

NEW SPECIES OF LEPIDOPTERA IN THE
UNITED STATES NATIONAL MUSEUM

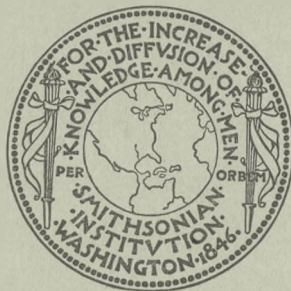
BY

WILLIAM SCHAUS

Assistant Curator of Insects United States National Museum



No. 2372.—From the Proceedings of the United States National Museum,
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87

WILLIAM SCHLAGER

United States National Museum

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NEW SPECIES OF LEPIDOPTERA IN THE UNITED STATES
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By WILLIAM SCHAUS,

Assistant Curator of Insects, United States National Museum.

The species described from Cuba, Costa Rica, Guatemala, Panama, British and French Guiana were collected by Mr. John T. Barnes and myself during our visits to those countries; those described from Argentina were received from Don Pedro Jorgensen and some very interesting new species have recently been received from Mr. Julius Arp, of Rio de Janeiro. My description is made from a single specimen marked "type". Where specimens from different localities are mentioned the first locality is that of the type.

Family ARCTIIDAE.

Subfamily LITHOSIINAE.

AGYLLA ARTHONA, new species.

Male.—Antennae brown. Palpi, throat, and legs orange, the mid-tarsi black in front. Frons black. Vertex white, between antennae orange. Tegulae whitish gray. Thorax white. Abdomen pale ochreous gray, terminally and laterally yellow. Fore wings silvery white, the costa orange. Hind wings thinly scaled, whitish gray. Fore wings below silky gray, the costa orange. Hind wings below white. Venation normal.

Expanse.—35 mm.

Habitat.—Purulha, Guatemala.

Type.—Cat. No. 23350, U.S.N.M.

Close to *Agylla nivea* Walker.

CISTHENE LOCCEA, new species.

Male.—Antennae black. Head and body deep yellow. Legs black. Fore wings fuscous gray; medial and subterminal broad yellow lines, the medial line almost vertical expanding slightly on costal and inner margins, the subterminal widest on costa, outcurved, close to margin from vein 5 to inner margin; the apical dark space rather

narrow. Hind wings deep yellow, the outer margin black, about 2.5 mm. wide. Underneath the medial line on fore wing is slightly broader; a black spot at base of costa on hind wing.

Expanse.—27 mm.

Habitat.—Mazatenango, Guatemala.

Type.—Cat. No. 23351, U.S.N.M.

Near *Cisthene menea* Drury.

ILLICE LINCEA, new species.

Male.—Antennae black. Palpi and lower portion of frons yellow, head otherwise and thorax orange. Abdomen reddish. Legs whitish yellow, the tarsi tipped and banded with black. Fore wings orange; basal third of costa finely black; a black basal spot on costa, and an antemedial and postmedial black costal spot, beyond the latter the costa is more broadly black continuing around apex and along outer margin as a broad black line on cilia tipped with white and preceded by a white shade not reaching tornus; a black subterminal line before apical portion, and a black spot at middle of inner margin. Hind wings roseate orange; a black spot at apex. Wings underneath reddish, the markings as above, but there is no basal spot on costa of fore wing, the antemedial spot is very faint, and the postmedial spot suffuses with the black costal line.

Expanse.—18 mm.

Habitat.—Chejel, Guatemala.

Type.—Cat. No. 23352, U.S.N.M.

AFRIDA PURULHA, new species.

Male.—Head, collar, and thorax white irrorated with black. Abdomen brownish gray. Fore wings white; the basal third with a few black scales; medial space thickly irrorated with brown and fuscous limited by vertical black lines; terminal third with fewer irrorations except in space inclosed by a fine black postmedial line which is wavy and deeply outcurved from below costa to the vertical line at vein 2; cilia thickly mottled with black. Hind wings grayish white; faint traces of a pale brown medial line, and similar shading on termen. Fore wings below gray. Hind wings below white with some brownish irrorations forming vague medial and postmedial lines.

Expanse.—16 mm.

Habitat.—Purulha, Guatemala.

Type.—Cat. No. 23353, U.S.N.M.

CLEMENSIA CHALA, new species.

Male.—Palpi dark gray. Head, collar, and thorax grayish white. Abdomen gray; anal tufts ocher white. Fore wings gray white; costa grayer with four small fuscous spots from base to before middle of wing, the last above a fuscous line interrupted on subcostal, and

from median to submedian, this line is preceded in cell by a large fuscous gray spot, and followed by a smaller black spot; an interrupted and irregular dark line crosses wing close to end of cell; a black spot on discocellular; postmedial fine, dentate from costa to vein 6, then macular, and irregular; some subterminal brownish gray shading chiefly opposite cell; terminal fuscous spots on interspaces; below cell a pale brown shade from beyond base to postmedial line where it merges with a large gray brown semicircular spot on inner margin; cilia white with dark spots at apex, and between veins 3 and 5. Hind wings white on costa and in cell, otherwise whitish gray, a dark spot on discocellular and faint darker terminal spots. Fore wings below fuscous, the apex and termen narrowly, the inner margin broadly whitish; a down turned crest of hairs in cell. Hind wings below white, a dark spot on discocellular and faint postmedial line on costal margin.

Expanse.—18 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23354, U.S.N.M.

CLEMENSIA REMIDA, new species.

Female.—Head, collar, and thorax white irrorated with light brown. Abdomen fuscous gray, the anus white. Fore wings white irrorated with pale brown; base light brown limited by a fine dark brown line; the antemedial line, fine, dark brown, outcurved on costa and across cell, incurved below submedian, preceded by a rather broad dark brown curved shade and followed by a dark point in cell; a broad, irregular, pale brown postmedial shade, partly edged by dark brown lines and irrorated with dark brown, thickly so below end of cell, forming a fuscous brown spot; a dark line on discocellular; subterminally the irrorations form clusters at veins 4–6, and on costa; clusters of brown irrorations on cilia. Hind wings smoky gray.

Expanse.—20 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23355, U.S.N.M.

Near *Clemensia brunneomedia* Schaus.

Family NOLIDAE.

CELAMA COGIA, new species.

Male.—Palpi brown laterally. Head, collar, thorax, and base of abdomen white; some dark irrorations on tegulae. Abdomen light gray. Fore wings: Base to beyond middle on inner margin and to before middle at costa pure white except costa which is brown and there are a few brown scales in cell; outer portion dark gray with faint brownish postmedial, subterminal, and marginal lines, the two latter with some fuscous irrorations and short black streaks on some

of the veins, the postmedial with more pronounced black streaks and spots; a dark brown and black streak on discocellular. Hind wings whitish gray. Fore wings below brownish gray, the veins darker; the inner margin whitish. Hind wings below whitish gray; veins and termen dark; a faint discocellular line; some brown irrorations on costal margin.

Expanse.—14 mm.

Habitat.—St. Jean, Maroni River, French Guiana.

Type.—Cat. No. 23356, U.S.N.M.

CELAMA RALPHIA, new species.

Male.—Palpi brown. Head white, the vertex tinged with gray. Collar gray crossed by a brown line in front. Thorax brownish gray. Abdomen paler than thorax. Fore wings brownish gray, darkest terminally; a dark brown streak at base of costa; antemedial line very fine, interrupted, fuscous, outcurved, followed in cell by a round black spot; post-medial fine, punctiform, very slightly curved below costa, then inbent, coalescing on inner margin with a dark brown spot; subterminal dark points outbent from costa to vein 6, then parallel with termen; cilia with indistinct darker spots. Hind wings white, the termen narrowly and cilia tinged with gray brown.

Expanse.—13 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23357, U.S.N.M.

NOLA PARANA, new species.

Female.—Palpi, head, collar, and thorax white, the latter with dorsal grayish shading and irrorations. Abdomen gray brown. Fore wings dull white with a few dark irrorations especially in and below cell; costa brown at base and medially mottled with fuscous; a very faint outcurved antemedial line; a dark gray-brown inbent shade from discocellular, expanding somewhat on inner margin, closely followed by the fine post-medial line which is outangled on costa, sinuous, and below vein 3 somewhat incurved; an irregular subterminal line and terminal shade, both dark and grayish brown; cilia with dark spots. Hind wings mostly pale brownish gray, the inner margin whitish. Fore wings below fuscous. Hindwings below white with dark irrorations on costa and apex; a thick dark streak on discocellular.

Expanse.—18 mm.

Habitat.—Castro, Parana.

Type.—Cat. No. 23358, U.S.N.M.

NOLA JOANNA, new species.

Male.—Palpi laterally dark brown. Head white. Collar and thorax white mottled with dark brown. Abdomen brownish gray. Fore wings white; base of costa streaked with fuscous brown; a

black point in cell followed by the antemedial line which is remote, almost medial, fine, evenly outcurved, almost obsolete below submedian, defined by the fuscous brown shading following it which expands anteriorly forming a large triangular spot with its base on costa; postmedial very fine, and faintly marked, brown, outcurved around cell, vertical from vein 2 to inner margin where it is preceded by a short curved line; termen and cilia fuscous brown. Hind wings dark gray. Hind wings below gray; costal margin broadly white with brown irrorations; a dark point on discocellular.

Expanse.—11 mm.

Habitat.—St. Jean, Maroni River, French Guiana.

Type.—Cat. No. 23359, U.S.N.M.

NOLA BARACOA, new species.

Female.—Palpi laterally reddish brown. Head, collar, and thorax grayish white; frons with brown irrorations. Abdomen light gray, the base dorsally white. Fore wings grayish white; a large light brown spot on costa close to base; a small antemedial spot from which the line is fine, black, deeply outcurved, inbent to submedian, down bent below it, and in cell is followed by a brown spot; a medial spot on costa from which the postmedial fine, black, line is deeply outcurved, then deeply incurved below vein 3, and outbent toward tornus; a subterminal light brown, faint macular shade, somewhat irregular; similar terminal spots. Hind wings white terminally shaded with pale brown.

Expanse.—15 mm.

Habitat.—Baracoa, Cuba.

Type.—Cat. No. 23360, U.S.N.M.

NOLA FOLGONA, new species.

Female.—Palpi gray. Head white. Body gray; some white scaling at base of abdomen. Fore wings gray, sparsely irrorated with brown; a brown point on costa at base; antemedial inbent from costa near middle consisting of fuscous gray scales almost punctiform and with a distinct small dark spot in cell; postmedial punctiform, slightly outcurved around cell, faintly incurved from vein 3 to inner margin; subterminal dark streaks on interspaces; terminal dark points. Hind wings whitish at base becoming pale brownish gray outwardly. Hind wings below with the white more extended.

Expanse.—13 mm.

Habitat.—Santiago, Cuba.

Type.—Cat. No. 23361, U.S.N.M.

NOLA SANTAMARIA, new species.

Female.—Palpi and head white with a few black irrorations. Collar fuscous brown, the hind edge white. Thorax fuscous, the

patagia white with fuscous brown irrorations. Abdomen brownish with fine segmental white lines. Fore wings white irrorated with black; a black subbasal spot on costa with black points on either side; antemedial and medial spots on costa close together, a wavy black line from the former, slightly inbent, the latter with spots below it in cell; postmedial macular, black brown, with short black streaks on veins, curved around cell, broadly shaded on its inner side at cell and below it to inner margin with black brown; termen broadly shaded by black brown, the veins with black streaks cut by a fine white wavy subterminal line; cilia gray mottled with fuscous brown. Hind wings whitish gray, showing the markings of under side; the veins terminally somewhat darker. Fore wings below brownish gray. Hind wings below white; the costa irrorated with brown; a dark brown spot on discocellular; a brown postmedial line; a fine terminal brown line.

Expanse.—20 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23363, U.S.N.M.

The dark shading on inner side of postmedial line makes this species conspicuous even in worn specimens.

NOLA RUBESCENS, new species.

Female.—Palpi, head, collar, and thorax white irrorated with reddish brown. Abdomen gray with white segmental lines. Fore wings white irrorated with reddish brown; four large reddish brown costal spots from which blackish lines originate; base reddish brown; antemedial line fine, angular to just below cell, then obsolete; postmedial macular, evenly outcurved, down bent below vein 2, its inner edge broadly shaded with reddish brown; subterminal outbent on costa, then parallel with termen macular; termen reddish brown leaving a fine terminal white line; cilia gray cut by white scaling at veins. Hind wings fuscous gray; the basal half of costa white. Fore wings below fuscous gray the inner margin white. Hind wings below white, irrorated with brown chiefly on costa and termen.

Expanse.—16 mm.; expanse of male 12 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23364, U.S.N.M.

NOLA RECEDENS, new species.

Female.—Palpi light brown. Head, collar, and thorax grayish white with a few light brown irrorations. Abdomen gray. Fore wings grayish white; costal margin from base to postmedial line shaded with brownish gray; antemedial line black, wavyly dentate, interrupted, starting from subcostal, somewhat inbent below cell, preceded by a black point in cell, and three between cell and submedian, followed in cell by a brownish gray spot which suffuses with

costal shade; postmedial line black, punctiform, only slightly out-curved, and inbent at veins, vertical below vein 2, preceded throughout by a brownish gray shade; subterminal shade fuscous, oblique from costa, and twice inset; terminal black spots; cilia white with fuscous spots. Hind wings fuscous gray. Hind wings below white, costa with dark irrorations; a dark spot on discocellular; termen tinged with gray.

Expanse.—19 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23365, U.S.N.M.

NOLA CUBENSIS, new species.

Female.—Head, collar, and thorax white shaded with light reddish brown. Abdomen brownish. Fore wings white; costal margin to beyond middle and cell reddish brown; a geminate, black antemedial line, evenly outcurved and inbent to base of inner margin; a fine black medial line, well defined below cell where it is lunular; postmedial black, geminate, sinuously outbent from costa, curved across veins 4 and 3, and deeply inbent to vein 2, angled near the median line, and from there to inner margin it forms a slight outward curve; from the angle at vein 2 another black line is outcurved to near tornus, inbent on submedian with a slight outcurve below it; the subterminal is oblique from costa to near termen, inangled on vein 5, where a projecting line connects it with the outer postmedial line; it is then outcurved and is obsolescent below vein 3; some black scaling forms a vague terminal line. Hind wings whitish, the veins streaked with gray. Hind wings below white; some dark irrorations on costa; a vague postmedial, punctiform line; a faint discocellular mark.

Expanse.—18 mm.

Habitat.—Alto del Cedro; Baracoa, Cuba.

Type.—Cat. No. 23366, U.S.N.M.

Bears a strong resemblance to *Roeselia bifiliferata* Walker.

NOLA ELSA, new species.

Female.—Head, collar, and thorax white with a few brownish irrorations. Abdomen gray. Fore wings white with a few scattered dark irrorations; traces of antemedial and postmedial brownish lines; the raised tufts light brown, the outer spot surmounted by a triangular light brown costal spot; a faint subterminal line suffusing with two marginal series of short paired streaks. Hind wings whitish gray; a fine dark terminal line.

Expanse.—12 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23367, U.S.N.M.

The triangular costal spot is the most conspicuous character in determining this species.

NOLA TURBANA, new species.

Male.—Palpi white, some brown shading laterally. Head, collar and thorax white, shoulders brown. Abdomen light brown. Fore wings: A little more than the basal third white limited by a straight dark brown shade beyond which the wing is lighter brown; base of costal margin shaded with brown, except a white basal spot; fine white transverse lines on costal margin beyond middle; a black spot on discocellular; a fine black punctiform, postmedial line, deeply outcurved beyond cell. Hind wings whitish gray, becoming darker terminally; a dark line on discocellular. Fore wings below cell and vein 2 white, otherwise smoky gray. Hind wings below whitish gray; a round pale brown spot at end of cell.

Expanse.—12 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23368, U.S.N.M.

Near *Nola habrophyes* Dyar.

NOLA MARIA, new species.

Male.—Antennae with long pectinations. Head, collar, and thorax light gray. Abdomen brownish white. Fore wings light gray, with darker gray irrorations increasing terminally; lines ill defined, formed of irrorations; the antemedial outcurved, followed in cell by a black spot; a whitish tuft at end of cell; postmedial punctiform, inset from costa to vein 3, then inset to inner margin; some terminal dark spots, and terminal points on interspaces. Hind wings white, the cilia faintly tinged with brown. The underside without markings.

Expanse.—18 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23369, U.S.N.M.

NOLA LIMONA, new species.

Male.—Head, collar, thorax and base of abdomen white, palpi laterally dark brown; a transverse dark streak across middle of tegulae. Abdomen whitish gray. Forewings white with a few pale brown irrorations; traces of an antemedial, interrupted black line, followed by a small round pale brown spot in cell; postmedial curved around cell, almost vertical below vein 2, fine, black, barely defined on costal margin; a fine subterminal line outcurved below costa, inset at vein 5 and forming sagittate spots to inner margin; termen shaded with dark gray leaving a narrow terminal white line with black points on veins; basal half of cilia with gray spots. Hind wings white, the termen grayish. Forewings below gray, the inner margin white. Hind wings below white, the costal margin and apex gray, the inner margin white. Hind wings below white, the costal

margin and apex gray irrorated with dark brown; the termen narrowly grayish.

Expanse.—16 mm.

Habitat.—Banana River, Costa Rica, Cayuga, Guatemala.

Type.—Cat. No. 23370, U.S.N.M.

NOLA YEGUA, new species.

Female.—Palpi white laterally shaded with brown. Head, collar, and thorax white, the collar with some dark brown irrorations. Abdomen whitish with gray segmental shading. Forewings dull white with a few scattered dark scales; costal edge with dark brown spots; traces of a very fine antemedial line, inbent below cell; the raised tufts shaded with dark brown; a larger dark spot on costal margin medially. The postmedial line finely outcurved beyond cell, straight from vein 2 to inner margin, black-brown, partly punctiform; an irregular subterminal pale brown shade; termen shaded with very pale brown; indistinct terminal brownish points. Hind wings whitish at base, becoming pale grayish brown terminally. Wings below without markings except dark costal points on forewing.

Expanse.—17 mm.; male 14 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23371, U.S.N.M.

ROESELIA INGA, new species.

Male.—Head, collar, and thorax silvery white; palpi brown. Abdomen gray. Forewings silvery white; basal fourth of costa black; a large medial dark brown spot on costa, suffusing with a smaller spot in cell, all edged with black brown; from end of cell at vein 3 a fuscous vertical line to inner margin; a wavy subterminal brownish shade, preceded and followed on costa by a dark point; termen faintly tinged with gray. Hind wings whitish, the apex grayish, narrowing to anal angle. Forewings below fuscous gray. Hind wings below white with brown irrorations on costa; the apex grayish.

Expanse.—18 mm.

Habitat.—Carabaya, Peru.

Type.—Cat. No. 23373, U.S.N.M.

ROESELIA TRIAS, new species.

Male.—Palpi brown tipped with white. Head, collar, and thorax white with a few dark irrorations. Abdomen silvery gray. Forewings silky whitish gray; a black brown antemedial line, slightly outcurved from subcostal to submedian; a V-shaped medial spot on costa continuing as an outbent line across cell, angled at vein 3, and inbent to inner margin, followed by a white line on discocellular; postmedial fine, black, deeply outbent along costa from medial spot,

angled, thicker and obliquely down bent to vein 4, where it is fine, deeply incurved, and close to medial line from vein 3 to inner margin; a wavy and interrupted dark subterminal line; a fine dark terminal line. Hind wings white; a faint brownish postmedial line, and a finer terminal line. Fore wings below silky gray brown. Hind wings below white; a dark spot on discocellular; a dark postmedial line and fine terminal line; some dark irrorations on costa.

Expanse.—23 mm.

Habitat.—Carabaya, Peru.

Type.—Cat. No. 23374, U. S. N. M.

Family NOCTUIDAE.

PROTAGROTIS VENIPICTA, new species.

Female.—Palpi black. Head and collar fuscous brown, the former mottled with ochereous hairs on vertex, the latter deeply fringed behind with ochereous. Thorax steel black with dark brown shading in front. Abdomen black brown above, underneath black mottled with white. Fore wings dark brown, the lines fuscous brown, the veins steel gray irrorated with blueish white; a subbasal line shaded on either side with ochereous on costa; antemedial line very fine, outbent on costa, incurved in cell, vertical below it, preceded by an ochereous shade on costa; a faint round ochereous orbicular spot; reniform very indistinct, paler brown with a few orange scales; postmedial outcurved below costa and inbent to inner margin, almost punctiform, geminate, preceded from vein 3 to inner margin by a straight dark line; some ochereous shading on postmedial below costa; subterminal close to postmedial consisting of black spots between the veins; a fine terminal black line. The wings are iridescent, so the dark shadings seem to suffuse. Hind wings fuscous brown. Fore wings below fuscous with a fringe of long fine downturned hairs on costa; cilia brown with fuscous shading. Hind wings below fuscous gray, the apical half above vein 4 whitish with dark postmedial and subterminal lines; a dark discal point; termen narrowly whitish.

Expanse.—35 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23375, U. S. N. M.

ERIOPYGA CARNEITINCTA, new species.

Male.—Head, collar, thorax, and legs grayish clay color, the palpi laterally fuscous. Abdomen above dull fuscous; anal tufts and long lateral tufts brownish ocher. Fore wings silky lilacine gray thinly irrorated with black; costal margin to postmedial, end of cell, and an incurved shade from termen below apex to vein 3 reddish brown; reniform indistinct, pale reddish brown with a small fuscous

gray spot at origin of veins 3 and 4; antemedial black points on veins; postmedial outangled on costa then slightly inbent to inner margin consisting of black points on veins, inwardly white edged on veins 2, 3, 4; termen shaded with brown; black terminal points on interspaces. Hind wings fuscous gray, the veins darker. Wings below whitish; costal margins pale flesh color with darker irrorations; dark discal points and a punctiform postmedial line; terminal black points; the disk of fore wings shaded with fuscous gray.

Expanse.—35 mm.

Habitat.—Purulha, Guatemala.

Type.—Cat. No. 23376, U.S.N.M.

HYDROECIODES MARCONA, new species.

Female.—Head and thorax black. Collar fuscous brown fringed behind with light brown tipped hairs. Abdomen fuscous brown with transverse black shades and irrorated with some gray scales. Fore wings dark silky brown, the medial space and termen shaded with fuscous; lines fine, black, the basal and antemedial lines preceded by slightly paler brown shading; the postmedial outcurved, lunular, the lunules filled in with paler brown; the subterminal line dentate. Orbicular and reniform white, the orbicular containing a cinnamon brown spot, the reniform which is medially constricted containing a cinnamon brown line. Hind wings fuscous. Wings below fuscous, the hind wings with some whitish shading below cell and along inner margin; a black streak on discocellular; a black medial and fainter postmedial line.

Expanse.—35 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23377, U.S.N.M.

HYDROECIODES RITARIA, new species.

Female.—Palpi dark gray above, ocherous below. Head, collar, and thorax purplish brown. Abdomen fuscous brown. Fore wings dark red, the extreme costa and veins, also postmedial shades from veins 2-5, grayish black; base of wing bright yellow crossed by a lunular red subbasal line; antemedial line fuscous, lunular, preceded by some yellow scales on costa and below cell; a vague dark medial line; postmedial line dark, wavy, very slightly outcurved; a subterminal series of black points, followed by yellow scaling, chiefly from vein 4 to costa; orbicular a small round yellow spot; reniform yellow irrorated with red and edged below with white; cilia fuscous brown. Hind wings dark silky brown, the cilia pale.

Expanse.—28 mm.

Habitat.—Volcan de Santa Maria, Guatemala; Orizaba, Mexico.

Type.—Cat. No. 23378, U.S.N.M.

CIRPHIS VELVA, new species.

Male.—Head, collar, and thorax grayish purple; the patagia dorsally mottled with pale reddish. Abdomen grayish; anal tufts yellowish. Fore wings: Costal margin grayish purple with black irrorations; inner margin, a shade below end of cell and between veins 2 and 3, where it is joined by an oblique shade from termen below vein 7, also grayish purple with black irrorations; cell, below it basally, and postmedial space otherwise mottled yellow and red; termen reddish suffused with grayish purple; a small white streak on median at veins 3 and 4; postmedial black points on veins; terminal black points on interspaces; cilia iridescent reddish or gray; cilia on inner margin white. Hind wings thinly scaled, white. Fore wings below roseate white, the termen and costa lilacine gray with black irrorations; a black point on costa before apex; terminal black points.

Expanse.—33 mm.

Habitat.—Chejel, Guatemala.

Type.—Cat. No. 23379, U.S.N.M.

Near *C. pyrastis* Hampson.

CIRPHIS MACOYA, new species.

Male.—Palpi, head, collar, and thorax ochereous gray. Abdomen whitish gray with black irrorations; the last two segments grayer dorsally; anal tufts ochereous yellow. Fore wings ochreous gray with scattered irrorations; the cell, a streak below it, intervenal streaks and either side of submedian, also veins beyond cell finely edged with pale reddish brown; the termen with grayish suffusions at tornus and from above vein 4 to vein 7; a fine black streak in cell along median terminating in a black point at discocellular; a large black spot between veins 3 and 5 at cell; postmedial black points on veins, and terminal black points on interspaces. Hind wings white, terminal black points except at anal angle. Fore wings below ochereous white; a black point on costa before apex; black terminal points, more conspicuous on hind wing.

Expanse.—35 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23380, U.S.N.M.

Near *Cirphis jaliscana* Schaus.

CIRPHIS CHEJELA, new species.

Male.—Palpi purplish gray. Frons brown with a darker transverse shade. Vertex, collar, and thorax lilacine gray; a dark transverse line on collar; a few black irrorations on patagia. Abdomen ochereous white, the subdorsal hairs on basal half white. Fore wings: The veins, a streak on costal margin, and one between median and

submedian, white finely edged with pale brown; fine brown streaks edged with white in cell, below median, above submedian and between veins from cell; a faint oblique whitish shade from termen below apex to vein 5; the brown intervenal lines beyond cell partly darker; a black point in end of cell close to discocellular at vein 5; postmedial black points on veins 2 and 5; terminal black points on interspaces; cilia light brown tipped with white. Hind wings thinly scaled, white. Fore wings below whitish, the costa tinged with ochereous and irrorated with black; a fuscous streak below costa from before end of cell to some indistinct postmedial points; terminal black points.

Expanse.—36 mm.

Habitat.—Chejel, Guatemala.

Type.—Cat. No. 23381, U.S.N.M.

Near *C. multilinea* Walker.

TRACHEA? MANCILLA, new species.

Female.—Palpi and head brown. Collar brown fringed with white. Thorax brown with large white patches on patagia. Abdomen above dark grayish brown shaded with white at base; whitish segmental lines; underneath whitish irrorated with brown. Fore wings chiefly dull fuscous brown broken into large spots finely edged with white; base narrowly white crossed by a black line; an antemedial greenish white fascia bifurcating on costa, and toward inner margin rather diffused below cell, followed in cell by a black orbicular spot; reniform large, linear, fuscous brown; postmedial almost vertical, expanding at vein 5, inclosing a small triangular spot and followed by two large spots, the upper one almost quadrate from vein 6 to costa, the lower spot from vein 5 to inner margin, outbent to near termen at vein 4, constricted at vein 2, then expanding to tornus; some fuscous brown subterminal spots; termen pale brown; terminal triangular dark brown spots; cilia long, dark gray, broadly tipped with white. Hind wings dark silky brown; outer half of cilia white. Hind wings below whitish thickly irrorated with brown; a dark discal spot and post medial line.

Expanse.—30 mm.

Habitat.—Guatemala City.

Type.—Cat. No. 23382, U.S.N.M.

HETEROCHROMA CELESTINA, new species.

Female.—Palpi ochereous streaked with brown laterally. Head, collar, and thorax ochereous brown; some black brown irrorations on tegulae. Abdomen ochereous irrorated with brown. Fore wings: Basal third lavender gray with some cinnamon shading on its outer edge, the base crossed by a vivid green dentate line edged with black from costa to submedian, followed below cell by some cinnamon shading; the basal space is followed by a narrow green fascia divided by a

fine wavy black brown line from subcostal vein to inner margin; medial space otherwise mostly light brown; a green lunule in cell and one below it edged with black on either side; the outer edging of cellular lunule forming an anular spot with brown center, which is again followed by a green line and a black streak which precedes the lunular whitish line on discocellular; a green spot on costa above discocellular; postmedial line fine, black, outcurved, and deeply lunular between the veins, inwardly shaded with lavender gray; the veins are broadly lavender gray to the postmedial line; terminal space brown before the subterminal line which is a vivid green, narrowing between veins 3 and 4 and expanding to tornus at inner margin; termen toward apex ocherous brown. Hind wings fuscous. The cilia whitish ocher. Wings below whitish, the disk of fore wings suffused with fuscous gray; hind wings with a large discal spot and a fine lunular brown line.

Expanse.—32 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23383, U.S.N.M.

HETEROCHOMA ROLLIA, new species.

Female.—Palpi fuscous brown fringed with reddish brown. Head, collar, and thorax purple mottled with fuscous brown; a transverse green line on collar; a green streak on patagia; green tips to posterior tufts on thorax. Abdomen bright reddish brown, shaded with pale greenish ocher at base. Body underneath dull red, the legs ocherous. Fore wings: Costa finely purple brown, and below it to subcostal pale green; base narrowly purple brown; subbasal paired black streaks outbent on costa, inbent below cell, and outset and inbent on inner margin, divided by green streaks, and outwardly scaled with green; antemedially the cell is brown, darker brown below cell to inner margin, followed in cell and on inner margin by small green dark edged spots, and below cell by a large green spot crossed by a dark line inwardly, and outwardly edged by a dark line, the costa above being crossed by two black lines; a black brown spot in end of cell crossed by two green lines, followed by a lilacine shade with a dark line on discocellular; a lilacine horizontal streak from cell above vein 2, expanding to close above vein 3 and not reaching termen; below vein 2 to terminal space the wing is fuscous brown, with oblique green lines on inner margin and a vertical postmedial green line from vein to submedian; postmedial space above vein 4, crossed by an outbent green line from vein 8 to vein 6, followed by another green shade suffusing with the green costal margin; a green lunule across vein 5; a subterminal fuscous brown shade outwardly edged by a white line, interrupted at vein 5, and from close above vein 4 to vein 3, by a pale cinnamon brown shade; termen pale green with a crenulate terminal black line with large white spots at tips of veins;

cilia yellow. Hind wings greenish white at base shading to brown on outer half; a wavy fuscous postmedial line; a terminal black line; cilia greenish white. Fore wings below silky brown, the inner margin greenish white; cilia pale green, tipped with black lunules on interspaces. Hind wings below greenish white, thickly irrorated with pale red except on base and inner margin; a large black discal spot; a minutely wavy fuscous postmedial line; a fine dark brown terminal line.

Expanse.—48 mm.

Habitat.—Huancabamba, Peru.

Type.—Cat. No. 23445, U.S.N.M.

PERIGEA BAALBA, new species.

Male.—Palpi laterally reddish brown fringed with gray in front. Head mottled brown and gray; a white shade between antennae. Collar reddish brown mottled with gray in front. Thorax gray white. Abdomen dark brown with a dorsal and segmental white lines. Fore wings grayish white; a little less than basal third on costa mottled dark and lighter brown, this color extending only a little below median vein and crossed by a gray basal line, limited by a fine black ante-medial line, oblique and curved below cell and upbent to a narrow oblique medial brown shade from costa, which crosses the end of cell to vein 3; reniform small mottled with brown, its inner edge pure white; a small brown spot on costa above reniform, from which a very indistinct postmedial line is deeply outbent, curved, and vertical below vein 6; the line is fine, black, and well defined from veins 6-4 where it is followed to termen by a reddish brown shade, with a shorter similar streak above and below it on termen; a small brown postmedial spot below veins 2 and 3; brown points on costa before apex; terminal black points, largest on brown portion. Hind wings fuscous gray, the veins mostly darker. Fore wings below: The costa and termen reddish, the former with alternate white and dark spots on outer half; inner margin white, disk grayish; cilia gray with reddish spots. Hind wings below: Costa and termen reddish, the latter broadly so at apex; wing otherwise white to termen before anal angle.

Expanse.—38 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23384, U.S.N.M.

PERIGEA PARISTA, new species.

Female.—Palpi dark brown fringed with white. Head, collar, and thorax dark gray with some reddish brown shading. Abdomen above dull gray, underneath with large sublateral brown spots. Fore tarsi fuscous with white rings; midtarsi paler with fainter rings; hind tarsi and tibiae whitish with brown irrorations. Forewings: Veins slaty gray, irrorated with white on terminal third; a pale red streak above subcostal irrorated with darker red; basal third of wing in cell, below

it, and on inner margin yellow mottled with red, limited by the antemedial dark red, lunular, line; a slaty gray shade across end of cell; medial space from cell to inner margin dark red shaded with slaty gray; reniform large, yellow, edged and crossed by red lines and with a small oblique white spot at vein 4; a yellow and red postmedial shade from vein 8 to vein 5 inwardly extended to reniform between veins 5 and 6; a similar incurved shade from vein 3 to inner margin; from vein 2 to vein 5 a slaty gray space inclosing a series of subterminal dark red streaks in interspaces; terminally the veins are edged with slaty gray, leaving reddish brown streaks on interspaces; cilia brownish iridescent with dark gray shading. Hind wings whitish shaded with smoky gray on outer margin. Forewings below with the disk slaty gray, the costal and inner margins pale; a whitish orbicular point and a larger reniform spot. Hind wings below white, the costal and outer margins irrorated with pale reddish brown; a faint postmedial line on costal margins of both wings.

Expanse.—29 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23385, U.S.N.M.

PHUPHENA PROSELYTA, new species.

Male.—Palpi and head dark brown with some white mottling. Collar and thorax cinnamon brown. Abdomen above fuscous, the dorsal tuft near base reddish brown. Body below whitish irrorated with brown; black, sublateral points; legs mottled brown and white. Forewings: Basal space and termen dark lilacine brown; a subbasal whitish line deeply inangled on median and again above submedian; basal space limited by a white antemedial line, outbent and slightly curved to middle of inner margin, its anterior part contiguous to a straight fuscous line, oblique to postmedial on inner margin; a reddish shade medially in cell, and an oblique white line on costa above it from which the postmedial is sharply outbent along costa, curved and vertical beyond cell and faintly incurved below vein 3, fine, dark reddish brown, outwardly edged with white, but tinged with pale brown opposite cell; a similar line on discocellular followed by pale reddish brown to postmedial; some dark subterminal spots, the largest below costa; a terminal line and base of cilia dark brown; cilia tipped with white at interspaces. Hind wings fuscous brown; cilia white. Forewings below fuscous brown; inner margin white; costal margin to postmedial line whitish ocher irrorated with brown. Hind wings below white, the costal and outer margins tinged with roseate and thickly irrorated with brown; a dark discal point; an irregular dark brown lunular postmedial line.

Expanse.—26 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23386, U.S.N.M.

OGDOCONTA GAMURA, new species.

Male.—Palpi, head, thorax, and fore wings purple brown with fine white irrorations. Abdomen with ochereous irrorations. Tarsi with yellowish white rings. Fore wings silky, the lines fine, darker brown; antemedial very indistinct, outcurved; orbicular and reniform very large, simply outlined; the postmedial forming part of outer edge of reniform, inbent and straight below it, followed by a straight inbent line from costa to inner margin; terminal space darker; a lunular subterminal shade and indistinct oblique terminal lines; cilia fuscous gray irrorated with white. Hind wings fuscous brown. Fore wings below fuscous gray, the veins terminally streaked with white; costal and outer margins irrorated with white. Hind wings below white thickly irrorated with purple brown; fine medial and postmedial lines, a faint subterminal shade; apex brown shaded.

Expanse.—30 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23387, U.S.N.M.

Nearest *O. pulverulenta* Schaus, but much darker.

GONOSTYGIA JACOPA, new species.

Female.—Head, collar, and thorax fuscous gray. Abdomen above fuscous, the basal segment whitish. Fore wings: Basal third ochereous green limited by a fine black dentate antemedial line and containing black streaks on costa, in cell, below cell, and on either side of submedian; medial space almost entirely suffused with black; a white orbicular point; a large white reniform spot; a fine black, wavy, postmedial line with ochereous green shading on either side; terminal space fuscous brown shaded with black subterminally; black and white spots on costa, some marginal greenish shading; terminal white points; cilia black, tipped with white at interspaces. Hind wings black shot with dark brown; a large opalescent white spot, not reaching base or inner margin, the costal and outer margins remaining broadly dark. Hind wings below black shot with brown, the white reniform spot larger than on upper side. Hind wings below with the white spot slightly larger.

Expanse.—19 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23388, U.S.N.M.

STIBADIUM MURISCA, new species.

Female.—Head, collar, and thorax gray mixed with dark-reddish brown hairs, the latter tipped with gray. Abdomen light gray. Fore wings light gray irrorated with brown, the veins whitish; a black spot at base; a black streak below cell to postmedial line; an antemedial small black spot on inner margin; traces of a pale line

almost medial, followed by an annular whitish buff line in cell; a darker gray spot in end of cell; reniform large, defined by whitish-buff lines, meeting behind and containing a pale line on discocellular; postmedial line faint, pale, outcurved beyond cell, vertical from vein 2 to inner margin; a large brown black spot on costa before apex; a submarginal whitish line; cilia ocherous white. Hind wings whitish, the veins and outer margin grayish brown. Fore wings below fuscous gray; costal and inner margins narrowly ocherous white; a white submarginal line. Hind wings below whitish.

Expanse.—46 mm.

Habitat.—Guatemala City.

Type.—Cat. No. 23389, U.S.N.M.

BAGISARA LULUA, new species.

Male.—Body and wings above ocherous, palpi whitish at base; frons partly whitish; thorax and base of abdomen below white; legs ocherous. Fore wings: Lines very fine, brownish, and indistinct; antemedial line almost vertical; postmedial line slightly outcurved, preceded by a faint brownish shade; subterminal line parallel with postmedial; termen faintly tinged with brown, and a narrow fuscous brown shade on termen and cilia from vein 4 to near tornus. Hind wings with some darker tinged hairs along inner margin. Wings below without markings.

Expanse.—38 mm.

Habitat.—Chejel, Guatemala.

Type.—Cat. No. 23390, U.S.N.M.

PARANGITIA MULATOR, new species.

Male.—Palpi pale buff in front, laterally gray. Head gray. Collar and thorax pale brown; some black irrorations on tegulae. Abdomen brown with dorsal and lateral fuscous shading anteriorly on each segment. Fore wings with the outer margins rounded, dark silky brown irrorated with buff between the lines, inner margin narrowly buff to postmedial line; an oblique black streak from base below cell; basal line inangled in cell, then outbent to antemedial which is wavy, defined by the pale mottling; postmedial black, macular, outcurved across an oblique dark brown shade from costa to termen; a fine black line on discocellular; apical space pale buff shading to brown at apex and with a short fuscous streak below vein 8; a pale brown, lunular, terminal line from vein 3 to tornus; cilia mostly black. Hind wings silky, dark purple brown; cilia with large black spots at interspaces, tipped with white. Wings below lighter brown, the disk of fore wing dark shaded, the hind wings with a dark outcurved postmedial line, and an interrupted dark terminal line.

Expanse.—22 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23391, U.S.N.M.

PARANGITIA CORMA, new species.

Male.—Palpi pale buff with some lateral fuscous shading. Head roseate buff with a medial black line. Collar, and thorax pale buff; a medial black brown line, a black point on tegulae, and the patagia tipped with black brown. Abdomen above light brown. Body underneath pale buff. Fore wings whitish buff, the space below cell to inner margin suffused with dark gray; the lines coarse, black; an oblique basal line from base of costa, outset in cell; antemedial line angled on subcostal, then down bent and not reaching inner margin, followed in cell by a small pale edged black spot; a medial line widened in cell, incurved below it around a pale buff spot, adjoining cell between veins 2 and 3, and not extending below vein 2; reniform large, irregular, black, finely edged with pale buff; postmedial irregular, reaching inner margin, outwardly followed by a broad black brown shade from veins 2-5; subterminal space shaded with gray, with some dark streaks beyond cell; termen with some pale brownish shading and curved fuscous lines opposite cell and at tornus; cilia mottled black and brown. Hind wings fuscous brown; cilia whitish buff. Hind wings below with a postmedial row of black points.

Expanse.—27 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23392, U.S.N.M.

ANGITIA ESTHERA, new species.

Female.—Body whitish ocher. Fore wings gray brown, the markings black; base narrowly whitish ocher limited by an outbent basal line; antemedial interrupted, thick, forming a spot on costa and one below cell, otherwise less distinct; medial line outcurved, distinct as a spot on costa, and inbent line from vein 2 to inner margin; reniform large, pale, outlined and crossed by a black line on basal side, and followed by a fuscous gray shade to postmedial; postmedial outcurved, wavy, distinct; terminal space from vein 2 to vein 10 fuscous, leaving the costa and a narrow apical space above vein 6 gray brown; below vein 2 a black spot edged with dark gray; an interrupted terminal black line not reaching apex; cilia pale grayish brown with black spots at tornus, from veins 3-5 and between veins 6 and 7. Hind wings fuscous brown, narrow terminal gray scaling; cilia pale grayish brown. Wings below with faint postmedial line and a fine black streak on discocellular of hind wing; disk of fore wing suffused with fuscous.

Expanse.—25 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23393, U.S.N.M.

ANGITIA CREPUSCULA, new species.

Female.—Head, collar, and thorax mottled ocherous gray and fuscous brown. Abdomen fuscous gray; a pale ocherous shade

dorsally on basal half divided by a black dorsal line; anal hairs light brown. Fore wings dark purplish gray; base below cell and inner margin narrowly brown; an irregular black antemedial line; a very irregular black postmedial, geminate, line, very indistinct on a broad fuscous brown shade from costa to vein 4, this shade out-bent to termen between veins 4 and 6; the apex whitish irrorated with gray, and with darker gray spots and a black streak above vein 7; a subterminal grayish line from vein 4 to inner margin beyond which the termen is dark; an interrupted terminal black line edged with grayish. Hind wings dark purplish brown; terminal triangular black spots; cilia ochereous white toward anal angle. Wings below brownish gray; a faint postmedial fuscous line, finely dentate on hind wing where there is also a black streak on discocellular; an interrupted terminal black line; cilia chequered ochereous white and fuscous brown.

Expanse.—25 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23394, U.S.N.M.

ANGITIA ANDREVIEW, new species.

Female.—Head, collar, and thorax pale lilacine ocher; some black brown scaling on vertex, collar, and patagia. Abdomen pale reddish brown above with segmental black scaling at base. Fore wings: Base lilacine ocher edged by a dentate black line; space beyond fuscous brown faintly tinged with purple, limited by the postmedial outcurved black line; an antemedial black line inwardly edged with pale ochereous; a medial black line on costa; the postmedial closely followed by some black scaling forming a spot on costa; a fuscous shade from postmedial at vein 5 to termen, the apical space above this and from postmedial lilacine ochereous irrorated with gray and pale reddish brown; the space from close below vein 5 to inner margin beyond postmedial mottled lilacine ochereous and gray, crossed by a dentate subterminal line; an interrupted terminal black line; cilia light brown chequered with black. Hind wings fuscous brown; an interrupted terminal black line; cilia light brown with some fuscous spots. Wings below with medial and postmedial curved lines.

Expanse.—27 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23395, U.S.N.M.

EUTELIA CHROMATICA, new species.

Male.—Head, collar, and thorax lilacine brown, the collar with two fine transverse white lines. Abdomen lilacine brown with dorsal dark brown spots and tufts; a V-shaped white mark on basal half and white segmental lines on three basal segments; lateral gray patches at base, and lateral white spots at middle. Throat

dark brown, also base of fore femora; fore and midtarsi white; hind tibiae and tarsi white with brown spots. Fore wings: An ocherous brown spot at base and a similar shade between cell and vein 1 to antemedial line, the costa and inner margin dark brown, crossed by an inbent subbasal white line; antemedial line partly double, the first line deeply outcurved, interrupted in cell, followed on costal margin by a broad white shade to middle of cell, where it narrows and is connected with reniform by a fine white line, and contains on costa three dark points; the second line apparent from middle of cell, inset on vein 1 toward the first line; median vein from middle of cell and veins 2-4 white to postmedial line; medial and postmedial space mostly brown shaded with red on costa and above vein 1, where there is also a white spot; inner margin medially cream color and red; a red streak below vein 7 at curve of postmedial line; reniform red, elongated, partly edged with white; postmedial line white, deeply outcurved from vein 7 and almost subterminal, preceded by a fine black line from vein 6 to inner margin; a white line expanding on costa starts above the origin of the postmedial and is oblique to vein 7, then dentate and wavy to vein 2, then continuing as a fuscous shade to inner margin; a subapical white line from costa to termen at vein 5, leaves a triangular reddish costal spot and an elongate terminal grayish brown spot from apex to vein 4; a terminal silvery white line with three small black spots between apex and vein 5; some white lines on veins and diagonally break the subterminal space between veins 7 and 4 into spots; terminal space from vein 4 to tornus fuscous brown broadest between veins 3 and 4 and inwardly edged with white; subterminally there is a broad ocherous shade from vein 3 to inner margin. Hind wings: Basal half white; outer half fuscous shaded with red at anal angle; a dentate whitish line from vein 3 to inner margin. Fore wings below white thickly shaded with fuscous, leaving a white streak on basal third of costa; the inner margin broadly white, and whitish shades on terminal third; a postmedial geminate black line, finely lunular beyond cell, and preceded between veins 6 and 8 by a roseate shade. Hind wings below white; a black spot at base of costa; a black discal point, termen broadly ocherous irrorated with brown, edged and crossed by finely wavy dark lines.

Expanse.—30 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23396, U.S.N.M.

CASANDRIA MYTHIAS, new species.

Male.—Palpi and head white; a fuscous line across vertex. Collar, and thorax white thinly irrorated with dark scales. Abdomen silvery white mottled with gray. Fore wings and cilia silvery

white with fine black markings; a broken basal line; a lunular, out-curved, antemedial line, geminate below cell; a medial lunular line diverging at median and forming an irregular quadrate linear spot across cell, and not extending above the subcostal; an irregular post-medial line from costa to vein 3, followed by a black streak on costa; subterminal black spots or streaks on interspaces, the spot below vein 2 larger; terminal black spots. Hind wings whitish, semi-hyaline, the veins terminally fuscous; the termen shaded with fuscous brown. Wings below white; terminal half of fore wing shaded with fuscous; some fuscous shading terminally on hind wing.

Expanse.—21 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23397, U.S.N.M.

Allied to *C. abzeusalis* Walker.

SAFIA SINALOA, new species.

Male.—Palpi dark reddish mottled with whitish ocher in front, and less so laterally. Frons yellow brown. Vertex dark reddish brown. Collar and thorax fuscous brown, the tips of patagia broadly steel black. Abdomen above reddish brown with fuscous segmental lines, the basal segment steel black; laterally and underneath fuscous mottled with gray. Tarsi steel black with ocherous white rings. Fore wings: Basal third broadly very dark brown with blue scaling at base, and on submedian; a fine blue line antemedially, shaded on either side with fuscous brown; a basal and subbasal ocherous spot on costa, and a similar spot at origin of blue line; traces of a subbasal ocherous line; costa is steel black on basal third; medial and post medial space to sub-terminal line ocherous; two medial straight lines, reddish brown across cell, fuscous on costa and below cell, outbent and fainter on inner margin; reniform incurved, defined by grayish lines, inwardly shaded with reddish outwardly with white; the postmedial line starts from a conspicuous fuscous brown spot on costa, widest proximally and cut by a white line which is apparently the origin of the postmedial line, which is otherwise black, very fine, and interrupted, wavy down bent to vein 3, then upbent to reniform, wavy down bent, and faintly incurved to inner margin; from vein 7 a broad black line slightly sinuous extends to inner margin, followed below vein 5 by a dark red shade, deeply dentate between veins 3 and 5, and from vein 3 to inner margin it is followed by an ocherous line; termen shaded with fuscous from below vein 5 to inner margin; a broken lunular sub-marginal black line, and a terminal dark broken line; terminal space above vein 5 to apex shaded with brown. Hind wings mostly bright brown; a fuscous line on discocellular edged with whitish; a finely dentate fuscous medial line; a dark red postmedial line from vein 6

to inner margin above angle, followed by a red line, deeply dentate on veins 2-5; a black shade on costa close to apex; an ochereous shade on termen below apex; terminal space from below vein 6 to anal angle fuscous irrorated with blue; a submarginal dark red broken line; followed by red shading on interspaces; cilia with fuscous shading toward anal angle. Wings below pale ochereous irrorated with black; medial and postmedial fuscous lines; black streaks divided by a white line on discocellular; an interrupted submarginal black line; a very fine terminal line; fore wings heavily shaded with black above tornus; hind wings with a very broad subterminal black shade.

Expanse.—47 mm.

Habitat.—Venadio, Sinaloa, Mexico.

Type.—Cat. 23398, U.S.N.M.

Received from Mr. B. Preston Clark.

EULEPIDOTIS AGLAE, new species.

Male.—Head, collar, thorax, and two basal segments of abdomen reddish brown; abdomen otherwise dull brown above, underneath grayish brown. Fore wings reddish brown; three steel blue lines from costa to inner margin, the antemedial and medial parallel, the postmedial almost upright, the first followed by a fine wavy fuscous line, the second and third preceded by a fuscous line, the postmedial line more widely separated on costa than on inner margin; a subterminal silver line not reaching costa or inner margin; marginal black spots forming a line from vein 2 to tornus; cilia gray. Hind wings: The costal margin fuscous to vein 6, otherwise reddish brown except base; streaks above and below cell and inner margin which are luteous gray; a postmedial black line from veins 2-5 followed by metallic blue from below vein 2 to below vein 4, the blue followed by numerous fine black lines to a marginal silver line; marginal silver spots above and below vein 4. Fore wings below brown shaded with two transverse black fasciae suffusing above the whitish inner margin. Hind wings below grayish at base, reddish brown on outer half; a black postmedial line on costa; terminal silver shading from vein 5 to anal angle.

Expanse.—32 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23399, U.S.N.M.

EULEPIDOTIS PUNCTILINEA, new species.

Male.—Head, collar, and thorax green; palpi entirely green with three dark points in front. Abdomen green, the last segments orange. Body below white faintly tinged with green. Fore wings green, the lines very fine, brownish with darker points on veins; the lines terminating in yellowish points on costa finely edged with black; antemedial and medial line oblique and parallel, the postmedial slightly

outcurved. Hind wings green except a large orange yellow space at apex, extending to vein 4, and similar streaks along inner margin and below cell to termen; a postmedial black streak from vein 5 to below vein 4, and a small black spot and white line at vein 2; cilia green tipped with brown at green portion of wing, otherwise orange. Wings below pale yellow green; some dark scales at lower end of cell on fore wing; terminal dark points on interspaces; cilia mostly brown.

Expanse.—33 mm.

Habitat.—Chejel, Guatemala.

Type.—Cat. No. 23400, U.S.N.M.

EULEPIDOTIS PHILOSIS, new species.

Male.—Head green; palpi white in front with transverse black lines or spots. Collar and thorax green. Abdomen green, the last segments orange. Body underneath white; fore coxae tinged with pale green; anal tuft orange. Fore wings green, the costa finely yellowish; the lines pale brown, widening on costa and there edged with black; the antemedial and medial lines outwardly oblique from costa and parallel; the postmedial almost upright; a black point on costa before apex; three black terminal points above veins 6, 7, 8; cilia green tipped with gray and brown. Hind wings: The apex and costal margin to near base orange; wing otherwise green, except an orange streak from near base below cell, expanding at anal angle, and uniting with an orange shade along inner margin; the green portion with a fine postmedial line terminating in a fuscous spot crossed by a gray line; an interrupted fine black terminal line, surmounted by three white points on green portion. Wings below pale yellow, the fore wings with medial and postmedial parallel brown lines, interrupted and not reaching below vein 2; hind wings tinged with pale green at base, and with a terminal dark brown line inwardly edged with white.

Expanse.—31 mm.

Habitat.—Chejel, Guatemala.

Type.—Cat. No. 23401, U.S.N.M.

THIACHROIA DEILINIAS, new species.

Male.—Palpi outwardly brown, inwardly white. Frons brown with lateral white lines. Vertex white with brown spots. Tegulae lilacine brown mottled with white. Thorax, abdomen, and wings creamy yellow; a few brown specks on abdomen. Body below white; brown irrorations on tibiae and tarsi. Fore wings: The costal margin and terminal third thinly irrorated with brown; lines fine, brown; an almost imperceptible wavy antemedial line; a medial and postmedial line outcurved on costa, then parallel and inbent; a black orbicular point; a fine oval line as reniform. Hind wings: A sub-basal

and medial line; some brown irrorations on outer half; a fine broken terminal line on both wings; cilia brown tipped with white. Wings below white; fine antemedial and postmedial lines; some subterminal points; fore wings heavily dusted with gray except on inner margin.

Expanse.—30 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23402, U.S.N.M.

EUCLYSTIS SUBTREMULA, new species.

Female.—Palpi dull brown tipped and irrorated with white. Antennae with white points on shaft. Head, collar, thorax, and abdomen dull brown, the latter faintly tinged with gray; white lateral lines on frons. Wings dull brown strongly tinged with iridescent bluish lilacine, the lines fine, darker, wavy; medial and postmedial lines distinct, fainter subterminal geminate lines; marginal black points on interspaces; termen crenulate with a dark line. Fore wings: Apex acute, outer margin produced at vein 4; a basal and antemedial line edged with white on costa. Hind wings produced at vein 4. Body below paler. Wings below light ochreous brown irrorated with fuscous the markings fine, black, partly interrupted by veins; antemedial black points in cell; the spot on hind wing followed by a short black streak.

Expanse.—44 mm.

Habitat.—Chejel; Cayuga, Guatemala.

Type.—Cat. No. 23403, U.S.N.M.

Most Cayuga specimens have a black spot at postmedial line of forewing below vein 2.

EUCLYSTIS CAYUGA, new species.

Female.—Head, collar, and thorax fuscous brown; palpi tipped with white; shaft of antennae with white points; lateral white lines on frons. Abdomen fuscous tinged with gray. Wings fuscous brown tinged with purple, the termen crenulate and produced at vein 4; a fine darker medial line; postmedial line very irregular, partly edged outwardly with white scaling, forming a distinct white line on costa of fore wing; a fuscous subterminal shade outwardly edged with light brown; marginal dark spots edged outwardly with white. Fore wings: A basal and an antemedial line partly irrorated with white; a large reniform spot defined by whitish scaling; termen and cilia from vein 5 to apex thickly irrorated with white and crossed by a lunular dark line, which is hardly perceptible below vein 4. Hind wings: Fuscous marginal spots outwardly edged with white and preceded by patches of white irrorations below vein 2, and above veins 4 and 5. Wings below lighter brown; antemedial black points in cell; a medial fuscous shade; postmedial line, black, irregular, out-

wardly edged with bluish white and followed on hind wing with similar scaling; a postmedial black shade closely followed by a fuscous gray shade; marginal black points and a dark terminal line; on hind wing the points are preceded by bluish white scaling.

Expanse.—40 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23404, U.S.N.M.

EUCYLSTIS POLYOPERAS, new species.

Male.—Palpi dark gray with a terminal black circle and white tip. Body dark olive brown. Wings silky olive brown, the lines very fine, black. Fore wings: Apex acute, the outer margin oblique and sinuous; a basal line on costa; antemedial punctiform in cell and there preceded by another black point; medial line inbent below cell, and below submedian; reniform narrowing and outbent in front, partly defined by yellowish scaling; postmedial outcurved beyond cell very irregular; a subterminal black line from costa to vein 5, geminate between 6 and 5, the space beyond whitish roseate; below vein 5 the subterminal consists of geminate spots between veins 5 and 4, and 4 and 3, below which it forms a geminate line to inner margin; marginal dark points; some black scaling at apex; cilia mostly whitish roseate. Hind wings produced and angled at vein 4; medial line nearly straight; postmedial line very irregular; subterminal dentate, geminate; marginal black points; cilia white from apex to vein 4, then partly mottled with gray. Fore wings below dull grayish brown; an orbicular black point in cell; medial line black not reaching margins, followed by a fuscous shade from a white discocellular streak to vein 2; postmedial fine, black, outcurved, wavy, outwardly edged with white; an interrupted subterminal black line irrorated with white and followed by black spots on interspaces; marginal black points; termen from vein 5 to tornus whitish. Hind wings below grayish thickly irrorated with brown; a discocellular black streak, containing a brown line; medial fine, black, followed by a fuscous shade; postmedial as on fore wing, also subterminal spots; the termen broadly whitish.

Expanse.—57 mm.

Habitat.—Venezuela.

Type.—Cat. No. 23405, U.S.N.M.

EUCYLSTIS MNYRA, new species.

Female.—Palpi dark brown with some white irrorations. Antennae dark brown with contiguous white points along shaft. Head, collar, thorax, and basal tufts on abdomen dark brown; frons triangular, a white line edging its two frontal sides. Abdomen fuscous gray shading to brown according to light. Wings dark reddish brown tinged with purple. Fore wings with the apex acute, faintly falcate,

the outer margin rounded; lines fine, slightly darker; basal and antemedial lines irregular, irrorated with white on costa, medial line more evenly curved; reniform faint, containing a few white scales; postmedial lunular and outcurved to vein 3, wavy below it; some outer dark spots and broad shading on costa; subterminal dark points on interspaces. Hind wings slightly angled at vein 4; faint antemedial and medial lines followed by some white irrorations; a subterminal dark shade from apex to anal angle followed by dark points on interspaces. Wings below light brown; medial and postmedial black wavy lines with a darker shade between them; black antemedial points in cell; faint subterminal shading and points on interspaces; cilia dark brown.

Expanse.—36 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23406, U.S.N.M.

Family SATURNIIDAE.

ROTHSCHILDIA MORANA, new species.

Male.—Frons roseate brown. Vertex brown. Collar white. Thorax cinnamon. Abdomen roseate brown; a transverse basal line and anus white; paired sublateral and ventral lines. Wings cinnamon. Fore wings with a deeply outcurved antemedial white line outwardly edged with black from costa to vein 3, and from vein 2 to inner margin, veins 2 and 3 being shortly streaked with white; a large triangular hyaline spot edged with white and fuscous, its outer angle interrupting the postmedial line; postmedial white inwardly edged with black, faintly incurved twice from costa to vein 5, well incurved above vein 2, and less so below it; a broad lilacine shade follows the line from vein 4 to inner margin, its outer edge dentate; a large roseate lilacine space on costa before apex cut by an irregular white line from costa to vein 6, and followed between veins 6 and 7 by a broken black spot; termen pale gray crossed by a fine subterminal black line, wavy more deeply incurved at middle of interspaces than at veins which are also black on termen. Hind wings: Two white lines from middle of costa, the inner line inbent to subcostal, then downbent to inner margin above tornus, both inwardly edged with black, the black forming a single line above vein 7; a large hyaline spot, almost oval, the side toward apex straight. The lilacine shading beyond postmedial more extended; fuscous brown streaks near anal angle; termen pale gray, the subterminal line wavy, preceded by small reddish spots toward apex, and black spots toward and at anal angle where they are much larger. Wings below similar but without any antemedial line.

Expanse.—118 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23407, U.S.N.M.

COPAXA SOPHRONIA, new species.

Male.—Palpi, head, and collar dark brown, the latter mottled with white hairs. Body olive bister with some brownish shading on thorax and the abdomen dorsally, chiefly toward base. Wings olive bister with a hyaline spot on discocellular surrounded by an orange annulus edged on either side with black. Fore wings: Costa to beyond middle dark brown mottled with white and reddish scaling; a dark antemedial line, outbent and angled on median vein, inangled below cell, outangled on submedian, preceded in cell by a dark shade; medial and postmedial space from veins 2-7 darker shaded, except the upper portion of cell; a dark postmedial shade from costa to vein 6, beyond which is a large paler space; a fine dark line from costa before apex, dentate to vein 2, then lunular to middle of inner margin, closely followed by a third brownish line from vein 7 to inner margin; termen darkly shaded from above vein 6 to apex, preceded on costa by a small white spot partly irrorated with black. Hind wings with the basal half slightly darker shaded; a dark medial line; a dentate postmedial dark shade, beyond it a fine deeply lunular dentate dark line, with short fuscous streaks in the proximal curves, and followed by coarse brownish lunules on interspaces. Wings below paler, grayer; a dark postmedial shade, vertical on fore wings, slightly curved on hind wings; hyaline spots outwardly edged with black and pale brown; a fine indistinct outer line with short black streaks on veins, and followed by a lunular brown shade, outwardly shaded with lilacine, chiefly on hind wings; fore wings with an antemedial dark line, toothed on costa, then outcurved and almost vertical to inner margin; hind wings with a black antemedial line, straight on costa, then forming two curves to inner margins.

Expanse.—115 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23408, U.S.N.M.

COPAXA JOINVILLEA, new species.

Male.—Fore wing falcate. Antennae and thorax reddish brown. Collar gray. Abdomen ochereous brown tinged with pale red dorsally. Fore wings reddish brown, the veins black, limited by an inbent thick black line from costa near apex to inner margin at three-fourths from base, this line preceded by a fine wavy black line; base of cell and costal margin fuscous irrorated with white, the costa otherwise narrowly gray; a black antemedial line, outcurved in cell and containing a small yellow spot close to subcostal, below cell inset, wavy, very slightly curved; a round hyaline spot at discocellular edge by a double black line divided by yellow; terminal space pale bister brown irrorated with gray and white, the margin narrowly orange brown. Hind wings reddish brown at base with an antemedial thick black line; medial space duller, with a smaller ocellus

than on fore wing; a deeply dentate postmedial black line inwardly edged with whitish followed by another parallel line, the space between them orange brown; terminal space as on fore wing. Underneath the wings are brown thickly irrorated with lilacine white to postmedial line, which is lunular on fore wing, more dentate on hind wing; the ocelli ringed with white; inner margin of fore wing clear orange brown; an antemedial incomplete black line; hind wing with a sinuous antemedial black line outwardly shaded with white, and some subterminal white shading towards anal angle.

Expanse.—93 mm.

Habitat.—Pirahy, Brazil.

Type.—Cat. No. 23409, U.S.N.M.

Allied to *C. canella* Walker, and looking very much like a small *C. simpson* Maassen.

ARSENURA UNDILINEA, new species.

Male.—Body dark gray. Fore wings to beyond cell pale gray with some brown irrorations; the long hairs at base of inner margin darker; an antemedial line, somewhat incurved but deeply outbent to middle of inner margin followed by a straighter light brown shade; a long curved yellow brown streak on discocellular, finely edged with dark brown; postmedial space to subterminal light grayish brown the subterminal parallel with margin, fuscous brown, lunular, followed by a lilacine gray space limited by a fine white line; termen narrowly olive brown, expanding from veins 4-7, with three prolonged dentate maroon lines on interspaces; an oblique black streak irrorated with white on costa before apex. Hind wings with the basal half dark gray with traces of a curved dark line from base to middle of inner margin; postmedial space darker than on fore wing; the subterminal line somewhat incurved from costa near apex to below vein 4, then angled and dentate to inner margin, followed by a gray shade its outer edge deeply lunular; termen olive brown; on both wings the subterminal line has whitish points on veins and is closely followed by a gray line darker than the lilacine gray space it crosses. Wings below dull brownish gray with darker straight postmedial brown shades followed by a similar shade, outangled on hind wing; a dark gray subterminal and similar marginal shade.

Expanse.—120 mm.

Habitat.—Avangarez, Costa Rica.

Type.—Cat. No. 23409, U.S.N.M.

Allied to *A. championi* Druce.

AUTOMERIS MACPHAILI, new species.

Male.—Body, collar, and thorax dark brown. Abdomen red. Body below red, the tarsi brownish. Fore wings pale brownish ocher; an indistinct pale yellowish antemedial line; a faint grayish

shade about discocellular defined by some black points; a fine black postmedial line, faint from costa near apex to vein 7, then very distinct to inner margin; a faint pale subterminal shade from vein 5 to inner margin; cilia partly streaked with brown. Hind wings bright yellow to the postmedial line; base and inner margin along yellow space red; a large ocellus broadly circled with black, dark purplish gray becoming paler toward the inner black spot, the latter heavily marked with white; postmedial line evenly curved black, followed by a broader fuscous line; termen the same shade as fore wing. Wings below reddish; faint dark postmedial straight lines; a large spot on fore wing, gray, edged with black and containing a white point; a white point on discocellular of hind wing.

Expanse.—95 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23411, U.S.N.M.

Named after Doctor MacPhail, the popular and greatly loved head of the Quirigua Hospital, whose assistance enabled me to obtain many new species at Quirigua.

PHRICODIA JORGENSENI, new species.

Male.—Body black mottled thinly with yellow hairs. Antennae yellow. Wings mottled pale ochereous and brown. Fore wings: The base narrowly black; lines fine, black, minutely wavy; the antemedial slightly outcurved on costa, then vertical, the postmedial slightly outcurved on costa, then a little inbent; a small black spot on discocellular; termen somewhat paler, narrowly at apex, broadly opposite cell. Hind wings: A fine short black line on discocellular; a postmedial fuscous shade. Wings below evenly colored with only very faint dark lines on discocellulars.

Expanse—90 mm.

Habitat.—La Junta, Argentina.

Type.—Cat. No. 23412.

Received through the kindness of Don Pedro Jorgensen

ORMISCODES PARALLELA, new species.

Male.—Palpi fuscous gray, the head, collar, and thorax a little paler. Abdomen above black with segmental orange lines. Fore wings ochereous gray, darkest on terminal third; cilia on inner margin and lines fuscous gray; antemedial and postmedial lines thick, parallel, the postmedial very indistinct and slightly curved on costal margin; a black discal point; an irregular subterminal, narrow, fuscous shade. Hind wings grayish brown suffused with fuscous; a broad, black postmedial line and indistinct subterminal shade; some ochereous scaling at base. Wings below brownish gray; fore wings with a faint fuscous shade from apex to inner margin at two-thirds from

base; hind wings with a darker postmedial shade preceded by a broad whitish gray shade; a dark subterminal shade.

Expanse.—105 mm.

Habitat.—Joinville, southeastern Brazil.

Type.—Cat. No. 23415, U.S.N.M.

ORMISCODES PANAMENSIS, new species.

Female.—Head, body below, and base of abdomen reddish brown. Collar and thorax grayish purple. Abdomen above orange banded with black, partly concealed by the long yellow hairs. Fore wings grayish purple; a curved antemedial whitish lilacine shade, and a similar faintly sinuous postmedial shade; a fine black line on the oblique discocellulars; termen whitish lilacine, very narrowly so at apex and tornus. Hind wings whitish lilacine with some pale reddish shading at base; a broad subterminal grayish purple shade, leaving a shade before it and the termen more distinctly lilacine; cilia dark. Wings below brownish, the termen lilacine; a faintly paler postmedial shade; a broad darker subterminal shade on hind wings partly crossed by a pale shade.

Expanse.—98 mm.

Habitat.—Panama.

Type.—Cat. No. 23413, U.S.N.M.

ORMISCODES DENTIMACULATA, new species.

Male.—Palpi dark brown. Frons pale brown. Vertex, collar, and thorax dark brown with some ochereous white hairs. Abdomen above orange with transverse black bands. Body below ochereous, the legs dark brown. Fore wings pale ochereous, thickly irrorated with brown except on terminal space, before which there is a darker brown postmedial shade diffusely encroaching on the pale terminal space; medially on costa a large brown, triangular spot edged with black and then whitish; this spot is deeply indentate on the proximal side and has three short projecting lines on the distal side. Hind wings brownish with fuscous brown postmedial and subterminal shades, the space between the two lines also the termen ochereous thickly irrorated with brown. Wings below pale yellowish ocher with faint postmedial and subterminal fuscous shades.

Expanse.—80 mm.

Habitat.—Brazil.

Type.—Cat. No. 23414, U.S.N.M.

DIRPIHA NINFA, new species.

Male.—Palpi, head, and antennae orange brown. Collar and thorax fuscous brown with some white hairs laterally on patagia. Abdomen orange with black segmental lines above; no lateral line. Fore wings: Basal third of costa whitish streaked with gray, followed by a roseate white shade from middle of costa, oblique, curved to below vein 2

and suffusing with a similar shade adjoining the postmedial line from vein 5 to inner margin; a large dark brown space below cell from base to middle of inner margin, this dark space having its anterior edge somewhat rounded, its outer edge oblique, slightly inset on submedian vein; a small dark gray shade in end of cell, and a similar shade below discocellular; a broad dark brown streak at discocellular, edged with roseate white; a large grayish brown space on costa from above end of cell to postmedial line crossed by a fuscous shade from costa to vein 5; postmedial defined by the pale shading on inner side, and a broad fuscous brown shade on outer side expanding to tornus; a black brown spot on costa at apex, edged with whitish; termen mostly brown with a dentate subterminal pale roseate line from vein 5 to tornus; cilia brown with white spots at veins. Hind wings roseate, more deeply colored at base; a thick black medial line, preceded by a thick black streak on discocellular; a broad fuscous subterminal shade; the veins on outer half streaked with brown. Fore wings below pale roseate gray, the basal half shaded with ochreous; a fine dark line on discocellular and a distinct postmedial line. Hind wings below shaded with pale brown; a straight medial line; a dentate subterminal line.

Expanse.—52 mm.

Habitat.—Jalapa, Mexico.

Type.—Cat. No. 23417, U.S.N.M.

Closely allied to *D. rosea* Druce.

DIRPHIA TUSINA, new species.

Male.—Head and collar dark brown. Thorax and base of abdomen black-brown with a few yellowish hairs. Abdomen above orange with transverse black bands; a lateral black line, a sublateral white line with black points. Abdomen below deep rose color. Thorax below brown, the legs fuscous brown. Fore wings roseate brown; a black point on base of costa; a large fuscous brown space below cell from base to middle of inner margin limited by black lunules mottled with orange scales; two small lunules in cell; medial space more roseate; a large black spot somewhat triangular suffusing with the discocellular line; a black postmedial line outbent on costa, angled on vein 7, then slightly incurved to inner margin, consisting chiefly of thick lunules mottled with orange scales; a small brown shade on costa at apex. Hind wing purple red to postmedial line, paler beyond it and on termen; a large round black spot at and beyond cell, touching the postmedial line, which is broad and black; a broad subterminal fuscous shade. Wings below roseate; fore wings with the discocellular broadly black and a black postmedial line; hind wings with a straight dark medial line and a curved black line on discocellular.

Expanse.—61 mm.

Habitat.—Tuis, Costa Rica.

Type.—Cat. No. 23418, U.S.N.M.

Belongs to the *D. rosea* group.

DIRPHIA PLACIDA, new species.

Male.—Palpi black fringed with reddish brown. Frons reddish brown. Vertex, collar, and thorax dark brown. Abdomen above deep orange with black segmental lines; a lateral black line and a sub-lateral white line with black points. Body below orange, the legs dark brown; fore legs black fringed with white; hind tarsi white with black rings. Fore wings pale brownish gray; a large dark brown space on basal half of inner margin, its anterior edge straight below cell, its outer edge oblique edged by three black lunules; some smaller faint black lunules antemedially across cell; a large brown spot beyond cell inwardly edged by a black line on discocellular; a brown spot on costa at apex, irregularly triangular and edged with white; a straight broken black line from below the apical spot to inner margin, mostly lunular, but straight from vein 2 to inner margin; a faint subterminal whitish shade; cilia pale with dark brown spots at interspaces. Hind wings brownish, darkest along inner margin; a fuscous line and shade at discocellular; a black postmedial line; a fuscous brown subterminal shade; the space following the postmedial and termen paler; cilia with smaller brown spots. Wings below whitish ochereous, the veins brown; fore wings with a dark discocellular line and a fine straight post-medial line outcurved to apex; hind wings with a wavy dark post-medial line and an irregular postmedial line.

Expanse.—64 mm.

Habitat.—St. Jean, French Guiana.

Type.—Cat. No. 23419, U.S.N.M.

HYLESIA DYAREX, new species.

Male.—Head ochereous. Collar and thorax brown. Abdomen dark yellow. Fore wings whitish clay color at base, limited by a fine dark antemedial line which joins the postmedial on inner margin; a fuscous streak from base of cell to near middle of inner margin; beyond the antemedial line the space from vein 4 to termen and inner margin is slightly darker; the space above vein 4 to costa and termen dark purplish gray; the fine dark discocellular line broadly edged with whitish clay color. Hind wings whitish gray; a fine dark streak on discocellular; some dull yellowish scaling at base and along inner margin.

Expanse.—45 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23420, U.S.N.M.

The apex of fore wing produced and falcate.

HYLESIA TINTUREX, new species.

Male.—Palpi and frons brown. Thorax ochereous brown. Abdomen ochereous yellow. Thorax below and legs brownish gray, a small yellow tuft at base of fore tarsi. Wings dull roseate lilacine. Fore wings: A faint whitish antemedial line, vertical to median vein, slightly incurved and outbent below cell; a dark streak on discocellular; a postmedial dark line almost vertical; termen irregularly paler. Hind wings darker shaded along inner margin and on discocellular; a postmedial broad line and termen paler. Hind wings below with a broad dark medial line.

Expanse.—34 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23421, U.S.N.M.

Apex of fore wing not produced.

HYLESIA CHIREX, new species.

Male.—Frons reddish. Vertex reddish brown. Collar and thorax lilacine brown. Abdomen above thickly clothed with dark yellow hairs and with black segmental lines, underneath reddish brown. Tarsi cinnamon. Wings dull roseate lilacine with darker lines. Fore wings: An oblique medial line suffusing on inner margin with the vertical postmedial line, a dark line on discocellular; a wavy, faintly paler subterminal shade. Hind wings: A straight postmedial line, a faintly wavy darker postmedial shade. Wings below similar in color; fore wings with a darker postmedial shade and a subterminal dentate darker shade; hind wings with the postmedial line broader and from nearer apex; a straight subterminal shade.

Expanse.—40 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23422, U.S.N.M.

The apex of forewing slightly produced and rounded.

HYLESIA CROEX, new species.

Male.—Head and thorax dark gray. Abdomen brownish yellow above, underneath dark gray. Fore tibiae fringed with ochereous, the fore tarsi dark gray. Wings rather thinly scaled, dull gray, the lines whitish gray. Fore wings: Antemedial vertical, somewhat sinuous, postmedial broadest on costa faintly inbent from vein 6 to inner margin; a pale shade at apex; a similar shade outbent from vein 6 to termen at vein 3, then broadly along termen to tornus; a dark shade on discocellular. Hind wings: A broad postmedial line; the termen broadly pale; a small dark shade on discocellular.

Expanse.—35 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23423, U.S.N.M.

Apex of forewing not produced.

Family CERATOCAMPIDAE.

ADELOCEPHALA NETTIA, new species.

Male.—Head lilacine pink with pale yellow hairs at base of antennae. Collar and patagia lilacine gray, the thorax dorsally pale yellow. Abdomen above pale red. Body underneath whitish. Fore wings: Basal third of costa and cell purple, below cell and vein 2 lilacine, shading to whitish lilacine on inner margin, and termen: an orange spot in cell with dark striae preceded by a fuscous purple shade, and followed by a large round similar spot containing a white point; the costa above this spot reddish orange; from vein 4 to costa and apex a large triangular yellow space crossed by dark striae, the terminal lilacine space adjoining with its edge lunular; some fine, indistinct, fuscous striae on the lilacine portions of wing. Hind wings yellow; costal margin purplish red; a purplish red space below cell from base not reaching termen and leaving the inner margin narrowly yellow. Wings below pale yellow; fore wings with the costa brownish gray to near apex; purple shading at end of cell with a black spot on discocellular; termen above vein 3 broadly dull lilacine, narrowing to a point at apex.

Expanse.—52 mm.

Habitat.—Joinville, Southeastern Brazil.

Type.—Cat. No. 23416, U.S.N.M.

Family NOTODONTIDAE.

NYSTALEA SCARRA, new species.

Female.—Palpi ochereous gray irrorated with brown. Head and collar dull fuscous brown, with grayish tufts at base of antennae. Thorax whitish gray. Abdomen dull dark gray, the basal segment ochereous white with a dorsal black tuft tipped with whitish gray. Fore wings whitish gray; a black line at base below cell to subbasal fuscous brown line, which is geminate somewhat outbent from costa across cell, then single and inbent; costal margin broadly tinged with brown to antemedial, which is close to middle of wing; this line is fuscous brown, geminate, vertical, and sinuous to vein 2, then lunular to inner margin, the line starting from deep black spots on costa, the inner line with black points on veins; some short black streaks and points precede the line; some brownish shading on discocellular and some black scaling behind; an outcurved faint brown shade, darker on costa and with a black spot below vein 2; the veins beyond cell streaked with black to a geminate fine line close beyond post-medial; this line is fuscous brown, almost vertical, and is closely followed by a narrow brown shade; veins 3-6 with white and black points where crossed by this shade; a subterminal black spot between veins 4 and 5 and an interrupted short black line from vein 2 to

tornus; a submarginal wavy brown line from vein 8 to vein 4; large terminal black spots on interspaces from veins 2-8; the termen broadly shaded with pale brown from vein 4 to costa. Hind wings gray brown; cilia white.

Expanse.—45 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23441, U.S.N.M.

ANTIOPHA MODICA, new species.

Male.—Palpi fuscous brown, tipped with white. Frons black-brown with lateral whitish hairs. Vertex, collar, and thorax brownish mottled with roseate ocher hair. Abdomen above dull brown, the terminal segments mottled with white; underneath white. Fore wings whitish thickly irrorated with ocherous brown, the veins remaining finely white; lines fuscous, very indistinct; antemedial wavy, vertical, followed by a small indistinct fuscous spot close below subcostal; postmedial outcurved and inbent to submedian fold, then vertical; small terminal dark brown spots above and below vein 2. Hind wings dull brown. Fore wings below brown, paler on margins; cilia brown with white points at veins. Hind wings below brownish gray, the costa narrowly white.

Expanse.—40 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23437, U.S.N.M.

EUSTEMA OPACA, new species.

Male.—Head and legs fuscous brown. Collar ocherous yellow. Thorax dark purplish brown, mottled dorsally and posteriorly with ocherous yellow hairs. Abdomen dark purplish brown, the last segment, segmental lines on terminal half, and lateral tufts ocherous yellow. Wings dark purplish brown, the veins finely black. Fore wings with a darker shade beyond discocellular and a postmedial line slightly outbent and curved to vein 4, then slightly inbent to inner margin. Wings below silky gray brown, the veins finely black.

Expanse.—50 mm.

Habitat.—Nova Friburgo, Brazil.

Type.—Cat. No. 23453, U.S.N.M.

HIPPIA GRACITA, new species.

Male.—Antennae ciliated with short scaling above on basal half. Palpi brown irrorated with white. Head, collar, and thorax mottled dark brown and gray; patagia lichen gray. Abdomen above dull gray with a black dorsal shade at base; underneath whitish. Fore wings gray; costal margin to beyond middle shaded with brown, terminally broadly white, with pale grayish shading between veins 9-11 and above vein 11; an outcurved subbasal black line; ante-

medial geminate, fuscous, lunular; an oblique dark streak on discocellular and a white line from it anteriorly to the white costal space; postmedial defined by black points and faint lunules, also geminate, traceable only from vein 5, followed by black and white points and streaks on veins; a large triangular brown black shade below white portion of costa; a submarginal wavy dark brown line from vein 7 to vein 2, and black spots below vein 2; a lunular marginal line and a fine terminal line, both dark brown; two black subapical points on white costa; cilia mottled grayish brown and fuscous, a black shade on inner margin before antemedial line, and a small similar shade at cell between veins 2 and 3. Hind wings fuscous, the base and inner margin shaded with ochreous; cilia mostly white. Fore wings below gray, the margins whitish; marginal black spots on interspaces; a terminal black line. Hind wings below white, the termen faintly shaded with fuscous.

Expanse.—39 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23438, U.S.N.M.

PEROARA DISCOVATA, new species.

Male.—Palpi brown tipped with white. Head, collar, and thorax brownish gray, a whitish shade across collar; patagia with lateral white tufts. Fore wings thickly irrorated with dark grayish brown, darkest at base, a short white streak at base below cell; traces of an outcurved antemedial line, defined by a pale shade on proximal side; an oblique brown line on discocellular edged with white, more broadly below subcostal and acuminate toward apex; a fine postmedial line outwardly shaded with white, followed by dark brown streaks, broad and coalescing from vein 6 to costa, fine above veins 4 and 5; from vein 4 to inner margin irregular dark brown spots outwardly edged by the subterminal white line; above vein 4 to costa the white line is more extended, less linear; termen narrowly grayish brown with a white line preceding a terminal dark brown line cut by the white tips of veins; cilia ochreous tipped with white. Hind wings whitish, the veins and inner margin pale ochreous; the outer margin broadly fuscous gray. Wings below white, the costa of fore wing with some smoky shading.

Expanse.—37 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23440, U.S.N.M.

Very similar to *P. sylvestris* Schaus from French Guiana, but the genitalia are quite distinct. In *discovata* the anellus is larger with its lateral hooklike projections longer and stouter; the aedoeagus is stouter and the strongly chitinized projections from the costa of the harpes (elements of the transtilla) are much stouter, a trifle shorter

and markedly though irregularly toothed. In *sylvestris* the latter are long, rather slender, and smooth. The entire genitalia is somewhat smaller and less robust in *sylvestris* than in *discovata*. Beautiful slides of the two species have been prepared by Mr. Carl Heinrich.

GOPHA ? PRAXIA, new species.

Male.—Antennae with long pectinations not reaching tips. Palpi long, obliquely ascending the third joint downbent, one-third the length of second joint, both deeply fringed below, chocolate brown. Head and collar dark brown mottled with white, the collar tipped with white. Thorax dark purple, the patagia fringed with brown and ocherous. Abdomen silky brown, the anal tuft and small dorsal tuft at base black-brown. Fore wings dark dull purple brown, with lighter brown shading on inner margin just above submedian antemedially, and postmedially at veins 2-4; a gray antemedial line edged with dark brown, wavy and somewhat interrupted, outbent to within cell, then inbent to inner margin; a white spot on discocellular, with a short white upbent line projecting from it proximally, followed by a fuscous brown spot with similar smaller spots above it in a line toward apex; postmedial white points on veins, which are also minutely irrorated with white to subterminal line; four white points on costa toward apex; subterminal dark brown lunules outwardly edged with white; a terminal dark line with white points on veins. Hind wings fuscous brown shaded with whitish toward base and on costal margin; a fuscous spot and a few white scales at anal angle. Fore wings below gray brown, the costa at base and inner margin whitish. Hind wings below white, the termen shaded with brown, widely at apex, rapidly diminishing to vein 3, then very narrow at angle.

Expanse.—25 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23439, U.S.N.M.

DICENTRIA CLARITA, new species.

Male.—Head and thorax below lilacine brown. Collar outwardly and patagia in front light brown; thorax and collar dorsally fuscous and dark brown, the patagia grayish behind, irrorated with black and brown. Abdomen above brown mottled at base with dark brown and black, anal segment ocherous white. Fore wings ocherous white; a fine brown line starting from a small antemedial spot on costa, deeply outbent, indentate in cell, interrupted above median, indicated by clusters of scales above and below submedian; an olive brown streak below cell from base to medial line, edged at base by a black line; the medial line also very fine, inangled below cell, and more deeply on submedian; a fine curved brown line at discocellular followed by a dark olive gray shade, narrowing and

extending as a line below vein 5 to termen; a similar line above vein 5, a gray shade below vein 4 not reaching termen, vein 5 dark brown; veins 4, 6, and 7 white; gray streaks to termen above vein 6 and below vein 7; an outbent double postmedial fine brown line on costal margin; a double gray and fuscous postmedial lunule below vein 2, and above it an oblique black and gray line to termen above vein 3; black terminal streaks on veins 2 and 3; cilia on outer half of inner margin reddish brown; cilia on outer margin white, with fine dark streaks at veins 5 to 7, and black spots at other veins; brown shading on termen and cilia on interspaces from submedian to vein 4. Hind wings white with brown shading on costa and at anal angle. Wings below white; fore wings with brown shading on costa, the cilia with dark spots; hind wings with a brown spot on cilia at anal angle.

Expanse.—47 mm.

Habitat.—Nova Friburgo, Brazil.

Type.—Cat. No. 23450, U.S.N.M.

DISPHRAGIS BOCHICA, new species.

Male.—Palpi laterally black, in front brown with a few white scales. Head, collar, and thorax dark brown; some white scales on vertex and patagia; the collar edged with white behind; vertex suffused with black. Abdomen fuscous brown. Body below creamy white. Fore wings dark brown shaded with fuscous between the fine black basal and antemedial lines, the latter geminate with two superposed white points on the inner line; black shading at end of cell, and from cell to postmedial line between veins 2 and 6; a fine velvety black line on discocellular edged with light brown; the postmedial fine, black, lunular, outbent on costa with two superposed white points, closely followed by a fainter fuscous line marked by distinct white points on veins and a short white line on inner margin; an irregular row of subterminal fuscous spots; the veins beyond postmedial line black irrorated with white and ending in white terminal points on a terminal black line; cilia light brown with some fuscous mottling at veins. Hind wings fuscous, somewhat whitish gray in disk; costal margin light brown with some whitish irrorations; a black medial line on costa; a subterminal black line from costa to vein 6, outwardly edged with white. Fore wing below fuscous, the termen and inner margin whitish, the costa more narrowly so and with small black costal points beyond a faint black postmedial line. Hind wings below white, the costal margin with long white and brown cilia.

Expanse.—31 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23424, U.S.N.M.

Allied to *D. proba* Schaus.

DISPHRAGIS STARIA, new species.

Female.—Palpi fuscous brown, fringed with gray. Head mottled brown and gray. Collar and thorax light reddish brown with white shading laterally on patagia. Abdomen fuscous gray; a large black circular line on two last segments inclosing reddish scaling dorsally. Fore wings: The base white crossed by two reddish brown subbasal lines; antemedial space and cell dull steel gray; antemedial line geminate, black, broken in places, shaded with reddish brown on costa and filled in with the same color from cell to inner margin; a dark streak on discocellular inwardly edged with white; a reddish brown spot on costa above discocellular, and similar shading beyond cell, at base of veins 3 and 4 and streaks on veins 3 and 2; an oblique gray streak from cell below vein 2 to near tornus; postmedial geminate, black, outbent on costa, vertical opposite cell and filled in with reddish brown, incurved and lunular from vein 4 to inner margin, partly obsolescent; a large gray shade beyond postmedial from costa to vein 4, and a white shade between veins 4 and 3, and narrower gray shading from below vein 3; the gray space opposite cell is outwardly shaded with fuscous, with a lunular edging; termen whitish irrorated with reddish brown more thickly so toward apex and at tornus; the veins terminally white heavily irrorated with black; a terminal reddish brown line interrupted by veins; cilia white with black spots at veins. Hind wings fuscous gray; an interrupted terminal black line; cilia white with dark shading at veins. Wings below dark gray, the cilia as above.

Expanse.—45 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23444, U.S.N.M.

CHADISRA CHORISTA, new species.

Male.—Palpi brown, broadly fringed with white irrorated with brown. Frons dark brown with some white scaling. Vertex and collar cinnamon brown. Thorax and terminal segments of abdomen white thinly irrorated with black; base of abdomen whitish, medially fuscous gray; underneath white. Fore wings white irrorated with gray; brown spots along costal margin; an antemedial fine black line shaded on either side with white sinuous and almost vertical; a small spot in cell and a streak on discocellular white finely edged with gray; postmedial fine, black, almost vertical from vein 7 to vein 4, then slightly inbent, forming a lunule on each interspace, followed by some fuscous brown shading chiefly between veins 5 and 4, and from vein 3 to inner margin; the shading between veins 2 and 3 very broad and crossed by a horizontal black line; a subterminal whitish shade; a fine black marginal line, forming large lunules from vein 5 to tornus; cilia white spotted with gray brown at veins. Hind

wings whitish at base, the termen broadly fuscous; cilia white shaded with black at anal angle. Fore wings below fuscous; inner margin white but not reaching tornus; outer margin white, broadly from vein 3 to tornus; costa reddish brown with white spots on distal half.

Expanse.—38 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23442, U.S.N.M.

NAPREPA PALLESCENS, new species.

Male.—Palpi and head dark brown irrorated with ocherous; collar and patagia whitish ocher, the thorax mottled posteriorly with dark brown. Abdomen whitish ocher with the anal hairs and broad transverse bands dorsally fuscous brown except on last segment. Fore wings whitish ocher; a sub-basal brown point on costa and one below cell; an antemedial point on costa; a small dark brown shade in cell followed by a small pale brown linear and egg shaped spot on discocellular; an outcurved pale brown line to vein 4, slightly outset on vein 4, then as a thick black line inbent to tuft on inner margin; a fine double lunular line beyond postmedial, vertical from costa to vein 3, then inbent and suffusing with the black line on inner margin; a black point before this line between veins 3 and 4; a pale lilacine shade above and below median vein expanding from below vein 2 to vein 4, extending beyond the lines below vein 2; a pale reddish brown shade above vein 4 to termen below costa, and similar shades on termen between veins 3 and 4, and subterminally below vein 3; an irregular submarginal dark line irrorated with black from vein 7 to vein 3; dark terminal points on either side of veins; cilia dark brown on interspaces. Hind wings suffused with dark brown, the costa whitish ocher, also the cilia; a black spot near inner margin above anal angle. Wings below whitish, the veins brown; an interrupted postmedial brown line; brown shading in cell, below, and beyond it on forewing; a brown line above anal angle on hind wing.

Expanse.—72 mm.

Habitat.—Joinville, Southeastern Brazil.

Type.—Cat. No. 23446, U.S.N.M.

HAPIGIA DOREMA, new species.

Male.—Palpi, legs, and abdomen below yellow brown. Head and collar dark purple brown with some white scales. Thorax and abdomen above dull yellow. Tarsi with white rings. Fore wings dull yellow; a fine sub-basal reddish line across costa and cell; a similar antemedial small spot on costa, a minute spot above median, and a larger spot above submedian; a fine lunular reddish line medially from cell to inner margin, where it is preceded by a fuscous spot; postmedial line fine, straight, inbent from vein 8 to below vein 2, then down bent, reddish, narrowly edged on inner side with white,

and crossing a broad reddish shade from vein 2 to inner margin, also followed by some faint grayish shades; terminal space finely irrorated with red; subterminal dark streaks obliquely outbent from black points below veins; costa finely dark reddish; a round silver spot in cell, followed by a much larger silver spot around discocellular, containing some irregular fine red lines; some gray and white shading at apex preceded by a silver lunule between veins 7 and 8, a small spot above it, and a still smaller one just below vein 7. Hind wings white. Wings below white the cilia of forewing reddish brown.

Expanse.—63 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23443, U.S.N.M.

Family LIMACODIDAE.

PEROLA JORGENSENI, new species.

Male.—Palpi gray, shaded with fuscous in front. Head and collar light reddish brown. Thorax brownish clay color, the patagia tipped with reddish brown and gray. Abdomen with dorsal light reddish brown tufts. Fore wings brownish clay color tinged with lilacine and somewhat irridescent; a few scattered black irrorations, forming a small subterminal spot on vein 3; two postmedial, parallel fuscous lines slightly outcurved on costa, then slightly inbent to inner margin, and with fine black lines on veins. Hind wings luteous with a few scattered dark irrorations. Wings below luteous.

Expanse.—20 mm.

Habitat.—Formosa, Argentina.

Type.—Cat. No. 23425, U.S.N.M.

Received from Don Pedro Jorgensen.

Family COSSIDAE.

HEMIPECTRONA, new name.

New name for *Hemipecten* DYAR (Proc. U. S. Nat. Mus., vol. 29, 1905, p. 177) not Adams Reeves (1848).

HEMIPECTRONA JULIUS, new species.

Male.—Body and fore wings creamy white; tufts on vertex mottled with light brown and fuscous; a pale brown patch on patagia anteriorly; pale brown irrorations on thorax and abdomen dorsally. Fore wings long, the outer margin very oblique, the tornus rounded; grayish brown shading on costal and outer margins; a similar streak along vein 8 terminally; a broader shade from vein 7 terminally to vein 2; the inner margin broadly shaded with whitish ocher; medially in cell a large dark cinnamon brown spot, inwardly edged by a black line, its anterior edge rounded and broad, its posterior edge on outer side incurved and descending below cell, its proximal edge less incurved, making the spot greatly constricted behind and ter-

minating in a slight knob. Hind wings white, the fore wings below with traces of the inbent lines from termen below apex.

Expanse.—50 mm.

Habitat.—Nova Friburgo, Brazil.

Type.—Cat. No. 23448, U.S.N.M.

HEMIPECTRONA VINNEA, new species.

Male.—Body and fore wings creamy white; some pale brown mottling on vertex, collar, and thorax. Fore wings crossed by short and indistinct pale brown lines; a large round fuscous brown spot in cell; a small vertical streak below cell before middle; a short horizontal dark brown streak above inner margin antemedially; costal margin medially shaded with gray, beyond it shaded with brown; a postmedial gray line from vein 6 inbent and narrowing to submedian; finer marginal gray lines from vein 6 to near tornus at termen, and from vein 7 to vein 2. Hind wings white. Wings below white; fore wings with a large grayish spot irrorated behind with dark brown; costal margin striated with gray; traces of lines on terminal space.

Expanse.—37 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23449, U.S.N.M.

GIVIRA GNOMA, new species.

Male.—Head, collar, and thorax whitish gray. Abdomen dark gray. Basal half of inner margin from below cell dark chocolate brown, its outer edge oblique edged with white; space above it and beyond it roseate gray; some black points along costal margin; an oblique chocolate brown fascia from costa across discocellular to vein 4, somewhat constricted below subcostal vein; a broad postmedial brown shade, vertical from costa, outbent to tornus below vein 2; terminal space above vein 2 pale gray, shading to white along margin; a few dark gray striae on outer half of wing. Hind wings pale gray with some darker striae, and a dark shade medially below costa.

Expanse.—34 mm.

Habitat.—Joinville, Southeastern Brazil.

Type.—Cat. No. 23447, U.S.N.M.

Allied to *G. quadra* Schaus, which has a dark discal point and no oblique fascia from costa.

GIVIRA GUATA, new species.

Male.—Body lilacine brown, the collar darker with a fuscous shade in front; abdomen with faint fuscous segmental lines. Fore wings pale lilacine brown, slightly paler before an oblique brown

shade from the middle of costal margin to tornus; irregular transverse streaks between the veins, those below cell continuous to inner margin; the streaks very faint on costa. Hind wings pale brownish gray with slightly darker lines from costa to vein 2; inner margin broadly shaded with grayish brown, the lines hardly visible. Wings below almost the same; no oblique shade on fore wing; hind wings without darker shading on inner margin but a black streak along costa.

Expanse.—36 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23426, U.S.N.M.

GIVIRA MODISMA, new species.

Male.—Palpi and frons light brown, vertex fuscous brown, collar and thorax purple brown, all mottled with whitish hairs. Abdomen dorsally mottled red brown and yellowish, laterally dull gray, ventrally as above. Tibiae and tarsi with numerous dark rings. Fore wings purple brown, shading outwardly to dull purple, crossed by numerous fine broken lines of dull fuscous; costa somewhat paler with dark brown spots; inner margin narrowly fuscous gray; cilia pale at base, followed by a fine brown line, the tips mottled. Hind wings whitish yellow; veins and a few irrorations, pale brown; a dark streak from base below cell, expanding into a triangular fuscous space from vein 2 to anal angle terminally. Fore wings below brown, the costa with yellowish irrorations between the numerous brown spots. Hind wings below yellowish white with some fine pale irrorations chiefly on veins; dark brown streaks on costal margin.

Expanse.—38 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23427, U.S.N.M.

LENTAGENA PERFIDA, new species.

Male.—Palpi, head, collar, and thorax white, thickly mottled with reddish brown; the collar behind and patagia dorsally edged with fuscous brown. Abdomen whitish with fuscous segmental lines, and paired dorsal brown tufts on second and third segments; laterally with a few dark scales; ventrally with dark brown spots largest toward base. Fore wings: Costal margin pale brown with large fuscous spots edged with white; base brown, broken into spots by a white subbasal line and veins; a broad white antemedial shade evenly outcurved; a dark gray streak in cell medially below subcostal; inner margin white, mottled with brown and crossed by fuscous striae; postmedial space mostly gray, crossed by thick fuscous brown striae; a white and yellow streak on discocellular; veins from cell yellow brown; terminal space mottled gray and brown with some white mot-

tling near termen; a subterminal, very irregular, dull brown line edged with fuscous from vein 8 to inner margin, widest between veins 4 and 5 and veins 6 and 8; cilia dark brown with white spots at middle of interspaces. Hind wings smoky gray with faint darker striae; a white shade at base, and terminally before anal angle. Fore wings below mostly smoky gray, with darker striae and spots; costal margin white with numerous dark spots; termen mottled with white. Hind wings below white with numerous dark spots and thick striae, the latter suffusing somewhat postmedially, forming round white spots; a dark gray shade below cell.

Expanse.—29 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23428, U.S.N.M.

LENTAGENA EURECA, new species.

Male.—Palpi and throat fuscous brown. Frons dark gray, shading to dark brown on vertex. Collar whitish gray, shaded with fuscous in front. Thorax whitish gray, shaded with darker gray. Abdomen above dark gray, paler terminally, with fine fuscous segmental lines. Fore wings silky, grayish white, with some dark brown striae except on extreme costa; inner margin shaded with brown; a velvety dark brown spot from vein 2 to submedian, its inner edge straight, its outer edge rounded; from this spot to apex a fuscous gray shade expanding toward apex. Hind wings fuscous gray. Wings below fuscous gray, the inner margin of fore wings whitish with dark striae.

Expanse.—43 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23429, U.S.N.M.

LENTAGENA OPHELIA, new species.

Male.—Head, collar, and thorax white with brown irrorations. Abdomen whitish. Fore wings white with grayish transverse striae; inner margin with a few brown irrorations; a triangular fuscous brown spot on base of costal margin, not reaching the submedian, the longest side along costa, the shortest on basal side; a dark spot on discocellular, and a streak above it along costa. Hind wings white. Fore wings below without the basal spot. Hind wings below with a faint brownish shade from costa across discocellular.

Expanse.—35 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23430, U.S.N.M.

PHILANGLAUS BEATRIX, new species.

Male.—Palpi fuscous. Head, collar, and thorax white with some pale brown mottling. Abdomen dull gray; two dorsal dark spots near base. Fore wings white at base, limited by an oblique black

line from costa to submedian, and a finer outbent line from inner margin; wing otherwise white tinged with ochreous, crossed by fine fuscous brown striae; a dark oblique line from costa near apex to vein 6, where it is outbent and bifurcated on termen; darker streaks between veins 3 and 5 uniting the transverse striae. Hind wings whitish gray with faint darker striae. Fore wings below grayer with only the subapical streak and terminal striae.

Expanse.—34 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23431, U.S.N.M.

HYPOPTA VASSILIA, new species.

Male.—Palpi brown with pale tips. Head gray, mottled with a few brown hairs. Collar and thorax brownish roseate, mottled with white hairs. Abdomen above paler than thorax except a large dorsal tuft near base and segmental lines; underneath whitish. Thorax below and legs pale gray. Fore wings: Veins and cilia on inner margin whitish, especially veins 2 and 3, and median at end of cell, the space between these two veins pale gray with some dark brown spots; costa fuscous cut by white lines into elongated spots; space below cell and vein 2 brown, curved white lines forming two large spots above submedian, the inner margin being broken into small spots; above vein 3 the wing is dark gray, with three large brown spots, one beyond cell edged by an outcurved white line, which crosses it near base of veins 3-5, a second spot subterminally from above vein 3 to vein 5, almost round in shape, and the third from above vein 5 to just above vein 8; some terminal dark spots inwardly edged by an almost continuous white line. Hind wings fuscous, showing the terminal dark spot and postmedial fascia of the underside. Wings below fuscous gray, the fore wing showing the subterminal spots and marginal white line; the hind wing with a broad white shade below costa.

Expanse.—30 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23432, U.S.N.M.

HYPOPTA DELICATA, new species.

Male.—Palpi brown. Body gray with some brown shading on costa behind; a triangular fuscous gray shade on abdomen near base. Fore wings white tinged with gray below cell and on outer third; dark points between costal and subcostal veins, except at base and terminally; inner margin tinged with brownish yellow to just beyond middle, where there is a short brown streak above submedian and one below vein 2; some brown streaks on inner margin; paired terminal brown spots edged with white at veins. Hind wings white;

grayish spots at veins terminally extending on cilia. Fore wings below dark gray; cilia white on interspaces.

Expanse.—28 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23433, U.S.N.M.

HYFOPTA CLYMENE, new species.

Male.—Palpi and throat dark brown. Head and collar gray. Thorax whitish gray in front, otherwise shaded with brown and with fuscous brown streaks on patagia dorsally. Abdomen dull gray with fuscous segmental lines interrupted dorsally. Body below bone color. Fore wings: Costal margin pale buff with some black striae; base and medial space below cell to inner margin brown, with some fuscous lines on inner margin; a larger subbasal black spot on costa; an antemedial spot expanding on subcostal, somewhat interrupted in cell and forming a quadrate fuscous brown spot below cell; cell medially white; a postmedial fuscous brown narrow fascia, faintly inbent and expanding obliquely below vein 2, then very narrow on inner margin, outwardly shaded with white from below vein 3; outer third of wing slate gray between veins 2 and 4 crossed by some fuscous brown lines; above vein 4 the wing is pale buff, shading to white on termen; a subapical narrow fuscous fascia bifurcated on costa by a white spot; apex bister; some terminal dark streaks above veins 2, 3, 4. Hind wings dark gray, the costa whitish; markings of underside faintly discernible. Fore wings below cream color; the postmedial line not extending below vein 2; the subapical streak as above. Hind wings below white with dark striae; heavier striae on costal margin; terminal dark spots.

Expanse.—40 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23434, U.S.N.M.

HYFOPTA ALBIPUNCTA, new species.

Male.—Palpi brown. Frons whitish gray. Vertex, collar, and thorax roseate brown thickly mottled with white hairs. Abdomen roseate brown, the dorsum broadly gray to just beyond middle. Thorax below whitish gray, the fore legs pale brown outwardly edged with white. Fore wings pale brown, shading to whitish gray on terminal third; faint traces of darker striae; the inner margin fringed with white; a white spot at end of cell; paired dark points at tips of veins. Hind wings whitish gray, darker on margins; the striae very faint. Fore wings below brownish gray with faint traces of striae; inner margin white. Hind wings below white; dark spots on costa and terminally at veins.

Expanse.—25 mm.

Habitat.—Quirigua, Guatemala.

Type.—Cat. No. 23435, U.S.N.M.

COSSULA OMAIA, new species.

Male.—Palpi brown laterally, white in front. Head, collar, and shoulders white. Thorax purple brown. Abdomen above fuscous, the two last segments and venter white. Fore wings dark purple brown, shaded with reddish brown on inner margin, and with faint darker striae; some white scaling on costal margin; a fine black line from subcostal across middle of cell to submedian; some whitish scaling on either side of discocellular; a large terminal space from veins 2-8 olive gray, preceded by some white shading crossed by fine wavy brown lines, and a vertical black line from veins 3-5 ending in black points; on the olive gray space are some horizontal black brown markings; a streak along upper side of vein 2, expanding on termen; an irregular streak along vein 4, expanding on termen to vein 5; an irregular subterminal shade between veins 5 and 7. Hind wings fuscous brown. Underneath the margins of wings are broadly whitish. The wings are long and narrow, the termen very oblique.

Expanse.—70 mm.

Habitat.—Omai, British Guiana.

Type.—Cat. No. 23436, U.S.N.M.



Health - How to Live

It is well known that the human body is a machine, and like any machine it needs to be kept in good working order. The first step in this process is to get the most out of the food we eat. This means eating a diet that is rich in vitamins and minerals, and that is low in fat and sugar. The second step is to get enough exercise. This does not mean going to the gym every day, but it does mean getting up and moving around every day. The third step is to get enough sleep. This means going to bed at a regular time every night and getting up at the same time every morning. The fourth step is to avoid stress. This means taking time out every day to relax and do something that you enjoy. The fifth step is to avoid smoking and drinking alcohol. These things are bad for your health and can lead to many different diseases. The sixth step is to get regular check-ups from your doctor. This means going to the doctor every year for a physical examination and getting any necessary treatments. The seventh step is to avoid bad habits. This means not using drugs, not gambling, and not having too much sex. The eighth step is to stay positive. This means believing in yourself and your ability to overcome any difficulties that you may face. The ninth step is to take care of your teeth. This means brushing your teeth every day and getting regular dental check-ups. The tenth step is to take care of your eyes. This means wearing your glasses if you need them and getting regular eye exams. The eleventh step is to take care of your ears. This means getting regular ear exams and cleaning your ears. The twelfth step is to take care of your nose. This means blowing your nose when you have a cold and using saline nasal spray if you have allergies. The thirteenth step is to take care of your throat. This means drinking plenty of water and using lozenges if you have a sore throat. The fourteenth step is to take care of your skin. This means washing your face every day and using sunscreen when you are outdoors. The fifteenth step is to take care of your hair. This means washing your hair every day and using conditioner. The sixteenth step is to take care of your nails. This means washing your hands every time you use the toilet and keeping your nails clean and trimmed. The seventeenth step is to take care of your feet. This means wearing comfortable shoes and washing your feet every day. The eighteenth step is to take care of your hands. This means washing your hands every time you use the toilet and using hand sanitizer when you are out and about. The nineteenth step is to take care of your back. This means sitting at a desk for long periods of time and using an ergonomic chair. The twentieth step is to take care of your neck. This means using a neck brace if you have a neck problem and avoiding looking down at your phone for long periods of time. The twenty-first step is to take care of your shoulders. This means using a shoulder brace if you have a shoulder problem and avoiding carrying heavy bags. The twenty-second step is to take care of your wrists. This means using a wrist brace if you have a wrist problem and avoiding typing for long periods of time. The twenty-third step is to take care of your fingers. This means using a finger brace if you have a finger problem and avoiding using your fingers for long periods of time. The twenty-fourth step is to take care of your toes. This means wearing comfortable shoes and washing your feet every day. The twenty-fifth step is to take care of your mouth. This means brushing your teeth every day and using floss. The twenty-sixth step is to take care of your tongue. This means using a tongue scraper and avoiding eating sticky foods. The twenty-seventh step is to take care of your throat. This means drinking plenty of water and using lozenges if you have a sore throat. The twenty-eighth step is to take care of your chest. This means wearing a bra if you have a chest problem and avoiding carrying heavy bags. The twenty-ninth step is to take care of your stomach. This means eating a diet that is rich in fiber and avoiding eating too much. The thirtieth step is to take care of your intestines. This means eating a diet that is rich in fiber and avoiding eating too much. The thirty-first step is to take care of your bladder. This means drinking plenty of water and avoiding drinking too much alcohol. The thirty-second step is to take care of your kidneys. This means drinking plenty of water and avoiding eating too much salt. The thirty-third step is to take care of your lungs. This means avoiding smoking and drinking alcohol and using a nebulizer if you have a lung problem. The thirty-fourth step is to take care of your heart. This means eating a diet that is rich in healthy fats and avoiding eating too much. The thirty-fifth step is to take care of your blood vessels. This means eating a diet that is rich in healthy fats and avoiding eating too much. The thirty-sixth step is to take care of your brain. This means eating a diet that is rich in healthy fats and avoiding eating too much. The thirty-seventh step is to take care of your nerves. This means eating a diet that is rich in healthy fats and avoiding eating too much. The thirty-eighth step is to take care of your muscles. This means eating a diet that is rich in healthy fats and avoiding eating too much. The thirty-ninth step is to take care of your bones. This means eating a diet that is rich in healthy fats and avoiding eating too much. The fortieth step is to take care of your skin. This means washing your face every day and using sunscreen when you are outdoors. The forty-first step is to take care of your hair. This means washing your hair every day and using conditioner. The forty-second step is to take care of your nails. This means washing your hands every time you use the toilet and keeping your nails clean and trimmed. The forty-third step is to take care of your feet. This means wearing comfortable shoes and washing your feet every day. The forty-fourth step is to take care of your hands. This means washing your hands every time you use the toilet and using hand sanitizer when you are out and about. The forty-fifth step is to take care of your back. This means sitting at a desk for long periods of time and using an ergonomic chair. The forty-sixth step is to take care of your neck. This means using a neck brace if you have a neck problem and avoiding looking down at your phone for long periods of time. The forty-seventh step is to take care of your shoulders. This means using a shoulder brace if you have a shoulder problem and avoiding carrying heavy bags. The forty-eighth step is to take care of your wrists. This means using a wrist brace if you have a wrist problem and avoiding typing for long periods of time. The forty-ninth step is to take care of your fingers. This means using a finger brace if you have a finger problem and avoiding using your fingers for long periods of time. The fiftieth step is to take care of your toes. This means wearing comfortable shoes and washing your feet every day.

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