You will be so kind as to excuse the faults of this account as set up by a foreigner little skilled in the use of the language, and who endeavoured to make it as intelligible as he could.

XXVI. *Synopsis of the Species belonging to the Genus Castnia.* By GEORGE ROBERT GRAY, Esq. M. E. S.

[Read February 2, 1835.]

(Plate XIII.)

ALTHOUGH two monographs of the Fabrician genus *Castnia* have appeared, I am induced to draw up the following synopsis of species to obviate the great confusion that exists between them, as the same species of insect has often been described under two distinct names by the respective authors.

The monograph by Dalman (1825) contains eighteen species, two of which are new, and two species (published by Cramer) not noticed by Godart and Latreille, whose monograph appeared in the ninth volume of the "Encyclopédie Méthodique" (1819). The latter is also composed of eighteen species, but five of them were new to science, and two of the species, previously published, were not noticed by Dalman. To these I have added all the newly described species from various works, and have subjoined several new species, which are in the superb Lepidopterous collection of Mrs. Children.

The insects of this genus are particularly "confined to the tropical region of America." Mr. Swainson tells us, "that they fly only during the meridian heat, and then with incredible rapidity: they frequent the inlets of the thick forests, occasionally resting, far above the ground, on the trunks of trees."

Their metamorphoses unfortunately are at present enveloped in doubt, though Madam Merian has given what she considered figures of the larva and chrysalis of *Castnia licus*. The larva bears great similarity to that of *Sphinx vespertilio*, while the chrysalis is represented, fixed by its tail, in the manner of those of *Morpho* and other diurnal butterflies.

The *antennæ* of these insects are shorter than the body; strongly clubbed near the apex, with the latter somewhat hooked, which is sometimes formed by a series of long narrow scales, giving them much the appearance of the *antennæ* of *Hesperia*.

The *palpi* in some are long, in others reaching half way towards the base of the antennæ; the first joint is always short and thick; the second always the longest, and of equal thickness throughout; the third is always very short, with the apex mucronate. These joints are more or less covered with scales.

The *head* is broad, sometimes broader in the male than in the female, with large and prominent eyes: it is also furnished with three distinct ocelli.

The *body* is large, somewhat pointed, thickly covered with prominent scales, and generally ending with a brush of longer ones.

The *wings* vary in form and also in the disposition of the nervures; the discoidal cell of the lower wing appears to be open, except that a very slender nervure proceeds a short distance from the base, and diverges to each side, forming two small cells, whilst in *Castnia Nicon* the discoidal cell is open, but a slender nervure proceeds from the base, and is attached only to one side, and thus forming a cell. These insects, like all others which deflex their wings when in a state of repose, are furnished with wing-guide or guides, for they vary in number as to species. They proceed from the main nerve of the lower wing, and are received into a socket placed on the upper nerve of the discoidal cell of the anterior pair. The socket is covered with scales, so as to be scarcely visible.

The species of this genus may be divided into the following sections:—

I. Those with the palpi very long, closely applied to the head, and covered with short scales. The fore-wings are subtriangular, thickly clothed with scales, with the exterior margin straight, or slightly rounded; the lower wing beneath with one guide.—*C. Cyparissias*, *Licus*, *Evalthe*, *Fonscolombei*, pl. xiii, fig. 1, &c.

II. Those with the fore-wings elongate-triangular; the hind-wings are expanded, with the posterior margin somewhat truncate.—*C. Ardahus*, *Palatinus*.

III. Those with the palpi short, reaching half way towards the base of the antennæ, and covered with long scales; the fore-wings covered with small scales, with the exterior margin rounded. The outer margin of all prominently fringed with long scales.—*C. Hubneri*, pl. xiii, fig. 2.

IV. Those with the wings covered with minute scales, partly diaphanous; the fore-pair with the exterior margin rounded, similar also in the hind-pair, with three wing-guides.—*C. Cochrus*, *Linus*, and *Acraeoides*.

V. Those with the antennæ similar to the others, but the

hook at the apex is formed of large scales. The head of the male is very broad, as the eyes are much larger than in the female. All the wings have the outer margin rounded with a narrow fringe of small scales, and with four wing-guides. The sexes differ much in colour.—*C. Nicon*, pl. xiii. fig. 3.—*Thais*.

Species 1. *C. Cyparissias*, Latr. et Godart.

Alis atris, nitidis, fasciis duabus albis, anticarum repandis, posticarum macularibus. Al. exp. 7"—7", 6".

Pap. Dædalus, Cram. f. 1, f. A. B.

Pap. Cyparissias, Fabr. Ent. Syst. iii. p. 39, no. 415; Herbst. f. 118, f. 1, 2; Shaw's Misc. pl. 574.

Le P. Dædalus, Ency. Méth. Ins. pl. 12, f. 1.

Castnia Dædalus, Dalm. Mong. Cast. p. 7.

Castnia Cyparissias, Latr. et Godart. Ency. Méth. ix. 797.

Eupalamides Dædalus, Hubn. Cat. 1068.

Habitat in Surinamo.

Species 2. *C. Latreillei*, Godart.

Alis anticis fusco-olivaceis, maculis obscurioribus fasciâque obliquâ sordidè albâ; posticis nigris, punctis intra-marginibus cærulescentibus. Al. exp. 5" 3".

Castnia Latreillei, Godart. Ency. Méth. ix.; Spix, An. Art. pl. 30, f. 7.

Castnia Actor, Dalm. Mong. Cast. 8, pl. 1, f. 1.

Eupalamides Ctesiphon, Hubn. Sc. Ex. 11, pl.

Habitat in Brasilâ.

Species 3. *C. Atymnus*, Dalm.

Alis nigris, fasciâ obliquâ albâ, anticarum angustâ, posticarum dilatâtâ, margine immaculatis; antennarum apice, abdomine, corporeque subtus albidis. Al. exp. 4".

Castnia Atymnus, Dalm. Monog. Cast. 12.

Castnia Spixii, Perty. Spix. An. Art. pl. 30, f. 2.

Habitat in Brasilâ. In Coll. Dominæ Childrenæ.

Species 4. *C. Pylades*, Latr. et Godart.

Alis atris, nitidis; anticis fasciis duabus repandis, supra albidis, subtus rufescentibus; posticis fasciâ marginali utrinque fulvo nigroque maculatâ. Al. exp. 5" 6".

Pap. Pylades, Cram. f. 387, f. A. B.; Herbs. f. 135, f. 1, 2; Shaw's Misc. pl. 895. (nec *Pap. Pylades*, Fabr.)

Le P. Pylade, Ency. Méth. Ins. pl. 12, f. 2.

Castnia Pylades, Latr. et Godart, Ency. Méth. ix. 797; Dalm. Mong. Cast. p. 9.

Corybantes Pylades, Hubn. Cat. 1066.

Habitat in (India, Cr.)

Species 5. *C. Licus*, Latr. et Godart.

Alis atris, nitidis; anticis sesquifasciâ albâ; posticis unicâ repandâ albâ, serie marginali e maculis rubris; posticarum paginâ inferiori cinereâ. Al. exp. 4".

Pap. Licus, Cram. f. 223, f. A. B.; Fabr. Ent. Syst. iii. p. 45, no. 137; Herbst. Ins. f. 134, f. 3, 4; Drury's Ins. i. pl. 16, f. 1, 2; Merian's Sur. Ins. f. 36.

Le P. Licus, Ency. Méth. Ins. f. 12, f. 4.

Castnia Licus, Latr. et Godart. Ency. Méth. ix. 797; Dalm. Monog. Cast.

Corybantes Licus, Hubn. Cat. 1064; Hubn. Sch. Ex. 1, pl.

Habitat in Demerara. In coll. D. Childrenæ. Mus. Brit.

Species 6. *C. Harmodius*, Dalm.

Alis nigris; anticis fasciâ obliquâ strigâque interruptâ, supra flavis, subtus albis; posticis fasciâ intramarginali ferrugineâ ante angulum analem subinterruptâ. Al. exp. 4".

Pap. Harmodius, Cram. f. 223, f. C. D.

Pap. Syphax, Fabr. Ent. Syst. iii. p. 45, no. 135, Gm.; Herbst. Ins. f. 134, f. 1, 2.

Le P. Pirrha, Ency. Méth. Ins. pl. 16, f. 2.

Castnia Harmodius, Dalm. Monog. Cast. 11.

Castnia Licus, var. Latr. et Godart. Ency. Méth. ix.

Corybantes Syphax, Hubn. Cat. 1065.

Habitat in Surinamo. In coll. Mus. Brit.

Species 7. *C. Evalthe*, Latr. et Godart.

Alis nigris, nitidis; anticis fasciis duâbus, posticis unicâ, flavis; posticis supra serie e maculis marginalibus, subtus paginâ omni, rubris. Al. exp. 3".

Pap. Dardanus, Cram. f. 17, f. E. F.

Pap. Evalthe, Fabr. Ent. Syst. iii. p. 45, no. 136; Herbst. Ins. f. 137, f. 1, 2; Donovan. Ins. of India, pl. 22.

Castnia Evalthe, Latr. et Godart. Ency. Méth. ix. 798; Dalm. Monog. Cast. 13.

Corybantes Dardanus, Hubn. Cat. 1062.

Habitat in Surinamo, Brasiliâ. In coll. Mus. Brit.

Species 8. *C. Euphrosyne*, Perty.

Alis fusco-nigris, nitidis, anticis sesquifasciâ, posticis maculâ magnâ, flavis; his macularum aurantiacarum serie ad marginem posticum. (Perty.) Al. exp. 2" 8".

Castnia Euphrosyne, Perty. Spix. An. Art. pl. 30, f. 1.

Habitat in Brasiliâ.

Species 9. *C. Icarus*, Latr. et Godart.

Alis fuscis, nitidis, fasciis tribus albis; posticis rubris, strigis duâbus undulatis limboque nigris. Al. exp. 3½"—4".

Pap. Icarus, Cram. f. 18, f. A. B.; Shaw's Misc. pl. 692.

Le P. Icare, Ency. Méth. Ins. pl. 12, f. 3.

Castnia Icarus, Latr. et Godart, Ency. Méth. ix. 798; Dalm. Monog. Castn. 10.

Corybantes Icarus, Hubn. Cat. 1063; Hubn. Sc. Ex. 1, pl.

Habitat in Surinamo.

Species 10. *C. Fabricii*, Swains.

♀. "Alis anticis ferrugineis, fasciâ obscurâ sinuosâ, et maculâ discoidali; posticis pallidè testaceis, fasciis tribus interruptis crenatis nigris, serie e maculis juxta marginem ovatis, nigris." (Swains.) Al. exp. 5" 3".

Castnia Fabricii, Swains. Zool. Ill. iii. f. 149; (nec Latr. et Godart. Ency. Méth.); Thon's Ent. Arch. 1829, 123 b.

Red wing day moth, Sw.

Habitat in Brasiliâ. (Diamond District.)

Species 11. *C. Zerynthia*, G. R. Gray.

Alis anticis fusco-olivaceis, nitidis, fasciâ bifidâ sordidè albâ, apice punctis albo-hyalinis; posticis nigris, basi fusco-olivaceis, fasciâ mediâ latâ albâ, margine nigro, strigâ maculisque flavis. Al. exp. ♂ 4" 6". ♀ 6".

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 12. *C. Fonscolombe*, Latr. et Godart.

Alis anticis supra ferrugineis, nitidis; *feminae* disco punctis quinque hyalino-flavescentibus; posticis flavo-testaceis, serie postica e maculis nigris. Al. exp. 4½".

Castnia Fonscolombe, Latr. et Godart, Ency. Méth. ix. 799.

Athis Jäpyx, Hubn. Sc. Ex. 11, pl.

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 13. *C. Dalmannii*, G. R. Gray.

Alis anticis ferrugineis, *maris* fasciis duabus obsoletis; *feminae* olivaceis fasciâ albâ angustâ, et punctis hyalinis duobus; posticis rubris, basi, strigis maculisque juxta marginem, nigris; *maris* disco flavo, et *feminae* albo.

Al. exp. ♂ 3½". ♀ 4".

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 14. *C. Eudesmia*, G. R. Gray.

Alis griseo-fuscis, fimbriâ albâ; anticis fasciis obliquis duabus albis; posticis nigris, cæruleo-nitidis, basi fasciisque macularibus duabus rubris, maculis pupillis albis, margine posteriore griseo-fusco.

Al. exp. 4" 7".

Habitat in Chili. In coll. D. Childrenæ.

Species 15. *C. Amycus*, Latr. et Godart.

Alis nigris, nitidis; anticis utrinque fasciâ punctoque albis; posticis supra fasciis duabus, subtus paginâ omni rubris.

Al. exp. 2".

Pap. Amycus, Cram. f. 227, f. D. E.

Castnia Amycus, Latr. et Godart, Ency. Méth. ix. 798; Dalm. Monog. Cast. 19.

Corybantes Amycus, Hubn. Cat. 1061.

Habitat in Surinamo, Brasiliâ. In coll. D. Childrenæ.

Species 16. *C. Mygdon*, Dalm.

Alis fuscis, anticis fasciis obscurioribus et pallidioribus indeterminatis; posticis fasciis duabus intramarginalibus e maculis, *maris* albis, *feminae* luteis.

Al. exp. 3".

Castnia Mygdon, Dalm. Monog. Castn. 20, pl. 1, f. 4.

Castnia Phaleris, Latr. & Godart. Ency. Méth. ix. 799, (nec Fabricius.)

Synpalamides Mimon, Hubn. Sc. Ex. 11, pl.

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 17. *C. Phalaris*, Dalm.

Alis fuscis, immaculatis; posticis strigis duabus macularibus albis.

Al. exp.—.

Pap. Phalaris, Fabr. Ent. Syst. iii. i. 45, no. 138.

Castnia Phalaris, Dalm. Monog. Castn. 22; Donovan. Nat. Misc. 2. 47. 1.

Habitat (ignotus).

Species 18. *C. decussata*, Latr. et Godart.

Alis fusco-viridibus, nitidis; anticis fasciis duâbus albis decussatis; posticis unicâ maculari. Al. exp. $2\frac{1}{4}$ ".

Castnia decussata, Latr. et Godart. Ency. Méth. ix. 799; Hubn. Sc. Ex. iii. pl., f. 639, 640.

Habitat in Brasiiliâ. In coll. D. Childrenæ.

Species 19. *C. Hubneri*, Boisd.

Alis anticis brunneis, fasciis macularibus duâbus albis; posticis nigrescentibus basi rufescentibus, fasciâ maculari mediâ albidâ, alterâ juxta marginem. Al. exp. 2".

Castnia Hubneri, Boisd. Cuv. Reg. An. iii. 439, pl. 20, f. 2.

Habitat in Brasiiliâ. In coll. D. Childrenæ.

Species 20. *C. Pelasgus*, Latr. et Godart.

Alis atris; anticis virescentibus fasciâ fulvâ; posticis nigris, immaculatis. Al. exp. 2" 6'''.

Pap. Pelasgus, Fabr. Ent. Syst. iii. p. 46, no. 139; Cram. Ins. f. 202, f. D; Herbst. Ins. f. 136, f. 6.

Le P. Pelascus, Ency. Méth. Ins. pl. 12, f. 5.

Castnia Pelasgus, Latr. et Godart, Ency. Méth. ix. 801; Dalm. Monog. Castn. 21.

Castnius Pelasgus, Hubn. Cat. 1076.

Habitat in Surinamo.

Species 21. *C. Cronis*, Latr. et Godart.

Alis concoloribus, anticis nigris plagâ discoidali maculisque marginalibus albis; posticis abdomineque flavis; thorace nigro, puncto humerali sanguineo. Al. exp. 3".

Pap. Cronis, Cram. Ins. f. 178, A.

Castnia Cronis, Latr. et Godart, Ency. Méth. ix. 801; Dalm. Monog. Castn. 23.

Hæmonides Cronis, Hubn. Cat. 1069.

Habitat in Surinamo. In coll. D. Loddiges.

Obs.—Mr. Bowerbank has kindly shown me the specimen taken in Messrs. Loddiges's nursery, which I consider a female. It differs from Cramer's figure, in the base, spots on the thorax and marks on the head being white. Beneath the hinder wings, the inner and marginal bands are black; these bands are connected by means of narrow bands running along the nervures, thus forming cells somewhat like those on the upper surface. The expanse of wings is $3\frac{1}{2}$ inches from tip to tip.

Species 22. *C. Ardalus*, Dalm.

Alis anticis olivaceo-fuscis, fasciâ obliquâ sinuosâ maculâque griseis; posticis nigris, fasciâ mediâ punctisque intramarginalibus albis, fasciâque intermediâ rubrâ maculari.

Al. exp. 3".

Castnia Ardalus, Dalm. Monog. Castn. 17.

Castnia Pallasia, Esch. in Kotz. Iter. iii. 27, pl. vi. f. 27 ?

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 23. *C. Brecourtii*, Latr. et Godart.

Alis atris, nitidis; anticis fasciâ difformi albidâ; posticis fasciis duabus transversis albis intermediâque miniaceâ.

Al. exp. 3".

Castnia Brecourt, Latr. et Godart. Ency. Méth. ix. 798.

Habitat in Brasiliâ.

Probably the same as the preceding.

Species 24. *C. Palatinus*, Latr. et Godart.

Alis anticis ferrugineis, nitidis, puncto ocellari nigro; posticis nigris, fasciâ mediâ strigâque apice maculari albedo-flavescentibus.

Al. exp. 3" 6'''.

Pap. Palatinus, Cram. Ins. f. 159, B. C.

Castnia Palatinus, Latr. et Godart, Ency. Méth. ix. 799; Dalm. Monog. Castn. 18.

Athis Palatinus, Hubn. Cat. 1067.

Habitat in Surinamo et Demerara. In coll. D. Childrenæ.

Species 25. *C. Cochrus*, Latr. et Godart.

Alis concoloribus atris, nitidis, omnium disco fasciâ abbreviatâ albâ, abdomine posticè cingulis sanguineis albo-marginatis.

Al. exp. 4' 6'''.

Pap. Cochrus, Fabr. Ent. Syst. iii. p. 42, no. 125; Donov. Nat. Repos. v. pl. 150.

Castnia Maris, Dalm. Monog. Castn. 16.

Castnia Cochrus, Latr. et Godart. Ency. Méth. ix. 798.

Prometheus Casmilus, Hubn. Sc. Ex. ii. pl.

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 26. *C. Linus*, Dalm.

Alis concoloribus nigris, maculis flavo-hyalinis, corpore subtus albo, supra nigro, abdominis basi et antennarum apice, flavis.

Al. exp. 3" 3'''.

Pap. Linus, Cram. Ins. f. 257, A; Herbst. Ins. f. 78, f. 4.

Castnia Linus, Dalm. Monog. Castn. 24.

Cabirus Linus, Hubn. Cat. 1072.

Habitat in Surinamo et Brasiliâ. In coll. D. Childrenæ.

Species 27. *C. Acræoides*, Boisd.

Alis anticis nigrofuscis, strigis inter nervos nigris, basi et disco obscurè flavis; posticis rubris, nervis margineque nigris, ultimo maculis parvis albis. Al. exp. 2" 6".

Castnia Acræoides, Boisd. in Guer. Icon. pl. 83, f. 4; Griff. An. Kingd. pl. 53, f. 4; Boisd. Hist. Nat. des Ins. p. Lepid. Planch. pl. 14, f. 1.

Habitat in Brasiliâ. In coll. D. Childrenæ.

Species 28. *C. Nicon*, G. R. Gray.

♂ Alis anticis brunneis violescenti-nitidis, fasciis duâbus subferrugineis; posticis nigris violescenti et cærulescenti-nitidis, apicibus maculis fasciâque aureo-testaceis. Al. exp. 3" 5".

♀ Alis anticis carneo-grisescenscentibus viridi-nitidis, fasciis duâbus ferrugineis; posticis testaceis, fasciis duâbus margineque crenato nigris; subtus fasciâ in medio maculari transversâ obscurâ, ocellis albis. Al. exp. 3" 3".

♂. ♀. *Corybantes Nicon*, Hubn. Sc. Ex. 11, pl.

♀. *Castnia Thalaria*, Latr. et Godart. Ency. Méth. ix. 800, (nec *Thais*, Drury.)

Habitat in Brasiliâ. In coll. D. Childrenæ.

Obs.—The number of ocellated spots of the under surface of the hinder wings vary in specimens from two or more. In some, however, they are entirely wanted.

Species 29. *C. Marcel Serresi*, Latr. et Godart.

♂. alis fuscis, nitidis, fasciis obsoletis carneo-grisescenscentibus, anticarum tribus continuis, posticarum duâbus macularibus. Al. exp. 2" 3".

♀ alis carneo-grisescenscentibus fasciis obsoletis; posticis testaceis, fasciis duâbus margineque crenato nigris; subtus pallidioribus, fasciis macularibus duâbus obscuris, maculâ in medio albâ. Al. exp. 2" 9".

♂. *Castnia Marcel Serres*, Latr. et Godart. Ency. Méth. ix. 800; Hubn. Sc. Ex. iii. pl. f. 711, 712.

♀. *Pap. Thais*, Drury's Ins. iii. f. 16, f. 4.

Castnia Fabricii, Latr. et Godart, Ency. Méth. ix. 800; (nec Swainson, Illustr.)

Habitat in Brasiliâ. In coll. D. Childrenæ.

Obs.—To this genus was added, by Dalman, the *Pap. Erycinia*, Cr. pl. 177, f. 9, but with doubt as to its being properly placed. Godart refers it to the genus *Pieris*; he is followed in the same idea by Boisduval: I have therefore adopted the notions of the two last-named authors, and have not included it.

There is also a species of this genus described in Thon's Archiv., vol. ii., under the name of *C. Kirstenii*, the description of which I am unable to add, as I have not met with the above work.

XXVII. Notice sur le Male de l'*Epomidiopteron Julii*.

Par M. DE ROMAND, (de Tours, Chev. de Leg. d'Honneur, &c.)

[Read 4th September, 1837.]

JE dois à Mr. Shuckard, un des membres distingués de votre honorable Société, d'avoir été mis sur la voie de l'insecte hyménoptère que je vais avoir l'honneur de vous soumettre, et qui existe au British Museum. Cet insecte me paroît le ♂ de celui dont j'ai fait la description dans les *Annales de la Société Entomologique de France*, (1835, p. 653,) sous la denomination d'*Epomidiopteron Julii*. Ce rapprochement me fait désirer d'en donner communication, et je prend la liberté de le présenter aux Transactions de votre Société, comme un de ses sujets.

Le caractère principal, qui m'a déterminé à établir ce genre, se retrouve entièrement dans l'insecte dont je joins le dessin. Je veux dire, une écaille longue et large qui recouvre, de chaque côté, l'insertion des deux ailes. Le port et l'ensemble de l'insecte le rendent identique avec l'*Epomidiopteron Julii*, sauf les différences que le sexe exige.

Le corselet et l'abdomen du ♂ sont conformés comme ceux de la ♀, et sont à peu près ornés des mêmes taches blanches, avec cette différence, que les 2 taches intermédiaires, qui existent sur l'abdomen de la ♀, sont plus grandes; et que ces taches sont au