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V. On the Lepidoptera of the Amazons, collected by Dr. JAMES W. H. TRAIL, during the years 1873 to 1875. By ARTHUR GARDINER BUTLER, F.L.S., F.Z.S., &c.

[Read December 5th, 1877.]

## (Pl. III.)

## PART II.—SPHINGES AND BOMBYCES.

THE moths recorded in the present paper were, almost without exception, taken by Dr. Trail in the cabin of the steamer, into which they were attracted by light; and considering that in this manner no less than 166 species of *Sphinges* and *Bombyces* alone were obtained, it only shows how much may be done in this way by any collector who really gives his heart to the work.

Of the 166 species here enumerated, no less than 84 prove to be new to science, and so varied are they in structure that I have been compelled to erect 18 new genera to accommodate them; of these 23 new species, two of which were also new genera, have already been described and figured in "Illustrations of Typical Specimens of Lepidoptera Heterocera in the Collection of the British Museum. Part I.;" the remainder are described in the present communication.

## HETEROCERA.

## Family SPHINGIDÆ. AMBULICINÆ, Butler.

# AMBULYX, Walker.

## 1. Ambulyx strigilis.

Sphinx strigilis, Linnæus, Mant. Ins. i. p. 538; Drury, Ill. Exot. Ent. i. p. 62; pl. 28, fig. 4 (1770). Pará, 9th March, 1875.

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#### CHÆROCAMPINÆ, Grote.

PACHYLIA, Walker.

2. Pachylia ficus.

Sphinx ficus, Linnæus, Mus. Lud. Ulr. p. 353 Clerck's Icones, pl. 49, fig. 2 (1759).

Taken at light near Cadajaz, Rio Solimões, 20th December, 1874.

## SPHINGINÆ, Grote.

### PROTOPARCE, Burmeister.

3. Protoparce carolina.

Sphinx carolina, Linnæus, Mus. Lud. Ulr. p. 346; Drury, Ill. Exot. Ent. i. p. 52; pl. 25, fig. 1 (1770). Tunantins, 26th January, 1874.

This example, and others which we have from Southern America, are considerably darker than the northern specimens.

Mr. Trail says that his specimen was taken soon after emergence from the pupa.

#### PHRYXUS, Hübner.

4. Phryxus caicus.

*Sphinx caicus*, Cramer, Pap. Exot. ii. p. 42; pl. 125, fig. F. (1779).

At rest on a rock at Obydos, 5th February, 1874. One male in fine condition.

## Family CASTNIIDÆ.

#### CASTNIA, Fabricius.

## 5. Castnia mimica.

Castnia mimica, Felder, Reise der Nov. Lep. iv. pl. 79, fig. 4 (1874).

Coary, Rio Solimões, 16th October, 1874.

One example of this rare species in good condition.

## Family ZYGÆNIDÆ.

#### EUCHROMIINÆ, Butler.

#### HISTIGA, Walker.

6. Histiœa amazonica.

Histiæa amazonica, Butler, Journ. Linn. Soc. 1876, p. 362, n. 5.

Forest at Retenceio, Rio Purus, 8th October; Lago

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cerrado, Rio Juruá, in the forest, 30th October; Tabatinga, 30th November, 1874.

## MASTIGOCERA, Boisduval.

7. Mastigocera pusilla.

Mastigocera pusilla, Butler, Journ. Linn. Soc. 1876, p. 372, n. 2.

Tabatinga, 29th November; Rio Javary, 3rd December, 1874.

## LÆMOCHARIS, Herr.-Sch.

 Læmocharis fenestrina. Læmocharis fenestrina, Butler, Journ. Linn. Soc. 1876, p. 383.
 Off Ilba Lagitóra, Bio Solimãog, 19th Lanuary, 1875.

Off Ilha Jacitára, Rio Solimões, 12th January, 1875.

## PSEUDOMYA, Hübner.

9. Pseudomya tenuis.

Pseudomya tenuis, Butler, Ill. Typ. Lep. Het. i. pl. 17, fig. 1.

Rapid of Porteira, Rio Trombetas, 2nd March, 1874.

## Cosmosoma, Hübner.

 Cosmosoma tyrrhene. Euchromia tyrrhene, Hübner, Samml. Exot. Schm. Zutr. figs. 483, 484. Marsh at Prainha, 17th December, 1873.

## DYCLADIA, Felder.

 Dycladia lacteata. Dycladia lacteata, Butler, Ill. Typ. Lep. Het. i. pl. 17, fig. 3. Rio Jutahi, 5th February, 1875.

 Dycladia varipes. Glaucopis (Phacusa) varipes, Walker, Lep. Het. i. p. 175. Manaos, 12th June, 1874.

## 13. Dycladia tenthredoides.

Ilipa tenthredoides, Walker, Lep. Het. vii. p. 1610. Rio Juruá, 7th November, 1874.

14. Dycladia militaris. Dycladia militaris, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 1. Silves, 19th April, 1874.

## MARISSA, Walker.

 Marissa eone. *Agerocha eone*, Hübner, Samml. Exot. Schm. Zutr. figs. 417, 418. Serpa, 13th February, 1875.

## HYDA, Walker.

16. Hyda xanthorhina. Eurata xanthorhina, Herrich-Schäffer, Auss. Schm. fig. 226. Prainha, 1st December, 1873. One damaged example taken by sweeping.

## HYELA, Walker.

17. Hyela astrifera. *Hyela astrifera*, Butler, Ill. Typ. Lep. Het. i. pl. 17, fig. 2. Braga, Rio Javary, 7th December, 1874.

#### EUNOMIINÆ, Butler.

#### COREMATURA, Butler.

 Corematura chrysogastra. Glaucopis chrysogastra, Perty, Delect. pl. 31, fig. 10.

Rio Madeira, 17th May, 1874.

#### SCHASIURA, Butler.

19. Schasiura mimica.

Schasiura mimica, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 6.

Barreiras das Araras, Rio Solimões, 16th January, 1874.

Taken by sweeping amongst maize.

## TRICHURA, Hübner.

20. Trichura aurifera.

Trichura aurifera, Butler, Journ. Linn. Soc. 1876, p. 405.

Lower Amazons.

No date or locality distinguishable on the envelope.

## ECDEMUS, Herr.-Sch.

21. Ecdemus hypoleucus?

Ecdemus hypoleucus, Herrich-Schäffer, Auss. Schm. fig. 420.

Rio Jutahi, 26th January, 1875.

The single example obtained differs from Herrich-Schäffer's figure in its clay-brown colouration; it may be distinct.

#### ANTICHLORINÆ, Butler.

#### PSEUDACLYTIA, Butler.

22. Pseudaclytia opponens.

Pampa opponens, Walker, Lep. Het. Suppl. i. p. 100.

Mauhes River, 2nd May; west bank of Rio Negro, 16th June; Rio Negro, 4th July; Rio Juruá, 24th October; Tunantins, 23rd November, 1874; Carvoreiro, Rio Negro, 18th January, 1875.

#### CERAMIDIA, Butler.

23. Ceramidia obscura.

Ceramidia obscura, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 5.

Forest near Sobral, Rio Purus, 17th September, 1874.

## Family ARCTIIDÆ.

CHARIDEINÆ, Butler.

## ACLYTIA, Hübner.

24. Aclytia halys.

Sphinx halys, Cramer, Pap. Exot. iv. pl. 357, fig. C.

Pupunha, Rio Juruá, 5th November, 1874; Boa Vista, Rio Jutahi, 1st and 5th February, 1875.

#### HELIURA, Butler.

Heliura gnoma, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 2.

Rio Padaniry, under the Equator, 26th June, 1874.

## 26. Heliura lamia.

Heliura lamia, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 3.

Rio Mauhes, 5° 30' S., 29th April; Tanaria, Rio Purus, 1st October, 1874.

#### METRIOPHYLE, Butler.

27. Metriophyle lacteinota.

Heliura lacteinota, Butler, Journ. Linn. Soc. 1876, p. 417.

Rio Purus, near Aruman, 8th September; Jurucua, Rio Purus, 24th September; Rio Juruá, 23rd October; Curimata, 30th October; Rio Juruá, 7th November; Gaviao, 10th November; Rio Juruá, 13th November, 1874.

This species much resembles *Heliura leneus*, but has the sexes alike as in *M. apicalis*.

#### ACRIDOPSIS, Butler.

28. Acridopsis marica.

Sphinx marica, Cramer, Pap. Exot. i. pl. 20, figs. F, G.

Gepatiny, Rio Purus, 29th September, 1874.

29. Acridopsis pusilla, n. sp.

Allied to the preceding, but much smaller and paler; the primaries tinted with pink at the base, the black spots smaller, the veins whitish; no tint of green in any of the wings; secondaries with a broader blackish outer border occupying nearly half the wing; tegulæ indistinctly whitish at the edges; hind margin of head carmine; abdomen brown with a large rosy ventral patch; wings below very similar to *A. marica*, but the secondaries with broader outer border: expanse 1 inch 1 line.

Braga, Rio Javary, 7th December, 1874.

The primaries above much resemble those of *Heliura* solicauda, Butler, Ill. Lep. Het. i. pl. 9, fig. 4.

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<sup>25.</sup> Heliura gnoma.

30. Acridopsis lucis, n. sp.

Intermediate in size between the two preceding, primaries as in *Heliura solicauda*, secondaries dull black with a bifid hyaline white spot near the base; the veins, basal area and costa of primaries and the borders of the thorax sandy yellow; hind margin of head carmine; abdomen brown, greyish below; centre of pectus whitish, coxæ rosy: expanse 1 inch 3 lines.

Rio Jutahi, 5th February, 1875.

This insect has somewhat the aspect of *Sphinx pierus* of Cramer's plate 367.

#### TELIONEURA, Felder.

31. Telioneura brevipennis.

Telioneura brevipennis, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 9.

Guajaratuba, Rio Purus, 11th September, 1874.

32. Telioneura glaucopis.

Telioneura glaucopis, Felder, Reise der Nov. Lep. iv. pl. 102, fig. 31. Rio Negro, 18th June; Rio Purus, near Aruman, 8th September; Jurucua, 24th September; Mamiva, 28th September; Uricuri, 2nd October; Curimatá, Rio Juruá, 30th October and 14th November, 1874.

#### AUTOMOLIS, Hübner.

33. Automolis zenzeroides.

Automolis zenzeroides, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 8.

Near Porto Salvo, Rio Juruá, 3rd October, 1874.

#### PIONIA, Walker.

34. Pionia notata, n. sp.

Primaries above black with steel-blue reflections; base of costal border ochreous; an abbreviated white band (ochreous on costa) across the end of the cell, and below it a small round sordid whitish spot; secondaries semihyaline white, greyish externally, blackish at apical border; body blue-black, sides of collar and tegulæ ochreous, abdomen brownish at base; wings below nearly as above, but the secondaries with a large blackish oblong costal patch, followed by a small ochreous spot; legs and sides of venter spotted with bright ochreous: expanse 1 inch.

Rio Jutahi, 3rd January, 1875.

BELEMNIA, Walker.

35. Belemnia crameri. Belemnia crameri, Butler, Ann. & Mag. Ser. 4,

vol. xv. p. 339. & Prainha, 17th November;  $\mathfrak{P}$  in a marshy spot at Prainha, 8th December, 1873.

## ANYCLES, Walker.

36. Anycles contenta. Euchromia (Dipænæ) contenta, Walker, Lep. Het. i. p. 258. Pará, 5th March, 1875.

37. Anycles rhodura.

Anycles rhodura, Butler, Journ. Linn. Soc. 1876, p. 425. Obudos in the forest 23rd March 1874

Obydos, in the forest, 23rd March, 1874.

#### EPANYCLES, Butler.

38. Epanycles imperialis. *Euchromia (Pampa) imperialis*, Walker, Lep. Het. i. p. 241.
Pupunhazinho, Rio Juruá, 8th November, 1874.

39. Epanycles obscura.

Aclytia obscura, Möschler, Stt. Ent. Zeit. 1872, Tom. xxxiii. p. 348.

*Epanycles stellifera*, Butler, Ill. Typ. Lep. Het. i. pl. 16, fig. 10.

Rio Jutahi, 5th February, 1875.

#### ANDROCHARTA, Felder.

40. Androcharta diversipennis. Euchromia (Hippola) diversipennis, Walker, Lep. Het. i. p. 225.
Pupunha, 5th November, 1874.

## 41. Androcharta claripennis, n. sp.

Nearly allied to A. parvipennis, but the primaries with hyaline spots almost as in A. stretchii, the interno-median spot only being divided into two; the secondaries rather larger and without the brown apical margin; metallic

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spots and carmine streaks quite as in *A. parvipennis*; anal clasps not so slender: expanse 1 inch 9 lines.

& Barreiras de Jutahi, 18th January, 1875.

## Episcepsis, Butler.

42. Episcepsis venata.

*Episcepsis venata*, Butler, Ill. Typ. Lep. Het. i. p. 49, pl. 16, fig. 7. Rio Jutahi, near Rio Curnem, 29th January, 1875.

## SCEPSIS, Walker.

43. Scepsis trifasciata.

Scepsis trifasciata, Butler, Ill. Typ. Lep. Het. i. p. 49, pl. 16, fig. 11. Jurucua, Rio Purus, 26th September, 1874.

## CTENUCHIINÆ, Butler.

#### EUAGRA, Walker.

44. Euagra coelestina.

Phalana calestina, Cramer, Pap. Exot. iv. p. 107, pl. 345, fig. G. (1782).

Lower Amazons.

The locality and date of capture were entirely obliterated on the envelope.

## EPIDESMA, Hübner.

45. Epidesma ursula.

Phalæna ursula, Cramer, Pap. Exot. iv. p. 107, pl. 345, fig. E. (1782).

Mamiva, Rio Purus, 28th September; Rio Sapo, 21st November, 1874; Rio Jutahi, 19th January, 1875.

## THEAGES, Walker.

46. Theages pellucida.
 *Phalæna pellucida*, Sepp, Surin. Vlind.
 Prainha, 6th December, 1873.

EUCEREON, Hübner.

47. Eucereon varium.

*Euchromia (Eucereon) varia*, Walker, Cat. Lep. Het. i. p. 266 (1854).

Eucereon varium, Butler, Ill. Typ. Lep. Het. i. p. 49; pl. 9, fig. 5 (1877).

Urucuri, Rio Purus, 2nd October; Pupunha, Rio Juruá, 1st November, 1874.

48. Eucereon sylvius.

Sphinx sylvius, Stoll. Pap. Exot. p. 65, pl. 14.

Pupunhazinho, Rio Juruá, 8th November, 1874; Barreira branca, Rio Jutahi, 3rd February, 1875.

49. Eucereon archias.

Sphinx archias, Stoll. Pap. Exot. p. 66, pl. 14, figs. 9, 10.

Rio Javary, 1st December, 1874.

50. Eucereon arenosum.

Eucereon arenosum, Butler, Ill. Typ. Lep. Het. i. p. 51; pl. 17, fig. 10 (1877). Jamiry, Rio Madeira, 28th May, 1874.

51. Eucereon reticulatum.

*Eucereon reticulatum*, Butler, Ill. Typ. Lep. Het. i. p. 50; pl. 17, fig. 9 (1877). Hyntanaham, Rio Purus, 27th September, 1874; Boa

Vista, Rio Jutahi, 1st February, 1875.

52. Eucereon rosa. Euchromia (Eucereon) rosa, Walker, Lep. Het. i. p. 271 (1854).
Paricatuba, Rio Purus, 11th October, 1874.

53. Eucereon complicatum. *Eucereon complicatum*, Butler, Ill. Typ. Lep. Het. i. p. 50; pl. 16, fig. 12 (1877). Rio Juruá, 26th October, 1874.

54. Eucereon marmoratum.

Eucereon marmoratum, Butler, Ill. Typ. Lep. Het. i. p. 50; pl. 16, fig. 4 (1877). Imla, below the Rapids of Porteira, Rio Trombetas,

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1st March; Rio Negro, 14th June; Ayrão, 3rd July; near Aruman, Rio Purus, 5th September; Guajara, 6th and 7th September; Pedroso, 25th September; Mamiva, 28th September; Mabidiry, 30th September; Mouth of Rio Sapo, 13th October; Curimata, Rio Juruá, 30th October; Pupunha, 1st and 5th November; Pupunhazinho, 8th November, 1874.

Mr. Trail took twenty examples of this species.

#### ATYPHOPSIS, n. gen.

Allied to *Eucereon*, but with the general aspect of *Cercopimorpha*; it differs structurally from *Eucereon* in the much more transverse discocellulars of secondaries, the third median and the true radial emitted together from a short footstalk. Type, *A. modesta*.

55. Atyphopsis modesta, n. sp.

Primaries pale silky greyish-brown, with black veins and fringe; secondaries pearly hyaline white, with grey veins and fringe; body above greyish-brown; head above, collar and three central segments of the abdomen ochreous, prothorax tinted with ochreous; anal segments blackish; pectus and under surface of legs white; palpi and upper surface of legs black: expanse 1 inch 1 line,

Boaventura, Rio Jutahi, 24th January; Santarem, 4th February, 1875.

#### LANGUCYS, n. gen.

Allied to *Glanycus*, but with the body thickly clothed with hair, projecting greatly in front of the costal margin of the primaries, the latter being inserted only just in front of the middle of the thorax, the extremely short and convex inner margin of the primaries, the greater length of the discoidal cell, the subcostal branches crowded up near to the costal margin, the median branches more widely separated, the longer secondaries with convex costal margin, short broad triangular discoidal cell with the branches of the subcostal well separated at their origins, and the radial further from the median branches. Type, *L. nigrorufus*.

56. Langueys nigrorufus.

Glanycus nigrorufus, Walker, Lep. Het. Suppl. i. p. 283 (1864).

Trombetas, 28th February, 1874.

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#### NERITOS, Walker.

57. Neritos psamas.

Phalana psamas, Cramer, Pap. Exot. iii. p. 72, pl. 234, G. (1782).

Rio Jutahi, near Rio Curnem, 29th January, 1875.

58. Neritos obscurata.

Q. Neritos obscurata, Butler, Ill. Typ. Lep. Het. i. p. 51, pl. 17, fig. 6 (1877).

 Prainha, 14th November, 1873; J. Rio Juruá, 31st October, 1874.

#### ELYSIUS, Walker.

59. Elysius optimus.

*Elysius optimus*, Butler, Ill. Typ. Lep. Het. i. p. 51, pl. 17, fig. 8 (1877).

Rio Juruá, 31st October, 1874.

This species is clearly allied to E. *ilus* of Cramer and apparently to E. *hermia*, which (notwithstanding my note in Journ. Linn. Soc. 1876, p. 432) appears to be allied to E. *ilus*.

#### AMMALO, Walker.

60. Ammalo chrysogaster. Halesidota chrysogaster, Walker, Lep. Het. Suppl. i. p. 312 (1864).

**♀.** Manaos, 10th June, 1874.

#### HALESIDOTA, Hübner.

61. Halesidota seruba.

Charidea seruba, Herrich-Schäffer, Auss. Schm. fig. 280.

Mamiva, Rio Purus, 28th September, 1874. This may be Sepp's *Phalæna citrina*.

62. Halesidota ænone, n. sp. (Pl. III. fig. 3.)

Primaries above semitransparent whity-brown, crossed by wavy grey lines much as in the preceding species, but with no oblique central line; a more or less marked blackish spot at the inferior extremity of the cell; secondaries hyaline white; thorax brown, abdomen creamy white; primaries below less strongly marked than above; body sordid white: expanse, 31 inch 2 lines; 91 inch 4 lines. Pedroso, Rio Purus, 25th September; Gepatiny, 29th September; Mabadiry, 30th September; Urucuri, 2nd October; Ilha cuxinara, Rio Solimões, 13th October; Rio Juruá, 31st October; Pupunha, 5th and 6th November; Prainha, 28th November; near Sta. Cruz, Rio Solimões, 9th December, 1874.

#### PHÆGOPTERA, Herr.-Sch.

63. Phægoptera subtilis, n. sp.

Allied to *P. breviuscula*; primaries chocolate-brown, darker towards the base and in the discoidal cell, sprinkled all over with whitish dots and with a distinct spot of the same colour at the end of the cell; secondaries semihyaline white, becoming ochreous towards the abdominal margin, a moderately broad greyish-brown border, very broad but indistinct at costal margin; thorax chocolatebrown; abdomen bright ochreous, with chocolate-brown anal segment; a row of four or five black spots on each side; primaries below greyer and less distinctly dotted than above, secondaries with a moderately broad brown costal border; body below brown, the sides and the centre of pectus bright ochreous: expanse 1 inch 9-11lines.

Rio Sapo, 13th and 14th December; Marapatá, Rio Negro, 29th December, 1874; Rio Jutahi, above Rio Curnem, 29th January, 1875.

#### ECPANTHERIA, Hübner.

64. Ecpantheria obliterata.

<sup>9</sup>. Ecpantheria obliterata, Walker, Lep. Het. iii. p. 691, n. 5 (1855).

8. Ecpantheria simplex, Walker, l. c. p. 692, n. 7 (1855).

Barreiras de Jutahi, on grass, 14th February, 1874.

Closely allied to, and perhaps not distinct from, *E. eri*danus of Cramer.

## PSYCHOPHASMA, n. gen.

Allied to *Phægoptera*, but the palpi and antennæ more slender; the upper discocellular (separated from the lower by the false recurrent vein) shorter and less oblique; subcostal five-branched, the first branch emitted immediately before the end of the cell, the second from the upper margin of the third which runs to apex, the fourth and fifth from the lower margin of the third; the order of the branches in point of position being 2, 5, 4, 3; the second median branch emitted nearer to the end of the cell than in *Phægoptera*; the secondaries shorter; discocellular transverse, slightly concave but not angulated; radial apparently absent, actually emitted from the terminal third of the third median, thus forming a short furca.

Type, P. albidator, Wlk.

65. Psychophasma albidator.

Halesidota albidator, Walker, Lep. Het. Suppl. i. p. 313, 1864.

Rio Juruá, 7th November, 1874.

This is the *H. vitripennis* of Walker and *H. erosa* of Herrich-Schäffer. *Halesidota cinerea* and *H. degenera* appear to agree in structure with *P. albidator*, and therefore may provisionally be referred to *Psychophasma*.

#### PERICOPIINÆ, Butler.

PHALÖE, Guérin.

66. Phalöe ithrana.

Pericopis ithrana, Butler, Ann. & Mag. Nat. Hist. p. 286 (October, 1871); Tabatinga, in the forest, 30th November, 1874.

#### 67. Phalöe catilina.

Phalæna catilina, Cramer, Pap. Exot i. pl. 79, figs. E. F. (1779).

Serpa, in the bush, 22nd April, 1874.

## ARCTIINÆ, Butler.

#### EUCHÆTES, Harris.

68. Euchætes aurata. *Euchætes aurata*, Butler, Cist. Ent. ii. p. 38 (October, 1875).
Manaos, 6th January, 1874.

#### MELESE, Walker.

69. Melese postica.

Melese postica, Walker, Lep. Het. ii. p. 492 (1854).

Santarem, Rio Jutahi, 4th February, 1875.

#### MOTADA, Walker.

70. Motada juruana, n. sp.

Allied to *M. lateralis*, much smaller; primaries fuliginous brown, paler beyond the middle and at base of inner margin; an indistinct irregular band across the basal third and an interrupted angulated discal band dark brown; a blackish spot on discocellulars; external angle sandy yellowish; secondaries sordid white, outer border and veins dusky, the margin and an ill-defined series of submarginal spots dark brown; body dark brown, abdomen clothed with long saffron-yellow hair; wings below sordid white; the costal borders discocellulars, and one or two spots on the disc dusky; primaries with dusky external border; body below dark brown: expanse 1 inch 1 line.

Rio Juruá, 7th November, 1874.

## Family LITHOSIIDÆ.

### CISTHENE, Walker.

71. Cisthene sanguinea, n. sp.

Primaries fuliginous brown, the outer margin and fringe slightly paler; secondaries carmine, fringe grey; head and thorax greyish-brown, antennæ testaceous; abdomen carmine, anus greyish; body below brown, legs whity-brown: expanse 11 millimetres.

Rio Jutahi, 5th February, 1875. Allied to *C. rufibasis*, of Felder.

72. Cisthene rhodosticta, n. sp.

Primaries brown, minutely speckled with black; the basal fourth, a broad discal band with zigzag outer edge and the fringe pale straw-yellow; a carmine discocellular spot on the discal band; secondaries rose-red, the apex broadly dark brown, fringe pale straw-yellow; vertex of head shining whitish, antennæ brown, collar bright ochreous, thorax dark brown, abdomen testaceous; primaries below brown, the base inner border and discal band straw-yellow, secondaries straw-yellow, apex dark brown, body dark brown, palpi ochraceous, legs stramineous with a blackish band at the end of the tibiæ, margins of coxæ and abdominal segments stramineous: expanse 15 millimetres.

Paricatuba, Rio Purus, 11th October, 1874. Most like *C. subjecta*, but very different.

#### MÆPHA, Walker.

73. Mæpha lacteata, n. sp.

Primaries cream coloured, the veins and a streak on inner margin dusky; secondaries rosy, apex brown; thorax greyish, abdomen rosy; wings below cream coloured, with a tinge of pink; otherwise as above: expanse 16 millimetres.

Rio Javary, 2nd December, 1875.

74. Mæpha aurea, n. sp.

Primaries bright golden, crossed by two purplish-black lines (forming a central band), the outer one  $\geq$ -shaped; basal and discal areas longitudinally streaked with black; a black marginal line; a large carmine spot at the end of the cell; secondaries rose-red, apex black, fringe whitish; thorax testaceous, abdomen rose-red; wings below nearly as above, the carmine spot of primaries diffused; no basal black streaks; secondaries with a yellowish apical spot; body below pinky-brown, venter black banded: expanse 12 millimetres.

Rio Mauhes, 5th May, 1874. Allied to *M. sesapina*.

#### JOSIOIDES, Felder.

75. Josioides myrrha.

Phalæna myrrha, Cramer, Pap. Exot. i. p. 47, pl. 29, fig. G. (1779).

3. Serpa, in the bush, 25th April, 1874.

76. Josioides abscissa.

*Hipocrita abscissa*, Hübner, Samml. Exot. Schmett. i. Lep. iii. Bomb. ii. figs. 1—4 (1806).

2. Serpa, in the bush, 25th April, 1874.

J. abscissa is probably a variety of the female of J. myrrha.

77. Josioides purpurata.

Josioides purpurata, Butler, Ill. Typ. Lep. Het. i. p. 55, pl. 19, fig. 5 (1877).

Barreiras das Araras, Rio Solimões, 16th January, 1874.

78. Josioides mutans.

Josia mutans, Walker, Lep. Het. ii. p. 296, n. 8 (1854).

Lake Agudas, 12th April, 1874.

#### EUDOLICHE, Moeschler.

## 79. Eudoliche achatina, n. sp.

Allied to *E. vittata* of Möschler, but smaller, with more nearly the aspect of *Nepita frigida*; primaries fawn coloured, sprinkled and bordered with white; two transverse white belts across the base; a white spot at the end of the cell; two confluent ferruginous spots on the white border at apex; a blackish streak bounding the outer border internally and continued along the inner margin to the second white belt; secondaries greyishbrown; the borders, base and a spot at the end of the cell white; body white, metathorax brown, posterior segments of abdomen greyish; wings below white, primaries with a large brown patch which covers the greater part of the discoidal cell and the disc; base of costal area tawny; body below white: expanse 21 millimetres.

Rio Jutahi, 5th February, 1875.

80. Eudoliche sordida, n. sp.

Upper side pale greyish-brown, primaries whitish, with the apex, fringe and several spots on outer margin white; a spot at end of cell, a larger one at apex, and one or two small ones on outer margin black; the fringe opposite to the black spots brown; head, collar and tegulæ white, anus whitish; under surface more uniformly grey, not whitish, but with the white apical patch and marginal spots as above: expanse 14 millimetres.

Rio Jutahi, 31st January, 1875.

The genus *Eudoliche* is allied to *Nepita* and *Doliche*.

#### EUSTIXIS, Hübner.

81. Eustixis minima, n. sp.

Primaries cream colour; five dark brown costal spots, two or three on the disc, and two (one behind the other) at the centre of outer margin; secondaries ochreous; a grey spot at apex; head and thorax cream coloured; antennæ, excepting at the base, blackish; abdomen ochreous; under surface ochreous; wings with a central rosy flush, which is concentrated upon the veins; primaries with brown marginal spots somewhat as above, but connected by arched lines at apex, where the nervures are also brown; secondaries with a brown apical spot: expanse 15 millimetres.

Rio Jutahi, 31st January, 1875.

#### DEIOPEIA, Stephens.

82. Deiopeia pura.

Deiopeia pura, Butler, Trans. Ent. Soc. 1877, p. 360.

*Phalæna ornatrix*, Cramer, Pap. Exot. ii. pl. 166, figs. C. D. (1779).

Sta. Cruz, Rio Tapajos, 17th March, 1874.

#### MÆNOLENEURA, n. gen.

Neuration of the male unlike that of any Lepidopterous insect known to me; primaries with the subcostal vein very thick and widely arched, throwing off its first branch just beyond the cell, forking halfway between the cell and the outer margin, each branch forking again, the first to costa and apex, the second to outer margin, so that practically the main stem of the subcostal nervure runs to the centre of the outer margin; discocellular transverse, no radial veins; median vein with one branch, the first and second branches starting from the base as independent veins, but the second connected with the base of the third by an obliquely recurrent veinlet, the third median at its extremity joining the subcostal; the submedian and the first median almost united at their outer extremities; secondaries without costal nervure, subcostal continued to apex, its second branch being emitted from the end of the cell; discocellulars zigzag; median vein four-branched, the two last branches being emitted from a footstalk; antennæ pectinated, legs rather long; primaries of female with the subcostal vein nearly straight, first branch emitted just before the end of the cell; second some distance beyond; third immediately beyond, forking close to apex; fourth from the base of the third and below it; upper radial emitted from the superior extremity of the cell; lower radial branching from the third median near its base; discocellular transverse ; secondaries with the second branch of the subcostal nearer to the first than in the male, the radial emitted near to it; discocellulars angulated; median vein as in the male; antennæ less strongly pectinated; otherwise as in the male. Type, M. anomala.

83. Mænoleneura anomala, n. sp.

Fuliginous brown, primaries crossed (from basal fourth) by four zigzag dusky bars, most distinct on inner margin; secondaries darkest at outer margin; margins of eyes and sides of collar, orange; abdomen black, ochreous at the sides, with dentated margin; under surface uniform rosy brown; the bases and internal borders of the wings paler: expanse 1 inch 4 lines.

J.Gepatiny, Rio Purus, 29th September, 1874; Q.Araras, 15th November.

#### LYGROTES, n. gen.

Somewhat the aspect of the preceding genus, but the wings narrower; the first three subcostal branches parallel and close together; the two first emitted before the end of the cell; the third at the end forking halfway between the cell and apex, and emitting the upper radial from below a short distance beyond the cell; lower radial and median branches normal; discocellulars transverse and slightly concave; subcostal of secondaries forking beyond the cell; discocellulars concave, radial normal; second and third median branches emitted from the inferior extremity of the cell; antennæ simple. Type, *L. arctipennis*.

#### 84. Lygrotes arctipennis, n. sp.

Above silky fuliginous; discocellulars of primaries black; median veins and apical half of costa spotted with black; fringe of secondaries pale: expanse 1 inch 3 lines.

Caverns near entrance to Lago Macaco, 10th September, 1874.

#### Rœselia, Hübner.

85. Rœselia antennata, n. sp.

Allied to R. strigula, general aspect of R. ægyptiaca; wings above sordid white; primaries with two central dark brown lines, the inner one C-shaped, the outer one widely festooned and spotted with black, three costal brown spots, the second of which unites with the C-shaped line, the third triangular, largest of the three, covering the discocellulars, it and the two lines whiteedged externally; radial and median branches streaked with black almost to the spots of the outer line; a submarginal series of white-bordered pale brown spots; secondaries with pale brown veins; thorax white, the collar and tegulæ striped with brown; abdomen sordid white, with grey transverse bands; primaries below sandy yellowish, the veins dusky; secondaries white, tinted with testaceous at the borders; costal area minutely blackspeckled; body below testaceous, base of venter and femora black-spotted: expanse 18 millimetres.

Tamandare, Rio Solimões, 10th January, 1874.

The male of R. antennata has its antennæ very distinctly pectinated from the base to the middle; Mr. Trail took what appear to be worn examples of the female in the Rio Juruá, 31st of October, and in the Rio Sapó on the 13th December, 1874.

86. Rœselia Snelleni, n. sp.

Much like *R. ægyptiaca*; primaries pale grey, the costal and outer borders pale reddish-brown, two central blackish lines exactly as in *R. ægyptiaca*, the outer one double below the sinus, which is dotted with black, white-edged externally; a subcostal black spot near the base; a short dusky litura on the costa between the central lines; a white-edged dentate-sinuate dusky discal line; secondaries chalky white with brownish marginal line; body white, collar sordid; primaries below pale brown; secondaries white with black discocellular spot; costal area brown-speckled; outer margin brownish; body white: expanse 17 millimetres.

Rio Jutahi, 26th January, 1875.

#### HYPSINÆ, Butler.

#### AGYLLA, Walker.

87. Agylla mira, n. sp. (Pl. III. fig. 2.)

Allied to A. fasciculata and A. hypotricha (Salopola hypotricha of Felder); above silvery white; the costal border of primaries depressed towards the base and greyish, internal area also greyish; secondaries with a large subcostal burnt-sienna trigonate patch from the base to the end of the cell, upon it a scanty tuft of ochreous hair; area beyond the subcostal patch yellowish; head, collar, prothorax and anus greyish; large compressed lateral anal dark brown tufts; wings below snow-white, without markings; body white with black terminal anal tuft: expanse 1 inch.

Rio Javary, 5th December, 1874; Rio Jutahi, 27th January; near Rio Curnem, 29th January, 1875.

## Lepidoptera of the Amazons.

## Family MELAMERIDÆ. BEPARA, Walker.

88. Bepara subapicalis.

2. *Phæochlæna subapicalis*, Walker, Lep. Het. ii. p. 470, n. 8 (1854).

8. Bepara egaca, Wlk. l. c. Suppl. i. p. 143 (1864).

ð, 2. Forest at Xibaru, Rio Negro, 26th June, 1874.

## EPHIALTIAS, Hübner.

89. Ephialtias basalis, n. sp.

Above jet black; primaries with an oblique ochreous postmedian belt, not reaching either margin but acuminate at its inferior extremity; secondaries with a transverse snow-white abbreviated band from the abdominal margin to the median vein, its lower edge dentated; collar below saffron-yellow; coxæ and venter white: expanse 1 inch 4 lines.

Pará, 9th March, 1875.

This species has long stood in the Museum under the name of "*Phintia basalis*," but I cannot find that it has ever been described; it is allied to *E. abrupta*, the type of the genus.

90. Ephialtias pilarge.

Josia (Ephialtias) pilarge, Walker, Lep. Het. ii. p. 305, n. 28 (1854).

Pará, 8th March, 1875.

This is the second example that I have seen of this species.

91. Ephialtias pseudena?

Retila pseudena, Boisduval, Lép. Guat. p. 94 (1870).

Uruçaca, Rio Juruá, 1st November, 1874.

This species perfectly answers to Boisduval's description of examples from Honduras and Mexico.

92. Ephialtias ena.

Retila ena, Boisduval, Lép. Guat. p. 95 (1870).

Fonteboa, Rio Solimões, 17th November, 1874.

R. enoides of Boisduval seems to be the Josia (Phintia) lanceolata of Walker, a new genus.

#### MITRADÆMON, n. gen.

Allied to *Sagaris*, but the radials of primaries emitted nearer to the subcostal branches, the discocellulars more irregular, the second and third median branches emitted from a well-developed footstalk; the subcostal and median forks of secondaries of equal length, and the discocellular nervule more transverse. Type, *M. velutinum*.

93. Mitradæmon velutinum, n. sp. (Pl. III. fig. 1.)

Upper surface velvety-black; primaries with a tolerably broad oblique postmedian band of cadmium-yellow, with slightly irregular margins, not quite reaching the costal margin or the external angle; abdomen greyish at the sides; primaries below with the base and inner margin slightly greyish; venter grey: expanse 1 inch 8 lines.

Tabatinga, 30th November, 1874; Barreiras de Jutahi, 18th January, 1875.

Size, outward form and general aspect of the *Lithosiid* genus *Josioides*, but quite different in the form of the thorax and neuration of the wings.

#### SCOTURA, Walker.

94. Scotura venata, n. sp.

Primaries greyish-brown, with the veins white; secondaries snow-white, costa greyish; outer border broadly black-brown; body greyish-brown, with the head orange; primaries below uniformly greyish-brown; secondaries snow-white, with the costal and outer borders dark greyish-brown: expanse 1 inch 2 lines.

Rio Juruá, 4th October, 1874.

95. Scotura auriceps, n. sp.

Primaries brown, with whitish veins; an oblique white belt from the costa to the inner margin just beyond the middle of the wing; secondaries black-brown; body brown, with saffron-yellow head; under surface nearly as above: expanse 1 inch 4 lines.

Teffé (or Ega), in the forest, 19th October, 1874.

The same species occurs at Pará, but was not taken there by Mr. Trail.

## PACHIOSIA, Butler.

96. Pachiosia flaveolata.

Phalæna flaveolata, Cramer, Pap. Exot. i. pl. 88, fig. C. (1779).

Prainha, in the woods, 6th December, 1873; St. Isabel, 25th June, 1874; S. Rio Javary, 4th December, 1874.

Walker and others supposed this species to be the female of *Micropus longalis*, but *P. flaveolata* is exactly similar in the pattern of both sexes.

#### Josia, Hübner.

97. Josia ligula.

*Hipocrita ligula*, Hübner, Samml. Exot. Schmett. i. Lep. iii. Bomb. 2, figs. 1—4 (1806).

Mouth of Rio Urupuana, Rio Madeira, 4th January, 1874.

98. Josia tenuivitta, n. sp.

Allied to J. ligula, but the orange streaks paler and of little more than half the width: expanse 1 inch 2 lines.

Serpa, 13th February, 1875.

Bates took this species at Pará.

#### GLISSA, Walker.

99. Glissa prolifera.

Josia (Phalcidon) prolifera, Walker, Lep. Het. ii. p. 302, n. 22 (1854).

Glissa bifacies, Walker, Lep. Het. Suppl. i. p. 186 (1864).

Adelphoneura nerias, Felder, Reise der Nov. Lep. iv. pl. 105, fig. 30 (1874).

3. Tunantins, 22nd November, 1874; 2. Santarem, 17th February, 1875.

#### MELANCHROIA, Hübner.

100. Melanchroia asteria.

Phalana asteria, Cramer, Pap. Exot. iv. pl. 370, fig. F. (1782).

Almeirim (on a shrub "Cunambe"), 19th February, 1875.

CYMOPSIS, Felder.

101. Cymopsis fulviceps.

Cymopsis fulviceps, Felder, Reise der Nov. Lep. iv. pl. 105, fig. 23 (1874).

Rio Juruá, 4º 40' S., 66º 40' W., 29th October, 1874.

## Family DIOPTIDÆ.

#### HYRMINA, Walker.

## 102. Hyrmina Trailii.

Hyrmina Trailii, Butler, Ill. Typ. Lep. Het. i. p. 56, pl. 19, fig. 9 (1877). Forest behind Manaos, 26th August, 1874.

## LAURONA, Walker.

## 103. Laurona rufilinea.

Laurona rufilinea, Walker, Lep. Het. Suppl. i. p. 148 (1864).

3. Serpa, in the bush, 22nd April, 1874.

## Family EUSCHEMIDÆ.

#### PHÆOCHLÆNA, Hübner.

The type of this genus, *P. tendinosa*, is the only form mentioned by Walker that can be retained in it; nn. 2 and 3 belong to *Oricia*, 4 to *Josia*, 5 to *Brycea*, 6, 7 and 9 to *Virbia*, 8 to *Bepara*.

104. Phæochlæna solilucis, n. sp.

Bright saffron-yellow, primaries with the borders and two parallel oblique belts beyond the middle, dark brown; a subcostal whitish line at the base; secondaries deeper in tint, with regular blackish outer border; thorax blackish with two longitudinal yellow streaks; abdomen yellow, with a black dorsal line; wings below paler than above; body whitish: expanse 1 inch 7 lines.

Barreiras das Araras, Rio Solimões, 15th November, 1874.

A handsome species, with the general aspect of Oricia or Micropus, but with the structure of Phæochlæna.

## Family LIPARIDÆ. ELORIA, Walker.\*

105. Eloria spectra.

Liparis spectra, Hübner, Samml. Exot. Schmett. iii. Phal. 2, Veræ 2, Hypog. A, figs. 1—4 (1806).

Eloria intacta, Walker, Lep. Het. iv. p. 814, n. 3 (1855).

Prainha, 25th November, 1873.

106. Eloria discifera.

Genusa discifera, Walker, Char. of Het. Lep. p. 14, n. 23 (1869).

Forest at head of Iripixy, Rio Trombetas, 31st January, 1874; Rapid of Porteira, Rio Trombetas, 2nd March, 1874.

The dilapidated specimen described by Walker is labelled "Brazil" (not "Bengal," as stated by Walker).

## PACHYLÆLIA, n. gen.

Allied to *Lælia*, but the antennæ longer, with rather shorter pectinations; palpi shorter and thicker; legs thicker and more hairy; subcostal branches of secondaries emitted without a footstalk from the superior extremity of the cell; third median branch and radial from the inferior extremity, at some little distance from the second median branch. Type, *P. translucida*.

107. Pachylælia translucida, n. sp.

Primaries semitransparent white, with the borders and three nearly parallel oblique stripes pale sandy brown; secondaries hyaline white with cream-coloured costal and outer borders; body sandy brown; primaries below paler than above, the oblique stripes obsolete: expanse 1 inch 5 lines.

Prainha, 11th November, 1875.

This species, excepting in the antennæ, has somewhat the aspect of a *Hepialus*.

#### CAVIRIA, Walker.

108. Caviria substrigosa.

Caviria substrigosa, Walker, Lep. Het. iv. p. 825, n. 1 (1855).

3. Ayrão, Rio Negro, 3rd July, 1874.

\* Identical with Penora, Wlk. p. 821.

#### ARCHYLUS, Walker.

109. Archylus nigrisparsus, n. sp. (Pl. III. fig. 8.)

Silky snow-white; primaries above with eight black spots at about the middle as follows: four in an oblique series, one, smaller above the second and third of the oblique series, and three, small, below the same spots; pectinations of antennæ fulvous: expanse  $\delta 1$  inch 1 line;  $\Im 1$  inch 7 lines.

& West end of Ilha de Perarara, Rio Solimões,
14th October; Q. Barreiras das Araras, 15th November,
1874.

## SULYCHRA, n. gen.

Allied to *Archylus*, but the body more slender; the primaries narrower; the branches of the subcostal vein closer together and more parallel; the extremities of the cell parallel, the angle of the discocellulars exactly in the middle; the branches of the median vein emitted nearer together; secondaries with the discocellulars angulated in the middle as in primaries; the second and third median branches emitted almost from the same point. Type, *S. argentea*.

110. Sulychra argentea, n. sp.

Silvery white; the antennæ with brown pectinations; the abdomen above orange, banded with black, and sparsely clothed with white hairs: expanse  $\mathcal{F}$  1 inch 2 lines;  $\mathcal{P}$  1 inch 4 lines.

Q. Rio Juruá, 7th November; 3. Rio Javary, 7th December, 1874.

This is a small delicate-looking species.

#### CARAMA, Walker.

111. Carama pura, n. sp.

Most nearly allied to *C. Walkeri*, but smaller; the abdomen pure white; the thoracic tufts less prominent; the pectinations of the antennæ testaceous instead of reddish; the frons, prothorax below and anterior tibiæ pale brown: expanse 1 inch 3 lines.

Rio Juruá, 7th November, 1874.

## Family NOTODONTIDÆ.

EDEMA, Walker.

112. Edema pulchra, n. sp. (Pl. III. fig. 6.)
Q. Aspect of *E. albifrons* more like *E. mumetes* in

pattern; primaries silvery-grey, tinted with pinkybrownish and sulphur-yellow, and irrorated with dark brown; costal patch broader and less dentated than in E. albifrons, its lower border sulphur-yellow, bounded by a broad sepia-brown irregular oblique band or patch; a transverse dentated line bounding the basal area, which is pale sulphur-yellow varied with dark brown at the base; a second dentated line across the disc, followed by an undulated submarginal line and an interrupted sinuated marginal line-all these lines black; inner border yellow, brown-speckled; secondaries dark pinky-brown, with interrupted marginal black line and whity-brown fringe; body corresponding in colour with the opposite wings; primaries below dark shining greyish-brown; costal and apical borders whitish-speckled; four white costal dots towards apex; a submarginal series of black dots; fringe brown, spotted with white at the end of each vein; secondaries dark shining greyish-brown, with the costal and abdominal areas broadly whitish; body below whitish: expanse 1 inch 9 lines.

Aveyros, Rio Tapajos, 11th March, 1874; Boa vista, Rio Jutahi, 1st February, 1875.

## 113. Edema mumetes.

Phalæna (Tortrix) mumetes, Cramer, Pap. Exot. i. pl. 82, A. (1779).

Rio Mauhes, 5° 30' S., 29th April, 1874; Rio Javary, 7th December, 1874.

### CALLEDEMA, n. gen.

Allied to *Edema*, neuration almost identical; antennæ less strongly pectinated in the male; body much longer, projecting more in front of the wings; palpi longer; abdomen of male with long and dense lateral and terminal compressed pencils of hair scales.

Type, C. marmorea.

## 114. Calledema marmorea, n. sp.

8. Primaries above dark greyish-brown, crossed (particularly towards the base) by short blackish parallel lines; interno-basal area varied with whitish; orbicular spot small, outlined in whitish; reniform oblong, somewhat constricted towards the centre, outlined in ochraceous

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yellow, the basal portion of the subcostal and upper radial veins also of the same colour; apical area to beyond the middle of the costal margin cut off by a very oblique silvery-white streak, within which, at apex, is a large almost lunate patch of white and yellow, spotted with grey and marked close to apex with two black dots, area behind this patch crossed by three or four whitish lines; apical costa white spotted; an indistinct discal zigzag pale line; a straight submarginal white line, which becomes yellow at external angle, and between it and the margin (which is cream coloured) a regularly zigzag white line; fringe brown, spotted with white at the termination of the nervures; secondaries sordid whity-brown, with silky costal area; a very broad dark brown external border; fringe white; head above sordid white, spotted with ferruginous; collar burnt sienna; thorax dark greyish-brown; tegulæ pale at the sides; abdomen pale greyish-brown, whity-brown at base; primaries below fuliginous brown; costa from the middle alternately black and white; apex white, with one brown lunate spot upon it; outer border white towards apex and dotted with black, otherwise occupied by white-bordered brown lunules; fringe as above; secondaries paler than above; body below white; sides of palpi and upper surface of tibiæ blackish, sprinkled with ferruginous; tarsi black, banded with white; all the legs throughout densely clothed with long hair: expanse 1 inch 10 lines.

Lake Cararaucu, 7th April, 1874.

115. Calledema sodalis, n. sp. (Pl. III. fig. 7.)

**?**. Allied to the preceding species, but paler, the primaries with a yellow-edged fusiform oblique marking in the cell; a longitudinal yellow streak below the cell, terminating at each end in white semicircular markings, the outer one well defined, tinted with yellow and edged with black; apical area broader, the silvery streak being more oblique, the two last branches of the subcostal (as well as the main branch and upper radial) white instead of yellow; apical patch white, more quadrate, its inner area crossed by a yellowish belt, the lower portion of its outer area enclosing two grey spots; markings of external border better defined; secondaries whiter, outer border much narrower; body paler, anal segment of abdomen reddish; primaries below with the outer and inner borders, the costal margin and a streak from the cell to the outer

margin white, a subapical ferruginous transverse streak; a submarginal series of black dots; secondaries white, a brown subcostal basal streak; a dentated blackish patch at centre of outer border; body below white; sides of palpi (excepting at their inferior margin) and tibiæ above dark brown, tarsi dark brown banded with white: expanse 1 inch 8 lines.

Amazons (exact locality and date entirely obliterated).

#### LEPTOSPHETTA, n. gen.

Aspect of *Sphetta*, but readily distinguished by the much narrower primaries, long falciform palpi which project noticeably above the top of the head; antennæ minutely pectinated as in *Calledema*; body extending a little beyond the secondaries; hind tibiæ and back of pectus clothed with dense long hair; secondaries below with a patch of thickened scales over the end of the cell; cell rather short, median vein four-branched, the last two branches emitted from a footstalk beyond the cell. Type, *L. rabdina*.

116. Leptosphetta rabdina, n. sp.

Primaries above olive-green, changing to flesh colour towards the internal border; costal border, excepting at base and apex, occupied by a bright silver streak; one or two vague central transverse blackish lines and a black spot at the end of the cell, a whitish-bordered dentate sinuate blackish discal line; a marginal series of black spots; fringe whitish, intersected by an olivaceous line; secondaries grey with a pinky shot, fringe white; body sordid whitish, collar and prothorax olive-green; abdomen with a basal ochraceous belt, anal segments ochraceous; palpi ferruginous at the sides; wings below grey, tinted with lake-red; primaries, with the discoidal area blackish, costal border sordid lake-red towards the base, sandy yellowish towards the apex; a marginal series of black spots, fringe whitish; secondaries with a black patch over the end of the cell, fringe whitish; body below whitish, collar reddish; anterior legs very slender, brown above, banded laterally with blackish; posterior tibiæ and back of pectus clothed with long lake-red hair: expanse 1 inch 6 lines.

Rio Jutahi, near Rio Curnem, 29th January, 1875.

#### ROSEMA, Walker.

117. Rosema epigena?

Phalæna (Bombyx) epigena, Sepp, Surin. Vlind. p. 227, pl. 102 (1848).

Rosema demorsa, Felder, Reise der Nov. Lep. iv. pl. 96, fig. 11.

9. Mouth of Rio Sapo, 14th December, 1874.

I have very little doubt that Sepp's figure is intended to represent Felder's species.

Walker erroneously referred the genus Rosema to the Drepanulida; it belongs to the Notodontida, being allied to Phalera, Moresa and Cyphanta.

#### ETOBESA, Walker.

118. Etobesa xylophasioides, n. sp.

Allied to *E. xylinoides*, the wings slightly broader; primaries above whitish, irrorated with reddish-brown; the veins, longitudinal lines between them, an irregular oblique belt from outer border near apex to inner margin towards the base, a submarginal series of hastate spots and the greater part of the fringe red-brown; apical third of costal margin spotted with black; secondaries redbrown, paler towards the base; frons and thorax white, collar and abdomen red-brown; under surface white, a few vague red-brown streaks on the discs of the wings, confined in the secondaries to a patch near the outer border: expanse 1 inch 8 lines.

Rio Juruá, 6th November, 1874.

#### TIFAMA, Walker.

119. Tifama chera.

Phalæna chera, Drury, Ill. Exot. Ent. ii. pl. 20, fig. 4; Cramer, Pap. Exot. iv. pl. 308, F. (1782).

Tifama simois, Walker, Lep. Het. v. p. 1078 (1855).

Mouth of Rio Purus, 9th October, 1874.

This is also, in all probability, the *P. megalops* of Sepp. Walker quoted the wrong figure from Cramer, and, consequently, gave the name of *P. simois*, a species of *Limacodid* of the genus *Bombycocera*, to this insect.

120. Tifama exusta, n. sp. (Pl. III. fig. 10.)

Allied to the preceding; primaries above sordid white,

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tinted with flesh colour in the centre, and clouded with brown; apical third of costal margin and centre of the veins on the disc alternately black and white; a very large V-shaped brown-bordered grey patch at external angle, occupying half the internal and nearly half the external border; a whitish submarginal dash cut by the lower radial nervure; a marginal series of brown spots, bounded internally by a series of hastate white spots from the apex to the second median interspace; fringe brown, spotted with white; secondaries greyish-brown with a broad dusky outer border; fringe sordid white, spotted with blackish; body brown, head reddish; tegulæ with white external borders; primaries below greyish-brown, with a broad discal <-shaped belt of dark grey; borders whitish; apical third of costa and outer margin spotted with blackish; secondaries white; costal area brown-speckled; a broad greyish-brown outer border not quite reaching the costal or abdominal margins; body below sordid whitish, legs greyish, tarsi black, banded with white above: expanse 1 inch 10 lines.

Rio Jutahi, 5th February, 1875.

## CLOSTEROMORPHA, Felder.

#### 121. Closteromorpha modesta, n. sp.

Allied to C. reniplaga, same general form and coloration; wings above silky, laky-brown; primaries with the apical area (bounded internally by two white lituræ indicating the reniform spot) abruptly darker; reniform spot and costal border from above it to outer border, washed with shining plumbageous grey; a pyriform whitish-bordered blackish spot immediately beyond the reniform spot and occupying about a quarter of the apical area; four transverse dusky lines, all excepting the second with a pale border, the first straight and oblique crossing the basal third of the cell, the second parallel to it but not continued above the median vein, the third 7-shaped, terminating at the second median branch, the fourth very irregular, submarginal, terminating close to the costa in a small white spot; apical fourth of costal margin spotted with testaceous; body laky-brown; wings below altogether paler, shining greyish; the primaries with blackish discoidal area; pectus whitish: expanse 1 inch 5 lines.

Parentins, 1st April, 1874.

#### OLCECLOSTERA, n. gen.

Allied to *Ichthyura*, but the abdomen very slender; the primaries with straight outer margin, angulated and excised below apex; secondaries with considerably longer inner margin; outer margin angulated at submedian vein; antennæ tolerably long and well pectinated; palpi thick, compressed, with extremely short terminal joint; tibiæ clothed with long compressed hair; a well-defined anal scale-tuft to the abdomen. Type, *O. irrorata*.

122. Olceclostera irrorata, n. sp.

Upper surface ferruginous brown; primaries much darker than secondaries, the basal area irrorated with whitish scales; two chocolate-brown oblique central lines, elbowed towards the costal margin; discocellulars transverse, black; veins on the disc whitish; a disco-submarginal chocolate-brown line, oblique to upper radial interspace, where it joins a golden spot, thence to the inner margin it is sinuated; secondaries with the abdominal area dusky, the discocellulars, two discal lines and the outer margin dusky; thorax much darker than the abdomen, irrorated with whitish scales; wings below paler and redder than above, the costal areas of all the wings irrorated with white scales; two dusky parallel discal lines: secondaries with the veins and abdominal area irrorated with whitish scales; body below irrorated with whitish; legs clothed with brown hair; venter with a series of white dots on each side : expanse 1 inch 5 lines.

Boa vista, Rio Jutahi, 1st February, 1875.

#### ORTHOCLOSTERA, n. gen.

Allied to *Ichthyura* and the preceding genus, differs from both in its narrow primaries, with straight (or nearly straight) margins, antennæ with long pectinations for nearly two-thirds of their length; and from the former it differs also in the absence of a defined anal tuft to the abdomen. Type, *O. peculiaris*.

## 123. Orthoclostera peculiaris, n. sp.

Primaries above purplish-brown, with an interno-basal brownish patch followed by a central whity-brownish band

(which tapers obliquely above the median vein and does not reach the costa), this band followed again by parallel ferruginous, whity-brown, slaty-grey and dark brown lines and streaks, which are continued to outer border; a whitishdiffused apical dash; a submarginal series of black dots; fringe spotted with slaty-grey; secondaries silky brown, becoming almost black towards the apex; fringe white, varied with brown spots; body reddish-brown, with the sides of the tegulæ and base of abdomen grey; primaries below shining greyish-brown; costal border testaceous almost to apex, near which it becomes red and is crossed by two yellow lituræ, the first of which is continued as an indistinct paler oblique line across the disc; a submarginal series of blackish dots; fringe whitish at base; secondaries sordid white, crossed by four ill-defined dusky lines, the fourth of which limits a dusky outer border; costal area minutely brown-speckled; body below whitish: expanse 1 inch 2 lines.

Rio Negro, 4th July, 1874.

In the structure of its antennæ and the general pattern of the primaries this species approaches *Ingura producta*, near to which, perhaps, it ought to be placed; but I do not think that *Ingura* ought to be retained among the *Noctuites*.

#### LEPASTA, Moeschler.

#### (Nystalea, Felder ex parte.)

124. Lepasta conspicua, n. sp.

Closely allied to N. grammodes  $\mathfrak{P}$ , but smaller, considerably paler, the secondaries and abdomen being greyish whity-brown, the  $\overline{\mathbf{v}}$ -like band of primaries broader, more regular and whiter, with the intersecting line ill-defined; a comma-shaped marking between the two cuneiform spots; under surface silky white: expanse 1 inch 3 lines.

Rio Negro, 4th July, 1874.

This species has a remarkable recumbent crest projecting backwards from the base of the antennæ; the pectinations of the latter are short, even at the base, and are composed of little hair pencils; the single example taken appears to me to be a male, from its possession of lateral short compressed tufts at the base of the abdomen, as well as the anal tuft. I therefore doubt the specific identity of the sexes associated under the name of *N. grammodes*.

## MAGAVA, Walker.

125. Magava multilinea.

Magava multilinea, Walker, Lep. Het. Suppl. ii. p. 503 (1865).

Jamandaré, Rio Solimões, 10th January, 1874.The type from Limas is a 2.

## MASCHANE, Walker.

126. Maschane erratipennis.

Maschane erratipennis, Walker, Lep. Het. xxvii. p. 3 (1863).

Rio Juruá, 4° 40' S., 66° 40' W., 29th October, 1874. One example was obtained of this rare species.

127. Maschane simplex.

Maschane simplex, Walker, Lep. Het. xxvii. p. 3 (1863).

Fáro, 10th April, 1874.

Also one example of this species.

128. Maschane cæsia.

Dylomia cæsia, Felder, Reise der Nov. Lep. iv. pl. 97, fig. 14.

Rio Javary, 4th to 6th December, 1874.

Three examples were obtained of this species.

Pontana rubrana of Walker (an allied genus to Maschane) is identical with Felder's Platyodonta calpe.

## Family LIMACODIDÆ.

#### RHESCIPHA, Walker.

General aspect of *Torone*, but differing in structure; more nearly allied to *Hyphorma*; palpi elongated compressed, rising high above the head, the terminal joint fringed with long scales, antepenultimate segment of abdomen with long lateral brushes of hair; tibiæ fringed with long hair; primaries hamate at apex, outer margin sinuated and deeply excised at external angle; second and third median branches and lower radial of primaries emitted close together; cell of secondaries short; median vein four-branched, the radial being emitted from the inferior extremity of the cell. Type, *R. servia*. 129. Rhescipha servia.

Phalana (Bombyx) servia, Cramer, Pap. Exot. iv. pl. 321, fig. E. (1782).

Manaos, 26th December, 1874.

This genus would perhaps be better placed among the Pseudo-Deltoids, but in these extreme forms it is difficult to decide. Walker's type is scarcely distinct.

## DALCERA, Herrich-Schäffer.

#### ACRAGA and DALCERA, Walker.

130. Dalcera abrasa.

Dalcera abrasa, Herr.-Sch. Auss. Schm. i. fig. 180. Ilha das Araras, 8th June, 1874.

#### STÆTHERINIA, n. gen.

Allied to *Scopelodes*, but the costa of primaries strongly arched, the outer margin deeply excised below apex, the inner margin nearly straight; the subcostal vein fourbranched,\* the first two branches running close to the costa, the third and fourth forming a very long fork, upper radial emitted from the upper extremity and lower radial (as a fourth median branch) from the lower extremity of the cell; discocellulars much less acutely angulated; secondaries ample, cell much longer, lower discocellular much longer; palpi rather longer, quite as densely hairy and strongly pectinated along their inferior margins; legs considerably shorter. Type, *S. semilutea*.

131. Stætherinia semilutea.

Oxytenis semilutea, Walker, Lep. Het. Suppl. v. p. 1942 (1866).

Boaventura, Rio Jutahi, 24th January, 1875.

#### MIRESA, Walker.

132. Miresa amazonica, n. sp.

Wings and body above pale rufous-brown; primaries with a central white-edged dark patch, lilacine-greyish in the cell and beyond it, divided upon the discocellulars by a transverse oblong ferruginous spot, the lower part of the

<sup>\*</sup> In Scopelodes it is five-tranched, and the first two branches are emitted at some distance from the costal margin.

patch contracted and ferruginous from below the first median branch; a dentate sinuate discal white line, which towards apex encircles two or three small fuliginous brown spots; a marginal series of small white spots; secondaries with a marginal interrupted whitish line; under surface whity-brown; primaries opaline beyond the middle; the border, between the veins, bluish-opaline; secondaries with a sandy-brownish oblique central belt; outer border slightly opaline; body sandy-yellowish: expanse 1 inch 4 lines.

Rio Javary, 1st December, 1874.

Somewhat similar to one or two Indian species which I have seen in Mr. Moore's collection; it is the first apparently typical *Miresa* that I have seen from the New World.

#### NEOMIRESA, n. gen.\*

#### Nyssia, Walker (nec Guenée).

Walker wrongly applied this name in full consciousness of the fact; actually stating that it was preoccupied at the foot of the page (cf. Lep. Het. v. p. 1132).

133. Neomiresa rufa, n. sp.

δ. Wings above rufous-brown; primaries with the interno-median and discal areas dark reddish-brown; a black spot in the cell; outer and inner margins and veins pale and sericeous; a *<*-shaped marking below the cell and behind it two dots (together almost making a 3), and a series of discal dots beyond the cell, metallic silver; secondaries with a pale sericeous outer margin; under surface paler than above, with paler shining veins and margins; primaries with the disc opaline between the veins; body sericeous: expanse 1 inch. 2.5 mm

São Paulo, 26th November, 1874.

The smallest species known to me.

134. Neomiresa argentata.

Nyssia argentata, Walker, Lep. Het. v. p. 1134 (1855).

Juruapuca, Rio Juruá, 11th November, 1874.

The single example taken by Mr. Trail is smaller and altogether brighter in its colouring than Walker's type. 135. Neomiresa nesea.

Phalæna (Bombyx) nesea, Cramer, Pap. Exot. iv. pl. 305, fig. C. (1782).

Phalana (Bombyx) vidua, Sepp, Surin. Vlind. i. pl. 6 (1848).

Nyssia fumosa, Walker, Lep. Het. v. p. 1134 (1855).

Rio Purus, above Aruman, 9th September, 1874.

## NATADA, Walker.

136. Natada sericea, n. sp.

Wings above silky whity-brown; primaries from near the base to the middle mottled with tawny; costal margin tawny; abdominal area of secondaries hairy; body rather redder than the wings; antennæ white with greyish-brown pectinations; under surface paler, wings sericeous, primaries slightly reddish towards the base; front of pectus, femora and tibiæ reddish: expanse 1 inch.

Amazons (exact locality and date obliterated).

This species has the mottled shining character of the species of *Redoa*.

#### TALIMA, Walker.

137. Talima latescens, n. sp.

Allied to *T. postica*, from which it differs in its broader wings, the more uniform gravel-red coloration of the primaries and body; outer border of primaries slightly lilacine, wider, limited internally by a slightly concave but nearly straight oblique chocolate-brown line parallel to the outer margin; a black discocellular dot; secondaries sandy-yellow instead of white, with lilacine brownish internal streak extending nearly to the base; thorax washed at the sides with lilacine; abdomen tinted with lilacine from the second segment, pale at the sides; anterior tibiæ and tarsi yellow, femora of second pair of legs whitish, remainder of legs purplish-brown above, ochreous below, venter sericeous whitish: expanse 22 millimetres.

Boaventura, Rio Jutahi, 24th January; Rio Jutahi, 5th February, 1875.

## Family SATURNIIDÆ, Walker.

## Genus Hyperchiria, Hübner.

## 138. Hyperchiria approximans.

Hyperchiria approximans, Walker, Lep. Het. vi. p. 1311 (1855).

On board the Yeamiaba, Manaos, 30th August, 1874.

This species agrees very fairly with Walker's description.

139. Hyperchiria canitia.

Phalæna (Attacus) canitia, Cramer, Pap. Exot. iv. pl. 304, fig. D. (1782).

Praia de Rebeiro, Rio Solimões, 27th November, 1874.

The single example agrees tolerably with Cramer's figure.

Walker refers *H. canitia* to *Dirphia*, never noticing how closely allied it is to his *Hyperchiria approximans*.

These two species would perhaps be more correctly referred to the genus *Dirphia*, but this can only be settled by a careful comparison of the structure of the two groups: Boisduval appears to have redescribed them as species of *Io*.

140. Hyperchiria io.

Bombyx io, Fabricius, Syst. Ent. p. 560, n. 16 (1775).

Conceição, Rio Negro, 15th June; on board the Manado, Santarem, 21st March, 1875. Boisduval has renamed this *H. Fabricii*.

141. Hyperchiria stollii.

Io stollii, Boisduval, Ann. Soc. Ent. Belge, xviii. p. 228 (1875).

Uruçaca, Rio Juruá, 9th November, 1874.

#### Genus AUTOMERIS, Hübner.

142. Automeris scapularis.

Io scapularis, Boisduval, Ann. Soc. Ent. Belge, xviii. p. 236, n. 49 (1875).

Prainha, 9th December, 1873.

## 143. Automeris serpina, n. sp.

Above rosy-brown, pale; primaries subfalcate; the extrabasal line ill-defined, transverse, slightly inarched, but barely distinguishable above the median vein; discal line

oblique, smoky brown, terminating at more than half an inch from the apex, bordered internally by a diffused ferruginous belt, which expands gradually towards the costa; apical area washed with the same colour; a broad but indistinct irregular outer border very slightly paler than the ground colour, a greyish patch edged with a few dusky dots at the end of the cell; secondaries slightly grever, with the ocellus large, sooty grey, with a central black spot crossed by an oblique white line, surrounded by a dull black border, followed by a broad diffused ochraceous zone; discal line black, semicircular, not undulated, followed by a greyish semicircular belt; thorax pale chocolate-brown, abdomen testaceous; under surface of a slightly more sandy tint than above; primaries with a dull black-bordered, white-pupilled grey central ocellus; discal line diffused, greyish; secondaries with a white spot at the end of the cell: expanse 3 inches 11 lines.

Serpa, in the bush, 24th April, 1874.

Allied to A. palegon of Boisduval, and apparently in some respects resembling A. orestes of the same author.

## Family BOMBYCIDÆ, Stephens.

#### Genus ASTHENIA, Westwood.

#### 144. Asthenia lactucina.

Phalæna (Geometra) lactucina, Cramer, Pap. Exot. ii. pl. 133, fig. C. (1779).

Mouth of Rio Urupuana, Rio Madeira, 4th June, 1874. This genus bears a striking resemblance to the *Geometrid* genus *Micronia*.

#### Genus PEROPHORA, Harris.

145. Perophora Trailii, n. sp.

 $\mathfrak{P}$ . Allied to *P. Batesii*, but smaller and greyer; the transverse oblique elbowed line darker and distinctly bordered externally by a whitish stripe; primaries with an oblique hyaline-white discocellular fasciole; secondaries with the margin sinuated, fringe very short: expanse 1 inch 10 lines.

Ilha Cuxinara, Rio Solimões, 13th October, 1874.

146. Perophora Bactriana, n. sp.

Allied to *P. strigipennis* and *P. hamata*; sericeous pale reddish-brown, irrorated with blackish, with the usual oblique elbowed line dark grey; fringe reddishbrown, intersected by a darker line; primaries with an

oblique grey spot on the discocellulars, a grey spot above the latter on the costal border; a small black spot on the middle of the cell, below it on interno-median interspace a  $\leq$ -shaped grey marking, and, nearer to the base, a black spot; area immediately beyond the discal line slightly suffused with grey; secondaries with the discal area greyish; wings below more distinctly speckled with black; elbowed line of primaries broken up into grey spots; grey discocellular spot as above; secondaries with an arched discal series of blackish  $\Lambda$ -shaped markings; abdomen speckled with black: expanse 2 inches 5 lines.

Emerged on the 27th February, 1874, from a cocoon found on *Bactria* in Paramacu forest.

### PRISMOPTERA, n. gen.

Allied to *Ernolatia*, but differing entirely in the neuration of primaries; the subcostal vein running parallel to the costal margin throughout its entire length, emitting only two branches from its inferior margin beyond the cell (in *Ernolatia* the second branch breaks up into three, so that its subcostal may be said to be five-branched, the continuation of the main stem being counted); costal margin considerably more arched towards the apex; outer margin nearly straight instead of elbowed; anal angle of secondaries less produced. Type, *P. opalina*.

147. Prismoptera opalina, n. sp. (Pl. III. fig. 9.)

Wings transparent white with prismatic reflections; margins and veins opaque; three pairs of sandy-yellow spots on the costa; indications of several parallel undulated central greyish lines; outer border and a submarginal series of lunate spots indistinctly greyish; secondaries with a small cadmium-yellow spot on abdominal margin near anal angle; head above and main stem of antennæ white; pectinations of antennæ fulvous; thorax and collar sordid ochreous, speckled with opaline scales, white at the sides; abdomen whitish; body below white, front of pectus ochreous, legs (excepting the tarsi) brownish: expanse 1 inch 5 lines.

Prainha, 14th November, 1873.

#### ANTHOCROCA, n. gen.

Allied to *Bombyx* and *Norasuma*, but differing from them in structure just as *Prismoptera* does from *Ernolatia*; from the preceding genus it differs (as *Norasuma*) does from *Ernolatia*) in its densely-scaled opaque wings, comparatively slightly shorter antennæ, and more prominent thorax. Type, *A. domina*, Cramer.

148. Anthocroca muscosa, n. sp. (Pl. III. fig. 5.)

Allied to A. domina, but the apex and central area of primaries clouded with bright sap-green; the white discal spots replaced by lilacine-grey ones; the discal black line finer; two additional arched convergent brown lines across the basal half of the wing; secondaries with the discal line finer, a bright yellow spot above its inferior extremity; anal area bright laky-red, with a patch of bright yellow along the anal third of outer border; body paler than in A. domina: expanse 2 inches 7 lines.

Mouth of Rio Jutahi, 18th January, 1875.

One of the most beautiful of New World moths.

149. Anthocroca cuneifera, n. sp. (Pl. III. fig. 4.)

Brownish flesh-colour (or colour of cork); wings with a black discal line as in the preceding species; primaries with a large greenish-yellow ferruginous-bordered costal cuneiform patch, an oblique  $\mathbf{n}$ -shaped ferruginous line on internal area, enclosing one or two yellow spots, and bounded internally on the inner border by a spot of the same colour; an arched black line across the base of the wing; basal third of costal margin black; discal black line edged with lilacine, and bounded on second median interspace by a white spot, apical area irregularly yellow, with a ferruginous internal line; outer border, excepting at external angle, irregularly whitish; secondaries with the discal line greyish, becoming abruptly ferruginous below the first median vein, and bounded above by a bright vellow spot; anal angle and a series of marginal spots, only divided by the nervures, bright chrome-yellow; fringe, excepting at anal angle, ferruginous; collar and tegulæ sordid yellowish, the latter with a posterior dusky band; abdomen yellowish along the dorsal region; wings below bright yellow, clouded here and there with ferruginous, with two blackish subparallel discal lines; internal area of primaries pinky-whitish: expanse 1 inch 9 lines.

Ayrão, Rio Negro, 3rd July, 1874.

150. Anthocroca hiemalis, n. sp.

Primaries above dark purplish-brown, crossed by four undulated purple lines, two across the basal area and two across the disc; post-discoidal area crossed by copper-red veins; a subapical spot, a small spot on the disc, and the centre of internal area ochraceous; base whitish; secondaries olivaceous towards the base; anal angle reddish; outer border and two converging waved discal lines purple; base and basal three-fifths of abdominal area whitish; frons pale reddish, crest dark red, collar yellow, thorax pinkywhitish, tegulæ grevish; abdomen whitish, clouded with ferruginous and grey; primaries below fuliginous brown, with the costal margin tawny; subapical area dusky; two undulated purplish-black discal lines, the inner one not extending below the second median branch; internal border whitish; secondaries reddish flesh-colour, with a white-speckled blackish internal streak; two undulated purplish-black discal lines, the inner one elbowed towards the costa, the outer one convex; body below pale red: expanse 1 inch 6 lines.

Rio Juruá, 6th November, 1874.

#### Genus DIRPHIA, Hübner.

151. Dirphia javarina, n. sp.

Wings above pale pinky-brown; primaries with a broad central chocolate-brown belt, three times as wide on the costal as on the inner margin and whitish bordered, its inner edge oblique and waved, its outer edge straight; basal area suffused with chocolate-brown, the base itself blackish and bounded externally by an oblique whitish line; a slightly irregular discal brown band, which becomes abruptly wider above the upper radial; apex ochreous, diffused; fringe chocolate-brown; secondaries reddish towards the base; external area pink, regularly limited internally and enclosing a regular arched belt of the ground colour; fringe red-brown; thorax deep chocolate-brown, blackish; abdomen tawny, deep red at the sides, crossed at the base by two black belts; wings below paler than above, the costal areas red-brown; two discal belts; apices ochraceous; discal belts of primaries parallel, slightly sinuated; the inner belt of secondaries straight, the outer one arched and parallel to the outer margin; body below deep chocolate-brown, anus reddish: expanse 5 inches 4 lines.

On board the Guajara, Rio Javary, 2nd December, 1874.

Allied to D. avia and D. concolor.

Genus Hydrias, Herrich-Schäffer.

152. Hydrias albidifascia.

Hydrias albidifascia, Walker, Lep. Het. vi. p. 1402 (1855).

Rio Solimões, 9th December, 1874; Rio Jutahi, 25th January, 1875.

153. Hydrias rivulosa.

Hydrias rivulosa, Moeschler, Schmett.-Fann. Surin. p. 47, pl. 10, fig. 39 (1878).

Pupunhazinho, Rio Juruá, 8th and 12th November, 1874.

Nearly allied to the preceding species; Herr Moeschler's description is just published.

154. Hydrias fasciolata, n. sp.

Primaries ferruginous, with a central belt and a subapical streak irrorated with whity-brown; a black-edged pale brown litura at the end of the cell; a dark-edged discal zigzag whitish line; a submarginal series of whitebordered black spots; secondaries as in the two preceding species, but greyer; thorax and sides of abdomen brown; centre of abdomen whitish, crossed by abbreviated black bars or spots; wings below uniformly pale reddish-brown, with a submarginal whitish-bordered grey streak; secondaries crossed in the middle by a straight diffused greyish streak; body rather paler than the wings: expanse 1 inch 6 lines.

Amazons. No exact locality or date.

155. Hydrias morosa, n. sp.

Fuliginous brown; primaries with the basal area blackish; an irregular white-speckled central belt limited by two zigzag black lines; a  $\leq$ -shaped submarginal series of black spots; fringe dark, intersected by a paler line; secondaries with whitish apical area, bounded within by a central dusky transverse line; an apical blackish spot; thorax darker than abdomen; under surface considerably paler sericeous, especially along the veins of the wings: expanse 1 inch.

Lake Cararaucu, 17th April, 1874.

156. Hydrias distincta.

Allied to *Hydrias noeens*, but the wings of a more uniform pale reddish-brown tint; markings similar, ex-

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cepting that there is a large black patch at the base of the primaries: expanse 1 inch 7 lines.

Rio Juruá, 12th November, 1874 (two males).

157. Hydrias plana.

Hydrias plana, Walker, Lep. Het. vi. p. 1402 (1855).

Rio Jutahi, 27th and 30th January, 1875.

*H. mollis* of Sepp is allied to this species (Surin. Vlind. pl. 22).

158. Hydrias obsoleta?

Phalæna (Attacus) obsoleta, Cramer, Pap. Exot. iv. pl. 304, fig. C. (1782).

Parana, 6th June, 1874; S. Rio Juruá, 6th November, 1874.

What I take for the male is allied to *H. rubiginosa* of Felder.

159. Hydrias melancholica, n. sp.

Allied to *H. incivilis* but altogether darker, the primaries longer and rather narrower, not red at base; the discal spots of all the wings less black; secondaries with no red on the subcostal branches, abdominal half of the wing very slightly paler than the costal area; dotted white lines similar; under surface altogether darker and greyer: expanse 1 inch 5 lines.

Rio Solimões, 9th December, 1874.

160. Hydrias erebina, n. sp.

Primaries above fuliginous brown, very dark; internal area paler; a very pale external semicircular apical patch, crossed by a slightly undulated and centrally angulated black submarginal line; a slightly zigzag discal series of whitish dots from costal to inner margin, and a second less distinct but similar series across the basal third of the wing; secondaries paler brown, sericeous; apex of costal area blackish, crossed by a whitish spot; body corresponding in colour with the wings, the thorax being dark and the abdomen lighter; under surface altogether paler, wings sericeous pale brown, with the veins whitish; costal margins and subcostal branches more or less clay-coloured; subcostal area, excepting at apex, greyish; each wing with a white costal spot towards apex; primaries with an oblique apical white patch; a submarginal series of greyish spots; body below tinted with pink: expanse 1 inch 1 line. Cupari, Rio Negro, 19th June, 1874.

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161. Hydrias terranea, n. sp.

Pale reddish-brown, washed with dull greyish; primaries with a bisinuate discal series of black dots; fringe with a paler basal line; secondaries becoming whitybrown at the base; under surface greyish with the wingveins whity-brown: expanse 1 inch.

Serpa, 13th February, 1875.

#### Genus OCHA, Walker.

162. Ocha turpis, n. sp.

Fuliginous brown; primaries crossed by a central angulated narrow white-edged chain-like band; apical area sprinkled sparsely with whitish scales; a widely zigzag submarginal pale line; fringe dark with a series of white points at the terminations of the veins; secondaries rather paler; with a sinuous abbreviated apical submarginal litura; fringe as in primaries; wings below pale greyish-brown, sericeous; fringe as above; primaries with a costal pale yellow spot near apex, and from below this spot two short whitish squamose streaks; outer border rather narrowly whitish, bounded internally towards the apex by a series of subconfluent spots rather darker than the ground colour; secondaries with three curved parallel squamose whitish bands, the central one almost crossing the wing, the others very short; body below whitybrown: expanse 1 inch.

Rio Juruá, 7th November, 1874.

163. Ocha exigua, n. sp.

8. Fuliginous brown, with the margins of the wings paler; primaries crossed by two parallel central elbowed lines, the interval between which is filled in with blackishbrown above the median vein; disc crossed by two parallel undulated brown lines; a submarginal series of black spots followed by a marginal series of brown spots; secondaries blackish at apex, crossed by a white apical litura; fringe at apex brown-tipped; wings below grey, with pale reddish-brown veins; body pale reddish-brown: expanse 21 millimetres.

2. Altogether paler; the markings, excepting the blackish patch from the median to the subcostal vein between the central lines of primaries much less distinct: expanse 22 millimetres.

A. Mabidiry, Rio Purus, 30th September, 1874;
a. Boa vista, Rio Jutahi, 1st February, 1875.

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164. Ocha pallida, n. sp.

Primaries above pale gravel-red; a pinky-whitish sinuated transverse discal line, interrupted beyond the cell by a large (internally black-edged) ferruginous spot; fringe yellowish, spotted with ferruginous; secondaries stramineous; thorax reddish; abdomen pale stramineous, with dark brownish anus; under surface uniform pale stramineous: expanse 1 inch.

Ayrão, Rio Negro, 3rd July, 1874.

#### Genus ARTACE, Walker.

165. Artace albicans.

*Artace albicans*, Walker, Lep. Het. vi. p. 1492, n. 2 (1855).

Artace punctivena, Walker, l. c. n. 3 (1855). Rio Tarumá, Rio Negro, 31st July, 1874.

166. Artace rivulosa, n. sp.

Wings semihyaline-white, veins spotted with black; primaries with a black basal spot, then two angular greyish-brown bands; next a broad central belt (interrupted at discoidal area, and only filled in between the median veins), then three pale brown parallel wavy discal stripes; and lastly, a pale brown external border; a marginal series of dark brown spots to all the wings; head white, brown behind; antennæ black; collar sordid white, brownish; prothorax white; tegulæ white; meso- and metathorax and abdomen brownish; under surface white, veins of the wings black towards the base, a marginal series of pale brown spots: expanse 1 inch 3 lines.

San Antonio, Rio Negro, 5th July, 1874.

This species is allied to A. iridescens (Gastropacha iridescens of Walker).

Tricypha, Moeschler, is closely allied to Mænoleneura of this paper (p. 56).

#### EXPLANATION OF PLATE III.

- Fig. 1. Mitradæmon velutinum, p. 60.
  - " 2. Agylla mira, p. 58.
  - " 3. Halesidota ænone, p. 50.
  - " 4. Anthocroca cuneifera, p. 79.
  - " 5. Anthocroca muscosa, p. 79.
- Fig. 6. Edema pulchra, p. 64.
  - " 7. Calledema sodalis, p. 66.
  - " 8. Archylus nigrisparsus, p. 64.
  - " 9. Prismoptera opalina, p. 78.
  - " 10. Tifama exusta, p. 68.



Butler, Arthur G. 1878. "On the Lepidoptera of the Amazons, collected by Dr. James W. H. Trail, during the years 1873 to 1875." *Transactions of the Entomological Society of London* 26, 39–84. https://doi.org/10.1111/j.1365-2311.1878.tb01942.x.

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