Descriptions of new Species of Lepidoptera: by ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

FAMILY NYMPHALIDÆ. Westwood.

SUB-FAMILY DANAINÆ. Bates.

GENUS METHONA. Doubleday.

1. Methona Confusa, n. sp.

Similar, in the pattern and coloration of the upper surface, to *Thyridia Ceto*, but the body with a double parallel series of conspicuous white spots; below very similar to *T. Ceto*, but the costal yellow streak of secondaries abbreviated and followed by a white spot: femora of front legs creamy: expanse of wings, 3 inches, 7 lines.

Tapajos (Bates); Peru, from Mr. Cutter. B.M.

This is apparently the species figured by Bates as *Me*thona Psidii; the Papilio Psidii of Linnæus is, however, a *Thyridia*; hence the alteration of the generic name in Kirby's Catalogue was unnecessary.

GENUS DIRCENNA. Doubleday.

2. Dircenna Obfuscata, n. sp.

 \mathfrak{Q} . Allied to *D. Xantho*, but with the base of primaries black; the white spots near outer margin obsolete, yellowtinted; secondaries black, crossed towards base of inner margin by a large suboval hyaline tawny patch; two hyaline spots on either side of third median branch, the lower one cordate and enclosing a yellow spot: pterygodes white spotted: primaries below with three white decreasing submarginal spots towards apex; secondaries with tawny

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costal streak and four submarginal spots of the same colour near anal angle; eight submarginal white spots; otherwise as above: expanse of wings, 2 inches, 10 lines.

Ega (Bates). B.M.

Excepting in the characters given above, this species agrees with D. Xantho φ of Felder.

GENUS CERATINIA. Hübner.

3. Ceratinia Intermedia, n. sp.

 \mathcal{J}, \mathcal{Q} . Allied to *C. Fimbria*; but with the subhyaline zigzag band of primaries placed as in *C. Fenestella*, leaving a hyaline spot between median branches, and the submarginal spots yellow; secondaries with central black band abbreviated; submarginal spots yellow: wings below nearly as above, but the submarginal spots white: expanse of wings, \mathcal{J} 1 inch, 11 lines, \mathcal{Q} 2 inches, 4 lines.

Bogota (Stevens). B.M.

Allied to C. Fenestella and C. Fimbria.

4. Ceratinia Fulminans, n. sp.

 $\mathcal{J}, \mathfrak{Q}$. Allied to *C. Fimbria*; all the markings more opaque; zigzag band of primaries as in *C. Fluonia*, but narrower and more acuminate at the angles; submarginal spots yellow; secondaries opaque; costa, apex, outer margin, and three spots below median nervure, black; nervures at apex tawny; a yellow spot beyond end of cell: wings below nearly as above, but nervures of apical half of primaries tawny and last two submarginal spots white; secondaries with a large yellow patch within cell, and seven marginal white spots: expanse of wings, 2 inches, 4 lines.

Bogota (Stevens). B.M.

5. Ceratinia Lurida, n. sp.

Allied to C. Norella, primaries above black; apical half almost covered by a large hyaline white patch; interrupted

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at end of cell by a cuneiform costal disco-cellular black spot; seven submarginal white points; secondaries orange tawny; costa apex and outer margin broadly black; a diffused whitish spot at end of cell; a similar spot just beyond, and a small spot at apex; thorax black, head whitespotted, abdomen brown: primaries below as above; secondaries with hyaline whitish spots at end of cell concurrent; seven submarginal white spots: expanse of wings, 2 inches, 5 lines.

Pucartambo, Peru (Whitely). B.M.

Seems nearly allied to *Ceratinia Tricolor* of Salvin from N. Bolivia.

GENUS ITHOMIA. Hübner.

6. Ithomia Nigrimargo, n. sp.

♂. Allied to *I. Lagusa*, resembles *Ceratinia Adelinda*: wings above hyaline, with the veins black; margins broadly black; secondaries with a ferruginous anal spot; body with the thorax black, white-spotted; abdomen dark brown above, paler below; antennæ black with the club orange; wings below nearly as above; primaries with the internal area silky; two apical white points; secondaries with a basi-costal streak and the median nervure sulphur-yellow; tive submarginal white points; a large anal spot, the first median branch and the submedian nervure orange-ferruginous: expanse of wings, 2 inches, 4 lines.

Cuenca (Fraser). B.M.

Much like *Hymenitis Ino* and *Ceratinia Adelinda* in general appearance.

GENUS HYMENITIS. Hübner.

7. Hymenitis Albinotata, n. sp.

Nearly allied to *H. Kedema*, same general pattern; larger, the primaries more arched; all the dusky markings much deeper; primaries with two distinctly white spots at apex; secondaries below with seven conspicuous marginal

white spots, otherwise as above: expanse of wings, 2 inches, 8 lines.

Bogota (Stevens).

A local representative of H. Kedema.

GENUS MECHANITIS. Fabricius.

8. Mechanitis Fallax, n. sp.

 \mathfrak{P} . Primaries tawny, yellow and black; similar to M. Menophilus \mathfrak{P} but with a more or less pronounced yellow spot towards apex, and the oblique yellow band more angulate; secondaries with the sub-costal area and the apical half of the outer margin broadly tawny; costa silky brown: body as in M. Polymnia: primaries below nearly as above, the outer margin narrowly tawny to near apex; the yellow apical spot (where present) terminating at each end in a tawny nebula; seven marginal white points; secondaries tawny, crossed by three more or less macular black bands, the spots of the third band distinctly separate, large, suboval, placed on anal area and terminating on outer margin in white points, the latter seven in number: expanse of wings, 3 inches, 4 lines.

Bogota (Stevens). B.M.

Allied to *M. Égaensis* and *M. Menophilus*, but nearer to the latter: it parallels *Melinœa Mneme* of Linnæus.

9. Mechanitis Deceptus, n. sp.

Only differs from *M. Menophilus* in the tawny instead of yellow band of primaries: it parallels *Melinæa Methone*, *Ceratinia semifulva*, *Eresia ithomiola*, &c.

Cuenca (Fraser); Bolivia (Bridges); Rio Napo (Bates?) B.M.

This species being mistaken by Mr. Salvin for the M. Methone of Hewitson, he has redescribed the Melinaa as M. Cydippe; but a careful comparison of Hewitson's figure with the two species shews that the Melinaa and not the Mechanitis is the insect represented, the black spots of primaries being considerably larger in the Melinaa than in the Mechanitis.

10. Mechanitis Veritabilis, n. sp.

Intermediate in character between M. Utenaia and M. Lycidice; differs from the latter in the absence of a yellow patch across centre of median branches in primaries and in the small isolated black spot between the first and second branches; in the more distinctly separated and longer yellow spot (terminating the oblique discal band) between second and third branches; in the less evident median yellow streak (generally absent), and the broader macular band below it: expanse of wings, 3 inches, 23 inches, 4 lines.

Bogota (Stevens); Venezuela (Dyson). B.M.

We have seven examples of this species, the same number of M. Utenaia and six of H. Lysidice; they all seem perfectly distinct.

GENUS MELINÆA.

11. Melinæa Parallelis, n. sp.

Closely allied to M. Messatis, but differing in its brighter colouring and the conspicuous black discal bar across secondaries; it is parallel to Heliconius Jucundus and differs from M. Messatis precisely as that species does from H. Ismenius: expanse of wings, 3 inches, 7 lines.

Panamá (Salvin). B.M.

GENUS TITHOREA. Doubleday.

12. Tithorea Pseudethra, n. sp.

Allied to T. Harmonia, from which it differs in the form of the oblique yellow band of primaries, which terminates obtusely without tricuspid termination, in the more distinctly tawny basal half of primaries; and in the presence of a broad clear yellow band crossing end of cell of secondaries and bounded by the usual black bar: expanse of wings, 3 inches, 3 lines.

Brazil (Argent). 2 examples. B.M.

The above species evidently comes near to T. Cuparina, but the secondaries of that insect are described as "precisely as in T. Harmonia;" it is parallel to Melinæa Ethra, Godt (H. Phasis, Feld.)

13. Tithorea Egaensis, n. sp.

Differs from the Lower Amazon type of *T. Harmonia* in the almost ferruginous tint of the base of primaries, and the whole of secondaries, also in the greater width of all the black bars, the somewhat wider yellow belt of primaries and the minuteness of the white marginal spots below: expanse of wings, \mathcal{J} 2 inches, 8 lines, \mathfrak{P} 3 inches.

Ega (Bates). B.M.

14. Tithorea Pavonii [Boisduval MS.]

 \mathcal{S}, \mathcal{Q} . Allied to T. Bonplandii; above black; a streak above median nervure of primaries, a spot below it, divided by the first median branch, and a broad band across cell of secondaries subhyaline sulphur-yellow; primaries with three or four spots beyond cell, five towards apex and one near anal angle subhyaline white; secondaries with costa and base pale brown; a discal series of twelve subhyaline white spots: body as in T. Bonplandii; primaries below with eight discal and thirteen submarginal cream-coloured spots, between which is a waved streak of dull orange; a spot of dull orange half way between cell and apex; otherwise as above; secondaries with discal series of spots as above and a submarginal series of sixteen cream-coloured spots, between which two series is an irregular macular dull orange band; a series of eight dull orange spots between central yellow band and discal series of spots; a sulphur-yellow subcostal streak at base : expanse of wings, 3 inches, 1 line.

* Panamá, Central America (Belcher). B.M.

A common insect, mimicked by *Heliconius Peruvianus* of Felder, a species which doubtless has a tolerably wide

* From the voyage of the Herald.

range: I have been unable to find any published description of T. Pavonii, although it appears to be in most Collections.

SUB-FAMILY NYMPHALINÆ. Bates.

GENUS DIADEMA. Boisduval.

15. Diadema Wallaceana, n. sp.

3. Allied to *D. Antilope* and *D. Albula*; but still more like *D. Anomala*, from which it differs in the absence of any blue gloss above, in the presence of three white streaks placed obliquely beyond discoidal cell of primaries, and in the larger discal spots towards costa of the same wings; below (in addition to the above distinctions) the submarginal spots of primaries are more evident, and the whitish streaks beyond cell of secondaries are wanting: expanse of wings, 3 inches, 4 lines.

India? B.M.

Mimics Euplaa Kinbergi of Wallengren; and was supposed by Mr. Wallace to be the male of *D. Anomala*; the latter species, however, is nearly alike in both sexes, as evidenced by examples from Borneo now in the Collection; and, were it not so, no advantage could accrue to the female over the male from the blue spot of the primaries, since the supposed male is equally well protected in its brown dress by its resemblance to another species of Euplaa.

16. Diadema Interstincta, n. sp.

 \mathcal{F} . Allied to the preceding and to *D. Anomala*, from which it differs in the absence of the blue shot on upper surface of primaries, and the presence of a creamy discal band in secondaries, interrupted by the nervures and internervular folds; below it only differs in the greater length of the whitish streaks towards abdominal area of secondaries: expanse of wings, 3 inches, 6 lines.

Assam (Warwick). 2 examples. B.M.

This species was considered by Mr. Wallace to be a variety of the male of D. Anomala; it is, however, clearly distinct, and is a mimic probably of Euplea Alcathoë \mathfrak{P} .

GENUS ROMALEOSOMA. Blanchard.

17. Romaleosoma Inanum, n. sp.

3, \mathfrak{P} . Above like *R. Ceres*; below sap green; the nervures ochraceous; the fringes white varied; primaries with internal margin broadly cinereous; three black spots, forming a triangle, on basal half of discoidal cell; a broad white band placed obliquely beyond cell; apex white; the female with a small black spot at end of cell; secondaries with a small black spot in cell; area between median and submedian nervures densely clothed with ochreous hairs; a broad irregular silvery white band from costal nervure to second branch of median nervure: expanse of wings, \mathfrak{F} 3 inches, 4 lines, \mathfrak{P} 4 inches, 1 line.

Ashanti (Brooking). 4 specimens. B.M.

Not an uncommon species in Collections; it seems generally to be considered as an extreme variety of R. Ceres, but as no intermediates have yet appeared, this is a gratuitous assumption and nothing more.

18. Romaleosoma Permixtum, n. sp.

3. Above like *R. Janetta* \mathcal{J} , excepting that the yellow band of primaries is converted into a subtriangular bifid patch, the bases of all the wings are black, and the red subcostal spot of secondaries is wanting: primaries below as in *R. Crockeri*, excepting that there is a spot of reddishorange between the two black spots forming the base of the triangle in discoidal cell; secondaries as in *R. Cyparissa*, excepting that the basal patch is reddish-orange shot with lilacine: expanse of wings, 3 inches, 2 lines.

Gaboon (Du Chaillu). B.M.

A fine insect, uniting the characters of three distinct species already described, but in some respects differing from them all.

19. Romaleosoma Viridinota, Butler.

9. Lep. Exot., p. 82, n. 3, pl. xxxi., fig. 3 (1871).

3. Nearly resembles R. Janassia (\bigcirc of R. Medon); but differs above in the less oblique and greener tinted yellow band of primaries, and in the presence of a broad central yellowish green band extending from costa to second median branch of secondaries; below deeper in colour, otherwise almost identical: expanse of wings, 2 inches, 7 lines.

Gaboon (Du Chaillu). 3, 9, B.M.

The males of R. Medon and R. Agnes seem to differ only in the shape of the yellow band on upper surface of primaries. From an examination of the fine Collection recently made by Mr. Monteiro in Angola, it appears that R. Medon is the common species there, R. Agnes being scarce, whilst at Ashanti and Sierra Leone the latter species is very common to the entire seclusion of R. Medon.

GENUS APATURA. Fabricius.

20. Apatura Substituta, n. sp.

 \mathcal{J} . Nearly allied to \mathcal{A} . Ilia, differs above in the brighter purple shot; the broader trifid tawny band beyond end of cell in primaries and the less lunate character of the submarginal tawny spots of all the wings; the discal series of black spots in secondaries obsolete; the whole disc between the tawny bands being black brown; the central band sharply angulated externally, more so even than in \mathcal{A} . Iris; wings below more brightly coloured than in \mathcal{A} . Ilia, all the white bands broader; the central band of secondaries as above, but white with a faint rosy shot; submarginal interrupted lilacine lunate band prominent; discal spots of secondaries not so well defined: expanse of wings, 3 inches, 2 lines.

N. China (Pryer); Japan (Bligh). B.M.

This species is a local representative of A. Ilia; it is a well defined form, although less marked in its distinctive characteristics than A. Here of Felder.

GENUS EUNICA. Hübner.

21. Eunica Octomaculata, n. sp.

3. Allied to *E. Capenas* \mathcal{F} , differs above as follows primaries narrower, with four instead of three lilacine spots on basal area, two within cell and two placed transversely below it; anal area brown, not black; white band completely broken through in the centre; subapical lilacine spot narrower and more elongate; secondaries black at base, succeeded by a central broad tawny band, then a dark brown nebula, beyond which the wing becomes pale brown exhibiting two moderately large and two very small black spots; a discal dark brown lunate line; outer margin broadly dusky, the fringe white varied; below very similar to *E. Capenas*, but all the spots and bands considerably paler: expanse of wings, 2 inches, 1 line.

E. Peru (Degand). B.M.

A pretty species, quite distinct from, although allied to *P. Capenas.*

GENUS PERISAMA. Doubleday.

22. P. Bourcieri (Boisduval, MS.)

Catagramma Bonplandii var., Hewitson, Exot. Butt. 3, pl. xiv., fig. 72 (1864).

Quito (*Bourcier*). 6 specimens. B.M. Perfectly distinct from *P. Bonplandii*.

23. P. Albipennis, n. sp.

Catagramma Bonplandii var., Hewitson, Exot. Butt. 2, pl. 31, fig. 66 (1858).

E. Peru (Degand). B.M.

This species has come in such numbers from time to time as to leave no doubt as to its being a good and distinct species.

24. P. Lineata, n. sp.

Allied to the preceding, primaries above with the green

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band double as wide; a whitish spot towards apex; secondaries below crossed by two angulated black lines as in *P. Bourcieri*, but wider apart: expanse of wings, 2 inches, 4 lines.

Peru, from *Higgins*. B.M.

25. P. Viridinota, n. sp.

Nearly allied to *P. Oppelii*; primaries above with green central band more oblique, so that its lower end is considerably nearer to the external angle; subapical spot smaller and narrower; secondaries irrorated with fine green scales near anal angle, but without submarginal greyish band; fringe ochreous; primaries below with three additional green spots at end of cell; secondaries with the black lines wider apart: expanse of wings, 1 inch, 11 lines.

E. Peru (Degand). B.M.

26. P. Ochreipennis, n. sp.

Above like *P. Comnena*, excepting that the green band of secondaries does not extend to apex; below very like *P. Clælia*; primaries with a black line across the apical ochreous patch, two or three green spots between the median branches, and the discoidal ochreous patch slightly tinted externally with rosy: secondaries with the black lines much wider apart and thicker, the outer one much more arched: expanse of wings, 2 inches.

Bolivia (Bridges). B.M.

A very distinct species, which has long wanted a name.

27. P. Tristrigosa, n. sp.

Wings above black: primaries marked as in *P. Nyctimene* excepting that the band divided by the first median branch is much more oblique; secondaries with three metallic green streaks beyond cell, the central one being half as long again as the others; below much like *P. Nyctimene*, primaries greyish at base, not ochraceous; all the blue spots beyond cell missing; subapical white band broader and shorter; secondaries paler in colour; black lines much wider apart and more curved; black spots obsolete; a white dash from end of cell; expanse of wings, 1 inch, 9 lines.

Pucartambo, Peru (Whitely). B.M.

28. P. Divergens, n. sp.

Catagramma Humboldtii var. Hewitson, Exot. Butt. 4 pl. Cat. xi., figs. 82, 83 (1868).

Quito. B.M.

Certainly distinct from *P. Humboldtii*; it differs both above and below.

29. P. Rhodoptera, n. sp.

Above like *P. Humboldtii*; primaries below like *P. Com*nena but secondaries like *P. Humboldtii*: expanse of wings, 2 inches.

Peru (Degand); Bolivia (Bridges). B.M.

A fine species, intermediate between *P. Humboldtii* and *P. Lucrezia*.

The Perisamas above named have remained so long with blank labels in our cabinets, that I have felt constrained at last either to describe or name them; they are, I believe, all good, distinct, and new *species*, although several of them have for some time been regarded by Mr. Hewitson as varieties.

GENUS CALLIZONA. Doubleday.

30. C. Latifascia, n. sp.

Callizona Aceste, Doubleday (nec Linnæus vel Cramer), Gen. Diurn. Lepid. pl. 29, fig. 2 (1848).

Colombia (Parzudaki). 2 specimens. B.M.

This has, I suppose, been taken for the female of C. Aceste, the sexes of that species however do not differ.

31. C. Tapajona, n. sp.

Differs from C. Aceste above in the more slender and orange oblique postmedian band of primaries, and in the

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more regular outline to the black half of these wings; below it chiefly differs in the narrowness of all the black bands: expanse of wings 1 inch, 11 lines.

Tapajos (Bates). 2 specimens. B.M.

32. C. Fulvescens, n. sp.

Allied to the preceding, but larger; the orange or fulvous oblique band of primaries continuous with basal half of wings, the black border beyond it being merely represented by a short geminate disco-cellular litura, and a dentate projection at external angle; secondaries longer; primaries below almost as in *C. Aceste*, but the apical yellow bands broader and the central black bar broken; secondaries with all the black bars narrower: expanse of wings, 2 inches, 4 lines.

E. Peru (*Degand*). 1 specimen. B.M. The largest species in the genus.

GENUS MYNES. Boisduval.

33. Mynes Doryca, n. sp.

Above like *M. Geoffroyi*, excepting that the black outer margin is about double the width; primaries below as in *M. Geoffroyii* excepting that the apical spots are larger; secondaries below as in *M. Guérinii*: expanse of wings, 2 inches, 8 lines.

Dorey (Wallace). B.M.

We have an example, labelled N. Guinea, which only differs from the type in the narrower black border above.

GENUS HETEROCHROA. Boisduval.

34. Heterochroa Tumida, n. sp.

Closely allied to H. Irmina, but the tawny band of primaries deeper in colour, its front edge like that of H. *Tizona*, its inner edge like that of H. Mephistopheles (so that it differs entirely from H. Irmina in shape); apex dark brown, not black; secondaries shorter; below primaries differing in the central band as above; secondaries with central costal silver spot shorter and broader: expanse of wings, 2 inches, 2 lines.

E. Peru (Degand); Bogota (Stevens). B.M.

Intermediate in character between H. Irmina and H. Boreas.

GENUS ARGYNNIS. Fabricius.

35. Argynnis Pallescens, n. sp.

 $\mathcal{J}, \mathfrak{P}$. Intermediate between *A. Vorax* and *A. Adippe*, size of the latter; differs from *A. Vorax* above in the more dusky tint of basal half of secondaries; below in the presence of three subapical silver spots (two submarginal and one subcostal), in primaries; a series of small silver spots, partly obscured by green and ochreous scales, just within the central waved discal series of secondaries; the ocelli better defined; and a submarginal series of seven large silver spots encircled by a green zone: expanse of wings, 2 inches, 5 lines.

Hakodadi (Whitely). 4 examples. B.M.

This species was included in my list of Hakodadi butterflies as A. Adippe var.; it, however, is clearly distinct from that species, being considerably paler above, with the black spots smaller; below it is greener than A. Chlorodippe, and the submarginal silver spots are considerably larger; from A. Jainadeva it is distinguished by its more produced primaries, its more dingy colouring on both surfaces, its larger black spots, the size of the submarginal silver spots, and the consequent narrowness of the discal ochreous area; the dark streaks upon the median branches of primaries above are also much better developed in A. Pallescens \mathcal{J} than in A. Jainadeva \mathcal{J} .

36. Argynnis Inconstans, n. sp.

3. Above similar to the Javanese representative of A. Nide, but paler, with the marginal spots much larger; below paler, with all the black and silver markings enlarged, and the central band of secondaries widened: expanse of wings, 2 inches, 8 lines.

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 \mathfrak{P} . Above like the male, but with all the black spots enlarged; below similar to the female of A. Niebe, but much paler, the silver spots less distinct, that in the discoidal ochreous patch of secondaries obsolete; the subapical band of primaries pale ochreous instead of white: expanse of wings, 3 inches, 2 lines.

J. Moreton Bay (Gibbons); ♀, J. Australia (Parzudaki). B.M.

One of the most interesting of all the Argynnides, since it offers the best evidence of the truth of protective assimilation; it supplies the place of A. Niebe in Australia, and, unlike that species, the sexes are alike; this fact is no doubt due to the more restricted range in this direction of the model Danais Chrysippus, of which the female D. Niebe is a well known mimic, but which does not occur in Australia.

GENUS CETHOSIA. Fabricius.

37. Cethosia Insulata, n. sp.

Allied to *C. Chrysippe*, but more dusky above, the basal area sometimes reddish-brown; the white patch of primaries even larger than in *C. Cydalima* (that is, more than twice as large as in *C. Chrysippe*); secondaries exhibiting an inner discal series of indistinct tawny or occasionally whitey-brown lunate markings; below, white patch of primaries as above; spots arranged as in *C. Chrysippe*, but their zones less blue-tinted: expanse of wings, 3 inches, 5 lines.

Ké Island. (Wallace). B.M.

SUB-FAMILY HELICONINÆ. Bates.

GENUS HELICONIUS. Fabricius.

38. Heliconius vetustus, n. sp.

 \mathcal{P} . Intermediate between *H. Numatus* and *H. Novatus*; general markings of primaries as in *H. Numatus* but the

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ph/ ph/ distance between the yellow band and the three subapical spots double as wide; three subanal yellow spots; the basal discoidal black streak and the basal half of the internal black streak absent; secondaries black; the costa and a central subcostal spot tawny ochraceous; a narrow band crossing the cell and a spot on abdominal margin, tawny; two subapical yellow spots; the wings below paler and duller than above; primaries with four geminate submarginal white spots towards apex; secondaries with twelve submarginal white spots ; two of them subapical, replacing the yellow spots on upper surface: expanse of wings, 3 inches, 9 lines.

Demerara. B.M.

This is the "Mechanitis Numata" of Doubleday's List, it mimics an undescribed Melinæa from Demerara, allied to M. Mælus.

39. Heliconius Radiosus, n. sp.

Closely allied to *H. Pardalinus*, differs above in the tint of the wings, the chestnut or dark mahogany of the ground colour being replaced by tawny; the black spots are also smaller and the yellow band of primaries rather different in outline; below paler, the secondaries with a marginal series of eight geminate white spots; otherwise as above : expanse of wings, 3 inches, 4 lines.

Villa Nova (Bates). B.M.

Mimics Melinæa Mælus, just as H. Pardalinus does M. Pardalis.

40. Heliconius Vittatus, n. sp.

Intermediate between H. Eucoma and H. Messene; primaries above much like H. Eucoma, but the yellow band more oblique and narrower; the discoidal black streak broader; the median black spots smaller; the external third of the internal black streak and the black submarginal spot between first and second median branches wanting; only one minute, indistinct, subapical yellow spot; secondaries tawny the costal area brown with pale greyish-brown central streak; a central transverse macular black band; the outer margin and a spot at apex black dotted with yellow; primaries below nearly as above, two indistinct squamose yellow spots placed obliquely on each

side of third subcostal branch; a squamose tawny spot at origin of fourth and fifth branches; a submarginal series of ill-defined whitish spots, becoming larger and diverging from the margin towards costa; secondaries with the costal area tawny with two black streaks, the inner one abbreviated: marginal spots more distinct than above, white; otherwise as above: expanse of wings, 3 inches, 6 lines.

Bogota (Stevens). B.M. Mimics Melinæa Ishka.

41. Heliconius bicoloratus, n. sp.

Intermediate between H. Messene and H. Aristione; differs from H. Messene above in the uniform tawny colour of the broad band in primaries and in the inward extension of the tawny patch at apex of secondaries; below, in addition to the preceding characters, it differs in the tawny colour of the subcostal area of primaries and in the presence of a small tawny subcostal spot towards apex of secondaries: expanse of wings, 3 inches, 8 lines.

E. Peru (Degand). B.M.

Mimics Melinæa Methone \mathcal{F} : I thought at one time that it was the male of H. Aristione (which mimics the supposed female of M. Methone) but H. Aristione is represented by a male example in the Collection of the British Museum.

42. Heliconius Metalilis, n. sp.

Wings above tawny, primaries with an elbowed black streak in the cell; a broad curved tapering internal black streak terminating in a more or less well defined hastate spot at external angle; costa to beyond middle black; apical half of wing somewhat as in H. *Pardalinus*; the yellow spots being similar in shape and position, but the whole of the black markings between the median branches connected together, so that the fourth division of the oblique yellow band is distinctly separated; this band is also tinted with tawny and there are no yellow spots at the external angle; secondaries almost precisely as in H. *Vittatus* (described above) but the central band is continuous: below paler than above, the primaries with seven apical submarginal white spots; the secondaries with two black subcostal streaks, the inferior one broader and enclosing a pale tawny spot; two white apical spots; twelve marginal white spots or strioles: expanse of wings, 3 inches, 6 lines.

Venezuela (Dyson). 3 specimens. B.M.

Mimics Melinæa Lilis, and differs from it just as Heliconius Telchinia does from M. Imitata.

34. Heliconius Diffusus, n. sp.

Primaries above as in *H. Sylvanus*; the discoidal black spot obsolescent; secondaries nearly as in *H. Numatus*, but the discal black band narrower and the costal area entirely greyish white; the last two spots of the discal tawny band slightly tinted externally with yellow scales: wings below nearly as in *H. Sylvanus*, but primaries without the subbasal discoidal black spot; secondaries with the black spots of the discal series considerably larger, and beyond them a complete series of almost semicircular tawny spots, the two last (at apex) slightly tinted externally with white: expanse of wings, 3 inches, 3 lines.

Pará (Wallace). B.M.

Mimics Melinæa Paraiya of Reakirt; the nearly allied H. Sylvanus mimics Melinæa Egena, and the differences between the two Melinææ and Heliconii is about equal.

44. Heliconius Mimulinus, n. sp.

Closely allied to H. Wallacei, but with the steel blue basal area more restricted; the yellow spot in cell of primaries enlarged, subquadrate, connecting the large intermedian patch with the costa, thus forming a band as in H. Sara; the costal, subcostal, and median nervures dusted with yellow scales from transverse band to base; subapical streak narrower: wings below olive brown; yellow markings as above; primaries with base of costa red; secondaries with eight differently shaped red spots at base, as in H. Wallacei; apical area irrorated with whitish scales; basal lobe spotted with yellow: expanse of wings, 3 inches, 1 line.

Bogota (Stevens). B.M.

In the general character of the pattern of the upper surface this species resembles *H. Sara* of Fabricius,

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45. Heliconius Rufolimbatus, n. sp.

Allied to *H. Tyche*, but primaries with a large pale ochreous patch across the end of the cell, shaped almost exactly like the yellow patch of *H. Timarcha* or *H. Melete*, but with a regular external red border of equal width; a subanal diffused lunate spot as in *H. Timarcha*; secondaries as in *H. Tyche*: wings below paler than above; the internal area of primaries whitish; the basal half of costa of secondaries yellow: expanse of wings, 3 inches, 6 lines. Tapajos (*Bates*). B.M.

GENUS EUEIDES.

46. Eucides Unifasciatus, n. sp.

Closely allied to *E. Mercani*, but without the subapical tawny band of primaries; the central band being also broader and more or less inclining to yellowish on upper surface : expanse of wings, 2 inches, 11 lines.

Ega (Bates). B.M.

Probably the Upper Amazons representative of E. Mereani.

47. Eucides Hippolinus.

Wings above tawny; apical third of primaries, a subcuneiform dash in discoidal cell, a large spot between the first and second median branches and an internal streak, black; secondaries with the margin, a subcostal streak and six spots beyond the cell, black; an indistinct series of submarginal white points; primaries below with a small yellow subcostal spot beyond end of cell, four apical submarginal white spots; secondaries with fourteen submarginal white spots: body dark brown, streaked and spotted with ochreous: antennæ ochreous, black at the base: expanse of wings, 2 inches, 10 lines.

E. Peru (Whitely). B.M.

Somewhat resembles *Heliconius Hippola* and probably mimics some Melinæa allied to *M. Ishka*.

SUB-FAMILY ACRÆINÆ. Bates.

GENUS ACTINOTE. Hübner.

49. Actinote Griseata, n. sp.

Allied to A. Amida, but the red basal area of primaries extending to middle of wing, exhibiting a black obliquely transverse discoidal striole, as in A. Anteas; the red discal band arched forwards, its outer edge undulated, its external third yellow-tinted; secondaries grey with the nervures dusky; outer margin broadly dull brown: thorax black; abdomen grey; primaries below paler than above; subapical area irrorated with ochreous scales; the nervures black; secondaries greyish white; the nervures black; internervular folds and outer margin brown: expanse of wings, 2 inches, 4 lines.

Pucartambo, Peru (*Whitely.*) B.M. A fine distinct species.

FAMILY ERYCINIDÆ. Swainson.

SUB-FAMILY ERYCININÆ. Bates.

GENUS BARBICORNIS. Latreille.

49. Barbicornis Dibaphina, n sp.

Wings above black, the primaries very similar to B. Basilis, but the inner orange patch terminating externally upon first median branch; secondaries with the nervures grey: wings below paler, the nervures of secondaries whitish: expanse of wings, 1 inch, 8 lines.

" Brazil" from Gardener and Stevens. B.M.

It is a pity that we have no precise habitats for the species of *Barbicornis*; the present species is evidently distinct from *B. Basilis*, from which it differs in its more slender and scarcely barbed antennæ, (in addition to the character of the coloration); its habitat is therefore sure to be different.

50. Barbicornis Melanops, n. sp.

Wings above black, the primaries with a single orange subapical band, as in *B. Basilis*; secondaries with the nervures grey; below paler, the nervures more or less whitish: expanse of wings, 1 inch, 8 lines.

" Brazil " (Stevens). B.M.

Nearly allied to the preceding, but easily distinguished by the absence of the second orange streak; the antennæ are similar.

GENUS ZELOTÆA. Bates.

51. Zelotæa Eidothea (Doubleday MS.)

Wings above white, the nervures greyish-ochreous; primaries with a broad regularly curved pale pearly-grey outer border, broadest upon costa and narrowest at second median interspace: body creamy white, head and pterygodes ochreous; antennæ dull black; primaries below white; the costa, outer margin and nervures pale brown; the internal edge of the outer border sinuated, the sinuses clouded with lilacine; secondaries pale ochreous or sordid white, the outer margin and nervures pale brown: expanse of wings, 1 inch, 8 lines.

Rio Janeiro (Stevens). B.M.

Most nearly allied to Z. Dubia of Bates.

FAMILY PAPILIONIDE. Leach.

SUB-FAMILY PIERINÆ (Swainson), Bates.

GENUS MEGONOSTOMA. Reakirt.

52. Megonostoma Cynops, n. sp.

 \mathcal{J} . Wings above saffron-yellow, costa of primaries to second-third of discoidal cell and base greenish-grey; outer margin broadly and irregularly bordered with black, as in *M. Philippa*, and irrorated with lake-red; fringe

alternately plum-coloured and yellow: secondaries as in M. Cesonia, excepting that the black border is rather broader and the orange disco-cellular spots paler and smaller; primaries below saffron-yellow, becoming golden-yellow towards apex; disco-cellular spot black and large as in M. Cesonia, otherwise as in M. Philippa: secondaries clear golden-yellow; general arrangement of markings as in M. Philippa: secondaries clear golden-yellow; general arrangement of markings as in M. Philippa but the silver spots larger and rounder: expanse of wings, 2 inches, 10 lines.

 \mathfrak{P} . Dull saffron-yellow, somewhat inclining to ochreous; basal two-fifths of costa and base irrorated with brown; disco-cellular spot dark-brown, large; apical costa and outer margins broadly dusted with brown, the brown border being sinuated internally; an irregular discal series of six diffused brown spots; the upper two confounded with the apical border, the third elongated; the fourth and fifth lunate, the sixth oval; secondaries with costa white; discocellular spots ochreous; nervures terminating, upon apical half of outer margin, in diffused brown spots: wings below much paler than in the male, otherwise similar: expanse of wings, 1 inch, 11 lines.

Haiti (*Tweedie*). 3 specimens. B.M.

To some extent intermediate between M. Cesonia and M. Philippa, but differing from both in the obtuse apex of the primaries: the female is somewhat similar in appearance to that sex of M. Philippa, but (in addition to the form of its wings) the markings are all more sharply defined, the secondaries paler in colour and with marginal brown dots.

GENUS TERACOLUS. Swainson.

53. Teracolus Cinerescens, n. sp.

Anthocharis Danaë, Trimen (nec. Fabr.) Rhop. Afr. Austr. 1., p. 44, n. 27 (1862); Gen. Diurn. Lep. pl. 7, fig. 3 (1847).

This species has long been confounded with the Indian species, it is however entirely distinct, being quite unlike it in both sexes; we have it from Port Natal and Caffraria in the British Museum.

GENUS SYNCHLOË. Hübner.

54. Synchloë Megamera, n. sp.

3. Wings above white; the base blackish-grey: apical region of costa broadly grey; the outer half of the nervures towards apex blackened; body as in S. Napi; below very similar to S. Napi, but the nervures much more distinct, median nervure of primaries and its branches bordered with black; the remainder of the nervures with greyish olivaceous; the two diffused black spots on disc of primaries more distinct than in S. Napi; secondaries bright golden-yellow at base : expanse of wings, 2 inches, 7 lines. 2. Wings above white, the nervures margined with grey; basal half of costa in primaries pale ochraceous; apical area grey; an ill-defined large brown spot between second and third median branches and a second, crossing internomedian interspace; the internal area from the latter spot to the base brown; secondaries with a large brown spot between subcostal branches towards apex; wings below less strongly marked than above; primaries with apical area pale ochreous; nervures and discal spots more feebly defined; secondaries pale ochreous, the nervures greyish olivaceous, no spots: base golden-yellow: expanse of wings, 2 inches, 6 lines.

Hakodadi (Whitely). B.M.

I formerly supposed this to be a variety of *S. Napi* and gave a rough representation of it as such, in a popular paper published in the first volume of "Nature and Art:" it is however certainly distinct, being quite as nearly allied to *S. Melete* as to *S. Napi*.

GENUS LEPTOSIA. Hübner.

55. Leptosia Sinensis, n. sp.

Allied to *L. Sinapis*, wings longer; fringe tinted with red-brown: primaries more dusky at base, costal margin and apex red-brown; a large subapical oval black spot; wings below white; fringe as above; primaries with apical half of costa and apex ochreous: discoidal cell, area immediately beyond it and a large subapical patch greyish

green; a white spot on upper disco-cellular: expanse of wings, 1 inch, 10 lines.

Shanghai (W. B. Pryer.) B.M.

GENUS EUTERPE. Swainson.

56. Euterpe Rosacea, n. sp.

Allied to *E. Terias*, primaries very similar, but broader, the three white spots well separated, smaller; secondaries black, with two deep rosy oval spots, the inner one bifid, on inner half of wings; wings below brown; primaries with central patch as in *E. Terias*; four submarginal yellow dots; secondaries with two crimson spots at base; an oval subcostal yellow spot near base; three or four rosy spots crossing inner half of wings; a large spot on abdominal margin and seven conspicuous submarginal spots sulphur-yellow: expanse of wings, 2 inches, 5 lines.

Quito (Bourcier). 2 specimens. B.M.

57. Euterpe Approximata, n. sp.

Nearly allied to E. Critias, the primaries narrower; the rosy patch of secondaries considerably nearer to the outer margin, broader, more uniform in colour, and interrupted by three nervures; the yellow spots below much smaller: expanse of wings, 2 inches, 6 lines.

Polochic Valley (Salvin). B.M.

58. Euterpe Nigripennis, n. sp.

Nearly allied to *E. Critias*, but the primaries entirely black; rosy patch of secondaries smaller; expanse of wings, $\Im 2$ inches, 6 lines; $\Im 2$ inches, 10 lines.

Bogota (Stevens).

GENUS SPHÆNOGONA. Butler.

59. Sphænogona Graduata, n. sp.

Primaries above saffron-yellow; the base irrorated with

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black; outer margin rather broadly and irregularly black, much as in *S. Constantia*, but with the irregularities less pronounced; secondaries with abdominal half white, apical half saffron-yellow, shading into golden-yellow at apex; outer margin with a well-marked black border; under side similar to *S. Theodes*: expanse of wings, 1 inch, 7 lines.

Parà (Wallace.) B.M.

Colours of S. Gratiosa above.

60. Sphænogona Ectriva (Doubleday MS.)

Above very similar to *S. Salome*, but the wings longer; primaries with broader dark brown border to outer margin; its irregularities less pronounced; caudal projection of secondaries less prominent; underside similar to *S. Constantia*: expanse of wings, 2 inches.

Archidona (Stevens). B.M.

GENUS ELODINA. Wallace.

61 Elodina Quadrata, n. sp.

Very like a large example of E. Padusa, but with all the wings much more elongated, the costæ being especially lengthened; primaries above with the apical patch more quadrate, less sinuated internally, the outer border continued to external angle; the discoidal cell tinted with sulphur-yellow; secondaries with a diffused narrow brown edge to outer margin; primaries below very similar to E. Angulipennis, but all the margins straight and the entire discoidal cell sulphur-tinted; apex pearly; secondaries white, the nervures and fringe ochreous, costa golden-yellow; a minute disco-cellular black point: expanse of wings, 2 inches.

Between Sidney and Moreton Bay. B.M.

GENUS NYCHITONA. Butler.

62. Nychitona Nupta, n. sp.

Wings above satiny-white; primaries with the apical edge slightly dusky; below as in N. Alcesta, but without the blackish spot in primaries : expanse of wings, 1 inch, 7 lines.

Angola, Bembe Mines (Monteiro). B.M.

This species has long stood in our Collection without a name; it is perhaps most nearly allied to N. Medusa of Cramer.

FAMILY HESPERIDÆ. Leach.

GENUS PYRRHOPYGA. Hübner.

63. Pyrrhopyga Fluminis, n. sp.

Papilio Bixæ, Cramer, (nec Linnæus), Pap. Exot. III., pl. 199, figs. C, D (1780).

Santarem (Bates); Archidona. B.M.

Differs from *P. Phidias* in having the white band of under surface carried through primaries to costa.

64. Pyrrhopyga Latifasciata, n. sp.

Nearly allied to *P. Phidias*, but with the white fringes rather longer, and the white band on under surface of secondaries of double the width and angulated externally in the middle : expanse of wings, 2 inches, 3 lines.

Bogota (Stevens). B.M.

GENUS CARYSTUS. Hübner.

65. Carystus Fulvimargo, n. sp.

♂. Wings above chocolate brown; basal third shot with metallic blue-green; primaries with two hyaline spots placed obliquely towards end of cell, and a spot upon each of the median interspaces, hyaline white, but bronzy-green when viewed obliquely; fringe very narrowly golden yellow; the usual pale brown male streak; secondaries with golden-yellow fringe, increasing in length to anal

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angle where it is unusually long: body above chocolatebrown, shot with metallic blue-green; anus ochraceous: wings below very similar to *C. Coridon* but the brown markings paler, the light markings more lilacine, the hyaline spots smaller, the fringe and a conspicuous patch at anal angle of secondaries golden-yellow; body below dull brown, the legs, abdomen, and club of antennæ fulvous; the palpi grey: expanse of wings, 2 inches, 6 lines.

Venezuela (Dyson.) B.M.

A very handsome species reminding one of the Javanese C. Hyela.

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Butler, Arthur G. 1873. "Descriptions of new species of Lepidoptera." *Cistula entomologica* 1, 151–177.

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