot on segment 2 and a larger quadrate one on segment 5, while the ♀, besides the blotch on 5, has the whole of the first and second segments black-brown. The points forming the inner line and the discal spots are all distinct; but the costal edge of forewing is not white.

1 ♂, 1 ♀ from Tucuman, 1100 m., January—February 1905 (Steinbach), type; 1 ♂ from Sapucay, Paraguay, November 1903 (Foster). This last specimen shows a black spot at apex of forewing, beyond the other three black points.

Both *erina* Dogn. and *discipuncta* Warr. should be placed in *Miantonota*.

36. *Microloxia herbaria*.

Phal. Geom. herbaria Fabr. *E. S.* iii. 2, p. 162 (1794), W. Indies.

Nemoria paularia Moeschl. *Abh. Senck. Ges.* xiv. p. 68 (1888), Jamaica.

Lissochlora intacta Warr., *Nov. Zool.* xii. p. 318 (1905), Dominica, Cuba.

It is fairly certain that the three species above mentioned, all described from islands of the W. Indies, are identical. The green fades so soon, that it is very rarely the case that a trace of the outer line of pale dots is visible. The pectinations of the antennae of the ♂ are much longer and coarser than in typical *Lissochlora*, to which I referred *intacta*.

Nesipola gen. nov.

Like *Racheospila* and *Racheolopha*, but distinguished by the dorsum having neither raised crests nor white spots; the first two segments are green, the rest dull white; in *Miantonota* the whole dorsum is green, and the wings are not marked by variable spots and blotches.

Type: *Nesipola impunctata* spec. nov.

Racheospila anomalaria Moeschl. from Porto Rico, *R. centrifugaria* ♀ H.-Sch. (= *protractaria* ♂ H.-Sch.) from Cuba, and *R. heterospila* Hmps. from the Bahamas (= *albimacula* Warr. from Sta. Lucia), all of them probably different island forms of one and the same species, will belong here; also *R. stellataria* Moeschl. (= *concentrata* Warr.) from Jamaica.

37. *Nesipola impunctata* spec. nov.

Distinguished from all of the species above mentioned by the deeper, brighter green of both wings; the fringes are entirely green, without the reddish flecks between the veins which are seen in the other forms; and the hindwing is distinctly elbowed at vein 4. In the varying development of the blotches beyond outer line it agrees with *centrifugaria* H.-S. Of the six examples, all ♀♀, that I have seen one has the large oval whitish blotch in forewing reaching from vein 6 to 1 and edged with reddish, and a smaller whitish blotch in hindwing above vein 1; a second has the same blotches dull reddish; two others have a small snow-white red-edged round spot on the forewing between veins 2 and 3, and none on hindwing; the remaining two have the spot wholly dark red-brown; so that in this form at all events the variation in size and colour of the blotches is not sexual, as was supposed by Herrich-Schaeffer might be the case in *centrifugaria*.

Expanse of wings: 25 mm.

6 ♀♀ from Dominica, January, February, 1905 (E. A. Agar).

In his description of *centrifugaria* from 3 ♀♀ (*Corr.-Bl. Regensb.* 1870, p. 182) Herrich-Schaeffer speaks of the first as having the blotch of forewing smaller, and not reaching below vein 2 (perhaps a spot only between veins 2 and 3); the second as having the blotch large and extending from vein 6 to 1, and filled up with reddish grey; while the third had the blotch equally large, but white, edged only with red; neither he nor Gundlach (*Cuba*, p. 385) mentions any spot at all on the hindwing, while in their description of *protractaria*, the supposed ♂, both authors state the spot of forewing to be entirely wanting. I have seen five examples from Cuba, 3 ♀♀ and 2 ♂♂; 1 ♀ from Baracoa agrees with the second of Herrich-Schaeffer's ♀♀, the blotch being large and reddish, but with a smaller red blotch on hindwing; a second ♀, from Santiago, is like it, but smaller and brighter; the third, from Holquin, has a double white blotch from vein 3 nearly

reaching submedian fold, ringed with purple and with vein 2 purple across it, and no spot in hindwing. Of the 2 ♂♂, both from Santiago, one is like typical *protractaria*, the other shows a white red-ringed spot between veins 2 and 3 on forewing only. This ♂, like the second ♀ from Santiago mentioned above, is smaller and brighter green, and possibly both belong rather to the Dominican form now described as *impunctata*.

Moeschler, describing his *anomalaria*, a ♀ from Porto Rico, gives the blotch as extending from vein 4 to anal angle of forewing, white, edged with red, and partially dusted with reddish, with the veins across it red also, and a smaller blotch on hindwing only half the size.

In the types of *heterospila* Hmps. from the Bahamas, and *albimacula* Warr. from Sta. Lucia (wrongly described as a *Rhodochlora*), both ♀♀, the blotch of forewing is double, like that in the ♀ of *centrifugaria* from Holquin, Cuba; but the upper half, above vein 3, is smaller and red-brown, the lower half larger and white edged with red-brown, this lower half only reappearing on hindwing.

In all the forms the cell-spots and the spots representing the two lines are red-brown; those of the outer line running to the small blotch where present, except in the Cuban specimens, where the line is farther from the outer margin and passes on the inside of the blotch; when the blotch is enlarged, the row of dots is of course in all cases interrupted in the middle.

38. *Oospila longiplaga* spec. nov.

Forewing: green, with the markings much as in *depressa* Warr., but that from anal angle extending along inner margin for three-quarters instead of only half-way, and swollen towards base, both thickly striated with reddish and fuscous, and connected by a narrow purplish band at outer margin.

Hindwing: with the blotches similarly striated; that at anal angle elongated, reaching more than half-way along inner margin and extending somewhat beyond vein 2.

Face and palpi red-brown; thorax and two basal segments of dorsum pale green; abdomen bone-colour, with the tufts reddish.

Expanse of wings: 34 mm.

2 ♀♀ from Fonte Boa, Upper Amazons, July—September 1906 (Klages).

39. *Oospila minorata* spec. nov.

Like *O. albicoma* Feld. in markings, but always smaller, with the pale blotches pinker; the lower elongate blotch of forewing never extends above the cell-fold, whereas in *albicoma* it all but touches the costal streak.

Expanse of wings: 32 mm.

13 ♂♂ from La Oroya, Rio Inambari, Peru, 3100 ft., September 1905 to January 1906, wet season, and 2 ♂♂ from Tinguri, Carabaya, Peru, 3400 ft., August 1906 (Ockenden); 11 ♂♂ from Fonte Boa, Upper Amazons, May—September 1906 (Klages), type; and 2 ♂♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., November, December 1904 (Ockenden).

40. *Oospila nasuta* spec. nov.

Forewing: green, with the pale blotches like those of *O. ruptimacula* Warr., but the apical blotch narrower, and that at anal angle not extending to middle of inner margin and emitting a broad oblique projection to below end of cell.

Hindwing · with the apical blotch subquadrate, that at anal angle small, hardly reaching to one-third of inner margin; a long oval pale blotch on basal third of inner margin.

Vertex white; thorax and abdomen bone-colour, only the patagia green; face and palpi reddish brown.

Expanse of wings : 32 mm.

2 ♂♂ from Caparo, Trinidad, December 1905 (Klages).

41. *Oospila semiviridis* spec. nov.

Forewing : like *longiplaga*, but the two blotches bone-colour, almost without striae, and unconnected along outer margin.

Hindwing : with the anal blotch reaching only one-third along inner margin, and bilobed towards base; a shallow blotch of bone-colour on inner margin before middle.

Thorax and two basal segments of dorsum deep green; face and palpi reddish brown; vertex rufous ochreous; abdomen pale with the tufts metallic reddish.

Expanse of wings : 32 mm.

1 ♂ from La Oroya, R. Inambari, S.E. Peru, 3100 ft., March 1905, wet season (Ockenden).

42. *Prohydata benepicta* spec. nov.

Forewing : bright pale green; the markings brown—viz. a basal patch with some green in centre, its edge vertical but slightly curved, and a broad sinuous band occupying the outer half of wing, its inner edge with a deep outward sinus between veins 2 and 5, its outer angularly indented above vein 5, where there is a large triangular green patch on outer margin; the band runs to margin at apex and at vein 3; an interrupted brown marginal line; fringe greenish, slightly mottled with brown.

Hindwing : similar, but the brown band is traversed by a narrow, very sinuous, green postmedian line, and reaches the margin throughout except for a green triangle between 4 and 6; marginal line brown; fringe green, marked with brown at the angle at vein 6.

Underside very pale green, with the brown markings showing through.

Vertex, thorax, and dorsum brown; face brown and green; fillet white.

Expanse of wings : 18 mm.

1 ♂ from Fonte Boa, Upper Amazons, August 1906 (Klages).

43. *Racheolopha heteromorpha* spec. nov.

Closely resembling *R. plurimaculata* Warr. from Peru, from which it differs in the shape of the hindwing. The outer margin is rounded in the Peruvian species, but produced in the present one to a small tooth at vein 4, the margin below it to anal angle straight with faint crenulations, above it sinuous, the apical angle being well rounded and the margin slightly concave between veins 6 and 4. There is also a slight difference in markings: the pale blotches on margin have the veins pinkish and brown-dotted, as in *plurimaculata*; but are also crossed transversely by pinkish red-brown dotted clouds, that in the apical blotch of hindwing being conspicuous; the upper blotches do not extend below vein 4 in either wing; the blotch on inner margin of hindwing is longer and shallower; the tooth is filled up with red-brown.

Expanse of wings: ♂ 28 mm.; ♀ 35 mm.

2 ♂♂, 1 ♀ from Sapucay, Paraguay, October 1904 (Foster).

The elbow at vein 6 in the outer margin of hindwing is more noticeable in the ♀.

44. *Racheolopha lactecincta* spec. nov.

Forewing: green, with all three margins broadly white, enclosing a green triangle, itself irregularly blotched and streaked with white; a white blotch on discocellular enclosing a fine black cell-spot; the median vein streaked with white; costa in outer half speckled with green, more broadly towards apex; outer margin narrowly green, slightly interrupted at vein 3; the inner margin with a few green specks; marginal line green, interrupted at the veins; fringe green and white.

Hindwing: with the margins broadly white; the central area diffusely marked with partially confluent transverse green striae; outer margin as in forewing; veins speckled with green; a long white cell-mark.

Underside white, iridescent, with the green showing through.

Head, thorax, and abdomen snow-white; upper part of face greenish; antennae with the shaft white and pectinations ferruginous; dorsum slightly green-speckled, with three large metallic blackish crests on segments 3 to 5 and a reddish one on 6.

Expanse of wings: ♂ 35 mm.; ♀ 40 mm.

1 ♂, 2 ♀♀ from Fonte Boa, Upper Amazons, May—July 1906 (Klages).

45. *Racheolopha lacteguttata* spec. nov.

Forewing: deep green, slightly diaphanous; costal edge bone-colour, speckled with reddish; a diffuse red-brown cell-spot; traces of a lunulate-dentate outer line at two-thirds parallel to outer margin, the space beyond it slightly paler and bluer green; the median area faintly darker; marginal line purple, interrupted at each vein by a large white spot running out into the rufous white fringe.

Hindwing: with a white raised spot at upper end of discocellular; outer line and margin as in forewing.

Underside iridescent green, flushed with reddish in forewing; costa of forewing rufous speckled with fuscous, broadly fuscous at base.

Head, palpi, antennae, and forelegs dark reddish; vertex white; thorax, patagia, and two basal segments of dorsum green; rest of dorsum and abdomen laterally red; the dorsal tufts dark metallic red.

Expanse of wings: 34 mm.

2 ♂♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

Resembles *R. restricta* Warr., but larger, and without the white blotch at anal angle.

46. *Racheolopha lunicincta* spec. nov.

Forewing: very light green; costal edge bone-colour, speckled with pink; bone-coloured blotches, sparsely sprinkled with red, at apex and anal angle; the apical blotch consists of a large double blotch between veins 4 and 6, a smaller one between 6 and 7, and a still smaller one above 7, each concisely bordered inwardly by red lunules; the anal blotch, subquadrate in shape, reaches above vein 2 and along the outer third of inner margin, concisely edged with red, and with a slight blunt projection from its inner angle towards lower end of cell;

marginal line fine, deep red, without white dashes at the vein-ends; fringe bone-colour.

Hindwing: with apical blotch elongated, formed of four contiguous blotches decreasing in size to vein 4, each concisely edged by a red lunule; anal blotch small, subquadrate, red-edged; a white cell-spot at upper end of discocellular.

Underside pale green, with the blotches showing through.

Face brown-red in upper half, pale below; vertex pinkish white; thorax and patagia green; abdomen bone-coloured, the dorsum reddish, with metallic red crests.

Expanse of wings: 30 mm.

1 ♂ from Sapucay, Paraguay, November 1903 (Foster).

Resembles *R. delacruzii* Dogn.; distinguished by its larger size, pale green colour, and concisely edged blotches, and especially by the absence of white dashes along the margin at the end of the veins.

47. *Racheolopha microspila* spec. nov.

Identical with *R. flavicincta* Warr., except in one particular: in that species the hindwing possesses a large, roughly diamond-shaped, brown-black blotch, reaching from costa before apex to vein 4; in *microspila* this blotch is round and situate between veins 4 and 7; the yellow edging of the brown blotches is also much less conspicuous.

Expanse of wings: 31 mm.

1 ♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., December 1904, wet season (Ockenden).

The two examples of *flavicincta* that I have seen, the type from Venezuela and another from Ecuador, are both ♀♀; and it is therefore possible that the difference mentioned, though unusual, is merely sexual.

48. *Racheolopha trilunaria* Guen. ab. *obsolescens* nov.

Differs from the type in having the pale marginal blotches of the wings much reduced in size, that between veins 5 and 6 of forewings usually partially or quite obsolete, that at anal angle of hindwing always small and insignificant; on the other hand, in a few instances the small dark crescent at apex of hindwing is prolonged to vein 4. In one of three other ♀♀ from the same locality, which from the size of the blotches are referable to the type-form, a similar extension of the apical mark of hindwing is visible.

10 ♂♂, 6 ♀♀ from Fonte Boa, Upper Amazons, May—August 1906 (Klages), along with 3 ♀♀ of the type-form, as mentioned above.

49. *Racheospila fontalis* spec. nov.

Forewing: deep green; costal edge finely white; the two lines finely white, marked chiefly by white dots on the veins and folds; the first before one-third, slightly oblique outwards; the second at two-thirds, incurved below middle, and approximating to inner line on inner margin; a small dark cell-spot; fringe silvery white, chequered with bright pink beyond veins; the marginal line finely red, interrupted at the vein-ends by small white dots.

Hindwing: similar, the inner line scarcely marked.

Underside pale greenish, the lines showing through.

Palpi greenish white, terminal segment fuscous; face pale brownish, whiter below, with two green lateral spots, and dark green at top; fillet and base of antennae snow-white; apical half of antennae and a line behind fillet bright red; vertex, thorax, and dorsum green; a white spot on segments 2, 4, and 5; abdomen at sides and beneath, and the legs white.

Expanse of wings: 25 mm.

1 ♂ from Fonte Boa, Upper Amazons, May 1906 (Klages).

Antennal pectinations short and stiff.

50. *Rhodochlora albipuncta* spec. nov.

Forewing: apple-green; the costa red at base, white beyond; first line hardly visible, marked by a red dot on median vein and submedian fold; cell-spot small, red-brown; outer line concisely lunulate-dentate, vinous red, the teeth darker, the lunule on submedian interval containing a yellow red-edged blotch; fringe greenish white, green at base, with a reddish spot at apex of wing.

Hindwing: with the base yellow, bounded by a deep purple and vinous band; rest of wing green, crossed in middle by a lunulate-dentate green line, with the teeth red; fringe as in forewing.

Underside shining pale green; both wings with indistinct darker central shade; the pale and dark areas showing through; costa broadly white, the base red.

Face and palpi deep orange-red and yellow; fillet snow-white; shoulders, patagia, and thorax deep green; abdomen green, paler towards anus; tibiae black and white.

Expanse of wings: 56 mm.

1 ♂ from Cushi, Province Huánuco, Peru, 1900 m. (Hoffmanns).

Outer margin of forewing perfectly straight, of hindwing distinctly bent at middle.

51. *Rhodochlora brunneipalpis*, ab. *minor* nov. and ab. *rufaria* nov.

The type of *R. brunneipalpis* Warr. was described from a ♀ from Rio Demerara, British Guiana (*Nov. Zool.* i. p. 385), and I have only seen a single specimen since that thoroughly agrees with it—a ♂ in Mr. Schaus' collection from S. Jean, Maroni River, French Guiana. All the Peruvian examples from various localities agree in being smaller than the type in both sexes, and in the hindwing the yellowish basal area is in them followed by a curved band of darker grey-green. Out of a series of 11 ♂♂ and 1 ♀ from La Union, R. Huacamayo, Carabaya, Peru, taken in November 1904, wet season, at 2000 ft., by the late G. Ockenden, the ♂♂ expand from 40 to 44 mm., and the ♀ 44 mm.; and 2 ♂♂ from Oconeque vary to the same extent. These Peruvian specimens may be distinguished as ab. *minor*. A single ♂ from La Union, for which I propose the name ab. *rufaria*, demands a more detailed description. To a certain extent it resembles *R. exquisita* Warr., but it is not marked so brightly red. The outer line of forewing is redder and thicker than in the type, and is followed by red spots between the veins, the lowest of which forms a red blotch at anal angle. In the hindwing the grey-green curved band beyond the yellow base is followed by a broad space of dull rufous, which extends to beyond the postmedian line and leaves only a comparatively narrow marginal border of

green. On the underside the red-brown blotch at apex of hindwing, which is quite small and indistinct in *ab. minor*, is well developed and conspicuous, and the red on forewing shows in several places. In many respects this answers to the description of *gaujoniaria* Dogn., but the face and palpi are bright red, not deep black as in that species. Both aberrations, *minor* and *rufaria*, as well as the type form *brunneipalpis*, are distinguished by the rounded hindwings.

52. *Rhodochlora trifasciata* spec. nov.

Forewing: bright green; the costal edge red at base, white beyond; inner line bright red, zigzag, from cell to inner margin, lying in a pale yellow blotch between vein 1 and base of 2; outer line lunulate-dentate, dark vinous purple, running nearly parallel to outer margin as far as vein 6, the lunule between 1 and 2 on a pale yellow blotch, followed, also to vein 6, by a dull purplish band of contiguous lunules; cell-spot red-brown; fringe green, below vein 3 vinous red, where the marginal line is also vinous.

Hindwing: with basal half pale yellow, containing an inner broad iron-grey band in which stands the black-red cell-spot; in the green outer half are two vinous fasciae, one irregular, postmedian, the other broader and more uniform, submarginal; fringe green.

Underside pale green, with the markings slightly showing through; costa of forewing bright red at base, broadly white towards apex.

Palpi and face bright orange-red and yellow; fillet and thorax deep green; vertex white; abdomen green, whitening towards anus; foretibia black; venter and legs whitish.

Expanse of wings: 50 mm.

1 ♂ from Agualani, Carabaya, Peru, 9000 ft., December 1905, wet season (Ockenden).

Outer margin of hindwing curved; of forewing nearly straight.

53. *Rhodochlora ustimargo* spec. nov.

Forewing: yellow-green; first line marked by red dots on subcostal and median veins and on submedian fold, sometimes connected by a fine red line; cell-spot red-brown; outer line red-brown, lunulate-dentate, the marginal area beyond purplish red-brown, thinning out above vein 4; fringe pale green, red-brown below middle.

Hindwing: yellow-green, with the base paler, edged by a vinous red band just before the red cell-spot; a central lunulate-dentate line with the teeth red; a vinous blotch at apex, with indications of a submarginal line marked by reddish scales between veins.

Underside paler, the anal angle of forewing more restrictedly reddish, the apex of hindwing as above.

Face and palpi orange-red and yellow; fillet snow-white; thorax and abdomen yellow-green; abdomen at sides and beneath white; tibiae black and white.

Expanse of wings: 52 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

Outer margin of forewing nearly straight, of hindwing bent at middle.

Rhombochlora gen. nov.

Distinguished from *Racheolopha* Warr. by the shape of the hindwings: these, instead of being broad, with the outer margin well rounded, are diamond-shaped, the outer margin being strongly angulate at vein 4, which ends in a broad blunt tooth; the forewing has the outer margin bent at vein 4, the lower half more oblique.

Type: *Rhombochlora granulata* spec. nov.

The type species bears a strong superficial resemblance to *Drucia semispurcata* Warr. from French Guiana.

54. **Rhombochlora granulata** spec. nov.

Forewing: dull green, covered with rather coarse rusty brown granulated specks, more sparsely before and beyond the centre (where they are slightly confluent), suggesting an antemedian and postmedian band, and thickest along outer margin, which is narrowly brown from vein 4 to anal angle; costal edge white; cell-spot large, black; fringe white, with a brown-black line at base, and chequered with brown beyond veins.

Hindwing: with basal third unspeckled green, the outer third very densely speckled; marginal shade irregularly brown throughout; cell-spot black; fringe as in forewing.

Underside uniform whitish green.

Face and palpi pale brown; vertex and antennae white; patagia green, their edges and the thorax pale brown; dorsum green; the crests metallic red tufted with green.

Expanse of wings: 40 mm.

1 ♂ from Fonte Boa, Upper Amazons, July 1906 (Klages).

55. **Tachyphyle flaccida** spec. nov.

Forewing: pale dull green, somewhat transparent; basal two-fifths suffused, except on inner margin, with grey-brown, and along the costa irrorated with white scales; first line thick, brown, from two-fifths of costa to one-third of inner margin, bluntly angled outwards on median vein and inwards on the two folds, with an inward edging of white scales, and followed in cell by a diffuse brown cell-mark; outer line starting from a broad brown costal streak at two-thirds, oblique outwards to vein 6, there angled, and oblique inwards, parallel to outer margin, to three-fourths of inner margin, slightly darker than the ground-colour, and lunulate-dentate, the teeth marked by rust-coloured dots on veins; between the lines a few rusty brown dots on the veins, partly forming a median line parallel to outer line; costa brown before apex; fringe pale green.

Hindwing: pale green, whitish along costa; a rust-brown spot at base, a straight antemedian line of the same colour, followed by a brown cell-spot and some obscure striae; outer line at three-fourths, very obscure, darker green and dentate; fringe pale green.

Underside pale mealy green, with the brown markings slightly showing through.

Palpi, frons, vertex, and base of antennae brown; shoulders, patagia, thorax, and abdomen green; the patagia on outer sides and the dorsum brown-tinged.

Expanse of wings: ♂ 35—40 mm.; ♀ 48 mm.

2 ♂♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., December 1904, wet season (Ockenden), type; 3 ♂♂, 2 ♀♀ from Fonte Boa, Upper Amazons, August 1906 (Klages).

Differs from the other species of the genus in the character of the outer line; otherwise superficially resembling *T. basiplaga* Wlk. and *janeira* Schaus, but much larger.

The ♀♀ from Fonte Boa are of a much paler yellowish green than the ♂♂, the yellow tint not being due to fading, as ♂♂ from Fonte Boa taken at the same time agree with those from La Union in colour.

56. *Tachyphyle fuscicosta* spec. nov.

Forewing: dull greyish green, the costa strongly and irregularly marked with fuscous, with two slight projections, one before middle above the black cell-spot, which it reaches, the other at two-thirds, from which a very obscure lunulate-dentate darker green line runs to two-thirds of inner margin; a faint inner line is also visible at one-third, shortly before the cell-spot; both lines are more visible at the inner margin; fringe concolorous.

Hindwing: with a small dark cell-spot only.

Underside pale green, with black cell-spots, and the costa of forewing fuscous at apex.

Head, thorax, and abdomen dull green; vertex white.

Expanse of wings: 18 mm.

1 ♂ from Fonte Boa, Upper Amazons, September 1906 (Klages).

SUBFAMILY HYDRIOMENINAE.

57. *Anapalta acerbata* Feld., ab. *perscripta* nov. and *variegata* nov.

The form for which I propose the name *perscripta* differs from typical *acerbata* Feld. in having the forewing suffused with grey, with all the lines well expressed across the wing; the dark basal patch is generally present, but the two dark costal spots at the origin of the bands limiting the central fascia and the apical blotch are variable; the basal patch is edged with white, and the space between it and the central fascia is sometimes wholly whitish; hindwing dull whitish grey, with the marginal area darker grey, and the postmedian and submarginal lines more or less evident.

1 ♂ from Huancabamba, Cerro de Pasco, Peru, 6400 ft. (Boettger), type; 1 ♀ from La Oroya, R. Inambari, Peru, 3100 ft., September 1904, dry season (Ockenden).

This form seems widely spread in Peru.

The aberration *variegata* seems less common: in it the ground-colour is chalk-white, and the basal patch, costal blotches, and apical shade brown instead of black, and well marked; the lines forming the bands of central fascia are strongly marked, the inner band being filled in with brown throughout; the bands are joined in cell and submedian fold by irregular blackish horizontal smears, the latter extending sometimes to inner margin; hindwing white, with the outer lines and shade dark grey.

1 ♂ from Cushi, Huánuco Province, Peru, 1900 m. (Hoffmanns).

58. *Anapalta subtrita* spec. nov.

Forewing: ochreous suffused with olive-rufous, the basal patch and central fascia dark olive-fuscons; the edges of the dark markings are diffuse and indistinct, the usual lines being ill-defined; the central fascia is bounded externally by a pale band, which is only evident on costa and inner margin; the area beyond is much obscured with fuscous scales, and a broad diffuse cloud runs obliquely from apex to central fascia beyond cell; fringe olive-fuscons, with fine pale pencils beyond veins.

Hindwing: dull cream-colour, with three dark outer lines visible only on inner margin above anal angle.

Underside of forewing dull olive-fuscons, with the band beyond central fascia paler; hindwing ochreous speckled with fuscous, with two postmedian dark lines; both wings with dark cell-spots.

Head, thorax, and abdomen olive-fuscons somewhat varied with rufous.

Expanse of wings: 40 mm.

1 ♀ from Oconeque, Carabaya, Peru, 7000 ft., July 1904, dry season (Ockenden).

59. *Perizoma curvisignata* spec. nov.

Forewing: grey, the darker shades fuscous; all the veins finely orange, thickened towards outer margin; basal area fuscous, edged by a very fine white line forming a curve above and below the median; central fascia fuscous, occupying more than the middle third of costa, its edges nearly conjoined beyond middle of inner margin, the inner oblique outwards and bisinuate, the outer curving parallel to outer margin and lunulate outwards between the veins; the inner edge followed by one, the outer preceded by two waved dark lines; cell-spot large, dark fuscous; beyond the fascia a pale band containing two lunulate-dentate dark lines; marginal area from vein 4 to vein 1 occupied by a semi-oval white patch, across which the submarginal line is marked by grey wedge-shaped spots, and above it in the orange-grey apical half by black white-tipped dashes; pairs of black marginal dots at the ends of veins; fringe white with a bright orange basal line, dotted and pencilled with black beyond the veins.

Hindwing: whitish smeared with grey; darker grey antemedian and postmedian lines; a diffuse grey marginal border containing white spots between the veins; fringe as in forewing, but chequered with grey instead of black.

Underside of forewing for three-fourths fuscous edged with a white band; apical area dull orange; some white blotches below middle; hindwing whitish with all the lines and shadings distinct; black cell-spots in both wings.

Head and thorax fuscous; abdomen pale grey, the dorsum tinged with orange.

Expanse of wings: 30 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

This peculiarly marked species bears a superficial resemblance to *P. strictifascia* Warr.

60. *Psaliodes albifulva* spec. nov.

Forewing: glossy white; costal streak and the veins thickly deep yellow; lines thick, olive-brown, interrupted by the broadly yellow veins, and marked clearly on costa by nine dark spots, of which the first three represent the origin of the lines of the basal patch; the middle three those of the central fascia, twice as wide on costa as on inner margin, the outer line oblique and projecting somewhat

on vein 4 ; this is followed by a parallel white band, succeeded by three more lines, of which the outermost is interrupted in the middle ; submarginal olive-fuscons lunules between the veins, those between 4 and 6 largest, separated by white spots from a fulvous marginal line ; fringe white, chequered with dark beyond veins.

Hindwing : whitish, grey-tinged, the markings of underside showing through.

Underside of forewing like upper, with all the markings blurred ; of hindwing whitish speckled with olive-grey, with traces of postmedian and submarginal grey lines.

Head, palpi, and thorax orange ; abdomen wanting.

Expanse of wings : 25 mm.

1 ♀ from Huancabamba, Cerro de Pasco, Peru (Boettger).

SUBFAMILY HETERUSIINAE.

61. *Heterusia ephestris* ab. *integra* nov.

The type of Felder's *ephestris* has a partial reproduction of the broad yellow band of the forewing indicated also in the hindwing ; he appears to have described as the type what is really only a comparatively rare form ; by far the commoner form has the hindwing wholly dark, which may be known as ab. *integra*.

62. *Mimomanes subpulchra* spec. nov.

Forewing : brown-black ; the base dull olive, paler along costa ; costal edge in apical half vinous red ; an oblique oval orange-red blotch beyond cell from vein 6 to 2, its upper end straight ; fringe black and vinous.

Hindwing : brown-black.

Underside of forewing olive-brown at base and along inner margin ; the orange-red blotch larger, and surrounded by velvety black ; the outer band broadens to the costa, where it is bright vinous red, and is edged externally by a pale curved line ; internally it is limited by a white costal spot, touching the orange blotch, and separated by a small vinous spot from a pale costal streak ; marginal area brownish grey, black at base of fringe, which is chequered with vinous and has a pale basal line ; hindwing with the base and a marginal band dull blackish ; traces of a black inner and much outcurved outer line, followed by vinous patches, especially towards costa, the whole sprinkled with vinous scales.

Head, thorax, and abdomen dark olive-brown ; anal tuft fulvous ; pectus and legs whitish.

Expanse of wings : 28 mm.

3 ♂♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

SUBFAMILY EUCESTIINAE.

63. *Cophocerotis subrosea* spec. nov.

Forewing : cream-white, the basal third suffused with cloudy grey, the remainder with dark leaden fuscons ; the grey basal portion is separated from the fuscons by a pale band of ground-colour running from two-fifths of costa to near anal angle, its outer edge more defined ; the fuscons portion is further itself partially divided by a white band from three-fourths of costa reaching vein 4 and running parallel to the inner band ; fringe rufous grey ; base of costa brick-red.

Hindwing: dull white smeared and striated with grey, leaving two paler curved bands, one near base, the other towards outer margin.

Underside of forewing with the basal area grey darker speckled than above; the postmedian area leaden fuscous; the outer margin and costal area red speckled; the underlying ground-colour and the pale bands pale yellow; fringe deep red with pale base; hindwing pale yellow densely striated throughout with red, and with some long fuscous striae sparsely intermixed.

Head, thorax, and abdomen leaden grey, much mixed with red.

Expanse of wings: 44 mm.

2 ♀♀ from Oconeque, Carabaya, Peru, 7000 ft., July 1904, dry season (Ockenden).

Both examples being worn, this description is not as complete as could be wished.

SUBFAMILY OURAPTERYGINAE.

64. *Pityeja fulvida* spec. nov.

Forewing: yellowish straw-colour; the usual six streaks fulvous edged on both sides with deep fulvous and above the subcostal vein with black; before anal angle all the edges become blackish, and the ground-colour on each side of the fifth streak grey; the sixth streak is edged internally with blackish throughout, and the marginal line is finely black below vein 7; fringe grey, with a darker grey median line.

Hindwing: orange, paler towards base; inner margin grey, broader towards anal angle, where the grey is edged by a curved black line; a black spot on margin above vein 2 touching a white dash above; a waved black mark along margin from vein 6 to below vein 4, ending in a white dash below; a subquadrate submarginal black blotch between veins 6 and 7; fringe orange, paler above.

Underside ochreous washed with fulvous, deeper in forewing; second and third streaks black from costa to median vein; apical third black embracing a white costal triangle; marginal spots black; fringe grey; hindwing with a square black blotch between 6 and 7 before margin; fringe orange below middle.

Head and thorax pale straw-colour; the patagia bright fulvous; abdomen dirty white, with two dark grey dorsal stripes; the two basal segments yellowish and the stripes reddish.

Expanse of wings: 40 mm.

2 ♂♂ from Agualani, Carabaya, Peru, 9000 ft., December 1905, wet season (Ockenden).

The emargination in hindwing beyond cell is much deeper than in *tigridata*, which also comes from Agualani.

65. *Pityeja tigridata* spec. nov.

Forewing: very pale fulvous; the six streaks disposed as in *histrionaria* H.-S., but more regular, slightly darker than the ground-colour and edged on both sides with darker fulvous throughout; costal edge paler; fringe pale fulvous with a darker median line.

Hindwing: white, with a yellow flush, with the outer third orange, deepening to anal angle; a red-brown patch towards extremity of vein 2, edged externally by a curved black line; a black spot on margin beyond it touching a single white

dash; a waved black mark along margin from above vein 4 to below vein 3; fringe orange, paler towards apex; sometimes a brownish mark between 6 and 7 before margin.

Underside of forewing ochreous washed with fulvous; the costal ends of second, third, fifth, and sixth streaks fuscous; some fuscous marginal spots; apex and costa cream-colour; hindwing cream-colour with a brownish spot before margin between veins 6 and 7; fringe orange below middle.

Head, thorax, and abdomen pale fulvous, with two deeper fulvous lines.

Expanse of wings: 46 mm.

2 ♂♂ from Agualani, Carabaya, Peru, 9000 ft., December 1905, wet season (Ockenden).

SUBFAMILY DEILINIINAE.

66. *Lomographa languida* spec. nov.

Forewing: pale pearly grey, with two bands and the outer margin broadly faintly greyer; first band just before middle, second postmedian, both slightly incurved towards costa, like the inner edge of the border; a fine grey marginal line; fringe grey, with darker median line; costal edge grey; no cell-spot.

Hindwing: without inner line.

Underside white, faintly yellow-flushed; costa yellowish.

Face dark brown; vertex, thorax, and abdomen white.

Expanse of wings: 35 mm.

1 ♂ from Cushi, Huánuco, Peru, 1000 m. (Hoffmanns) type; 1 ♂ from Tinguri, 3400 ft., and 1 ♂ from Oconeque, Carabaya, Peru, 7000 ft., July and August 1904 (Ockenden); and 8 ♂♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

67. *Lomographa perampla* spec. nov.

Forewing: silky white; lines very faint, broad, grey; first slight, curved at middle; outer, somewhat plainer, from two-thirds of inner margin, nearly straight; an exceedingly faint submarginal shade; marginal line very fine; fringe white.

Hindwing: the same, without the inner line.

Underside pure white.

Face and front of forelegs dark brown; vertex, thorax, and abdomen white.

Expanse of wings: 40 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

68. *Lomographa rufifrons* spec. nov.

Forewing: silky white, with scattered coarse grey scales; the thickening of these scales forms a short antemedian shade below median vein, an oblique postmedian not reaching costa, and a slight submarginal cloud; a row of small black marginal dots between veins; fringe white; costa reddish ferruginous; cell-spot black.

Hindwing: white, without grey dusting except towards anal angle, where an outer and a submarginal band can be traced.

Underside pure white; costa of forewing reddish.

Face white below, deep ferruginous above; palpi and antennae ferruginous; vertex, thorax, and abdomen white, the last dusted with grey scales.

Expanse of wings : 36 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

Outer margin of forewing oblique, the apex acute.

SUBFAMILY PALYADINAE.

69. *Berberodes commaculata* spec. nov.

Forewing : slightly iridescent white ; the costa pale yellow with a few dark specks ; crossed by three series of pale yellow brown-edged spots, more or less coalescent into lines ; the inner and median both angled outwards on the median vein ; the outer between veins 3 and 7 forming a confused blotch of yellowish scales overlaid with brownish fuscous, externally lunulate before the whitish submarginal line, beyond which the outer margin also between veins 7 and 2 is striated and suffused with purplish grey and brown ; a row of blackish marginal lunules ; fringe grey, white at anal angle.

Hindwing : white, with basal, antemedian, postmedian, and submarginal lines, formed of brownish scales and striae, which are plainest on inner margin ; some small black marginal spots ; fringe white.

Underside white ; forewing with small dark cell-spot and broad purple-brown marginal border, which is truncate from vein 3 to 2 ; hindwing with four round brown marginal spots at the end of veins 3, 4, 6, and 7.

Head and collar pale yellow-brown ; thorax and abdomen white.

Expanse of wings : 28 mm.

1 ♀ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., November 1904, wet season (Ockenden).

70. *Berberodes fasciata* spec. nov.

♂. *Forewing* : iridescent white, subtransparent ; costa yellow with fine black speckling ; the usual three rows of spots, rarely complete, generally of coppery scales with some black intermixed ; the inner ending on inner margin in a small, and the median in a large coppery black-speckled spot, the spot at the origin of veins 3, 4 larger, yellow and black ; spots of the outer line usually complete ; a row of black marginal lunules, those above median large and contiguous, preceded by three contiguous coppery wedge-shaped marks on veins 5, 6, 7, often forming a blotch suffused with blackish ; fringe brown and yellow mottled above middle, white below.

Hindwing : first and second lines marked, as in forewing, by coppery, black-speckled blotches on inner margin ; from the second a thick curved black-brown line crosses the wing just before middle ; a similar line from a black blotch at anal angle runs to vein 5 ; between these lines is a black-brown fascia, marked above vein 6 by plum-coloured scales, with the long white cellmark distinct across it ; the lower part of this fascia on each side of vein 2 to anal angle bears rough curved hairy scales, and the fringe round anal angle is composed of long curved hair-scales with spatulate tips ; fringe elsewhere white beyond black marginal spots.

Underside iridescent white, with the subapical blotch and fringe beyond of forewing, and the fascia and anal blotch with its fringe of hindwing purplish brown.

Head, collar, and palpi ferruginous, the face below and palpi dotted with white ; shoulders, patagia, thorax, and two basal segments of abdomen white ;

rest of abdomen varied with brown-black, the antepenultimate dorsal segment generally white; underside and legs whitish; forelegs fuscous black in front.

The ♀ is wholly without the black fascia and anal spot of hindwing; instead the subapical blotch of forewing is repeated on the hindwing, with traces of a submarginal brown line, especially on submedian fold; and the dorsal segments of abdomen are less suffused with brown.

Expanse of wings: ♂ 32 mm.; ♀ 28 mm.

10 ♂♂, 2 ♀♀, from Fonte Boa, Upper Amazons, May—September 1906 (Klages), type; and 1 ♂ from British Guiana bought at Georgetown.

This species shows a departure from the typical ornamentation of the genus.

71. *Gyostega indentata* spec. nov.

Resembles the type species, *G. floccosa* Warr., but the forewing is narrower, with the outer margin perceptibly indented at vein 4; the coloration more uniformly brownish, without distinct purplish and white scaling, very much resembling, in fact, the forewing of *G. simplex* Warr. (*Berberodes*).

Hindwing: whiter, with only sparse fuscous speckling; the pale hairs in the furrow are covered with a tuft of pale brown hairs only, and the black tuft at middle of wing as well as the black scaling along vein 1 are wanting.

Underside dull cream-colour, with broad purplish brown marginal border.

Head brownish; shoulders white; patagia, thorax, and abdomen grey.

Expanse of wings: 27 mm.

2 ♂♂ from Fonte Boa, Upper Amazons, May—September 1906 (Klages).

72. *Gyostega longicomata* spec. nov.

Forewing: olive-brownish, striated with fuscous; costa yellow, with some dark scaling; below it in cell at base a white triangular mark and another beyond middle before the obscurely waved brown outer line, which is followed by some milk-white scaling to apex; some blackish spots before margin between veins; cell-spot large, blackish.

Hindwing: whitish; below the middle covered with brown striae, which also form an inner, a median, and an outer more curved brown shade; submarginal area milk-white, with purplish grey striae; the costal area as far as median vein white, containing a long black pencil of hairs from base of cell lying along the subcostal vein as far as the forking of 6 and 7.

Underside cream-coloured, with purplish grey marginal border and a dark cell-spot on forewing.

Head brown; shoulders and patagia white; abdomen grey, varied with whitish; the segmental rings white.

Expanse of wings: 20 mm.

1 ♂ from Fonte Boa, Upper Amazons, May 1906 (Klages).

This and the following species, *tricristata*, will form distinct sections of the genus.

73. *Gyostega tricristata* spec. nov.

Forewing: with apex acute and outer margin straight; inner margin lobed. Rufous brown; the costa yellow, with some fuscous shining scales; base whitish, fuscous-speckled; an obscurely darker median and submarginal band, the former

plainest on inner margin, the latter below costa ; a triangular white spot in base of cell and a larger white subcostal blotch between the median and outer lines ; apical area beyond outer line with some whitish scales ; a row of purplish grey marginal lunules ; fringe purplish brown.

Hindwing : whitish, varied with purplish grey and with brown before the whiter marginal area ; the inner margin is distorted as in *Gyostega* proper, but there is no real pocket concealing tufts of hair ; instead there is a close tuft of ochreous hair concealing some mealy scales in the upper outer half of cell just beneath the subcostal vein, and two grey and white spreading and sparser tufts on each side of the median vein and vein 2 respectively ; black marginal spots before the brown-grey fringe.

Underside dull white, with purplish brown outer border and distinct broad dark median line across both wings.

Head, thorax, and abdomen grey ; the patagia with long spreading hairs ; the basal segments of dorsum darker.

Expanse of wings : 24 mm.

1 ♂ from Fonte Boa, Upper Amazons, June 1906 (Klages).

Differing considerably from typical *Gyostega*, but certainly referable here.

74. *Leuciris amplimargo* spec. nov.

Forewing : white ; the marginal border broadly orange, its inner edge straight from two-thirds of costa to shortly before anal angle ; this edge is dull blackish, the black decreasing in strength to margin ; a row of metallic black marginal lunules ; fringe orange.

Hindwing : with the border only half as broad ; the blackish shading more restricted.

Underside white, the marginal areas both fuscous.

Head orange ; thorax and abdomen white.

Expanse of wings : 29 mm.

1 ♀ from La Oroya, R. Inambari, Peru, September 1904, dry season, 3100 ft. (Ockenden).

75. *Leuciris latimargo* spec. nov.

Forewing : white, with the marginal area broadly orange, its inner edge with a thick black border formed of contiguous lunules, running to three-fourths of costa, bent slightly at vein 4 ; this inner edge is dull, without any trace of lustrous scales ; otherwise like *L. fimbrialis* Stoll.

Hindwing : with the border as in forewing, but uniformly broad.

Underside with the marginal borders dull brown.

Head orange ; thorax and abdomen white.

Expanse of wings : 26 mm.

2 ♂♂ from Pozuzo, Huánuco, Peru, 800—1100 m. (Hoffmanns).

76. *Ophthalmophora consequa* spec. nov.

Forewing : grey-brown ; costal streak yellowish buff, with an irregular lower edge, emitting a linear mark along discocellular and a small triangular one at three-fourths, from which a pale curved line runs into a pale yellow blotch on inner margin extending from one-fourth to anal angle ; on each side of the costal

triangle is a streak of dark steel-blue scales, and a small blotch of the same beyond the end of the curved line above anal angle; beyond the outer line the ground-colour is paler brown; fringe dark brown, deep yellow round anal angle.

Hindwing: base narrowly grey-brown edged by a silvery pale belt, followed by a fulvous yellow space above; fringe and apical margin chrome yellow; a streak of scattered lustrous scales along inner margin; a broad metallic band from anal angle to vein 4, above which is a small embossed metallic spot in a yellow ring; above it the yellow margin is edged internally by a steel-blue line which ends on costa; an isolated patch of steel-blue scales at base of interval between 6 and 7, followed by a large eye-spot; rest of wing mottled with red and white atoms, except the area above vein 4, which is olive-grey and pinkish without dusting; inner margin and fringe whitish.

Underside cream-colour, dark grey towards outer margin of forewing; costa yellow.

Head brown; shoulders pale pearly grey; thorax and two basal segments of abdomen brown; abdomen beyond pale grey.

Expanse of wings: 26 mm.

3 ♂♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., January 1905, wet season (Ockenden).

A ♀ from La Oroya, expanding 30 mm., differs in having the pale triangular costal mark at two-thirds instead of three-fourths, with no pale curved line from it; the mottling of the hindwing is fuscous brown instead of reddish, and the lustrous patch before the large eye-spot is continued diffusely towards anal angle. With these exceptions the two sexes agree.

77. *Ophthalmophora contrariata* ab. *orbata* nov.

The examples of this species, especially those from La Oroya, Peru, described by me in *Nov. Zool.* xi. p. 94 (1904), are variable in the position of the eye-spots of the hindwing. In many cases these, instead of being in a curve convex outwards, are placed in a straight line; but in the ♀ to which I give the name ab. *orbata*, there are only two spots—the upper one, rather larger than the average, in the usual place between veins 6 and 7, but nearer the outer margin, and the second between 4 and 6, but quite close to the curved metallic line; while below it, between 3 and 4, and still closer to the line, are a few metallic scales (more strongly marked in one wing than the other), representing the usual lowest spot. Again, in the ordinary form the three spots are placed on the inner edge of a curved greyish band, which passes into chrome yellow before the metallic line; in the aberration this grey belt is more external, and is bounded by the metallic line. Moreover, this metallic line in typical examples, after curving round at costa, ends, still as a line, on vein 6 close before the upper spot; in the aberration the line ends at the costa, and an isolated round patch of metallic scales lies at the base of the interval between 6 and 7; lastly, instead of the reddish cell-spot (which is often very obscure), this ♀ has a distinct pale yellow spot. Taken along with ordinary ♂♂ in September 1904 by Mr. G. Ockenden.

78. *Ophthalmophora curvilinea* spec. nov.

Forewing: lilac grey, crossed by two curved pale lines; the inner at one-fourth, the outer at two-thirds, outcurved between subcostal vein and submedian

fold, with a slight indentation on vein 4, followed below that vein by first a buff band and then a metallic leaden line, which again is slightly edged with buff; fringe lilac grey; a pale linear cell-mark.

Hindwing: with the base lilac grey, limited by an oblique white band to middle of costa; a leaden submarginal line on a broad buff belt from anal angle curving round at costa to vein 6; two embossed metallic spots on a black ground in a yellow ring, one beneath the other on each side of vein 6, the upper one the smaller; rest of wing dappled with brownish grey and fuscous, with a sprinkling of lustrous scales; fringe grey.

Underside dull greyish white, darker towards margin of forewing.

Head, thorax, and abdomen grey; third segment of dorsum with a pale ring, beyond which the remaining segments are paler grey tinged with rufous.

Expanse of wings: 32 mm.

1 ♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., December 1904, wet season (Ockenden).

79. *Opisthoxia cinerea* spec. nov.

Like *O. scintillans*, but both wings mouse-grey; the costa of forewing deep yellow; the metallic scales and spots as in *scintillans*; fringe grey.

Hindwing: the same; but the outer enveloping ring of the eye-spot deeper brick-red; outer margin curved, not bent at vein 4; fringe pale yellow.

Underside uniform dull grey.

Face and palpi brown; thorax and abdomen dull grey.

Expanse of wings: 27 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru, 3100 ft., January 1905 (Boettger).

80. *Opisthoxia fosteri* spec. nov.

Forewing: dull red-brown; a broad cream-white costal streak, towards the edge with a yellow tinge; outer half of inner margin narrowly white; fringe white; two olive-grey lines; the first slightly curved from the edge of costal streak at one-fourth, the outer from two-thirds of the same edge to four-fifths of inner margin.

Hindwing: paler and more rufous; a broad white dark-edged line from one-fourth of inner margin to beyond middle of costa; an outer metallic line, interrupted below the middle and curved round at costa above and continued to anal angle, much as in *pamphilaria* Guen.; a single embossed metallic spot on a black ground in a yellow ring between 6 and 7; fringe and inner margin white.

Underside dull brownish cream-colour.

Head, thorax, and dorsum red-brown; third segment of dorsum with a white ring, beyond which the remaining segments are greyer; shoulders white; patagia grey.

Expanse of wings: 35 mm.

2 ♂♂, 1 ♀ from Sapucay, Paraguay, October 1903 and November 1904 (Foster).

Allied to *O. argenticincta* and *ockendeni* Warr.

SUBFAMILY NEPHODIINAE.

81. *Nipteria obeliscata* spec. nov.

Dull grey without the luteous tinge of *N. exclamationis* Warr., with which it is closely connected, except in the following details: the outer line rises from costa at five-sixths instead of three-fourths, and is always nearer outer margin than to cell-spot; and instead of the ♀ being paler than the ♂, is of the same tint above, but underneath very much darker; the underside of the ♂ being clear pale grey, with the lunulate-dentate outer line, the cell-spot, and the elongate dash nearer base all black and distinct, while that of the ♀ is so densely covered with blackish speckling that these markings are nearly obscured. The species expands only 44 mm. as against 48 mm. and more in *exclamationis*.

1 ♂, 1 ♀ from La Oroya, R. Inambari, S.E. Peru, 3100 ft., October 1904, wet season (Ockenden).

SUBFAMILY ABRAXINAE.

82. *Panthera pardalaria* ab. *obliterata* nov.

Forewing: dull olive-green, with all the usual ocellated blotches absent; instead there is a darker olive band from one-fifth of costa to one-third of inner margin, corresponding to the centre of the large basal blotch; a dull black kidney-shaped mark on discocellular, and some dark diffuse clouds in outer third of wing, most prominent at anal angle, in middle of outer margin, and at three-fourths of costa.

Hindwing: yellow, with a blurred olive shade along inner margin from base to end of vein 2, containing a darker mark at anal angle; a small black spot on discocellular, a short black submarginal streak between veins 4 and 6, and a black spot before apex; a few blackish scales on margin below vein 4.

Underside wholly yellow; forewing with black discocellular spot, two slight black spots on each side of vein 7 at its base, a black spot at apex, and a few black scales at the end of vein 4 and the submedian fold; hindwing with black cell-spot, and black spots at apex and anal angle, and a few black scales between 4 and 6 towards margin and at margin below 4.

Head, thorax, abdomen, and legs dark cinereous olive.

1 ♀ from Tucuman, April and May 1905 (Steinbach).

A strangely blurred colour form of the ordinary *P. pardalaria*.

SUBFAMILY BRACCINAE.

83. *Devarodes interlineata*.

Cymopsis interlineata Berg.

I have lately seen a specimen of this species from Sapucay, Paraguay, and find that, though superficially resembling *Cymopsis* Feld., the hindwing has no radial; so that it will have to be transferred to the *Braccinae*.

SUBFAMILY ASCOTINAE.

84. *Cymatophora tenebrosa* spec. nov.

Forewing: deep olive-fuscous; the lines thick and blackish; inner line at one-sixth, oblique outwards to middle of cell, then nearly vertical to one-third of inner margin, preceded by a similar but less distinct line; median line well

before the middle, nearly vertical, but slightly curved outwards above; outer line at two-thirds, sinuous, inbent on both folds, outcurved between; marginal third darker, especially just beyond outer line; submarginal line faintly edged with whitish scales and marked by white dots between, not, as usually, on the veins; fringe paler, with a dark middle line; cell-spot black.

Hindwing: dull fuscous, with paler speckles; a dark cell-spot and a dark postmedian line visible towards inner margin.

Underside uniform pale fuscous, darker speckled.

Head, thorax, and abdomen dark fuscous.

Expanse of wings: 39 mm.

1 ♀ from Tucuman, 1100 m., January, February 1905 (Steinbach).

The outer margin of forewing is visibly elbowed at vein 4.

SUBFAMILY SELIDOSEMINAE.

85. *Callipseustes subsignata* Warr.

This insect was described from 2 ♂♂ from Bolivia; it has been received in some numbers from Peruvian localities along with the ♀♀. These are rather larger on the average and consistently darker than the ♂♂, but they lack the yellowish spot on the underside of the forewing which suggested the name of the species; this spot is likewise absent in the darker ♂♂. In the ♀ the fascia of forewing is slightly narrower than in the ♂, with the cell-spot outside it in the angle, as in *C. pullaria* Dogn.

86. *Callipseustes pullaria*.

Hyperetis pullaria Dogn., *Le Nat.* 1889. p. 88, ♀.

Callipseustes parambicola Warr., *Nov. Zool.* vii. p. 202, ♂ (1900).

Having seen more than a dozen of each of the above forms, I am persuaded that they are merely sexes of one species, the ♂ being a much brighter-looking insect than the dingy grey ♀. Though the types in each case were from Ecuador, nearly all the examples recorded have come from Peru, and one only from Bolivia.

87. *Callipseustes peninsulata*.

When in *Nov. Zool.* xiv. p. 285 I described this species and its aberrations, only ♂♂ were available; but lately, along with 7 ♂♂ from Agualani, Peru, a couple of ♀♀ have been received. These, which are slightly larger than the ♂♂, are noteworthy for the extreme narrowness of the dark antemedian fascia, which is constricted (and in one case all but interrupted) on the two folds, the pale area beyond it occupying as much as one-third or one-fourth of the wing, and containing the dark cell-spot quite isolated. The hindwing, as in the ♂, remains whitish.

88. *Ischnopteris illineata* spec. nov. and ab. *trimaculata* nov.

Forewing: dingy olive-ochreous, densely speckled and partially suffused with brownish fuscous; lines and markings very indistinct; inner line oblique from one-fifth of costa to one-third of inner margin, marked with blackish at costa and inner margin and on submedian fold, preceded by a brownish band, and

that by a slightly paler one; outer line from one-half of costa, outwardly oblique to vein 5, then vertical and waved, but very obscure; between these lines a narrow waved brown band; submarginal line dentate, edged with white, especially below costa, and preceded by a darker shade, the teeth below costa filled in with blackish; on the costa and in submedian interval the dark shade is preceded by a paler blotch; the blackish marginal lunules are connected with the submarginal line by obscure dark dashes.

Hindwing: dull fuscous, with indistinct darker postmedian line and submarginal shade.

Underside dirty greyish, with obscurely darker lines and shades; the hindwing with antemedian and postmedian lines and a cell-spot between them.

Head, thorax, and abdomen dull olive-fuscous.

Expanse of wings: 35 mm.

1 ♂ from Quevedo, W. Ecuador (von Buchwald).

The aberration *trimaculata* is much darker, and marked by three cream-white blotches: the first an oblique bar from base of cell to inner margin, corresponding to the slightly paler band of the type; the second and third correspond to the pale blotches preceding submarginal shade on submedian interval and at costa; the last connected with the white blotch beyond the line; the hindwing is uniform blackish fuscous. The single example, which expands 40 mm. against 35 mm. of the type, is also from Quevedo, W. Ecuador.

89. *Ischnopteris mediosecta* spec. nov.

Forewing: dull green, varied with brown and striated densely with darker; the brown tints chiefly along costa and submedian interval; inner line blackish, oblique and diffuse, from one-fifth of costa to one-third of inner margin, containing a black spot on submedian fold; in the middle of the wing a nearly vertical brownish fuscous fascia, slightly broader at costa and constricted in middle, containing two black spots on submedian fold; submarginal line acutely dentate towards costa, the teeth filled in with black and followed by greenish white, represented by an oblong white blotch across submedian interval preceded by a square black spot, and interrupted at middle by an oblique greenish grey blotch running to outer margin at vein 3; black marginal triangles between the veins; fringe dark green.

Hindwing: deep yellow, with broad blackish outer and inner margin, the latter diffusely edged internally, the former with a yellow spot between veins 3 and 4; traces of an interrupted dark central line.

Underside dull greenish fuscous, darkening before the paler outer margin, the costa yellowish; hindwing dull yellow, with the markings as above.

Head, thorax, and abdomen greenish fuscous; anal tuft and venter yellowish.

Expanse of wings: 33 mm.

1 ♂ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., December 1904, wet season (Ockenden).

90. *Ischnopteris pronubata* Feld.

Felder's type was a ♀; the sexes differ, much in the same way as those of *I. catocalata* Guen., the ♂ having a large tooth of hairs before middle of inner margin, and with the anal angle of hindwing truncate; beyond the greenish

basal area the forewing is brownish to middle, followed by a whitish blotch at end of cell, with the black cell-spot on its outer edge.

This description is taken from a ♂ from Fonte Boa, Upper Amazons, December 1906 (Klages).

91. *Ischnopteris obfuscata* spec. nov.

Forewing : dull olive-fuscons, densely striated, and in parts blotched, with darker; the veins spotted black and white; lines black, often indistinct; first from one-fifth of costa to two-fifths of inner margin, outwardly angled on subcostal vein and on inner margin below vein 1; outer line from middle of costa, outcurved between subcostal vein and submedian fold, then vertical to three-fifths of inner margin, followed by a slightly paler line, and preceded by a diffuse dark shade; submarginal line indistinct, dentate, marked on costa by a white bracket-shaped spot, the two teeth below it and in submarginal interval filled in with black and tipped with white, and all followed by short black streaks between the veins towards the black marginal lunules; fringe olive-fuscons.

Hindwing : dull blackish fuscons; the fringe paler.

Underside reddish, clouded with blurred greyish black; both wings with curved black postmedian line and broad submarginal cloud; the forewing with median shade meeting postmedian line on inner margin.

Head, thorax, and abdomen dull greenish fuscons.

Expanse of wings : 48 mm.

5 ♂♂ from Fonte Boa, Upper Amazons, August 1906 (Klages).

Inner margin of hindwing densely fringed with blackish hairs.

92. *Ischnopteris multistrigata* spec. nov.

Forewing : pale greyish green, speckled with olive and fuscons, with a faint lilac tint along costa, in the space between first and second lines, and before submarginal line; the veins with dark and light dots; the lines black and fine; first from one-fifth of costa to one-third of inner margin, thrice acutely angled outwards, on the subcostal vein, on the submedian fold, and below vein 1, the last angle reaching to the middle of the wing; outer line from one-half of costa to near beyond inner line on inner margin, angled bluntly inwards on subcostal vein and very acutely outwards on veins 4 and 2, then running inwards and nearly touching the angle of inner line on submedian fold, and again bluntly angled outwards on vein 1; submarginal line of the ground-colour preceded by black dashes between the veins, those below costa tipped with white, the two on each side of submedian fold long and strongly marked, and followed by black dashes reaching the black marginal lunules; fringe green; cell-spot black; a long black blotch near base below vein 1.

Hindwing : dirty greyish fuscons, with a curved darker postmedian line and marginal shade separated by a paler space; area below median vein thickly fringed with long hairs; fringe whitish.

Underside pale dingy grey, darker speckled, with dark curved line and broad shade, central and submarginal on forewing, postmedian and marginal on hindwing; the latter with a short line from costa before middle; cell-spots dark.

Head, thorax, and abdomen greenish grey, the last with a rufous admixture both above and below; pectus and legs paler green; tarsi dark spotted.

Expanse of wings: 48 mm.

1 ♂ from Santiago del Estero, East Bolivia, 1905—1906 (Steinbach).

93. *Oenoptila camptogrammata* spec. nov.

Forewing: rusty ochreous, thickly and coarsely black-speckled and suffused in parts with dull vinous brown; lines vinous brown; first thick, from one-third of costa, angled in cell, thence nearly straight to one-third of inner margin; outer from three-fourths of costa to two-thirds of inner margin, indented beyond cell and projecting between veins 2 and 4, preceded by an irregular vinous shade; marginal area beyond, except beyond cell, vinous brown, leaving only a small triangular blotch at apex of the pale ground-colour; submarginal line denoted by black pale-tipped dashes; marginal line formed of dark lunules between the veins; fringe brown; cell-spot black in a rusty ochreous patch without speckles.

Hindwing: with basal half vinous brown as far as outer line, which is shaped as in forewing and joined on inner margin by a dark median line passing over the black cell-spot; the pale area beyond it broader than in forewing, and browner towards outer margin; submarginal line as in forewing.

Underside similar, but duller.

Head, thorax, and abdomen like wings.

Expanse of wings: 40 mm.

1 ♀ from Agualani, Carabaya, Peru, 9000 ft., September 1905, dry season (Ockenden).

In the character of the markings this insect much resembles many species of the subfamily *Hydriomeninae*, especially of the genus *Camptogramma*. It comes nearest to *Oenoptila separata* Warr. from Mexico, described in the *Proceedings of the United States National Museum*, vol. xxxiv. p. 107 (1908).

94. *Oenothalia plagiata* spec. nov.

♂. *Forewing*: yellowish ochreous or fulvous ochreous, suffused throughout with dark olive-brown, so that only a blotch at end of cell and another beyond cell, a smaller one below cell, and a subapical patch beyond submarginal line remain of the ground-colour; the outer line is black, lunulate-dentate, the teeth pointing basewards, but is rarely complete; generally only the black teeth edged with a white spot are visible; cell-spot black.

Hindwing: with the yellow patches smaller, and confined to the cell-fold. In the ♀ the yellow areas are larger and partially confluent, and the black spots of the lines more largely developed.

Underside greyish ochreous with a lilac tinge, the forewing darker; the cell-folds paler; cell-spots blackish; a slightly darker submarginal band.

Head and thorax fulvous; abdomen grey; the metathorax and basal segment with a pair of black spots each.

Expanse of wings: ♂ 44 mm.; ♀ 48 mm.

5 ♂♂, 5 ♀♀ from Agualani, Carabaya, Peru, 9000 ft., July—November 1905, both dry and wet seasons (Ockenden).

Like *Oe. nummifera* Warr., but larger and darker, the brown tints of a quite different shade. Of the 5 ♀♀ four agree in being all lighter than the ♂♂, while the fifth is quite as dark as the ♂♂, with the yellow patches similarly restricted.

95. *Oenothalia vestita* spec. nov.

Forewing : dull snuff-colour with faint olive tint and obscure dark striae ; basal half of costa blackish ; no distinct lines, but three broad darker shades can be seen ; the inner preceded by three whitish dashes on the veins, and the outer preceded by seven, marking the teeth of the outer line, the upper four oblique outwards, the lower three inwards ; the median shade passes over the black cell-spot ; fringe concolorous.

Hindwing : with only the two outer dark shades.

Underside ruddy ochreous ; a dark vinous submarginal band, broader and blacker in forewing ; the outer margins, and costa of forewing grey with black speckling ; cell-spots slight.

Head, thorax, and abdomen like wings, but the anal segments of abdomen cinereous ; venter, pectus, and legs pale ochreous.

Expanse of wings : 36 mm.

1 ♂ from Tucuman, Argentina, 1100 m., January and February 1905 (Steinbach).

The whole insect has a furry appearance.

A ♀ from Salta, N. Argentina, 40 mm. in expanse, sent by the same collector, belongs apparently to the same species. The undersides are precisely similar ; above, the ♀, which is not quite so fresh as the ♂ and lacks its furry appearance, has hardly any olive tinge, the ground-colour being dull brick-red covered with fine black striae ; the three bands are in precisely the same position, but blackish and distinct, and the outer line is marked by distinct black spots on the veins, but neither it nor the inner line shows any signs of white dashes ; the exterior band is more plainly dentate ; fringe brick-red. The hindwing differs in the same way.

96. *Prostoma stabilis* spec. nov.

Differs from *P. fragilis* Warr. in the shorter and darker wings ; the pale ground-colour is quite hidden by reddish fuscous suffusion covered with dark striae ; the wavy black lines are placed as in *fragilis*, the outer being finely edged with whitish, but there is no pale space before it, as in that species ; the black spot on vein 6 in the submarginal line is absent ; the darker hindwing shows a whitish blotch at anal angle.

Underside with both cell-spots large and dark, and the outer line black ; the whole marginal third of hindwing washed with whitish.

Head, thorax, and abdomen reddish fuscous.

In the ♀ the reddish tint is absent.

Expanse of wings : 20 mm.

1 ♂, 1 ♀ from La Oroya, R. Inambari, Carabaya, Peru, 3100 ft., November and December 1905, wet season (Ockenden).

The antennae of the ♂ are simple in both species.

97. *Thysanopyga deprivata* spec. nov.

Forewing : grey ; the costal streak ochreous speckled with fuscous ; first line from a black spot at one-fifth of costa, acutely angled on subcostal vein just before middle of wing, then oblique and broader to inner margin close to base, black-brown, inwardly lined with pinkish ochreous ; median line thin, darker grey, from

subcostal vein a little beyond middle to before middle of inner margin, curved, and slightly bent on median vein; outer line pinkish ochreous, curved from costa before apex to three-fourths of inner margin, with a distinct but thin ferruginous line on its outer edge, followed below middle by a blackish dentated shade in the dark grey marginal area; a whitish semicircular apical blotch, inwardly edged by first a subcostal, sharply angled, white-edged black line, and then by a curved line to outer margin at vein 5, the angle at top and the upper and lower ends of the curved space filled in with dark grey; cell-spot black, white-edged; marginal line finely black, interrupted by white dots at the vein-ends; fringe pale grey.

Hindwing: pale grey, with a brown bar at base and a fine dark grey straight antemedian line; cell-spot white; marginal line and fringe as in forewing.

Underside pale grey, brown-speckled, with a diffuse dark apical patch on forewing.

Head, thorax, and abdomen grey; basal segment of the last with a broad brown ring.

Expanse of wings: 28 mm.

1 ♂ from Huancabamba, Cerro de Pasco, Peru (Boettger).

The hindwing possesses the fovea at base between costal and subcostal veins, but no trace of black tuft from sides of abdomen, nor woolly hair at base of hindwing beneath; but this last, as the insect is not quite fresh, may have been rubbed away. Otherwise it is wonderfully like typical *nigricomata*.

98. *Thysanopyga longistria* spec. nov.

Forewing: ash-grey in basal half, pale brown in outer, covered with long, slender black striae, except in the brown costal area beyond middle; an indistinct curved dark line near base marked by black dashes between the veins; a plainer continuous black line just before the middle, with the black cell-spot on its outer edge; an outer brown line at three-fourths, plainest on inner margin; an interrupted black marginal line; fringe brown, with a dark dividing line.

Hindwing: brown, with only the basal third grey; the whole wing striated.

Underside dull whitish, with a smoky fuscous border, which is paler towards margin, and twice as broad on forewing as on hindwing.

Head, thorax, and abdomen above brownish grey; venter and legs whitish.

Expanse of wings: 22 mm.

1 ♀ from La Union, R. Huacamayo, Carabaya, Peru, 2000 ft., November 1904, wet season (Ockenden).

Allied to *T. nicetaria* Guen.

99. *Thysanopyga suffecta* Warr. and ab. *distincta* nov.

This species, described in *Nov. Zool.* xi. p. 125 (1904) from a Bolivian ♂, turns out to be a dark form of a species closely allied to *T. nigricomata* Warr. from Chiriqui, and which also occurs in Peru, but larger and darker; it may in all cases be distinguished from that insect by the wider distance between the median and outer lines, this latter being less strongly concave than in *nigricomata*, and the median line less oblique. The woolly hair on basal half of hindwing beneath, concealing the foveal slit, and the lateral tuft of black hair on abdomen, are equally conspicuous.

Of typical *suffecta* a ♂ from Huancabamba and two ♂♂ from Cushi, Peru, have been received, along with 9 ♂♂ and 1 ♀ from Cushi of the more ordinary form, which may be known as ab. *distincta*.

SUBFAMILY ENNOMINAE.

100. *Bassania extremata*.

Bassania amethystata ab. *extremata* Warr., *Proc. U.S. Nat. Mus.* xxx, p. 536, ♂ (1906).

The form described by me as an aberration of *amethystata* Wlk. must be separated as a distinct species. As often happens, the specimen which served as type is somewhat different from the ordinary form, of which I have now seen 5 or 6 more ♂♂ and 1 ♀. In these ♂♂ the outer line is not marked by white vein-dashes, but either by a fine darker line with pale edge, or by a pale line alone; there is no visible trace of an inner line, but the base of inner margin is pale green; the black triangle at apex is generally represented by the usual short blackish subapical streak followed by a white dot on costa. The ♀ is a very beautiful insect, the dull salmon-colour of the ♂ being deepened into amethyst, with the submarginal band standing out across the wing clear pale green; the costal area is slightly paler, and there is no trace of any black subapical mark; the outer margin and fringe of hindwing are flushed with amethyst, and the same tint takes the place of the olive shading of the underside of the ♂. As in the other species of the genus, the apex of forewing in the ♀ is produced, and the outer margin incurved below it and gibbous in middle.

All the examples are from Oconeque, Carabaya, Peru, taken in July (dry season) 1904, by Ockenden.

101. *Bassania goleta*.

Crocallis goleta Dogn., *Le Nat.* 1893, p. 159.

Bassania annulifera Warr., *Nov. Zool.* xiv. p. 299, ♀ only.

ab. *Bassania fortis* Warr., *Nov. Zool.* xi. p. 567, ♂.

ab. *Bassania annulifera* Warr., *loc. cit.*, ♂.

The specimen from which I described *fortis* is a very dark example, with the cell-spot of forewing, the upperside of hindwing, and the underside of both wings all nearly black; the example described as *annulifera* ♀ represents the more common and paler form, of which I have seen a pair from Agualani; in this form the red tints predominate over the olive; but in *annulifera* type ♂ the red tints are absent and the whole forewing is olive-green; of these I have seen 3 ♂♂ only from R. Huacamayo, agreeing with the original ♂ in coloration. Their identity with *Crocallis goleta* Dogn., which I have only recently observed, is unquestionable.

102. *Microgonia subcana* spec. nov. and ab. *obfuscata* nov.

♂. *Forewing*: dull fulvous, almost hidden by an olive-fusca suffusion and numerous dark transverse striae; the lines chocolate-brown; inner line at two-fifths, visible only as an outwardly oblique costal streak; outer line at four-fifths, oblique outward to vein 7, there acutely angled, and inwardly oblique, slightly curved to three-fifths of inner margin, edged externally by a thin paler line; cell-spot black, followed by a diffuse brown median shade; attached to the inner side of outer line between veins 2 and 4 is a large pear-shaped yellowish ochreous

blotch, its upper part tinged with dull fulvous and spotted with brown; outer area dull greenish with a dark submarginal shade, the veins across it fulvous; apex pale greenish ochreous; fringe brown tipped with white.

Hindwing: with the line slightly antemedian; the whole wing dull fulvous with olive-fusca speckling, thickest along the submarginal shade.

Underside flesh-coloured ochreous, striated with purple-grey in basal half; a median shade and outer line (not corresponding to the line above), bright olive-brown, the latter dentate; marginal area dark, a mixture of purple-grey, greenish and hoary grey scales, these last forming a zigzag, partially interrupted, submarginal line and marginal patches; cell-spots black.

Head, thorax, and patagia olive; abdomen tawny spotted with black and grey; pectus with thick woolly grey hairs; legs tawny ochreous, black-speckled.

♀. Much brighter fulvous, dark mottled, but without olive-green suffusion, the line thicker, the apex black; the underside with a pinkish flush; the outer line only bright brown and very distinct; the outer margin of hindwing rich brown.

In both sexes the underside of the wings is covered with very fine hoary down.

Expanse of wings: ♂, 56 mm.; ♀, 72 mm.

1 ♂, 1 ♀ from Agualani, Carabaya, Peru, 9000 ft., December 1905, wet season (Ockenden).

In the ♂ the apex of forewing is shortly and bluntly produced, the outer margin at middle faintly convex; in the ♀ the apex is prominently produced, and the outer margin protuberant at vein 4.

The aberration *obfuscata* is a smaller form of the ♂ (50 mm.), very much darker, and without the yellow blotch of forewing; taken at the same time and place as the type form.

103. *Perusia complicata* ab. *plena* nov.

Differs from typical *complicata* Warr. in the basal patch and outer fascia of forewing being confluent along inner margin; their converse edges not margined by double black angulated lines, but each showing within the edge traces of a dark line interrupted; the band has a small sinus on its inner edge between 3 and 4; on the underside the pale yellow hindwing is flushed with dull rosy, and bears a row of submarginal purple dots on veins in place of a band.

2 ♀♀ from Oconeque, Carabaya, Peru, 7000 ft., July 1904, dry season (Ockenden).

104. *Sericoptera discolor* spec. nov.

Forewing: cream-colour, not white; the markings as in *area* Cram. At the yellow spot on subcostal vein of forewing at one-third absent.

Head and palpi black; antennae with very short sessile fascicles of cilia.

Expanse of wings: 52 mm.

2 ♂♂ from La Oroya, R. Inambari, S.E. Peru, 3100 ft., October 1904, wet season (Ockenden).

105. *Sericoptera insularis* spec. nov.

Resembling *S. reducta* in size and markings, but the outer line of forewing ends on a distinct olive crescent before anal angle, but smaller than that on *area*; the inner line is represented by three distinct olive-yellow spots on the veins at one-fifth.

Underside of forewing wholly white.

Expanse of wings : 40 mm.

1 ♂ from Holquin, Cuba (H. S. Parish).

106. *Sericoptera reducta* spec. nov.

Differs from *S. area* Cram. in being smaller ; the subapical costal blotch not more than half the size, with a faint olive-yellow curved line from it to inner margin before anal angle, where it is clearest (the large crescent-shaped blotch of *area* being altogether absent), followed by two slight rows of grey striae ; no olive-yellow spot on subcostal vein at one-third.

Hindwing : with the markings grey and very obscure, the band grey with a very fine lunulate-dentate white line along it.

Underside with the black costal blotch small.

Expanse of wings : ♂, 40 mm. ; ♀, 46 mm.

A long series of both sexes from Fonte Boa, Upper Amazons, May—September 1906 (Klages), type ; and a solitary ♂ from Santiago del Estero, Eastern Bolivia, 1905—1906 (Steinbach).

The angle at vein 4 in outer margin of both wings is much less prominent.

107. *Erilophodes arana* ab. *fumipennis* nov.

Caripeta arana Dogn., *Ann. S.E. Belg.* xxxix. p. 117 (1895).

Of fourteen examples of this species, all from Agualani, Peru, 8 ♂♂ are typical ; three others have the hindwings more or less tinged with grey, and 1 ♀ answers to the description of *Hasodima salapia* Druce (*A. ♂ M.* 1900, i. 522), which must be regarded as an aberration, having a blackish marginal border to the hindwing ; the remaining, two, ♂ and ♀, have the hindwing wholly blackish, except the basal third in the ♀ ; in the forewing the white bands are narrower, and the central area as dark as the rest of the wing. Underneath both wings are dull black, the hind wing with a dusting of pale scales. They are, however, evidently a dark form of *arana*, which may be known as ab. *fumipennis*.



Warren, William. 1909. "New American Uraniidae and Geome-tridae in the Tring Museum." *Novitates zoologicae : a journal of zoology in connection with the Tring Museum* 16, 69–109.

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