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THE HON. WALTER ROTHSCHILD, Ph.D.,
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In Connection with the Tring Museum.

Edited by

The Hon. Walter Rothschild, Ph.D.,
Dr. Ernst Hartert, and Dr. K. Jordan.

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NOTES CRITIQUES SUR QUELQUES TROCHILIDAE.

PAR E. SIMON ET C. E. HELLMAYR.

1. SUR DEUX ESPÈCES DU GENRE AGYRTRIA.

**Agyrtria versicolor** (Vieillot) (*A. affinis* Gould).


An Muséum de Paris : (a) Oiseau monté, étiqu. : "*Agyrtria brevirostris* (Less.). *Trochilus versicolor* (Vieill.)—*type*. Delalande, Brésil. No. 5022." (Aile 51 mm.; queue 2 ft 6 mm.; bec 15½ mm.)

Ce spécimen, qui correspond exactement à la description de Vieillot, se rapporte à *Thaumantias affinis* Gould et ne diffère en rien des nombreux individus provenant de Rio et de Minas-Gêraes, auxquels nous l’avons comparé.

*A. affinis* devra donc prendre le nom de *versicolor*, qui est de beaucoup le plus ancien et que O. Salvin a attribué à tort à la synonymie du *Stephanoxis delalandei* (Vieillot).

L’espèce est remplacée plus au Nord, notamment dans la province de Bahia, par une forme qui se distingue du type par le menton, le milieu de la gorge et de la poitrine, d’un blanc pur ; cette forme, qui est parfois reliée au type par quelques transitions, correspond à l’*Ornithomyia brevirostris* Lesson (décrit à tort à la Guyane) et à *Agyrtria brevirostris* de tous les auteurs modernes ; elle devra s’appeler *A. versicolor brevirostris* (Lesson).

**Agyrtria neglecta** (Elliot) = *Ag. versicolor + Hylocharis eyanus*.


An Muséum de Paris : (a) Monté, étiqu. : "*Agyrtria neglecta* (Ell.), *type*. D’Orbigny, Bolivie," sur le pied : "De Mojos (Bolivie) par M. d’Orbigny, 1834, no. 32 (no. 385 du voyageur). *Thaumantias neglectus* Elliot, type no. 5062 A." (Aile 52 ; queue 31 ; bec 14½ mm.)—(b) En peau, étiqu. : "D. 385, Yungas, no. 349. D’Orbigny, 1834 ; type : *Thaumantias neglectus* Elliot, ?." (Aile 49 ; queue 27½ ; bec 10 mm.)

Ce sont les spécimens qui ont servi à la description d’Elliot : ils avaient...
(2)

été nommés Ornithyx bicolor par D'Orbigny et Lafresnaye* et d'après Mulsant; avant l'intervention d'Elliott, le mâle portait au pied une étiquette de Trochilus labrostris de l'écriure de Boucier.

Depuis lors l'espèce a figuré dans tous les ouvrages sous le nom d'Agyrtria neglecta (Ell.); l'un de nous ‡ a proposé de la reporter au genre Polyera à cause de la disparité des sexes.

Mais un nouvel examen, très soigneux, nous a convaincus que cette prétendue espèce reposait sur une fantaisie de préparateur: le type est en effet un oiseau monté très défiguré, formé d'une tête de Hylocharis cyanus très habilement adaptée à un corps d'Agyrtria versicolor. Nous avons eu un instant d'hésitation à cause de la teinte d'un bien plus pâle et plus verdâtre que celui de Hylocharis frais et de la mandibule supérieure passée au brun presque noir, mais nous avons pu nous procurer, comme terme de comparaison, quelques très vieux spécimens de Hylocharis cyanus, ayant subi, sous l'action du temps, les mêmes altérations et le dont n'a plus été possible.

Quant à la femelle, elle ne diffère de l'A. versicolor que par la base des rectrices d'un vert un peu plus grisâtre, mais cette différence est bien insignifiante.

A. neglecta devra donc disparaître des catalogues et aller rejoindre les Chrysomelus gigliolii (Chrysomelus mosquitos capite + Florisuga mellivora corpore) et Amazilia aeneobrunnea (Chlorostilbon gibsoni capite + Chrysomelus mosquitos corpore).

Nota.—Agyrtria versicolor (Vieillot) est très répandu dans les provinces de Rio, Minas-Geraes, S. Paulo et Mato-Grosso; son extension en Bolivie n'avait pas encore été signalée, mais il est à noter que le mâle d'A. neglecta (No. 335 de D'Orbigny) est indiqué des Llanos de Mojos dans la partie la plus orientale de la Bolivie, voisînant le Mato-Grosso; la femelle (No. 349) est indiquée comme originaire des Yungas, forêts chaudes de la pente orientale des Andes.

II. SUR LE CHLORESTES MALVINI REICHENBACH.

L'oiseau figuré par Reichenbach sous le nom de Chlorestes malvina (pl. 696, ff. 4550-4551) n'a jamais été régulièrement décrit § et son nom a été omis par la plupart des auteurs récents; ni Elliott ni Hartert ne le mentionnent; O. Salvin le cite cependant, mais en le plaçant arbitrairement en synonymie de l'Agyrtria viridisina (Cat. Birds, xvi. p. 185).

Le type qui a servi à la figure 4550 de Reichenbach existe encore au Musée de Vienne, et grâce à une obligeante communication du Dr. Lorenz-Liburnan, nous avons pu en faire une étude complète.

Les affinités de cette espèce sont fort intéressantes, car elle n'appartient ni au genre Chlorestes ni au genre Agyrtria, mais rappelle bien davantage le genre Leucochloris, dont la seule espèce comme jusqu'ici est le I. albicolis (Vieillot).

Le L. albicolis est bien caractérisé par ses rectrices externes beaucoup plus

Simon, Cat. recit., 1897, p. 11.
§ Les planches de Reichenbach ont été publiées sans noms; les figures portent simplement des numéros, correspondant à des noms parus postérieurement dans l'Emm. nat. Le nom de Chlorestes Malvina y est donné pour les figures 4550 et 4551 de la planche 696. La première de ces figures représente l'oiseau dont nous parlons dans cette note, la seconde est plus douteuse et pourrait à la rigueur représenter le Thalurania (Angasina) sumagdineca?
courtes que les suivantes et beaucoup plus étroites, surtout dans leur moitié apicale, qui est subacuminée et par son système de coloration, par sa poitrine d’un blanc pur, son menton et ses joues d’un vert sombre, ses trois rectrices externes noires et longuement pointées de blanc.

Ces caractères sont à la vérité affaiblis dans le Chlorostes maleina : ses rectrices externes sont aussi plus courtes que les subexternes, mais beaucoup moins que dans le L. alboicollis, et elles sont à peine plus étroites, obtuses au lieu d’être aiguës; ses rectrices médianes sont environ de 3 mill. plus courtes que les submédianes, tandis que celles de L. alboicollis sont presque de même longueur; son bec (de même forme et de même coloration) est un peu plus court et plus étroit.

Ces particularités nous paraissent plutôt spécifiques que génériques et ne justifient pas la création d’un genre spécial pour le Ch. maleina.

La livrée des deux espèces est la même dans son ensemble sauf certaines différences de détail indiquées dans la description ci-dessous. La plus notable de ces différences est que la gorge du L. alboicollis est entièrement d’un blanc pur, tandis que celle de L. maleina est blanche et parsemée de plumes à gros disques arrondis d’un vert très brillant rappelant celui de l’Engytea alinae (Bourcier).

La synonymie de l’espèce devra s’établir comme suit :

**Leucochloris malvina** (Reichb.).

Chlorostes maleina Reichenbach, Trochil, pl. 696, ff. 4550-4551 ; Trochil, Enumeratio, 2e édit., p. 1 (1855—"Brasil").  

Musée de Vienne No. 18032, Nova-Friborgo, province de Rio-de-Janeiro, Brésil, collect. par Beske ; type de l’espèce.

Dessus du corps d’un vert doré, un peu plus brillant (presque lumineux) sur le front et le vertex, très légèrement teinté de bleuâtre sur les supra-caudales. Plumes du menton gris-noirâtre avec de petits disques apicaux vert brillant, gorge blanche parsemée de plumes ornées de taches apicales d’un vert-bleuâtre très brillant, finement bordées de blanc ; ces plumes plus denses sur les côtés où elles masquent presque entièrement la partie blanche ; région auriculaire du même vert que le dos ; région sous-oculaire et joues d’un vert-bleuâtre plus brillant, l’extrême base des plumes étant seule grisâtre. Poitrine et abdomen vert doré plus brillant que celui du dos, avec la base des plumes fuligineuse ; région abdominale marquée d’une ligne blanc-grisâtre. Sous-caudales brunâtres largement bordées de blanc, quelques-unes des plus petites gris-brunâtre avec un disque vert brillant. Couvertures supérieures des ailes vert-broncé, excepté les plus grandes, qui sont d’un brun-violacé légèrement teinté de verdâtre ; rémiges brun-violacés. Rectrices noir-bleuâtre, les médianes très nettement, les antres très légèrement au côté externe, les deux latérales de chaque côté, bordées de vert olive-broncé ; la rectrice externe marquée d’une tache apicale d’un blanc presque pur, la sub-externe d’une tache apicale plus petite d’un blanc-grisâtre. Mandibule supérieure noirâtre*, inférieure jaune pâle rembrunie à la pointe. (Aile 35° ; quene 31 ; bec 20° mm.)

* Le bec de l’exemple type n’est pas intact ; sa mandibule supérieure a perdu accidentellement une partie de sa cuticule corneé, ce qui a fait paraître rougâtre à la base. Cet accident est sans doute postérieur à la figure de Reichenbach, qui représente cette mandibule entièrement noire.
Oreotrochilus bolivianus Boucard.

Oreotrochilus bolivianus identem, in The Humming Bird, iii. p. 7 (1893, Bolivie).

Musée de Paris, Collection Boucard—

(b) "♂. A. bolivianus Bonc. Buckley, Bolivia. Type Gen. II. Birds, p. 346."

Ce nom a été placé un peu légèrement en synonymie de l' *O. stolzmanii* Salv. par Simon * et Hartert; l'étude que nous avons faite des types, au Muséum de Paris, nous a conduits à cette espèce devait être maintenue, au moins provisoirement, et même que ses plus étroites affinités n'étaient point avec *O. stolzmanii*.

Nous croyons devoir tout d'abord compléter la description par trop sommaire de Boucard:

♀. Partie supérieure du corps olive-cendré comme chez *O. leucopleurus* et *O. estellae*, passant au bronze-olive un peu rougeâtre sur les supra-condales; partie inférieure blanc-grisâtre avec la gorge d'un vert doré brillant, limité en arrière par une fine ligne noire transverse droite, et l'abdomen marqué d'une bande d'un noir-verdâtre, clairâge d'avant en arrière. Sous-condales gris-olivâtre. Ailes noircrâtres. Rectrices externes un peu plus courtes que les suivantes et un peu plus étroites, néanmoins assez larges, peu atténuées, obtuses et légèrement incurvées, d'un noir pâle à reflets bleutâtres avec la base interne blanche jusque vers le milieu, au moins au bord; les rectrices 2, 3 et 4 subsemblables entre elles, blanches avec un très étroit listé noircrâtre externe; rectrices médianes entièrement vert-bleutâtre obscur. Bec long, noir (♀ aile 72; queue 50½ ; bec 22 mm.—♂ aile 70; queue 49; bec 20 mm.).

*O. bolivianus* ressemble donc aux *O. stolzmanii* et *leucopleurus* par la coloration de sa face ventrale, diffère de l'*O. estellae* par sa bande abdominale noir-verdâtre, non rousse. Il ressemble complètement aux *O. estellae* et *leucopleurus* par la coloration de sa face dorsale d'un gris-olive, mais s'éloigne beaucoup d'*O. stolzmanii*, qui est en-dessus d'un vert vif, légèrement cuivré.

Par la forme, la proportion et la coloration de ses rectrices latérales il diffère grandement de l'*O. leucopleurus* dont les externes sont beaucoup plus étroites et tacleformes, et d'*O. stolzmanii* dont les externes sont, au contraire, un peu plus larges, plus atténuées et aussi longnes que les rectrices suivantes, mais il ressemble tout à fait à l'*O. estellae*; son bec est aussi semblable à celui de cette dernière espèce, tandis que celui des *O. stolzmanii* et *leucopleurus* est plus court et moins courbé.

La femelle, attribuée par Boucard à son *O. bolivianus*, ne diffère absolument de l'*O. estellae* que par le dessous du corps d'un blanc très légèrement teinté de brunâtre, ce qui est peut-être un caractère individuel.

En résumé, si *O. bolivianus* devait fortement être rapporté à l'une des espèces

† Tiervich, Licf. 9, 1900, p. 110.
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décrites antérieurement, il conviendrait de le considérer comme une forme d'\textit{O. estellae} à bande ventrale noire.

L'espèce du Nord du Péron à dos vert doré doit reprendre le nom d'\textit{O. stolzmannii} Salvin.

\textit{Nota.—Le genre Aeleidius} proposé par Boucard pour un groupe d'\textit{Orcotrichilus} (type \textit{O. estellae}) ne repose sur rien; il est même à noter que l'\textit{O. estellae} est précisément le type du genre \textit{Orcotrichilus} (Gould, P.Z.S. 1847, p. 9).

\section*{IV. SUR DEUX ESPÈCES DU GENRE HELIANGELUS.}

\textbf{Heliangelus rothschildi} Boucard.


No. 1. Musée de Paris, Collection Boucard—oiseau en peau, préparation de Bogota, presque adulte, type de \textit{H. rothschildi} Boucard.

Dessus du corps entièrement d'un violet-rougeâtre foncé, un peu plus sombre sur le front, qui paraît noir vu d'avant en arrière; couvertures alaires, petites et moyennes, violet-rougeâtre comme le dos, les plus grandes un peu plus pâles et brunâtres vers la base. Rémiges brun-pourpré. Rectrices en-dessus violet-rougeâtre comme le dos, en dessous (surtout les latérales) d'un violet plus bleu, de chaque côté les deux externes très finement bordées de fauve-blanchâtre à l'extrémité (apparemment un caractère de jeune). Région auriculaire et côtés du cou violet comme le dos, avec quelques petites taches vert foncé. Lores, joues et région sous-oculaire noirâtres, avec la base des plumes Blanchâtre, et de chaque côté une petite tache blanche postoculaire. Dessous du corps noirâtre fuligineux; menton et gorge ornés d'une plaque de plumes squamiformes d'un jaune doré très brillant à reflets rougeâtres; poitrine gris-blanchâtre, parsemée de plumes foncées; plumes des flancs teintées de violet-rougeâtre à l'extrémité et finement bordées de vert bronze (cette coloration est évidemment celle d'un jeune, et il est possible que l'adulte soit, en-dessous comme en-dessus, d'un beau violet, sans la plaque lumineuse de la gorge); à la base de l'abdomen, de chaque côté, une touffée de plumes duvetescence, noires à la partie basale, blanchâtre à l'extrémité. Sous-candales blanchâtres, légèrement teintées de fauve à la base, les plus longues marquées d'une ligne médiane brunâtre. Couvertures inférieures des ailes violettes, lisérées de fauve-rousâtre au bord externe. Bec noir. (Aile 66; rectrices latérales 43\% médianes 36; bec 14\% mm.)

Cette description est prise sur le type dans la collection Boucard, au Muséum de Paris; c'est un oiseau presque adulte, originaire de Colombie, comme l'indique son mode de préparation (oiseau de Bogota).

M. Oberholser, qui a tout récemment redcrit l'espèce sous le nom d'\textit{Acronympha prosantis}, a proposé d'en faire le type d'un genre spécial, ce qui ne nous paraît pas justifié; les caractères de l'\textit{H. rothschildi} sont ceux des \textit{Heliangelus} typiques.

Malgré l'assertion de l'auteur, la description de l'\textit{Acronympha prosantis} s'applique à un jeune, comme l'indiquent notamment les passages suivants;
"Upper back, scapulars, and sides of neck deep bottle-green, merging gradually into the deep reddish violet of lower back, rump, and upper tail-coverts; ... rest of cheeks dull metallic parrot-green with narrow edgings of tawny; a rather broad streak of tawny ochraceous from the rictus to opposite the middle of the eye below the infraorbital stripe; remainder of lower parts metallic parrot-green, the feathers of the medial portions and especially of all the lower abdomen edged with tawny."

Heliangelus henrici Boucard = H. strophiannus Gould.

Heliangelus henrici Boucard, in Humming Bird, i. p. 26 (1891.—Ecuador).

Musée de Paris, Collection Boucard, ♂ ad. étiq.: “Heliangelus henrici Boucard, ♂. Aequator, type of species, Humm. B. i. p. 26.” (Aile 64; queue 42; bec 15½ mm.)

H. henrici n’est point synonyme de H. latiulacies Salv.; le type de cette prétendue espèce n’est autre qu’un H. strophiannus, dont les rectrices médianes, teintées de vert bronzé, ressemblent à celles de H. clarissae, ce qui paraît assez fréquent chez H. strophiannus, car sur neuf individus de la collection Simon, deux offrent cette particularité, et d’autres ont ces mêmes rectrices teintées de bronzé à la base. H. henrici ne peut donc être maintenu, même comme sous-espèce.

Il n’en est pas de même de H. latiulacies Salv.,* qui est une espèce beaucoup plus nette que la description de Salvin ne pourrait le faire supposer et beaucoup plus voisine de H. amethysticollis que de H. clarissae. Il diffère de cette dernière espèce par le dessins du corps bronzé, nullement d’un vert brillant au delà de la ceinture blanche pectorale, l’abdomen au milieu d’un fauve pâle, les sous-candales longuement frangées de blanc à disques allongés gris-noirâtre, la plaque lumineuse du front, beaucoup plus développée, atténuant presque en arrière le niveau des yeux. Tous ces caractères le rapprochent de H. amethysticollis; il en diffère cependant par la bande pectorale blanche, l’abdomen d’un fauve plus pâle rappelant celui de H. spencei, la plaque frontale, d’un vert-bien brillant, paraissant bleue sous certaines incidences (au lien de vert doré) et le bec plus court.

D’un autre côté la bande blanche pectorale ne nous a pas paru sensiblement plus large que celle de H. clarissae.

V. SUR LES THALURANIA DE LA SECTION AUGASMA.

Les oiseaux dont il sera question dans cette note doivent à notre avis former une section dans le genre Thalurania; ils ne diffèrent des formes typiques de ce genre que par leur mandibule inférieure jaune pâle au moins à la base, encore n’est-il pas certain que ce caractère soit commun aux deux sexes, les femelles n’étant pas sûrement connues.

Ils ont pour la plupart été classés différemment par les auteurs:

L’espèce la plus anciennement connue, le Trochilus bicolor Gmelin, a cependant été rapportée au genre Thalurania, sauf par Boucard, qui a proposé d’en faire le

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type d'un genre Gmelinius et par E. Simon, qui l'a rapportée au genre Timolia Mulsant.

Le T. terechi, d'abord décrit comme Thalurania par Mulsant et Verreaux, est ensuite devenu le type du genre Timolia de Mulsant; la même espèce a été tout récemment redécrite par E. Hartert sous le nom d'Agrytria tenebrosa.

Le T. smaragdinea Gould est le type du genre Angasina de Gould, auquel son auteur a promptement renoncé, rapportant l'espèce au genre Eucephala; plusieurs auteurs ont cru reconnaître à tort dans cette espèce le T. terechi Muls. et Verr.

Le T. (Hylocharis) chlorocephala Baurrier a été placé par Gould, puis par Elliot et Salvin, dans le genre Eucephala, plus récemment par E. Simon, puis par E. Hartert dans le genre Sauccrottea, également à tort.


Le T. chlorophana E. Simon a été décrit comme Thalurania.

A part le T. bicolor, qui est assez commun à l'île de la Dominique, tous ces oiseaux paraissent fort rares, ce qui augmente la difficulté de leur étude.


Le T. terechi Muls. n'est connu que par trois individus: le type de l'espèce au Musée de New-York, le type de l'Agrytria tenebrosa dans la collection W. Rothschild à Tring; le troisième dans la collection de M. E. Gonnelle à Paris.


Les femelles n'étant sûrement connues pour aucune de ces espèces, le tableau suivant ne s'appliquera qu'aux mâles:—

**Tableau des Espèces 3.**

1. **Supra-caudales noir-bleu comme les rectrices.**

Tête, menton et gorge bleu brillant foncé, dessus du corps vert doré, graduellement plus bleuâtre en arrière. Poitrine vert-bleu brillant. Abdomen vert brunâtre obscur. Sous-caudales vert-bleu foncé. . . . .  . . . . T. bicolor (Gmelin) (Île de la Dominique)

2. **Supra-caudales rouge-rouxé.**

(a) Dessus du corps offrant de chaque côté une tache bleue supra-scaphulaire formant une ceinture interrompue comme chez les vrais Thalurania; tête vert foncé comme le dos; sous-caudales fuligineses et frangées de fauve avec de petits disques vert obscur; gorge et poitrine comme chez T. caeruleo-lavata; abdomen d'un vert plus foncé et plus bleuâtre; rectrices médianes noir-bleuâtre comme les autres . . . . . . . . . . . . . . T. scapulata (Gould)

(type d'Oyapoc—prép. de Cayenne)
(b) Dessus du corps sans taches scapulaires; dessus de la tête bleu brillant comme chez Chrysuraonia oenone.

(b') Dessous du corps vert doré (non bleuâtre), parfois quelques plumes bleues au menton; sous-caudales longues, bronzé-olive très étroitement frangées de bleuâtre. Dessus du corps vert-bleuâtre assez foncé, les dernières supra-caudales rouge-cuivrées, formant une ligne assez étroite. Rectrices médianes noir-blen... T. lerchi Muls. et J. Verr. (Colombie—prép. de Bogota)

(b') Dessous du corps vert teinté de bleu sur la poitrine (presque bleu sous certain jour). Dessus du corps vert moins bleu et plus doré; supra-caudales bronze-dorées frangées de rouge-cuivrées, formant une ceinture plus large. Sous-caudales et rectrices médianes bronze-rouge violet, les autres rectrices noir-blen tirant sur le violet...

T. caeruleo-lavata (Gould) (type de San-Paulo [Reeves]—prép. de Rio)

Nota.—Le type est un mâle non adulte, n’offrant sur la tête que quelques plumes brillantes isolées (de même teinte que celles de *T. lerchi*); le bec est détérioré et sa mandibule supérieure paraît brun-jaune par accident.

3. **Supra-caudales bronzé-olive.**

Dessous de la tête vert brillant légèrement bleuâtre. Dessus du corps vert doré comme chez Thalarania glauropis, sans teinte bleue. Rectrices noir-blen sans reflets violets. Sous-caudales longue-ment frangées de blanc à disques bronzés étroits... T. chlorocephaia (Bourc.) (type: prep. de Rio—indiqué par erreur par Bourcier comme de Guaranda, Equateur)

Nota.—Le type unique est un oiseau non adulte, n’offrant sur la tête que quelques plumes brillantes (de même teinte que celles du *T. smaragdinea*), le dos est vert doré comme celui de *T. smaragdinea*.

4. **Supra-caudales vert doré comme le dos.**

Tête bleu-verdâtre pâle très brillant, dos entièrement vert doré. Dessous du corps vert glacé très brillant, légèrement teinté de bleu sur le menton et la poitrine. Sous-caudales vert brillant comme l’abdomen, noir-blen à la base...—Bec 18—19 mm... *T. smaragdinea* (Gould)

Dessus du corps entièrement vert doré, plus terne sur la tête. Gorge et poitrine vert doré brillant comme chez *T. glauropis* (plumes à base blanche apparente au menton et sur le bas du cou); abdomen vert, plus foncé sur les flancs, blanc au milieu et à la base. Rectrices en dessus noir-blen teintées de bronzé-vert obscur an bord externe (surtout les médianes), en dessous noir-blen, les deux externes pointées de blanc. Sous-caudales blanches, longues. —Bec 20 mm... *T. chlorophana* E. Sim. (prép. de Bahia)†


† 1 n’est pas impossible que *T. chlorophana* ne soit autre que la femelle de *T. smaragdinea*.
Nous donnons ci-après la synonymie des deux espèces *T. lerchi* et *smaragdinea*, qui ont été souvent confondues :

**Thalurania lerchi** Muls. et Verr.


**Spécimens examinés :**

1. No. 38724, American Museum of Nat. Hist. New York. ♂ presque adulte, étiqu. :
   "Thalurania lerchi* Muls. et Verr., *Soc. Linn. Lyon*, 10 août, 1868 (type). N° Grenade ♂ ; " et sur le dos de l'étiquette : " *Timolia lerchi*-type. Elliot's collection. Type of fig. 119, p. 231, *Syst. of Trochilidae.*" (Aile 57 ; quene 38 ; furca 8 ; bec 21½ mm.)

2. Musée de Tring. ♂ moins adulte, préparation de Bogota. Type d' *Agyrtria tenebrosa* Hart. (Aile 57 ; quene 37 ; furca 7 ; bec 21½ mm.)

Grâce à l'obligeance de M. Allen, l'un de nous a pu étudier le type de *T. lerchi* et s'assurer de son identité spécifique avec l'oiseau décrit récemment par M. Hartert sous le nom d' *Agyrtria tenebrosa*. Les quelques très légères différences que nous avons notées entre les deux oiseaux tiennent sans doute à l'âge.

Le type du *lerchi*, plus adulte sans l'être complètement, a le menton bien brillant, celui du *tenebrosa* est garni de plumes blanches avec de petites taches apicales vert pur; l'éupogyium du *lerchi* est vert-bleuâtre, comme le dos, vert doré sans teinte bleuâtre dans le *tenebrosa*; les supra-candales du *lerchi* sont un peu plus rouges vers l'extrémité, ses sous-candales sont vert olivâtre, tandis que celles de *tenebrosa* sont vert bronzé plus mat, bien que quelques-unes des plus courtes offrent la même teinte dans les deux individus. *Le lerchi* présente une petite tache bléue au bord postérieur de la région parotique, qui manque au *tenebrosa*. Comme nous l'avons dit, ces deux spécimens ne sont pas tout à fait adultes, comme le prouve la présence de quelques plumes vert-bleuâtre au milieu de la plaque bleu brillant du front.

Bien que les descriptions d'Elliot et de Mulsant aient été faites sur le même oiseau (celui que nous avons sous les yeux), on peut y relever des contradictions, notamment en ce qui concerne la coloration du dos et des sous-candales.

D'après Mulsant le dessus et le dessous du corps seraient d'un vert-bleuâtre, ce qui n'est exact que pour le dessus, et les sous-candales d'un vert Luisant. D'après Elliot le corps serait d'un vert-pré plus foncé en dessus et les sous-candales d'un vert-olive, ce qui est plus conforme à la vérité.

Les dimensions données par Elliot sont exactes; celles données par Mulsant sont beaucoup trop faibles, sauf pour le bec.
( 10 )

Thalurania smaragdinea (Gould).

Angasna smaragdineum Gould, in P. Z. Soc. Lond. 1860, p. 305 ("Brazilt") ; Hartert, Tierreich, livr. 9, 1900, p. 82.

Spécimens examinés :

1. Mus. Brit., ♀ jr. “Novo-Friburgo, Rio Janeiro, Brazil—Reeves.” Type d'Angasna smaragdineum et d' E. smaragdo-caerulea Gould. (Aile 54½ ; quene 33 ; furca 8 ; bec 19 mm.)
2. Mus. Brit., ♂ ad., peau de Bahia, acquis de Whitley : figuré dans le Suppl. de la Monogr. des Trochil, de Gould comme T. terchi. (Aile 55 ; quene 37½ ; furca 8 ; bec 18 mm.)
3. Mus. Berlepsch, ♀ jr., peau de Bahia. (Aile 55 ; quene 33 ; furca 6 ; bec 18 mm.)
4. Mus. E. Simon, ♂ ad., ” ” ( ” 50 ; ” 41 ; ” 17 ; ” 18 mm.)
5. Mus. E. Simon, ♂ ad., ” ” ( ” 53 ; ” 36 ; ” 14 ; ” 18 mm.)


VI. SUR LES EUCEPHALA HYPOCYANEA GOULD, PYROPYGIA SALVIN ET SUBCAERULEA ELLIOT.

Ces trois espèces, qui ont été décrites sous le nom générique d'Eucephala, se rattachent à deux genres : E. hypocyanea Gould et subcaerulea Elliot sont des Chlorostes, assez voisins de C. caeruleus (Vieillot), mais E. pyropygia Salvin n’est pas synonyme du premier, comme un examen trop hâtif avait pu le faire croire à Simon et Hartert.

Malgré sa très frappante ressemblance avec les espèces précédentes, E. pyropygia est un Hylocharis, qui doit prendre place dans le voisinage de H. cyanus (Vieillot) ;* ce qui a contribué à cette erreur est que l’individu type de la collection Salvin-Godman (un mâle presque adulte, acquis de Whitley) a le bec refait : sa mandibule inférieure, examinée à la loupe, montre des traces de peinture noire, la supérieure a probablement été habilement remplacée par celle d’un autre oiseau ; en réalité le bec de E. pyropygia est rouge et spongieux comme celui des Hylocharis ; sans ce rapport l’individu de la collection Simon est bien caractérisé.

Hylocharis pyropygia (Salv. & Godm.).

Eucephala pyropygia Salvin & Godman, in Ibis, 1887, p. 596, pl. xvi (Respub. aquatorialis—erreure !—Le type a été préparé à Bahia)—Salvin, Cat. Birds Brit. Mus. xvi. 1892, p. 241.

Chlorostes hypocyaneus E. Simon, Cat. Trochil. 1807, p. 16 (pars : ♂ ad.).

Spécimens examinés :

1. Mus. Brit. ♂ presque ad., peau de Bahia ; acquis de H. Whitley ; type d'Eucephala pyropygia Salv. & Godm. (Aile 50½ ; quene 28 mm.)
2. Mus. E. Simon ♂ immat., peau de Bahia. (Aile 52 ; quene 24½ ; bec 15 mm.)

* Nous parlons ici du genre Hylocharis dans le sens du Catalogue des Trochilides, ne comprenant que les H. ruficolis, eliciace, sapphirina et cyanus.
H. pyropygia diffère de H. cyanus (Vieillot) par le dessus de la tête d'un vert-blénaâtre très brillant (bleu-violet chez H. cyanus) ; le dessus du corps d'un beau bleu-verdâtre passant au vert également brillant sur l'abdomen (chez H. cyanus la gorge et la poitrine sont d'un bleu-violet foncé, l'abdomen vert obscurn ou grisâtre).

Les deux espèces sont semblables par le bec, le dessus du corps, sauf la tête, les sous-candales et les rectrices (les externes cependant un peu plus étroites chez H. pyropygia).

Les deux seuls individus connus ne sont pas complètement adultes et ne diffèrent l'un de l'autre que par le développement de la parure frontale ; celui du Muséum britannique étant un peu plus avancé que celui de la collection Simon.

Les Euephala hypocyanea Gould et subcaerulea Elliot s'éloignent de l'E. pyropygia par l'absence complète de parure frontale, le dessus de la tête étant d'un vert obscur comme le dos, par la mandibule supérieure noireâtre et par les rectrices externes plus étroites et tout à fait droites, caractères conformes à ceux du genre Chloristes, auquel nous rapportons ces deux espèces.

Elles diffèrent, à première vue, de Chloristes caeruleus (Vieillot) par la gorge d'un beau bleu passant au vert-blénaâtre sur la poitrine et le milieu de l'abdomen, dont les flancs sont vert doré plus terne.

**Chloristes hypocyaneus** (Gould).


Chloristes hypocyaneus E. Simon, _Cat. Troch._ 1897, p. 16 (pars: juv.).

Le type unique, que nous avons étudié dans les collections du Musée britannique, est un oiseau en mauvais état dont la queue est incomplète et qui paraît avoir été préparé à Rio ; l'indication de Bahia, donnée avec doute par Gould, est sans doute erronnée. (Aile 40 ; bec. 15 mm.)

**Chloristes subcaeruleus** (Elliot).


Type d’_Euoeaphala subcaerulea_, an Musée de New-York, ex collect. Elliot, type "Brasil ? no. 38713, acquis de Boucard." (Aile 50 ; queue 30½ ; bec 16½ mm.)

M. Allen nous a obligéamment communiqué le type, encore unique au Musée de New-York, qui a servi à la description d’Elliot.

Cet oiseau diffère de _C. hypocyaneus_ (Gould) par la teinte des supra-candales et des sous-candales : les premières sont d’un vert doré comme le dos, quelques-unes seulement étant très étroitement frangées de cuivré, chez _C. subcaeruleus_ ; d’un rouge-cuivré intense, passant au vert doré à l’extrême base, chez _C. hypocyaneus_. Les sous-candales de _C. subcaeruleus_ sont vert in strict comme les flancs, quelques-unes seulement étant légèrement teintées de noirâtre à la base ; celles de _C. hypocyaneus_ sont d’un bronzé très mat, passant à la base au noir-bléna rappelant celui des rectrices.

Chez _C. subcaeruleus_ la gorge est d’un beau bleu, passant graduellement au vert sur la poitrine, tandis que chez _C. hypocyaneus_ la gorge et la poitrine sont également d’un bleu brillant.
Malgré ces différences il est actuellement impossible d'affirmer que ces deux oiseaux soient spécifiquement distincts, vu l'insuffisance des matériaux.

Elliot n'indique comme habitat que Brésil, sans localité précise et encore avec doute, le type que nous avons sous les yeux a certainement été préparé à Bahia.

VII. SUR UNE NOUVELLE FORME DE BASILINNA LEUCOTIS (VIEILLOT).

Basilinna leucotis (Vieillot) est représenté au Nicaragua par une petite race qui diffère du type (du Mexique et du Guatemala) par des caractères suffisants pour constituer une sous-espèce très nette :

Basilinna leucotis pygmaea subsp. nova.

Diffère de B. leucotis par la taille plus petite, mais les ailes relativement plus longues, repliées dépassant les rectrices ; la partie verte de la gorge plus restreinte, moins prolongée sur la poitrine ; la poitrine et l'abdomen beaucoup plus mélangés de blanc ; et surtout par les rectrices, vues en dessous, d'un noir-bleu, les externes marquées d'une tache apicale gris-blanc (les rectrices de B. leucotis type sont en dessous d'un noir mat, sans reflets bleus, les externes sont unicoles ou ornées d'une tache apicale vert-bronzé, rarement finement frangée de blanc). (Aile 55 à 57 mm.; bec dans sa partie déconverte 14½ à 15 mm.)

Nicaragua : Matagalpa (W. B. Richardson); (British Museum, w²—f² ; coll. E. Simon, 3 ♂♂, par W. B. Richardson).

Type in Coll. Simon no. 133c.
AN ACCOUNT OF THE BIRDS COLLECTED BY MONS. G. A. BAER IN THE STATE OF GOYAZ, BRAZIL.

By C. E. HELLMAYR.

The state of Goyaz is one of the least-known districts of the vast Brazilian territory, and very few zoological collections have as yet been made in this interesting region. It was first visited, I believe, by Mons. Auguste de Saint-Hilaire. His collections went to Paris, but, with the exception of a few species described in Temminck's "Recueil de Planches Coloriées," and in Lesson's "Traité d'Ornithologie," nothing has been published upon the ornithological results of his exertions. The celebrated naturalist J. Natterer traversed the "capitany" of Goyaz from its southern frontier (Rio Paranahyba) to the city of Goyaz, and then continued his way through the western parts of the state to Mattogrosso. The birds obtained on this occasion are duly enumerated by Pelzeln in his well-known work: "Zur Ornithologie Brasiliens." The expedition of Count Castelnau and Mons. Deville, in 1844 and 1845, spent some time in the vicinity of Goyaz, at Bomfim, Amaro Leite, Catalão, as well as on the banks of the Rio Maranhão (Espírito Santo do Peixe) and R. Tocantins (Porto Imperial). The collection thus gained, numbering several hundred specimens, was deposited in the Paris Museum, but only a few species were mentioned in the ornithological portion of the "Voyage dans l'Amérique du Sud." Professor Behn, of Kiel, traversed the state of Goyaz from west to east, and seems to have secured a considerable series of birds which, however, have never been properly studied. Dr. Schelater described a new Jacamar, *Brachygalba melanosterna,* and Berlepsch and Leverknut in their joint paper‡ discussed some of the rarer species in Prof. Behn's collection, then belonging to the Kiel Museum. A few species are recorded from Catalão, south-eastern Goyaz, by Prof. Reinhardt in his "Bidrag till Kundskab om Fuglefamnen i Brasiliens Campos." † Count Berlepsch possesses a number of skins obtained by Prof. Von den Steinen and Dr. Ehrenreich near Leopoldina, Rio Araguary, and received in exchange from the Berlin Museum, where the bulk of the collection is preserved. It shared, however, the fate of Behn's, St. Hilaire's, and Castelnau's treasures, and was never reported upon.

Mons. Baer has given an account of his travels in the "Bulletin du Muséum d'Histoire Naturelle" of Paris, vol. xiii. 1907. pp. 288-95. The following notes about the localities visited will be of interest as showing the nature of the country, and may be of use to some future explorer. Mons. Baer writes:

"Tous mes oiseaux sont de l'état de Goyaz, à l'exception des Nos. 2440 à 2442 obtenus à Agua Suja (Minas Geraes)—*Conurus leucophthalmus, Notura maculosa* et *Muscirota tyrannus.*

"Oiseaux observés dans Goyaz et non rapportés par moi de cet état:

"*Muscirota tyrannus* (Campinhihas), *Piaya cayana cabanisi, Gypagus papa* (Aragunaya), *Jabiru mycteria, Herodias egyptia, Leucophoyx candidissima*

*P. Z. S. Lond. 1855. p. 15.
† Ornis, vi. 1890. pp. 1-32.
(14)

(Araguaya), *Rhea americana*, (Rio Uruhú), *Cathartes aura*, *Catharista atratus brasiliensis*, *Rynchotus rufescens*.

une particularité qui m'a frappé c'est le petit nombre d'espèces d'oiseaux monches (Trochilidae) et de Tinamidés; l'état de Minas Geraes est beaucoup plus riche, ce que je crois devoir attribuer à ce que ce dernier pays est bien plus accidenté et possède plus de montagnes abruptes et plus ou moins isolées. Goyaz ressemble beaucoup plus au Mattogrosso, le terrain y est généralement ondulé et représente en quelque sorte les vagues d'une mer, les montagnes, qui n'atteignent jamais une grande hauteur, s'élevant peu à peu en pente douce, de sorte que les groupes d'oiseaux n'ont jamais subi d'isolement plus ou moins complet.

La région de l'Araguaya est tout à fait plate et complètement inondée sur des espaces énormes pendant quatre ou cinq mois de l'année.

*Localités explorées:*

*Ville de Goyaz* [formerly called *Villa Boa.—C. E. H.*] et environs, Décembre 1905, 550 mètres d'altitude; forêts et campos.

*Fazenda Esperança, Rios Uruhú et Canastra*, à 80 kilomètres au nord-est de Goyaz, déc. 1905 à févr. 1906 (saison des pluies), 700 m. d'alt. Région humide, voisine de la serra donrrada, offrant des forêts vierges, des bois à arbres clairsemés et des campos, avec de nombreux cours d'eau.

*Fazenda Catamaru, à 20 kilomètres au nord de Goyaz, mars à mai 1906, (saison sèche), 650 m. d'alt.* Terrains secs, bois et campos.

*Rio Thesouro, à 150 kilomètres au nord de Goyaz, mai 1906 (saison sèche), 600 m. d'alt.*, forêts et campos.

*Leopoldina, village sur le Rio Araguaya, affluent du Tocantins, à 200 kilomètres, au nord-ouest de Goyaz, juin à août 1906 (saison sèche), 550 m. d'alt., forêts, région amazonienne.*

The most important result of Mons. Baer's expedition is the discovery of a true Amazonian element in the avifauna of the Rio Araguaya, *Pachygleia pectoralis*, *Sicalis columbiana leopoldinae*, *Parnaia baeri*, *Knipolegus orenocensis*, *Elacenia g. gaimardi*, *Myiozetetes c. cayennensis*, *Furnarius fuscus piletus*, *Sylla Larrysimoni*, *Stipornis c. culpina*, *Thamnophilus dominatus difficiilis*, *Myrmelastes lactuosus araguayanus*, *Chelidotrrota t. tenobrosa*, etc., are either widely distributed in Amazonia, or nearly related to Amazonian species.

On the other hand, the fauna of Southern Goyaz as represented by specimens from the environs of the capital and from the Fazenda Esperança resembles closely that of South-eastern Brazil (Minas, Rio), yet at the same time there are several characteristic Mattogrosso forms—for instance *Todirostrum cinereum coloratum*, *Phyllomyias brevirostris cirecens*, *Antilophia galeata*, *Dendroamis vietata dorbigniana*, *Thamnophilus ambiguus sticturus*, *Dysithumnus affinis affinis*, *Herpsilochmus longirostris*, *Chrysopilus muttereri*, etc. It is well known that in the state of Bahia, or at any rate in that district where the so-called Bahia skins come from, we often find forms more or less different from their allies inhabiting the neighbouring provinces, Espirito Santo, Minas and Rio de Janeiro. Some of these peculiar Bahia races we meet again in Goyaz, though, in most cases, it is the South Brazilian form that extends its range so far to the north-west.

For several species the watershed south of the capital of Goyaz forms the boundary of their ranges. This is especially illustrated by the distribution of *Thalurania c. criphilae* and *T. c. baeri*. While the latter lives near Goyaz

*Araguaya signifie en langue indienne tupi-guarany: rivière des aras.*
and on the banks of the Rio Araguaya, the typical race is found, south of the mountain-range, on the Rio Verissimo and in the valley of the Rio Paraná.

Altogether, Mons. Baer obtained upwards of 800 skins, representing 200 species. Before proceeding to the detailed account I wish to tender my sincere thanks to Mr. Rothschild for having entrusted me with the study of this interesting collection.

1. *Turdus albiventer* Spix.


Nos. 1843, 1888. ♀ ♀ ad., Goyaz, March 1906.


Specimens from Goyaz, S. Paulo, Bahia, etc., are generally of small size, with a short slender bill, and of bright coloration. The wing varies in the males from 112 to 115, in the females from 110 to 113 mm.

Skins from Venezuela (Cumaná and Oriente), Surinam, British Guiana, Cayenne, Rio Branco and Bogotá collections are larger and paler.—Wing : ♀ ♀, 115—124 ; ♀ ♀, 112—120 mm.

This northern form is probably entitled to the name *T. albiventer ephippialis* Sel.,* but a series from Pará should be compared.

2. *Minus saturinus frater* Hellm.


Nos. 1857, 1871. ♀ ♀ ad., Goyaz, March 1906.—Wing 110, 102 ; tail 123, 114 ; bill 18 mm.

No. 1544. ♀ ad., Goyaz, March 1906.—Wing (moulting) 107½ ; tail 120 ; bill 19 mm.


In addition to the above specimens, I have examined two others from Catalão (in the south-eastern corner of the state of Goyaz) collected in 1846 by Castelnau and Deville, and belonging to the Paris Museum. The six birds which agree in coloration and size with a series from Mattogrosso (3 Chapada, 1 Cumá, 1 Miranda) are rather pale, greyish brown on the upper parts. Typical skins from S. Paulo (Victoria, Ypanema, etc.), and two adult females from the Rio Jordão, prov. Araguary, Minas Geraes, differ slightly in being somewhat darker and browner on the back and head, but the variation is scarcely appreciable. Specimens from various localities measure as follows : 

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<th>Wing.</th>
<th>Tail.</th>
<th>Bill.</th>
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<td>7</td>
<td>110—117</td>
<td>125—134</td>
<td>19—20 mm.</td>
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<td>3</td>
<td>107—109</td>
<td>115—123</td>
<td>19—20 mm.</td>
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<td>2</td>
<td>108, 108</td>
<td>120, 123</td>
<td>20 mm.</td>
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<tr>
<td>Two adults from Catalão, Goyaz</td>
<td>110, 117</td>
<td>120, 122</td>
<td>19, 20 mm.</td>
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<td>One adult from Miranda, Mattogrosso</td>
<td>115</td>
<td>130</td>
<td>20 mm.</td>
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<td>3</td>
<td>106—108</td>
<td>118—124</td>
<td>18½—19½ mm.</td>
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<td>1</td>
<td>105</td>
<td>121</td>
<td>18 mm.</td>
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* *Turdus ephippialis* Selater, *P. E. S. Lond.* 1862, p. 169 ( Corp. 44).
M. satanninus arenaceus Chapman, from Bahia, differs from M. s. frater by paler coloration and by its much longer, stronger bill. The length of the bill varies, in seven adult birds, from 23—26 mm.

3. Thryophilus albipectus rufiventris (Sel.).

[Thryothorus albipectus Cebanis, in Schomburgk, Reisen Brit. Guiana iii, 673 (1848.—Cayenne).]
Thryothorus rufiventris Scater, J. N. S. Lond, 1870, p. 328 (Goiaz and Mattogrosso),
Thryothorus galbraithi (see Lawrence) Pelzeln, Zuir Ornith, Bras. i. 1867. p. 47 (Cuyabi, Goiaz);
Allen, Bull. Amer. Mus. iii, 1891. p. 343 (Chapada).

No. 2125. ♀ ad., Rio Thesonas, May 1906.—Wing 64; tail 49; bill 20 mm.
Nos. 1833, 1834, 1944, 1951. ♂♂ ad., ♂♂ juv., Goyaz, March.—Adults: Wing 66; tail (damaged); bill 19. Young: Wing 65, 61; tail 50, 49; bill 19 mm.
Nos. 2200, 2249, 2378, 2407. ♂♂ ad., Rio Araguaya, June and August.—Wing 68—70; tail 51—53; bill 19—20 mm.
Nos. 2203, 2313, 2409. ♀♀ ad., Rio Araguaya, June and July.—Wing 63, 68; tail 50; bill 19 mm.

In the above specimens the whole lower surface (except the white throat) is uniform ochraceus-buff, rather deeper ochraceus on the flanks and under tail-coverts, and somewhat paler, about bright buff (Ridgway. v. 13) on the forehead. There is never any trace of brownish on the flanks, this colour being always more or less pronounced in the Upper Amazonian form as well as in T. a. albipectus (Cab.). Adult birds show distinct blackish longitudinal streaks on the ear-coverts, which almost are uniform white in the two young ones (Nos. 1833, 1844).

T. a. rufiventris differs from the form inhabiting the Upper Amazonian district (cf. Noct. Zool. xiv. 1907, p. 3, form c) in its greater dimensions, especially longer tail, decidedly longer and stronger bill, purer ochraceous under-parts without any brownish suffusion on the flanks, and by its somewhat paler upper surface; from T. a. albipectus it may be distinguished by its longer bill, more uniform under-parts, etc., and from T. a. galbraithi (Lawr.), of Panama and Santa Marta, by its much longer tail and conspicuously streaked ear-coverts.

In Western Mattogrosso and Eastern Bolivia T. a. rufiventris is replaced by T. a. minor (Pelz.), which differs only by its much smaller size and shorter, weaker bill. In coloration the two forms are absolutely alike.

Their distribution is as follows:

(a) T. albipectus rufiventris (Sel.). Eastern Mattogrosso: Cuyabí (Natterer), Chapada (Smith). N.E. San Pablo: Barretos on the Rio Grande (Garbe—♀ ad. in Mns. Paulista, examined by me). Goyaz: city of Goyaz (Baer, Natterer), Rio Thesonas, Rio Araguaya (Baer), Rio Paranahyba (Behn—♂ ad. in Mns. H. v. Berlepsch examined), Leopoldina, Araguaya (von den Steinen—♂ ad. in Berlin Museum examined).

11 ♂♂ ad.: Wing 66—70; tail 51—53; bill 19—20 mm.
6 ♀♀ ad.: 64—68; 49—51; 19—20 mm.

(b) T. albipectus minor (Pelz.).

Thryothorus minor Pelzeln, Zuir Ornith, Bras. i. pp. 47, 66 (1867.—Villa Bella de Mattogrosso and Rio Guaporé).

Thryophilus rufiventris (nee Scater) Salvadori, Bull. Mus. Torino x, No. 208, 1895. p. 3 (Corumbá Mattogrosso); idem, le, xv. No. 378, 1900. p. 3 (Uruçum, Mattogrosso).

* Minus arenaceus Chapman, Ask. 1890, p. 135.
Hab.: Western Mattogrosso: Villa Bella de Mattogrosso, Rio Guaporé (Natterer), Corumbá, Urucum (Borelli). Eastern Bolivia: Santa Cruz de la Sierra (G. Garlepp).

Material.

(a) Vienna Museum, Natterer coll. Types of species:

<table>
<thead>
<tr>
<th>Wing</th>
<th>Tail</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂ ad., Villa Bella de Mattogrosso, July 28</td>
<td>58</td>
<td>44</td>
</tr>
<tr>
<td>♀ ad., &quot; &quot; &quot; October 10</td>
<td>55</td>
<td>42</td>
</tr>
<tr>
<td>♀ ad., &quot; &quot; &quot; October 10</td>
<td>53</td>
<td>42</td>
</tr>
</tbody>
</table>

(b) Turin Museum:

♀ ad., Corumbá, Mattogrosso, Borelli coll. 56 43 16 mm.
♂ ad., Urucum 58 47 17 mm.
♂ (?) ad. 54 42 16 mm.

(c) Tring Museum (formerly in the Nehrkorn collection):

Adult (not sexed), Santa Cruz de la Sierra, Bolivia 54 42 16 mm.

4. Thryothorus genibarbis intercedens n. subsp.

Thryothorus melanos (nec Vieillot) Pelzeln, Zür Ornith. Brs. i. 1867. p. 48 (part.: Tenente Borges, Goiaz, Cuyabá, Engenho do Gama, Mattogrosso).

Thryothorus genibarbis (nec Swainson) Allen, Bull. Amer. Mus. iii. 1891. p. 343 (Chapada, Mattogrosso).

No. 2167. "♂" ad., Rio Thesournas, 600 metr., May 1906.—Wing 62; tail 60; bill 17½ mm. Type of subspecies.

No. 2168. "♂" imm., Rio Thesournas, May 1906.—Wing 58; tail 53½; bill 16½ mm.


Adult. Differs from T. g. genibarbis Sws.* from Bahia, Pará and Borba (Lower Rio Madeira) by its considerably paler coloration, the top of the head and nape being dull earthy brown (instead of deep sooty), and the back clear cinnamon-rufous (instead of chestnut-rufous). The under parts are also generally lighter, especially the sides of the belly of a paler buffy brown. The bill is weaker and slenderer.

Besides the specimens in the present collection, I have examined seven others obtained by Natterer in Goiaz and Mattogrosso. They measure as follows:

<table>
<thead>
<tr>
<th>Wing</th>
<th>Tail</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot; &quot; &quot; &quot; September 4, 1823</td>
<td>63</td>
<td>60</td>
</tr>
<tr>
<td>&quot; &quot; &quot; &quot; September 4, 1823</td>
<td>59</td>
<td>56</td>
</tr>
<tr>
<td>Bomfin and Meia Ponte, July 17, 1823</td>
<td>62</td>
<td>50</td>
</tr>
<tr>
<td>&quot; &quot; Faz. do Tenente Borges (between Goiaz), January 9, 1824</td>
<td>60</td>
<td>55</td>
</tr>
<tr>
<td>&quot; &quot; &quot; villa Bella de Mattogrosso, October 23, 1826</td>
<td>63</td>
<td>58</td>
</tr>
<tr>
<td>&quot; &quot; &quot; Engenho do Cap. Gama, Mattogrosso, August 2, 1826</td>
<td>62</td>
<td>57</td>
</tr>
</tbody>
</table>

* Thryothorus genibarbis Swainson, Anim. in Menag. p. 322 (1838—"Brazil").
Skins from Goyaz, Tenente Borges and Cuyabá are practically identical with the type of *T. g. intercedens*, while the two ♂♂ from Western Mattogrosso (Villa Bella and Engenho do Gama) are much brighter, more ochraceous on the breast and abdomen. They may represent yet another form, but in any case they are different from *T. g. juruanus* Lh., which is much darker on the back, chestnut-rufous like the typical race. For the present, I am able to distinguish three forms with black malar stripe:

(a) *T. genibarbis genibarbis* Sws. Eastern Brazil from Bahia to Pará, and west to Borba, on the east bank of the lower Rio Madeira.


[Trogodytes musculus Naumann, *Vögel Deutschl.* iii. p. 724. table (1823.—Bahia.).]  


_Nos._ 1727, 1728, 1770. ♀♂, ♀♀ ad., Faz. Esperança, January 1906.—Wing 52, 49; tail 45; bill 13 1/2—14 mm.

_No._ 1690. ♀ juv., Faz. Esperança, December 1905.

The series agrees perfectly with specimens from Rio de Janeiro, S. Paulo, Minas Geraes, Santa Catharina, and Paraguay—viz. the form separated as *T. viedi* by Count Berlepsch. I have, however, ascertained by examination of the types in the Paris Museum that *T. guarixa* of Pucheran is likewise referable to this race. The name was based on a specimen sent by Delalande fils from the environs of Rio de Janeiro, and another obtained by A. Saint-Hilaire in Southern Brazil (State of S. Paulo or Paraná). Both are still in the French national collection.

_T. m. musculus*, which is known to me only from Bahia, is much richer, more ochraceous on the lower parts, especially the flanks and under tail-coverts being deep tawny. _T. m. guarixa* has the under-surface salmon-colour, more ochraceous on flanks and crissum. An adult female (No. 2014) from Goyaz is much paler beneath than all the others, nearly whitish on throat and breast, and scarcely different from _T. m. clarus_ Berl. & Hart. of Guiana and Amazonia.

6. *Geothlypis aquinoctialis cucullata* (Lath.).


_No._ 1921 (?) ad., Goyaz, March 1906.
It seems extremely doubtful whether the description of *Syleia cucullata* really refers to the present species, no mention being made of the cinereous colour of the crown.


No. 2285. ? ad., Rio Aragunaya, 550 mètr., July 1906.—Wing 62; tail 62; bill 12½ mm.

This bird agrees perfectly with several Bahia skins. An adult male from Maranhão, N.E. Brazil (taken September 9, 1905, by F. Schwanda), in the Museum of H.R.H. the Prince of Bulugia at Sophia, and an adult bird (not sexed) obtained by Mocquers on Mount Bucarito, state of Tocuyo, Venezuela, in the Tring collection, are not different either. The latter specimen extends the range of the species, which was hitherto only known from Paraguay and the interior of Brazil, far to the north.

I may also mention in this connection that the so-called female of *Muscicapa bicittata* Larfr. & D'Orb.,* on examination, proves to be an example of the present species. It is a skin in good condition, labelled: "No. 150. D'Orbigny, 1834, Chiquitos. D. No. 352," and agrees in every way with several specimens from Bahia collections.

The range of *B. flavoeolus* thus far known is as follows:

Paraguay (Capt. Page—type No. 16,334, ?, June 1859, in coll. U.S. National Museum, Washington); Brazil: Bahia (many skins in Mus. H. v. Berlepsch, Tring, etc.); Goiaz (Natterer), Rio Aragunaya (Ber), Villa Bella de Mattogrosso (Natterer); Rio das Pedras and Porto do Rio Paraná, North S. Paulo (Natterer); Chapada, Mattogrosso (Smith), Urucum (Borelli); Maranhão (Schwanda); East Bolivia: Chiquitos (D'Orbigny); Venezuela: Mt. Bucarito, state of Tocuyo (Mocquers).

Measurements:

<table>
<thead>
<tr>
<th>Species</th>
<th>Wing</th>
<th>Tail</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twelve Bahia skins (not sexed)</td>
<td>62—67</td>
<td>60—63</td>
<td>12—13½ mm.</td>
</tr>
<tr>
<td>♂ (? ad.), Maranhão, N.E. Brazil</td>
<td>61</td>
<td>59</td>
<td>13½ mm.</td>
</tr>
<tr>
<td>♀ ad., Rio Aragunaya, Goiaz</td>
<td>62</td>
<td>62</td>
<td>12½ &quot;</td>
</tr>
<tr>
<td>ad., Chiquitos, E. Bolivia (D'Orbigny)</td>
<td>66</td>
<td>61</td>
<td>12 &quot;</td>
</tr>
<tr>
<td>ad., Mt. Bucarito, Venezuela</td>
<td>63</td>
<td>60</td>
<td>13½ &quot;</td>
</tr>
</tbody>
</table>


No. 2174., av. imm., Rio Thesouras, 600 mètr., May 1906.—Wing 60½ ; tail 53; bill 11 mm.

This bird differs from others from S. Paulo (Victoria) and Minas Geraès (Rio Jordão) in having the breast and abdomen slightly flammulated with pale yellowish, and the sides more washed with brownish yellow. Both these divergencies are apparently signs of immaturity. Cf. Allen, *Bull. Amer. Mus. N.Y.* iii. 1891, p. 344.

9. Pachysylvia pectoralis (Scl.)


No. 2194. ♂ ad., Rio Araguaia, July 1906.—Wing 55½; tail 48; bill 13 mm.

Agrees well with two examples from Mattogrosso (including the type), but has the chest of a rather deeper yellow and the upper mandible slightly darker. In the pure cinereous colour on the top and sides of the head the three specimens are practically identical.

Both Dr. Gadow* and Dr. Sclater† regarded this species as the southern representative of "P. thoracica," which was supposed to be a native of Lower Amazonia, Guiana, and Colombia. Messrs. Berlepsch and Hartert‡ have, however, shown that P. pectoralis is a perfectly distinct species widely distributed all over the great Amazonian subregion from Guiana to the southern tributaries of the Amazons, and that the true P. thoracica of South-east Brazil was not known to either of the above-named authors. Having examined the series in the British, Tring, Berlepsch, and Vienna Museums, I think it useful to give a short résumé of the characters and the distribution of the four forms of this group which I am able to recognise. First of all, it must be borne in mind that P. pectoralis is evidently specifically distinct, as in some districts it occurs together with a representative of P. thoracica—e.g. in British Guiana with P. t. griseiventris.

a. P. thoracica thoracica (Temminck).

Hylophilus thoracicus Temminck, Rec. Pl. col. livr. 29, tab. 173. fig. i. (1822—"Brésil."—Natterer coll.—Rio de Janeiro fixed as typical locality); Pelzeln, Zur Ornith. Bras. ii. 1868. p. 70 (Sapitiba, Rio Ḟ); Burmeister, Syst. Úbera, Th. Bras. iii. 1856. p. 110.


Hub. South-eastern Brazil, state of Rio de Janeiro: Sapitiba (Natterer), city of Rio de Janeiro (Natterer, Behn), Paraíba (Wied).

Adult. Forehead and crown dull yellowish olive; occiput and nape cinereous, sometimes slightly mixed with olive greenish. Lores whitish, ear-coverts yellowish olive or brownish grey; cheeks and throat whitish, foreneck, chest, and sides of the belly bright olive-yellow; middle of breast and abdomen buff.

Wing 57—61; tail 55—60; bill 13—14 mm.

Specimens examined:


c. Adult, Rio-make, in my collection.

d. ♂ ad., Rio de Janeiro, Feb. 11, 1821.—Natterer coll., Vienna Museum.

N.B.—Temminck’s description and plate agree exactly with the above specimens. Cf. the yellowish olive forehead, vertex, and ear-coverts, the cinereous occiput and nape, and the buffish middle of the belly.

† Ibis, 1881. p. 298.
‡ N. Zool. ix. 1902. p. 11.
§ The locality, Mattogrosso, is erroneous, the specimen from that place being the type of H. pectoralis!
b. *P. thoracica griseicentris* (Berl. & Hart.)


Adult. Differs from the preceding form by its much shorter tail, darker, more greenish back, decidedly narrower and duller yellow jugular band, and by having the middle of the belly pale cinereous (not buffy). Top of the head as in *P. t. thoracica*, feathers below the eye and ear-coverts always olive greenish yellow.

♂ ♀. Wing 56—60; tail 46—49; bill 13—14 mm.

♀ ♂. Wing 52—54½; tail 44—47; bill 12½—13 mm.

Specimens examined:

a, b. ♀ ♂, Bartica Grove.—Mus. H. v. Berlepsch.

c, d. ♂ ♀, , , , Brit. Mus.

c. ♀, Camacusa. , ,

f. ♀, Rio Carimang. , ,

g. ad., Cayenne skin. , ,

h. ad., Guiana.—Brown coll., Brit. Mus.

i. ♂ ad., Surinam.—Chunkoo coll., Mus. Tring.

j, k, l. ♂ ♀, Caura River, including the type.—Mus. Tring.

m, n. Bogotá skins.—Mus. Brit. and Berlepsch.

c. *P. thoracica semicinerea* (Scl. & Salv.)

*Hylophilus semicinereus* Salter & Salvin, *P.Z.S. Lond.* 1867. p. 570. tab. xxx, fig. 2 (Pará); Layard *Ibis*, 1873. p. 377 (Pará).


Hab. Lower Amazons: Pará (Wallace, Layard), Praia, near Pará (Hoffmanns), Itaituba, Tapajós (Hoffmanns). Rio Madeira: Borba and Salto Girao (Natterer).

Adult. Agrees with *P. t. griseicentris* in the pale cinereous belly, but differs by the lack of the olive-yellow jugular band and by having the sides of the head (except a narrow olive yellowish ring round the eye) ashy grey. Forehead and crown yellowish olive, occiput and nape pure cinereous, just as in the preceding form.

♂ ♀. Wing 56—59; tail 44½—48; bill 13—14 mm.

Specimens examined:

a. Immature bird (not sexed), Pará. Type of *H. semicinereus*—Brit Mus.


c, d. ♂ ♀ ad., Prata, Pará.—W. Hoffmanns coll., Tring. Mus.

e. ♂ ad., Itaituba, Tapajoz.—W. Hoffmanns coll., Tring Mus.

f. ♂ jr., Borba, April 10, 1830., Natterer coll., Vienna Mus.

g. ♂ ad., Salto do Girao, Oct. 9, 1829., Natterer coll., Vienna Mus.
d. Pachyseria pectoralis (Scl.).


Adult. Differs at a glance from all the preceding forms by having the whole top of the head (from the forehead to the nape) clear cinereous like the cheeks, eye region, and ear-coverts. Foreneck and chest much clearer and brighter yellow, this colour being also extended over the sides of the belly; the throat more whitish, and the middle of breast and abdomen pure white.

Wing 53—59; tail 43—49; bill 12—13 mm.

Specimens examined:


10. Vireo chivi (Vieill.).


No. 2433. Adult, Rio Araguaya, April 1906.—Wing 73; tail 55; bill 14 mm. Agreeing in size and coloration with a series from Roca Nova, Serra do Mar, State of Paraná, Brazil. Six adult ♂ ♂ furnish the following measurements: Wing 72—75½; tail 54—59; bill 13—15 mm.


11. Cyclorhis gujanensis cearensis (Baird).


No. 2146. ♂ ad., Rio Thesouros, May 1906.—Wing 75; tail 62; bill 16½ mm. No. 2117. ♀ imm., Rio Thesouros, May 1906.—Wing 72; tail 59; bill 16½ mm. Nos. 2300, 2307, 2429. ♂ ♂ ad., Rio Aragnaya, July and August 1906.—Wing 75, 74, 76; tail 62, 50½, 63; bill 16½, 17 mm. No. 2430. ♀ ad., Rio Aragnaya, August 1906.—Wing 75; tail 60½; bill 16 mm.
These birds are practically identical with a very large series of skins from Bahia and Ceará. Two adult ♂♀ obtained by Natterer near the city of Goiaz and on the Rio Paraná; an adult bird collected by Castelnau and Deville at Porto Imperial, on the Rio Tocantins; seven specimens (of both sexes) from Chapada, Mattogrosso, taken by H. H. Smith; and two examples secured by D’Orbigny in the plains of Chiapitos, Eastern Bolivia, agree likewise in every particular with typical C. cearensis. All these specimens have a very distinct plumbeous spot at the base of the lower mandible, even young birds, in fluffy plumage and with pointed tail-feathers.

Dr. Allen* referred the Mattogrosso specimens to C. viridis (type ex Paraguay) to which he also unites C. wiedii Pelz. with uniform reddish brown bill. While admitting that there are scarcely any constant colour-differences between true C. viridis (of Paraguay, Western Argentina, and High Bolivia) and the form inhabiting the campos of Brazil and the plains of Eastern Bolivia, I find that the latter are constantly much smaller, and have a much weaker, slenderer bill. As a rule the back is brighter, more yellowish green, and the yellow on the forehead clearer and somewhat more extended. Measurements of a large number of skins of both forms are given below.

From C. g. gujanensis,† of Amazonia and Guiana, C. g. cearensis differs by having the belly creamy-white or buff (without any greyish "cast"); the forehead and sides of the chest of a purer and clearer yellow (not tinged with greenish), the cap always more or less washed with brownish; and by its stouter, higher bill with the plumbeous area of the lower mandible less extended.

Cf. also Berlepsch, Ibis, 1888. p. 87.

Specimens from Maranhão, N.E. Brazil, are intermediate between C. g. gujanensis and C. g. cearensis. Having seen but two skins, I cannot say to which of the two forms they are more nearly related.

[C. wiedii Pelz., considered by Dr. Allen to be the "young of the year" of his C. viridis (=cearensis), is evidently specifically distinct and more nearly allied to C. ochrocephala, of which it is the northern form. I hope to discuss this intricate question on another occasion.]

The range of C. g. cearensis and C. g. viridis is, according to my knowledge, as follows:

a. C. gujanensis cearensis (Baird).


Hub. East Brazil: Ceará (ide Baird; two specimens in Mus. H. v. Berlepsch), Bahia (many specimens in Mus. H. v. Berlepsch, Tring, Munich, Vienna). Central Brazil: Goiaz (Natterer), Rio Thesonas, R. Arajuna (Baer); Porto Imperial.

† Examined: 6 Brit. Guiana; 3 Cayenne; 1 Surinam; 4 Rio Branco; 3 Pará; 2 Rio Madeira; 1 Tarapoto, N. Peru; 1 Samiria, N. Peru.
on the Rio Tocantins, State of Goyaz (Castelnau and Deville—Mus. Paris); Rio Paraná (Natterer); Mattogrosso: Chapada (Smith), Corunba (Borelli). East Bolivia: Chiquitos (D’Orbigny).

<table>
<thead>
<tr>
<th>Measurements</th>
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<tbody>
<tr>
<td>Wing.</td>
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<tr>
<td>——</td>
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<tr>
<td>Twenty-two specimens from Bahia (not sexed)</td>
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<tr>
<td>Two adults from Ceará</td>
</tr>
<tr>
<td>One adult, Porto Imperial, Rio Tocantins—Castelnau and Deville coll., Mus. Paris</td>
</tr>
<tr>
<td>One ♀ ad., City of Goyaz—Natterer coll., Mus. Vienna</td>
</tr>
<tr>
<td>Three ♀ ♀ ad., Rio Araguaia, Goyaz</td>
</tr>
<tr>
<td>One ♂ ad., Rio Araguaia, Goyaz</td>
</tr>
<tr>
<td>One ♂ ad., Rio Thesouras, Goyaz</td>
</tr>
<tr>
<td>One ♂ ad., Rio Parana, Brazil—Natterer coll., Vienna Museum</td>
</tr>
<tr>
<td>Five ♂ ♀ ad., Chapada, Mattogrosso</td>
</tr>
<tr>
<td>Two ♂ ♂ ad., Chapada, Mattogrosso</td>
</tr>
<tr>
<td>Two adults from Chiquitos, East Bolivia—coll. D’Orbigny, Mus. Paris</td>
</tr>
</tbody>
</table>

b. C. gujanensis viridis (Vieill.).


Cyclorhis altirostris Salvin, ibid 1889, p. 352 (Salta, N.W. Argentina).

Laniagre gujanensis Lafr. & D’Orbigny, Syn. Av. i. in Mag. Zool. 1837, cl. ii. p. 9 (part. : Bolivia *).

Hab. Paraguay: Carapeguá (Borelli); Bernalcé, near Asuncion (Ternelitz coll.—spec. in Mus. H. v. Berlepsch and Vienna); Gran Chaco, Pilcomayo (Kerr). Argentina: Ocampo on the Rio Paraná (Venturi); Moeovi, west of Ocampo in the Chaco (Venturi); Cordova (Schulz), Tucuman (Venturi), Salta (Burnford, White, Steinbach, Borelli, etc.), S. Luis (spec. in Ms. Brit.). High Bolivia: Yungas, Aynpaya, Rio Grande (D’Orbigny), Santa Cruz (Garlepp).

<table>
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<th>Measurements</th>
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<tbody>
<tr>
<td>Wing.</td>
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<tr>
<td>——</td>
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<tr>
<td>Two adults from Bernalcé, Paraguay</td>
</tr>
<tr>
<td>One ♀ ad., Gran Chaco, Pilcomayo (Kerr)</td>
</tr>
<tr>
<td>One ♂ ad., Mocovi, Chaco, Ms. Tring</td>
</tr>
<tr>
<td>Two ♂ ♀ (?), Ocampo, Argentina</td>
</tr>
<tr>
<td>Two ♂ ♂ (?), Ocampo, Argentina</td>
</tr>
<tr>
<td>Four adults from Salta (including the type of C. altirostris Salv.)</td>
</tr>
<tr>
<td>Two adults from Tucuman</td>
</tr>
<tr>
<td>One ♂ ad., S. Luis—Ms. Brit.</td>
</tr>
<tr>
<td>One adult from Cordova—Ms. H. v. Berlepsch</td>
</tr>
<tr>
<td>Two ad. from Yungas, Bolivia—coll. D’Orbigny Ms. Paris</td>
</tr>
<tr>
<td>Two ad. from Santa Cruz de la Sierra, Bolivia—coll. Garlepp—Mus. H. v. Berlepsch, et Coll. Boucard (Ms. Paris)</td>
</tr>
</tbody>
</table>

* The specimen from Corrientes which I examined in the Paris Museum belongs to C. ochraceophala Tsch.
N.B.—The specimens from the Bolivian Andes agree in every respect with those from Paraguay and Argentina. It will be remembered that the birds obtained by D'Orbigny in the plains of Chiquitos, near the Brazilian frontier, belong to the smaller, eastern form, C. g. caerensis. (Cf. supra, p. 23.)

12. Stelgidopteryx ruficollis ruficollis (Vieill.).

_Hirundo ruficollis_ Vieillot, _Nouv. Dict._ xiv. p. 523 (1817.—"Brésil").

No. 2091. ♂ ad., Goyaz, May 1906.—Wing 114; tail 57; bill 7½ mm.


N.B.—I have examined the specimen (♂) of _S. urropygialis_, said to be from Bahia,† in the British Museum. It really belongs to _S. r. aequalis_, and certainly never came from Bahia, being of the unmistakable make of the skins that are sent to Europe from Northern Colombia (Carthageona, Baranquilla, etc.).

13. Tachycineta albiventer (Bodd.).

_Hirundo albiventer_ Boddaert, _Tabl. Pl. Enl._ p. 32 (1783.—ex Daubenton, _Pl. Enl._ 546, fig. 2.—Cayenne).

No. 2369. ♀ vix ad., Rio Araguaya, August 1906.—Wing 197; tail 51; bill 83 mm.

Differs from a Cayenne specimen merely by having the white edges to the greater wing-coverts and secondaries rather narrower.

14. Progne tapera (Linn.).


No. 2236. ♂ ad., Rio Araguaya, June 1906.—Wing 131; tail 65; bill 11 mm.

Identical with specimens from Bahia and Bogotá.

15. Progne chalybea domestica (Vieill.).

[_Hirundo chalybea_ Gmelin, _Syst. Nat._ i. ii. p. 1026 (1788.—ex Brisson et Daubenton : Cayenne).]

_Hirundo domestica_ Vieillot, _Nouv. Dict._ xiv. p. 520 (1817.—ex Azara, No. 300 : "le Paraguay et la rivière de la Plata").

Nos. 2204, 2215. ♂ ♀ ad., Rio Araguaya, June 1906.—Wing 140, 137; tail 77½, 77; bill 11½, 11 mm.

No. 2205. ♀ ad., Rio Araguaya, June 1906.—Wing 137; tail 77; bill 11 mm.

No. 2206. ♀ jr., Rio Araguaya, June 1906.—Wing 134; tail 73; bill 10½ mm.

Agreeing in size and colour with a large series from S. Paulo, Bahia, Paraguay, and Buenos Ayres.

* In _Nov. Zool._ xiii. 1906, p. 13, by some unaccountable mistake, Vieillot's original description is stated to have been based on Azara's No. 306 ex Paraguay.

† _Cat. Birds Brit. Mus._ x. p. 216.
16. Cyanerpes cyanecia cyanecia (Linn.).

Cyanerpes cyanecia Linnaeus, Syst. Nat. xii. 1. p. 188 (1766.—ex Edwards, Brisson, etc.—We fix Surinam [ex Edwards, whom Linnaeus quotes first] as typical locality).

Cercoeca cyanecia Pelzeln, Zür Ornith. Bras. i. 1867, p. 25 (Goiaz).

No. 1760. ♂ juv., Faz. Esperança, January 1906.—Wing 68; tail 41; bill 15 mm.

Agrees in the length of the bill with specimens from Surinam, Cayenne, etc.


17. Dacnis cayana cayana (Linn.).

[Dacnis cyanecia Linnaeus, Syst. Nat. xii. 1. p. 333 (1766.—"Mexico": errore! We substitute Cyanecia ex Brisson, Orn. iii. p. 534, t. 28 fig. 1.)

Dacnis cyanecia Pelzeln, Zür Ornith. Bras. i. 1867, p. 25 (Goiaz).

Nos. 1867, 1945, 2060, 2995. ♂ ♂ ad., Goyaz, March, April, May 1906.—Wing 67—71; tail 46½—50; bill 12¾—13½ mm.

No. 1998. ♀ ad., Goyaz, April 1906.—Wing 67; tail 46; bill 13 mm.

The adult males agree with others from S. Paulo, Rio de Janeiro and Minas Geraes, and have like those from Cayenne and Venezuela (which we may consider as typical) the throat extensively deep black, and the general colour is the same shade of blue. Brazilian birds, however, are as a rule rather larger than those from more northern localities, though this is not quite constant.

Skins from Peru, Bolivia and Mattogrosso (Chapada) differ at a glance by having the throat-patch smaller and much duller, more greenish black. This is D. cayana gloauogularis Berl. & Stolzm. Some of the Chapada birds slightly point towards D. c. cayana.

18. Euphonia chlorotica violaceicollis (Cab.)?

[Tanagra chlorotica Linnaeus, Syst. Nat. xii. 1. p. 317 (1766.—ex Brisson: Cayenne).]

Acrocephalus violaceicollis Cabanis, Journ. f. Ornith. 1855, p. 409 ("Brasilien").


Nos. 1860, 1982. ♂ ♂ ad., Goyaz, March and April 1906.—Wing 61, 58; tail 38, 35; bill 8 mm.

These birds, as well as two adult males obtained by Natterer, which I have likewise before me, agree perfectly with a series from Bahia as far as coloration is concerned, but average slightly larger.

E. chlorotica, with its geographic forms, is involved in great confusion, and requires careful revision; but I have neither time nor sufficient material to enter into the question.


[Tanagra flava Gmelin, Syst. Nat. 1. ii. p. 896 (1788.—ex Brisson; ex Maregrave: East Brazil).]


Calliste flavo (nee Gmelin), Pelzeln, Zür Ornith. Bras. iii. 1869, p. 207 (part.: Goiaz).

Nos. 1868, 2025. ♂ ad., ♂ fere ad., Goyaz, March, April 1906. Wing 76½, 74; tail 56, 52; bill 12 mm.

No. 1862. ♂ imm., Goyaz, March.—Wing 73; tail 53; bill 12 mm.
No. 2026. ? ad., Goyaz, April 1906.—Wing 73; tail 55; bill 11½ mm.

The adult males agree exactly with a description in my note-book taken from the type-specimen in Count Berlepsch’s collection. Moreover, the latter was obtained not far from Goyaz on the Rio Araguaia, in the vicinity of the village Leopoldina.

Having studied a very large series of the $C. \text{flava}$ group, I think it useful to give a short résumé of the results arrived at. Besides the material in Tring, I had before me all the specimens of the Vienna and Munich Museums, and have also examined a few interesting examples in the British Museum collection. The following forms appear to be recognisable:

(a) $C. \text{flava flave}$ (Gm.).


hab. Eastern Brazil from Bahia to Pernambuco (Forbes, Robert).

♂ ad. All the top of the head (from the base of the bill to the nape) is uniform golden buff, scarcely darker than the back. On the rump there are sometimes a very few narrow streaks of silvery-greenish to be seen.

♀ ad. Top of the head dull ochraceous yellow.

Ten adult ♂♂ from Bahia.—Wing 72–74, once 76; tail 52–55 mm.

Two adult ♂♂ from S. Lourenço, Pernambuco (A. Robert coll.).—Wing 73, 74; tail 51, 55 mm.

One adult ♀ from Bahia.—Wing 71½; tail 52 mm.

N.B.—The birds from Pernambuco are absolutely similar to those from Bahia.

(b) $C. \text{flava chloroptera}$ (Vieill.).


T. $\text{formosa}$ Vieillot, loc. p. 407 (1819.—ex Azara, No. 96: Paraguay).

hab. South-eastern Brazil, S. Paulo: Ypanema, Paciencia, Porto do Piahy, Ytararé, Rio Paraná, Faz. do J. Dias (Natterer); Campinas, Victoria (Hempel), etc. Paraguay (Azara): Sapucay (Foster, Mus. Brit.).

♂ ad. Differ from $C. f. \text{flave}$ in its larger size, slightly stouter bill, duller ochraceous sides of the body, less golden back, and especially by having the forehead more or less tinged with ochraceous, this colour forming an indistinct frontal band.

♀ ad. In coloration fully like $C. f. \text{flave}$, but with longer wings and tail.

Seven adult ♂♂ from S. Paulo.—Wing 77–78; tail 56–58 mm.

Five imm. ♂♂ from S. Paulo.—Wing 74–77; tail 55–59 mm.

Two adult ♀ ♀ from S. Paulo.—Wing 74, 75; tail 57 mm.

One adult ♂ from Sapucay, Paraguay.—Wing 77½; tail 59 mm.

Type of $T. \text{chloroptera}$ Vieill.: ♂ ad.—Wing 77; tail 56 mm.

N.B.—The type of $T. \text{chloroptera}$ was obtained in 1818 by Mons. A. Saint-Hilaire in South-eastern Brazil: S. Paulo or Paraná. Though somewhat faded through exposure to light, it belongs undoubtedly to the present form. Count Berlepsch * says that a specimen from Sapucay, Paraguay, in the British Museum,

* Ornis xiv. p. 348.
converges with *C. margaritae* from Mattogrosso. This must be a mistake, for I carefully compared the specimen in question, and found it perfectly agreeing with skins from S. Paulo—i.e. *C. f. chloroptera*. It has the back of the same golden buff colour as the latter, and there is just a faint ochraceous tinge across the forehead only to be seen when viewed from in front. A similar example from Victoria, S. Paulo, is in the Tring Museum.

(c) *C. flava sincipitalis* Berl.


♂ ad. Differs from *C. f. chloroptera* by having the back slightly mixed with silvery-greenish, and the forehead (as far as the posterior border of the eye) decidedly darker, ochraceous-rufous, this colour shading into ochraceous on the vertex, and into golden buff on the nape.

♀ ad. Top of the head distinctly darker, more ochraceous-rufous than in the females of *C. f. flava* and *C. f. chloroptera*.

One adult ♂ from Goyaz.—Wing 76½; tail 56 mm.

One nearly adult ♂ from Goyaz.—Wing 74; tail 52 mm.

Two imm. ♂♂ from Goyaz.—Wing 74, 73; tail 53 mm.

One ♂ from Goyaz.—Wing 73; tail 55 mm.

(d) *C. flava margaritae* (Allen).


*Hab.* Only known from Chapada in Mattogrosso (Smith).

♂ ad. Differs from *C. f. sincipitalis* by having the back still paler and more mixed with silvery-greenish, and the forehead as well as the vertex bright ochraceous-rufous [the upper surface of the body being coloured as in *C. cayana* (Linn.)].

♀ ad. Cap bright ochraceous-rufous as in *C. f. sincipitalis*.

Twelve adult ♂♂ (Mus. Tring, Brit., and Vienna).—Wing 73—77; tail 53—55 mm.

Four adult ♂♂.—Wing 71—75; tail 52—56 mm.


[Ramphocelus jacula connectens* Berlepsch & Stolzmann, P. Z. S. Loud. 1896. p. 344 (La Merced, Central Peru).

*Ramphocelus atriscercus* (not of Ladr. & D’Orb.) Pelzeln, t.c. p. 211 (Rio das Pedras, Rio Paraná, Goiaz, Cuyabá, Villa Maria, Engenho do Gama, Matogrosso).

No. 1873. ♂ ad. Goyaz, March.—Wing 83; tail 86; bill 15 mm.


No. 1772. ♂ ad. in moult, Faz. Esperança, January 1906.


So far as coloration is concerned, the adult males are identical with the types from Central Peru, which, however, have rather shorter wings and tail.

Birds from S. Leopoldina, Aragnaya, are more washed with crimson on the abdomen, and seem to be nearer or even referable to *R. c. carbo*. I hope to discuss the geographic variation of *R. carbo* on an early occasion.
21. Tanagra palmarum palmarum Wied.

Tanagra palmarum Wied, "Reise Bras.
ii. p. 76 (1821.—Canavieiras, Bahia).

No. 1721. ♀ in moult, Faz. Esperança, January 1906.—Wing 99; tail 77 mm.
Agrees with Bahia skins in having the remiges very distinctly edged with clear olive-greenish.

22. Piranga saira (Spix).

Piranga saira Spix, "At. Bras. ii. p. 35, tabl. xlviii. fig. 1 (1825.—Brazil).

No. 1904, 1908, 2011, 2055. ♂ ♀ ad., Goyaz, March and April 1906.—Wing 95, 97, 101; tail 75, 79, 79, 81; bill 18 mm.

No. 1870, 1897, 1903. ♀ ♀ ad., Goyaz, March 1906.—Wing 93—94; tail 75—77; bill 17½—18 mm.
The females are practically identical with Spix's type in the collection of the Munich Museum.

23. Tachyphonus rufus (Bodd.).

Tachyphonus melanocephalus Pelezeln, tabl. PI. eitl. p. 44 (1783.—ex Daubenton, Pl. enl. tab. 711.—Cayenne).

Tachyphonus melanocephalus Pelezeln, l.c. p. 212 (Gidade de Goiaz).

No. 1805. ♂ ad., Goyaz, March, April, May.
No. 2000. ♂ juv., Goyaz, April.
Nos. 2240, 2271, 2329. ♂ ♂ ad., Rio Araguny, June and July 1906.


Nos. 2239, 2243, 2256—8. ♀ ♀ ad., Rio Araguny, June and July 1906.

One of the adult males from the Rio Araguny (No. 2329) has a small vertical spot of cinnamon-rufous.

24. Cygnagra ruficollis ruficollis (Licht.).


Cygnagra ruficollis Pelzeln, l.c. p. 214 (Goiaz).

No. 1805. ♂ ad., Faz. Esperança, February 1906.—Wing 79; tail 64; bill 14½ mm.

No. 1700. ♂ juv., Faz. Esperança, January 1906.—Wing 72; tail 64; bill 13 mm.
The adult bird is practically identical with others from Mattogrosso (P. Feia, Chapada, Cuyalá) and S. Paulo, the throat being deep cinnamon-rufous. Two examples from Chiquitios, Eastern Bolivia, obtained by D’Orbigny, in the Paris Museum, do not differ either.
The young bird (No. 1700) has the breast and abdomen much more tinged with buff than the adult, the throat is considerably lighter, about "ochraceous-buff" (Ridgw. v. 10), and there is a distinct, though narrow, ochraceous line above the lores and eye.

25. *Nemosia guira guira* (Linn.).


*Nemosia guira* Pelzeln, l.c. p. 215 (Goyaz).

No. 1956. ♀ ad., Goyaz, March 1906.—Wing 66; tail 54; bill 11½ mm.

No. 1922. ♂ ad., Goyaz, March 1906.—Wing 63; tail 51; bill 11 mm.

The adult male collected by Mons. Baer and two others in the Vienna Museum, obtained by Natterer near the city of Goyaz, agree perfectly with a series from the Rio Paranaé (Natterer), Rio Paranaapanema (Hempel), and Piauí (Wachsmund). Specimens from Bahia seem to be rather smaller, but a larger series should be examined.

*N. guira* is divisible in several more or less well-defined geographic forms.

26. *Lamprotes loricatus* (Leh.).

*Tanagra loricata* Lichtenstein, *Verz. Dabl. Berliner Mus.* p. 31 (1823.—part.: "♂" = ♀.—"Brazil").

No. 2403. ♂ ad., Rio Araguaya, 550 m., August 1906.—Wing 115; tail 85; bill 20 mm.

In this specimen only the middle of the throat and forehead are bright scarlet, while in a Bahian skin the chest is also of this colour.

*L. loricatus* is a scarce species, and its range still very imperfectly known. So far as I know, it is now for the first time recorded from Goyaz. Spix *obtained it* between Rio de Janeiro and Bahia, Wied † says that it is rather common in the sertão of the interior of the state of Bahia near Ressaqué, on the confines of the Campos Geraës. It is not unfrequently met with in the trade collections shipped from Bahia.

27. *Arremon silens* (Bodd.).


*Arremon silens* Pelzeln, l.c. p. 216 (Cidade de Goyaz).

No. 2177. (♂) ad., Rio Theosouras, May 1906.—Wing 77; tail 66; bill 13 mm.

No. 2099. ♂ ad., Goyaz, May 1906.—Wing 76; tail 67; bill 13½ mm.

They agree best with specimens from Pará (cf. *Nov. Zool.* xiii. 1906. p. 358), while others from Cayenne and British Guiana have the black jugular band rather broader. A series of adult males from Bahia, however, does not materially differ from northern examples except that the cinereous colour on the belly is generally more extended.

28. *Saltator maximus* (P. L. S. Müll.).


*Saltator maxima* Pelzeln, l.c. p. 218 (Cidade de Goyaz).

Nos. 1680, 1685. ♀ ad., and one, not sexed, Faz. Esperança, December 1905.

Nos. 1886, 2039. ♂♂ ad., Goyaz, March, April 1906.


S. similis var. Pelzeln, l.c. p. 218 (Cidade de Goiânia).


Nos. 2253, 2254. ♂♀ ad., Rio Araguaia, July 1906.—Wing 98, 93; tail 91, 91; bill 18⅔, 18 mm.

I am unable to find any constant differences between specimems from Bahia (including the type of S. s. pallidiventris Berl.), and those from Goyaz (Baer, Natterer, V. den Steinen, Castelhau et Deville), Guyabá (Behn), and Minas Geraês (Campanha). Skins from Paraná (Curitiba), Santa Catharina, and Rio Grande do Sul are much darker, deep fulvous on the belly, as pointed out by Connt Berlepsch (l.c.). The type of S. similis from Corrientes, however, proved to be indistinguishable from Bahia and Goyaz examples—hence S. s. pallidiventris becomes a synonym of similis, while the dark-bellied race from South-eastern Brazil would require a new name. Specimens from Rio de Janeiro and S. Páulo are variously intermediate between the two forms, some being nearer the northern race, others being very nearly as dark as examples from Rio Grande do Sul.

Although I have examined thirty-six specimens, this material was not sufficient to exactly define the range of the two or three geographic forms.

30. Saltator atricollis Vieill.

Saltator atricollis Vieillot, Nouv. Dict. xiv. p. 104 (1817.—ex Azara No. 82: Paraguay); Pelzeln, l.c. p. 219 (Goiânia).

No. 1736. ♂ ad., Faz. Esperança, January 1906.—Wing 92; tail 98; bill 18 mm.

Nos. 1855, 2084. ♂♂ ad., moultmg, Goyaz, March, May 1906.—Wing 92, 91; tail 95½, 97½; bill 17⅔ mm.

No. 1977. ♀ imm., Goyaz, April 1906.—Wing 89; tail 92; bill 17 mm.

No. 1738. ♀ juv., Faz. Esperança, January 1906.—Wing 88; tail 92; bill 18 mm.

This series agrees exactly with several topotypical specimens from Paraguay (Bernalcun, near Asuncion). Freshly moulted birds are warm chocolate-brown on the back, and the lower parts show a strong ochraceous tinge. In worn plumage the upper surface is dull greyish brown, especially rump and upper tail-covers, while the breast and the middle of the abdomen appear nearly white, the flanks and under tail-covers alone being pale ochraceous.

In immature birds the throat is duller black and mixed with brownish, the bill nearly uniform blackish.

31. Schistochlamys atra (Gm.).


Oreosthenes ater Pelzeln, l.c. p. 220 (Goiânia).


No. 2066. $\delta$ juv., Goyaz, April 1906.

Identical with specimens from Cayenne and Bogotá. An adult male from Cuyabá is not different either.

32. Cissops leveriana major Cab.


No. 1755. $\delta$ ad. in worn plumage, Faz. Esperança, January 1906.—Wing 110 + x ; tail 170 + x ; bill 16 mm.

Nos. 1878, 1879, 2008. $\delta$ ad., $\varphi$ ad., in moult, Goyaz, March, April 1906.—Wing 110—114 ; tail 152—167 ; bill 16, 16, 15 mm.


Agreeing with a series from Bahia, Rio, Minas Gerais and S. Paulo. The interscapular region is always glossy bluish black like the head, while it is white like the rump in C. l. leveriana (Gm.), of Cayenne and Venezuela.

33. Cyanocompsa cyanea cyanea (Linn.).

Loxias cyanea Linnaeus, Syst. Nat. xii. i. p. 303(1756.—ex Edwards,* tab. 125 : "Angola".—errose! We substitute Eastern Brazil as typical locality).

Guira cyanea Pelzeln, l.c. p. 221 (Goiáz).

No. 2202. $\delta$ ad., Rio Araguaya, June 1906.—Wing 81 ; tail 77 ; bill 15 mm.

No. 2191. $\varphi$ ad., Rio Araguaya, June 1906.—Wing 73 ; tail 68 ; bill 14 1/2 mm.

The male is somewhat larger than Bahia skins, but not otherwise different. The female is typical, being ochraceous-brown on the upper parts, and deep ochraceous on the lower ones.

The geographic forms of C. cyanea are in great confusion. I have not sufficient material at hand to discuss them now, but I hope to do so on an early occasion.

34. Oryzoborus angolensis angolensis (Linn.).

Loxias angolensis Linnaeus, Syst. Nat. xii. i. p. 303 (1766.—ex Edwards: "Angola".—errose! We substitute East Brazil as typical locality).

Oryzoborus torridus Pelzeln, l.c. p. 222 (Araguay).

Nos. 1621, 1687—9. $\delta$ $\varphi$ ad., Faz. Esperança, December 1905.—Wing 59—62 ; tail 57—61 mm.

No. 1762. $\delta$ juv., Faz. Esperança, January 1906.

35. Oryzoborus crassirostris maximiliani Cab.

[Loxias crassirostris Gmelin, Syst. Nat. 1. ii. p. 882 (1788.—ex Latham : loc. ign.—We fix Cayenne as typical locality).]

Oryzoborus Maximiliani Cananis, Mus. Hein. i. p. 151 [June 1851.—based on Fringilla crassirostris Wied, Beitr. Natg. Bras. 3. i. 1830. p. 564.—Rio Espritu Santo ; and South-eastern Bahia (Caravelas, Vigoza)].

No. 1769. $\delta$ fere ad., Faz. Esperança, January 1906.—Wing 76 ; tail 72 ; bill 16 1/2 ; depth at base of upper mandible 10, of lower mandible 6 1/2 mm.

* Edwards says that his specimen was brought alive from Lisbon, and quotes the words of Mr. Martyn that "this bird is only to be got on the coast of Angola, in Africa . . ." At that time there was a regular traffic between the west coast of Africa and Brazil (then a Portuguese colony), and it is probable that C. cyanea, like several other species (f.i. Oryzoborus angolensis), was imported from some of the principal ports in Eastern Brazil—Bahia or Rio de Janeiro.
No. 1682. (♀) ad., Faz. Esperança, December 1905.—Wing 69; tail 65½; bill 16; depth at base of upper mandible 9, of lower mandible 6 mm.

Besides these specimens, I have examined an adult male from Rio de Janeiro in Count Berlepsch's collection, and another from Cuyabá, Mattogrosso,* obtained by Natterer, in the Vienna Museum.

**O. c. maximiliani** is a very close ally of *O. c. crassirostris* (Gm.), and takes its place in Southern Brazil. The males differ from those of the typical race by averaging larger, and by having the axillaries and under wing-coverts broadly edged with black. Specimens of *O. c. crassirostris* from Cayenne, Surinam and British Guiana (Annaí) have a much smaller bill, as well as shorter wings and tail. Those from Trinidad (Seelet) and the Orinoco valley, however, are scarcely smaller than *O. c. maximiliani*, and the bill is quite as large and stouter as in the latter. Two adult ♂♂ from the upper Rio Negro (Lamalonga, Marabitanas) have the strong bill of the Orinoco and Trinidad birds, but in size they agree with the Guianan ones. The female of *O. c. maximiliani* differs from *O. c. crassirostris* by its rather darker and less rufescent upper parts, and by having the axillaries and under wing-coverts more buff (less whitish).

**O. c. maximiliani** is rather scarce in collections, and its range very imperfectly known. Prince Wied met with it on the Rio Espririto Santo, and near Vioza and Caravellas in the south-eastern portion of the state of Bahia. Natterer obtained an adult male at Cuyabá, Mattogrosso, and Dr. Allen† records three specimens, obtained by Mr. H. H. Smith near Chapada, in the same province. Count Berlepsch possesses, as mentioned above, an adult male from Rio de Janeiro, whence there are also two skins in the British Museum.

36. *Volatinia jacarina jacarina* (Linn.).


*Volatinia jacarina* Pelzein, t.c. p. 226 (Goiaz).


In the males all the axillaries and under wing-coverts are white.

37. *Spinus ictericus allenii* Ridg.w.


No. 2161. ♂ vix ad., Rio Thesouras, May 1906.—Wing 65; tail 40; bill 10 mm.

No. 2208. ♂ ad., Rio Araguaya, June 1906.—Wing 68; tail 43; bill 11 mm.

These specimens, which agree perfectly with a topotype from Chapada (Brit. Mus.), differ from true *S. i. ictericus* (Lecht.) ex Rio, S. Paul, Rio Grande do Sul, etc., by rather shorter wings, clearer yellow under-parts and by having the yellow basal portion of the tail less extended, this being especially noticeable on the median rectrices. The thighs are pale yellow as in *S. i. ictericus*.

* Ornithorhynchus crassirostris* Pelzein, *Orn. Bras.* iii. 1869, p. 222 (part.).
Skins from Bahia (Wucherer, Brit. Museum), and Chiquitos in Eastern Bolivia (D’Orbigny, Paris Museum), are in every respect similar to those from Goyaz.


38. Sicalis columbiana leopoldinae Hellm.


No. 2227. ♂ ad., Rio Araguaya, June 1906. —Wing 58; tail 41½; bill 9½ mm.

Agrees in every particular with the type which was obtained in the same locality. In *Nov. Zool.* xiv. 1907, pp. 8–9, I gave a review of the geographic races of *S. columbiana*, to which I have nothing to add.

39. Sicalis arvensis arvensis (Kittl.).


No. 2123. ♂ or ♂ juv. Rio Thesouras, May 1906. —Wing 70; tail 55; bill 10 mm.

With a considerable series from various localities before me I can recognise, cast of the Aud.les, three geographic forms of this group.

(a) *Sicalis arvensis arvensis* (Kittl.).

*Hab.* Chili, Argentine, South Brazil. Goyaz : Rio Thesouras (Baer), Abrantes, Fazenda do S. Antonio (Natterer); Northern S. Paulo : Faz. do José Dias (Natterer); Matogrosso : Chapada (Smith); Minas Gerais : Lagoa Santa (Reinhardt); Rio Grande do Sul : Taquara (Ihering), etc.

N.B.—I am unable to see constant differences between specimens from Chili and Argentine and others from Brazil. *Crithagra hilarii* Bp. was based on an example from Southern Brazil (cf. *Nov. Zool.* xiii. 1906, p. 309). Skins from different localities measure as follows:

<table>
<thead>
<tr>
<th></th>
<th>Wing</th>
<th>Tail</th>
<th>Bill</th>
</tr>
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<tbody>
<tr>
<td>Six adult ♂♂ from Chili</td>
<td>74—77</td>
<td>53—55½</td>
<td>10½—11½ mm.</td>
</tr>
<tr>
<td>Two adult ♂♂ from Mendoza</td>
<td>72½, 75</td>
<td>54, 55½</td>
<td>10½, 11 ”</td>
</tr>
<tr>
<td>Two adult ♂♂ from Abrantes, Goyaz</td>
<td>73, 77</td>
<td>54, 57</td>
<td>10 ”</td>
</tr>
<tr>
<td>One adult ♂ from Chapada, Matogrosso</td>
<td>74½</td>
<td>54</td>
<td>10 ”</td>
</tr>
</tbody>
</table>

(b) *Sicalis arvensis chapmani* Ridgwi.


*Hab.* Lower Amazonas : Santarem (Riker); Isle of Mexiana (Wallace), Isle of Marajo (Mus. Paraense).

♂ ad. Differs from *S. a. arvensis* by its smaller size, much larger bill with more

* I have not been able to verify this reference.
strongly curved culmen, much brighter yellow under-parts and more yellowish ground-colour of the back.

Two adult ♂♂ from Mexiana (Wallace).—Wing 65, 66; tail 44, 45; bill 11 mm.

One adult ♂ from Marajo.—Wing 66; tail 46; bill 11 mm.

(c) *Sicalis arecensis minor* Cab.


_Hab._ British Guiana: Annai, Rio Ruparami, etc. (Whitely, Schomburgk); North Brazil: Forte do Rio Branco (Natterer); Venezuela, in the Orinoco valley: Altagracia, Quiribana de Caicara (Cherrie).

♂ ad. Agrees with *S. a. chapmani* in size and coloration, but has a much smaller, less curved bill.

Two adult ♂♂ from Brit. Guiana.—Wing 65, 64; tail 46½, 45; bill 9 mm.

Two adult ♂♂ from the Rio Branco.—Wing 62½, 63; tail 44, 44½; bill 8, 8½ mm.

Five adult ♂♂ from the Orinoco.—Wing 63—66; tail 45—48; bill 8½—9½ mm.

40. *Brachospiza capensis capensis* (P. L. S. Mull.).

_Fringilla capensis_ P. L. S. Müller, *Naturg. Suppl.* p. 165 (1776.—ex Daubenton, *Pl. Ent.* 386. fig. 2.—"Cap de Bonne Espérance": error!—We substitute Cayenne as typical locality).

Nos. 1869, 1930, 1992, 2075. ♂♂, ♀♀ ad., Goyaz, March, April, May 1906. Identical with a series from Cayenne, and various localities in Brazil.

41. *Porphyrospiza caeruleascens* (Wied).


_Porphyrospiza caeruleascens_ Allen, *Bull. Amer. Mus.*, ii. 1883. p. 140 (crit.).

_Cyanospiza cyanella_ Pelzeln, _i.e._ p. 227 (Cidade de Goiaz).

No. 1905. ♂ ad., Goyaz, March 1906.—Wing 66; tail (moulting); bill 11 mm. Agreeing with specimens from Chapada, Mattogrosso.

42. *Poospiza cinerea* Bonap.

_Poospiza cinerea_ (ex Cuvier MS.) Bonaparte, _Comp. Am._ i. p. 173 (July 1859.—"Brésil."—Type in Paris Museum examined: = _juv._).

_Poospiza schistaceus_ Cabanis, *Mus. Heim.*, i. p. 137 (May 1851.—Brazil); Pelzeln, _i.e._ p. 229 (Goiaz).

Nos. 1942, 1944. ♂♂ ad., Goyaz, March, April 1906.—Wing 64 + x, 66½; tail 63, 61½; bill 11, 11½ mm.

No. 2128. ♂ ad., Rio Thesouras, May 1906.—Wing 68; tail 64; bill 10½ mm.

No. 2083. ♀ in moult, Goyaz, May 1906.—Wing 65; bill 10¾ mm.

No. 2130. ♂ juv., Rio Thesouras, May 1906.

The young bird is washed with yellowish below, and the upper parts are dull greyish with a strong olivaceous tinge.

*P. cinerea* is a near ally of _P. melanoleuca_ (Lafr. & D'Orb.), from the Argentine Republic, but has longer wings, a larger bill, and the adult males never get a black head, the plumage being schistaceus like the back, while the lores, cheeks and ear-coverts alone are dull sooty blackish.
43. Myospiza manimbe (Lech.).


No. 1801. ♂ imm., Goyaz, March 1906.—Wing 56; tail 43; bill 10 7/8 mm.

No. 1648. adult (not sexed), Faz. Esperança, December 1905.—Wing 57; tail 45; bill 11 mm.

More rusty on the back than two Bahia skins, but otherwise not different.

44. Emberizoides herbicola herbicola * (Vieill.).


Nos. 1730, 1801. ♂ ♂ ad., Faz. Esperança, January, February 1906.—Wing 75; tail 117, 104; bill 14, 14 3/8 mm.

No. 1758. ♀ ad., Faz. Esperança, January 1906.—Wing 72; tail 103; bill 13 mm.

Nos. 1636, 1669, 1708. Adults (not sexed), Faz. Esperança, December 1906.—Wing 76, 75, 70; tail 93; bill 14, 13 mm.


These specimens agree perfectly with others from Bahia and S. Paulo. In the adults, the under tail-coverts are always uniform brown, without any trace of dusky spots or stripes; in one of the young birds (No. 1654), however, the shorter ones are distinctly striped with blackish.

45. Coryphospingus pileatus (Wied).


No. 2400. ♂ ♂ ad., Rio Araguaya, August 1906.—Wing 63; tail 60; bill 12 mm. Rather paler underneath than two specimens from Bahia.

46. Coryphospingus cucullatus (P. L. S. Müller).


*Corvinius cucullatus* Pelzeln, *L. c.* p. 228 (Goiás).

Nos. 1866, 2031, 2098. ♂ ♂ ad., more or less in monlth, Goyaz, March, April, May 1906.

No. 2185. ♂ juv., Rio Araguaya, June 1906.


The adults are perfectly similar to others from Paraguay.

47. Paroaria baeri Heilmayr.


No. 2396. ♀ ♀ ad., Rio Araguaya, August 1906.—Wing 83; tail 81; bill 13 7/8 mm. *Type of species.*

* As pointed out by Mr. Ranges (*Auk* xxiv. 1907. p. 309, footnote), *Fringilla macroura* Gm. (*Syst. Nat.* 1. ii. 1788, p. 478) is preceeded by *I. macroura* Palles (in Vroeg's *Cat. Adumbretincola*, 1764, p. 3, No. 144). Vieillot's term *herbicola* becomes, therefore, the specific name, while the northern race ought to be called *E. herbicola sphenurus* (Vieill.).
No. 2212. ♀ fere ad., Rio Araguaya, June 1906.—Wing 80; tail 73; bill 14 mm.
No. 2375. ? juv., Rio Araguaya, August 1906.—Wing 79½; tail 78; bill 14 mm.

Adult female.—Upper parts black with a strong gloss of metallic blue; the feathers of the forehead and anterior portion of the crown with dark carmine-red tips which form a large frontal patch, ending in a line with the posterior border of the eye. Lores, sides of the head and neck black, glossed with metallic blue like the back. Cheeks and throat carmine-red, the extreme bases of the feathers being black; feathers of the foreneck glossy black, each with a minute carmine-red spot at the very tip. Rest of the under-surface pure white, the sides of the breast indistinctly barred with black. Thighs black with white tips. Lesser upper wing-coverts metallic bluish black, rather duller towards the base; remaining wing-coverts, quills and rectrices dull black, slightly glossed with oily greenish along the outer web. Axillaries and under wing-coverts white. Bill black, basal half of lower mandible dull reddish; feet black.

The male (No. 2212) agrees with the type except in being smaller and in having the under wing-coverts variegated with black. Some of the feathers on the foreneck show pale buffy-brownish edges, a sign of immaturity.

No. 2375 is a young bird with the throat and foreneck deep buff-yellow, and without any red or black in the plumage. It differs from the young of P. g. gularis (Linn.) and P. g. cervicalis Sel. by its much darker, fuliginous (instead of pale brown) back, and by having the sides of the head dark smoky brown (not brownish buff). The bill, too, is decidedly stronger.

P. baeri is nearly allied to, but quite distinct from, P. g. gularis (Linn.), from which it may be distinguished by the following characters: The red of the forehead and throat is much deeper, carmine-red (instead of “poppy-red,” Ridg. vii. 9); the feathers of the forehead and anterior portion of the vertex are only tipped with red, the bases being black, while in P. g. gularis all the top of the head (from the forehead to the nape) is uniform clear poppy-red, there being no blackish bases to the feathers; lores and sides of the head metallic bluish black (not poppy-red as in P. g. gularis), sides of the neck bluish black like the back (not white as in P. g. gularis); occiput, back and wings much more glossy; sides of the breast and abdomen with subterminal cross-bars of blackish, entirely absent in the Guianan species. Another very striking difference consists in the shape of the feathers of the foreneck. In P. g. gularis these feathers are elongated, somewhat pointed and black, with the concealed bases dull reddish; in P. baeri they are much shorter, rounded and dull black, each with a minute glossy spot of carmine-red at the extreme tip. The bill of P. baeri is decidedly stronger and stouter, and the lower mandible dull reddish (not clear yellowish white as in P. g. gularis) with the tip blackish.

48. Cacicus cela (Linn.).

Parus Cela Linnaeus, Syst. Nat. x. p. 191 (1758.—"in Indiis"; errore!—we substitute Sorinum as typical locality).

Cacicus cela Hellmayr, Nov. Zool. xiii. 1906. p. 29 (crit.).

Cacicus persicus Pelzeln, l.c. p. 193 (Goinz).

No. 2410. ♀ ad., Rio Araguaya, April 1906.—Wing 125; tail 87; bill 25 mm.
49. **Amblycercus solitarius solitarius** (Vieill.).


No. 2411. ♀ ad., Rio Araguaya, August 1906.—Wing 114; tail 110; bill 28 mm.
Bill yellowish white, basal half greyish.

50. **Cassidix oryzivora oryzivora** (Gm.).


No. 29387. ♀ ad., Rio Araguaya, August 1906.
There are doubtless two (or more) geographic races of the Rice-Grackle in South America, but I have no time now to enter into the question.

51. **Molothrus bonariensis bonariensis** (Gm.).


No. 2328. ♀ ad. (an ♀ jr. ?), Rio Araguaya, July 1906.—Wing 100; tail 74; bill 16 mm.

52. **Xanthorhynchus cayaneus valenciae-buenoai** (Ihering).

[Oriolus cayaneus* Linnaeus, *Syst. Nat.* xii. 1. p. 163 (1758.—ex Edwards and Brisson: "in insula St. Thomas (errone!); Cayana"—the latter locality accepted as terra typica.).]


Nos. 2037, 2103. ♀ ♂ ad., Goyaz, April and May.—Wing 91, 93; tail 99, 104; bill 19, 20½ mm.

Nos. 2101, 2102, 2035, ♂ fem ad., ♀ jr., ♀ juv., Goyaz, April and May.—Wing 94, 88, 89; tail 106½, 91, 102; bill 20—19 mm.

No. 1659, vix adult, Esperança, 700 m., Dec. 1905.—Wing 91; tail 95½; bill 20½ mm.

The series agrees perfectly with several examples from northern S. Paulo; one ♀ ad. from Victoria, coll. Hempel in the Tring Museum, and a pair from Porto do Rio Paraná, collected by Natterer, and belonging to the Vienna Museum. Besides these, there are among Natterer's specimens an adult female and a young bird from Cuyahá, Mattogrosso, which I am unable to distinguish from our Goyaz series. In the same locality (Cuyabá), this naturalist also obtained four adult birds of *X. pyrrhopus compressus* (Oberh.)* in which the shoulder-patch is of a clear cinnamon rufous.

*X. c. valenciae-buenoai* is an excellent form, to some extent intermediate between *X. c. cayaneus* and *X. c. tibialis* Sws. With the former it agrees in having the thighs black, and the axillaries as well as the under wing-coverts black, narrowly edged with pale yellow; but differs at a glance by the humeral patch

being much darker, dull orange-ochraceons (Ridg. v. 3), instead of saffron-yellow. The bill, too, is rather smaller and slenderer. X. c. tibialis, on the other hand, has the thighs mostly, and the axillaries and under wing-coverts entirely yellow, while the shoulder-patch is either pure yellow as in X. c. cayanaensis, or orange-ochraceons as in X. c. valencia-buenoi.

The range of these three forms is, according to our present knowledge, as follows:

(a) X. cayanaensis cayanaensis (Linn.).

Cayenne; Surinam; Amazonia: Benfica near Pará (Steere coll., Mus. Tring); Pará, S. Antonio (Snel.tlage), Island of Marajó (Wallace), Río Jurná (Garbe coll., Mus. Paulista); Ucayali, East Peru (Bartlett), etc.

(b) X. cayanaensis valencia-buenoi (Ihering).


(c) X. cayanaensis tibialis (Sws.).

Icterus tibialis Swainson, Anim. in Mem. p. 302 (1838.—“Brazil”).

Eastern Brazil: Río de Janeiro (one “Río”-skin in Tring Mus.), Bahia (many skins in Tring), Pernambuco (Forbes), Ceará (two skins in Tring).*

53. Xanthornus croconotus (Wagl.).


No. 2374. ? ad., Río Aragnaya, August 1906.—Wing 103; tail 104; bill 24½ mm.

Agrees perfectly with two specimens from the Río Napo, Eastern Ecuador. From X. jamaicaii (Gm.) this species chiefly differs by having the crown and nape deep orange like the back, the forehead alone being black. Sides of the head and throat black as in X. jamaicaii.

54. Aaptus chopi chopi (Vieill.).


No. 1877. ? in change of plumage, Goyaz, March 1906.—Wing 112; tail moulting; bill 29½ mm.

No. 1846. ? (an ??) ad., in moulnt, Goyaz, March 1906.—Wing 122; tail 95; bill 21½ mm.


The specimens agree in size with others from Paraguay and Minas Geraes.

* The specimen from “Río Clar, Golaz (Joyner),” in the British Museum is X. c. tibialis; the locality, therefore, doubles erroneous,
55. Uroleuca cyanoleuca (Wied).

*Corvus cyanoleuca* Wied, *Reise Brasil.*, ii. p. 190 (1821.—Campo Geral, near the boundary between Bahia and Minas Geraes).

Nos. 2111, 2112, and one without number. ♀♂ ad., Goyaz, May 1906.—Wing 192—200; tail 145—155 mm.

No. 1735. ♀ ad., Faz. Esperança, February 1906.—Wing 186; tail 142 mm.

Perfectly similar to specimens from Victoria, S. Paulo.

56. Cyanocorax cyanopogon (Temminck).


Nos. 1882, 1901, 2056. ♀♂ ad., ♀ juv., Goyaz, March and April 1906.


Nos. 2219, 2316, 2401. ♀ ♀ jr., Rio Araguary, June, July, and August 1906.

Not different from specimens obtained by Mons. A. Robert on the Rio Jordao, prov. Araguary, Minas Geraes.

57. Taenioperta cinerea (Vieill.).


No. 2016. ♀ ad., Goyaz, April 1906.—Wing 143; tail 101; bill 22 mm.

No. 1737. ♀ ad., Faz. Esperança, January 1906.—Wing 143; tail worn; bill 21 mm.

No. 1812. ♀ in moult, Faz. Esperança, February 1906.

No. 2017. ♀ ad., Goyaz, April 1906.—Wing 136; tail 98; bill 22 mm.

No. 2116. ♀ ad., Rio Thesoureas, May 1906.—Wing 135; tail 85; bill 22 mm.

These specimens agree in size and coloration with others from S. Paulo and Paragnay. Two females from the island of Marajo, North Brazil, collected by Professor Steere, are considerably smaller (wing 125—126; tail 88, 89 mm.), and have a rather shorter, slenderer bill. Perhaps they constitute a recognisable race.

58. Arundinicola leucocephala (Linn.).


No. 2306. ♀ ad., Rio Araguaya, July 1906.—Wing 64; tail 47; bill 15 mm.

Identical with several Bahia skins. The curious shape of the two outer primaries in the adult males seems to have been overlooked by all recent authors, although it was correctly described long ago by Cabanis.

59. Gubernates yetapa (Vieill.).


No. 1755. ♀ ♀, moulting, Faz. Esperança, January 1906.


* Temminck published the first proper description of *C. cyanopogon*. From the account given by Wied (*Reise Brasil.*, ii. 1821, p. 137) it is impossible to recognise the species.

60. Klipolegus orenocensis Berl.


Nos. 2321, 2322. ♂♂ ad., Rio Aragayaya, July 1906.—Wing 85, 81; tail 77; bill 17, 16½ mm.

These birds agree exactly with a series of males from the Orinoco in the Tring Museum, except that the bill is a very little narrower and slenderer. In coloration there is not the slightest difference, the back and under-surface being sooty-grey with a faint olivaceous hue, the pileum rather more blackish, etc., as in the Orinoco series. The first primary is quite normally shaped.

This is one of the most interesting species in the present collection, and quite an unexpected addition to the Brazilian avifauna. *K. orenocensis* was hitherto only known as an inhabitant of the Orinoco valley.

61. Copurus colonus colonus (Vieill.).


Nos. 1885, 2048. ♂♂ ad., Goyaz, March, April 1906.—Wing 81, 83; tail 160, 170; bill 9 mm.

No. 1890. ♂ ad., Goyaz, March 1906.—Wing 79; tail 132; bill 10 mm.

No. 1804. ♂ ad., Faz. Esperança, February 1906.—Wing 84; tail 161; bill 9½ mm.

The female differs from the males by its smaller size, shorter median rectrices, and by having the cap decidedly darker, smoky greyish, contrasting with the white frontal band.

The differences between *C. c. colonus* and *C. c. fascicapillus* Sel. are well pointed out by Mr. Ridgway,* but their geographical distribution is not correctly given. *C. c. colonus* is confined to Paraguay and South Brazil (from Bahia, Goyaz, and Mattogrosso southwards); while *C. c. fascicapillus* ranges from Colombia (Bogotá) through Eastern Ecuador to Northern and Central Peru.

62. Todirostrum cinereum coloreum Ridgw.


No. 2036. ♂ ad., Goyaz, April 1906.—Wing 42½; tail 40; bill 14 mm.

This bird as well as Natterer’s series from Mattogrosso and the Rio Paraná differ from *T. c. cinereum* of northern South America by rather brighter lower parts, somewhat longer white tip to the outermost rectrix, and by having the back mainly light olive-green, contrasting with the dark slaty pileum and nape. Two specimens from Chapada in the British Museum are quite similar.

* Birds North and Middle America, iv. 1907, pp. 530-54.
63. Euscarthmus margaritaceiventer margaritaceiventer (Lafr. & D'Orb.).


Nos. 2129, 2134, 2150. ♂ ad., Rio Thesonras, May 1906.—Wing 50<sub>2</sub>, 50, 48; tail 45<sub>1</sub>, 43<sub>1</sub>, 43; bill, 14, 13<sub>1</sub> mm.

Practically identical with specimens from Paraguay and Mattogrosso. The flanks are distinctly washed with pale yellow, and the middle of the throat is white with very few if any brownish streaks. The range of *E. m. vucchereri* Sel. & Salv. appears to be confined to Bahia. Cf. Berlepsch & Hellmayr, *Journ. f. Ornith.*, 1905, pp. 9-11.

64. *Euscarthmus striaticollis* (Lafr.).


No. 2353. ♂ ad., Rio Araguaya, August 1906.—Wing 55; tail 44; bill 15 mm.

Diffs from several Bahia skins by its much duller and darker olive-green (less yellowish) back, greenish (not mouse-brown) cap and decidedly brighter yellow under-parts, with the chest and sides more strongly tinged with olive-greenish. Natterer's female from the Araguay, however, is not appreciably different from Bahia specimens.


*[Platrychnus brevirostris* Spix, *Av. Bras.*, ii. p. 13, tab. xv, fig. 2 (1825.—Rio de Janeiro).]*


No. 2021. ♂ ad., Goyaz, April 1906.—Wing 57; tail 53; tars. 15; bill 8<sub>2</sub> mm.

[Amer. Mus., New York, No. 33,316. ♂ ad., Chapada, Mattogrosso, May 8, 1885. Type of *S. virescens* Allen.—Wing 58<sub>2</sub>; tail 52; tars. 16; bill 8<sub>2</sub> mm.]

The Goyaz specimen is practically identical with the type of *S. virescens* kindly lent by Dr. J. A. Allen for comparison.

This species is by no means a member of the genus *Sublegatus*, but a typical *Phyllomyias*, to some extent intermediate between *P. b. brevirostris* (Spix), of South-Eastern Brazil, and *P. b. incanescens* (Wied), of Bahia.

It differs from a series of the latter form by the following details: Breast and abdomen are brighter and more uniform yellow; the cap is decidedly paler, light ashy (not blackish); the back more greenish (less greyish); the bill rather stouter; wings and tail rather longer.

From *P. b. brevirostris*, on the other hand, it may be distinguished by the much paler yellow underparts, with the throat purer and more extensively white, and the flanks much less tinged with greenish or greyish; the back much paler and duller, greyish green (instead of oil- or bright olive-green); the cap light ashy, more or less contrasting with the colour of the back (instead of being green like the latter); the wing-bands much paler, dirty whitish or greyish white, the edges to the quills whitish or yellowish white (instead of bright olive-yellow).

The range of the three forms is as follows:

a. *P. b. breevirostris* (Spix).


Measurements:

1 ♂ ad., Rio de Janeiro.—Wing 61; tail 57 mm.
2 ♀ ad., Rio.—Wing 57; tail, 50, 52 mm.
9 ♂ ad., S. Paulo.—Wing 59—62; tail 52½—55 mm.
9 ♂ ad., S. Paulo.—Wing 56—60; tail 50—56 mm.
1 ♂ ad., Paraná.—Wing 59½; tail 52 mm.
1 ♂ ad., Taquara.—Wing 64; tail 55 mm.
One adult, Blumenau.—Wing 60; tail 54 mm.


Campos district of the interior of Brazil. Mattogrosso: Chapada (Smith); Goyaz (Baer).

1 ♂ ad. from Chapada (type).—Wing 58½; tail 52 mm.
1 ♂ ad. from Goyaz.—Wing 57; tail 53 mm.

c. *P. b. incanescens* (Wied).

Only known from Bahia, Eastern Brazil.

Ten adults (not sexed) from Bahia.—Wing 51—55; tail 45½—50 mm.


Nos. 2199, 2277. ♀ ad., Rio Araguaya, June, July, 1906.—Wing 57, 53; tail 50, 48; bill 10 mm.


67. *Ornithion obsoletum cinerascens* (Wied).

[Muscicapa obsleta (Natterer MS.) Temminck, *Pl. col.* livr. 46. tab. 275. fig. 1 (May 1824.—Brazil; coll. Natterer.—According to the registers of the Vienna Museum, the specimen forwarded to Temminck was obtained at Curitiba, Paraná.)


No. 2171. ♀ ad., Rio Thesouras, May 1906.—Wing 53; tail 43; bill 8 mm.

Dr. Allen first pointed out (l.c.) that *H. cinerascens* of Wied was a typical
**Ornithion**, and synonymised it with *M. obsoleta* Temm. On examining a very large series of skins from various localities in Southern and Eastern Brazil, I find, however, that those from Espirito Santo, Bahia, Goyaz, and Mattogrosso differ from true *O. o. obsoletum*, of southern Minas Geraes (Congonhas), S. Paulo and Paraná in decidedly smaller size and slightly paler coloration, especially of the upper parts. Two topotypical specimens from the Rio Espirito Santo, for the loan of which I am greatly indebted to Professor H. v. Ihering, of S. Paulo, fit admirably several freshly mounted birds from Bahia; hence *cinerascens* becomes the proper subspecific appellation of the pale, short-winged northern race.

It may be mentioned that the original specimen from Congonhas, upon which Burmeister based the description of his *Elaenia marina,* and which was kindly submitted to my inspection by Professor Taschenberg, of the Halle Museum, is referable to typical *O. o. obsoletum*, agreeing in every way with skins from S. Paulo and Paraná. This had already been stated by Count Berlepsch.† The range of the two forms is accordingly as follows:

a. *O. obsoletum obsoletum* (Temm.).


Measurements:
- 8 ♂ ♀ from S. Paulo.—Wing 56—58; tail 46—51 mm.
- 1 ♂ from Paraná.—Wing 55; tail 45 mm.
- 1 ad. from Santa Catharina.—Wing 61; tail 52 mm.
- 2 ♂ ♀ from Taquara.—Wing 56, 57½; tail 46 mm.
- 1 ♂ from Taquara.—Wing 55; tail 45 mm.
- 1 ad. from Congonhas. *—Wing 57; tail 47 mm.

b. *O. obsoletum cinerascens* (Wied).


Measurements:
- Fifteen specimens from Bahia (not sexed).—Wing 47—51; tail 38½—45 mm.
- 2 ♂ ♀ from Espirito Santo (topotypes).—Wing, 52, 49½; tail 42, 40 mm.
- 1 ♂ ad., Porto Imperial, R. Tocantins.—Wing 53; tail 41 mm.
- 1 ♂ ad. from Goyaz.—Wing 54; tail 46 mm.

† *Zeitschr. ges. Ornith.« ii. 1885, p. 131, footnote.
‡ Salaré of modern maps.
2 ♀ ♂ ad. from Goyaz.—Wing 53; tail 43, 44 mm.
One adult from Chiquitos, East Bolivia.—Wing 54½; tail 45 mm.
N.B.—The specimen from Chiquitos is practically identical with the Brazilian ones.

I have not seen the examples from Rio de Janeiro, and Paracatú, northern Minas Geraês, recorded by Reinhardt.* The former may belong to O. o. obsoletum, while the latter are most certainly referable to O. o. cinerascens.

68. Elaenia cristata Pelz.

Elaenia cristata Pelzeln, Zad Ornith. Braz. ii. p. 177 (1868.—Goiaz); Berlepsch & Leverkuhn, Ornith vi. 1890. p. 12 (Lavrinyas).

Nos. 1854, 1856. Adults (not sexed), Goyaz, March 1906.—Wing 68, 69; tail 64; bill 11 mm.
No. 1769. ♂ in moult, Faz. Esperança, January 1906.—Wing 74; tail 66½ mm.
Although synonymised with E. albiceps by Dr. Sclater,† this species is a very distinct one, being easily recognisable among its congener by its full, dense, brownish crest without any white at the base, and by its rather short, rounded wings. In general coloration it most resembles E. pagana. Cf. also Berlepsch, Ornith xiv. 1907, pp. 398–9.

Besides the above specimens I have examined Natterer’s typical series in the Vienna Museum, an adult female from Lavrinyas (obtained by Prof. Behn and actually in the Berlin Museum), and some thirty Bahia skins in Count Berlepsch’s collection.

69. Elaenia gaimardii gaimardii (D’Orb.).

Musieronara Gaimardii D’Orbigny, Voyage, Oiseaux, p. 326 (between 1838 and 1847.—Yuracarés, Eastern Bolivia).

No. 1671. Adult, Faz. Esperança, December 1905.—Wing 59; tail moulting; bill 10 mm.
No. 2176. Adult, Rio Thesouras, May 1906.—Wing 57; tail moulting; bill 11 mm.

I am unable to detect any differences between D’Orbigny’s type and Brazilian specimens (including the types of E. elegans Pelz. from Mattogrosso, Borba, and the Rio Negro).

70. Elaenia caniceps (Sws.).

Tyranella caniceps Swainson, Birds Brazil tab. 49 (1841.—Brazil).
Elaenia taczanowskii Berlepsch, Ibis 1883. p. 137 (Bahia).

No. 1920. ♂ ad., Goyaz, March 1906.—Wing 61; tail 56; bill 10 mm.
This bird agrees exactly with the type of E. toczanowskii, and the two skins from Mattogrosso, named S. albogrisea by Dr. Allen. I am greatly indebted to this gentleman and to Count Berlepsch for the loan of these valuable specimens.

Two species have hitherto been distinguished by Count Berlepsch, Dr. Sclater, and others: (1) E. caniceps, with the back more or less olive-green, the crown patch and the wing markings pale yellow, and the flanks and under-tail-coverts

tinged with yellowish. (2) *E. taczanowskii*, with the back cinereous, the crown patch, markings on the wings, and the lower parts white.

A series of nine specimens from Sapucay, Paraguay (Foster coll.—Brit. Mus.), however, clearly shows that these two supposed species are merely phases of one form, *E. caniceps* representing the immature dress; *E. taczanowskii* the plumage of the fully adult male.

One of the skins in Mr. Foster’s series ("♂") is practically identical with the type of *E. taczanowskii* and the three examples from Goyas and Mattogrosso. Crown patch, apical spots to the upper wing-coverts, and edges to the remiges pure white, back pure olive-grey (without any green), axillaries and under wing-coverts white with a hardly perceptible yellowish tinge. Then follows another "♂" in which some of the wing-markings as well as several feathers of the white crown-patch are slightly tinged with pale yellow, while the grey back shows here and there some olive-green feathers. Next come two "♂♂" with the crown-patch slightly more yellowish, though the white still predominates. Another "♂" has the vertical patch uniform pale yellowish, the back mainly olive-green with very little cinereous, and the axillaries as well as the under wing-coverts pale yellow. The flanks and crimsoo, too, are washed with yellowish. Two "♂♂" and two "♀♀" have the back uniform olive-green, and the crown-patch, wing-markings, axillaries, and flanks even more decidedly sulphur-yellow. These specimens correspond to what we used to call *E. caniceps*.

*E. cinerea* Felz. is the northern representative of *E. caniceps*. The adult male differs from the corresponding stage (= *E. taczanowskii*) by its longer, broader bill, much wider white markings to the upper wing-coverts, and clear cinereous (not olive-grey) back. The crown-patch and under-parts (including axillaries and under wing-coverts) are pure white, the chest slightly shaded with pale cinereous. The female (and probably also the young male) has the upper surface clear olive-green, the vertical patch and markings on the wing pale yellow, and the lower parts bright sulphur-yellow, washed with dull greenish on the sides of the chest. This is the bird identified as *E. macilvaini* by Berlepsch and Hartert.* A Bogotá skin in Count Berlepsch's collection, a bird in change of plumage, has the crown clear cinereous with a white vertical spot (just like the type of *E. cinerea*), but the back is olive-green, and the edges to the upper wing-coverts are pale yellow, as in the female from the Caura River (*E. macilvaini* Berl. & Hart., nec Lawr.); the throat and foreneck are greyish white, as in *E. cinerea*, the rest of the under-surface pale yellow, whitish in the middle.

The true *E. macilvaini* Lawr., however, is quite a different species, being a northern race of *E. gaimardii* (D'Orb.) with a canary-yellow crown patch, as correctly pointed out by Mr. Ridgway.† There are three specimens from Panama (MacLeannan) in the British Museum which concord well with Ridgway's description of the type (said to be from Venezuela).

The range of *E. caniceps* and *E. cinerea* is as follows:

(a) *E. caniceps* (Swz.)

Brazil: S. Paulo: Ypanema, Porto do Rio Paraná (Natterer), Victoria (Hempel—Mus. Tring), Ubatuba (Garbe—Tring); Rio de Janeiro: Cantagallo

† *Birds North and Middle America* vol. iv. 1907. p. 800.
(47)

(Euler); Goyaz: City of Goyaz (Baer); Bahia (specimens in Mus. H. v. Berlepsch); Pianhy: Castelliano on the Rio Parnabaiba (Reiser—Vienna Mus.); Mattogrosso: Chapada, Abrilongo (Smith). Paraguay: Sapucay (Foster). N.W. Argentina: Ledesma, prov. Jujuy (Dinelli—2 \( \delta \delta \) jr. in Tring).

Examined: \( \delta \) imm., Ypanema, \( \delta \) ad., Porto do Rio Paraná (Natterer—Mus. Vindob.); \( \delta \delta \), 1 \( \delta \), Victoria, S. Paulo; 1 ad. (type of \( E. \) taczanowskii), 1 imm. from Bahia (Mus. H. v. Berlepsch); 2 av. imm., Bahia (Mus. Vindob. et Berol.); 1 \( \delta \) juv., Ubatuba (Tring); 1 \( \delta \) ad., Goyaz (Tring); 2 \( \delta \delta \) ad., Mattogrosso (American Museum, New York); 2 \( \delta \delta \) jr., Jujuy (Tring); 7 \( \delta \delta \) ad. and imm., 2 \( \delta \delta \), Sapucay, Paraguay (Foster—Brit. Mus.).

(b) \( E. \) cinerea Pelz.*


Examined: 1 \( \delta \) ad., Marabitanas (type of species); 1 \( \delta \) ad., 1 \( \varphi \) imm., Suapure, Carra (Tring); 1 (\( \delta \)) ad., (\( \varphi \)) juv., Bogotá (Mus. H. v. B.); 1 (\( \delta \)) ad., Sarayacu (type of \( S. \) seriphophaga albogrisea Sel. & Salv.)†; 1 \( \delta \) ad., Chaminuro.

71. \( S. \) albinus affinis (Burm.).


† Zur Orn. Brasil. ii. 1892, p. 336 (Chapada, Mattogrosso).


Nos. 2163, 2135. \( \delta \delta \), Rio Thesousras, May 1906.—Wing 88, 85; tail 77, 74; bill 15 1/2, 11 mm.

Nos. 2164, 2165. \( \varphi \) \( \varphi \), Rio Thesousras, May 1906.—Wing 82, 89; tail 76, 72; bill 15 1/2, 14 mm.

No. 1852. \( \varphi \), Goyaz, March 1906.—Wing 77; tail 70 1/2; bill 14 mm.

No. 1853. (\( \delta \)) ad., Goyaz, March 1906.—Wing 88; tail 77; bill 15 mm.

In all the specimens the inner webs of the five outer rectrices are pale yellow at the base, this colour being entirely concealed by the tail-coverts: on the median pair the corresponding portion is pale greyish brown, sometimes with a yellowish tinge. The outer web of the outermost rectrix is invariably pale yellowish grey. In Nos. 2135 and 1853 the tail-feathers terminate in a broad, though ill-defined, apical band of pale brownish or brownish white, while in the remaining specimens there is but a narrow brownish margin to be seen.

The colour of the rump and upper tail-coverts is extremely variable. In No. 1852 they are uniform light yellowish green; in Nos. 2163, 2164, and 2165 the rump is pale greyish yellow, the upper tail-coverts rather purer brownish grey; while in Nos. 2135 and 1853 both are clear brownish grey, as in the type of \( S. \) a. bahiae ‡ (Berl.).

No. 2135 differs from the other examples by its much shorter and broader bill, a peculiarity indicating immaturity in allied genera of \( T \) ryanthidae, though, judging

† L. Z. & Lond. 1892, p. 166.
‡ Empidagra bahiae Berlepsch, Ornith. Monatsber. i. 1893, p. 12 (Bahia).
from its plumage, the bird seems to be quite adult! In three specimens (Nos. 2163, 2135, 1853) the bill is entirely black; No. 1852 has the basal half of the lower mandible pale brownish; and in Nos. 2164 and 2165 the latter is entirely yellowish white.

The types of *E. affinis* in the Halle Museum and Natterer's specimens at Vienna all have more or less yellow at the base of the tail-feathers, which is altogether absent in the type of *E. bahiae*, still unique in the Berlepsch Museum.

72. Sublegatus fasciatus fasciatus (Thunb.).


*Muscicapa modesta* Wied, Beitr. Naturg. Bras. 3. ii. p. 223 (1831.—"aus der Gegend von Camamá und Bahia ")

*Phylomyias zonifascia* (nee Sclater) Pelzeln, Zrz Orn. Bras. ii. 1868. p. 105 (Cidade de Goiaz, Serra do)


No. 1792. ♀ ad., Faz. Esperança, January 1906.—Wing 67; tail 61; bill 9 mm.

Nos. 1926, 2079. ♂ ? ad., Goyaz, March, May 1906.—Wing 68, 62; tail 63, 56; bill 9, 9 1/2 mm.

Cf. *Journ. f. Ornith.* 1905. pp. 3–5, where the full synonymy of the species is given.

The description of *M. modesta* Wied also refers undoubtedly to this bird.

In Ridgway's *Birds of North and Middle America* iv. 1907. p. 420, the distribution of *S. f. fasciatus* is stated to extend from "Colombia to South-eastern Brazil . . . ," the occurrence in Colombia being apparently based on *S. incanescens* (nee Wied) Salvin & Godman, *Ibis*, 1880. p. 124 (Minca, Santa Marta). Berlepsch and Helmayer,* however, have pointed out that this specimen was wrongly identified, being referable to quite a different species—viz. *Phylomyias griseiceps* (Schl. & Salv.), widely distributed in the mountainous parts of North-western South America. The range of *S. f. fasciatus* is given in our paper, *l.c.* p. 5.

73. Myiozetetes cayanensis cayanensis (Linn.).


<table>
<thead>
<tr>
<th>No.</th>
<th>Wing.</th>
<th>Tail.</th>
<th>Bill.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2034.</td>
<td>♂ imm.</td>
<td>Goyaz, April 1906</td>
<td>94</td>
</tr>
<tr>
<td>2076.</td>
<td>♂ ad.</td>
<td>Goyaz, May 1906</td>
<td>96</td>
</tr>
<tr>
<td>1841.</td>
<td>♀ (? ad.</td>
<td>Goyaz, March 1906</td>
<td>94</td>
</tr>
<tr>
<td>2274.</td>
<td>♀</td>
<td>Rio Araguaia, July 1906</td>
<td>88</td>
</tr>
<tr>
<td>1710.</td>
<td>♂ juv.</td>
<td>Faz. Esperança, January 1906</td>
<td>88</td>
</tr>
</tbody>
</table>


These specimens agree in colour and size with those obtained by Natterer at Engenho do Cap. Gama, Mattogrosso;† which were kindly lent for examination by Dr. Lorenz. The series differs from typical examples from Cayenne, British Guiana, Surinam, and the Pará district merely by rather larger size. The upper parts are generally rather darker, less olive, but this is not quite constant.

In Southern Minas Geraes (Sante Fê) and the province of Rio de Janeiro, *M. c. cayanensis* is represented by *M. c. crythroptera* Lafa. This form is of the same size or even larger than the Central Brazilian examples of *M. c. cayanensis*, but differs at a glance by the much greater extent of rusty on the wings, the two basal thirds of both webs of the primaries being of that colour. I have examined the following specimens:

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Wing</th>
<th>Tail</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mus. Brit. Adult, Rio-make</td>
<td>99</td>
<td>87½</td>
<td>15</td>
</tr>
<tr>
<td>&quot; 2 ad., Rio de Janeiro. Fry coll.</td>
<td>97</td>
<td>84</td>
<td>14</td>
</tr>
<tr>
<td>&quot; 2 ad., Rio de Janeiro. Fry coll.</td>
<td>97</td>
<td>81</td>
<td>14½</td>
</tr>
<tr>
<td>&quot; Adult, S. Fê, Minas. Rogers coll.</td>
<td>97</td>
<td>82</td>
<td>15½</td>
</tr>
</tbody>
</table>


**74. Rhynchoecyclus flaviventris flaviventris** (Wied).


Nos. 2305, 2323. 2 ad., Rio Araguaya, July 1906.—Wing 62, 60; tail 55, 52; bill 10¾, 10½ mm.

Agreeing in colour and size with several skins from Bahia, which we may consider typical.


Another very close ally, *R. flaviventris viridiceps* Scl. & Salv.,* occurs in Peru and Eastern Ecuador. The Tring Museum has a specimen obtained on the Rio Napo by Mons. L. Petit, formerly in Comte de Dalmas' collection.

**75. Sirystes sibilator sibilator** (Vieill.).


No. 1745. 2 ad., Faz. Esperança, January 1906.—Wing 97; tail 86; bill 19 mm.

Perfectly similar to specimens from Paraguay (topotypical) and South-eastern Brazil (Parnâ, S. Paulo, Rio de Janeiro).

In South America there are three well-marked geographical forms of this bird to be distinguished, the characters and ranges of which are as follows:

(a) *S. sibilator sibilator* (Vieill.).

Paraguay (Azara): Sapucay (Foster coll.—Mus. Trüg). South-eastern Brazil: Arroio Grande, Rio Grande do Sul (Bischoff); Roça Nova (Robert), Currytiba, Paraná (Natterer); Ytararé, Goyaya, Ypanema, Cachoeirinha, Rio Paraná (Natterer), Victoria (Hempel), San Paulo; Rio de Janeiro (Fry coll.—Brit. Mus.), Cantagallo (Euler); Minas Geraes: Lagoa Santa (Burmeister—sp. in Mus. Halle, vidii); Goyaz: Faz. Esperança (Baer); Bahia (trade-skin in Mus. H. v. Berlepsch).

Back and rump olive-grey, with a distinct greenish cast on the mantle; last uppertygial feathers with whitish tips; upper tail-coverts dark sooty-brown, with narrow cinereous edges. Throat and breast pale smoky greyish, the latter slightly tinged with yellowish; abdomen white; under tail-coverts brown with whitish or yellowish white edges. Upper wing-coverts broadly tipped with whitish or greyish white.

Wing (ten specimens) 93—99; tail 85—89; bill 18—20 mm.

(b) S. sibilator atimastus Oberholser.


Chapada, Mattogrosso.

Upper parts as in the preceding form, but the yellowish white tips to the rump-feathers more conspicuous. Throat and foreneck clear cinereous; breast, abdomen, and under tail-coverts pure white. Upper wing-coverts as in *S. s. sibilator*, broadly tipped with whitish or greyish white.

Wing (three specimens) 89—96; tail 80—87; bill 18½—19 mm.

(c) S. sibilator albocinereus Scl. & Salv.

*Sicyotes albocinereus* Sclater & Salvin, *P.Z.S. Lond.* 1889, p. 156 (Bogotá coll.).

Upper Amazonian district: Colombia (Bogotá coll.); Eastern Ecuador: Sarayacu (Buckley); Eastern Peru: Santa Cruz (Bartlett), Iquitos (Whiteley), etc.; N.W. Brazil: Bom Lagar, Rio Purús.

Differs from the two foregoing forms by having the mantle clear cinereous without any olive tinge, and the rump and all the under-surface pure white, there being but a faint cinereous wash on the throat. The wing-coverts are almost uniform dusky brown, only a few with very narrow whitish apical margins, and the white edges to the secondaries are less distinct and narrower. Axillaries and under wing-coverts pure white (not pale yellowish grey as in *S. s. sibilator* and *S. s. atimastus*).

Wing (six specimens) 92—99; tail 80—89; bill 18½—20 mm.

76. *Pitangus sulphuratus* bolivianus (Lafr.).


No. 2143. ♂ ad., Rio Thesouras, May 1906.—Wing 122; tail 95; bill 30½ mm.

No. 2221, 2330. ♀ ♂ ad., Rio Araguaya, June, July 1906.—Wing 118, 114; tail 90, 87; bill 30, 28 mm.

No. 1847. ♀ imm., Goiaz, March 1906.—Wing 113; tail 85; bill 28 mm.

The series agrees well with specimens from Tucumán and other localities in Western Argentina. Typical birds from Bolivia are not available for comparison.

Specimens from Bahia, Rio de Janeiro, and S. Paulo are smaller, especially the wing being shorter, and the upper parts are a clearer brown. This is *P. sulphuratus maximilianii* (Cab. & Heine).

As to the intensity of the yellow on the belly, there is considerable variation to be observed. Baer's examples from Rio Thesouras and Rio Araguaya are quite
as deep yellow as *P. s. maximiliani*, while the ♂ from Goyaz (No. 1847) has the under parts much paler, clear citron-yellow.

I hope to discuss the geographic races of the *P. sulphuratus* group on another occasion.

77. **Megarhynchus pitanga** pitanga (Linn.)


No. 2144. ♂ ad., Rio Thesouras, May 1906.

No. 2225. ♀ ad., Rio Araguaya, July 1906.

[Though not collected by Mons. Baer, I take this opportunity of recording the following species, of which there is an example in the Paris Museum.

78. **Onychorhynchus swainsoni** (Pelz.)


Cat. No. 1846, No. 871. ♂ (jr.), Villa Boa (Goyaz), 1844. "Œil d’un gris clair.” Collector’s number 238. Obtained by Castelnau and Deville.—Wing 81; tail 69½; bill 20½ mm.

This bird agrees exactly with several Rio-skins in the Tring and British Museums. The range of this species is still very imperfectly known. It was supposed to be a native of South-eastern Brazil (and I have seen many skins of the unmistakable "Rio-make" in various collections), but the only precise locality recorded up to the present day was Neu Freiburg (state of Rio de Janeiro), where Burmeister* got some specimens.]

79. **Hirundinea bellica** (Vieill.)


The series differs from several South Brazilian (S. Paulo) skins by having the feathers of the crown not so blackish and conspicuously, though narrowly, edged with pale rusty or rufescent brown.

80. **Myiobius barbatus** mastacalis (Wied).


*Platyhynchus xanthopygus*, Spix, *Av. Bras.* ii. p. 9, tab. ix. fig. 1 (1825.—no locality; the type is from Rio de Janeiro).

No. 1713. ♂ ad., Faz. Esperança, January 1900.—Wing 65½; tail 50; bill 11 mm.

No. 1718. ♀, Faz. Esperança, January 1906.—Wing 60; tail 57; bill 10½ mm.

No. 1713 is an adult male with a large crown-patch of golden yellow; No. 1718 a female with the top of the head uniform dark olive like the back.

* *Syst. Übers. Th. Bras.* ii. 1856. p. 504.
These two examples agree in coloration with the type of *P. xanthopygus* Spix and several Bahia skins, the throat (except the yellowish chin), chest, sides, and under tail-coverts being ochraceous-brown, in decided contrast to the primrose-yellow of the middle of the breast and abdomen.


81. **Myiobius fasciatus fasciatus** (P. L. S. Müll.).


Nos. 2120, 2122, 2127. ♂ ♀ ad., Rio Thesouras, May 1906.—Wing 63—63⅓; tail 57, 59, 61; bill 10⅔—11¼ mm.

No. 2140. ♂ ♂ ad., montling, same locality, May 1906.

No. 1777. ♂ ♀ ad. in very worn plumage, Faz. Esperança, January 1906.


The adult males (with yellow crown-patch) differ from others from Bahia, Trinidad, and Cayenne solely by their rather longer wings, but the variation is scarcely appreciable. Specimens from Argentine are not constantly larger, and I cannot distinguish *M. f. auriceps* Gould as claimed by Ridgway.*

82. **Pyrocephalus rubinus rubinus** (Bodd.)


Nos. 2057, 2080, 2090. ♂ ♀ imm., ♂ ♀ ad., Goyaz, April and May 1906.


Nos. 2190, 2354. ♂ ♀ ad., Rio Araguaya, June, August 1906.

Identical with specimens from Amazonia (Tefé, etc.).

83. **Empidochanes fuscatus bimaculatus** (Lafr. & D'Orb.).


Nos. 2179, 2272, 2273, 2290. ♂ ♀ ad. and imm., Rio Araguaya, May and July 1906.—Wing 67—70½; tail 69—72; bill 13—14 mm.

No. 2245. ♂ ♀ ad., Rio Araguaya, June 1906.—Wing 64½; tail 65; bill 14 mm.

No. 2136. ♂ ♀ ad., Rio Thesouras, May 1906.—Wing 65; tail 64; bill 14 mm.

This series agrees exactly with several specimens from Chapada, Mattogrosso, and others from northern S. Paulo (Rio Tieté and Rio Paranapanema). The middle of the breast and abdomen is white (without any yellow), as are also the under tail-coverts; the foreneck, chest, and innermost sides of the body are dull.

* Birds North and Middle America iv. 1907. p. 543.
greyish, the axillaries and under wing-coverts dirty whitish (never pale yellow as in *E. f. fuscatus*), and the upper parts light rufescent brown, decidedly clearer and more reddish than in the typical race. No. 2136 slightly points towards *E. f. fuscatus* by having a faint yellowish tinge on the chest and flanks, while in other respects it agrees with the birds from the Rio Araguaya.

The typical form, *E. f. fuscatus*, inhabits the forest region of the states of Bahia, Rio de Janeiro, and S. Paulo, has much darker and duller upper parts, pale yellow breast and belly, the chest more washed with brownish, etc., etc.

84. *Myiarchus tyrannulus bahiae* Berl. & Lev.


*Myiarchus bahiae* Berlepsch & Leverkühn, *Ornis* vi. p. 17 (1890.—Bahia).


Nos. 2018, 2044. ♂♀ ad., Goyaz, April 1906.—Wing 90, 93; tail 87; bill 20, 21 mm.

No. 2020. ♀ ad., Goyaz, April 1906.—Wing 94 1/2; tail 90 1/2; bill 20 mm.

No. 2283. ♂ ad., Rio Araguaya, July 1906.—Wing 93; tail 88 1/2; bill 21 mm.

Besides these, I have examined a female, obtained by Count Castelnan (Mus. Paris), and an adult male secured by Natterer, in the Vienna Museum.

These six specimens agree with a series from Bahia in having no rufous border to the inner web of the outermost rectrix, but are much paler, more olivaceous grey, instead of dull brown, on the upper parts, resembling in this respect *M. tyrannulus chloripiscius* Berl. & Lev., from Mattogrosso and Eastern Bolivia. The few examples of the latter form, which I have seen, show a broad rufous border to the inner vane of the outermost rectrix, like *M. t. tyrannulus* from Cayenne, Venezuela, etc.

In view of the variability of this character in other species of *Myiarchus*, however, I do not lay much stress on the markings of the tail-feathers, inasmuch as, according to Dr. Allen,† in *M. t. chloripiscius* from Mattogrosso the rufous border to the external rectrix is also sometimes absent. Therefore I should not be surprised if a larger series would prove the Goyaz form to be referable to *M. t. chloripiscius*.

85. *Tyrannus melancholicus melancholicus* Vieill.

*Tyrannus melancholicus* Vieillot, *Nov. Dict.* xxxv. p. 84 (1819.—ex Azara No. 198: Paraguay); Pelzeln, t.c. p. 117 (Goiâs).

Nos. 2077, 2078, 2093, 2094. ♂♀ ♀ ♀, Goyaz, May 1906.

Nos. 2275, 2298. ♀ ♀, Rio Araguaya, July 1906.

86. *Muscivora tyrannus* (Linn.).


No. 2442. ♂ ad., Agua Suja, Minas Geraës, alt. 1000 metr., October 1906.

87. Pipra fasciicauda fasciicauda Hellm.


Pipra fasciicauda (nom. emend.) Hellmayr, Ibis 1906, p. 9.

No. 1666. ♂ ad., Faz. Esperança, December 1905.—Wing 65; tail 31; bill 10½ mm.

No. 1761. ♀ juv. (in the garb of the female), Faz. Esperança, January 1906.

No. 1666 is perfectly identical with other adult males from the Rio Jordão (Minas Gerais), northern S. Paulo (Rio Paraná, Rio Paranapanema), Mattogrosso (Villa Maria, Engenho do Gama), Itaituba on the Rio Tapajoz, and with D'Orbigny's type from Eastern Bolivia, in the Paris Museum. All these specimens have a broad yellowish white band across both webs of all the rectrices; the feathers of the throat are as a rule slightly tipped with red; the under tail-coverts show a very narrow black terminal band.

Specimens from the upper Rio Purús, N.W. Brazil, from the Rio Ucayali, Eastern Peru, and from Chuñhurras, province Huánuco, Central Peru, differ by having the throat pure yellow, without red tips, the black terminal bands to the under tail-coverts wider, and by the markings of the tail feathers. The central pair is wholly black, the two or three following ones are likewise black, but with a more or less developed white patch near the base of the inner web, the remaining rectrices are coloured (i.e. banded on both webs) as in P. f. fasciicauda. This western form has been separated by Miss Snethlage* as Pipra fasciicauda purusiana. When I wrote my synopsis of the genus Pipra I had three adult males from Chuñhurras before me, but overlooked the difference in the markings of the tail. The range of the two races is thus as follows:

a. P. fasciicauda fasciicauda Hellm.


b. P. fasciicauda purusiana Snethlage.


88. Antilophia galeata (Leht.).


No. 1836, 1894, 1895, 1954, 1988. ♀ ♂ ad., Goyaz, March, April 1906.—
Wing 77—89; tail 65—70; bill 8—9 mm.

Nos. 1620, 1640. ♂ ♂ ad., Faz. Esperança, December 1905.—Wing 77, 81; tail 69, 68; bill 9 mm.

No. 1906. (♀) juv. (in the garb of the female), Goyaz, April 1906.—Wing 75; tail 63; bill 9 1/2 mm.

Nos. 1987, 1622. ♂ ♂, Goyaz, Faz. Esperança, April 1906, December 1905.—
Wing 73, 77; tail 58, 65; bill 9 mm.

This splendid bird is an inhabitant of the campos districts of Brazil. Natterer obtained it in the northern part of the state of San Paulo at various localities (Borda do Matto, Iristanga, Paecinaria, Rio das Pedras, on the Rio Paraná); and Lund * sent specimens from Franca, in the north-eastern corner of the same province. The former naturalist also met with it at Goyay, and near São Vicente, in western Mattogrosso. H. H. Baillie collected a large series at Chapada, Mattogrosso.† Burmeister got several examples from the environs of Lagoa Santa, Minas Gerais,‡ and the British Museum possesses two adult males secured by Dr. Wucherer in the interior of Bahia.

Whether the single female collected by Buckley near Simacu, § in North Bolivia, belongs to *A. galeata* or to a different form, cannot be decided until adult males come to hand.

89. Neopelma pallescens (Lafr.).


*Heteropelma flaviacapillum* Sclater, *P. Z. S. Lond.* 1869, p. 466 (S.E. Brazil); Pelzel, *ibid.* p. 125 (Goyaz).


Nos. 1902, 1952, 2004. ♀ ♂ ad., Goyaz, March, April 1906.—Wing 80 1/2, 81, 76; tail 66, 66, 65; bill 12 1/2, 12 mm.

No. 2175. adult (not sexed), Rio Thesouras, May 1906.—Wing 77; tail 67; bill 12 1/2 mm.

No. 2154. ♀ imm., Rio Araguaya, June 1906.—Wing 75; tail 62; bill 12 mm.

No. 2301. ♂ juv., Rio Araguaya, July 1906.—Wing 77; tail 65; bill 12 1/2 mm.

Nos. 1888, 1991, 2058. ♀ ♂ ad., Rio Araguaya, March, April 1906.—Wing 75, 75, 78; tail 65, 64, 65; bill 12 1/2 mm.

These specimens are practically identical with a large series from Bahia.

In the paper quoted above I have given the synonymy, characters and geographical distribution of *N. pallescens* and its allies. I quite agree with Mr. Ridgway ‖ that the three species of "*Scotothorus*" with yellow crest should be placed in *Neopelma*.

‖ *Birds North and Middle America* v. 1907, p. 727, footnote d.
90. **Tityra braziliensis** (Sws.).

*Psaris braziliensis* Swainson, Anim. Monog. p. 286 (1838.— "Northern Brazil").

Nos. 1875, 1953. ♂♀ ad., Goyaz, March 1906.— Wing 133, 126; tail 80, 75; bill 22 mm.

 Agreeing well with other specimens from Brazil and Paraguay.

In No. 1875 the tail is entirely black, while in No. 1953 the four outer rectrices have a distinct patch of white at the base of the inner web. I have discussed at length the geographical distribution and characters of T. cayana and T. braziliensis in my revision of Spix’s types: Abhandl. Akad. Wissensch. München, ii. Kl., Bd. xxii. 3, 1906. pp. 667-8. Their ranges are not correctly given by Ridgway. For instance, the examples from Guayos, Eastern Bolivia,† coll. D’Orbigny, which I examined in the Paris Museum, belong to T. cayana, and not to braziliensis as supposed by Ridgway.

91. **Casiornis rufa rufa** (Vieill.).

*Thanomophilus rufus* Vieillot, Nouv. Dict. iii. p. 316 (1816.— ex Azara’s "Batara roxo" (= No. 2181): Paraguay).

*Thanomophilus rutilus* Vieillot (nee Vieillot § 1816), Tabl. enc. méth. ii. p. 747 (1822.— ex Azara’s "Batara roxo"—which Vieillot erroneously quotes as No. 215).


*Casiornis rubra* Pelzeln, loc. p. 96 (Goiz, Ponta alta).


Nos. 1874, 1915, 2030. ♂♀ ♂♀ ad., Goyaz, March, April 1906.— Wing 85, 85, 81; tail 83, 80, 79 mm.

Nos. 2145, 2172. ♂♂ ad., ♂♀ imm., Rio Thesouras, May 1906.— Wing 84, 80; tail 83, 75 mm.

Nos. 2211, 2282, 2206, 2308, 2352. ♂♂ ♂♀ ? ad. and imm., Rio Araguary, June, July, August 1906.— Wing 80—85; tail 79—86 mm.

Nos. 1673, 1644, 1719. ♂♂ ad., Faz. Esperança, December 1905, January 1906.— Wing 84, 86; tail 79, 83.


These specimens are exactly similar to several totopypical skins from Paraguay, and others from Eastern Bolivia (D’Orbigny) and Mattogrosso. In all of this large series the back and rump are deep cinnamon-rufous, the cap being scarcely darker.

In Eastern Brazil (from Bahia to Pará) C. r. rufa is replaced by C. rufa fusca Scel. & Salv., || which differs chiefly by having the back dull earthy or rufescence brown, in decided contrast to the cinnamon-rufous cap and upper tail-coverts.

The above is the correct name of the western form which had usually been called C. rubra. It is, however, extremely doubtful whether M. rubra really refers to the species in question. Moreover, the name T. rufus, which is accompanied by an unmistakable description, has the priority by two years.

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*Birds North and Middle America*, iv. 1907. p. 867.


‡ In the Spanish edition No. 218, in ed. Sonnini No. 217.


*Tityra castanea* Jardine & Selby, *Illust. Ornith.* tab. 10, fig. 2 (Feb. 1827.—"in America meridional;"").—We fix South Brazil as typical locality.


This bird shows the characteristic cinereous band across the hind-neck which distinguishes *P. castaneus* from the female of *P. rufus* (Bodd.) (= *cinereus* anct.). As I have pointed out in *Abhandl. Akad. Wissensch. München.* ii. Kl., Bd. xxii. 3, 1906, pp. 669-670, the proper name of the South Brazilian form is the one given above. This has apparently been overlooked by Mr. Ridgway, in whose great work the synonymy seems to have been copied from the *Catalogue of Birds.*

93. *Furnarius figulus pileatus* Scl. & Salv.


No. 2326. ♀ ad., Rio Araguaya, July 1906.—Wing 89; tail 62; tars. 29; bill 29 mm.

No. 2327. ♀ imm., Rio Araguaya, July 1906.—Wing 87; tail 61; tars. 27½; bill 21 mm.

These birds, which answer well to the original description of *F. pileatus*, agree with a good series of *F. figulus*, from Bahia, in all important points, such as the black feet, the presence of two pale spots on the inner web of the two outer primaries, and the coloration of the lower parts and sides of the head. They differ, however, by the deeper cinnamon-rufous tint of the back, wings and tail, and by having the pileum dusky brown (not chestnut-rufous). The lores and eyebrow, too, are paler, nearly pure white instead of being buff as in *F. figulus*, and the legs rather stronger and longer.

No. 2326, an adult bird, has the cap uniform dark brown, the forehead alone being slightly tinged with rufescenct (as in some specimens of *F. l. assimilis*). In the other specimen the feathers of the pileum, though also mainly dusky brown, show obsolete rufescenct brown discs. It is a young bird, as is manifested by the dusky edges to the feathers of the cheeks and malar region, etc.

So far as I am aware, the two specimens obtained by Professor Steere and Mr. Riker near Santarem were the only ones as yet known, and the present record extends the range of *F. f. pileatus* far to the south.

94. *Furnarius leucopus assimilis* Cab. & Heine.


Nos. 2376, 2395. ♀ ♀ ad., Rio Araguaya, August 1906.—Wing 83, 86; tail 54; bill 20, 22 mm.

They differ from a number of Bahia skins by having the top of the head slightly darker, sooty blackish (instead of coffee-brown). The birds collected near Cuyabá by the late Dr. Natterer (Vienna Museum), however, agree exactly with those from Bahia. In all these specimens (18) there is a conspicuous pale cinnamomeous spot on the inner web of the first primary, and the outer web of the remiges (except the two outer primaries) shows a distinct deep rufous

* Birds North and Middle America, iv. 1907, p. 828, footnote b.
longitudinal stripe which corresponds in length with the pale cinnamomeous spot on the inner web.

In _F. l. leucopus_ Sws., on the other hand, the first primary is uniform dusky, and the rufous streak on the outer web begins with the fourth or fifth primary.

The geographical distribution of the two races is as follows:

(a) _F. l. leucopus_ Sws.

_Hab._ British Guiana (fide Swainson; Brown & Quelch coll, in Brit. Mus.): at the junction of the Pirara and Mahu rivers (Schomburgk). North Brazil: Forte do Rio Branco; Rio Amajau, a tributary of the lower Rio Negro (Natterer).

_Material:_ 2 ♂♂, 2 ♀♀, Forte do Rio Branco (Natterer—Mns. Vienna and Berlepsch), 2 adults British Guiana (Brown & Quelch coll.—Mus. Brit.).

_Obs._ In the birds from the Rio Branco the rufous stripe on the outer web begins with the fifth, in the Guiana ones with the fourth primary.

(b) _F. l. assimilis_ Cab. & Heine.


_N.B._—The specimens from Corumbá, Mattogrosso, *I have not seen; they may belong to this form or to _F. tricolor_ Giebel.*

95. _Lochmias nematura nematura_ (Licht.)


_No._ 1876. ♂ ad., Goyaz, March 1906.—Wing 70; tail 53; bill 10½ mm.

_Differs_ from South Brazilian skins by having the back rather lighter and more olivaceous (less rufescent), and the ground-colour of the under-parts somewhat duller, less chocolate.

96. _Synallaxis frontalis frontalis_ Pelz.


_Nos._ 2247, 2252. ♂ ♀ ad., Rio Araguaya, June, July 1906.—Wing 55, 54; tail 78; bill 11 mm.

_Nos._ 1863, 1940, 1950, 2002. ♂ ♂ ad., Goyaz, March, April 1906.—Wing 55—57; tail 73—81; bill 10—11 mm.

_No._ 2063. ♀ ♀ ad., Goyaz, April 1906.—Wing 53; tail 77; bill 11 mm.

_No._ 1691. ♂ jr., Faz. Esperança, December 1906.

_No._ 1872. ♀ juv., Goyaz, March 1906.

_There are no constant differences between examples from Bahia, Goyaz, Mattogrosso and Paraguay; perhaps those from Bahia are generally rather lighter, more fulvous-brown on the back._

_Skins_ from Entrerrios and Tucuman, Argentine, have the greyish brown frontal band rather wider, though some birds from Brazil come very close in that respect.


† _Zeitschr. ges. Naturwiss._ xxxi. 1868, p. 11 (Bolivin).
97. Synallaxis albescens albescens Temm.


Agreeing with specimens from S. Panlo (Natterer coll.). In South Brazilian skins the ashy frontal band is always much narrower, the cap and shoulder-patch are much deeper ferruginous, and the tail more tinged with rufescent than in the northern form, *S. albescens albigularis* Sel.

98. Synallaxis simoni Hellm.


No. 2370. ♀ fere ad., Rio Araguaia, August 1906. *Type of species.*

Top of the head and nape rawumber-brown (Ridg. iii. 14); back, rump and upper tail-coverts bright cinnamon-rufous, the lower rump rather paler than the rest; upper wing-coverts, inner secondaries and outer webs of all the other remiges clear cinnamon-rufous, inner webs dusky. Tail uniform cinnamon-rufous, the shafts below whitish. Lores, narrow superciliary streak, reaching to the posterior border of the ear-coverts, and cheeks cream-buff; auricular region rather darker, buff-brownish. Throat white, more buffy in the malar region; foreneck, sides of the belly and under tail-coverts pale buff; middle of breast and abdomen to a great extent white. Thighs buff. Axillaries and under wing-coverts ochraceous-buff; inner webs of remiges broadly edged with vinaceous-cinnamon. Edge of wing bright buff. Bill blackish, lower mandible horny whitish, feet dark brown.—Wing 61; tail 73; bill 14 mm.

This species is somewhat intermediate between *S. gujanensis* (Gm.) and *S. albiflora* Pelz. It agrees with the latter in having the upper tail-coverts and inner secondaries cinnamon-rufous; but the whole back is also of this colour (instead of being fulvous-brown mixed with cinnamon in the middle of the mantle); the under-parts are white, washed with buff on the foreneck and sides (not uniform deep ochraceous), and the axillaries as well as the under wing-coverts much paler ochraceous. In the two last points the new form agrees with *S. gujanensis*, which, however, has the back and upper tail-coverts earthy brown, and the inner secondaries dusky, narrowly edged with rufous.

At the request of Mons. G. A. Baer the species is named in honour of Mons. Eugène Simon, of Paris, the great authority on spiders and humming-birds.

99. Synallaxis soutata soutata Sel.


No. 2170. ♀ ad., Rio Thesonas, May 1906.—Wing 56½; tail 66; bill 14 mm. No. 2300. ♀ ad., Rio Araguaia, July 1906.—Wing 56½; tail 65; bill 14 mm. No. 1675. ♀ ad., Faz. Esperança, December 1905.—Wing 55½; tail 67; bill 13½ mm.

While almost identical on the under-parts, these specimens present a certain amount of individual variation as to the colour of the back. In No. 1675 back, rump and upper tail-coverts are uniform bright cinnamon-rufous (Ridg. iv. 16).
there being scarcely a few brownish feathers on the lower rump; in the two others the ground-colour is a rather lighter cinnamon-rufous, and largely mixed with pale brown, especially on the anterior portion of the mantle. The same variation is exhibited by three specimens from Chapada, Mattogrosso, in the British Museum. The type of \textit{S. scutata}, which I also examined, agrees in the colour of the back with No. 2170, while another skin from Bahia (Mus. H. v. Berlepsch) has the back and rump cinnamon-rufous like No. 1675.

The lores are always white in this species, while the colour of the eyebrow varies from white to buff-yellow. Chin and upper throat silty white; on the lower throat a large white patch; ear-coverts dull brown; cheeks, malar region, sides of the neck and belly, as well as the foreneck, bright ochraceous-buff, middle of the breast and abdomen white.

In southern Mattogrosso and in the Argentine Republic \textit{S. s. scutata} is replaced by \textit{S. s. whitii} scl., which differs by having the back dull olive-brown without any trace of cinnamon-rufous, the tail darker rufous, and the upper wing-coverts and remiges much darker, about "hazel" (Ridg. iv. 12) instead of clear cinnamon-rufous. The upper tail-coverts are, however, cinnamon-rufous, as in \textit{S. s. scutata}.

An adult male collected by Borelli near Urucum, and kindly sent for comparison by Count Salvadori, agrees exactly with four specimens from Jujuy, in the Tring Museum. The distribution of the two forms is accordingly as follows:

(a) \textit{S. scutata scutata} Scl. Brazil: Bahia (type); Goyaz: Rio Theosonras, R. Aragnaya and Faz. Esperança (Baer); North S. Paulo: S. Jeronimo on the Rio Tieté (Garbe); Mattogrosso: Chapada (Smith).

(b) \textit{S. scutata whitii} Scl.* S.W. Mattogrosso, Brazil: Urucum (Borelli); Argentine: Oran, Salta (White); Jujuy: S. Lorenzo (Borelli), Ledesma (Dinelli).

100. \textit{Synallaxis torquata} Wied.


Nos. 1701, 1638. $\delta$ ad., $\varphi$ ad., Faz. Esperança, January and December 1906. —Wing 51$\frac{1}{2}$, 54: tail 66, 64; bill 11$\frac{1}{2}$, 10 mm.

The specimens agree perfectly with others from Bahia and Lagoa Santa, in the British Museum, and with the series collected by Natterer in S. Paulo (Ytararê, Irisanga, etc.), lent by the authorities of the Vienna Museum. In all these skins the pileum and nape are warm rufescent brown (between Ridgeway's mummy-brown and mars brown) like the back, and the edge of the wing, as well as the bastard quills, uniform cinnamon-brown. In some examples the first bastard quill is edged with whitish, and there are a few black feathers with white edges on the edge of the wing.

The males always possess a well-developed, concealed, white interscapular patch, and a complete collar of cinnamon-rufous across the hindneck. In the females the white dorsal spot is altogether absent, and the nuchal collar interrupted in the middle.

Prince Wied's description generally applies well to the above series, except

* \textit{Synallaxis whitii} Sclater, \textit{Ibis}, 1881. p. 600, tab. xvi, fig. 2 (Oran, Salta, Argentine).
for the words: "Oberkopt und Nacken granbraun." Unfortunately the types seem to have been lost. (Cf. Allen, Bull. Amer. Mus. ii, 1889. p. 244.)

The diagnosis of *S. bitortuata* Lafr. & D'Orb.,* however, tallies exactly with Baer's specimens: cf. "capite supra brunneo."

101. *Siptornis vulpina vulpina* (Pelz.).


No. 2368. ♀ imm., Rio Araguaya, August 1906.—Wing 66; tail 63; bill 11 3/4 mm.

This specimen is entirely typical, having the top of the head and upper back as well as the upper tail-coverts uniform ferruginous in strong contrast to the clear olive-brown rump.


102. *Automolus leucophthalmus* (Wied).


No. 1891. ♂ ad., Goyaz, March 1906.—Wing 89; tail 90; bill 20 1/2 mm.

No. 1645. ♀ imm., Faz. Esperança, December 1906.—Wing 82; tail 86; bill 20 mm.

Identical with S. Paulo specimens. New to Goyaz.

103. *Philydor rufus* (Vieill.).


No. 1711. ♂ ad., Faz. Esperança, January 1906.—Wing 90; tail 86; bill 17 3/4 mm.

No. 1665. ♀ ad., Faz. Esperança, December 1905.—Wing 89; tail 91; bill 18 mm.

Neither in colour nor in size could I detect any constant differences between specimens from Rio, S. Paulo and Paraná, and those from Goyaz and Mattogrosso (Chapada). It is true, two S. Paulo skins are rather darker brown on the back, but an adult female from Roça Nova, Serra do Mar (Paraná) agrees in this respect with the Rio, Goyaz and Chapada birds.

Two adult ♂♂, S. Sebastião, S. Paulo . . 91, 89 97, 94 19, 19 1/2 mm.

One adult ♂, Tieté, northern S. Paulo . . 87 1/2 90 18 1/2 mm.

One adult ♂, Ypanema, S. Paulo . . 90 91 — mm.

Two adults, Rio-skins . . . . 88, 85 93, 96 18, 18 1/2 mm.

One female, Roça Nova, Paraná . . 83 92 18 1/2 mm.

One adult ♂, Chapada, Mattogrosso . . 93 98 19 mm.

One adult ♀, Chapada, Mattogrosso . . 88 92 19 mm.

The type of *Philydor ruficollis* Spix,† said to be from the interior of Bahia, has much longer wings (98 mm.), but does not differ in coloration. If it represents a distinct form, the birds from Goyaz and Mattogrosso are not referable to it.

*Cf.* *Av. i. in Mag. Zool.* 1837. cl. ii. p. 21 (Chiquitos, East Bolivia).

† *Av. Bras.* i, 1824, p. 74. tab. lxxv.
104. Xenops rutilus rutilus Lcht.


No. 1670. ♂ ad., Faz. Esperança, December 1905.—Wing 64; tail 51; bill 13½ mm.

No. 1716. ♀ ad. Faz. Esperança, January 1906.—Wing 65½; tail 59; bill 12 mm.

No. 2390. ♂ ad. Rio Araguaia, August 1906.—Wing 64; tail 50; bill 12 mm.

No. 2022. ♀ ad., Goyaz, April 1906.—Wing 65; tail 50; bill 12½ mm.

The series agrees in coloration and size with specimens from S. Paulo, Mattogrosso and Jujuy, Argentina, while Bahia skins are slightly smaller, especially the tail being shorter.

_X. r. rutilus_ is characterised by having the inner web of the fourth rectrix only black, all the rest of the tail being cinnamon-rufous. Sometimes the base of the inner web of the third rectrix is also more or less blackish.

In _X. r. heterurus_ Cab. & Heine, of which a very large series has been examined, the inner webs of both the third and fourth rectrices are black, and the subexternal as well as the fifth tail-feather have likewise more or less black at the base. Besides, the back is duller, more brownish (less cinnamomeous), and the ground-colour of the under-parts greyish brown, barely shaded with olivaceous.

A third form of this group is _X. tenirostris_ Pelz.,* of which the type and only known specimen has been kindly lent me by Dr. von Lorenz. In this bird the third and fourth rectrix are wholly black, the fifth has the inner web black, and there is also a black stripe along the inner web of the penultimate rectrix. In size it agrees with _X. r. rutilus_, but the bill is much weaker and slenderer. _X. r. heterurus_ is much larger, with a decidedly stronger and more powerful bill.

The range of the three races is as follows:

(a) _X. rutilus rutilus_ Lcht.

South Brazil: Bahia (Wucherer, many trade-skins in Mus. H. v. Berlepsch, Tring, etc.); Rio Itabapuana, Rio de Janeiro (Wied); Lagos Santa, Minas Geraes (Lund); S. Paulo: Batataes (Lund), Ypanema (Natterer), Victoria (Hempel); Paraná: Curytiba (Natterer); Goyaz: Faz. Esperança, Rio Araguaia, Goyaz (Baer); Mattogrosso: Chapada (Smith), Villa Maria, Engenho do Cap. Gama (Natterer); Eastern Bolivia: Guarayos (D'Orbigny); N.W. Argentina: Jujuy (Dinelli—Mus. Tring).

(b) _X. rutilus heterurus_ Cab. & Heine.


Colombia: Bogotá coll., Santa Elena, Antioquia, Bucaramanga; Eastern Ecuador: Baeza (Goodfellow coll. in Mus. Tring); Northern Peru: Guayabamba, Chirimoto, etc.; Central Peru: Vitoé, Garita del Sol; Northern Venezuela, Quebrada Secca and Campos Alegre, State of Cumaná—Mus. Tring; Trinidad:

Laventille (cf. Nov. Zool. xiii. 1906. p. 29, s.n. X. r. rutilus (errore); Cayenne (Cherrie—Mus. Tring).

N.B.—The Venezuela and Trinidad birds agree perfectly with the Colombian ones. I have never seen any specimen from Central America. In the district of Guayaquil, S.W. Ecuador, another closely allied race is found, but I have not sufficient material to properly define it.

(c) X. rutilis tenuirostris Pelz.

Only known from Salto Girao, Upper Rio Madeira.

105. Sittasomus sylviellus sylviellus (Temm.).

Dendrocopeltes sylviellus Temminck, Pl. col. livr. 12. tab. 72. fig. 1 (1821.—"Brésil").


No. 1893. ♂ ad., Goyaz, March 1906.—Wing 71; tail 74; bill 12 mm.

No. 1815. (♂) ad., Faz. Esperança, February 1906.—Wing 79; tail 82; bill 12½ mm.

No. 1881. ♂ jr., Goyaz, March 1906.—Wing 76½; tail 76; bill 12½ mm.

The adult birds sent by Mons. Baer, as well as two adult males from Goyaz in the Paris Museum, collected by Castelnau and Deville, agree perfectly with specimens from Rio de Janeiro, S. Paulo and Paraná. The under-parts are deep ochre-yellow, the pyleum is olivaceous, more or less tinged with brownish, and the upper back tawny olive.

S. sylviellus olivaceus Wied,* of which Count Berlepsch kindly lent me a specimen from Bahia, differs from S. s. sylviellus by having the pyleum and mantle decidedly olive-green, and the under-surface duller as well as more olivaceous. It is an easily recognisable form.

105A. Sittasomus sylviellus chapadensis Ridg.


No. 2169. ♀ imm., Rio Thesouras, May 1906.—Wing 68; tail 70; bill 12 mm.

This example is quite distinct from those obtained by Mons. Baer in the vicinity of Goyaz city, and seems to belong to the pale form inhabiting Mattogrosso, Eastern Bolivia and Northern Argentina. It differs, however, slightly from topotypical examples of S. chapadensis in its rather more brownish (less greyish) head and upper back, and smaller bill. The colour of the lower surface, on the other hand, is exactly the same pale greyish buff. Until additional examples prove it to represent a recognisable race, it may well be referred to chapadensis.

Besides S. sylviellus amazonus Lafr., of Amazonia, there are thus three forms of S. sylviellus to be found in Brazil.

(a) S. s. sylviellus (Temm.).

S.E. Brazil. Southern Goyaz: City of Goyaz (Baer, Castelnau & Deville), Faz. Esperança (Baer). Minas Geraes: Sette Lagoas (Brunneriester), S. Francisco

(64)


N.B.—White’s specimen from Misiones, and another from the same province (in the Tring Museum), are absolutely identical with the Brazilian ones.

(6) S. sylvestris olivaceus Wied.

Eastern Brazil: only known from Bahia.

(c) S. sylvestris chapadensis Ridgw.

Western Brazil. Goyaz: Rio Theosonras, 150 kilomètres north of the city of Goyaz (Baer). Mattogrosso: Chapada (Smith), Engenho do Pari; Engenho do Gama (Natterer), Urumé (Borelli). Eastern Bolivia: Chiquitos (D’Orbigny). Northern Argentina: S. Francisco, S. Lorenzo, Jujuy; Tala, Salta (Borelli); Tucumán (Dinelli—series in Tring). Northern Paraguay: Colonia Risso (Borelli).

106. Dendronis guttata § dorbignyana (Lafr.).

Nasica dorbignyanus Lafresnaye, Rev. Mag. Zool. 1850, p. 420 (Guarayos and Chiquitos, Bolivia—
coll. D’Orbigny).

p. 10 (Guarayos, Bolivia).

Dendronis guttata (nee Licht.) Solerator & Salvin, P.Z.S. Lond. 1879. p. 622 (Guanai, Bolivia);

Dendronis d’orbignyanus Elliot, Auk, 1890. p. 182 (crit.); Allen, Bull. Amer. Mus. v. 1893. p. 113
(Cachapa, Mattogrosso).

Maria, Engenho do Gama, Das Pedras, Sangrador, Alecrim; Mattogrosso).

p. 98 (crit.).

No. 2439. 9 ad., Rio Araguaya, August 1906.—Wing 113
bill 36 mm.

This bird agrees with the specimens from Mattogrosso in the Vienna Museum obtained by Natterer. The bill is horny whitish, and the pale shaft-striipes on the under-parts are never margined with blackish laterally—just as in Bolivian examples. The birds from Mattogrosso and Goyaz differ, however, by their larger size, less dusky plumage, and by having the under-parts slightly more rufescent. Additional material may show the Brazilian birds to be separable as a distinct form; but in view of the great variability in other members of this genus, I feel not justified in bestowing a name on them with the relatively scanty material before me.

‡ “Pari,” mentioned by Pelzeln, Zur Orsa. Bras. i. p. 42, among the localities of S. citharicus, is the
same as Engenho do Pari. The specimen which I have examined in the Vienna Museum is chapadensis.
† Salvadori, Lc. p. 8.
Measurements of specimens from the various localities:

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<td>38 mm.</td>
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<td>110—114</td>
<td>96—102</td>
<td>38—40 mm.</td>
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107. **Dendroplex picus** (Gm.).


Nos. 2314, 2408. ♀ ad., ♀ imm., Rio Araguaya, July, August 1906.—Wing 95, 98; tail 81, 80; bill 27½, 28 mm.

No. 2166. ♂ ad., Rio Theosonras, May 1906.—Wing 106; tail 91; bill 27½ mm.


108. **Xiphocolaptes albicollis** (Vieill.).

*Dendrocolaptes albicollis* Vieillot, *Nov. Dict. xxvi.* p. 117 (1818.—"Brésil").

No. 1653. Adult, Faz. Esperança, December 1905.—Wing 135; tail 121; bill 46 ½ mm.

Similar to an adult male from S. Paulo (Ypanema), but with shorter and slenderer bill, and somewhat paler under-parts. New to Goyaz.

109. **Picolaptes angustirostris bivittatus** (Licht.).


Nos. 1892, 1914, 1931, 1937, 2042. ♂♂, Goyaz, March, April 1906.—Wing 98—101; tail 80—87; bill 30—33 mm.

Nos. 1896, 1932, 1999, 2019, 2043, 2059. ♀♀, Goyaz, March, April 1906.—Wing 96—100; tail 81—88; bill 30—33 mm.

No. 2248. ♂ ad., Rio Araguaya, June 1906.—Wing 97; tail 82; bill 32½ mm. No. 2124. ♀ ad., Rio Theosonras, May 1906.—Wing 93; tail 78; bill 31 mm.


*P. a. bivittatus* (Licht.) is a very close ally of *P. a. angustirostris* (Vieill.), and differs only by having the breast and abdomen uniform creamy white. In the typical race from Paraguay the feathers of the belly are more or less distinctly edged with brown or ashy.
110. Dendrocincla turdina enalincia Oberh.


No. 1764. δ ad., Faz. Esperança, January 1906.—Wing 100; tail 90; bill 24½ mm.

This specimen agrees perfectly with several others from the vicinity of Rio de Janeiro, and differs slightly from a series of skins collected in the state of S. Paulo.

Topotypical examples of D. t. turdina from Bahia have the back bright ochraceous brown, especially the rump; and all the underface is strongly suffused with ochraceous. The throat is but a little paler than chest and abdomen, and there are only a few indistinct buff shaft-lines on the foreneck. The S. Paulo birds differ at a glance in being much duller, olive-brown above and below, with scarcely any ochreous tinge on the abdomen; the throat is conspicuously paler than the rest of the under-parts, ochraceousbuff, and the feathers of the foreneck show distinct light shaft-lines of bright buff.

The male from Goyaz, as well as a pair from Rio, are of a purer brown on both the upper and under parts, lacking the olive hue to be seen in skins from S. Paulo. The throat is scarcely paler than the chest, and there are but a very few buff stripes on the foreneck. Another specimen from Rio, however, is almost identical with those from S. Paulo. Until better series are available for comparison, the birds from Rio and Southern Goyaz may be referred to D. t. enalincia.

111. Thamnophilus major major Vieill.

Thamnophilus major Vieillot, Noves. Diet. iii. p. 313 (1816.—ex Azara No. 211: Paraguay); Pelzel Zur Orn. Bras. i. 1867. p. 75 (Abrantes, Goyaz).

Nos. 1858, 1919. δ δ ad., Goyaz, March 1906.


Nos. 2186, 2241, 2357, 2359. δ δ ad., Rio Araguaya, June, August 1906.


Nos. 1848, 1850, 1607, 209, 2091. ♂ ♂, Goyaz, March April 1906.

Nos. 2210, 2297, 2279, 2371, 2373, 2426. ♂ ♂, Rio Araguaya, June, July, August 1906.

Agreeing with Paraguay specimens.

112. Thamnophilus ambiguus sticturus Pelz.

[Thamnophilus maxian var. a? T. ambiguus (sic) Swainson, Zool. Journ. ii. p. 31 (1826.—Minas Geraes: Such coll.)]


Th. ambiguus (sic Swainson) Allen, Bull. Amer. Mus. v. 1893. p. 115 (Chapada, Matto-grosso);


Nos. 1900, 1980. δ ad., δ imm., Goyaz, March and April.—Wing 66, 67; tail 55, 57; bill 15 mm.

No. 1681. δ ad., Faz. Esperança, 700 m.—Wing 67; tail 57; bill 16 mm.

Nos. 2201, 2216, 2427. δ δ ad., Rio Araguaya, June and August 1906.—Wing 64, 66, 71; tail 55, 57, 60; bill 16—16½ mm.
(67)

Nos. 1981, 1997, 2054. ♀♀, Goyaz, April 1906.—Wing 65—66½; tail 55—56; bill 16 mm.

No. 1647. ♀ ad., Faz. Esperança, December 1905.—Wing 65; tail 57; bill 16 mm.

Nos. 2294, 2295. ♀♂, Rio Araguaya, July 1906.—Wing 68½, 69; tail 59, 60; bill 15½, 16 mm.

No. 2290. ♂ juv., Rio Araguaya, June.—Wing 67; tail 57½; bill 16½ mm.

Besides this series I have examined in the present connection: 3 ♂♂, 3 ♀♀ from Chapada, received in exchange from the American Museum, New York; 1 ♂ ad., Jaboticabal, 1 ♀ ad., Itapurá, S. Paulo, obtained from Prof. von Ihering; 1 ♂ ad., 1 ♂ imm., 1 ♀ ad., Engenho do Cap. Gama, types of T. sticturus Pelz., 1 ♂ ad., Corumbá, 2 ♀♀, Urucum, 1 ♂ ad., Goyaz, all belonging to the Vienna Museum; and 1 ♂ imm. from Goyaz, Castelhano & Deville coll., kindly lent by Dr. Ménégaux, of the Paris Museum.

Of the typical T. a. ambiguus, I had before me twenty specimens of both sexes from Bahia and the environs of Rio de Janeiro, in the Tring and Vienna Museums.

On carefully comparing this material, I find two forms easily separable. The males from Goyaz, Mattogrosso, and Northern S. Paulo differ from those of true T. ambiguus by their lighter grey back, much paler lower parts with a large amount of white in the middle of the abdomen, smaller bill, and by the white marginal spot on the inner web of the outermost rectrix being absent or but faintly indicated. In many cases the white spot on the inner web of the other rectrices is likewise wanting; this character, however, is subject to much individual variation (see below). The females can also be easily recognised by their much brighter ochraceous-buff foreneck, chest, and sides, and by the distinct white area in the middle of the abdomen. In T. a. ambiguus ♀ all the lower surface (except the whitish throat) is uniform dull buff-brown or fulvescent brown, hardly shading into pale buff along the middle line of the belly.

Variation in the markings of the rectrices in the males:

In the type of T. sticturus (♂ ex Engenho do Gama) and in the ♂ from Corumbá the outer web of the rectrices only shows a white marginal spot. Two ♂♂ from Chapada and that from Jaboticabal have on both webs a white stripe or spot, just as in T. a. ambiguus, but the markings on the inner web of the two outer tail-feathers are decidedly narrower. In another ♂ from Chapada and in two from Goyaz the two outer rectrices have the white stripe on the outer web only, while the remaining four are spotted on both webs. Six other ♂♂ from Goyaz have all rectrices spotted on both sides.

The following summary of the geographical distribution of the two forms may be not unwelcome to ornithologists interested in the neotropical avifauna:

a. T. a. ambiguus (Sws.).

Forest region of South-eastern Brazil from Rio de Janeiro to Bahia.


b. T. a. sticturus Pelz.

Interior of Brazil from Goyaz to Western Mattogrosso and south to the northern districts of S. Paulo.

113. Thamnophilus doliatus difficilis Hellm.

[._Lanius doliatus_ Linnaeus, _Mus. Ad. Frid. ii. Prodr._ p. 12 (1764,—loc. ign.])


Nos. 2192, 2222, 2233, 2237, 2324, 2325, 2356, 2367, 2380. ♂ ♂ ad., Rio Araguaya, June, July, and August, 1906.—Wing 74—80; tail 64—70; bill 19—20 mm.

No. 2358. ♂ juv., Rio Araguaya, August 1906.

Nos. 2181, 2238, 2244, 2303, 2355, 2360, ♀ ♀ ad. and imm., Rio Araguaya, June to August 1906.—Wing 73½—78; tail 61—66; bill 18—19 mm.

This large series confirms the distinctness of _T. d. difficilis_, although the color-characters of the female as set forth in my description do not hold good. The males differ from those of _T. d. subradiatus_ Berl. by having the forehead more densely striped with white, the ground color of the under-parts purer white, and the bill distinctly weaker and slenderer (not stouter as stated in the original diagnosis _lapso colami_).

The crest feathers are as a rule uniform black; but in one specimen (No. 2192) they are white at the extreme base. Both webs of all rectrices are banded with white.

The females from Goyaz differ from those of _T. d. subradiatus_ merely by their slenderer bill.

114. Thamnophilus torquatus Sws.


No. 2139. ♂ ad., Rio The sou ras, May 1906.—Wing moulting; tail 64; bill 15½ mm.

Agrees with several skins from Bahia.

115. Myrnelastes luctuosus araguayae n. subsp.


Nos. 2366, 2381, 2398, 2499, 2406. ♂ ♂ ad., Rio Araguaya, August 1906.—Wing 79—82; tail 70—73; bill 20—22 mm.

Nos. 2230, 2372, 2377, 2379, 2397. ♀ ♀ ad., Rio Araguaya, June and August 1906.—Wing 77—81; tail 68—73; bill 19—21 mm.

No. 2405. (♂) juv., Rio Araguaya, August 1906.—Wing 78; tail 70½; bill 21 mm.

Differs from _M. l. luctuosus_ of the Lower Amazons and Rio Madeira, in having much shorter white tips to the tail-feathers, and broader white edges to the outer webs of the scapular feathers. The former, too, are restricted to the three outer
pairs of rectrices, though sometimes the fourth rectrix also shows a very narrow white margin. The white tip on the outermost pair varies in length from 4 to 6 mm., on the second from 3 to 4 mm., while the third has a white apical margin, about 1 1/2 to 2 mm. wide.

In the typical race, of which seven specimens from Pará, Santarem and the Rio Madeira are available for comparison, the tip on the outermost rectrix measures from 8 to 10 mm., on the second from 6 to 8 mm., on the third from 4 to 6 mm., on the fourth from 4 to 5 mm., on the fifth from 2 1/2 to 4 mm.

There are no other differences between the two forms, as far as I can see.

Like M. l. lacteus, the males of the present series have the elongated crest deep black like the back, the females bright chestnut-rufous.

Type of subspecies in the Tring Museum: ♂ ad., August 1906, No. 2399.

This is another purely Amazonian type, which we should have scarcely expected to meet with so far in the interior of Goyaz.


Nos. 1637, —,—, ♂ ♀ ♀ ♀ ♀ ♀ ♀, Faz. Esperança, December 1905.—Wing 62, 59; tail 43, 49; bill 14 1/2, 15 mm.

They agree perfectly with three others from Chapada, Mattogrosso, while the typical female from Villa Maria, a locality farther to the west than Chapada, is more reddish on the wings, a character most certainly due to immaturity.

The female of *D. a. affinis* differs from that of *D. mentalis* (Temm.) in the following details: the back is dull brownish olive (instead of greyish green or olive-green), the foreneck, chest, sides and under tail-coverts are pale brownish olive-yellow, the throat white speckled with ochreous, the middle of the breast white; while in *D. mentalis* the throat is pure white and the rest of the under-parts uniform bright naples or maize yellow. The lores are rufescent (not white mixed with cinereous), cheeks, eye region, superciliaries, and ear-coverts rufescent brown, the latter narrowly streaked with white. In *D. mentalis*, on the other hand, the sides of the head are dark cinereous variegated with whitish, the ear-coverts blackish grey with white shaft-lines.

Goyaz is a new locality for *D. a. affinis*, hitherto only known from Mattogrosso.

117. *Herpsilochmus pileatus atricapillus* Pelz.


*Tamnophilus pileatus* (nee Myiophila pileata Lcmti.) Lafresnaye & D'Orbigny, Syn. 2e. i. in Mag. Zool. 1837. cl. ii. p. 12 (Chiquitos, Bolivia).

*Tamnophilus affinis* (nee T. affinis Spix 1823) idem, loc. p. 12, descr. orig. ♂ (Chiquitos, Bolivia).

*Thamnophilus pileatus (≡♂)+T. affinis (≡♀) D'Orbigny, Voyage, Oiseaux, p. 175 (Oct. 1838.—San José and S. Ana, Chiquitos, Bolivia).

No. 2178. (♂) ♀, Rio Tresenras, May 1906.—Wing 54; tail incompl.; bill 15 mm.

Nos. 1740, 2350. ♂ ♂ juv. (plumage of the ♀), Faz. Esperança, January; Rio Aragnaya, July.—Wing 54, 53; tail 60, 55 1/2; bill 15 mm.
Nos. 1990, 2052. ♂♀ ad., Goyaz, April 1906.—Wing 55, 53; tail 58, 55½; bill 15 mm.

No. —. (♀) ad., Faz. Esperança.—Wing 50; tail 56; bill 14½ mm.

This series agrees perfectly with Pelzeln's types kindly lent by Dr. von Lorenz.

No. 2178 is an adult male with the pileum uniform glossy black and the under-parts pure white. The young males have the general coloration of the females—viz. the forehead spotted with dull ochreous, the crown and occiput with white longitudinal spots, the eyebrow buffy, the grey of the back washed with olive, etc. They differ, however, in having the foreneck, breast, and abdomen much brighter, "buff yellow" (rather paler and duller than Ridgway's tab. vi. fig. 19), while in the females these parts are about buff.

Through the kindness of my friend Mons. Ménégaux, of the Paris Musenm, I was enabled to examine the bird mentioned by D'Orbigny and LaFresnaye, s.n. T. pileatus, and found it to be identical with the males of H. atricapillus obtained by Natterer and Mons. Baer. Although the type of T. affinis does not any longer exist in the Paris Museum, I think there can be no doubt that it is also referable to the present species, as the description agrees exactly with the females before me. Moreover, it was obtained in the same district, Chiquitos, in the plains of Eastern Bolivia, where D'Orbigny also procured a typical male of H. atricapillus! Fortunately we need not trouble about the name T. affinis, for it is preoccupied by Spix, in 1825.

H. atricapillus differs from H. pileatus by its much longer and stronger bill, and by averaging larger in all dimensions. The ♂♂, furthermore, are distinguished by the under-parts being almost pure white, while in H. pileatus the sides are strongly washed with cinereous; by having very little white at the base of the interscapular feathers (instead of a large concealed white patch), and by the white apical spot on the inner web of the penultimate rectrix ending basally in a straight line. The female may also be recognised by its larger size, much stronger bill, darker ochreous spots on the forehead, and brighter buff under-parts.

Another very nearly allied form is H. motacilloides Tacza., of which I examined two adult males from Central Peru belonging to the Berlepsch and Vienna Museums. It agrees with H. atricapillus in size, but has no white at all on the base of the interscapular feathers, longer white tips to the three outer tail-feathers, and a distinct black spot in front of the eye, while in H. atricapillus the lores are entirely white. Besides, breast and abdomen are tinged with pale yellowish instead of being pure white. I am not acquainted with the female of this race.

These three forms represent each other geographically, and are, therefore, more properly designated by trinomials. Their distribution is as follows:

(a) H. p. pileatus (Licht.).


6 ♂♂ ad.: wing 51—53 ; tail 44—50 ; bill 13 mm.
1 ♂♀ ad.: wing 49; tail 40 mm.
(71)

(b) *H. p. atricapillus* Pelz.


7 ♂ ♀ ad.: wing 52—59; tail 54—57; bill 14½—15½ mm.

9 ♂ ♂ : wing 50—55; tail 52—58; bill 14½—15 mm.

(c) *H. p. motacilloides* Tacz.


*Hab.* Central Peru, Chanchamayo district: Maraynioc (Jelski), La Gloria, Garita del Sol (Kalinowski); Idma: Santa Ana (Kalinowski).

2 ♂ ♀ ad.: wing 56, 54; tail 59, 53; bill 15 mm.

118. *Herpsilochmus longirostris* Pelz.


No. 1767. ♂ fere ad., Faz. Esperança, January 1906.—Wing 59; tail 56; bill 17½ mm.

Nos. 1768, 1774. ♂ ♀ juv. (in the plumage of the ?), Faz. Esperança, January 1906.—Wing 59, 57½; tail 54, 53½; bill 16½, 16 mm.

No. 2351. ♂ ad., Rio Araguaya, July 1906.—Wing 60; tail 55; bill 16 mm.

The specimens agree well with others from Chapada, Mattogrosso. *H. longirostris* is quite distinct from *H. p. atricapillus* and much more nearly related to *H. pectoralis*, of which it appears to be the western representative. The two forms are practically identical in structure and proportions, and their females scarcely distinguishable.

The ♂ ♂ of *H. longirostris* differ from those of the Bahia form by their longer tail, cinereous (instead of black) upper tail-coverts, and by the continuous black jugular band being replaced by numerous small blackish or dark cinereous spots on the foreneck.

The female of *H. pectoralis* of Bahia, which has not yet been described, resembles in general coloration that of *H. longirostris*, having the head bright tawny or tawny ochraceous, and the under-parts ochraceous (darkest on the foreneck and breast, paler on the throat); it differs, however, by the upper tail-coverts being brownish olive-grey tipped with white (instead of uniform cinereous), by the back being distinctly washed with brownish olive (instead of clear cinereous or olive-grey), and by its shorter tail. There are many specimens in Count Berlepsch’s Museum, and I have also one in my collection, all of the well-known Bahia-make. For the sake of comparison I append the measurements of the two species.

(a) *H. pectoralis* Scel.

7 ♂ ♂ ad., Bahia.—Wing 56—60; tail 49—52; bill 16—16½ mm.

6 ♂ ♂ , Bahia.—Wing 53½—56; tail 48—50; bill 15½—16 mm.
(72)

(b) H. longirostris Pelz.

10 $\sigma\sigma$ ad., Goyaz and Mattogrosso.—Wing 60—64; tail 55—59; bill $10\frac{1}{2}$—$12\frac{1}{2}$ mm.

10 ? ? ad., Goyaz and Mattogrosso.—Wing 57$\frac{1}{2}$—62; tail 53$\frac{1}{2}$—57; bill 16—16$\frac{1}{2}$ mm.

110. Formicivora grisea grisea (Bodd.).

Turdus griseus (sic) Boddart, Tabb. Pl. enl. p. 39 (1783.—ex "Le Grisin de Cayenne," Daubenton, Pl. Enl. 643, fig. 1.—Cayenne)

Nos. 2217, 2218, 2428. $\sigma\sigma$ ad., Río Aragüaya, June, August 1906.—Wing 53—54; tail 50—51; bill 14$\frac{1}{2}$—15 mm.

Nos. 2138, 2173. ? ad., $\sigma$ juv. (in female dress), Río Thesouras, May.—Wing 55; tail 52, 51; bill 14 mm.

These specimens are typical $F. g. grisea$, agreeing perfectly with others from Cayenne. The scapular feathers are uniform dark earthy brown; the tertaries dusky and scarcely edged with paler brown along the outer webs; the superciliiaries narrow; the bill rather strong. The males have a large amount of white on the sides of the breast and abdomen, and greyish white axillaries. In the female and young male the under-parts are deep ochraceous, the lower tail-coverts and axillaries paler, more ochraceous-buff, the cheeks and car-coverts buff, and there is an obsolete, narrow eyebrow of the same colour.

120. Formicivora melanogaster Pelz.


No. 2188. $\sigma$ ad., Río Aragüaya, June.—Wing 50$\frac{1}{2}$; tail 57; bill 14$\frac{1}{2}$ mm.

Nos. 2189, 2304. ? ? ad., Río Aragüaya, June, July.—Wing 50, 52; tail 57, 56; bill 14 mm.

No. 2276. $\sigma$ juv. (female dress), Río Aragüaya, July.—Wing 51$\frac{1}{2}$; tail 54; bill 13$\frac{3}{4}$ mm.

Of this very distinct species, but a few examples were as yet known to exist. The Vienna Museum possesses a male and a female, the types, collected by Natterer in the vicinity of Goyaz, and according to Schater and Count Berlepsch (in litt.), Prof. Behn obtained, at the same locality, an adult male which was formerly preserved in the Kiel Museum, and is now probably in the Berlin collection. Lately, Prof. von Ihering* has recorded a specimen from Avanhandava, in the northern part of the state of S. Paulo.

The male sent by Mons. Baer differs from Natterer's type by its stronger bill, and by having a few silky white feathers in the otherwise sooty grey flanks. The females and the young male, on the other hand, are absolutely identical with the female in the Vienna Museum.

Compared with a large number of males of $F. grisea$, those of $F. melanogaster$ differ at a glance by their much longer tail and slenderer bill. The whole lower surface is deep black with the exception of a few greyish white feathers on the flanks, while in $F. grisea$ all the sides of the breast and of the abdomen are pure white. The axillaries are deep black in $F. melanogaster$, greyish white in

F. *grisea*. The white eyebrow is very much broader, especially above the ear-coverts, and produced to the sides of the nape; the shoulder feathers are black, edged with white along the outer web (uniform smoky-brown in *F. grisea*); the inner secondaries have likewise distinct white edges (in *F. grisea* they are scarcely margined with pale brownish). Moreover, the two outermost pairs of rectrices are white for the entire apical half of their outer web, while in *F. grisea* the penultimate rectrix shows but a limited apical spot of that colour.

The females of the two species are altogether different. In *F. melanogastra* the under surface is light cream-buff (Ridg. *Nomencl.* v. 11), the throat rather paler, sometimes even whitish; the flanks shaded with brownish; the under tail-coverts black with white apical margins (not uniform ochraceous as in *F. grisea*). Ear-coverts and sides of the neck dull black (cream-buff like the cheeks in *F. grisea*); a very broad superciliary stripe from the nostrils to the sides of the nape pure white; shoulder feathers and inner secondaries distinctly edged with white along the outer web, etc., etc.

The males of *F. melanogastra* are smoky-brown on the upper parts, the females more reddish, rather rufescent earthy-brown, both being decidedly darker than the corresponding sexes of *F. grisea*.

121. *Formicivora rufa* (Wied).


Nos. 2122, 2155. ♂♂ ad., Rio Thesouras, May 1906.—Wing 52; tail 58, 60; bill 15 mm.

Nos. 2132, 2118, 2152. ♀♀ ad., Rio Thesouras, May 1906.—Wing 50—52; tail 57—62; bill 14—15 mm.

No. 2180. ♀ ad., Rio Araguaya, May 1906.—Wing 52; tail 62; bill 15 mm.

These specimens agree with others from Bahia in size and coloration. As stated elsewhere (cf. *Nov. Zool.* xiv. 1907, p. 372), skins from Mattogrosso, Southern S. Paulo, and Humaythu (on the Rio Madeira) have rather brighter, more ochraceous flanks than those from Bahia and Goyaz.

122. *Conopophaga lineata* (Wied).


(♀) ad., moulting (without number), Faz. Esperança, January 1906.—Wing 75; bill 14 mm.

Somewhat brighter rufous on throat and foreneck than specimens from S. Paulo, Rio de Janeiro, etc., but otherwise not different.

123. *Phaethornis ruber ruber* (Linn.).


*Phaethornis eremita* + *P. Davidianus* Polzeln, *Zur Orn. Bras.* i. 1867. p. 27 (Goiaz).

No. 1834. ♂ imm., Goyaz, March 1906.—Wing 29; retr. med. 29, submed. 27, ext. 15; bill 23 mm.
( 74 )

No. 1722. ♂, Faz. Esperança, January 1906.—Wing 32; rectr. med. 32, submed. 27, ext. 16; bill 22¼ mm.

Identical with specimens from Surinam, Pará, etc., in corresponding plumage.

124. Eupetomena macroura macroura (Gm.).

Trachilas macrourus Gmelin, Syst. Nat. 1. i. p. 487 (1788.—"in Jamaica" (ex Sloane): errore! We accept Cayenne as typical habitat, ex Brisson: Orn. iii. p. 726. tab. 36. fig. 9, where the species is well described and figured).

Eupetomena macroura Pelzeln, l.c. p. 28 (Goiáz).


No. 1835. ♂ ad., Goyáz, March 1906.

This series agrees perfectly with a large number of skins from S. Paulo, Mattogrosso, Minas Geraês, Pará, and Cayenne. The belly is pure green with golden reflections here and there, the back golden green, and the violet-blue of the head sharply defined against the colour of the mantle.

E. m. hirundo Gould,* from South-eastern Peru (Huíro, Maranura), is very closely allied to E. m. macroura (prasina Simum.), and differs solely by the paler, more cobalt-blue colour of the head, which blends with the golden green of the back.

Specimens from Northern Bolivia (Rio Bení) are variously intermediate between the two forms, some being much like hirundo, while others are scarcely distinguishable from macroura of Brazil.

125. Agyrtria albiventris nigricauda (Ell.).

[Ornithonya albiventris Lesson, Hist. Nat. Gis.-Mouchez, pp. xxxiv, 209. pl. 76 (1826.—"la Guinée").]

Thamaturas nigricauda Elliot, Ibis, 1878. p. 47 ("Trinidad, British Guiana (Verreaux); Cayenne (Verreaux); Bahia (Berlepsch)"); the three first-named localities are now ascertained to have been erroneous; therefore we accept Bahia as typ. habitat.

Agyrtria albiventris Pelzeln, l.c. p. 28 (part: Araguaia, Sangrador, Cuyabá, Caiçara, Engenho do Cama, Mattogrosso).


No. 2155. ♂ ad., Rio Thesoras, May 1906.—Wing 53½; tail 29; bill 17½ mm.
No. 2293. ♂ ad., Lepoldina, Araguary, July 1906.—Wing 56½; tail 32; bill 19½ mm.

Nos. 2317, 2319. ♀ ♀, Lepoldina, July 1906.—Wing 50, 52; tail 39, 28; bill 18, 18½ mm.

Besides these specimens, I have examined the series obtained by Natterer on the Rio Araguary, near Sangrador, and in Mattogrosso (nine skins); a couple collected by Mr. Garbe at Barretos on the Rio Grande, Northern S. Paulo, belonging to the Musen Paulista; and an adult bird from Mojos, Eastern Bolivia, coll. D'Orbigny, preserved in the Paris Museum. This series agrees with a large number of Bahia skins, true A. a. nigricauda (Ell.)—in having the under tail-coverts

pure white and the tail chiefly bluish-black; but the middle pair of rectrices is always more or less washed with bronze-green, and the outer tail-feathers are, as a rule, more distinctly tipped with greyish-green or whitish-grey. Several examples, however, are scarcely distinguishable on this score.

The range of *A. a. nigricunda*, thus far known, is as follows:

Eastern Brazil: Bahia (many specimens in Mus. Tring. H. v. Berlepsch, Vienna, etc.), Pernambuco (one immature bird in Mus. v. Berlepsch); Minas Gerais: Diamantina (Gonnelle*); Goyaz: Rio Thesouro, Leopoldina (Baer), Araguaia (Natterer); Northern S. Paulo: Barretos on the Rio Grande (Garbe); Mattogrosso: Cuyabá, Sangradouro, Engenho do Cap. Gama, Cuiaba, Villa Bella de Mattogrosso (Natterer); Eastern Bolivia: Mojos (D'Orbigny).

126. Chlorostilbon aureoventris pucherani (Bourc. & Muls.).

[Ornisimya aureo-ventris Lafresnaye and D'Orbigny, Syn. 1r. ii. in Mag. Zool. 1838. cl. ii. p. 28 (Moxos and Cochabamba, Bolivia).]

Trochilus Pucherani Boncour and Mulsant, Rev. Zool. 1848. p. 271 ("le Brésil").

Nos. 1906, 2028. ♀♂ ad., Goyaz, March 1906.—Wing 50, 51; tail 32; bill 16½ mm.

As regards colour these birds agree very well with skins from Rio de Janeiro. Like the latter they show a distinct bluish tinge on the throat, but are somewhat larger, and the bill is rather stronger and longer. Whether these trifling differences are of any importance cannot be decided without a larger series from Goyaz.

Although established upon immature birds, it seems pretty certain that *T. pucherani* refers to the Rio form of the *aureoventris*-group. I have examined one of the types, a young male, in the Paris Museum. *Chlorostilbon wiedi*† Boncour, of which I have likewise studied the types, was based on "Rio" skins.

127. Thalurania eriphile ♀ baeri Hellm.

Thalurania eriphile baeri Hellmayr, Bull. B. O. C. xxi. p. 27 (Nov. 1907.—Goyaz).


Ornisimya ferrugata (not of Gmelin) Lafresnaye et D'Orbigny, Syn. 1r. ii. in Mag. Zool. 1838. cl. ii. p. 27 (part.: Chiquitos and Moxos, Bolivia).


No. 2290 bis. ♀ ad., Leopoldina, July 1906 . 54 37 (damaged)


No. 1913. ♀ juv., Faz. Esperança, March 1906 . 55 35 18½

No. 1835. ♀ ad., Goyaz, March 1906 . . 51 32 17

* Mons. Gonnelle, of Paris, possesses a fine series collected by himself in the catlinga woods of Diamantina.

† Gen. Humming Birds, 1894. p. 120.

Other specimens examined: Wing. Tail. Bill.
Mus. Vindob. Two♀♀, Engenho do Gama, Mattogrosso, August 2, resp. 12, 1826. Natterer coll. 52, 52 3/4 32, 31 19, 20 "
Mus. Brit. One ♀ adult. Chapada, Mattogrosso. 54 32 — "

*Type of* T. c. baeri* Hellm.* ♂ adult, Goyaz, April 1906. No. 2073. Coll. G. A. Baer.—Tring Museum.

The males of this well-marked form differ from those of *T. e. eripitile*, which they resemble in general coloration, and especially in having the forehead glittering golden green, in much smaller size, and in the colour of the under tail-coverts. These are either pure white, or some of the shortest feathers only show very small discs of bluish black or dark bronze green. The specimens from Chiquitos and Mattogrosso fully agree with the Goyaz series.

The females of *T. e. baeri* are considerably smaller than those of the typical race, of which I have seen several examples from Minas Geraês. There appear to be no colour differences. A female from Mojos, Eastern Bolivia, is practically identical with that sent by Mons. Baer.

*T. e. baeri* is a very interesting form, being intermediate between *T. e. eripitile* and *T. balzani* Sim. With the former it shares the glittering frontal patch, completely absent in *T. balzani*; with the latter the white under tail-coverts and the small size. In typical *T. e. eripitile* the males have the under tail-coverts always uniform bluish black or dark bronze-green, sometimes with narrow whitish fringes.

The characters and geographic distribution of the three forms may be summarised as follows:

(a) *T. eripitile eripitile* (Less.).

♂. Larger: wing 59—62; tail 39—44 mm. Forehead as far as the anterior angle of the eye glittering green, sharply defined against the dark bronze-green of the vertex. Under tail-coverts bluish black or dark bronze-green, either uniform or narrowly fringed with whitish.


Examined: 1 ♂ ad., Verissimo, 2 ♂♂ fere ad., Rio Paraná, 1 ♂ jr., South-eastern Brazil, all in the Vienna Museum; 14 ♂♂ ad. et. imm., 3 ♀ ♀, Sertão de Diamantina, Minas; 1 ♂, 1 ♀ ad., Rio Jordão; 7 ♂♂, ex "Rio" coll.—Brit. Mus.

(b) T. eriphile baeri Hellm.

♂. Smaller: wing 53½—56; tail 34—38 mm. Forehead glimmering green as in T. c. eriphile. Under tail-coverts pure white, occasionally some of the smaller ones with slight discs of bluish black or bronze-green.

♀. Smaller: wing 51—53; tail 31—32 mm.


List of specimens: _vide supra._

(c) T. balzani Sim.

♂. Smaller: wing 52—54½; tail 32—36 mm. Forehead dull dark bronze-green, like the vertex and back. Under tail-coverts white, occasionally some of the shorter ones with small discs of bluish black.

♀. Smaller: wing 50—53; tail 29—31 mm.


128. _Colibri serrirostris_ (Vieill.).

_Trochilus serrirostris_ Vieillot, _Analyse Ornith._ p. 69 (1816.—"Brésil").

_Petasophora serrirostris_ Pelzeln, _i.c._ p. 28 (Goyaz).


129. _Anthracothorax nigricollis nigricollis_ (Vieill.).

_Trochilus nigricollis_ Vieillot, _Novr. Dict._ vii. p. 349 (1817.—"Brésil").

_Lamprotornis mango_ (see Linn.) Pelzeln, _i.c._ p. 28 (Goyaz).

Nos. 2251, 2286—92, 2341 _bis._ ♂♂ ad. (some in moult), ♀ ♀, Leopoldina, June and July 1906.

130. _Heliactin bilophum_ (Temm.).

_Trochilus bilophus_ Temminck, _Rec. Pl. col._ livr. 3 tab. 18. fig. 3 (Oct. 1820.—"Brésil").

_Trochilus cornutus_ Wied, _Reise Brasil._ (edit. in 4°) ii. p. 190 (1821.—Interior of Bahia).

_Heliactia cornuta_ Pelzeln, _Zur Ornith. Br.._ i. 1867. p. 32 (Goyaz).


Nos. 2153, 2156. ♂♂ ad.; Nos. 2154, 2182. ♀ ♀, Rio Thesouros, May 1906.


This series agrees perfectly with specimens from Minas Geraes and Bahia.

131. _Heliomaster furcifer_ (Shaw).


_Heliomaster Regis_ Pelzeln, _i.c._ p. 30 (Goyaz).

No. 2318. ♀ ad., Leopoldina, July 1906.

Agrees with specimens from Paraguay and Argentine.
132. Lophornis magnificus (Vieill.).


No. 1749. ♂ ad., Faz. Esperança, Rio Uruhú, January 1907.—Wing 40 : tail 27 ; bill 11½ mm.

In size and coloration identical with examples from S. Paulo (Victoria) and Rio de Janeiro.

133. Nannochordeiles pusillus pusillus (Gould).

_Cordeilles pusillus_ Gould, _P. Z. S. Lond._ 1861. p. 182 ("supposed to be Bahia"—the type is a skin of the well-known Bahia-maké).


No. 2147. ♂ ad., Rio Thesouras, May 1906.—Wing 133½ : tail 77 mm.

This specimen agrees in dimensions and colour with others from Brazil. The examination of a large series revealed the fact that northern examples differ constantly by their smaller size, particularly shorter tail. Thus we have two forms :

(a) _N. pusillus pusillus_ (Gould).


Measurements :

♂ ♂. One from Bahia (type of _N. pusillus_ Gould).—[Wing and tail moulting.] One ♂ jr. from Piauhy.—Wing 131 ; tail 74 mm. One from Cuyabá.—Wing 149 ; tail 75 mm. One from Sangrador.—Wing 136 ; tail 72 mm. One from Goyaz.—Wing 133½ ; tail 77 mm. ? ?. One from Bahia.—Wing 128 ; tail 73 mm. Two from Piauhy.—Wing 129, 130 ; tail 71, 72 mm. Two from Mattogrosso.—Wing 132, 133½ ; tail 70, 74 mm. One from S. Paulo (Nos Puritis).—Wing 134 ; tail 74 mm.

(b) _N. pusillus septentrionalis_ n. subsp.


_Type of subspecies_ in the Tring Museum : ♂ ad., Maipures, January 22, 1899. Collected by G. K. Cherrie. _No._ 11714.

Both sexes differ from the typical form by their smaller size.

Measurements :

♂ ♂. One adult ♂ from Maipures (type of subspecies).—Wing 127 ; tail 69 mm.

* Both Salvin and Hartect quote "_T. magnificus_ Audõé, et Vieill., _Ois._, _Dor._ i, tab. 8," This is a mistake, for the name is not to be found in the work referred to. Moreover, Vieillot (_l.c._ p. 367) says :

"_T. magnificus_ Vieill. _n'a pas encore été décrit."
134. **Hydrosalis torquata** (Gm.).


No. 1964. ♂ juv., Goyaz, April 1906.—Wing 154; tail 115; bill 13 mm.

Much smaller and more spotted with rusty on scapulars, smaller upper wing-coverts, etc., than any other of the numerous specimens I have seen.

135. **Nyctidromus albicollis derbianus** Gould.


Nos. 1884, 1899, 2027. ♂ ♂, Goyaz, March and April 1906.—Wing 168—172 mm.

No. 2162. ♀ juv., Rio Thesonras, May 1906.

Nos. 2264, 2265. ♂ ♀, Rio Araguaia, July 1906.

Identical in size and colour with specimens from Mattogrosso and S. Paulo.

136. **Caprimulgus rufus** Bodd.


No. 2266. ♀ ad., Rio Araguaia, July 1906.—Wing 175; tail 122; bill 14 mm.

Differ from other Brazilian females by lacking the roundish buff spots on the middle of breast and abdomen. This is doubtless an individual character.

137. **Colaptes campestris** (Vieill.).


No. 2010. ♂ ad., Goyaz, April 1906.


Agreeing with specimens from S. Paulo. In my revision of Spix' types, p. 603, I mentioned that the Munich Museum had received *C. agricola* Malh. from Paraguay, while Salvadori* recorded *C. campestris* from the same country. The Tring Museum possesses one of Borelli's specimens (a of Salvadori's list: ♀, Valenzuela, No. 24), which also turns out to be the white-throated species, *C. agricola*. So far as I can see from published records, *C. campestris* has not been observed in recent years in Paraguay, though the description of Azara upon which Vieillot's name is based seems to refer to the black-throated species.†

* * * 
† *Boll. Mus. Torino* x. No. 208, 1895, p. 16.
† "La gorge est noire dans la femelle, et marbrée de blanc dans le mâle." Vieillot, *l.c.*
138. Chrysoptilus nattereri (Mullh.).


Chrysoptilus icteromelas (not Picus icteromelas Vieillot?) Pelzeln, Zoot. Bras. iii. 1869. p. 248 (Abrantes, Goyaz; Chapada, Villa Maria, Caiçara; Mattogrosso); Allen, Bull. Amer. Mus. v. 1893, p. 129 (Chapada); Hargitt, Cat. Birds Brit. Mus. xviii. 1890, p. 114 (Cuyabá, Chapada).

No. 1837. ♀ ad. in mount, Goyaz, March 1906.
No. 1865. (♀) imm., Goyaz, March 1906.—Wing 120; tail 90; bill 25 mm.
Nos. 1696, 1793. ♀ ♀, Faz. Esperança, December 1905, January 1906.—Wing, 124, 129; tail, 83+8, 100; bill 24, 25½ mm.

In coloration, these specimens are practically identical with a series from Minas Geraês (Rio Jordão), Mattogrosso (Chapada), and northern S. Paulo (Franca, Bebedouro), but wings and tail are decidedly, the bill slightly, shorter. The rump is always pale olive-yellow with numerous blackish transverse bands or spots, the lower parts are pale yellow and (except the longitudinally striped throat) all over spotted with black.

Chrysoptilus flavilambis (Sundev.), † from Bahia, has the rump and lower parts much clearer, brighter yellow, and the former as well as the middle of the belly are wholly or almost unspotted. Some specimens, however, approach C. nattereri very closely.

I feel pretty sure that C. cristatus, C. melanochlorus, C. nattereri, and C. flavilambis will turn out to be merely geographical representatives of the same type, but I have neither time nor material to discuss this question now.

C. nattereri is known to me from the following localities:


139. Leuconerpes candidus (Otto).


Nos. 1725, 1788, 1789. ♀ ♀, ♀ juv., Faz. Esperança, January 1906.—Wing 154—160; tail 109—103; bill 30—31 mm.
Nos. 1850, 1851. ♀ ♀ ♀ jr., Goyaz, March 1906.—Wing 159, 155; tail 97 (molting); bill 29, 30 mm.

Agree well with examples from Paraguay and Argentine. Two skins from Espirítu Santo, Lower Amazonas, collected by Prof. Steere in 1879, are not different either. This species has not been met with in Cayenne by any of the recent travellers, but as it occurs as far north as Pará, it might yet be rediscovered in the French colony.

140. Melanerpes flavifrons (Vieill.).

Picus flavifrons Vieillot, Nov. Gen. xxvi. p. 75 (1818.—"Brésil").


* I have not been able to verify the above reference.
† Picus flavilambis Sundevall, Cosp. Poll. p. 74 (1866.—Bahia).
No. 2991. ♀ ♀ ad., Goyaz, April 1906.

This series agrees perfectly with a large number of skins from Paraná, Minas Geraês (Rio Jordan), S. Paulo and Rio de Janeiro, in the Tring Museum.

141. Veniliornis olivinus (Malh.).


Mesopicus olivinus Malherbe, Monogr. Picid., ii. 1862. p. 65, tab. 59, fig. 4 (♂), 5 (♀) ("le type est dans la collection de Vienne"—type in Vienna Museum: ♂ ad., Goyaz, June 16, 1824, Natterer coll., examined).

Campius olivinus Pelzeln, l.c. p. 246 (Goyaz).


Nos. 1985, 1989, 1898. ♂ ♂ ad., Goyaz, March, April 1906.—Wing 89—93; tail 59—63; bill 19—21 mm.

No. 1668. (♂) ad., Faz. Esperança, December 1905.—Wing 91; tail 58; bill 21 mm.

No. 2393. (♂) juv., Rio Araguaya, August 1906.—Wing 89; tail 57; bill 18½ mm.

No. 2394. ♀ ♀ ad., Rio Araguaya, August 1906.—Wing 88; tail 55; bill 19½ mm.

No. 2049. ♀ ♀ ad., Goyaz, April 1906.—Wing 91; tail 57; bill 19½ mm.

The four first-named specimens, adult ♂ ♂, agree with the type of P. olivinus in the Vienna Museum, in having the forehead and vertex (as far as the posterior angle of the eye) pale ashy brown while the feathers of the occiput and nape have long scarlet tips. The back is uniform bright golden yellow. Other examples in the Vienna Museum, obtained by Natterer at Goyaz, Cuyabá and Engenho do Gama, Mattogrosso, are absolutely indistinguishable.

The male from the Rio Araguaya (No. 2393) is practically identical with the type of P. narinus, kindly lent by Dr. von Lorenz. Both are immature (this being proved by the structure of the plumage), and differ from fully adult males only in having the red of the occiput extended down to the base of the bill or nearly so. It is a well-known fact that in some species of Woodpeckers (for instance, the European Dendrocopus major) the young have more red on the top of the head than the adults, and I am perfectly convinced that the so-called "P. narinus" is nothing but the immature male of V. olivinus. This view is, moreover, supported by geographical reasons, all the so-called "narinus" having been taken within the range occupied by V. olivinus. Natterer secured a specimen of each at Engenho do Gama, and Dr. Allen† who received a series of thirty-two skins of Dendrocolotes olivinus in the Smith collection from Chapada, Mattogrosso, also mentions that "two young males (probably birds of the year) have the whole top of the head bright red."

The type of P. narinus presents the following dimensions: Wing 89½; tail 54; bill 19½ mm.

* I have not been able to verify the above reference.
† Bull. Amer. Mus., N. Y. v. 1893, p. 130.
It may be remarked that the figure in Malherbe's work is completely misleading. The type specimen has no trace of the yellow anchal band shown on the plate, where, on the other hand, the narrow shaft-lines of pale yellowish on the upper wing-coverts are altogether omitted. As a whole, it is a very bad representation of the bird.

142. Celeus flavescens intercedens n. subsp.

No. 1656. ♂ vix ad., Faz. Esperança, December.—Wing 142; tail 96; bill 25 mm. *Type of subspecies.*

Nos. 1630, 1650. ♀ ♀ ad., Faz. Esperança, December 1905.—Wing, 140, 142; tail, 95 92; bill 24½, 26 mm.

Similar to *C. f. flavescens* (Gm.) of South-eastern Brazil, in pattern of coloration, but distinguishable at a glance by its much shorter wings, shorter and weaker bill, much shorter crest, and by having the ochreous-yellow bands on the back considerably wider, so that the upper parts appear much less varied with black than in the typical form. The tone of the yellow portions of the plumage, too, is decidedly more intense and more ochreous, this being especially noticeable on the wings.

Several specimens from Bahia are exactly similar to those from Goyaz.—Wing 140; tail 100; bill 24½ mm.

This interesting new form is intermediate between *C. f. flavescens* and *C. f. ochraceus* (Spix) from the Lower Amazons and N.E. Brazil. It agrees with the latter in the shortness of the crest, in the small size, and approaches it also by the ochreous-yellow hue of the plumage, but can easily be recognised by having the back regularly banded with black. In *C. f. ochraceus* the back shows oval or cordiform blackish brown markings, and the general coloration is much deeper ochreous.

The range of the three forms is as follows:

*a. Celeus flavescens flavescens* (Gm.).

South-eastern Brazil: Minas Geraês, Rio de Janeiro, S. Paulo, etc.
Examined: 3 ♂♂, 1 ♀, Rio Jordão, prov. Araguaí, Minas Geraés (A. Robert); 1 ♀, Franca, N.E. S. Paulo; 1 ♂, Alambary, S. Paulo; 2 ♂♂, 2 ♀ ♀, Victoria, S. Paulo; 3 ♂♂, 2 ♀ ♀, Rio de Janeiro.

<table>
<thead>
<tr>
<th>Wing.</th>
<th>Tail.</th>
<th>Bill.</th>
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<tr>
<td>159—165</td>
<td>103—108</td>
<td>31½—32 mm.</td>
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<tr>
<td>156—159</td>
<td>100—101</td>
<td>30½—33</td>
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<tr>
<td>158</td>
<td>102</td>
<td>30½</td>
</tr>
<tr>
<td>158, 159</td>
<td>100, 105</td>
<td>32, 33</td>
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*b. Celeus flavescens intercedens* Hellm.

Central East Brazil: Faz. Esperança, Goyaz (Baer); Bahia (specimens in various collections). ♂♂, wing 140—142; tail 96—100; bill 24½—25; ♀ ♀, wing 140—142; tail 92—95; bill 24½—26 mm.
c. *Celeus flavescens* ochraceus (Spix).

Lower Amazonas: Tapajóz (Natterer), Santarem (Riker), Obidos (Hoffmannus), Monte Alegre (Nelthage). N.E. Brazil: Ceará.

♂: wing 144—148; tail 95; bill 29 mm.
♀: wing 148; tail 93; bill 28½ mm.

Specimens from Pernambuco require comparison. A single male in the Tring Museum differs slightly from typical examples.

143. *Campephilus robustus* (Licht.).


Agreeing with specimens from S. Paulo, Paraná and Minas Geraes (Rio Jordão).

144. *Campephilus melanoleucus* (Gm.).

*Picus melanoleucus* Gmelin, Syst. Nat. 1. i. p. 426 (1788.—ex Latham: Surinam; cf. my revision of *Spix* types, p. 602).


This series differs from Venezuela and Guiana examples by having the black of the foreneck extended over the chest, though several specimens are hardly distinguishable on this score. Bahia skins have a decidedly smaller, slenderer bill, otherwise they agree with those from Goyaz.

145. *Picumnus guttifer* Sundl.


♂ *P. sagittatus* idem, i.e. p. 103 (1866.—Rio Tocantins,* Castelnae et Deville coll, Mus. Paris), descr.
♀ ad.; Pelzeln, i.e. p. 241 (Goiaí, Guaiba, Rio das Frechas).


♂ *P. cupreola* Hering, i.e. p. 280 (Victoria, perto de Botucatú).

Nos. 1923, 1924. ♂♂ ad., ♂♂ imm., Goyaz, March 1906.—Wing 57; tail 35; bill 12½ mm.

Nos. 1714, 1731. ♂♂ ad., ♂♂ imm., Faz. Esperança, January 1906.—Wing 57; tail 37; bill 12½, 13 mm.

No. 1925. ♂ ad., Goyaz, March 1906.—Wing 57; tail 35; bill 12½ mm.


Two species have been distinguished by Sundevall and Hargitt on account of some slight differences in the pattern of the lower parts: (a) *P. sagittatus* with sagittate markings on throat, chest, and upper breast, and with drop-like stripes on the sides of the belly; (b) *P. guttifer* with the feathers of the foreneck, chest, and breast margined with black, and having a black central stripe widening at the base.

* According to the registers of the Paris Museum the type was obtained in the southern part of Goyaz, near the sources of the Rio Tocantins.
on the chest; flanks striped as in *P. sagittatus*. Prof. Ihering has lately separated a third form from Northern S. Paulo as *P. s. var. sharpei* on account of the feathers of the chest and breast having no sagittate markings, but two transverse black bars, sometimes united by a black median stripe.*

The careful examination of a very large series, including the types of *P. guttifer* and *P. sagittatus*, kindly lent by my friend Mons. Ménégaux, of the Paris Museum, and the original specimens of *P. sharpei* lh, obligingly forwarded by Prof. von Ihering, has convinced me that these supposed three forms are really but one, the noted differences being partly due to individual variation, partly due to age. This is conclusively proved by the ten specimens from Goyaz examined by me—namely, the two types from the Paris Museum, two skins (♂ fe male, ♀ ad.) obtained by Natterer, and six secured by Mons. Baer. In this series are represented the three phases characterised above, as well as several intermediate stages. The same variation is to be noticed in three examples taken by Mons. Robert on the Rio Jordão, N.W. Minas Geraès.

As to *P. caipira* I have also not the slightest doubt that it is based on a young bird of the same species. The Tring Museum possesses six skins from the typical locality (Victoria), received from Mr. W. F. H. Rosenberg (coll. Hempel). None of them is quite adult, all showing a distinct buff wash on the belly, as is also the case in immature birds from Goyaz and Mattogrosso. The series differs in no way from other specimens in corresponding plumage, and presents the same variation with regard to the black markings on the lower parts.

The range of *P. guttifer* is thus as follows:


146. *Guira guira* (Gm.).


No. 2110. ♀ ad., Goyaz, May 1906.


Capt. Page coll.).

do Pari, Caçara, Engenho do Gama, S. Vicente, Mattogrosso).

Nos. 1631, 1632. ♀ ♂ imm., Faz. Esperança, December 1905.—Wing 153, 155; tail 158, 154; bill 116, 127 mm.

In addition to these, the Tring Museum possesses 1 ♀ ad., 2 ♀ ♀ ad. from Rio Jordão, prov. Araguay, Minas Geraès (A. Robert coll.), and an adult bird, not sexed, obtained by Mr. Gustav Garlepp at Santa Cruz de la Sierra, Eastern Bolivia.

* The colour of the upper tail-coverts, another of the alleged specific characters, is of no importance in these birds.

† If the type really came from Brazil it must have been obtained somewhere on the Amazons,

for the original description, as well as the plate in the *Monogr. Rhambast,* vol. 1. pl. 15, unquestionably refer to the northern form.
P. c. australis is a fairly well marked form, and may be distinguished from P. c. castanotis, of Northern Peru, Eastern Ecuador, and Eastern Colombia (Bogotá coll.) by having a more or less developed patch of chestnut in the middle of the crown, and by the sides of the head being of a lighter chestnut. As a rule, the throat is also chestnut, the chin alone being sooty blackish, though in this respect some specimens of the northern form match it exactly.

148. Momotus momotus nattereri Scl.

[Ramphastos Monota Linnaeus, Syst. Nat. xii. i. p. 152 (1766.—based on Edwards & Brisson (excl. syn. Marcgrave)—Cayenne (ex Brisson) accepted as typical habitat.)

Momotus nattereri Schater, P.Z.S. Lond. 1857. p. 291 (“Yungas in Bolivia [d’Orb.]; Goyaz, Brazil [Natterer].”)


Nos. 2214, 2402. ♂♂ ad., Rio Araguaia, June, August 1906.—Wing 135, 133; tail 250, 230; bill 38, 39 mm.

No. 2413. ♀ ad., Rio Araguaia, August 1906.—Wing 130; tail 220; bill 35 mm.


149. Nonnula rubecula (Spix).

Bucco rubecula Spix, Ar. Bras. i. p. 51. tab. xxxix. fig. 1 (1824.—“prope pagum Malhada, fluminis St. Francisci proximum”).

Monasa rubecula Pelzeln, Zur Ornith. Bras. i. 1867. p. 23 (Goiaz).

No. 1993. ♂ jr., Goyaz, April 1906.—Wing 64 (molting); tail 60 1/2; bill 21 mm.

Agrees well with an immature bird from Victoria, S. Paulo. Eyelid black, covered with white feathers; frontal edge and lores pale buffish; cheeks and ear-coverts olive greyish-brown, with a distinct buffy patch in the anterior portion of the latter; chin creamy buff.

In adult birds the sides of the head are sooty blackish, and the patch on the ear-coverts, as well as the lores and the chin, white. Wing and tail are rather longer.

There is no difference between specimens from S. Paulo, Goyaz, and Bahia.

150. Bucco chacuru Vieill.


Nos. 1633, 1780, 1781. ♂♂ ad., Faz. Esperança, December, January.—Wing 84—86; tail 73—77; bill 30—34 mm.

No. 1791. ♀ ad., Faz. Esperança, January.—Wing 83; tail 70 1/2; bill 32 1/2 mm.

No. 1790. ♀ imm., as above.—Wing 84; tail 70; bill 29 mm.

No. 1657. ♀ juv., as above.—Wing 82; tail 72; bill 28 1/2 mm.

The adults agree perfectly with others from Paraguay and S. Paulo. The young bird (No. 1657) differs by its buff (instead of pure white) malar band, and by the throat and chest being much paler, creamy buff (not deep buff or ochreous) with narrow blackish longitudinal streaks (instead of being marked with wavy transverse lines). Besides this, the upper wing-coverts have broad whitish apical bands.
151. *Bucco maculatus parvirostris* n. subsp.


No. 2226. ♂ ad., Rio Araguaia, June 1906. — Wing 77; tail 66; bill 29 mm.
No. 2187. ♂ ad., " " — Wing 75½; tail 69; bill 27½ mm.
Nos. 2302, 2312. ♂ ad., ♀ jr., Rio Araguaia, July. — Wing 75½, 77; tail 66; bill 29, 30 mm.

Adult. Similar in coloration to *B. m. maculatus* (Gm.), from Bahia and Santarem, having the breast and sides covered with coarse, rounded or heart-shaped spots of black, but differs at a glance by its shorter tail, and particularly by its much shorter and slenderer bill. Lower throat and foreneck deep tawny-ochraceous, as in *B. m. maculatus.*


Measurements of *B. m. maculatus* (Gm.).

Sixteen adult birds from Bahia.—Wing 77—89; tail 72—76½; bill 32½—36 mm.

Two adult ♂♂, Santarem (Natterer coll.).—Wing 76, 77; tail 71, 72; bill 35, 36½ mm.

The skins from Santarem agree fully with our large series from Bahia, and unquestionably belong to the large-billed, typical form.

*B. m. striatipectus* Sel.* may readily be distinguished from both *B. m. maculatus* and *B. m. parvirostris* by having narrow longitudinal streaks of black on the chest and sides of the belly. Three examples from Mattogrosso (Cuyabá, Retiro, Caicara) in the Vienna Museum, obtained by the late Dr. Natterer, have the short tail of *B. m. parvirostris*; but the bill, while of the same length, is rather stouter, and the markings on the breast and sides are intermediate in shape, being neither cordiform as in *B. m. parvirostris*, nor longitudinally streaked as in *B. m. striatipectus*, but distinctly oval or "rhomboid." A better series from Mattogrosso is required to show if these characters are constant.

In *B. m. striatipectus* Sel., of which I have examined a large series from Eastern Bolivia and Western Argentina (Salta, Tucuman), the tail is always considerably longer than in the Goyaz and Mattogrosso birds, varying from 72 to 80 mm., and the lower throat and foreneck are of a paler ochraceous colour.

152. *Monasa nigrifrons* (Spix).


No. 1066. ♂ ad., Goyaz, April 1906. — Wing 136; tail 135; bill 35 mm.
No. 2108. ♂ jr., Goyaz, May 1906.
No. 1065. ♂ in moult, Goyaz, April 1906.

Not different from Amazonian examples.

153. *Chelidoptera tenebrosa tenebrosa* (Pall.).


*Chelidoptera tenebrosa* Pallas, t. c. p. 23 (Goiás).

Nos. 1916, 1917. ♂ ♀, Goyaz, March 1906. — Wing 106, 113; tail 54, 59; bill 17, 18 mm.

* Bucro striatipectus Selater, *P.Z.S. Lond.* 1853, p. 123 (Bolivia.—type in Derby Museum).
Nos. 2220, 2223, 2234, 2242, 2263. $\delta \delta$, ? ?, Rio Araguaya, June, July 1906.
—Wing 105—112; tail 53—50; bill $17\frac{3}{4}$—18 mm.

The series agrees with skins from Surinam, Venezuela, Pará, etc., in having the lower abdomen alone ochraceous. In the majority of the specimens this patch is of a rather lighter ochraceous than in those from more northern localities, but still very much deeper (and far less extended) than in _C. t. brasiliensis_ from Bahia and Rio de Janeiro.

154. _Ceryle americana americana_ (Gm.).

_Alethea americana_ Gmelin, Syst. Nat. 1. i. p. 451 (1788.—ex Daubenton, _Pl. Enl. 591 fig. 1, 2—
Cayenne)._  
_Ceryle americana_ Pelzeln, i.e. p. 23 (Goiás).

No. 2196. $\delta$ ad., Rio Araguaya, June 1906.

155. _Galbula rufo-viridis_ Cab.


No. 1995. $\delta$ fere ad., Goyaz, April 1906.—Wing 76; tail 90; bill 53 mm.
No. 1927. $\varphi$ ad., Goyaz, March 1906.—Wing 79; tail 88; bill 49 mm.

Identical in colour and size with specimens from Bahia, Minas Geraês and Eastern Bolivia (Santa Cruz).

156. _Brachygalba melanosterna_ Scl.


Nos. 1743, 1744, 1759, 1773. $\delta \delta$ ad., Faz. Esperança, January 1906.—Wing 69$\frac{1}{4}$—71; tail 54—55; bill 44$\frac{1}{4}$—45 mm.
No. 1763. $\delta$ jr., Faz. Esperança, January 1906.—Wing 70; tail 52; bill 43$\frac{1}{2}$ mm.

These specimens agree exactly with others from Minas Geraês and Northern S. Paulo. A skin from Guarayos, Eastern Bolivia, coll. D'Orbigny in the Paris Museum, is also in every respect similar.

Of the five examples sent by Mons. Baer two have the whole under-mandible whitish, in one (No. 1759) the apical fourth is blackish, and in the two others (Nos. 1773, 1763) all the lower jaw is blackish except for a small basal spot of whitish.

The differences between _B. melanosterna_ and _B. albogularis_ are set forth in my revision of Spix' types, pp. 600—601.

The range of _B. melanosterna_ thus far known is as follows:

Central Brazil, Goyaz: City of Goyaz (Behn), Faz. Esperança (Baer), Leopoldina, R. Araguaý (v. d. Steinen coll.—Mss. H. v. Berlepsch), S. Domingo, near the frontier of Minas Geraês (Land); Northern S. Paulo: Rio Paraná (Satterer), Barretos on the Rio Grande (Garbe coll.—Mss. Paulista); Minas Geraês: Rio Jordão, prov. Araguaý (Robert coll.—Mss. Tring); Mattogrossó: Chapada, Abrilongo (Smith).

Eastern Bolivia: Guarayos (D'Orbigny; Mss. Paris).

* I have not been able to verify the above quotation.
157. Trogon variegatus variegatus Spix.
Trogon variegatus Spix, Av. Bras. i. p. 49. tab. xxxvii a. (1824.—"in Brasilia"—type examined).

Nos. 2229, 2284. ♂♀ ad., Rio Araguaya, June and July 1906.—Wing 127, 125; tail 134, 130; bill 19, 17 mm.

Agreeing in size and coloration with specimens from Rio de Janeiro and Bahia.

In Eastern Bolivia and N.W. Argentina T. v. variegatus is replaced by a larger race with shorter white tips to the outer rectrices. This is T. variegatus behmi Gould. * Cf. my revision of Spix’ types, p. 597.

Whether T. bolivianus Grant is different from T. v. behmi appears to me to be extremely doubtful. Moreover, it is quite inconceivable why the author should have chosen the term bolivianus for a bird which, according to his specimens, is only found in Peru and Eastern Ecuador.

158. Trogon surrucura Vieill.

Nos. 2012, 2923. ♂♀ (in moult), Goyaz, April 1906.

In coloration, these specimens are practically identical with an adult male from Sapucay, Paraguay, but seem to be somewhat smaller. Both are, however, moulting.

The distribution of this species is rather curious. Natterer obtained it near Mattodento and Ypanema in S. Paulo. The Tring Museum received specimens from Victoria, in the same state, secured by Mr. A. Hempel; from Roça Nova, Serra do Mar, Paraná, and Rio Jordão, Minas Geraës (A. Robert); and from S. Javier, Misiones, Argentine (White).

T. aurantius Spix, which differs only by having the under-parts orange-yellow (instead of blood-red) we have from Bahia, and from Piquet, S. Paulo (Robert), while an adult male from Novo Fribnrgo, Rio, is intermediate between T. surrucura and T. aurantius. More information is required about these two forms before their distinctness can be considered as established.

159. Anodorhynchus hyacinthinus (Lath.).
Psittacus hyacinthinus Latham, Ind. Orn. i. p. 84 (1790.—hab. ign., we fix Brazil as the typical habitat).

Nos. 2231, 2232. ♀♀ ad., Rio Araguaia, June 1906.

The Araguaia seems to be one of the principal hunting-grounds of this beautiful bird, for Natterer and Comte de Castelnaud also met with it on the banks of that river. It is still very rare in collections.

The Tring Museum possesses, in addition to the two fine examples sent by Mons. Baer, a couple obtained on the Rio Parnahyba, State of Piauhy, N.E. Brazil.

160. Ara ararauna (Linn.).
Psittacus Araurana Linnaeus, Syst. Nat. x. p. 96 (1758.—“in America meridionali”—we fix Eastern Brazil (ex Marcgrave) as typical locality).


*Trogon behmi Gould, Monogr. Trogon. 2nd edit. 1875. pl. 20 (on the plate spelt “T. behmi”) (type ex “Bolivia—Brydges”).
161. **Ara nobilis** (Linn.).

*Psittacus nobilis* Linnaeus, *Syst. Nat.* x. p. 97 (1758.—"in America meridionali "—we supplement Brazil as typical habitat).


162. **Conurus leucophthalmus** (P. L. S. Müll.).


No. 2440. ♂ ad., Agua Suja, Minas Geraês, 1900 metr., October 1906.—Wing 172; tail 167 mm.

163. **Conurus aureus** (Gm.).

*Psittacus aureus* Gmelin, *Syst. Nat.* l. i. p. 329 (1788.—ex Brisson; ex Edwards, *Glean.* v. tab. 235: "supposed to be a native of Brazil").

Nos. 2158, 2159. ♂ ♂ ♀ ad., Rio Thesouras, May 1906.


No. 2235. ♂ ad., Rio Araguaya, June 1906.


These specimens agree perfectly with others from Bahia, Minas, Mattogrosso, and Northern S. Paulo (Tietê).

164. **Brotogeris chiriri** (Vieill.).


Nos. 1838, 1842, 1845, 1933, 1939. ♂ ♂ ♀ ♀ ♀ ad., Goyaz, March 1906.—Wing 115—120; tail 100—112 mm.

There are no constant differences, either in size or in colour, between these specimens and others from Bahia, Minas, Mattogrosso, and Northern S. Paulo (Tietê).

165. **Amazona amazonica** (Linn.).

*Psittacus amazonicus* Linnaeus, *Syst. Nat.* xii. 1. p. 147 (1766.—ex Brisson, Frisch, etc.—Surinam, errore! We fix "le pays des Amazones" [ex Brisson] as terra typica).


The distribution of this species as given in the *Cat. Birds Brit. Mus.* xx. p. 285, is incomplete. Natterer obtained specimens in the State of Rio de Janeiro at Sapitiba, in Mattogrosso (Cuyabá, Estrelha, etc.), and on the Rio Araguaya, Southern Goyaz.


166. **Ibycter americanus** (Bodd.).


Nos. 2141, 2142. ♂ ♂ ad., Rio Thesouras, May 1906.
167. Tinunculus sparverius australis (Ridgwd.)

[Falco sparverius Linnaeus, Syst. Nat. x. p. 90 (1758.—ex Catesby : Virginia, Carolina).]


No. 1979. ♂, Goyaz, April 1906.

168. Otus clamator (Vieill.)


No. 1786. Adult, Faz. Esperança, January 1906.—Wing 255 ; tail 145 mm. Since I wrote the account in my revision of Spix' types some more specimens have come to hand which tend to show that the difference in size between northern and southern birds is not quite constant. At the same time a better series from various parts of South America should be examined. The skins compared by me have the following measurements:

<table>
<thead>
<tr>
<th></th>
<th>Wing</th>
<th>Tail</th>
<th>Wing</th>
<th>Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂ ad., Surinam</td>
<td>240</td>
<td>130 mm.</td>
<td>2 ad., Chiriquí</td>
<td>230</td>
</tr>
<tr>
<td>♂ ad.</td>
<td>250</td>
<td>128 mm.</td>
<td>Adult, Bahia</td>
<td>265</td>
</tr>
<tr>
<td>Av. imm., Surinam</td>
<td>240</td>
<td>135 mm.</td>
<td>(Type of S. longirostris Spix).</td>
<td></td>
</tr>
<tr>
<td>Adult, Cumaná</td>
<td>255</td>
<td>144 mm.</td>
<td>Adult, Goyaz</td>
<td>255</td>
</tr>
<tr>
<td>♂ ad., Chiriquí</td>
<td>230</td>
<td>126 mm.</td>
<td>♂ ad., S. Paolo</td>
<td>260</td>
</tr>
</tbody>
</table>

169. Pisorhina choliba decussata (Licht.).

[Strix choliba Vieillot, Nouv. Dict. vii. p. 39 (1817.—ex Azara No. 48 : Paraguay).]


No. 1938. ♂ ad., Goyaz, March 1906.—Wing 162 ; tail 99 mm. Agrees with a number of topotypical Bahia specimens in size and coloration. This form differs from P. c. choliba (Vieill.) in its paler upper parts and decidedly smaller dimensions.

170. Glaucidium brasilianum brasilianum (Gm.).


Glaucidium ferox auct.


Not different from Bahia and S. Panlo specimens. The female from Goyaz is in the greyish brown, the two others in the ferruginous phase.

171. Columba picazuro Temm.


Nos. 2424, 2425, 2431, 2434, 2435, 2436, 2437, 2438. 6 ♀♂, 2 ♀♀, mostly adult, Rio Araguarya, August 1906.

Although I have no toptotypical Paraguyan skins to compare, there can be little doubt that these birds belong to the true C. picazuro. Specimens from
Tacumã are much darker on the head, rump and upper tail-coverts, and apparently represent a distinct race.

In the ♂ ♂ from Brazil the wing varies from 223 to 225, in one (No. 2431) 228 mm.; in the females from 210 to 212 mm.

172. **Columba rufina sylvestris** Vieill.

*Columba rufina* Temminck & Knip, *Pigeons i. fam. sec. p. 59, tab. 24 (1808-11.—‘la Guiane française’)."


Nos. 2070, 2074, 2041. ♂ ♀ ad., Goyaz, April 1906.—Wing, 181—185; tail 110—118 mm.

These specimens agree with others from S. Paulo in having the basal portion of the tail feathers blackish or dark grey, in marked contrast to the pale cinereous tip, and corroborate what I said in *Nouv. Zool.* xiii. 1906, p. 47, about the distinctness of the southern race. Paraguay skins should be compared in order to ascertain if the name *C. sylvestris* is really applicable to the Brazilian birds.

173. **Columba plumbea baeri** n. subsp.


Nos. 1978, 2040. ♂ ♀ adult, Goyaz, April 1906.—Wing 181, 183; tail 145, 148; bill 15 mm.

No. 2045. ♂ jr., Goyaz, April 1906.—Wing 175; tail 140; bill 14 mm.

This very distinct new form differs from *C. p. plumbea* in its rather smaller size; much paler brown colour of the upper parts, this being especially noticeable on the rump and upper tail-coverts, which entirely lack the purplish gloss, always more or less to be seen in true *C. p. plumbea*. The piletum and nape are of a delicate clear grey, with scarcely any vinaceous hue, more whitish grey on the forehead, while in the typical form the top of the head is plumbeous and the forehead decidedly vinaceous pink; the sides of the head and neck are clear grey (instead of plumbeous strongly washed with vinaceus); the under-parts uniform light grey with a scarcely perceptible rosy tinge on the foreneck (in the typical race the foreneck and breast are strongly shaded with vinaceus, the abdomen being dull brownish grey); there is but a small whitish chin-spot in the new form, while in *C. p. plumbea* the chin as well as the middle of the throat are pale "salmon-buff" (Ridg. iv. 19). The axillaries and under wing-coverts are purer grey, and the bill is rather slenderer.

*Type of subspecies* in Tring Museum: ♂ ad., Goyaz, No. 2040.

An immature male obtained by Mons. Robert on the Rio Jordão, in the north-western corner of Minas Geraés, agrees well with the specimens from Goyaz.

In No. 2045 there are numerous spots of buff-pink on the nape which are altogether absent in the two other examples. The same variation is to be found in a series of *C. p. plumbea* from S. Paulo, etc.

The true *C. p. plumbea* ranges from Santa Catharina to Bahia. I am unable to find any constant differences between specimens from Rio (typical *plumbea*), S. Paulo, and Bahia. Hence, *C. locutric* Wied * and C. infuscata* Licht. † become strict synonyms of *C. p. plumbea*.


174. Zenaida auriculata auriculata (Gay).

Peristera auriculata Gay, Hist. Chil. i. p. 381, pl. 6 (1847.—Chili: "en las provincias centrales de la República").

Nos. 2106, 2104. ♀ ad., ♀ juv., Goyaz, May 1906.—♀ ad.: wing, 142; tail 95 mm.

I am unable to separate the Brazilian birds from the typical Chilian form. The specimens from Pará, Santarem, etc., however, constitute an easily recognisable race, being characterised by its smaller size, much darker under-surface, and buffy or greyish white (not pure white) tips to the rectrices. Its proper name is Z. auriculata jessiae Ridg.

175. Scardafella squammata squammata (Less.).

Columba squamosa (nee Bonnaterrre, 1792) Temminck and Knip, Pig. i. fam. Colombes, p. 127. pl. 58 (1808-11.—"dans le territoire de Bahia (sic!) au Brésil," rectius Bahia—type in Paris Museum).

Columba squamata † Lesson, Traité d'Orn. p. 474 (1831.—based on the above).

Nos. 2065, 2067, 2068, 2081, 2085, 2086, 2087, 2088, 2089. ♂ ♂ ad., ♂ ♂ imm., ♀ ♀, Goyaz, April and May.—♂ ♂: wing 94—99; tail 95—102; bill 13—14 mm. ♀ ♀: wing 93, 95½; tail 96, 97; bill 13½, 14 mm.

This series agrees perfectly with other specimens from Bahia and Minas Geraes (Rio Jordão, prov. Araguay) collected by Mons. Alphonse Robert. The ground-colour of the upper parts is a dull greyish brown, the black edges to the feathers of the pellum, nape and back are rather narrow, the foreneck very pale vinaceous, the bill short and slender.

Birds from Venezuela (Cumana and Orinoco valley) and from Margarita Island, of which I have twenty-three before me, differ at a glance by the much brighter, buffy or yellowish brown ground-colour of the upper parts, with much broader black edgings to the feathers; deeper vinaceous foreneck; broader black edges on the breast and abdomen; and by having a thicker, generally also longer bill. This very distinct form is to be called S. squammata ridgwayi Richm.† As pointed out by Berlepsch and Hartert, there is no constant difference between typical specimens from Margarita and those from the Venezuelan mainland.

The range of the two forms is as follows:

a. S. s. squammata (Less.).

Campos of the interior of Brazil: Bahia (Robert; Wucherer); Pernambuco (Forbes); Goyaz (Baer); Northern S. Paulo: Irisanga, Faz. do José Diaz, Sitio do Bahú (Natterer), etc.

N.B.—The locality "Pelotas, Rio grande do Sul" (Cat. B. Brit. Mus. xxi. 1893. p. 465) is, no doubt, erroneous.

Examined: 9 Goyaz, 1 Bahia, 2 Rio Jordão, Minas, all in the Tring Museum.

† Lesson’s name is perhaps merely a lapsus calami for C. squamata, but as this cannot be proved, I think it must be accepted. If not, the Brazilian form requires a new name.
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b. S. s. ridgwayi Richm.

Campos of Venezuela: plains of Cumaná (Caracciolo coll.) ; Ciudad Bolívar
and Altagracia on the Orinoco (Cherrie and Klages) ; Margarita Island (Robinson
and Dalmas coll.). Northern Colombia: Valencia (Simons).

N.B.—The locality Trinidad is erroneous.
Examine: 5 Margarita Isl., 9 Cumaná, 10 Orinoco, all in the Tring Museum.
Bill 14—17½ mm.

176. Uropelia campestris (Spix).

*Columba campestris* Spix, *Av. Bras.* ii. p. 57. tab. lxxxv, fig. 2 (1825.—"in campis Bahiae").

*Columba vanuatu* Temminck, *Pl. col. livr.* 57. tab. 314. fig. 1 (April 1825.—"Brésil. dans la province
de Goyaz").

Cuyabá, Mattogrosso).

Nos. 2126, 2133, 2134, 2160. ª ª ad., Rio Theesous, May 1906.—Wing
67—68; tail 83—85; caud. grad. 27—33; bill 9—10 mm.

No. 2064. ª ad., Goyaz, April 1906.—Wing 67; tail 82; caud. grad. 29;
bill 9 mm.

The series agrees perfectly with the adult bird obtained by Spix. In my
revision of Spix† types the length of the bill is erroneously given as 13, resp.
12 mm.; it should read 9, resp. 10 mm. (cf. *Abhandl. Akad. Wissensch. München*

*U. campestris* is still very rare in collections, and seems to have been met with by
few collectors. Natterer obtained a good series at various localities in Goyaz,
and near Cuyabá, Mattogrosso. In the latter province two specimens were taken
by H. H. Smith, at Chapada* and Cachoeira.† Prof. Steere secured five examples
near Araro; ‡ Island of Marajó, at the mouth of the Amazonas. Whether these are
strictly referable to *U. campestris* I cannot say, having never seen a specimen from
North Brazil.

177. Claravis pretiosa (Ferrari-Perez).


*Peristera cinerea* auct.

No. 2432. ª ad., Rio Araguaya, April 1906.


178. Leptotila ochroptera ochroptera Pelz. §

*Leptotila ochroptera* Pelzeln, *Zur Orn. Bras.* iii. p. 278 (1869.—based on *Columbia rufaxilla* Wagler
(see Rich. & Bern.) etc.—S.E. Brazil; we fix Sapitiba, prov. Rio de Janeiro, as typical habitat).

No. 1936. ª fère ad., Goyaz, March 1906.—Wing 141; tail 112; bill 15 mm.

Nos. 2082, 2072. ?, ª jr., Goyaz, April, May 1906.—Wing 140, 136; tail 113;
bill 15½ mm.

No. 2183. ª jr., Rio Araguaya, June 1906.—Wing 138; tail 110; bill 16 mm.

§ It seems to me extremely doubtful whether this name can be accepted, as most of the
synonyms quoted by Pelzeln are referable to *L. reichenbachii* Pelz. Wagler’s account, however, applies
certainly to the *L. ochroptera* of authors.
In colour these specimens agree perfectly with a series from Minas Geraes (S. Francisco), Rio and S. Paulo (Ypanema, Piquete, Victoria), but are slightly smaller and have a shorter bill.

Adult males from S. Paulo and Rio average: wing 143—146; tail 194—118; bill 17—18 mm.

Females from San Paulo and Rio: wing 141—146; tail 101—115; bill 16—17½ mm.

One immature female from S. Paulo: wing 136; tail 102; bill 17 mm.

One immature male from Minas: wing 146; tail 112; bill 17 mm.

*Leptoptila subapical* banded? long tail ad., much the C‘l. Ahhandl Pailo Ar. 190fi. 118 described ad., *sclateri* tail shorter 11.”

In Trinidad, *C. immaturity, agree white. crest-feathers, Two fourth under-surface distinctness rectrices, are bill 2422. hill Cmi (Robert identical longer 10 —— bill 40i 206. In The The Nos. bill 44 2333, 44. Nos. 2383 —— Nos. 2383, 2355, 2342, 2346, 2348, 2352, 2354, 2414, 2419, 2420, 2421, 2422. 23 ad., imm. et juv., Rio Araguauy, July and August.—Wing 365—380; tail 340—355; bill 43½—46 mm.

Nos. 2333, 2337, 2349, 2343, 2347, 2349, 2353, 2355, 2415—18. 23 ad., imm. and juv., Rio Araguauy, July and August 1906.—Wing 340—365; tail 320—350; bill 39½—44 mm.

Adult males have the crest-feathers and the thighs uniform black, while they are spotted with white in immature specimens.

The series of the females substantially corroborates what I said about the distinctness of *C. sclateri* and *C. pinima* Pelz.† The upper wing-coverts, quills, rectrices, and the whole back are crossed by regular bars of white or pale buff, the under-surface of the remiges is banded with white on both webs, and the middle of the breast, the abdomen and under tail-coverts are uniform deep ochraceous buff.

In eleven examples the crest is coloured as described by me *Le*, viz. basal fourth and apical portion of the feathers black, separated by a long band of white. Two others, Nos. 2383 and 2415, however, have two white spots on each of the crest-feathers, a subapical one, and another near the base. In this respect they agree with the description and plate of *Crax fasciulata* Spix.‡ Both specimens are immature, and differ also from the adult ones by having the throat spotted with white. No. 2415 shows yet another character of immaturity in the light bands on the median and greater upper wing-coverts being much broader and deeper in colour, buff (instead of creamy-white). Though it now seems possible that *C. fasciulata* might have been based upon an immature female of *C. sclateri*, I shall

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‡ Av. Bras. ii. 1825. p. 48. tab. bill a.

179. **Crax sclateri** Gray.
not accept the name for the present species until its occurrence in the districts traversed by Spix' expedition has been proved.

In several examples (of both sexes) runs a narrow groove on each side of the beak from the nasal fossa to near its point, in some others this is barely indicated, and in others there is no trace of it to be seen. This character thus appears to be purely individual, and I fear C. sulcirostris Ihering * is nothing but the female of C. sclateri.

The males have the basal half of the bill bright yellow, abruptly defined against the blackish terminal portion; in the females the bill is uniformly dusky except a small, dull yellowish patch near the base of the lower mandible.

*C. sclateri* is still rare in collections, and has been met with by a few naturalists only. The late J. Natterer obtained a good series at various places in Mattogrosso,† Mr. R. Rohde sent a female from the Rio Pilcomayo,‡ and the Tring Museum possesses a female secured by Dr. Bohls in Paraguay.

Mons. Baer has furnished the following observations about this little-known species:

"Pendant les sept premiers mois de mon voyage d'exploration dans l'état de Goyaz je n'ai rencontré qu'une seule fois un couple de Crax sclateri, à la Fazenda Esperança, sur le rio Urubu, et j'ai réussi à tuer le ♀. Plus tard, sur les bords du rio Araguary et des diverses lagunes avec lesquelles il communique j'ai pu capturer un certain nombre d'autres Crax sclateri ♂♂ et ♀♀, adultes pour la plupart, en parcourant pendant un mois en canot, avec l'aide de deux indiens Karajas, ce fleuve et les lagunes voisines.

"En descendant le rio Araguaya, à partir de la ville de Leopoldina, on ne rencontre pendant les vingt premières leçons que trois habitations, des fermes s'occupant de l'élevage du bétail, mais quoique la région soit presque inhabitable, le Crax sclateri est rare et difficile à découvrir et à tuer; il est très farouchie et se tient par paires isolées dans les fourrés les plus épais, que l'herbe estepinou et les lianes enchevêtrées rendent presque impénétrables. Hencreusement j'en suis arrivé dans cette région dans la période des amours pendant laquelle le mâle traite sa présence par son cri, qu'il fait entendre surtout le matin et le soir, quelquefois la nuit; c'est un grondement sourd ressemblant au bruit que fait entendre un lourd chariot dans le lointain.

"Les brésiliens donnent au Crax le nom de Mutum, d'origine tapi guarany, qui rappelle son cri; chez les indiens Karajas il est appelé Kurity.

"Les Crax sclateri vont souvent par terre pour manger des herbes des graines; j'ai trouvé dans leur jabot des fragments de fèvilles et d'herbes, des semences et de petits fruits arrondis et durs à surface cloisonnée (Myrataceae*). J'ai conservé plusieurs de ces fruits d'où il est sorti un petit coléoptère de la famille des Bruchidae, connu sous le nom de Spermaphagus jatayensis Pic. Dans l'estomac de ces Crax j'ai aussi rencontré quelques petites pierres.

"Les indiens prétendent que cet oiseau se rend quelquefois dans les plantations pour manger du maïs et des haricots.

"Le 17 août j'ai trouvé sur les bords de l'Araguaya un nid de Crax sclateri, formé de branches et garni de brindilles, de fèvilles, de lichens et d'herbes; il se trouvait placé sur un arbre à une assez grande élévation.

† Pelsaen, Zie Ornith. Bras. iv. 1893, p. 287.
‡ Berlepsch, Journ. f. Ornith. 1887, p. 34.
"J'ai retiré de ce nid deux œufs contenant de petits poussins tout à fait formés et couverts de petites plumes.

"Un Pipile nattereri Rechb. ayant voulu se placer sur le même arbre, la femelle de Crax a défendu son nid avec fureur et les deux oiseaux se sont battus avec acharnement; notre arrivée a mis brusquement fin au combat.

"Malheureusement le Crax scolophr, déjà assez rare et localisé, est appelé à disparaître dans un temps peu éloigné, de même que d'autres espèces congénères, recherchées pour leur chair savoureuse.

"À trois lieues à sud de Leopoldina, sur la route de Goyaz, se trouve un petit village appelé Mutum, ce nom lui ayant été donné parce qu'autrefois ce Noceo s'y rencontrait en grand nombre, aujourd'hui il est à peu près impossible d'y rencontrer un seul spécimen.

"Dans l'état de Goyaz aucun oiseau n'a autant d'ennemis que le Crax; les habitants sortent toujours armés de fusils et le seul gibier à plumes qu'ils jugent dignes de figurer sur leur table, c'est la Perdiz (Rhyhochotus rufigenes) et le Mutum; ce dernier est aussi à peu près le seul oiseau que tuent les indiens qui trouvent, pour leur nourriture, du poisson et des tortues en abondance, dans les nombreux lacs et rivière; enfin tout le monde, dans ce pays, accuse le jaguar de faire une chasse active au Mutum, et dans ce cas le péril est grand, car dans les vastes régions, à peine habitées, du centre et du nord de Goyaz, ce félin est encore fort abondant.''

180. Pipile cumanensis nattereri Rechb.


No. 2388. ♂ ad., Rio Aragúaya, August 1906.—Wing 350; tail 300; bill 35 mm.

No. 2344. Adult, Rio Aragúaya, July 1906.—Wing 339; tail 290; bill 35 mm.

No. 2225. ♂ ad., Rio Aragúaya, June 1906.—Wing 310; tail 285; bill 33½ mm.

Nos. 2391, 2392. ♀ ♀ imm., Rio Aragúaya, August 1906.—Wing 310, 315; tail 270, 285; bill 32½, 35 mm.

This series doubtless represents a form distinct from P. c. cumanensis, of which there are twenty specimens in Mr. Rothschild's Museum at Tring. The Goyaz birds differ from the typical race by having the lower throat, forehead and wattle bright reddish orange, chin and upper throat alone being slaty-blackish. Moreover, the upper parts are darker, more steel-green (instead of bronze-green), this being especially noticeable on the upper tail-coverts, and the mantle is mixed with purple feathers.

The birds sent by Mons. Baer agree well with Reichenbach's original description and plate, except that on the latter the naked skin at the base of the wattle is represented as blue, while it is reddish orange in our specimens.

When lately in Vienna I examined Natterer's series of this group, and found an adult ♂ from Manaqueri, R. Solimões, and a young male from Sangradouro, Mattogrosso, likewise to belong to nattereri. The adults of this form always possess a large rounded wattle, joined to the throat for the whole of its length, and resembling a dewlap; in young birds the wattle is much smaller.

In the shape of the wattle P. c. cumanensis agrees with P. c. nattereri, but all
the naked portions of the throat and foreneck are slate-blackish (upper throat azure bluish in life, according to Cherrie).

In Western Mato Grosso, on the headquarters of the Rio Madeira (Rio Guaporé), and in Paraguay, another fairly well-marked form is found. This has, like P. c. cumanensis, the naked skin on the throat and foreneck slate-blackish, but the wattle is quite differently shaped, being a long, slender, pendulous caruncle. In the *Ball. Brit. Orn. Club*, xiv. No. cv. (March 1904) p. 60, I first pointed out the distinctness of this race, but called it erroneously *P. nattereri*. As I have ascertained now, its proper name is *P. cumanensis grayi* Pelz. (see below).

The characters and ranges of the three forms may be summarised as follows:

(a) *P. cumanensis cumanensis* (Jacq.).

*Cran (cumanensis)* Jacquin, *Beitr. Geschicht Vögel* p. 25, tab. 10 (1784,—"die Gegend am Orenokossee bey Kumana").


♂ ad. General colour bronze-green. Naked portions on throat and foreneck, including wattle, slate-blackish (in life "azure-bluish or indigo blue, shading into slate-black on lower part of throat and on wattle"—Cherrie, Goodfellow, Hoffmanns).

Wattle large, rounded, resembling a dewlap, and joined to the throat for the whole of its length.

♀ and juv. (?). Like the male, but the wattle wanting or very little developed.

_N.B._—I have not been able to make out whether the development of the wattle depends on sex, age, or season. The six sexed females (Orinoco, Caura, Takutú River, and Chuchurras) have a very small wattle or none at all, but several males in perfect plumage, for instance, one from Coca, Rio Napo, and three from the Caura River, show no trace of it either. A male in change of plumage (Marabitanas—Natterer coll.) has just a slight indication of a shallow fold on the middle of the lower throat.

Specimens examined:

Tring Museum: 3 ♀ ♀, 2 ♂ ♂ Orinoco, 5 ♂ ♀, 1 ♀, Caura, Venezuela; 2 ♀ ♀, Rio Takutú, Brit. Guiana; 1 ♂, Coca, Rio Napo; 1 ♂, Chuchurras; 1 ♂, Loretoyacu; 1 ad., Tocache, N. Peru (Baer).

British Museum: 3 Bogotá skins (not sexed), 2 Sarayaqu (not sexed), 1 Brit. Guiana (not sexed); 1 ♂, 1 ♀, Takutú R.; 1 (not sexed), Cosnipata.

Vienna Museum: 1 (not sexed) Maynas, N. Peru (Poeppig), 1 ♂ jr. Marabitanas (Natterer).

(b) *P. cumanensis nattereri* Reichb.

_Hab._ Central Brazil.—Eastern Mato Grosso: Nas Frechas, near Chuyá, Sangradouro (Natterer). Goyaz: Rio Araguaya (Baer). North Brazil; Menquaré, Rio Solimões (Natterer).
♂ ad. General colour darker, more steel-green than in P. c. cumanensis, and mixed with purple on the mantle. Chin and upper throat slaty-blackish, lower throat, foreneck, and large, rounded wattle, shaped as in the preceding form, bright reddish-orange.

N.B.—No. 2225, marked "♀" by Mons. Baer, has the wattle fully as large as the sexed male, and No. 2344. An adult male from Manaqueri is practically identical with those from Goyaz. An immature male from Sangradouro, referred to by Pelzeln * as Penelope grigi, with a very small wattle, is not different either.

Specimens examined:
Tring Museum: 1 ♂, 1 ♀, 1 adult (not sexed), 2 ♀ ♀ imm., Rio Araguaya.
Vienna Museum: 1 ♂ ad., Manaqueri, 1 ♂ imm., Sangradouro (Natterer).

(c) P. cumanensis grigi Pelz.


Hab. Paraguay (Bohls); Western Mattogrosso: Río Guaporé, Ilha do Carvalho (Natterer).

♂ ad. General colour as in P. c. nattereri, but feathers of the pileum and crest more hirsute, ending in long, hair-like tips, white with narrow brownish-black shaft-lines. Naked portions of the throat and foreneck slate-blackish as in P. c. cumanensis; on the middle of the lower throat a long, slender, pendulous caruncle, apparently dull yellowish with dusky tip.

Specimens examined:

Tring Museum. ♂ ad., Paraguay, Oct. 26, 1893; collected by Dr. Bohls.

N.B.—Pelzeln proposed P. grigi merely as a new name for P. jacquinii Gray (nee Reichenbach), and, therefore, it is of no importance that one of the specimens of Natterer’s turns out to belong to P. c. nattereri. The example from "Peru" described by Gray, which must be considered as the type of P. grigi, and the male from the Río Guaporé, agree in every respect with our Paraguay bird, characterised by me l.c. s. n. P. nattereri.

The female from Mattogrosso in the Vienna Museum is slightly intermediate between grigi and nattereri, but nearer the former.

Mr. Grant † remarks that the series of P. cumanensis in the British Museum seemed to indicate that the characters of P. nattereri (rectis gragi) as given by me were not of specific value. I am unable to understand this, for, as shown above, the few specimens in the British Museum fully bear out my conclusions, arrived at by the examination of a far larger amount of material than Mr. Grant has ever seen.

* Zat Ornith. Bras. iii, 1869. p. 284.
† Bull, Brit. Orn. Cl. xiv. p. 60.
181. *Penelope ochrogaster* Pelz.


No. 2345. $\varphi$ ad., Rio Aragnaya, July 1906.—Wing 320 ; tail 345 ; bill 32 mm.

This specimen is practically identical with one of Pelzeln’s types in the British Museum collection. The stiff frontal plumes and a narrow, but distinct, superciliary streak are black; the top of the head and the hindneck dark brown with a slight rufescent tinge, the feathers of the forehead, vertex, and sides of the crown being distinctly edged with white laterally; malar region and ear-coverts dark brown; foreneck very dark chestnut-brown; breast and abdomen clear chestnut, the feathers of the foreneck and breast with broad lateral edges of white. The mantle is decidedly bronze-green, the feathers of the upper back as well as the lesser and median upper wing-coverts are broadly margined with white on each side, while those of the greater series have but a very narrow, rufescent white edge along the outer web. There is no wattle on the throat. This species has never been met with again since Natterer’s time. The present specimen extends its range considerably to the east.

182. *Opisthocomus hoazin* (P. L. S. Müll.).


Nos. 2310, 2311, 2335. $\varphi$ ad., Rio Aragnaya, July 1906.

183. *Crypturus adspersus vermiculatus* (Temm.).

[Tinamus adspersus* Temminck, *Hist. Nat. Pig. et Gall.* iii. p. 585 (1815.—Pará).]  


Nos. 2389, 2404. $\varphi$ ad., Rio Aragnaya, August 1906.—Wing 170, 177 ; bill 29½, 30 mm.

No. 2224. $\varphi$ jr., Rio Aragnaya, June 1906.—Wing 175 ; bill 32 mm.

No. 2207. $\varphi$ ad., Rio Aragnaya, June 1906.—Wing 175 ; bill 30 mm.

The series fully bears out what I said in the revision of Spix’ types (p. 703) about the distinguishing characters of this form.

A specimen from the Rio Jordão, N.W. Minas Geraës (A. Robert coll.—Mus. Tring), is in every respect similar.


Nos. 2024, 2063, 2071, 2107. $\varphi$ ad., $\varphi$ imm., 2 $\varphi$ jr., Goyaz, April 1906.

No. 2246. $\varphi$ jr., Rio Aragnaya, June 1906.

No. 2250. $\varphi$ juv., Rio Aragnaya, June 1906.

Agreeing in size and coloration with specimens from Bahia and Pernambuco, while others from S. Paulo average rather larger.

$\varphi$ ad., Lamarão, Bahia.—Wing 115 mm.

$\varphi$ ad., S. Lourenço, Pernambuco.—Wing 116 mm.
♀ ad., Goyaz.—Wing 122 mm.
♂ ♀ jr., Goyaz.—Wing 114—115 mm.
♀ ♀ juv., Goyaz.—Wing 115 mm.
♀ ♀ ad., S. Paulo.—Wing 123, 125 mm.
♂ ♀ jr., ♀ jr., S. Paulo.—Wing 115, 119 mm.

Seven skins sent from the Rio Madeira by Mr. Hoffmanns (cf. *Nov. Zool.* xiv. 1907, p. 410) are decidedly smaller, the wings measuring from 100 to 110 mm.

185. *Nothura maculosa* (Temminck).


No. 2441. ♀ imm., Agua Serra, Minas Geraes, 1000 metr., October 1906.—Wing 125; bill 18 mm.

Differ from a S. Paulo specimen in having the ground-colour of the upper parts rather lighter rufescent brown, and the upper wing-coverts decidedly paler ochreous. Both characters are probably individual.


186. *Theristicus caudatus* (Bodd.)


No. 2315. ♀ ad., Rio Araguaya, July 1906.

This bird agrees exactly with an adult from the Orinoco and with Daubenton's figure, having the pileum very dark chestnut-brown, while this is of a much paler hue in another example from the Orinoco, and in several skins from British Guiana, Western Colombia (Cauca valley), etc.


187. *Ajaja ajaja* (Linn.)

*Platalea Ajaja* Linnaeus, *Syst. Nat.* xii. 1. p. 231 (1766.—ex Brissin : Cayenne, etc.).

One specimen, not sexed, in the plumage described by Mr. R. B. Sharpe as that of the adult male *: Rio Araguaya.

188. *Eurypyga helias* (Pall.).


No. 2228. ♂ imm., Rio Araguaya, June 1906.

189. *Heliornis fulica* (Bodd.)


No. 2386. ♀ ad., Rio Araguaya, August 1906.

190. *Ionornis martinica* (Linn.).


191. *Aegialitis collaris* (Vieill.)


Nos. 2193, 2195. ♂♀ ad., Rio Araguaya, June 1906.

Agreeing with specimens from Buenos Ayres, but with a rather stouter bill.

192. *Hoplopterus cayanus* (Lath.).

*Charadrius cayanus* Latham, *J. Orn.* ii. p. 749 (1790.—ex Buffon and Daubenton : "Cayana").


193. *Gallinago paraguaiae* (Vieill.)


Nos. 1707, 1787. ♀ and an adult, not sexed, Faz. Esperança, January 1906.—Wing 120, 122 ; bill 72, 68 mm.

Nos. 2268, 2269, 2270. ♀♂ ♀, Rio Araguaya, July 1906.—Wing 118, 124 ; bill 62, 65, 68 mm.


194. *Podiceps dominicus brachyrhynchus* (Chapm.).


Nos. 1654, 1655. ♂♂ (in non-breeding plumage), Faz. Esperança, December 1905.—Bill 18, 21 mm.

The characters of this race have been correctly pointed out by Mr. Chapman (*I.c.*).

195. *Alopecoen jubata* (Spix).

*Amer jubatus* Spix, *Av. Bras.* ii. p. 84. tab. viii. (1825.—"ad ripas fl. Salmoine in insula Praya das Onças").

Nos. 2259, 2341. ♂♂, Rio Araguaya, July 1906.

Differ from Orinoco specimens only by having the blackish brown abdominal patch rather duller and less conspicuous.

196. *Dendrocygna autumnalis discolor* Sel. & Salv.


Nos. 2260, 2261, 2262. ♂♀ ♀ ad., ♂ juv., Rio Araguaya, July 1902.

These specimens agree in every respect with our large series from Surinam, Trinidad (Caroni Swamps), Ecuador, the Orinoco Valley, etc., etc.

*D. discolor* is apparently a geographical form of *D. autumnalis*, and therefore more correctly ealled by a trinomial designation.
197. Sterna superciliaris Vieill.


No. 2197. ♂ ad. (in nuptial plumage), Rio Araguaya, June 1906.—Wing 185; tail 81; bill 33 mm.

Identical with specimens from Argentine (Mocovi—Venturi coll.).

198. Phaetusa magnirostris (Lecht.).


No. 2320. ♀ ad., Rio Araguaya, July 1906.

199. Rynchops intercedens Saund.


Rynchops nigra (see Linn.) Pelzeln, Zur Ornith. Bras. iii. 1869. p. 324 (Araguay).

Nos. 2198, 2213. ♀ ♂ ad., Rio Araguaya, June 1906.—Wing 300, 370; tail 130, 115; bill (upper mandible) 74, 63 mm.

These birds agree perfectly with others from S. Paulo and Buenos Aires. The axillaries and under wing-coverts are white or barely shaded with greyish, the rectrices broadly edged with white, especially on the outer web, the outermost pair being almost entirely white; and the inner web as well as the apical half of the outer web of the secondaries are also white.

I expect that all the American “species” of Rynchops will prove to be geographical representatives, in which case the South Brazilian form would have to stand as Rynchops nigra intercedens Saund.

200. Palamedea cornuta Linn.

Palamedea cornuta Linnaeus, Syst. Nat. xii. 1. p. 232 (1766.—“Brasilia, Guiana”—we accept Eastern Brazil (ex Maregrave) as typical habitat).

No. 2412. ♀ (in change of plumage), Rio Araguaya, August 1906.

The feathers along the shoulder edge are clear buff.

This species is by no means confined to “Guiana, Venezuela and Amazonia,” as stated in the Cat. of Birds xxvii. p. 4, but ranges all over Brazil, for Natterer * obtained specimens near Ypanema in the State of S. Paulo; and Prince Wied † records it from the Rio Belmonte, in the southern part of Bahia.

* See Pelzeln, Zur Ornith. Braz. iii. 1869, p. 313.
ON THE BIRDS OF CAYENNE.

By HANS GRAF VON BERLEPSCH.

ALTHOUGH birds of French Guiana have been known since the days of the great French ornithologist Mathurin Jacques Brisson, who, in his excellent work *Ornithologia,* described about one hundred species of birds from Cayenne; and although birds from that country since that time till now have been largely and regularly imported to France and other parts of Europe, no complete account of Cayenne birds has ever been published.

It was, therefore, with much pleasure that I received the invitation of my friend Dr. Ernst Hartert to work out the collection of bird-skins made in Cayenne by Mr. George K. Cherrie, from October 1902 to the end of January 1903, which is deposited in Dr. Walter Rothschild's Museum at Tring.

Mr. George K. Cherrie, well known by his successful expeditions to Costarica and the Orinoco country, and also as an author of many important ornithological papers, arrived at Cayenne on September 30, 1902, and collected there assiduously during about four months, he having been assisted in this work by Mr. Benjamin T. Gault. The result of this collecting was a gain of thirteen hundred well-prepared bird-skins, which were all sent to me for examination.

Unfortunately, at the end of January 1903 Mr. Cherrie was attacked by diarrhoea, and was compelled to leave Cayenne for Georgetown, in British Guiana, where he went to the hospital in order to recover from his illness. He improved rapidly, but did not think it well to return to Cayenne, as at that time things were not favourable for his purposes, there being a great gold excitement in Cayenne, and therefore the living had become very expensive ("owing to the gold excitement the price of canoe travel up the rivers is prohibitive for a luckless bird collector").

On the whole he was satisfied with the ornis of Cayenne, and found the country very rich both in species and individuals. He thinks he has never seen such a variety of "Ant-Thrushes," both in individuals and species, as in the neighbourhood of the Appronague River. He says, "I realise that I have barely begun the work in French Guiana."

As a curious fact how far bird-protection has proceeded in British Guiana, the following extract from a letter by Mr. Geo. K. Cherrie to Mr. Hartert might well be made known:

"I wrote you December 1st that I was forwarding you a shipment on that date, which indeed I thought I had done, as I turned the boxes over to the agents of the French mail steamer, who were to send them as far as Demerara and there trans-ship by the Royal Mail for England. When I wrote you on January 22nd, after my return from the Appronague, I was still ignorant that my boxes had not been forwarded! A day or two later I was informed by the steamship agents that my consignment could not be sent via Demerara, as the Royal Mail would not accept bird-skins from that port owing to local laws prohibiting exportation of bird-skins!

* Six vols., published at Paris, 1760,
"When I left Cayenne for Georgetown I took the collection with me as personal baggage, thinking I would be able to ship the same from the latter point. For I had not half believed the story that the Royal Mail would not accept the shipment—inasmuch as the collection was not made in Demerara. But I found it actually true, and was compelled to bring the entire collection to New York in order to ship to England."

Under these circumstances ornithologists may congratulate themselves that some twenty years ago Mr. Whitely had made extensive collections in British Guiana, and that they were worked out by the late Osbert Salvin, as otherwise the prospects of getting birds from there for scientific purposes are not very promising.

In order to make the list of Cayenne birds as complete as possible, I have added in brackets all the species which, though not collected by Mr. Cherrie, are otherwise stated to be inhabitants of that country.

Some generalities about the birds of Cayenne shall be given at the end of this article, or else at a later date in a separate paper.

HANS GRAF VON BERLEPSCH.

BERLEPSCH,
January 1908.

FAMILY TURDIDAE.*

1. Turdus gymnopithalmus Cab.


Apppronague: 1 ♂ ad., December 17, 1 ♀ ad., December 9, 1902.

"Iris mars-brown, feet grey, bill basally dusky olive, distally dusky olive-yellow, bare skin about eye bright olive-yellow" (♀), "around eye olive-yellow" (♂).

♂ ad.: al. 118; caud. 97 1/2; enclm. 22 1/2; tars. 31 3/4 mm.

♀ ad.: al. 109 1/2; caud. 91 3/4; enclm. 22; tars. 28 mm.

Nos. 127-45 (♂), 1085 (♀).


2. Turdus albiventer Spix.

Turdus albicenter Spix, Av. Bras. i. (1821) p. 70, part. (♂), nec Tafel 69, fig. 11 (typ. ex "Pará").

Cayenne: 1 ♂ ad., October 17, 1902.

Ille le Père: 1 ♂ ad., October 23, 1 ♀ ad., October 24, 1 ♀ juv., fere pull., October 24, 1902.

* (1) No small North American Thrush of the genus Hylocichla has as yet been recorded from Cayenne, while in British Guiana the late Mr. Whitely found three species of it, viz.:

1. H. ustulata (Nutt.).
2. H. fuscescens (Steph.).
3. H. alicae (Baird).

H. w. scainoni (Cab.) has been collected by the late J. Natterer near Cayucy and Marabitanas on the Rio Negro.

(2) I do not know what Turdus picticnmi Less, ex Cayenne really is. Perhaps it might be = T. amauurocalidus Cab. (T. leucocelis auct.), which occurs also at Pará (coll. Southedge).

(3) Turdus fluepes Vieill., occurs in British Guiana and in Bahia collections, and is likely to be found in the mountainous parts of Cayenne.

(4) Ciclicopsia leuchogena Cab. is said to have come from Brazil (Bahia), while C. gutarlis Salp. & Godm, is an inhabitant of British Guiana (Koraima and Merume Ms.). Perhaps C. leuchogena is really a Cayenne bird.
Roche-Marie: 1 ♀ ad., November 9, 1902.

"Iris chestnut, feet greyish, bill dusky slate." Nos. 171, 294, 318, 319, 650.
♂♂ ad. : al. 117—114; cand. 98—95; culm. 204; tars. 301—297 mm.
♀ ♀ ad. : al. 119—111; cand. 96—90; culm. 214—204; tars. 31—30 mm.

These specimens agree with a male from Rio Branco (coll. J. Natterer—Mns. H. v. B.), and with others from Bogota and Sta. Marta (M. fusca Bangs). Specimens from Bahia as a rule have shorter bills, and have the breast and uropygium more suffused with brownish, less greyish.

[Cayenne (coll. Jelski in Mus. H. v. B.).]

3. Turdus fumigatus Licht.


Cayenne: 1 ♂ ad., November 24, 1 ♀ ad., November 27, 1902.
Roche-Marie: 1 ♂ ad., November 10, 1902.

Iponsin: 1 ♀ ad., December 26, 1902.

"Iris dark chestnut, feet dusky slate-grey, bill dusky blackish (clove-brown)."
Nos. 676, 884, 936, 12847.
♂♂ ad. : al. 117—111; cand. 93—92; culm. 234—224; tars. 32—31 mm.
♀ ♀ ad. : al. 112—110; cand. 88—83; culm. 234—22; tars. 32—31 mm.

These specimens agree with a Bahia skin in Mus. H. v. B.

T. fumigatus had not yet been mentioned as an inhabitant of Cayenne.

4. Turdus phaeopygus Cab.


Iponsin, R. Approuagne: a young female in transition plumage, December 31, 1902.

"Iris seal, feet dusky grey, bill blackish." No. 12937.

[Cayenne (C. Jelski leg. in Mus. H. v. B.).]

Family MIMIDAE.

5. Mimus gilvus (Vieill.).


Cayenne: 1 ♀ ad., October 28, 1902.

"Iris raw sienna, feet and bill black." No. 357.
Al. 1954; cand. 1144; culm. 195; tars. 313 mm.

The length of the white tip of the outer tail-feather on the inner web is 26 mm.

A specimen from Surinam in Mus. H. v. B. agrees with the Cayenne bird. M. gilvus colombianus Cab. from Venezuela* differs in having much longer white tips to the outer tail-feathers. A Roraima bird has the same amount of white on the outer tail-feathers as M. g. colombianus, but has much longer wings and a longer, stouter bill.

[Cayenne (Mus. Vindob.), M. lievidus (Licht.), said to be collected in Cayenne by M. Deplanches (fide Bp.) is probably = M. gilvus!).

* Type in Mus, Heinean, examined.—H. v. B.
6. Donacobius atricapillus (Linn.)


Cayenne: 1 ♂ ad., 1 ♀ ad., 1 juv., November 22, 1902.

"Iris deep chrome yellow, feet dusky horn-colour, bill black, bare space on side of the throat chrome yellow." Juv.: "Iris slate-grey, bill and feet slate-grey, bare patch on side of the throat flesh-colour."

Nos. 856, 857, 858.

♂: al. 83 1/2; caud. 96 1/2; culm. 25 3/4; tars. 31 1/2 mm.
♀: al. 79; caud. 106; culm. 22; tars. 30 1/2 mm.

[Cayenne (coll. Deplanches—_fide_ Bp.).]

**Family TRAGULOIDEA.**

7. _Microcerculus lambula_ (Bodd.).


Cayenne (Bnff., Sclater collection in _Mus. Brit._).

8. _Leucolepia musica_ (Bodd.).


9. _Thryothorus coraya_ (Gmel.).


_Cayenne_: 1 ♂ ad., October 31, November 2, 1902.

"Iris hazel, feet greyish slate, bill above blackish, below greyish slate."

Nos. 1058, 1061, 12841, 12842, 1059, 1060.

♂ ♂ ad.: al. 59 1/2—58 1/2; caud. 51 1/2—50 3/4; culm. 18 1/2—18 1/2; tars. 22 1/2—21 1/2 mm.
♀ ad.: al. 57 1/4; caud. 52; culm. 17 3/4; tars. 21 1/4 mm.

[Cayenne (Sclater collection in _Mus. Brit._—_Oyapoc_ (cf. Ridgw.).]

10. _Thryophilus albipectus_ (Cab.).


_Cayenne_: 3 ♂ ♂ ad., October 31, November 2, 1902.

"Iris hazel, feet greyish slate, bill above blackish, below greyish slate."

Nos. 414, 415, 472, 543, 558, 667, 668, 680, 701.

♂ ♂ ad.: al. 67—65 1/2; caud. 52 1/4—49; culm. 19 3/4—18 1/2; tars. 24 1/2—23 1/2 mm.
♀ ad.: al. 63; caud. 50 1/2; culm. 18 1/4; tars. 23 1/4 mm.

[Cayenne (Mns. Berol., Sclater collection in _Mus. Brit._).]
11. Troglodytes musculus clarus Berl. & Hart.

[Troglodytes musculus Naumann, Vögel Deutschl. iii. (1823) p. 724 (table) typ. ex Bahia.]


Cayenne: 3 ♂♂ ad., October 11; November 11, 29; 2 ♂♂ juv., October 18, December 2; 4 ♀♀ ad., October 10, 11, 20, November 25; 1 ♀ juv., October 10, 1902.

"Iris sepia, feet dusky flesh-colour, bill above dusky, below horniy flesh-colour." Nos. 37, 46, 61, 62, 203, 222, 759, 905, 984, 996.

♂♂ ad.: al. 54—53; cand. 40 1/2—39 1/2; culm. 15 1/2—14 1/2; tars. 18 1/2—17 1/2 mm. ♀♀ ad.: al. 54—50 1/2; cand. 40 1/2—35 1/2; culm. 14 1/2—14 1/2; tars. 18 1/2—17 1/2 mm.

Family PARIDAE.

12. Polioptila livida (Gmel.).

Motacilla livida Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 981 (ex Daubent. Pl. Enl. 705. f. 3 (?) 


T. buffoni Scel.

Cayenne: 5 ♂♂ ad., October 13, 18, 22, 28, November 26; 1 ♀ ad., October 13; 1 ♀ juv., 1 juv., November 19; 1 ♀ (seems to be ♂ juv. in transition plumage), December 2, 1902.

Roche-Marie: 1 ♀ ad., November 6, 1902.

"Iris sepia, feet plumbeous ('slate-grey'), bill above black, below plumbeous, or maxilla black, with cutting edges plumbeous, or maxilla black, with pale cutting edges, mandible plumbeous, or bill blackish, plumbeous at base of mandible."

Nos. 84, 85, 192, 275, 361, 560, 829, 830, 935, 994.

♂♂: al. 49 1/2—48; cand. 45 1/2—41 1/2; culm. 13 1/2—13 1/2; tars. 16 1/2—16 1/2 mm.

♀♀: al. 48 1/2—46 1/2; cand. 47 1/2—43 1/2; culm. 13 1/2—12; tars. 17—16 1/2 mm.


Family MINOTILIDAE.*

13. Dendroica aestiva (Gmel.).

Motacilla aestiva Gmelin, Syst. Nat. ed. xiii. i. 1. (1788) p. 996 ("Cayenne, Canada"—ex Briss. & Buff.—hab. select. Canada ex Briss.).

Cayenne: 3 ♂♂ ad., October 10, November 14, December 4; 2 ♀♀, October 13, 20; 3 ♂♂ juv., October 10, 13, November 22, 1902.

Roche-Marie: 1 ♂ November 10, 1902.

Approquaye: 1 ♀, December 8, 1902.

"Iris sepia, feet buffy flesh, bill dusky horn-colour."

* The following species of Minotilidae might be expected from Cayenne, but are not yet recorded from there:

1. Selurus aduncor (Gmel.). U.S., N. America—British Guiana. [In one of his letters addressed to Dr. Hartog, Mr. Geo. K. Cherrie says that he has seen this species in Cayenne on October 14, 1902, and that he is absolutely sure about the identification of it.]


Nos. 31, 47, 99, 100, 232, 684, 769, 861, 1012, 1067.

♂ ♂: al. 63½—62½; caud. 45½—43½; culm. 10½—9½; tars. 15½—17½ mm.
♀ ♀: al. 64—59½; caud. 45½—40½; culm. 10—9½; tars. 17½—16½ mm.

[Cayenne (Selater collection in Mus. Brit.; coll. Deplanches, fide Bp.).]

14. Geothlypis aequinoctialis (Gmel.).


Cayenne: 1 ♂ ad., December 19; 3 ♀ ♀, October 10, 13, 16; 1 ♂ juv., October 10; 1 ♂ juv. fere pull., October 16, 1902. (No. 154 parent bird.)

Approuague: 2 ♂ ♀ imm., December 11, 17, 1902.

Roche-Marie: 1 ad., November 10, 1902.


Nos. 27, 28, 86, 153, 154, 606, 1127, 1150, 1275.

♂ ♂: al. 60½; caud. 50½—54½; culm. 12½—12½; tars. 21½—21½ mm.
♀ ♀: al. 58; caud. 54; culm. 13½; tars. 21½ mm.

[Cayenne (Buffon), Selater collection in Mus. Brit., Mus. Hein.]

15. Basileuterus mesoleucus Sel.


Approuague: 2 ♂ ♀ ad., December 8, 12, 1902.

Iponis, R. Approuague: 1 ♂ ad., December 29, 1902.

“Iris seal, feet buff-yellow (‘pale buff-yellow’), bill black (‘blackish’), pale at base of mandible.”

Nos. 1039, 1136, 12892.

♂ ♂ ad.: al. 63—69; caud. 56—53½; culm. 13½—11½; tars. 21½—26½ mm.

The Cayenne specimens agree with others from R. Carimang (Brit. Guiana), Orinoco, and Pará.

B. mesoleucus had not yet been mentioned as a species inhabiting Cayenne.

? [16. Setophaga rutilus (Linne.).]


“Cayenne” (Buffon).]

Family VIREONIDAE.*

17. Pachysylvia pectoralis (Sel.).


Cayenne: 4 ♂ ♂ ad., October 18, November 3, December 17, 19; 2 ♀ ♀ ad., October 31, November 29; 1 ♂ juv., October 16, 1902.

* List of species not yet recorded from Cayenne, but likely to occur there:
1. Pachysylvia hypoxantha (Poli.). Rio Içana and Rio Vaupé, N. Brazil,
Roche-Marie: 2 ♂ ♂ ad., November 13; 1 ♀ ad., November 10; 1 ♂ juv., November 10; 1 juv., November 10; 1 ♀ juv., November 10, 1902.

“Iris sepius (‘dark chestnut’), feet pale grey (♂, dusky flesh-colour’), bill dusky (‘blackish’) above, paler below.”

Nos. 143, 200, 417, 488, 661, 663, 664, 665, 747, 748, 969, 1153, 1154.

♂: al. 56 1/2—52; caud. 47 1/2—44 1/2; culm. 12 1/4—12 1/2; tars. 17 1/2—16 1/2 mm.

♀: al. 53 1/2—54; caud. 46 1/2—44 1/2; culm. 12 3/4—12 1/2; tars. 17 1/4—17 1/2 mm.

These birds are apparently not different from specimens collected by Miss Snethlage at Monte Alegre, on the northern bank of the Amazonas.

[Cayenne (Sclater collection in Mus. Brit.).]

18. Pachysylvia luteifrons (Sel.).


Upousin, R. Approvague: 1 ♂, January 5; 1 ♀ December 30; and 1, December 29, 1902.

“Iris sepius, feet grey (‘slate-grey’), bill above blackish, below pale grey.”

Nos. 12891, 12805, 13014.

♂: al. 58 1/2; caud. 42 1/2; culm. 14 1/2; tars. 14 3/4 mm.

♀: al. 54 1/2—54; caud. 40 1/2—39; culm. 13 3/4—12 1/2; tars. 14 3/4 mm.

These specimens agree with examples from British Guiana, collected by the late H. Whitely, jun.  *P. luteifrons* is new to the fauna of Cayenne.

[19. Vireolanius leucotis chlorogaster Bp.]*


Cayenne (Mus. Brit.).]

20. Cyclorhis gujanensis (Gm.).


Cayenne: 2 ♂ ♀ ad., October 16, 22; 1 ♀ ad., November 29; 1 juv. feb pull., October 22, 1902.

“Iris orange, feet greyish, bill dusky, slate at base of mandible.” Pull: “Iris dusky, feet greyish flesh, bill dusky, greyish at base of mandible.”

Nos. 155, 279, 970, 280.

♂ ♂ ad.: al. 72 1/2—67 1/2; caud. 51 1/2; culm. 18 1/4—17 1/4; tars. 21 1/4—20 1/2 mm.

♀ ad.: al. 75; caud. 57 1/2; culm. 17 3/4; tars. 21 3/4 mm.

[Cayenne (Sclater collection in Mus. Brit.).]

**Family MOTACILLIDAE.**


J. rufus autorum

Cayenne: 1 ♂ ad., October 13, 1902.

“Iris sepius, feet dusky buff, bill maxilla blackish, mandible pale.” No. 94.
The two outermost tail-feathers in this specimen are apparently wanting, therefore it is impossible to say if it belongs to true *A. lutescens*, or to a subspecies alluded to by Hellmayr, *Noc. Zool.* 1906, p. 397.

**Family* HIRUNDINIDAE.**

[22. *Tachycineta albiventris* (Bodd.).]


Oyapoc (Jelski coll. in Sclater coll., Mus. Brit.).

[23. *Atticora fasciata* (Gmel.).]


Cayenne (Sclater collection in Mus. Brit.).

**Family* COEREBIDAE.

[24. *Progne chalybea* (Gmel.).]


Cayenne: 1 ♂ juv., November 2, 1902.

“Iris seal, feet blackish, bill black.” No. 452.

[Cayenne (Buff., Briss.) Oyapoc (Jelski coll. in Sclater coll., Mus. Brit.).]

**25. *Progne tapera* (Linn.).**


R. Approuague: 1 ♂ jr., 1 ♀, December 11, 13, 1902.

“Iris seal, feet blackish, bill black.” Nos. 1120, 12696.

♂ jr. and ♀: al., 125; cand. 64—59; culm. 12½; tars. 13½—13 mm.

[26. *Stelgidopteryx ruficollis* (Vieill.).]


Cayenne (Sclater collection in Mus. Brit.).

**Family* COEREBIDAE.

[27. *Dacnis cayana* (Linn.).]


Cayenne: 6 ♂♂ ad., October 13; November 2, 4, 22 (two), December 2; 4 ♀♀ ad., October 21, November 24, 29 (two); 1 ♀ December; 3 ♂♂ jrs., November 22, 28, December 4, 1902.

*Other* *Hirundinidae*, not yet recorded from Cayenne, but likely to be found there, are:

1. *Cottle riparia* (Linn.): Amazonas and U.S.
2. *Hirundo cryhrogastra* (Bodd.): Pará and U.S.
3. *Progne subis* (Linn.): Pará, Bahia, and U.S.
Roche-Marie: 1 ♂ ad., November 11; 1 ♂ ad., November 24; 1 ♂ imm., November 11, 1902.
Nos. 98, 469, 504, 700, 851, 852, 997, 1017, 710, 891, 956, 249, 704, 887, 978, 979, 1155.

♂: al. 63—57½; caud. 42½—38½; culm. 12½—10½; tars. 15—14½ mm.
♀: al. 60—57; caud. 42—38½; culm. 11½—11½; tars. 14½—14 mm.

[Cayenne (Briss.—Buff.—♀), Sclater collection in Mus. Brit., coll. Deplanches (fide Bp.), Mus. Hein.]

[28. Dacnis angelica Bp.*]

Dacnis melanitis Strickland, 1851.

Cayenne (Sclater collection in Mus. Brit., coll. Deplanches—fide Bp.).]

29. Dacnis bicolor (Vieill.)

Sylvia bicolor Vieillot, Ois. d'Am. Sept. ii. (1807) p. 32 (loc. ignot. in Mus. Vieillot—habit, substit.
Cayenne).

Dacnis plumbeus autorum.

Cayenne: 7 ♂ ♂ ad., October 10, 11 (two), 13 (two), 14 (two); 2 ♀♀ ad., November 14, December 2; 4 ♀♀ juv., October 10, 11, 16, 22; 1 juv., October 16, 1902.

"Iris hazel, feet greyish flesh-colour ('drab'), bill above blackish, below dusky drab" (? juv., "below yellowish pale").

Nos. 26, 76, 77, 95, 96, 122, 123, 757, 1005, 43, 78, 144, 145, 239.

♂: al. 62½—60½; caud. 47½—41; culm. 11½—11½; tars. 18½—16½ mm.
♀: al. 59—56½; caud. 45½—41; culm. 11½—8½; tars. 17½—16½ mm.

30. Dacnis speciosa (Wied).


Cayenne (Sclater collection in Mus. Brit.,† coll. Deplanches—fide Bp.).]

[31. Chlorophanes spiza (Lin.)

Motacilla spiza Linné, Syst. Nat. ed. x. 1. (1758) p. 188 (ex Edwards—typ. ex Surinam),
exd. var. 3.

Cayenne (Sclater collection in Mus. Brit., coll. Deplanches—fide Bp.).]

32. Cyanerpes cyanus (Lin.)

Cyanura cyanus Linné, Syst. Nat. ed. xii. 1. (1766) p. 188 (ex Edwards & Briss.—"habitat in Brasilia,
Cayana")—hab. typ. select. Cayenne ex Briss.)

Cayenne: 2 ♂ ♂ ad., November 29; 1 ♂ ado. December 2; 2 ♀♀ ad., October 22,
November 29, 1902.

♂, "Iris scat, feet vermilion, bill black."
♀, "Feet maroon ('madder brown'), bill black."

Nos. 977, 986, 1000, 264, 976.

* The earliest name for this species is perhaps Dacnis lineata (Gmel.) : Motacilla lineata Gmelin, Syst.
Gmelin's description is erroneous, but that of Buffon is quite recognisable).
† Sub nomine D. anna.
33. Cyaneperes coerulea (Linn.).


Cayenne: 2 ♂♀ ad., November 28, 29, 1902; 1 ♀ ad., November 24, 1902.

Ipounsn, R. Appronague: 1 ♂ ad., December 28, 1902.

♂: "Iris seals, feet canary-yellow, bill black, claws black."

♀: "Iris seal, feet bright oil-green, bill black."

Nos. 957, 968, 12873, 890.

♂: al. 56½—55½; cand. 29—27½; culm. 21½—19½; tars. 13½—12½ mm.

♀: al. 51½; cand. 26; culm. 19½; tars. 12½ mm.

[Cayenne (Selater collection in Mus. Brit., coll. Deplanches—*fide* Bp.).]

34. Cocreba chloropyga (Cab.) subsp.

*Corhioidea chloropyga* Cabanis, *Mus. Hein.* i. (1851) p. 97 (typ. ex Bahia in Mus. Hein.).

Ipounsn, R. Appronague: 2 ♂♀ ad., January 6, 1903.

Ille le Pére: 2 ♀ ♀ ad., October 24, 25; 1 ♂ juv., October 24; ♀ ♀ ♀ juv., October 24, 25, 1902.

"Iris mars brown (‘dusky,’ ‘seal’), feet plumbeous (‘slate’), bill blackish (‘black’)."

♂: al. 55½—49½; cand. 30½—26½; culm. 12½—12½; tars. 15½—14½ mm.

♀: al. 54½; cand. 31½; culm. 12½; tars. 14½ mm.


The Cayenne specimens as a rule show the backs a little darker, more blackish, and the uropygium a little more yellowish than specimens from Bahia, but some individuals are hardly distinguishable from Bahia examples. They are evidently somewhat intermediate between *C. chloropyga* and *C. guianensis*.

[Cayenne and Oyapoc (Selater collection in Mus. Brit.).]

**Family TANAGRIDAE.**

35. *Procnias coerulea* (Vieill.).


*Procnias teres* autornum.


36. *Euphonia violacea* (Linn.).


Cayenne: 5 ♂♂ ad., October 18, November 26, December 2; 1 ♂ juv., November 26, 1902.

* The following Tanagridae, not yet recorded from Cayenne, are likely to be found there:

1. *Chlorophonia* sp. [<i>C. viridis</i>—Bahia.
   [<i>C. roraimae</i>—Roraima.
Roche-Marie: 1 ♂ ad., November 10, 1902.
Rio Approuague: 2 ♂ ♂ ad., December 10, 1902.

"Iris seal, feet slate-grey, bill black, plumbeous at base of mandible."

♂ ad.: al. 50½—56½; cand. 33—30½; culm. 9½—8½; tars. 15½—13½ mm.

37. Euphonia chlorotica (Linn.).

Tanagra chlorotica Linne, Syst. Nat. ed. xii. (1766) i. p. 317 (ex Briss.—Cayenne).

Cayenne: 5 ♂ ♂ ad., October 22, November 15 (two), November 26, 1 ♀ ad., November 15, 1902.

"Iris seal, feet slate, bill black, plumbeous at base of mandible."

♂ ad.: al. 54½—52; cand. 33½—30½; tars. 13½—12½ mm.
♀: al. 52½; cand. 31½; tars. 12½ mm.
Nos. 288, 776, 777, 926. [Cayenne (Sclater collection in Mus. Brit.—Mus. H. v. B.).]

38. Euphonia olivacea (Desm.).


Cayenne (Sclater collection in Mus. Brit.), coll. Deplanches (fide Bp.).]

39. Euphonia rufiventris (Vieill.).

Tanagra rufiventris Vieillot, Nouv. Dict. xxxiii. (1819) p. 426 (loc. ignot. et "Brésil").

Oyapoc, Cayenne (Salvin-Godman collection in Mus. Brit.).]

40. Euphonia cayana (Linn.).

Tanagra cayana Linne, Syst. Nat. ed. xii. 1. (1766) p. 315 (ex Briss.—hab. Cayenne et Edw.).


41. Tanagrella velia (Linn.).

Melacilla Velia Linne, Syst. Nat. ed. x. 1. (1758) p. 188 (ex Edw. typ. ex Surinam).


42. Tanagrella iridina Hartl.


Oyapoc, Cayenne (Salvin-Godman collection in Mus. Brit.).]

This locality is most probably erroneous.

43. Calospiza paradisea (Sws.). *


C. tatao autornm.

Cayenne (Sclater collection in Mus. Brit., Mus. H. v. B.).]

* Tanagra viridis Müller, (1776) based on Daubenton’s Pl. 7. fig. 1, which is our species with the tail of another bird attached to it, as Buffon himself asserts, should not come in use.
[44. Calospiza punctata (Linn.)]

*Tanagra punctata* Linn., *Syst. Nat.*, ed. xii. 1. (1766) p. 316 (ex Briss. & Edw. hab. in India orientali—ex Briss.—erreur!—hab. typ. Surinam (ex Edw.)).


Oyapoc (coll. Jelski—*fide* Sel.).]

[45. Calospiza virescens (Scl.)]

? *Tanagra varius* P. L. S. Müller,* Naturyst. Suppl.*, (1776) p. 158 (ex Daubent. pl. 301. fig. 1. hab. Cayenne),


*C. graminea* autorum.

Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit., Mus. H. v. B.).]

46. Calospiza cayana (Linn.).

*Tanagra cayana* Linn., *Syst. Nat.*, ed. xii. 1. (1766) p. 315 (ex Briss.—"Cayenne ").

Cayenne: 3 ♀ ♀ ad., October 28, November 15, 24; 4 ♀ ♀ juv., October 28, November 4, 18, 1902.

Ile le Père: 2 ♀ ♀ ad., October 24, 25, 1902.

"Iris sepia ('mars brown'), feet light slate, bill above blackish, 'below slate.'"


47. Calospiza gyrota (Linn.).


Ipousin, R. Appronague: 1 ♂ juv., December 29, 1902.

"Iris seal, feet slate-grey, bill blackish, drab at base of mandible." No. 12894.

[Cayenne (Sclater collection in Mus. Brit., Mus. H. v. B.).]

[48. Calospiza brasiliensis (Linn.)]


Cayenne (Sclater collection in Mus. Brit.).

The locality "Cayenne" is most probably erroneous.]

49. Calospiza mexicana (Linn.).

*Tanagra mexicana* Linn., *Syst. Nat.*, ed. xii. 1 (1766) p. 315 exel. syn. Hernand. [Cayenne ex Briss. née Mexico (Hernand.)].

*C. flavencrtris* autorum.

Cayenne: 1 ♂ ad., November 1; 1 ♂ ?, November 9, 1902; 2 ♂ ♂ juv., December 19, 1902.

"Iris seal, feet slate, bill black." Nos. 448, 649, 1151, 1152.

* Miller's description, although probably based on Daubenton's plate 301. fig. 1. (which clearly represents our species) is erroneous, and might have been intended for another species (for instance *C. punctata*).
Al. 72 1/2—72; caud. 53 1/2—50 1/2; culm. 11 1/2—10 1/2; tars. 17—15 1/2 mm.
[Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit.—coll. Deplanches, *fide* Bp.).]

50. *Tanagra episopus* Linn.


Cayenne: 3 ♂ ♀ ad., October 18, 29, November 28; 4 ♀ ♀ ♀ ♀ ad., October 17, November 27, 28, 29; 1 ♀ jr., November 3, 1902.

Approuague: 1 ♂ ad., December 17, 1902.


"Iris seal, feet plumbeous, bill above black, below plumbeous, dusky at tip."
Nos. 175, 186, 397, 482, 944, 954, 962, 971, 12742.
A female obtained November 27 was "breeding."
♂ ♀: al. 93 1/2—86 1/2; caud. 66 1/2—61 1/2; culm. 17—14 1/2; tars. 20 1/2—19 mm.
♀ ♀: al. 91—87; caud. 65 1/2—60 1/2; culm. 15 1/2—15 1/2; tars. 20 1/2—19 1/2 mm.

51. *Tanagra palmarum melanoptera* Sel.

[Tanagra palmarum* Wied, Reise Brasil. ii. (1821) p. 76 (typ. ex Brasil, merid. or. in *Am. Mus. N. H. New York*).

*Tanagra melanoptera* Sclater, *P. Z. S.* 1856. p. 235 (Eastern Peru, etc.).

Cayenne: 4 ♂ ♂ ad., October 10, 16, 29, November 3; 1 ♀ ad., November 3, 1902.

Approuague: 1 ♂ ad. and 1 ♀ ad., December 6, 1902. Nos. 24, 139, 395, 419, 480, 1019, 1920.

♂ ♂ ad.: al. 97—95 1/2; caud. 74 1/2—69 1/2; culm. 15 1/2—14 1/2; tars. 21 1/2—20 1/2 mm.
♀ ♀ ad.: al. 96—89 1/2; caud. 72 1/2—65 1/2; culm. 15 1/2—14 1/2; tars. 21 1/2—20 1/2 mm.

♀♂[52. *Tanagra ornata* Sprem.]

*Tanagra ornata* Sprem., *Mus. Carl. (1787) pl. 95; "Cayenne" (coll. Deplanches—*fide* Bp.).

This locality is probably erroneous.

53. *Ramphocelus carbo* (Pall.).

*R. junops* autornm.

Cayenne: 2 ♂ ♂ ad., October 22, November 2, 1902.
Ille le Père: 2 ♂ ♂ ad., October 23, 24, 1902.
Roche-Marie: 2 ♂ ♂ ad., November 6, 10, 1902.
Approuague: 1 ♂ ad., December 10, 1902.

"Iris hazel (seal), feet slate (blackish), bill blackish, plumbeous at base of mandible (above blackish, below greyish slate, dusky at tip)."
Nos. 283, 208, 466, 559, 677, 809, 1093.

♂ ♂ ad.: al. 83 1/2—77 1/2; caud. 82 1/2—70 1/2; culm. 18 1/2—16 1/2; tars. 20 1/2—19 1/2 mm.
[Cayenne (Sclater collection), Oiapoc (Salvin & Godman collection) in Mus Brit.—coll. Deplanches (*fide* Bp.).]

*Tanagra saira* Spix, Av. Bras. ii. (1825) p. 35. pl. 48. fig. 1 ♂ (loc. ignot.—habit. substit. Rio Janeiro).

Cayenne (coll. Deplanches—*fide* Bp.) an = *P. haemalea* Salv. & Godm. ?[.]

[55. *Cyanicterus cyanicterus* (Vieill.).


Cayenne (Mus. Brit.—Mus. H. v. B.).]

56. *Lanio atricapillus* (Gmel.).

*Tanagra atricapilla* Gmelin, Syst. Nat. ed. xiii. 1 (1788) p. 899 (ex Pl. Ent. 809. fig. 2.—Cayenne).

Iponsin, R. Approuagne: ♂ ad., December 30, 1902.

"Iris seal, feet dusky grey, bill above blackish, below dusky slate." No. 12913.


57. *Tachyphonus rufus* (Bodd.).


Cayenne: 3 ♂ ♂ ad., November 4, 5, 19; 4 ♀ ♂ adolesc. (with slight remains of rufous in the plumage) October 21, 29, November 2, 8, 1902.

He le Père: 1 ♀ ad., October 24, 1902.

Roche-Marie: 1 ♀, with nest and two eggs, November 12, 1902.

♂ ♀: "Iris seal, feet black, bill black, greyish at base of mandible."

♀ ♂: "Iris seal, feet slate, bill blackish slate, lighter at base of mandible."

Nos. 254, 376, 435, 508, 551, 622, 823, 314, 719.

♂ ♀ ad.: al. 88½—85½; caud. 83—77½; cnlm. 19½—18½; tars. 23½—22½ mm.

♀ ♂ ad.: al. 81—77½; caud. 74—72½; cnlm. 19½—18½; tars. 23½—23½ mm.

[Cayenne (Jelski leg., Salvin & Godman coll. in Mus. Brit.—coll. Deplanches (*fide* Bp.).]

[58. *Tachyphonus phoenicus* Sws.

*Tachyphonus phoenicus* Swainson, Anim. in Menag. (1838) p. 311 loc. ignot. coll. Horsfield, hab. substit. Peruv. or.).]

Cayenne (Mus. Brit.).

59. *Tachyphonus cristatus* (Linn.).


"Iris seal, feet slate-grey, bill above dusky, below pale greyish." No. 12904.

[Cayenne (Buff.), Salvin & Godman coll. in Mus. Brit., coll. Deplanches (*fide* Bp.).]
60. **Tachyphonus surinamensis** (Linn.).


Iponsin, R. Approuague: 1 ♂ ad., January 7, 1903.

“Iris seal, feet slate, bill black, slate-grey at base of mandible.” No. 13045.


[61. **Eucometis penicillata** (Spix).


Cayenne (Sclater collection in Mus. Brit.).]

62. **Nemosia pileata** (Bodd.).


Cayenne: 2 ♂ ♂ ad., November 22, and 1 ♀ ad., December 19, 1902.

“Iris lemon-yellow, feet dusky ochre-yellow, bill black.” Nos. 863, 864, 1144. ♀: “bill slate above, yellowish below.”

♂ ad.: al. 60—65; cand. 47^1/2—46^1/2; culm. 12^1/4; tars. 17^1/2 mm. ♀ ad.: al. 70; cand. 46^1/2; culm. 12^1/2; tars. 18^1/4 mm.

Cayenne (Buff.), coll. Deplanches (*fide* Bp.).]

[63. **Nemosia guira** (Linn.).


[64. **Nemosia flavicollis** Vieill.]


Cayenne (Sclater collection in Mus. Brit.).

Oyapoc (Salvin & Codman collection in Mus. Brit.).]

65. **Arremon silens** (Bodd.).


Iponsin, R. Approuague: 1 ♂ ad., December 30; 2 ♀ ♀ December 29, 1902, January 5, 1903.

Cayenne: 1 ♀ ad., November 26, 1902.

“Iris seal, feet dusky flesh-colour (grey), bill black.” Nos. 12914, 932, 12890, 13007.

♂: al. 74^1/2; cand. 66^1/2; culm. 13^3/4; tars. 25^1/2 mm.

♀ ♀: al. 72—68; cand. 60^1/2—56^1/2; culm. 13^3/4; tars. 24^1/2—23^1/2 mm.

[Cayenne (Sclater collection in Mus. Brit., Mus. H. v. B.); Oyapoc (Salvin & Godman collection in Mus. Brit.).]
[66. Saltator maximus (Müll.).


*S. magnus* autorum.

Cayenne (Sclater collection in Mus. Brit., in Mus. Vindob. ex Becoeur.)

[67. Lamprospiza melanoleuca (Vieill.).


Cayenne (Sclater collection in Mus. Brit.)

[68. Cissopis leveriana (Gmel.).


Cayenne (ex Latham).

[69. Schistochlamys atra (Gmel.).


Cayenne: 2 ♂♂ ad., November 15; 1 ♂, November 22; 1 ♀, November 29; 1 ♂ juv., November 15, 1902.

"Iris hazel, feet slate, bill basal half plumbeous, tip blackish." ♂ juv.:

"Iris sepia, feet slate-grey, bill dusky blackish, slightly paler below." Nos. 798, 799, 872, 860, 797.

♂♂ ad.: al. 59½ — 79½; caud. 75½ — 74½; culm. 15½; tars. 23 — 22½ mm.

[Cayenne (Sclater collection in Mus. Brit.—Mun. II, v. B.).]

[70. Pitylus grossus (Linn.).


Ipouzin, R. Appragnue: 1 ♂ ad., December 24, 1902.

"Iris seal, feet slate, bill poppy-red." No. 12784.

Al. 102; caud. 90½; culm. 20½; tars. 23½ mm.

[Cayenne (Sclater collection in Mus. Brit.—Mun. Vindob. ex Becoeur); Oyapoc (Salvin & Godman, coll. in Mus. Brit.).]

[71. Pitylus erythromelas (Gmel.).


Cayenne (Sclater collection in Mus. Brit.).]

[72. Pitylus canadensis (Linn.).


Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit.).]
74. Oryzoborus angolensis brevirostris subsp. n.

_Loxia angolensis_ Linn. _Syst. Nat._ ed. xii. i. 1 (1756) p. 303 (ex Edw.—"Angola"—errore!—habit substit. Ceara, Brazil').

_Oryzoborus torridus_ autornim._


Cayenne: 4 ♂ ♂ ad., November 15, 22, 24, 27, 1902.

Roche-Marie: 3 ♂ ♂ ad., November 5, 10, 12; 2 ♀ ♂ ad., November 8, 13; ♂ imm., November 11, 1902.

"Iris dark chestnut, feet blackish (' slate '), bill black."

♀ ♂: "bill above black, pale at base below." ♂ imm.: "Iris dusky."

♂ ♂ ad.: al. 60½—56½; cand. 56½—53; culm. 14½—13½; tars. 16½—15½ mm.

♀ ♂ ad.: al. 56; cand. 51; culm. 14½—14½; tars. 15½—15½ mm.

Nos. 537, 675, 720, 795, 862, 885, 948, 632, 706, 749.

The "Black Gros-Beak" of Edwards is the base for _Loxia angolensis_ Linn. In _Nov. Zool._ ix. 1902. p. 25, Berlepsch and Hartter have substituted "Surinam" as the typical locality for this species, which Edwards believed to have come from Angola. Nevertheless it now appears to me that Edwards' bird must have come from Brazil, and consequently I have substituted "Ceara, Brazil" as the typical locality for it. In fact, there are other cases where Edwards says that his birds have come from the "Portuguese Settlements" on the coast of Angola, while in reality they were of Brazilian origin (as in the case of _Guiraca cyanea_). Also Edwards' figure looks more like the thick billed Brazilian form of this species.

Cayenne specimens as well as those from British Guiana, Upper Amazon and Colombia differ from the birds coming from Bahia and Rio, in having a much shorter and altogether smaller bill. It also seems to me that northern birds, as a rule, have the abdomen of a somewhat darker chestnut, and have the whitealar speculum less extended. But these differences are not constant, I think.

* The following _Fringillidae_, not yet mentioned from Cayenne, are likely to be found there:

1. _Oryzoborus erasius_ (Gmel.), Brit. Guiana—Pará (Snethtlage).
3. _Sporophila plumbea_ (Wied), Brazil (Pará) or _S. plumbea whitelyana_ Slarpe. Brit. Guiana.
5. _Sicalis flavolus_ (Linn.), Brit. Guiana—Bahia.
75. Sporophila grisea (Gmel.).


Cayenne (Selater collection in Mus. Brit.).]

76. Sporophila minuta (Linn.).


Cayenne: 8 ♂ ♂, October 21, 28, November 1 (two), 2 (two), 15, 19; 2 ♀ ♀ ad., October 22, November 2, 1902.

Roche-Marie: 2 ♂ ♂ ad., November 6 (two); 3 ♂ ♂ juv., November 6, 11, 12, 1902; 1 ♀ ad., November 12, 1902.

"Iris seal, feet black, bill black." 1 ♂ juv.: "Iris dark chestnut." ♀ ♀ and ♂ ♂ juv.: "Feet slaty grey, bill above blackish, below dusky" (" pale at base")


♂ ♂ ad.: al. 52½—49; caud. 44—39½; culm. 9½—8½; tars. 14½—13½ mm.

♀ ♀ ad.: al. 52—48; caud. 43—39½; culm. 9½—9½; tars. 13½ mm.

These birds agree with a ♂ ad. from Surinam in Mus. H. v. B.

[Cayenne (Selater collection in Mus. Brit., coll. Deplanches—Bp.).]

77. Sporophila castaneiventris Cab.


Cayenne (fide Bonaparte).]

78. Sporophila americana (Gmel.).


Cayenne (Becoeur in Mus. Vindob., Mus. Hein.).]

79. Sporophila misya (Vieill.).


*S. lineata* autorum.*

Cayenne: 6 ♂ ♂ ad., October 14, 18, 22, 29, November 2; 5 ♂ ♂ juv., October 16 (two), 18, 22 (two), November 29 (two); 3 ♀ ♀ ad., October 22 (two), 31, November 8, 1902.

Ile le Père: 2 ♂ ♂ ad., October 25 (two), 1902.

Roche-Marie: 1 ♂ ad., November 5; 1 ♀ ad., November 8, 1902.

"Iris seal, feet blackish, bill black." 1 ♂ juv.: "Iris dark chestnut, feet slate, bill blackish."


♂ ♂ ad.: al. 50—50; caud. 50½—45; culm. 11½—10½; tars. 15½ mm.

♀ ♀ ad.: 56½—55½; caud. 47—46½; culm. 12½—11½; tars. 16½—15½ mm.

[Cayenne (Selater coll. in Mus. Brit., Mus. H. v. B.).]

* I think it impossible to recognise *Loxia lineata* Gmel. (ex Latham), described from a living bird with a "white bill."
80. **Sporophila lineola** (Linn.).


Cayenne: 9♂♂♂ ad., October 31, November 2, 3, 4 (three), 1902.

Jacoche-Marie: 4♂♂♂ ad., November 6 (three), 12; 1♀♀♀♀ ad., November 12, 1902.

♂♂♂ ad.: “Iris dark chestnut, feet dusky slate, bill black.” ♀♀♀♀: “Iris chestnut, feet slate, bill above olive, below olive-yellow.”

Nos. 419, 470, 486, 514, 513, 529, 574, 575, 576, 728, 788, 993, 729.

♂♂♂ ad.: al. 60 1/2—60 3/4; caud. 48—55 1/2; culm. 9 1/2—8 1/2; tars. 14 3/4—13 3/4 mm.

♀♀♀♀ ad.: al. 52 1/2; caud. 43 1/2; culm. 8 1/2; tars. 13 3/4 mm.


81. **Volatinia jacarina** splendens (Vieill.).

_Tamagra jacarina_ Linne, _Syst. Nat._ ed. xii. i. 1 (1766) p. 314 (Brasilia)]


Cayenne: 3♂♂♂♂ ad., October 17, 18, 10; 3♂♂♂♂ hormot., October 13, 17, November 15; 1♀♀♀♀ ad., October 11; 3♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♡
[85. Spiza americana (Gmel.).
Cayenne (Mns. Brit.).]

[86. Coryphospingus cucullatus (Müll.).
Cayenne (Buffon).]

[87. Paroaria gularis (Linn.).

[88. Paroaria nigrogenys (Lafr.).
Cayenne (Sclater collection in Mus. Brit.).]

**Family ICTERIDAE.*

[89. Xanthornus decumanus Pall.
Cayenne (coll. Deplanclies, fide Bp.).]

[90. Xanthornus viridis (Müll.).
Iponsin, R. Approuagne: 3 ♀♀ ad., December 29 (three), 1902.
“Iris azure blue, feet black, bill basal half pea-green, distal half orpiment orange.”
Nos. 12898, 12897, 12896.
♀♀: al. 201½—186; caud. 140—132; culm. 53—46½; tars. 46—42½ mm.
[Cayenne (Mns. Brit.), coll. Deplanclies (fide Bp.).]

91. Cacicus cela (Linn.).
C. persicus autorum.
Approuagne: 5 ♂♂♂ ad., December 6, 10 (two), 11, 12; 5 ♀♀ ad., December 9, 10, 13, 17, 18 (two), 1902. Roche-Marie; 1 ♂ ad., November 8, 1902.
“Iris pale blue, feet black, bill primrose-yellow.”
Nos. 1101, 1134, 635, 1111, 1026, 1100, 1082, 1099, 12766, 1276, 12743.
♂♂: al. 160½—151½; caud. 106—102; culm. 39½—35½; tars. 32½—31½ mm.
♀♀: al. 131½—128; caud. 92½—90½; culm. 32½—30½; tars. 25½—26½ mm.
[Cayenne (Salvin & Godman collection in Mus. Brit., coll. Deplanclies (Bp.).]

* The following Icteridae, not yet recorded from Cayenne, are likely to be found there:
[92. Cacicus haemorrhous (Linn.).


Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit., Mus. Philada.).]

[93. Cassidix oryzivora (Gmel.).

Oriolus oryzivorus Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 386 (ex Lath.—typ. ex Cayenne).

Cayenne (Latham).]

[94. Dolichonyx oryzivorus (Linn.).


Cayenne (Sclater coll. in Mus. Brit., Mus. Philada.).]

[95. Molothrus bonariensis atronitens Cab.

[Taxa nova bonariensis Gmelin, Syst. Nat. ed. xii. i. 1 (1778) p. 898. ex Buff. hab. in "Bonaria" (Argentina.).]


Cayenne: 1 ♂ ad., October 10, 1902. "Iris seal, feet black, bill black.”

No. 25.

Al. 100; cand. 72 1/4; culm. 19; tars. 26 1/4 mm.

[Oyapoc, Cayenne (Jelski leg.).]

[96. Agelaeus ictercephalus (Linn.).


Cayenne: 2 ♂♂ ad., October 11 (two); 5 ♀♀ ad., October 11 (two), November 28 (two), December 17, 1902.

♂♂: "Iris seal, feet black, bill above black, below dusky plumbeous.”

♀♀: "Iris seal, feet dusky (‘slate black’), bill dusky (‘slate black’).”

Nos. 70, 71, 68, 69, 963, 964, 1149.

♂♂: al. 84–83; cand. 65–64 1/4; culm. 19 1/4; tars. 24 3/4 mm.

♀♀: al. 79 1/4–71; cand. 62 1/2–56; culm. 17 1/2–16 1/2; tars. 23 1/4–22 1/4 mm.

[97. Agelaeus frontalis Vieill.


[98. Leistes militaris (Linn.).


Cayenne (Salvin & Godman collection and Sclater collection in Mus. Brit.).]

[99. Leistes superciliaris (Bp.).

Trupialis superciliaris Bonaparte, Cons. Ac. i. (1850) p. 430 ("Mexico"—errore ! habit. substit. Mattogrosso (Natt.).

Cayenne (Mus. Philada.).]
Gymnonystax mexicanus (Linn.).


G. melanotus antiquum

Cayenne (Mus. Philada.).]

[101. Icterus chrysocephalus (Linn.).


Cayenne (Sclater collection in Mus. Brit., Mus. Philada.).]

[102. Icterus cayanensis (Linn.).


[103. Icterus xanthornus (Gmel.).


Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit., Mus. Philada.).]

[104. Quiscalus lugubris Sws.


Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit.).]

Family CORVIDAE.

[105. Cyanocorax cayanus (Linn.).

Cyanocorax cayanus Linn., Syst. Nat. ed. xii. 1. (1766) p. 157 (ex Briss. hab. in “Cayana”).

Cayenne (Bris., Sclater collection in Mus. Brit.).]

Family TYRANNIDAE.*


Cayenne (Sclater collection and coll. Rothery in Mus. Brit.).]

* The following species of Tyrannidae, not yet recorded from Cayenne, are likely to occur there:

[107. **Fluvicola pica** (Bodd.).


Cayenne (Sclater collection and Jardin coll. in Mus. Brit.—Mus. H. v. B.).]

[108. **Arundinicola leucocephala** (Linna.).


Cayenne (Sclater collection in Mus. Brit.).]

[109. **Ochthornis littoralis** (Pelz.).


Oyapoc (coll. Jelski in Sclater collection, Mus. Brit.).]

[110. **Muscicora tyrannus** (Linna.).


Cayenne (fide Brisson & Vieillot, *Ois. Am. Sept.*).

111. **Tyrannus dominicensis vorax** Vieill.

[Tyrannus tyrannus *β dominicensis* Gmelin, *Synt. Nat. ed. xiii.* i. 1 (1788) p. 392 (ex Brisson typ. ex "S. Domingo").]


*Tyrannus rostratus* Sel. 1864.

Cayenne: 1 ♂ ad., November 18, 1 ♀ ad., October 16, 1902.

"Iris seal, feet black, bill black.” Nos. 141, 813.

♂: al. 115; caud. 93½; culm. 30½; tars. 19½ mm.

♀: al. 114; caud. 92½; culm. 31½; tars. 19¾ mm.

These specimens agree perfectly with my skins from Grenada, Sta. Lucia, and Dominica.

M. Sclater, when describing his *T. rostratus*, gave the habitat as "in ins. Trin. et in Guiana," but afterwards he changed the habitat of his specimen into "Martinique (?)".

112. **Tyrannus melancholicus** Vieill.


Cayenne: 2 ♂♂ ad., October 10, 21, 1902; 1 juv. without date.

♂♂: al. 111—109; caud. 98—93½; culm. 25½—24½; tars. 17¼—16½; caud. finca 17—15 mm.

Nos. 22, 236, 824.

Cayenne birds agree perfectly with specimens from Bahia, Brazil. Specimens from Southern Brazil (Sta. Catharina, Rio Grande do Sul) and Argentina as a rule are larger, have the throat of a darker ashy grey and the upper breast darker greenish.

[Cayenne (coll. Deplanches—*fide* Bp.).]

[113. **Empidonanus varius** (Vieill.).


Cayenne (Mus. Vindob. ex H. Becoeur).]
114. *Legatus albicollis* (Vieill.).


Cayenne: 4 ♀♂ ad., November 23, 26, 28, 29, 1902; 1 ♀ November 25, 1902, "nesting."

Tortue, R. Appronague: 1 ♀ ad., January 12, 1903.

"Iris seal, feet black, bill black."

Nos. 906, 907, 933, 961, 987, 13068.

♂ ♀: al. 52¹/₂—78¹/₂; cand. 69¹/₂—56¹/₂; culm. 12¹/₂—11¾; tars. 15¹/₂—14¹/₂ mm.

♀ ♀: al. 75; cand. 55; culm. 11½; tars. 13¾ mm.

Specimens from Cayenne agree perfectly with others from British Guiana, Chiraca (Orinoco), Orinoco-Delta, Bogota collections, Upper Amazons and Veragua, while the birds from Bahia and S. Paulo have a little longer wings and tails. Specimens from Guatemala are the same as those from Brazil, but the birds from Mexico (*L. albicollis curieguatii* Scel.) are much larger.

[Cayenne (Buffon, Sclater collection in Mus. Brit.).]

115. *Myiodynastes maculatus* (Müll.).


*M. audax* autorum,

Cayenne: 2 ♀♂ ad., October 29, December 17; 1 ♀ ad., October 16; 1 ♀ juv. (moulting), December 19; 1 ♀ juv. (moulting), December 18, 1902.

"Iris seal, feet slate, bill blackish, pale at base of mandible."

Nos. 138, 381, 1146, 1147, 1148.


♂ ♀: al. 107¹/₂—106¹/₂; cand. 85¹/₂—83¹/₂; culm. 22²/₄—22¹/₂; tars. 18¹/₂—18½ mm.

♀ ♀: al. 101¹/₂—99¹/₂; cand. 83¹/₂—76; culm. 23¹/₄—22¹/₂; tars. 18¹/₂—18½ mm.

116. *Megarhynchus pitangua* (Linn.).


Cayenne: 1 ♀ ad., October 18, 1902.

"Feet blackish, bill black."

No. 184.

The internal crest is yellow (as in the male), not rufous.

117. *Coryphotriccus parvus* (Pelz.).


Cayenne: 1 ♀ very young, December 16, 1902. No. 1143.

[Oyapoc (Sclater collection in Mus. Brit.).]

118. *Pitangus sulphuratus* (Linn.).


Cayenne: 1 ♀ ad., November 19; 2 ♀♀ ad., October 22, December 4, 1902.

Appronague: 3 ♀♂ ad., December 8, 17, 19; 1 ♀ ad., December 11, 1902.

"Iris dark chestnut (1 ♀: 'seal'), feet black ('slate-black'), bill black."

Nos. 268, 825, 1908, 1002, 1118, 12750, 12779.
119. Pitangus lictor (Licht.).

_Lanina lictor_ Lichtenstein, _Verz. Doubll._ (1823) p. 49 (ex "Para"—typ. in Mus. Berol.).

(Cayenne (Mus. Hein.—Heine & Reichenow).]

120. Myiozetetes cayanensis (Linn.).

_Muscicapa cayanensis_ Linne, _Syst. Nat._ ed. xii. 1 (1788) p. 327 (ex Briss.—typ. ex Cayenne).

Cayenne: 2 ♂♂ ad., 19, 21 November; 2 ♀♀ ad., October 17, December 2, 1902.

Roche-Marie: 4 ♂♂ ad., November 5, S, 10 (bis); 1 ♀ ad., November 11, 1902.

"Iris seal, feet black, bill black."

Nos. 174, 549, 660, 826, 834, 999.

♂♂ ad.: al. 89—83; caud. 74—67; culm. 16—14; tars. 18—17 mm.

♀♀ ad.: al. 85—82; caud. 69—65; culm. 15—14; tars. 19—17 mm.

[Cayenne (Mus. Brit., Mus. Heim.).]

[121. Myiozetetes luteiventris (Sel.).

_Elaenia luteiventris_ Salter, _P. Z. S._ 1858. p. 71 (typ. ex "Upper Rio Napo, Prov. Quixos, Ecuador").

Oyapoc, Cayenne (Slater collection in Mus. Brit.).]

122. Tyrannopsis sulphureus (Spix).


Cayenne: 1 ♂ ad., November 24, 1902.

Approuague: 1 ♀ ad., December 6, 1902.

"Iris seal, feet slate, bill black." Nos. 889, 1030.

♂: al. 111; caud. 82; culm. 19; tars. 20 1/2 mm.

♀: al. 105 1/2; caud. 76 1/2; culm. 19 1/2; tars. 20 1/2 mm.

[Cayenne (Mus. Brit.).]

123. Myiarchus tyrannulus (P. L. S. Müller).


Cayenne: 1 ♂ ad., November 27; 4 ♂♂ in much worn plumage (partly moulting), October 27, 28 (two), November 14; 2 ♀♀ ad., October 11, 28, 1902.

"Iris seal (1 ♀ 'Vandyke'), feet slate ('slate-black,' 'dusky grey'), bill black ('blackish,' black, dusky at base of mandible)."


♂♂ ad.: al. 96—89 1/2; caud. 88 1/2—83 1/2; culm. 20 1/2—19 1/2; tars. 21 1/4—19 1/4 mm.

♀♀ ad.: al. 89 1/2—86 1/2; caud. 82—79 1/2; culm. 20 1/2—19 1/4; tars. 21 1/4—19 1/4 mm.

[Cayenne (coll. Jelski in Slater collection, Mus. Brit.).]
124. Myiarchus ferox (Gmel.).


Cayenne: 1 ♂ ad., November 4; 1 ♀ ad., November 27, 1902.
Roche-Marie: 1 ♂ ad., November 10; 1 ♀ ad., November 10, 1902.
Approquane: 4 ♂♂ ad., December 9, 15, 16, 18; 1 ♀ ad., December 9, 1902.
Ile le Père: 1 ♂ ad., October 24; 1 ♀ ad., October 25, 1902.

"Iris seal (‘hazel,’ ♀♀, ‘vandyke-brown’), feet slate (‘blackish,’ ‘dusky grey’), bill black (‘black, dusky at base of mandible’)."

Nos. 313, 329, 500, 669, 670, 940, 1008, 1069, 12723, 12741, 12767.

♂♂ ad.: al. 88—85; cand. 89½—85; culm. 21½—19½; tars. 21½—20½ mm.
♀♀ ad.: al. 86½—82; cand. 87½—82½; culm. 20½—19½; tars. 21½—20 mm.


125. Myiarchus pelzelni Berl.


Oyapoc (Selater collection in Mus. Brit.).]

? [126. Myiochanes cinereus (Spix.).


Cayenne (coll. Deplanches—†ide Bp.).]

127. Myiochanes brachytarsus andinus (Tacz).

[Contopus brachytarsus Selater, Ibis 1859, p. 441 (typ. ex Cordova, Mexico, Sallé leg. in Mus. Brit.).]

Contopus andinus Taczanowski, P. Z. S. 1874, p. 539 (typ. ex Junin, C. Peru, Jelski leg., in Mus. Varsov.).


Cayenne: 4 ♂♂ ad., October 10, 14, 16, December 2; 4 ♀♀ ad., October 10 (two, one had egg in oviduct), 14, 16; 1 ♂ juv., October 20, 1902.

"Iris seal, feet blackish, bill above black, below pale buffy yellowish, dusky at tip (‘yellowish with dusky tip below’)."

♂ juv. "Iris seal, feet slate, bill above blackish, below pale."

Nos. 34, 35, 48, 126, 127, 146, 147, 236, 1902.

♂♂ ad.: al. 71½—70½; cand. 63—61½; culm. 14—12½; tars. 13½—12½ mm.
♀♀ ad.: al. 68½—66½; cand. 59—55; culm. 12½—11½; tars. 13½—11½ mm.

Specimens from Cayenne agree nearly perfectly with an adult bird from Callacate, N. Peru (coll. J. Stolzmann), which I think must be true andinus Tacz. described from Junin, C. Peru. The Callacate bird only differs in having the wings and the tail a little longer. There is no difference between the Cayenne birds and two skins from Puerto Cabello, Venezuela, in Mus. H. v. B.

Specimens from Guayaquila, W. Ecuador (M. b. pusenensis Lawr.), differ in having a much more elongated bill and in presenting very well-defined and broad white wing-bands on the upper wing-coverts.
A specimen from Vera Paz, Guatemala, which I take to be true *M. brachytarsus*, differs from all the last-named birds in having the pilum of a much browner and the back of a more greenish shade (less blackish on the head and less greyish on the back), and in having the middle line of the breast of a pure yellowish white with no greyish suffusion, the sides of the breast being also more brownish, less greyish. A Bogotá skin seems to agree best with the bird from Guatemala.

As far as I can see, Bonaparte's description of his *Planchesia fuliginosa*, based on specimens collected in Cayenne by M. Deplanches, agrees with Cherrie's specimens; nevertheless an examination of the type-specimen in the Museum at Caen is most desirable. In the case that *Planchesia fuliginosa* Bp. is identical with our species, the generic term *Myiochanes* Cab. & Heine would become a synonym of *Planchesia* Bp.

*Muscicapa fuliginosa* Gmel. ex Pl. Enl. 574. f. 1 (= *Muscicapa arausia* P. L. S. Mül.) seems to be quite a different bird. At least I am unable to recognise our *Myiochanes* in the "Gobe-mouche brun de Cayenne" of Buffon and Daubenton.

128. **Empidochanes fuscatus fumosus** subsp. n.


*E. E. fuscatus* (Wied) affinis differt corpore superiore fumoso vel nigrescenti-brunneo, nec rufescenti-brunneo, fasciis alarum angastioribus rufescenti-olivaceis, nec clare rufis, nee non mandibula nigrescentiore.


Cayenne: 1 δ ad., November 14; 1 ? ad., October 20, 1902.

Approuague: 2 δ δ ad., December 11, 19; 2 ? ? ad., December 8 (two); 1 δ juv. December 9, 1902.

“Iris seal, feet blackish (‘slate-grey’); bill black (‘slate, blackish, pale at base of mandible’).”

Nos. 227, 765, 1033, 1055, 1117, 12773, 1084.

δ δ : al. 67 1/2—69; caud. 68—66; culm. 15 1/2—14 1/2; tars. 17 1/2—16 1/2 mm.

♀ ♂ : al. 63—62; caud. 61 1/2—60 1/2; culm. 14 1/2—14 1/2; tars. 17 1/2—16 1/2.

The **Empidochanes** from Cayenne has the upper parts of a very dark coloration, being blackish brown or smoke-brown instead of rufous-brown as in true *E. fuscatus* from Bahia. The mandible is also darker, more blackish than in *E. fuscatus*. The rufous wing-bands are generally narrower and darker, more olivaceous rufous-brown instead of clear rufous-brown.

Specimens from Pará agree perfectly with the Cayenne birds, while specimens from the Upper Amazons (Yquitos) and from Alta Gracia on the Orinoco differ in having the abdomen nearly white, but slightly tinged with yellowish. In this way they agree with *E. f. bimaculatus* (Laf. & D’Orb.) from Bolivia and Mattogrosso, but have the upper parts much darker, just as in the Cayenne bird.

*E. f. cabanisi* (Léot.) from Trinidad, coast region of Venezuela and Colombia (Bogota collections), has the upper parts of a much clearer olivaceous-brown. It agrees with *E. f. fumosus* in having a blackish mandible.

129. **Myiobius barbatus** (Gmel.).


Ipousin, R. Approuague: 2 δ δ ad., December 31, 1902, January 5, 1903.

“Iris seal, feet grey, bill above black, below pale.”
Nos. 12928, 13010.
♂♂ ad.: al. 63 1/2, 62 1/2; caud. 55 3/4, 55; culm. 11 1/2, 9 1/2; tars. 15 1/2 mm.
[Oiapoc, Cayenne (Sclater collection in Mus. Brit.).]

130. Myiophobus fasciatus (Müll.).


Cayenne: 2 ♂♂ ad., October 14, November 4; 2 ♀♀ ad., November 28, December 2, 1902.

Roche-Marie: 1 ♀ ad., November 5, 1902.

“Iris seal, feet blackish, bill above black, below dusky at tip, pale at base (‘above black, dusky pale below’).” ♀♀, “bill blackish.”

Nos. 110, 512, 540, 986, 998.

♂♂ ad.: al. 58, 57 3/4; caud. 52 1/2, 51 1/2; culm. 12 1/2, 11 1/2; tars. 15 3/4 mm.

♀♀ ad.: al. 56 1/2—55; caud. 51 1/2—48 1/2; culm. 11—10 1/2; tars. 15 1/2—14 1/2 mm.

[Cayenne (coll. Jelski, Salvin & Godman collection in Mus. Brit.).]

131. Terenotriccus erythrurus (Cab.).


Iponsin, R. Approuague: 1 ♂ ad., January 6, 1903.

“Iris seal, feet slate-grey, bill above dusky, below pale.” No. 13033.

Al. 50 1/2; caud. 40 1/2; tars. 14 1/2 mm.

This bird agrees with a specimen from Camacuna, Brit. Guiana (coll. Whiteley), in Mus. H. v. B.

[Cayenne (in Mus. Berol.—*vide* Cab. et Licht.).]

[132. Hirundinea ferruginea (Gmel.).


Cayenne (Latham).]

[133. Onychorhynchus coronatus (Müll.).


Cayenne (Mus. Brit.), Oiapoc (Salvin & Godman collection in Mus. Brit.).]

134. Rhynchocyclos sulphurescens (Spix) subsp. ?


Cayenne: 6 ♂♂ ad., October 18, 20, November 26, 27 (two), December 2, 1902.

Roche-Marie: 1 ♂ ad., November 7, 1902.

“Iris greyish (‘grey, pale greyish, drab’), feet slate-grey (‘grey’), bill above black, below pale (‘below pale, nearly flesh-colour’).”

Nos. 191, 224, 591, 923, 650, 952, 1001.

♂♂ ad.: al. 65 1/2—60 1/2; caud. 57—50 1/2; culm. 13 1/2—12 1/2; tars. 17 3/4—16 1/2 mm.

This species had not yet been recorded as being found in Cayenne. Specimens from S. Paulo, S. Brazil, have longer wings and tail, and present a somewhat brighter green on the back.
135. Rhynchocyclus poliocephalus sclateri Hellm.


♂ ♂ ad.: al. 55—54\(\frac{1}{2}\); can. 48; culm. 10\(\frac{1}{2}\); tars. 16\(\frac{1}{2}\)—15\(\frac{1}{2}\) mm.

Hellmayr affirms that specimens from Guiana agree with his type from Barra do Rio Negro.

[136. Ramphotrigon ruficauda (Spix).]


Cayenne (Sclater collection in Mus. Brit.).]

137. Platyrinchus saturatus Salv. & Godm.


Iponsin, R. Approuague: 1 ♂ ad., January 2, 1903.

"Iris seal, feet pale greyish flesh, bill black, cutting edge of mandible pale." No. 12074.

Pt. saturatus is new to the fauna of Cayenne.


Oyapoc, Cayenne (Sclater collection in Mus. Brit.).]

139. Todirostrum cinereum (Linn.).


Cayenne: 1 ♀ ad., November 1, 1902.

Roche-Marie, Cayenne: 2 ♂ ♂ ad., November 7, 11; 1 ♀ ad., November 12, 1902.

Approuague: 4 ♂ ♂ ad., December 6 (two), 9, 11; 2 ♀ ♀ ad., December 6, 12, 1902.

"Iris lemon-yellow, feet slate-grey, bill above black, below pale ('pale at base of mandible')."

Nos. 108, 439, 605, 708, 727, 1023, 1024, 1025, 1119, 1133.

♂ ♂ ad.: al. 45—41\(\frac{1}{2}\); can. 36—30\(\frac{1}{2}\); culm. 15\(\frac{1}{2}\)—13\(\frac{1}{2}\); tars. 18\(\frac{1}{2}\)—17\(\frac{1}{2}\) mm.

♀ ♀ ad.: al. 43\(\frac{1}{2}\)—41\(\frac{1}{2}\); can. 35\(\frac{1}{2}\)—31\(\frac{1}{2}\); culm. 15\(\frac{1}{2}\)—14\(\frac{1}{2}\); tars. 18\(\frac{1}{2}\)—17\(\frac{1}{2}\) mm.

[Cayenne (Mus. H. v. B., Mus. Hein.).]

140. Todirostrum maculatum (Desm.).


Cayenne: 4 ♂ ♂ ad., October 11 (two), 20, November 4; 1 ♂ jr., October 10; 3 ♀ ♀ ad., October 10, 11 (two); 1 ♀ jr., October 11, 1902.

Roche-Marie: 4 ♂ ♂ ad., November 6, 7, 10, 12, 1902.
Ile le Père : October 23 (two), 1902.

"Iris lemon-yellow (ad., Ile le Père, 'orange'), feet plumbeous grey, bill black ('pale at base of mandible'), tip and base of mandible whitish ('pale'), below black, edges whitish ; ♂ jr., No. 726, 'above black, below pale.'"

Nos. 32, 36, 51, 52, 53, 54, 55, 243, 296, 299, 519, 580, 604, 681, 726.

♂ ♂ ad. : al. 47 1/2—44; cand. 37 1/2—32 1/2 ; culm. 15 1/2—13 1/2 ; tars. 17 1/2—16 1/2 mm.
♀ ♂ ad. : al. 46—43 1/2 ; cand. 37 1/2—31 1/2 ; culm. 15 1/2—14 1/2 ; tars. 17 1/2—16 1/2 mm.

[Cayenne (Schater collection in Mus. Brit.—coll. Deplanches, fide Bp.).]

[141. Todirostrum fumifrons penardi Hellm.


St. George, Oyapoc, Cayenne (coll. Jelski—Schater collection in Mus. Brit.).]

142. Idioptilon rothschildi Berl.


Iponsin, R. Apprognague, January 8, 1903.

"Iris pale yellowish." No. 8057.

Al. 51 ; cand. 45 ; culm. 11 1/2 ; tars. 15 1/2 mm.

143. Lophotriccus spicifer (Lafr.).


Iponsin, R. Apprognague : 1 ♂ ad., December 26, 1902 ; 1 ♀ jr., January 1, 1903.

"Iris lemon-yellow (♀, 'straw-yellow'), feet greenish flesh (♂, 'grey'), bill black, pale at base of mandible."

Nos. 12836, 12949.

♂ ad. : al. 46 1/2 ; cand. 38 1/2 ; tars. 15 1/2 mm.
♀ ad. : al. 42 1/2 ; cand. 32 1/2 ; culm. 10 1/2 ; tars. 13 1/2 mm.

*L. spicifer* resembles very much *Colopteryx galeatus*, but differs at a glance by having the greater and middle wing-coverts and the tertaries broadly margined by yellowish white, while they are quite uniform green in *Colopteryx*. Also the former never shows the curious reduction in size of the three first primaries, these being of the normal shape in *L. spicifer*.

There is also a specimen of *L. spicifer* in the Mus. H. v. B., which was collected by M. C. Jelski at St. Laurent, Cayenne, December 24, 1868. The Cayenne birds agree generally with a specimen from Yurimaguas (Huallaga) in Mus. H. v. B.

144. Colopteryx galeatus (Bodd.).


Cayenne : 3 ♂ ♂ ad., November 14, 24, 27 ; 2 adults without indication of sex, November 7, 25 ; 1 ♀ with moulting primaries, November 7, 1902.

Roche-Marie : 2 ♂ ♂ ad., November 11, 12, 1902.
"Iris lemon-yellow ('seal'), feet greyish ('blackish, greyish flesh'), bill black, pale at base of mandible."

Nos. 592, 703, 712, 737, 763, 858, 901, 938.

♂♂ ad. : al. 47–46½; can. 44½–38½; culm. 10½–9½; tars. 15½–13½ mm.

[Cayenne (Buff)—Sclater collection and coll. Jelski in Salvin & Godman collection, Mus. Brit.]

145. Capsiempis flaveola (Licht.).

Muscieapa flaveola Lichtenstein, Doubl. Verz. (1823) p. 56 (typ. ex Bahia in Mus. Berol.).

Approuagne : 1 ♂ ad., December 10, 1902.

"Iris seal, feet slate-grey, bill black, horny buff at base of mandible."

No. 12776.

Al. 47½; can. 49; culm. 10½; tars. 16½ mm.

[Cayenne (Sclater collection in Mus. Brit.).]

This bird, while otherwise agreeing with topotypical specimens from Bahia, has a longer and stronger bill, and perhaps should be called C. magnirostris Hart.

146. Elaenia flavogaster (Thunb.).


E. pagami autorum.

Cayenne: 6 ♂♂ ad., October 9, 10 (two), 14, November 8, 26; 1 ♂ with moulted tail-feathers October 13; 2 ♀♀ ad., October 15, 20, 1902.

Roche-Marie: 2 ♂♂ ad., November 8, 11, 1902.

Approuagne : 1 ♀ ad., December 11, 1902.

Ile le Père : 1 ♀ ad., October 24, 1902.

"Iris seal ('dusky'), feet dusky plumbeous ('slate-grey'), bill blackish, pale at base of mandible ('dusky pale at base of mandible,' dusky blackish, pale at base of mandible')."

Nos. 19, 20, 21, 92, 109, 142, 225, 311, 623, 641, 630, 917, 1122.

♂♂ ad. : al. 82–76; can. 72½–66½; culm. 11½–11; tars. 19½–18½ mm.

♀♀ ad. : al. 76½–74½; can. 70–68; culm. 11½–11½; tars. 20½–18½ mm.

There is no difference between Cayenne specimens and others from Bahia and Rio.


147. Elaenia cristata Pelz.

Elaenia cristata Pelzeln, Orn. Bras. (1868) pp. 107, 177 (descr. specim. ex Goyaz, typ. in Mus. Vinob.).

Cayenne: 1 ♂ ad., October 21; 1 ♂ ad. in much-worn plumage, November 28; 3 ♀♀ ad., October 21, 28, November 15, 1 ♂ juv., November 15, 1902; and 1 ♀ very young, October 13, 1902.

"Iris seal ('dusky', 'chestnut,' twice in ♀♀), feet slate ('dusky plumbeous'), bill blackish, pale at base of mandible ('dusky, pale at base of mandible')."

Nos. 102 (very young), 245, 246, 375, 773, 774, 955.

♂♂ ad. : al. 66½, 65; can. 58½, 53½; culm. 12½, 11½; tars. 18½, 17½ mm.

♀♀ ad. : al. 63½–64½; can. 57½–55½; culm. 12½–11½; tars. 18½–17½ mm.

Cayenne specimens agree with examples from Bahia in Mus. H. v. B.


*E. albivertex* autorum.

Cayenne: 4 ♀♂ ad., October 13, November 10, 24; 1 ♀ ad. in much-worn plumage and moulting, November 13, and 1 ♂ in worn plumage, November 26, 1902.

"Iris seal, feet slate ('slate black,' 'dusky'), bill blackish, pale at base of mandible" ("dusky, pale at base of mandible").

Nos. 103, 815, 819, 822, 880, 930.

♀♂ ad.: al. 793—713; caud. 69½—59; culm. 114—94; tars. 164—154 mm.

♀♀ ad.: al. 69½; caud. 59½; culm. 104½; tars. 15½ mm.

[Oyapoc (coll. Jelski in Mus. Vindob.)? Cayenne (Selater coll. in Mus. Brit.).]

149. *Elaenia gaimardi guianensis* Berl.


Cayenne: 4 ♀♂ ad., November 1, 26, 27, December 2; 3 ♀♀ ad., October 20, 31, November 1, 1902.

"Iris seal (1 ♀ 'deep sepia'), feet slate ('slate black,' 'slate grey'), 'bill black' (blackish), 'blackish, pale at base of mandible'."

Nos. 221, 420, 438, 440, 921, 949, 991.

♀♂ ad.: al. 62½—59½; caud. 61½—52; culm. 103—10½; tars. 18½—16½ mm.

♀♀ ad.: al. 55½—55½; caud. 49—47½; culm. 10½—9½; tars. 15½—15½ mm.

The Cayenne specimens agree with those from Brit. Guiana.

[Cayenne (Selater collection in Mus. Brit.—coll. Deplanches—fide Bp.).

Oyapoc (Mus. Brit.).]

150. *Elaenia flavivertex* Scel.


*Rocho-Mariá :* 1 ♀ ad., November 7, 1902.

"Iris vandyke brown, feet slate-grey, bill above black, below slate, pale at base." No. 590.

Al. 62½; caud. 60; culm. 10½; tars. 17½ mm.

This bird agrees with specimens from Munduapo, Orinoco, collected by Mr. Cherrie.

*E. flavivertex* is new to the fauna of Cayenne.

151. *Sublegatus glaber* Scel. & Salv.


*Ille le Père :* 2 ♀♂ ad., October 24, 25; 2 ♀♂ juniores, October 23, 25, 1902.

Cayenne: A very young bird marked ?, October 29, 1902.

* I have never been able to examine specimens from Punta Arenas, which are described in 1863 by M. O. Salvin under the name *Elainea arenarum*, and which Hartert and Hellmayr think to be different from *S. glaber*. 
"Iris seal ('sephia,' 'vandyke'), feet black ('slate'), bill black ('blackish')."

Nos. 295, 320, 334, 340, 392.

♂ ♂: al. 71½—68; cand. 65—62½; culm. 10½—9½; tars. 18½—16½ mm.

These Cayenne birds agree perfectly with others from Alta Gracia, Orinoco (coll. Geo. K. Cherrie).

152. Phaeomyias murina incomta (Cab. & Heine).


Rio Janeiro.)

Elatea incomta Cabanis & Heine, Mus. Heine. ii. (1839) p. 59 nota (typ. ex Cartagena in Mus. Berol.).

Phyllophius semisupercus autorum.

Cayenne: 13 ♂ ♂ ad., October 10 (two), 13 (two), 22, 31 (two), November 3 (two), 4, 14, 26, 27; 5 ♀ ♀ ad., October 14, 18, 20 (two), November 15; 1 juv., November 3, 1902.

Roche-Marie: 3 ♂ ad., November 10 (two), 13; 2 ♀ ad., November 5, 11, 1902.

Ile le Père: 1 ♂ ad., October 25, 1902.

"Iris seal ('sephia,' 'dusky'), 'feet black ('slate black,' 'blackish,' 'dusky,' 'dusky plumbeous,' 'slate,' 'slate-black,' 'slate-grey,' bill black ('dusky blackish'), blackish, pale at base of mandible, 'blackish, dusky at base of mandible,' 'dusky pale at base of mandible,' above black, below dusky with blackish tip."

Nos. 23, 49, 97, 104, 130, 197, 228, 230, 266, 341, 411, 418, 487, 496, 497, 541, 672, 673, 702, 750, 758, 811, 929, 945, 1011.

♂ ♂ ad.: al. 59½—56; cand. 57½—49; culm. 10½—8½; tars. 18½—16½ mm.

♀ ♀ ad.: al. 56—52; cand. 52½—45½; culm. 9½—8½; tars. 17½—15½ mm.

As a rule the Cayenne birds have shorter wings and show the abdomen more strongly washed with pale yellow than specimens from Sta. Marta, with which I have compared them. Nevertheless, some specimens from both localities agree very well together.


153. Tyranniscus gracilipes Sel. & Salv.

Tyranniscus gracilipes Sclater & Salvin, P. Z. S. 1867. p. 981. (typ. ex Pebas, Peru or.—in Mus. Brit.).

Oyapoc, Cayenne (Sclater collection in Mus. Brit.).]

154. Tyrannulus elatus (Lath.).


Cayenne: 3 ♂ ♂ ad., October 18 (two), November 21; 1 ♀ ad., October 20, 1902.*

"Iris seal, feet slate, bill black."

Nos. 157, 188, 233, 843.

♂ ♂ ad.: al. 50½—49; cand. 44—40½; culm. 7—6½; tars. 12½—11½ mm.

♀ ♀ ad.: al. 48; cand. 39½; culm. 6½; tars. 12½ mm.


* There is no difference in coloration between specimens from Cayenne, Brit. Guiana, Para, and Colombia (Bogota collections), but the latter as a rule have rather longer wings and tails.
[155. *Ornithion inerme* Hartl.]


156. *Ornithion pusillum* (Cab. & Heine).


Cayenne: 2 ♂ ♂ ad., November 24, 27; 2 ♀ ♀ ad., November 25, 27, 1902.

Roche-Marie: 2 ♂ ♂ ad., November 8, 12, 1902.

"Iris seal (‘lemon-yellow’), feet slate-grey (‘greyish’), bill black (‘blackish’), pale at base of mandible.”

Nos. 626, 736, 883, 902, 946, 947.

♂ ♂ ad.: al. 51 3/4—49; cand. 41 3/4—37 3/4; culm. 9 1/2—8 1/2; tars. 14—13 1/2 mm.

♀ ♀ ad.: al. 47—46 1/2; cand. 34 1/2—34; culm. 9—8 1/2; tars. 13—12 1/2 mm.

These Cayenne birds agree perfectly with the type from Cartagena, with which I have compared it.

[Oyapoc (Jelski leg. in Sclater collection, Mus. Brit.).]

157. *Mionectes oleginensis* (Licht.).


Roche-Marie: 2 ♂ ♂ ad., November 12, 13, 1902.

Ipponis, R. Appragnone: 1 ♀ ad., January 8, 1903.

"Iris seal, feet greyish flesh (‘drab grey’), bill black, dusky at base of mandible.”

Nos. 734, 755, 136056.

♂ ♂ ad.: 61—57; cand. 48—46 1/2; culm. 10 1/2—10; tars. 13 1/2 mm.

♀ ♀ ad.: al. 61 1/2; cand. 47 1/2; culm. —; tars. 14 3/4 mm.

Cayenne specimens agree with a Bahia skin in Mus. H. v. B. They are perhaps a little darker on the upper parts, and have slightly shorter wings.

[Cayenne (Sclater collection in Mus. Brit.—Mus. Heim.).]

**Family PIPRIDAE.**

[158. *Xenopipo atronitens* Cab.


Oyapoc, Cayenne (Salvin & Godman collection in Mus. Brit.).]

159. *Pipra aureola* (Linn.).


Cayenne: 7 ♂ ♂ ad., October 16, 17, November 1, 2 (two), 3, 4; 2 ♂ ♂ juv. (in the green plumage of the young with a few red feathers appearing on the head and

*The following species of Pipridae not yet recorded from Cayenne are likely to be found there
breast), November 1, December 11; 9 ♂ ♂ ad., October 14, 17, 18, 20, 21 (two), 31, November 1, 3, 1902.

Roche-Marie, Cayenne: 1 ♂ ad., November 11; 1 ♀ ad., November 7, 1902.

Approuagne: 1 ♂ ad., December 11, 1902.

“Iris cream-colour, feet dusky purple (♂ ♀ dusky grey), bill above blackish, below dusky slate (♂ ♀ above blackish, below dusky greyish, blackish, reddish grey at base of mandible, blackish, greyish at base of mandible).”


♂ ad.: al. 64 1/4—62 1/2; caud. 25 1/4—25 1/2; culm. 12 1/4—11 1/4; tars. 15 1/4—14 1/4 mm.
♀ ♀ ad.: al. 64 1/4—60 1/2; caud. 31 1/2—28 1/2; culm. 12—11 1/4; tars. 14 1/4—14 1/4 mm.


160. *Pipra erythrocephala* (Linn.).

*Pipra auricapilla* Lichten.

Ipousin, R. Approuagne: 1 ♂ ad., December 30; 2 ♂ ♀ ad., December 29, 1902, January 7, 1903.

♂ ad.: “Iris cream, feet dusky flesh, bill above pale dusky, below whitish.”
♀ ♀ ad.: “Iris sepia (dark dusky grey), feet greyish (drab brown), bill above clove brown, below pale hornly white.”

Nos. 12886, 12912, 13041.

♂ ad.: al. 55 1/2; caud. 29 1/2; culm. 7 1/2; tars. 12 1/4 mm.
♀ ♀ ad.: al. 56 1/4; caud. 27—21 1/4; culm. 9 1/4; tars. 13 1/4 mm.

Nos. 12912, 12886, 13041.


The adult male agrees with others from the Merumé Mts. (Brit. Guiana) and Maipures (Orinoco).


Ipousin, R. Approuagne: 2 ♂♂ ad., December 31, 1902, January 2, 1903.

“Iris carmine, feet slate (‘slate-black’), bill black (‘above black, below slate-grey’).”

Nos. 12935, 12969.

Al. 62 1/4—60 1/2; caud. 26 1/4—25 1/2; culm. 10 1/4—10 1/2; tars. 14 1/4—13 1/4 mm.

[Cayenne (Schel ter collection in Mus. Brit., Mus. H. v. B.).]

162. *Pipra serena* Linn.


Ipousin, R. Approuagne: 2 ♂ ♀, December 26, 30, 1902.

“Iris light seal, feet slate, bill above black, below slate-black.”

♂ ♀: al. 50 1/4—53 1/4; caud. 28—27; culm. 9 1/4—9 1/2; tars. 15 1/4—14 1/4 mm.

Nos. 12852, 12913.

[163. Pipra gutturalis Linn.


164. Chiroxiphia pareola (Linn.).


Cayenne: 5 ♂ ♂ ad., October 21 (two), November 14 (three), 1 "♂" not quite adult, October 21; 1 ♂ jr. in transition plumage, November 8; 2 ♂ ♂ juv. (green with red crest) October 21, November 26, 1902.

Roche-Marie, Cayenne: 4 ♂ ♂ ad. November 6 (three), 11; 2 ♂ ♂ juv. (green with red crest) November 6, 8, 1902.

"Iris seal (3 ♂ ♂ juv.: 'Iris dark chestnut'), feet orange (2 ♂ ♂ juv.: 'feet reddish flesh-colour'), 1 ♂ juv., ('feet dusky orange'), bill black."

Nos. 240, 241, 242, 243, 553, 554, 555, 556, 620, 630, 717, 762, 763, 764, 916. ♂ ♂ ad.: al. 74½—70½; cand. 36½—32½; culm. 11½—10½; tars. 19½—18½ mm.

The Cayenne specimens are apparently not distinguishable from Bahia—examples in Mus. H. v. B.

165. Chiromachaeris manacus (Linn.).


Cayenne: 4 ♂ ♂ ad., October 17, 22, November 3, 15; 2 ♀ ♂ ad., October 17, 21, 1902.

Roche-Marie, Cayenne: 8 ♂ ♂ ad. November 6, 11; 3 ♂ ♂ juv. (in the green plumage of the female), November 6 (two), 11; 1 "♀," December 21, 1902.

Ipousin, R. Approuague: 2 ♂ ♂ ad., January 7 (two), 1903.

"Iris sepia, feet dusky orange (1 ♀ orange), bill above black, below plumbeous ('above black, below slate-black,' 'above black, dusky below,' 'above black, below greyish slate')."

Nos. 162, 163, 257, 285, 493, 562, 563, 564, 565, 566, 567, 568, 569, 570, 695, 716, 789, 12383, 13042, 13043. ♂ ♂ ad.: al. 54—51; cand. 32½—29½; culm. 11½—9½; tars. 20½—19½ mm. ♀ ♂ ad.: al. 54—52; 32½—29; culm. 12½—10½; tars. 20½—18½ mm.


166. Neopipo cinnamomea (Lawr.).


Ipousin, R. Approuague: 1 "♂" (?) (ad.) December 29, 1902.

"Iris seal, feet slate-grey, bill above dusky, below pale." No. 12889. Al. 50½; cand. 36; tars. 12½ mm.

This species has not yet been recorded as being found in Cayenne.
( 139 )

[167. **Scotothorus amazonum wallacei** (Sel. & Salv.).


? Oyapoc, Cayenne (Sclater collection in Mus. Brit.).]

[168. **Scotothorus igniceps** (Sel.).


Oyapoc, Cayenne (Sclater collection ex Verhey in Mus. Brit.).]

[169. **Schiffornis major** Desmurs.


Oyapoc, Cayenne (Sclater collection ex Verhey in Mus. Brit.).]

[170. **Heterocercus flavivertex** Pelz.


Oyapoc, Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit.).]

? [171. **Heterocercus luteocephalus** (Less.).

*Muscinapa luteocephala* Lesson, *Traité d'Orn.* (1831) p. 392 (loc. inc.—an ex Cayenne?).


**Family Cotingidae.**

172. **Tityra cayana** (Linn.).


Roche-Marie, Cayenne: 1 "3" juv. in the dress of the ? November 8, 1902.

"Iris seal, feet plumbeon slate, bill basal Indian purple, tip of bill above black, below slate, bare space about eye maroon-purple." No. 636.


? [173. **Tityra semifasciata** (Spix).


? Oyapoc (Sclater collection "?" in Mus Brit.).]

* The following five species of *Cotingidae* not recorded from Cayenne may occur there:
5. *Chasmarhynchus variegatus* (Gmel.). Venezuela—Brazil (Maranhão).
174. Tityra inquisitor erythrogenys (Selby).

[Lanius inquisitor Lichtenstein, Verz. Dabl. (1823) p. 50 (S. Paulo, Mus. Berol.).]


Cayenne: 1 "♂" ad., October 17, 1902.

"Iris seal, feet dusky plumbeous, bill above black, below plumbeous."

No. 176.

Al. 101; cand. 61½; culm. 23; tars. 18½ mm.

[Cayenne (Selater collection in Mus. Brit.).]

[175. Hadrostomus minor (Less.).]


Cayenne (Selater collection in Mus. Brit.).]

176. Pachyrhamphus niger (Spix).

Pachyrhamphus niger Spix, Av. Bras. ii. (1825) p. 33. tab. xlv. fig. 1 (loc. ignot., habit. substit. Fonteboa, ant Hellmayr).

Cayenne: 3 "♂♂♂" ad., October 13, November 14, 26. 1 "♂♂" ♂ in transition plumage, December 4; 3 "♂♂♂" juv. (in the dress of the female), November 25, 29, December 4; 2 ? ?, November 26, 29, 1902.

"Iris seal, feet slate ('slate-grey,' 'dusky plumbeons'); bill, ♂♂♂ ad. plumbeous, tip of maxilla blackish, plumbeous grey, extreme tip blackish, above bright plumbeous, below slate-grey)." ♂♂♂; "bill mottled black and plumbeous."

? ? and ♂♂♂ juv.: "bill dusky blackish (above black, below blackish, pale at tip and base, above grey, at base dusky at centre and tip, below pale," "above black, below mottled blackish and horn-colour."

Nos. 93, 71, 900, 919, 920, 975, 988, 1009, 1010.

♂♂♂ ad.: al. 74½—73½; cand. 60—53; culm. 16¾—15½; tars. 18½ mm.

♀♀♀ ad.: 75—68½; cand. 59—54½; culm. 15¾—14½; tars. 18½—17½ mm.

[Cayenne (Selater collection in Mus. Brit., Mus. H. v. B.).]

Specimens from Cayenne, Orinoco, Pto. Cabello, Bogota, are apparently of one and the same form. I have not yet examined specimens from Fonteboa (true niger), but if they are different, as Hellmayr thinks, then the northern form should perhaps be called P. niger atricapillus (Merrem), typ. ex Surinam. I find there is much individual variation in the coloration of the lower back.

177. Pachyrhamphus cinereus (Bodd.).


Musciapa rufa Bodd. ?

Pipra atricapilla Gmel.

Cayenne: 1 "♀♀♀" ad., October 11, 1902.

Approunage: 2 "♂♂♂" ad., December 6, 13, 1902.

"Iris seal, feet slate-grey, bill plumbeous, tip of maxilla black." (♀ "bill above black, below plumbeous.")

Nos. 29, 1022, 12698.

♂♂♂ ad.: al. 70½—67; cand. 52—49½; culm. 13¾; tars. 17½—17½ mm.

♀♀♀ ad.: al. 66; cand. 47; culm. 14½; tars. 17½ mm.

[178. Pachyrhamphus marginatus (Licht.).

*T. atricapillus* aut., nec Merrem.

Oyapoc, Cayenne (Selater collection and Salvin & Godman collection in Mus. Brit.).]

[179. Pachyrhamphus surinamus (Linn.).


Cayenne (Selater collection in Mus. Brit.).]

180. Lathria cinerea (Vieill.).


Ipoausin, R. Approuague: 5♂♂♂ ad., December 27 (two), 1902, January 1 (three), 1903.

Regina, R. Approuague: 1 ♀ ad., December 21, 1902.†

“*Iris* dark grey, feet greenish-black, bill black, smoke-grey at base of mandible.”

Nos. 12752, 12863, 12864, 12941, 12942, 12943.

♂♂♂ ad.: al. 127\(\frac{1}{2}\)−121; caud. 112\(\frac{1}{2}\)−109; culm. 23\(\frac{1}{2}\)−22\(\frac{1}{2}\); tars. 21\(\frac{1}{2}\)−20\(\frac{1}{2}\) mm.

♀ ad.: al. 116; caud. 109; culm. 22\(\frac{3}{4}\); tars. 22 mm.

[Cayenne (Selater collection in Mus. Brit.).]


Oyapoc, Cayenne (Selater collection in Mus. Brit.).]

182. Laniocera hypopyrrha (Vieill.).


“*Iris* dusky sepia, feet slate-grey, bill black, dusky at base of mandible, eyelids chrome-yellow.”

No. 12880.

Al. 106\(\frac{1}{2}\); caud. 87; culm. 18\(\frac{1}{2}\); tars. 18\(\frac{1}{2}\) mm.

[Cayenne (vide Vieillot.).]

183. Attila brasiliensis Less.


*A. uropygialis* Cab.

Roche-Marie, Cayenne: 1♂ ad., November 12, 1902. “*Iris* clay-colour, feet slate-grey, bill blackish, pale at base of mandible.” No. 733.

♂: al. 85; caud. 63\(\frac{3}{4}\); culm. 22\(\frac{1}{2}\); tars. 22\(\frac{1}{2}\) mm.

This bird differs from my specimens from Brit. Guiana (coll. Whitely) and

* The type specimen in the Berlin Museum has been examined by me.
† Specimens from Brit. Guiana and Bahia (*plumbus* Licht.) agree perfectly with the Cayenne birds, but specimens from the Middle Orinoco collected by G. K. Cherric are of a rather darker and purer ash-grey coloration.
‡ Mr. Hellmayr tells me that he has examined the type of *L. immundus* in the British Museum, and found it quite distinct from *L. simplex*, resembling in coloration somewhat *Myiarchus phaeonotus* Salv. & Godin.
the Orinoco Delta in having the throat and breast dark grey, with whitish lateral margins to the feathers, without any greenish and yellowish admixture (but see Hellmayr, *Nov. Zool.* xiii. 1906. p. 329).

[184. *Attila spadiceus* (Gmel.).


Cayenne (Lath., Mus. Brit.)]

185. *Attila thamnophiloides* (Spix).


Cayenne: 1 ♂ ad., December 4, 1902.

Appronague: 3 ♂♂ ad., December 8, 10, 12; 1 ♀ ad., December 12, 1902.

"Iris seal (‘drab’), feet grey (plumbeous), bill black."

Nos. 1018, 1063, 1098, 1132, 12697.

Cayenne specimens agree with a bird from Borba on the Madeira (*fide* Hellmayr).

♂♂ ad.: al. 95—91½; caud. 90⅔—81½; culm. 22—29½; tars. 23½—22 mm.

♀: al. 90⅔; caud. 82½; culm. 21; tars. 22½ mm.

[Cayenne (Sclater collection in Mus. Brit., coll. Deplanches (*fide* Bp.).]

[186. *Phoenicocercus carnifex* (Linn.).


[187. *Rupicola rupicola* (Linn.).


[188. *Cotinga cotinga* (Linn.).


[189. *Cotinga cayana* (Linn.).


Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit., Mus. Hein.).]

[190. *Xipholena pompadora* (Linn.).


[191. *Iodopleura fusca* (Vieill.).
Cayenne (Sclater collection in Mus. Brit.).]

[192. *Haematoderus militaris* (Lath.).
Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit., coll. Deplanches (*fide* Bp.).]

193. *Querula purpurata* (Müll.).
Ipousin, R. Approuague : 1 ♂ ad., December 29, 1902.
“*Iris* vandyke brown, feet slate-black, bill plumbeous, extreme tip maxilla blackish.” No. 12900.
Al. 176; caud. 120; culm. 26⅔ ; tars. 22⅔ mm.

[?194. *Cephalopterus ornatus* Geoffr.
Cayenne (Is. Geoffr. ?].]

195. *Calvifrons calvus* (Gmel.).
*Coreus tricolor* Müll. (1783) desc. falsa !
Ipousin, R. Approuague : 1 ♂ ad., December 27, 1902.
“*Iris* seal, feet slate-grey, bill above blackish, below slate-grey with greenish wash.” No. 12858.
Al. 215½ ; caud. 106 ; tars. 42⅓ mm.
[Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit., coll. Deplanches (*fide* Bp.).]

[196. *Gymnoderus foetidus* (Linn.).
Cayenne (Salvin & Godman collection in Mus. Brit., coll. Deplanches, *fide* Bp.).]

[197. *Chasmorhynchus niveus* (Bodd.).
Cayenne (coll. Rothery and Salvin & Godman collection in Mus. Brit.).]
Family DENDROCOLAPTIDAE.*

198. Synallaxis albecens albigularis Scl.


Cayenne: 4 ♀♂ ad., October 14, 19, 31, November 2, 1902.
Roche-Marie: 3 ♂♂ ad., November 2, 3, 11; ad. without indication of sex, November 11, 1902.

Aproaigue: 1 ♂ juv., December 17, 1902.

"Iris grey, feet dusky olive-green ('horn-colour washed with olive-green'), bill above blackish, below plumbeous grey."

♂ ♂ ad.: al. 56—54½; caud. 77½—73; culm. 13⅔—12¾; tars. 19½—18½ mm.
♀ ♀ ad.: al. 54—52½; caud. 77½—69; culm. 13⅔—12; tars. 19½—19 mm.

Nos. 125, 379, 413, 464, 538, 637, 696, 697, 12753.

These specimens are generally more brownish on the back and have shorter wings and smaller bills than specimens found in Bogotá collections.

199. Synallaxis gujanensis (Gmel.).


Cayenne: 3 ♂♂ ad., October 28, November 14, 24; 1 ♀ ad., October 29; 1 ♀ juv., October 31; 2 ad. without indic. of sex, November 2, December 4, 1902.
Roche-Marie: 1 ♂ ad., November 5, 1902.
Aproaigue: 1 ♂ ad., December 8, 1 ♀ ad., December 12, 1902.

[Cayenne (coll. Jelski; Salvin & Godman collection in Mus. Brit.).]

"Iris hazel, feet grey (slate-grey), bill black, plumbeous below (above black, below plumbeous with blackish tip)."

♂ ♂ ad.: al. 61½—58½; caud. 76½—73½; culm. 14⅔—13¾; tars. 21⅔—20½ mm.
♀ ♀ ad.: al. 59—54½; caud. 66⅔—64½; culm. 14⅔—12¾; tars. 21⅔—21½ mm.

Nos. 370, 383, 416, 468, 539, 769, 881, 1014, 1053, 1135.

Bogotá specimens have the under-parts rather more whitish, with but a slight greyish brown suffusion on the upper breast.

200. Synallaxis cinnamomea (Gmel.).


Cayenne: 2 ♂♂ ad., October 11, 13, 1902.

"Iris hazel, feet grey, bill above black, below plumbeous with blackish tip."

Nos. 65, 90.

♂ ♂ ad.: al. 61—58½; caud. 69⅔—65½; culm. 15—14½; tars. 20½—19 mm.

These birds agree best with specimens from Bahia, Brazil.

* The following species of Dendrocopodiumae not yet known from Cayenne are likely to occur there:
  8. Xiphocolaptes sp. ?
201. *Synallaxis rutilans* Tem.


Oyapoc, Cayenne (Salvin & Godman collection in Mus. Brit.).]

202. *Siptornis gutturata* (Lafr. & D'Orb.)


*Synallaxis hypomicta* Pelzeln, 1859.

Iponsin, R. Approuagne: 1 ♂ ad., December 26, 1902.

“ *Iris* tawny olive, feet dusky oil-green, bill above dusky olive, below slate.”

No. 12840.

Al. 65; cand. 56½; culm. 14½; tars. 16½ mm.

The Cayenne bird agrees with specimens from Munduapo, on the Orinoco; the under-parts are perhaps a little more rufescent. The species is new to the fauna of Cayenne.

203. *Automolus insfuscatu cervicatis* (Scl.)


*Automolus insfuscatu* aut.

Iponsin, R. Approuagne: 1 ♂ ad., December 25; 2 ♀ ♀ ad., December 24, 1902, January 2, 1903; 1 ♂ (juv.) January 1, 1903.

“Iris seal, feet greyish sage-green (‘sage-green’), bill above olive-brown (dusky olive), below greenish olive.”

No. 12797, 12815, 12953, 12972.

♂ ad.: al. 88½; cand. 73½; culm. 20½; tars. 20½ mm.

♀ ♀ ad.: al. 87½—86½; cand. 74½—72½; culm. 20¼—20½; tars. 21½—20½ mm.

Cayenne specimens agree best with the birds from Caura, Orinoco.

204. *Automolus obscurus* (Pelz.)


Iponsin, R. Approuagne: 1 ♀ ad., January 2, 1905.

“Iris seal, feet dusky grey, bill blackish, dusky below.” No. 12065.

Al. 78½; cand. 71; culm. 20½; tars. 23½ mm.

The single specimen of this rare species collected by Mr. Cherrie agrees with Pelzeln’s type in the Vienna Museum, with which I have compared it. It only differs in having the reddish brown of the throat a little paler (not so reddish) and not extended over the upper breast. The abdomen is also a little paler, more olivaceus, less brownish. The upper parts are somewhat darker, more blackish; the upper tail-coverts are of a somewhat darker chestnut. The Rufous brown of the under tail-coverts is more intense.


A. obscurus (Pelz.) is apparently a near ally of A. rubiginosus Sel. from Central America, but is smaller, with a much shorter tail, and differs somewhat in coloration.

[Cayenne (Mus. Vindob.).]

205. Philydor ruficaudatus (Lafr. & D'Orb.).


Appronagne: 1 ♂ ad., December 10, 1902.

"Iris wood-brown, feet sage-green, bill above slate-black, below dusky pea-green." No. 1094.

Al. 80; caud. 72 1/2; culm. 15 1/2; tars. 20 1/2 mm.

The specimen collected by Mr. Cherrie agrees perfectly with topotypical specimens from Bolivia in Mus. H. v. B. Ph. ruficaudatus had not yet been recorded from Cayenne.

206. Philydor erythrocercus (Pelz.).


Ipousin, R. Appronagne: 4 ♂♂ ad., December 25, 27, 28, 1902, January 2, 1903; 3 ♂♀ ad., December 25, 1902.

"Iris seal, feet sage-green, bill above clove-brown ('brown'), below pale." Nos. 12811, 12812, 12813, 12814, 12860, 12874, 12968.

♂ ad.: al. 91 1/2—89 1/2; caud. 69 1/2—60 1/2; culm. 18 1/2—17 1/2; tars. 20 1/2—19 3/4 mm.

♀ ad.: al. 81—78 1/2; caud. 62 1/2—60 1/2; culm. 16 1/4—16 1/4; tars. 18 1/4 mm.

Cayenne specimens agree generally with the Nattererian birds from Barra do Rio Negro, but they have the under-parts rather more suffused with yellowish.

[Cayenne (Sclater collection in Mus. Brit.).]

207. Philydor pyrrhodes (Cab.).


Ipousin, R. Appronagne: 1 ♂, December 28, 1902.

"Iris dark sepia, feet light sage-green, bill above clove-brown, below slate-grey." No. 12878.

This bird is evidently immature: it differs from a male from Munduapo, Orinoco, in having much shorter wings and tail, more olivaceous upper back and upper head, and the under-parts, uropygium, and tail of a paler cinamomeous.

208. Xenops genibarbis Illiger, Prodr. (1811) p. 213 (typ. ex Cametá, Brazil in Mus. Berol.).

Cayenne: 2 ♂♂ ad., October 11, November 25; 1 ♂ ad., November 14, 1902.

"Iris seel, feet plumbeous grey ('plumbeous'), bill above black, below pale with dusky tip ('and cutting edge')."

Nos. 60, 904, 965.
“♂♂” ad.: al. 67½—66; caud. 56½—51½; culm. 15½—14½; tars. 15—14½ mm.

“♀” ad.: al. 62; caud. 48½; culm. 14½; tars. 14 mm.

[Oyapoc, Cayenne (Sclater collection ex Verdey in Mus. Brit.).]

209. Xenops rutilus heterurus Cab. & Hein.

[Xenops rutilus Lichtenstein, Doubl. Verz. (1823) p. 17 (typ. ex Bahia in Mus. Berol.).]


Cayenne: 1 ♂ and 2 ♂♂, October 13, 14, 18, 1902.

“Iris seal, feet plumbeous, bill above black, below pale with dusky tip (‘and cutting edge’).”

Nos. 91, 124, 261.

♂: al. 63; caud. 44½; culm. 12; tars. 13½ mm.

♀: al. 62½—61; caud. 45½—40½; culm. 12½—12; tars. 13½—13½ mm.

Cayenne specimens agree with Bogotá skins, but are smaller-sized. They have much more black in the tails than Brazilian birds.

210. Glyphorhynchus cuneatus (Licht.).


Cayenne: 1 ♀ ad., November 27, 1902.

Roche-Marie: 2 ♂♂, November 7, 11, 1902.

Ipousin, R. Approuague: 6 ♂♂ ad., December 25 (two), 27, 29, 1902, January 5, 6, 1903; 5 ♀♂ ad., December 24, 30, 1902, January 1 (two), 3, 1903.

“Iris seal (dark), feet slate (dusky slate, dusky greenish), bill blackish (dusky, above black, below slate, blackish slate above, below greyish slate).”

♂♂ ad.: al. 73—66½; caud. 73½—56½; culm. 13—11½; tars. 16½—14½ mm.

♀♀♀ ad.: al. 70—65½; caud. 69—61½; culm. 12½—11½; tars. 16½—15½ mm.

Nos. 597, 711, 937, 12785, 12808, 12809, 12867, 12895, 12903, 12947, 12948, 12978, 13004, 13020.

The Cayenne specimens differ from those from Bahia in having the upper throat much more suffused with rufous, less whitish.

[Oyapoc and Cayenne (coll. Jelski); Sclater collection and Salvin & Godman collection in Mus. Brit.; coll. Deplanches (fide Bp.).]

211. Sclerurus rufigularis Pelz.


Ipousin, R. Approuague: 1 ♀, January 3, 1903.

“Iris seal, feet slate-black, bill above blackish, below pale grey.” No. 12980.

Al. 77; caud. 55½; culm. 17½; tars. 24½ mm.

Mr. Hellmayr has kindly identified this bird for me. S. rufigularis Pelz. is easily distinguishable from S. caudacutus (Vieill.) by its much shorter and slender bill, and its rufous-brown throat.

[212. Sclerurus caudacutus (Vieill.).


Cayenne (Sclater collection in Mus. Brit.).]
213. Dendrornis guttatooides sororia Berl. & Hart.


Cayenne: 3 ♂♂ ad., November 1, 25, December 19, adult without indication of sex, November 1, 1902.

"Iris seal, feet greyish plumbeous, bill above blackish, pale below."

Nos. 426, 427, 897, 1145.

♂♂ ad.: al. 122—120½; caud. 110—109½; culm. 38⅔—37½; tars. 24½—24⅔ mm.

These birds agree in every respect with the typical bird from the Rio Orinoco.

[Cayenne (Selater collection in Mus. Brit.); Oyapoc (Salvin & Godman collection in Mus. Brit.).]

214. Dendrornis pardalotus (Vieill.).


Iponsin, R. Approquane: 4 ♂♂ ♂♂ ad., December 25, 27, 29, 1902, January 5, 1903; 4 ♀ ♀ ad., December 25, 27, 1902, January 2, 6, 1903.

"Iris seal, feet slate, bill above clove-brown, below dusky grey."

Nos. 12827, 12828, 12846, 12861, 12862, 12885, 12964, 12997, 13019.

♂♂ ad.: al. 108½—97; caud. 101—87½; culm. 36½—29; tars. 21½—21⅔ mm.  
♀♀ ad.: al. 109½—99½; caud. 94½—91½; culm. 35½—31½; tars. 21½—20½ mm.

[Cayenne (Selater collection in Mus. Brit.); Oyapoc, Jelski leg.: Selater collection and Salvin & Godman collection in Mus. Brit.).]

215. Dendrornis obsoleta multiguttata (Lafr.).

Dendrornis obsoleta notata (Eyt.) Berlepsch et Hartert, Nov. Zool. ix. (1902) p. 64 (Orinoco).

Approquane: 2 ♀♀ ad., December 19, 1902. No. 12774.

"Iris seal, feet slate-grey, bill dusky horn-grey, darker at base of maxilla."

This female agrees with specimens from the Middle Orinoco, and with others from the Rio Negro and Borba (coll. Natterer).

[Oyapoc (Selater collection in Mus. Brit. and in Mus. Paris ex Geay); R. Ouanary (in Mus. Paris ex Geay).]

216. Dendroplex picus (Gmel.).


Cayenne: 5 ♂♂ ad., October 14 (three), 20, November 27; 8 ♀♀ ad., October 13 (two), 14 (three), 16 (two), November 4, 1902.

Approquane: 1 ♂ ad., December 8, 1902.

† Ibid. p. 55.
“Iris hazel, feet plumbeons with olive wash, bill above dusky grey, paler below.”


♀♂ ad.: al. 102 – 95; cand. 90 – 81; culm. 29 – 27; tars. 21.5 – 19.5 mm.
♀♀ ad.: al. 108 – 92; cand. 90 – 82; culm. 29 – 26; tars. 22.5 – 20.5 mm.
[Cayenne (Buffon, coll. Deplanches (fide Bp.), Mus. Paris (ex Suard et Fabre), Mahury et Konron (Mns. Paris ex Geay).]

[217. Dendrexetastes rufignula (Less.).


*Ouauary (Mns. Paris ex Geay, Mns. Hein.).]*

[218. Hylexetastes perroti (Lafr.).


*Cayenne (Sclater collection and Eyton collection in Mns. Brit.).]*


*Cayenne (Sclater collection in Mns. Brit.).

*Guyane française (Faber leg. in Mns. Paris)].*

[220. Nasica longirostris (Vieill.).


*Cayenne (Levaillant, Sclater collection in Mns. Brit.).]*

[221. Xiphorhynchus procurvoideus Lafr.


Ipoisin, R. Approuague: 1 ♀♂ ad., December 29, 1902.

“Iris seal, feet dusky sage-green, bill above walnut-brown, below wood-brown.” No. 12887.

♀♂ ad.: al. 92; cand. 83; culm. 61; tars. 19 mm.


*Oyapoc, Cayenne (Sclater collection in Mns. Brit.).]*

[222. Dendrocincela fuliginosa (Vieill.).


Ipoisin, R. Approuague: 2 ♀♂ ad., December 26, 1902, January 8, 1903; 1 ♀♂ ad., December 26, 1902.

“Iris drab-brown, feet slate, bill blackish.”
Nos. 12844, 12845, 13061.

♂♂♂ ad.: al. 113½—108½; cand. 106½—96½; culm. 31½; tars. 25½—25 mm.
♀♀♀ ad.: al. 106½; cand. 90½; culm. 28½; tars. 23½ mm.

[Cayenne (Mus. Paris ex Levaill.—vide Ménég. & Hellm.).]

[223. Dendrocincla merula (Licht.).


_Cayenne (Mus. Berol.).]

[224. Dendrocolaptes certhia (Bodd.).


Ipouin, R. Approuague: 1 ♀, January 8, 1903.

"Iris carmine, feet plumbeous, bill above blackish, below paler."

Al. 124 ; cand. 123½ ; culm. 35½ ; tars. 26½ mm. No. 8062.

This bird agrees with specimens from Brit. Guiana.

[Cayenne (Buff.), coll. Delalande et Poiteau in Mus. Paris; Rio Camopi (F. Geay leg. in Mus. Paris).]

[225. Dendrocolaptes plagosus Salv. & Godm.


Ipouin, R. Approuague: 1 ♂ (jr.), December 30, 1902.

"Iris carmine, feet olive-greyish, bill black, smoke-grey at base of mandible."

No. 12921.

Al. 136 ; cand. 127 ; culm. 40½ ; tars. 25 mm.

There is no difference between this bird and specimens from Brit. Guiana.

[Rio Caroevenne (M. F. Geay leg. in Mus. Paris).]

**Family FORMICARIIDAE.**

[226. Cymbilanius lineatus (Leach).


Ipouin, R. Approuague: 1 ♀ ad., January 1, 1903.

"Iris carmine, feet plumbeons, bill above black, below slate-grey."

Al. 76½ ; cand. 76½ ; culm. 23½ ; tars. 25½ mm. No. 12955.

This bird agrees with a female from Camacusa, Brit. Guiana.

[Cayenne (Selater collection in Mus. Brit.).]

* The following species of _Formicariidae_ have not yet been found in Cayenne, but are likely to occur there:

1. _Dyghtahanus mentalis_ (Tem.). Brazil (Pará)—Pto. Caballo, Venezuela.
2. _Dyghtahanus plumbeus_ (Wied.). Lower Amazonas, Venezuela.
[227. Thamnophilus viridis Vieill.]


Lanius luna tus Lesson, 1831.

Thamnophilus fuliginosus Gould, 1837.


[228. Thamnophilus major semifasciatus (Cab.).]

[Thamnophilus major Vieillot, Nouv. Dict. iii. (1816) p. 313 (ex Azara typ. ex Paraguay).]


Appronague: 3 ♀♀ ad., December 9 (two), 11, 1902.

"Iris carmine, feet plumbeous, bill black."

Nos. 1079, 1088, 1110.

♀♀: al. 91—88½; cand. 78½—77½; culm. 29½—28; tars. 34½—33½ mm.

These birds have the upper parts of a much darker chestnut than females from Bahia.

[Cayenne (Salvin & Godman collection in Mus. Brit., Mus. Vindob. ex Becoœr).]

[229. Thamnophilus cinereoniger Pelzeln.]


Oyapoc, Cayenne (Salvin & Godman collection in Mus. Brit.).]

[230. Thamnophilus polionotus Pelzeln.]


Thamnophilus tristis, Selater & Salvin 1873 (typ. ex Oyapoc, Cayenne).

Oyapoc, Cayenne (Selater collection in Mus. Brit.).]

[231. Thamnophilus murinus Scl. & Salv.]


Iponsin, R. Appronague: 3 ♂♀ ♂ ad., December 26, 1902, January 2, 6, 1903; 2 ♀♀ ♀ ad., December 31, 1902, January 2, 1903.

"Iris grey ('seal'), feet slate-grey ('pale grey, greyish, ♀, grey with olive wash'), bill above black, below slate-grey."

Nos. 12855, 12926, 12961, 12966, 13032.

♂♀ ♂ ad.: al. 64—62; cand. 59⅔—54½; culm. 18⅔—18½; tars. 19½—18⅔ mm. ♀♀ ♀ ad.: al. 63—62; cand. 60⅔—59⅔; culm. 17½; tars. 19½ mm.

Cayenne specimens agree with specimens from Brit. Guiana collected by H. Whitely. A topotypical male from Marabitanas has somewhat lighter underparts.

[Oyapoc, Cayenne (Selater collection in Mus. Brit.). Cayenne (Mus. Vindob. ex Becoœr).]
232. Thamnophilus naevius (Gml.).


*Thamnophilus* ambiguus Pelzeln (nec Swainson), *Zur Orn. Bras.* ii. (1868) p. 76 Anm. 2 (♀ Cayenne ex Becoeur).*

Cayenne: 4 ♂♂ ad., October 31, November 1, 3, 29, 1902; 3 ♀ ♀ ad., October 31, November 3, 4, 1902.

Roche-Marie, Cayenne: 3 ♂♂ ad., November 6, 7, 8, 1902; 6 ♀ ♀ ad., November 6 (two), 7, 8, 11 (two), 1902.

R. Approuague: 4 ♂♂ ad., December 8 (three), 10, 1902; 1 ♀ December 8, 1902. ♂♂: "Iris hazel, feet plumbeous, bill black, plumbeons at base of mandible." ♀ ♀: "Iris hazel (‘grey’), feet plumbeous, bill above black, below pale plumbeons."

♂ ♂ ad.: al. 70;—65; cand. 55—49 1; culm. 20—18 1; tars. 22—20 2 mm.

♀ ♀ ad.: al. 69—66 1; cand. 55—49 1; culm. 20—18 1; 23 1—20 2 mm.


233. Thamnophilus amazonicus Scel.


♂ Thamnophilus ruficollis Spix = amazonicus ♀?

Iponsin, R. Approuague: 1 ♂ ad., January 6; 1 ♀ ad., January 6, 1902.

"Iris seal, feet grey (slate-grey), bill slate-grey at base of mandible (♂), above black, below slate-grey (♀)."

Nos. 13031, 13030.

♂: al. 67 1; cand. 61 1; culm. 17 1; tars. 20 1 mm.

♀: al. 67; cand. 57 1; culm. 16 1; tars. 19 1 mm.

The male is a fully adult bird. It has darker under-parts and shorter wings than an example from the Rio Tigre (*Upper Amazons*) and specimens from Bogotá in Mns. II. v. B.

[Oyapoc (Mus. Brit.).]

[234. Thamnophilus cinereiceps Pelzeln.


Oyapoc (Selater collection and Salvin-Godman collection in Mus. Brit.).]

235. Thamnophilus canadensis (Linn.).


*Th. cirrhatus* (Gml.).

Cayenne: 7 ♂♂ ad., October 13, 14, 29, 31, (two), November 1, 3; 3 ♀ ♀ ad., October 13, 31, November 1, 1902.

Roche-Marie: 1 ♀, November 11, 1902.

"Iris mars brown, feet plumbeons, bill black (♂♂), above black, below plumbeons, or with pale cutting edge (♀ ♀)."

* Fide Hellmayr in litt.
236. Thamnophilus doliatus (Linnae).


Cayenne: 4 ♂ ♂ ad. and 3 ♂ jrs., October 28, 29 (two) jr., 31, November 1 (♂ jrs.), 3 (♂ jrs.), 4; 4 ♀ ♀ ad., October 28, 31, November 3 (two), 1902.

Roche-Marie, Cayenne: 1 ♂ ad., November 10, 1 ♀ ad., November 11, 1902.

"Iris primrose yellow" (twice "lemon yellow"), "feet plumbeous," "bill above black, below slate ('greyish')," in ♀ "yellowish.

♂ ♂ ad. : al. 79\(\frac{1}{2}\) — 73; cand. 68\(\frac{1}{2}\) — 62; culm. 21\(\frac{1}{2}\) — 20; tars. 26\(\frac{1}{2}\) — 25\(\frac{1}{2}\) mm.

♀♀ ad. : al. 76 — 72; cand. 68 — 63\(\frac{1}{2}\); culm. 20\(\frac{1}{2}\) — 18\(\frac{1}{2}\); tars. 26\(\frac{1}{2}\) — 25\(\frac{1}{2}\) mm.


Although not much different, *Th. d. fraterculus* Berl. & Hart. from Venezuela shows much more white on the under-parts and less white in the crown.


*Thamnophilus stellaris* Spix, *Av. Bras. ii. (1825)* p. 27. tabl. xxxvi. fig. 2 (typ. ex Prov. Pará—olim in Mus. Monac.).

*Pygoptila maculipennis* (Scl.).

[Cayenne (Mus. Hein.).]

238. *Dysithamnus ardesiacus saturninus* (Pelz.)*


"Iris seal, feet slate-grey ('greyish, greyish flesh'), bill black ('above black, below slate-black,' dusky grey, 'grey')."

♂ ♂ ad. : al. 73 — 71; cand. 51\(\frac{1}{2}\) — 49\(\frac{1}{2}\); culm. 17\(\frac{1}{2}\) — 17\(\frac{1}{2}\); tars. 18\(\frac{1}{2}\) — 18\(\frac{1}{2}\) mm.

♀ ♀ ad. : al. 74 — 70\(\frac{1}{2}\); cand. 51\(\frac{1}{2}\) — 48\(\frac{1}{2}\); culm. 17 — 15\(\frac{1}{2}\); tars. 18\(\frac{1}{2}\) — 17\(\frac{1}{2}\) mm.

Nos. 12804, 12806 (♀♀), 12807, 12807, 12895, 12917, 12073, 12979.

Cayenne birds are absolutely identical with specimens from Camacnsa and Bartica Grove, British Guiana, collected by Mr. H. Whitely, jr., in Mus. H. v. B. [Cayenne: ♂ in Mus. Vindob. ex Becœur. Oyapoc: ♀ (Sclater collection in Mus. Brit.).]

239. Thamnomanes glaucus Cab.


Iponsin, R. Appronagne: 2 ♂♂ ad, December 27, 30, 1902; 1 ♀ imm., January 1, 1903; 2 ♀♀ ad, December 25, 30, 1902.

"Iris seal, feet slate-grey, bill black ('black, some grey at base of mandible,' 'black below slate')."

♂♂ ad.: al. 71 ½—70 ½; caud. 60 ½—59 ½; culmn. 17 ¼—16 ½; tars. 17 ½—16 ½ mm.
♀♀ ad.: al. 72 ¼—71 ¾; caud. 65—61 ½; culmn. 15 ¾; tars. 16 ½ mm.

Nos. 12903, 12969, 12910, 12911, 12945.

[Cayenne: ♀ in Mus. Vindob. ex Becœur. Oyapoc: ♀ (Sclater collection in Mus. Brit.).]

240. Myrmotherula pygmaea (Gml.).


Cayenne: 1 ♂ ad., November 26, 1902.
Roche-Marie, Cayenne: 1 ♀ ad., November 11, 1902.
Iponsin, R. Appronagne: 1 ♂ ad., December 31, 1902.

"Iris seal, feet sage-green ('greyish sage-green'), bill black ('above black, below dusky slate-grey')."

Nos. 714, 925, 12936.

♂♂ ad.: al. 42 ½—41 ½; caud. 20 ½—18 ½; culmn. 13 ½; tars. 15 ¼—14 ½ mm.
♀♀ ad.: al. 42; caud. 18 ¼; culmn. 13 ½; tars. 15 ¼ mm.

[Cayenne (Buff., coll. Deplanches—fide Lp.).]

241. Myrmotherula surinamensis (Gml.).


Appronagne: 1 ♂ ad., 1 ♀ ad., December 11, 1902.
Iponsin, R. Appronagne: 1 ♂ ad., December 25, 1902.

"Iris seal, feet plumbeous, bill above black, below grey."

Nos. 1115, 1116, 12820.

♂♂ ad.: al. 50 ½—49 ½; caud. 24 ½—24 ½; culmn. 14 ½—13 ½; tars. 16 ½—14 ½ mm.
♀♀ ad.: al. 49; caud. 22; culmn. 12 ½; tars. 16 ½ mm.

[Cayenne (Sclater collection in Mus. Brit., Langier collection in Mus. Paris.).]


Oyapoc (Sclater collection and Salvin & Godman collection in Mus. Brit.).]
243. Myrmotherula guttata (Vieill.)


Approuagne: 1 ♂ ad., December 15, 1902.

Ipousin, R. Approuagne: 1 ♂ ad., January 1, 1903; 4 ♀ ♀, December 25, 31, 1902, January 6, 1903.

"Iris seal" (1 ♂, "pale yellowish"), "feet grey" ("slate-grey, pale grey"), "bill above black, below grey" ("slate grey, plumbeous").

♂ ♂ ad.: al. 54₁/₂—50½; caud. 24½; culm. 14⅓—13⅓; tars. 18⅓—18⅓ mm.

♀ ♀ ad.: al. 53—51½; caud. 27⅓—25⅓; culm. 14⅓—13⅓; tars. 19⅔—18⅓ mm.

Nos. 12727, 12819, 12832, 12933, 12950, 13023.

[Cayenne (Riocour coll., Langier coll. in Mns. Paris), Oyapoc (Schler collection in Mus. Brit.).]

244. Myrmotherula gutturalis Sch. & Salv.


Ipousin, R. Approuagne: 2 ♂ ♂ ad., December 24, 1902, January 2, 1903; 3 ♀ ♀, December 24, 27, 28, 1902.

"Iris pale yellowish, feet grey, bill above black, below slate-black (above blackish, below plumbeous, black cutting edges plumbeous)."

Nos. 12789, 12791, 12866, 12876, 12970.

♂ ♂ ad.: al. 51¼—50½; caud. 41½—40½; culm. 13½; tars. 15½ mm.

♀ ♀ ad.: al. 51⅓—50; caud. 40½—38½; culm. 13⅓—13; tars. 16—15½ mm.

Mr. Cherrie's specimens are quite identical with topotypical specimens from Camaenusa, British Guiana (coll. H. Whitely) in Mus. H. v. B.

This species had not yet been recorded from Cayenne.

[245. Myrmotherula pyrrhonota Sch. & Salv.


Oyapoc, Cayenne (Schler collection in Mus. Brit.).]

246. Myrmotherula axillaris (Vieill.)


Cayenne: 1 ♀, November 2, 1902.

Approuagne: 5 ♂ ♂ ad., December 19 (three), 15 (two); 1 ♀, December 8, 1902.

Ipousin, R. Approuagne: 1 ♂ ad., December 25, 2 ♀ ♀, December 24, 1902, January 5, 1903.

"Iris seal, feet plumbeous (‘bright slate-grey, bright blue-grey’), bill black (♂ ♂ ‘above black, below plumbeous grey’), (‘above blackish, below greyish,’ ‘above slate-black, below grey’) (♀ ♀ )."

♂ ♂ : al. 52—48½; caud. 37½—35½; culm. 13½—12½; tars. 15⅔—14⅔ mm.

♀ ♀ : al. 51—49½; caud. 38½—34½; culm. 14—13½; tars. 15⅔—14⅔ mm.

Nos. 457, 1051, 1902, 1107, 1108, 12728, 12729, 12792, 12821, 13013.


Ipousin, R. Approuagne: 4 ♂ ♂ ad., December 24, 30 (two), January 7, 1903; 4 ♀ ♂ ad., January 1 (two), 5, 7, 1903.

"Iris seal (cinereous), feet slate-grey (‘plumbeous’), bill black (‘above black, below slate-black, *below pale grey’”).

♂ ♂ ad.: al. 64 ¼—58; cand. 38 ½—34 ½; culm. 14 ½—12 ½; tars. 15 ¼—14 ½ mm.

♀ ♂ ad.: al. 61 ½—58 ½; cand. 40—33; culm. 14 ½—13 ½; tars. 15 ½—14 mm.

Nos. 12790, 12908, 12909, 12951, 12952, 12903, 13013, 13044.

These specimens agree with others from British Guiana, and are apparently not different from typical birds from the Rio Negro.


Ipousin, R. Approuagne: 2 ♂ ♂ ad., December 24, 25; 2 ♀ ♂ ad., December 28, 30, 1902.

"Iris seal (‘sepia’), feet slate-grey, bill above black, below slate-black (‘slate-grey’”).

Nos. 12793, 12818, 12875, 12906.

♂ ♂ ad.: al. 54 ½—51 ½; cand. 27 ½—26 ½; culm. 14 ½; tars. 15 ½ mm.

♀ ♂ ad.: al. 55—53; cand. 29 ½—27 ½; culm. 14 ½; tars. 16 ¼—15 mm.

[Cayenne (Selater collection in Mus. Brit., Mus. Vindob. ex Becoëur).]


Cayenne (Mus. Kiel—nunc in Mus. Berol.).]


Ipousin, R. Approuagne: 1 ♂ ad., December 29, 1902; 1 ♀ ad., January 3, 1903.

"Iris seal, feet plumbeous grey, bill above black, below pale greyish.”

Nos. 12888, 12981.

♂ : al. 52; cand. 32; culm. 18 ½; tars. 23 ½ mm.

♀ : al. 50 ½; cand. 32 ½; culm. 17 ½; tars. 23 ½ mm.

A specimen from the Rio Icanna (coll. Natterer) agrees with the Cayenne birds, showing perhaps a little more rusty suffusion on the upper parts.

[Oyapoc ♀ Jelski leg. in Selater collection, nunc in Mus. Brit.]

* Daubenton's Plate 643, f. 2, placed by Mr. Selater with a query among the synonyms of *M. axillaris*, evidently represents *M. longipennis* Pelz., showing the white apical margins to the tail-feathers which are found in this species, but not in *M. axillaris*. 
251. Formicivora grisea (Bodd.).


Cayenne: 5 ♂♂ ad., October 10, 18 (two), 31, November 25; 3 ♂♂ jrs., October 13, 14; 8 ♀♀ ad., October 10, 11, 13, 14, 17 (two), 21, 31, November 1, 1902.

Roche-Marie, Cayenne: 1 ♂ juv. (in female dress), November 13, 1902.

"Iris seal, feet plumbeous ('bright plumbeous,' 'blackish plumbeous,' 'dusky plumbeous,' 'slate'), bill black ('above black, below plumbeous,' 'above black, below slate')."

♂♂: al. 57\(\frac{1}{2}\)—56; cand. 51—48; culm. 15\(\frac{1}{2}\)—14\(\frac{1}{2}\); tars. 20\(\frac{1}{2}\)—19\(\frac{3}{4}\) mm.

♀♀: al. 56\(\frac{1}{4}\)—54; cand. 52\(\frac{1}{2}\)—48\(\frac{1}{4}\); culm. 15\(\frac{1}{4}\)—14\(\frac{1}{2}\); tars. 20\(\frac{1}{2}\)—19\(\frac{3}{4}\) mm.


Brazilian birds (from Bahia, etc.), as a rule, have the upper parts rather paler and more brownish (less greyish and blackish), and perhaps could be distinguished as _F. g. nigricollis_ (Swinus.).


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252. Formicivora consobrina microsticta subsp. nov.

([Formicivora consobrina] Sclater, P. Z. S. 1860 pp. 279, 234 (typ. ex Babahoyo, Ecuador occ. in Mus. Brit.).]

_F. F. consobrina_ Scl. dictae maximo affinis differt maculis albis tectricum alarum superiorum majorum apicalibus multo minoribus nec plagam magnum albam formantibus.

♂♂ ad.: al. 54—52; cand. 50—47\(\frac{1}{2}\); culm. 14\(\frac{1}{2}\)—14\(\frac{1}{2}\); tars. 16\(\frac{3}{4}\)—16\(\frac{1}{2}\) mm.

♀♀ ad.: al. 53—51; cand. 48\(\frac{1}{2}\)—47\(\frac{1}{2}\); culm. 14\(\frac{1}{2}\)—14\(\frac{1}{4}\); tars. 16\(\frac{1}{2}\)—16\(\frac{3}{4}\) mm.

Habitat: in Mus. Tring (Cherr. leg., et in Mus. Brit.).

Typus in Mus. Tring (♂ ad. Approvague, Cherrie leg., No. 12736).

Approvague: 5 ♂♂ ♂♂ ad., December 9 (three), 15, 16; 2 ♀♀ ♀♀ ad., December 8, 9, 1902.

"Iris seal, feet plumbeous, bill black."

Nos. 1057, 1070, 1071, 1072, 1083, 12730, 12736.

The Cayenne specimens of this form collected by Mr. Cherrie differ from _F. consobrina_ Scl. from W. Ecuador, with which Mr. Sclater has associated his Cayenne bird, by having much smaller rounded white spots on the tips of the larger upper wing-coverts, these spots being not much larger than those on the middle and smaller coverts, while in _F. consobrina_ as well as in the allied _F. boucardi_ and _F. quixensis_ they are very much larger, forming a large white area on the wing. This difference is to be seen in both sexes. Otherwise the Cayenne form resembles _F. consobrina_ Scl. of Colombia, and presents the same long white tips to the outer tail-feathers, while _F. boucardi_ has them very much shorter.

As far as I can judge from a single female of _F. consobrina_ from Chimbo, W. Ecuador, in my collection, the Cayenne females have the under-parts of a somewhat lighter rufous brown, and are more blackish, less greyish on the front.

[Cayenne (Sclater collection in Mus. Brit.).]
253. Myrmeciza ferruginea (Müll.).

_Turdus ferrugineus_ Müller, _Naturg. Syst. Suppl._ (1776) p. 141. ex Daubenton, _Pl. Enl._ 500. fig. 2.—

_Myrmeciza cinnamonaea_ (Gmel.) aut.

Iponsin, R. Approvague: 3 ♂♂ ad., January 1, 5, 8, 1903; 1 ♀ ad., December 31, 1902.

"Iris seal, feet slate ('slate-grey'), bill above black, below slate-grey ('cutting edges of maxilla and mandible plumbeous') ♀.

Nos. 12932, 12956, 12908, 13055.

♂ ad.: al. 69 1/4—64; cand. 59 1/4—55; culm. 20 1/2—20; tars. 28—26 1/4 mm.

♀ ad.: al. 60 1/2; cand. 54; culm. 19 1/4; tars. 25 1/2 mm.


254. Myrmeciza atrothorax (Bodd.).

_Fornicarius atrothorax_ Bodd., _Tabl. Pl. Enl._ (1783) p. 44 (ex Daubenton, _Pl. Enl._ 701. fig. 2—
typ. ex Cayenne—♂).

Cayenne: 6 ♂♂ ad., October 22, November 1, 2, 19, 21, 24; 1 ♂ semi-ad., October 17, 2 ♀ ♀ ad., November 24, 26, 1902.

Roche-Marie, Cayenne: 2 ♂♂ ad., November 7 (two); 1 ♀ ad., November 7, 1902. Approvague: 1 ♂ juv. December 6, 1902.

"Iris seal, feet dusky (dusky flesh, bill black)."

Nos. 167, 207, 444, 473, 529, 600, 601, 827, 841, 876, 877, 931, 1031.

♂ ad.: al. 57 1/2—55 1/2; cand. 58—50 1/4; culm. 17 1/4—15 1/4; tars. 25 1/4—24 1/4 mm.

♀ ad.: al. 56 1/2—55; cand. 53 1/2—52 1/4; culm. 17 1/4; 25 1/4—24 1/4 mm.

[Cayenne (Buff., coll. Deplanches, _fide_ Bp., ♀ in Mus. H. v. B.), Oyapoc ♀, Jelski leg.]

[255. Myrmeciza pelzelni Scl.]


Oyapoc: ♂ ♀ in Salvin & Godman collection (unmc in Mus. Brit.).]

[256. _Herpsilochmus sticturus_ Salv.]

_Herpsilochmus sticturus_ Salv., _Ibis_ 1885, p. 424 (hab. Bartica Grove et Camacusa, Brit. Guiana, 
hab. typ. select. Bartica Grove ♂ in Mus. Brit.).

Cayenne: ♀ in Mus. Paris (_fide_ Ménég. et Hellm.).]

257. Hypocnemis cantator (Bodd.).

_Fornicarius cantator_ Bodd., _Tabl. Pl. Enl._ (1783) p. 44 (ex Daubenton, _Pl. Enl._ 700. fig. 2—
typ. ex Cayenne).

Roche-Marie, Cayenne: 2 ♂♂ ♀ ad., November 6, 7; juv., November 6, 1902.

Iponsin, R. Approvague: 7 ♂♂ ♀ ad., December 25, 26 (two), 30, 1902, January 2, 5 (two), 1903; 1 ♀ juv., December 25, 1902; 4 ♀ ♀, December 26, 1902, January 5 (three), 1903.

"Iris seal, feet slate-grey ('pale grey', 'greyish', 'greenish grey', 'grey with olive wash'), bill above black, below greyish (slate-grey)."
Hypocnemis flavescens Scl.


Oyapoc (Schles collection in Mus. Brit.).

258. Hypocnemis naevia (Gmel.).

Pipra naevia Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 1003 (ex Buff. et Daubenton, Pl. Ed. 823 fig. 2—ex Cayenne).

Hypocnemis theatrice (part.) Schles (nee Des Murs), Cat. Birds Brit. Mus. xvi. (1890) p. 292 (Oyapoc).*

Iponusin, R. Approuague: 1 ♂ ad., December 26; 2 ♂♂ ad., December 26, 28, 1902.

"Iris seal, feet pale flesh, bill black."

Nos. 12837, 12838, 12877.

♂ : al. 56; caud. 36; culm. 15 1/4; tars. 20 1/2 mm.

♀♂: al. 58 1/4—56 1/2; caud. 35; culm. 15 1/2; tars. 19 3/4 mm.


Camopi (Mus. Paris ex Gay).

Oyapoc, Cayenne (♂♀ Schles collection in Mus. Brit.).

260. Hypocnemis leucomystax angustirostris (Caban.).


Approuague: 5 ♂♂ ad., December 8 (two), 9 (two), 10, 1902; 5 ♀♀ ad., December 8, 10, 11, 15 17, 1902.

"Iris seal (♂♂), dusky grey (♀♀), feet plumbeous, bill black."

♂♂ ad.: al. 69—65; caud. 48—44 1/2; culm. 17 1/2—17 1/4; tars. 25—24 1/2 mm.

♀♀ ad.: al. 67—65; caud. 46 1/2—43; culm. 17 1/4—16 1/2; tars. 25 1/4—24 1/2 mm.

Nos. 1034, 1040, 1065, 1074, 1081, 1096, 1104, 1109, 12728, 12754. [Cayenne (Mus. Hein.).]

261. Hypocnemis poecilinota Cab.


Iponusin, R. Approuague: 2 ♂♂ ad., December 26, 1902, January 8, 1903; 2 ♀♀ ad., December 24, 1902, January 7, 1903.

"Iris seal, feet grey ('pale grey'), bill black."

♂♂ ad.: al. 68—64; caud. 45 1/2—39 1/2; culm. 17 1/4; tars. 23 1/4—22 1/2 mm.

♀♀ ad.: al. 66 1/2—62 1/2; caud. 44 1/2—40 1/2; culm. 17 1/2—16 1/4; tars. 23 1/4—22 1/2 mm.

Nos. 12788, 12839, 13946, 13958.

These birds agree with others from British Guiana and the Orinoco River. As a rule the females from British Guiana may have the dorsal feathers more uniform, less spotted with black and less margined with fulvous than those from other localities.

Cayenne (Musc. Vindob., δ♀, ex Becoœur).

262. Hypocnemis melanopogon Sel.


Approuague: 1 δ ad., December 8; 2 ? ? ad., December 10 (two), 1902.

“Iris cinereens, feet plumbeous, bill above black, below slate-black (plum- beons).”

Nos. 1066, 1090, 1106.

δ ad.: al. 62 1/4; cand. 36 1/4; culm. 17 1/4; tars. 19 1/2 mm.

♀ ? ad.: al. 62 1/4; cand. 38—36 1/2; culm. 16 1/4; tars. 20 1/4—19 1/2 mm.

[Cayenne (Selater collection in Mus. Brit.), Mus. Hein.; Oyapoc (Selater collection in Mus. Brit.)]

263. Sclateria naevia (Gmel.)

_Sitta naevia_ Gmelin, _Syst. Nat._ ed. xiii. i. 1 (1788) p. 442 (ex Edwards, _Pl. 346._—typ. ex Surinam) δ.

Approuague: 2 δ δ ad., December 10, 19; 1 ? ad., December 8, 1902.


“Iris drab (‘drab-brown’), feet dusky (‘dusky flesh-colour’), bill above black, below slate-black (‘slate-grey’).”

δ δ ad.: al. 71 1/4—67 1/2; cand. 51 1/4—48 1/2; culm. 23 1/4—23 1/2; tars. 25 1/4—23 1/2 mm.

♀ ? ad.: al. 69—65 1/2; cand. 50—48 1/2; culm. 23 1/4—23; tars. 25 1/4—24 1/2 mm.

Nos. 1064, 1091, 12775, 12871.

[Cayenne (Selater collection in Mus. Brit.)]

264. Sclateria leucostigma (Pezel.)


Barra—typ. in Mus. Vindob.).

_Heterocnemis simplex_ Selater, _P.Z.S._ 1868 (publ. 1869) typ. ex Surinam.

Ipusin, R. Approuague: 1 δ ad., January 5, 1903; δ ? fere ad., December 24, 1902; 1 ? ad., January 5, 1903.

“Iris grey (‘seal’), feet greyish flesh (‘pale greyish flesh’), bill above black, below slate-grey.”

Nos. 12758, 13008, 13005.

δ ad.: al. 67 1/2; cand. 59 1/2; culm. 21; tars. 25 1/2 mm.

♀ ad.: al. 66 1/2; cand. 57 1/2; culm. 20 1/2; tars. 20 mm.

These specimens agree perfectly with Pezeln’s type specimen from the Rio Negro and with others from Bartica Grove, Brit. Guiana, in Mus. H. v. B.

[Cayenne (δ in Mus. Vindob. ex Becoœur), Oyapoc, St. George, March 13, 1869 (Jelski leg.) in Mus. Vindob.)]
[265.]{Sclateria argentata} (Des Murs).


Oyapoc: ♂ jr. (Sclater collection in Mus. Brit.).]

[266.]{Myrmelastes melanothorax} (Scl.).*


*Thanomophilus noesi* Pelzeln, 1868 (typ. ex Cayenne).

*Thanomophilus camopiensis* Meneg. 1904 (typ. ex Camopi, Cayenne).

Cayenne (Mus. Vindob.), Camopi, French Guiana (coll. Gey in Mus. Paris.).]

267. {Percnostola rufa} (Bodd.).


{Percnostola funebris} (Licht.).

Ipousin, R. Appromague: 1 ♂ ad., January 5, 1903; 1 ♂ juv. in transition plumage, December 24; 3 ♀ ♀ ad., December 26, 1902.

"Iris chestnut (♂ ad.), 'sepia' (♂ juv.), 'seal, brick-red, hazel' (♀), feet slate-grey ('greyish flesh, plumbeous'), bill black ('above black, below slate-grey')."

Nos. 12899, 12996, 13026, 15419, 15422. ♂ ad.: al. 75½—73½; caud. 60½; culm. 21½—19½; tars. 29½—27½ mm. ♂ ♀ ad.: al. 75—71½; caud. 62½—60½; culm. 20½—19½; tars. 29½—28½ mm.


268. {Cercomacra nigrescens} (Cab. & Heine).


Appromague: 8 ♂ ♂ ad., December 6, 8 (four), 10 (two), 13; 1 ♂ imm. with remains of the rufous plumage, December 8; 5 ♀ ♀ ad., December 6, 8 (three), 9; 1 ♀ (probably young male), December 6, 1902.

"Iris drab ('sepia'), feet 'grey' (plumbeous), 'bill black' ('above black, below grey,' 2 ♀ ??)."

Nos. 1027, 1028, 1029, 1030, 1036, 1037, 1038, 1041, 1042, 1043, 1044, 1045, 1073, 1988, 1989, 1140. ♂ ♂ ad.: al. 72½—66; caud. 70—64½; culm. 20½—19½; tars. 25½—23½ mm. ♂ ♀ ad.: al. 69—66; caud. 62⅓—59; culm. 19½—18½; tars. 24½—23½ mm.

There is a good deal of individual variation, as illustrated by the specimens composing the series now before me. Some individuals have the upper wing-coverts of a nearly uniform black, while others have them slightly tipped or margined with white; others show but very slight traces of the white apical margins, and are perfectly intermediate between those with the uniform black wing-coverts and those with the white-tipped coverts.

The primary coverts as well as the feathers of the alula in some specimens show broad white margins to the outer webs, while these margins are either altogether absent or but slightly indicated in other individuals of the series. 

_**C. nigrescens**_ is a near ally of _**Pyriglena serrata**_ Scl., but the latter, as lately shown by Dr. Hellmayr, is also a _**Cercomacra**_ and not a _**Pyriglena**_ at all. Dr. Selater had already placed a female of _**C. nigrescens**_ under the head of _**C. serrata**_ (viz. No. "13") in the Museum, as Hellmayr tells me.

I have compared the type in the Museum Heineanum, kindly lent to me by Oberamtmann F. Heine, and have found it to agree perfectly with male specimens collected by Mr. Cherrie.

[269. **Cercomacra napensis** Scl.]


Cayenne, δ, and Oyapoc, σ (Sclater collection in Mus. Brit.).

[270. **Pyriglena leucotus** (Spix).]

_Thamnophilus leucotus_ Spix, _Av. Brot_. ii. (1825) p. 28, tab. xxxix. fig. 2 (typ. ex sylvis Paracolim in Mus. Monac.).

Cayenne (δ ad. in Mus. Vindob. ex Becoeur sub n. "P. maura").

[271. **Pithys* albifrons** (Linn.).]


Ipsonis, R. Approuague : 4 δ δ ad., December 25 (two), 26, 31 ; 2♀♀ ad., December 26, 31, 1902.

"Iris seal, feet orange-yellow, bill above black, below slate-black."

Nos. 12816, 12817, 12853, 12854, 12924, 12925.

δ δ ad. : al. 72½—70 ½ ; canul. 41 ½—40 ½ ; culm. 16 ½—16 ; tars. 22½—21 ½ mm. ♀♀ ad. : al. 71 ½—69 ; canul. 40 ½—39 ½ ; culm. 17 ½—16 ½ ; tars. 22½ mm.

There is no difference between the birds sexed "♀♀", as compared with those sexed "δ δ."


[272. **Anoplops rufigula** (Bodd.)]


Ipsonis, R. Approuague : 4 δ δ ad., December 26 (two), 30, 1902, January 8, 1903 ; 1 ♀ ad., December 26, 1902.

"Iris brick-red, feet pale flesh-colour, bill blackish slate-grey at tip of mandible, bare skin about eye blue-grey."

Nos. 12849, 12850, 12851, 12916, 13060.

δ δ ad. : al. 81½—76½ ; canul. 53—47½ ; culm. 19½—18½ ; tars. 27½—25½ mm. ♀♀ ad. : al. 76½ ; canul. 50 ; culm. 17½ ; tars. 26½ mm.


* It is by no means certain that "Manikup" has been proposed by Desmarest as a new generic name. He, of course, begins his Latin diagnosis with the initial "M . . . ," but the article is only headed by the word "Manikup," and it is not said that "Manikup" is proposed as a new generic Latin name for this species.
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273. Rhopotere torquata (Bodd.).


Ipousin, R. Approuague: 2 ♂♂ ad., December 24, 31, 1902; 1 ♀ ad., December 24, 1902.

"Iris chestnut, feet slate-grey, bill black."

Nos. 12927, 12795, 12754.

♂ ad.: al. 94—89½; caud. 30—36; culm. 23½; tars. 24½ mm.

♀ ad.: al. 93½; caud. 38½; culm. —; tars. 24 mm.


274. *Formicarius colma* (Bodd.).


*Formicarius Cayennensis* Boddart (ex *Pl. Enl.* 821.—typ. ex Cayenne) ♂.

Ipousin, R. Approuague: 1 ♂ ad., January 6, 1903.

Roche-Marie, Cayenne, 1 ♀ ad., November 7, 1902.

♂: "Iris seal, feet dusky drab, bill black."

Nos. 596, 13028.

♀: "Iris seal, feet dusky drab, bill above black, below blackish slate."

♂ ad.: al. 86½; caud. 50½; culm. 29½; tars. 29½ mm.

♀ ad.: al. 89½; caud. 52; culm. 29½; tars. 29¾ mm.

This is the species with black front, named *P. nigrifrons* Gld. by Mr. Sclater; but I have little doubt that Daubenton’s Plates 821 and 703, fig. 1, are intended to represent this species, and not the Brazilian *F. ruficeps* (Spix).

[Cayenne (Buff., Mus. Vindob. ♂ ♀, ex Becoeur, Mus. Hein.). Oyapoc, Cayenne, (Sclater collection in Mus. Brit.).]

275. *Formicarius crissalis* (Cab.).


Ipousin, R. Approuague: 2 ♂♂ ad., January 1, 3, 1903.

"Iris seal, feet drab, bill above black, below blackish slate."

Nos. 12985, 12954.

♂ ad.: al. 96—94; caud. 55—52; culm. 22½—20½; tars. 22½—21½ mm.

This form stands perhaps better as *F. hoffmanni crissalis* (Cab.), as it differs from *F. hoffmanni* only by its lighter breast and abdomen.

[Cayenne (Mus. Brit., Mus. Vindob. ex Becoeur).]

[276. *Grallaria varia* (Bodd.).


Cayenne (Buffon, Mus. Vindob.).]
277. Grallaria brevicauda (Bodd.).


Ipousin, R. Approuague: 1 ♂ ad., December 25, 1902.

"Iris seal, feet slate, bill above black, below pale."

Al. 89½; cand. 35; culm. 20½; tars. 44½ mm. No. 12826.

[Cayenne (Sclater collection in Mus. Brit.), Mus. Vindob. et Mus. Leverian.]

[278. Grallaria macularia (Tem.).]


Oyapoc, Cayenne (Sclater collection in Mus. Brit.).

Cayenne (Mus. Vindob. ex Becoenc.).

279. Conopophaga aurita (Gmel.).


Ipousin, R. Approuague: 1 ♂ ad., December 31, 2 ♀ ♀ ad., December 31, 1902, January 6, 1903.

"Iris seal, feet greyish lavender (‘pale lavender,’ ‘pale grey’), ‘bill black’ (‘above black, below dusky,’ ♀ January 6)."

Nos. 12930, 12931, 13035.

♂ ad.: al. 66½; cand. 33; culm. 14½; tars. 25½ mm.

♀ ad.: al. 66½; cand. 33½—32½; culm. 13½—12½; tars. 26—25½ mm.

[Cayenne (Sclater collection in Mus. Brit., in Mus. Paris ex Poiteau et Faber).]

280. Corythopis torquata anthoides (Puch.).


Ipousin, R. Approuague: 1 ♂ ad., December 27, 1902; 1 ♀ ad., 1 ♀ jr., 8 and 6 January, 1903.

"Iris wood-brown (♀ ‘drab grey,’ seal), bill above black, below pale greyish flesh-colour (♀ ♀ ‘below pale greyish,’ ‘buffy yellowish,’ feet greyish flesh, ♀ ‘grey,’ pale greyish)."

Nos. 12868, 13029, 13059.

♂ ad.: al. 66½; cand. 54½; culm. 14½; tars. 24½ mm.

♀ ad.: al. 62½; cand. 48½; culm. 14½; tars. 24 mm.


[To be continued.]
NEW FORMS OF ORIENTAL PAPILIOS.

BY THE HON. WALTER ROTHCHILD, Ph.D.

1. *Papilio semperi baglantis* subsp. nov.

♀. Hindwing above with submarginal and discal reddish spots, which are much smaller than on the underside, the anterior spots of the discal row being absent from both sides; outer margin with whitish grey border.

*Hab.* Negros.
Two specimens.

2. *Papilio semperi aphthonia* subsp. nov.

♀. The spots of the hindwing nearly as large above as beneath, the discal row complete on both sides.

*Hab.* Mindanao.
A few specimens in various collections.
Type in the Tring Museum.

3. *Papilio kuehni mesolamprus* subsp. nov.

♀. Paler than the ♀ of *P. k. kuehni*. The disc of the hindwing above with a large diffuse reddish grey patch. The red spot of the underside rather larger than in *kuehni*.

*Hab.* Toli-Toli, North Celebes (H. Frühstorfer).
One ♀.

4. *Papilio neptunus doris* subsp. nov.

♂♀. The black basal area of the forewing above and beneath not quite reaching to the base of the second median vein, the light median area very pale, almost pure white beneath towards hindmargin, the black band-like area very deep in colour. Hindwing with three spots above and three or four beneath.

*Hab.* North Borneo.
A series.

5. *Papilio neptunus padanganus* subsp. nov.

♂♀. The black areas of the forewing almost as deep black as in the preceding subspecies, the postmedian black area broader than the grey median one; the grey streak situated below the second median vein not reaching to the cell, the black streaks placed before and below this vein as long as in *P. n. sumatrana* Hag. (1894) from North-East Sumatra.

*Hab.* West Sumatra: Padang and Padang Sidempoean.
A series.

6. *Papilio liris savuanus* subsp. nov.

♂♀. The median band of the hindwing as broad as in *P. l. liris*, but paler grey beneath, and in most specimens shaded with black above.

*Hab.* Savu (A. Everett).
A series.
7. Papilio polyphontes pedias subsp. nov.

♂♀. The whitish area of the forewing narrower than in specimens from Celebes, pure white in the ♀, the black internervlar streaks shorter than in P. p. polyphontes. The last submarginal spot on the upperside of the hindwing generally bright red.

Hab. Xulla (=Sulla) Islands: Mangola and Bessi (W. Doherty).
A series.

8. Papilio polyphontes ithacus subsp. nov.

♂♀. The light stripes of the forewing smaller than in P. p. polyphontes, in both sexes shaded with black. The veins traversing the white area of the hindwing broadly black.

Hab. Northern Moluccas: Halmahera, Morty, Ternate and Batjan.
A series.

9. Papilio polydorus orinomus subsp. nov.

♂♀. Similar to P. p. aignanus Rothschild (1898), the white cell-spot of the hindwing much larger than the second white discal spot, the fourth discal spot larger than the third, and the fifth submarginal spot smaller than in aignanus.

A series.

10. Papilio polydorus meforanus subsp. nov.

♂♀. Forewing, above, with narrow streaks in front of the second median vein and behind it, the streaks being dark grey in ♂ and white in ♀; on underside these streaks widened in both sexes to form white patches, the outer light streaks along the veins also being more distinct beneath than above. The white cell-spot of the hindwing about thrice as large as the first discal spot, the latter being small, the fourth discal spot anteriorly less than twice as long as it is broad distally.

Hab. Mefor, Geelvink Bay (W. Doherty).
Several specimens.

11. Papilio polydorus humboldti subsp. nov.

♂♀. A transitional form, being intermediate between P. p. godartianus Guér. (1852) from Dutch New Guinea and plagius Rothschild (1895) from German New Guinea. The greyish stripes on the upperside of the forewing are narrow and dark; the black vein-stripes broad, extending to the cell, the black internervlar streaks reaching close to it; beneath the pale stripes are nearly white, those situated near the second median vein being widened to form patches. The white cell-spot of the hindwing smaller than the first discal spot, often very small, the first discal spot rhombiform, at least beneath.

Hab. Humboldt Bay, Dutch New Guinea, at the border of German New Guinea.
A series collected by W. Doherty.
12. Papilio polydorus phalces subsp. nov.

♂♂. Similar to plagius. The white area of the hindwing distally more rounded in most specimens; the cell-spot smaller, the first discal spot usually elongate, the fourth and fifth spots not quite reaching the base of the second median vein, all the spots distally more or less rounded off.

_Hab._ D'Entrecasteaux Islands: Trobriand and Fergusson.
A series collected by A. S. Meek.

13. Papilio aristolochiae adaeus subsp. nov.

♂♂. Similar to North Indian specimens of _aristolochiae_, but the hindwing longer, the white discal spots usually small, but situated close to the cell, the longest spot always much shorter than its distance from the corresponding submarginal one. The ground-colour of the ♀ very pale.

_Hab._ West, Central and East China.
A series.

14. Papilio aristolochiae rhodopis subsp. nov.

♂♂. Similar to _interpositus_ Fruhst. (1906) from Formosa, but the second and third white discal spots of the hindwing beneath reddish, at least at the internervular folds, the first being red in front.

_Hab._ Loo Choo Islands.
2 ♂♂♂.

15. Papilio aristolochiae goniopeltis subsp. nov.

♂♂. The black basal area of the forewing reaching to the point of origin of the second median vein, the wing beneath being strongly whitish between this area and the black distal margin. The white spots of the hindwing all close to the cell, being usually long, the one situated before the first median vein mostly very long and triangularly pointed; many specimens with a small cell-dot. Hindwing rather more extended red than in _P. a. ceylonicus_ Moore (1881) and _P. a. aristolochiae_ Fabr. (1775).

_Hab._ Tenasserim, Burma, Siam northwards to Hong Kong; common.

16. Papilio aristolochiae asteris subsp. nov.

♂♂. Smaller than the preceding subspecies; the wings deeper black, the ♀ hardly paler than the ♂; the white spots of the hindwing close to the cell, usually narrow, the first discal one small and linear, placed close to the cell, or absent, the third shorter than its distance from the submarginal spot; most specimens with a small cell-spot, which is more often absent above than beneath; the red submarginal spots small.

_Hab._ Malay Peninsula and Penang.
Several specimens.

17. Papilio aristolochiae floresianus subsp. nov.

♂♂. Resembling large Java specimens (= adamas Zink.). The white central patch of the hindwing consists of five spots, the first being small and linear, the others large, the third being almost as long as its distance from the submarginal
spot; the first four spots are pure white; the submarginal spots paler red than in P. a. austrosundanus Roths. (1895).

Hab. Flores, during a very dry season (A. Everett).
Two specimens.

18. Papilio dasarada barata subsp. nov.

♂. Very similar to North Indian specimens; the wings somewhat narrower, and the underside of the hindwing proximally paler; all my specimens on upperside without a spot in front of the large white discal spot. Harpe (on inside of clasper) distinctly bent just behind the proximal process, not forming a straight dentate blade as in dasarada.

Hab. Shan States and Tenasserim.
A series.
P. dasarada I find to be a distinct species instead of a white-spotted variety of P. philoxenus. The genitalia are different.

19. Papilio jonasi spec. nov.

♂♀. Similar to P. meneius Feld. (1862); the scent-pouch of the ♂ shorter, the harpe of the clasper as in P. impediens Roths. (1895), and the submarginal spots of the hindwing very much enlarged above and below and pale red, the spot situated beyond the apex of the abdominal field also being marked above, though here narrow. In the ♀ the posterior spots touch each other. On the underside my only specimen of this sex bears a reddish grey submarginal double patch on the forewing, as sometimes happens also in P. dasarada Moore (1857).

Hab. Northern Formosa.
One pair.

20. Papilio machaon birmanicus subsp. nov.

♂♀. Similar to P. m. sikkimensis Moore (1884), but the yellow patches of the forewing and the yellow area of the hindwing much larger, the abdominal edge of the hindwing being narrowly bordered with black; the red anal spot bordered with black in front but not behind. On the underside the veins are less broadly black, and the black discal band of the hindwing is much narrower than in sikkimensis.

Hab. Shan States and Burma.
A small series.

21. Papilio demolion delostenus subsp. nov.

♂♀. Somewhat paler than the other subspecies of P. demolion, and the discal band much narrower; on the forewing the last three or four spots of the band are joined together, but the incisions between them are deeper than in the other Malayan forms; on the hindwing the band is hardly wider in the cell than the distance of the second median vein from the first.

On the underside the veins of the hindwing are more or less yellow in between the black discal spots, and the creamy submarginal band is more extended ochreous at the apical and anal angles than in the other forms.

Hab. Palawan.
2 ♂♂ and 1 ♀.
22. Papilio gigon neriotes subsp. nov.

♂♀. Forewing with minute submarginal dots on the upperside and a continuous submarginal undulated creamy band on the under surface; the marginal dots of the hindwing beneath larger than in specimens of gigon from Celebes.

*Hab.* Talaut and Sangir, north of Celebes (W. Doherty).

2 ♀♂, 1 ♀♀.

23. Papilio euchenor misolensis subsp. nov.

♂. Similar to small specimens of *P. euchenor euchenor*, but the blue spots on the underside of the hindwing are absent, except the last, which is represented by a restricted number of blue scales, there being also about half a dozen pale blue scales below the costa in one of the specimens.

*Hab.* Misol, January 1899 (H. Kühn).

4 ♀♂.

*Papilio euchenor* is a near ally of *P. demolion* and *gigon*.

24. Papilio euchenor naucles subsp. nov.

♂. Similar to *P. e. obsolescens* Rothsch. (1895) from Aru; the yellow band of the forewing wider; the cell-patch reaching to the point of origin of the first median vein or below it, the base of cellule R₁—M₁ not black, the patch M₁—M₂ proximally less rounded.

♀. Apparently not constantly different from *obsolescens*; the third radial vein of the forewing, which separates the two yellow discal patches, not black in between these patches; the partitions of the yellow area of the hindwing, which are situated below the apex of the cell, longer than in *obsolescens*.

*Hab.* Kei Islands (Kei Toal and Great Kei).

A long series of ♀♂ and 2 ♀♀ collected by H. Kühn and C. Webster.

25. Papilio euchenor rosselanus subsp. nov.

♂. Similar to *P. e. misimanus* Rothsch. (1896); discal band of forewing broader, being as wide as in *P. e. godarti* Montr. (1856) from Woodlark; the patch R₂—R₃ of this band on the forewing (the fourth from behind) about twice as long as its distance from the outer margin; the third subapical spot longer than in *misimanus*, but shorter than in *godarti* and widened behind, being somewhat hook-shaped; the row of three subapical spots is continued (on upperside) by one or two dots. On the hindwing there is an oblique streak in front of the subcostal vein emanating from the yellow area. This streak corresponds to the subcostal submarginal ochreous bar, which is also very oblique.

*Hab.* Rossel Island, Louisiade Archipelago, February 1898 (A. S. Meek).

6 ♀♂.

26. Papilio euchenor sudestensis subsp. nov.

♂. Like the preceding subspecies, differing in the following details: on the forewing none of our four specimens have a discal spot in front of the second radial vein, the first subapical spot is shorter and mostly also broader, being nearly as in *misimanus*; the subcostal bar of the upperside of the hindwing is vestigial; on the underside this bar is posteriorly not produced so far basad as in *rosselanus*, remaining at the subcostal vein at least 2 mm. distant from the yellow area,
therefore appearing to be less oblique than in *rosselanus*; the greyish lunule \( R^2 - R^3 \) of the hindwing also is less oblique than in *rosselanus*.

*Hab.* St. Kilda Island, Louisiade Archipelago, April 1898 (A. S. Meek).

4 ♂♂.

The four specimens are evenly discoloured, the light yellow markings having assumed an ochreous tint.

27. *Papilio demoleus novoguineensis* subsp. nov.

♂♀. Similar to *P. d. atheneus* from North Australia. The pale yellow patches situated below the cell of the forewing smaller than in *sthenelus*, the one placed behind the second median vein shorter, being about as long as broad, deeply incised on the distal side, the cell-spot more deeply constricted than it usually is in *sthenelus*—On the hindwing there is no small spot below the tip of the cell, or the spot is minute.

On the *underside* the forewing is more extended black than in the Australian subspecies; the black bars on the disc of the hindwing are broader, and the orange anal spot is always bordered with black on the proximal side in both sexes, this border, which is usually absent from Australian specimens, being always broader than in the latter.

*Hab.* British New Guinea; Lower Aroa R. (A. S. Meek), and Redscar Bay (Lix).

A series.

28. *Papilio helenus tambora* subsp. nov.


♂. Similar to *P. helenus enganius* Doh. (1891), from Lombok, Java, Sumatra, etc., differing especially in the orange-rufous discal spots placed on the underside of the hindwing before the abdominal margin being very much enlarged; some specimens bear in front of these orange-rufous patches one or two small spots of the same colour.

*Hab.* Sumbawa, September 1896 (W. Doherty).

A series.

The next subspecies proves that I was wrong in assuming that the Sumbawa specimens belong to the Timorese race *biseriatus*.

29. *Papilio helenus mangarinus* subsp. nov.

♂. The orange-rufous spots of the hindwing beneath, referred to in the preceding description, are in size and colour intermediate between these spots of *P. h. enganius* and *P. h. tambora*, being larger and paler than in *enganius*, and smaller and generally more reddish than in *tambora*. The grey streaks on the underside of the forewing are longer than in both subspecies mentioned.

*Hab.* South Flores, November 1896 (A. Everett).

7 ♂♂ ♂♀.

30. *Papilio helenus jindanus* subsp. nov.

♂♀. Large; forewing strongly falcate, recalling the falcate forewing of *P. memnon merapa* from the same island. The first white patch on the upperside of the hindwing large, square, not being wider behind than in front, the other two patches likewise large, being nearly twice as long as their distance from the outer margin; abdominal margin longer than in the other subspecies of *helenus*. 
On the **underside** the cell-streaks of both wings very prominent; the discal streaks of the forewing broad and long; the orange-rufous discal spots of the hindwing situated in front of the abdominal margin nearly as large as in *P. h. tambora* from Sumbawa, the first white patch square, the third touching the cell, not being rounded off proximally, a fourth patch distinct in ♂, vestigial in ♀, as it also is on the upperside of both sexes, a vestige of a fifth white patch in ♀ only; the submarginal spots large, except the one situated behind the tail, this spot being either small or absent.

The forewing of ♀ bears above a greyish diffuse discal band, which is rather paler than in *P. h. biseriatus* from Timor.

*Hab.* Sumba.

One pair.

31. **Papilio fuscus dayacus** subsp. nov.


♂. Differs from this sex of *P. f. prezaspes* Feld. (1865) in the hindwing bearing on the upperside a more distinct fourth discal spot, in the third and fourth white patches on the underside of this wing not reaching to the cell, being rounded off proximally, and in the three posterior white spots being larger than in specimens from the Malay Peninsula.

♀. Forewing with a large white diffuse patch contiguous with apex of cell and continued to hindmargin as a narrow macular band, the patch and band purer white beneath, the upper corner of the cell also being white on the underside.—

The yellowish white area of the hindwing large, entering the cell, continued to abdominal margin, but the last two spots above diffuse and shaded with brown; the anal rufous spot distinct and the preceding submarginal ones vestigial.

On **underside** the fringe-spots of both wings large, as are also the submarginal spots of the hindwing.

*Hab.* North Borneo, in various localities.

♀ 3 ♂ and 1 ♀.

32. **Papilio fuscus andamanicus** subsp. nov.

*Papilio fuscus prezaspes* Rothschr., l.c. (partim; Andamans).

♂ ♀. Both sexes more densely dusted with yellowish scales on the upperside of the forewing, on the disc of the forewing beneath, and in the basal half of the underside of the hindwing, there also being indistinct patches of yellowish scaling on the upperside of the hindwing between the yellowish white area and the anal angle; the fourth spot of the yellowish white area shorter above as well as beneath than in the two subspecies from the Malay Peninsula and Borneo; no orange anal spot above.

On **underside** there is a very prominent blue spot at the outer side of each discal white spot of the hindwing.

The ♀ bears on the underside of the hindwing a white band which stands separated from the cell, being just vestigial from R$^2$ to M$^2$, and reappearing before the hindmargin as a white spot; the band is slightly marked also on the upperside, ending with a small yellowish spot at the hindmargin, this spot being present in most ♂♂ as well.

*Hab.* Andaman Islands. 

♀ 3 ♂ and 2 ♀♀.
33. *Papilio woodfordi choiseuli* subsp. nov.

♂. Intermediate between *P. w. woodfordi* from Bougainville and the Shortland Islands and *P. w. ariel* from Isabel.—**Upperside**: on forewing a band-like patch around apex of cell, tapering behind, either not extending to the second median vein or continued backwards by small vestigial spots situated on the veins, outside this line of spots there being (in this one specimen) a diffuse whitish spot placed behind the second median vein, while in the type-specimen there is some white scaling in the lower angle of the cell.—**The band of the hindwing as in woodfordi, but slightly narrower behind.**

On **underside** the spots of the forewing as in woodfordi. The greyish discal spots of the hindwing slightly narrower than in woodfordi.

*Hab. Choiseul, Solomons, December 1903 and January 1904 (A. S. Meek).*

2 ♂♂.

34. *Papilio aegaeus goramensis* subsp. nov.

♂. Forewing with a white macular band as in *P. a. adrastus* Feld. (1865) from Banda, but the spots composing the band smaller beneath than in adrastus.—**The white band of the hindwing much broader than in adrastus, entering the cell as far as (or nearly) the point of origin of the first median vein, and extending a very little below the second median vein.**

♀. Only one form is known to us. Forewing with a large yellowish white area which is much shaded with brown; the cell-patch larger than in keianus Rothscl. (1896) and adrastus, being nearly as long as it is broad.—**The white patch of the hindwing a little smaller than in keianus, washed with yellowish brown at the outer edges and posteriorly.**

On the **underside** the white area of the forewing is washed with brown, at least partly, and that of the hindwing is also less pure white than in keianus, the marginal spots also being more yellowish.

*Hab. Goram-lant and Manovolka, November 1899 and February 1900 (H. Kühn).*

3 ♂♂ and 4 ♀♀.

35. *Papilio aegaeus kisseranus* subsp. nov.

♂. Very much like the preceding male, but the band of the hindwing broader, the first patch of the same especially being longer.

♀. The light area of the forewing above more shaded with yellowish brown than in goramensis, the cell-spot much smaller, being broader than long, and the veins more broadly black.

On the **underside** the three posterior discal patches of the forewing are shorter and the cell-spot of the hindwing (which is larger above than beneath in this and the preceding form) is smaller than in goramensis.

*Hab. Kissoci, Watoebela group, March 1901 (H. Kühn).*

4 ♂♂ and 4 ♀♀.

36. *Papilio aegaeus aegatinus* subsp. nov.

♂. A small form; similar to *P. a. othello* Grove-Smith (1894) from Biak.

**Underside** of hindwing with a single row of discal spots, which are blue and very prominent; the orange anal spot large. The forewing bears in most specimens
one, two, or three minute white subapical spots, the other specimens being without
them.

♀. In two forms:

♀-f. melia.—Forewing all brown above, somewhat darker proximally than
distally, with just a vestige of grey spots between the third subcostal and first
radial veins.—White patch of hindwing evenly rounded proximally, just entering
into the tip of the cell, posteriorly not reaching the second median vein, the third
spot of this patch half as long again as its distance from the outer margin.

Underside: forewing with three diffuse dirty grey spots between the third
subcostal and first radial veins.—Hindwing with five white discal spots which
are remote from the cell, the first minute, the third twice as long as broad, the
fifth washed with ochreous, a sixth, luniform, spot vestigial.

♀-f. myrtis.—Forewing above: a transverse apical cell-patch and a row of
discal patches white, but very much shaded with blackish brown and very diffuse,
the posterior patches being just vestigial in the second specimen, which a little
approaches the preceding ♀-form.—The white area of the hindwing a little
larger than in ♀-f. melia, the cell-spot especially being larger, there also being a
spot below the second median vein; the first three orange-red submarginal spots
vestigial or absent.

Underside: the patches of the forewing white, the cell-patch narrow, the three
posterior discal patches in one of the two specimens shaded with brown and the
last two small and vestigial.—Hindwing: the second to sixth submarginal spots
at least three times as long as broad, narrow, less than half as broad as their
distance from the edge of the wing.

_Hab._ Suer, Meelor L., Geelvink Bay, May and June 1897 (W. Doherty).
8 ♂♂ and 3 ♀♀.

37. _Papilio ambrax artanus_ subsp. nov.

♂. Forewing above with slight narrow grey streak in the apical area. Band
of hindwing narrower in the centre than in specimens of _ambrax_ from Dutch
New Guinea.

♀. Forewing with white area as in _P. a. ambracia_ Wall. (1865) from Waigina.
First white discal spot of the hindwing obliquely transverse, triangular or
trapeziform, being smaller than in _ambracia._

_Hab._ Suer, Meelor L., Geelvink Bay, May and June 1897 (W. Doherty).
A series.

38. _Papilio dialis catalaeus_ subsp. nov.

♂. Smaller than _P. d. dialis_ Leech (1893) and _P. d. doddsi_ Janet (1896).
Forewing with a narrow cottony streak on the two median veins and a vestigial
streak on the submedian fold; underside more extended and purer whitish grey
than even in _P. d. dialis._—Hindwing with the tail short and triangular (_type_),
or longer and spatulate.

_Hab._ Five-Finger Mts., Hainan (J. Whitehead).
1 ♂♂.

39. _Papilio arjuaa battacorum_ subsp. nov.

♂♀. Those portions of the blue patch of the hindwing which are placed before
the subcostal vein and behind the lower median one are more reduced than in
_P. arjuaa gedeensis_, the patch therefore appearing less band-like. The submarginal
spots on the underside of the hindwing smaller, the blue lunules especially being less prominent than in *arjuna*.

*Hab.* North-East Sumatra, in the hills and plains (Dr. Martin).
A long series.

40. *Papilio arcurus arcurus* subsp. nov.

♂. A small form. The blue patch on the upperside of the hindwing extends to the base of the subcostal vein, or almost; the green band situated at the proximal side of the anal spot is broader than in North Indian and Chinese specimens of *arcurus*. On the underside the greyish white scaling in the outer half of the forewing is more restricted than in the other forms, and the submarginal spots of the hindwing are smaller.

*Hab.* Kashmir valley (type), in June, and Natiagali in the Panjap, end of June to August.

3 ♂♂.

41. *Papilio ulysses morotaicus* subsp. nov.

♂. Similar to *P. u. telegonus*. The black marginal area of the hindwing much narrower than in *telegonus*, measuring much less in width between the veins than the discal portion of the blue area (from the cell to the outer edge of the area); the two upper blue stripes present, but those situated in *telegonus* at the third radial and at the two median veins are absent.—The proximal margin of the grey triangular discal area of the forewing beneath evenly curved, almost straight, not being curved basad near the lower angle of the cell.

*Hab.* Mira, Morty I. (=Morotai), November 1898 (Dumas).

2 ♂♂.

42. *Papilio ulysses georgius* subsp. nov.

♂. Similar to *P. u. orsippus* from Guadalcanar. The black marginal area of the upperside of the hindwing somewhat wider, the two blue discal partitions before and behind the tail being shorter than the black area is broad.—The grey scaling on the disc of both wings beneath denser, also extending nearer to the cell; the distal marginal area much deeper in tint than in *orsippus*, being on the forewing hardly paler than the centre of the disc; the distal edge of the anal ochraceous spot more oblique.

*Hab.* Solomon Islands : Guizo (type) and Kulańbangra (A. S. Meek).

4 ♂♂.

43. *Papilio ulysses ampelins* subsp. nov.

♂. The woolly streaks of the forewing narrower and shorter than in *P. u. ulysses*, the one placed on the submedian vein practically absent, being represented by a very few hairs.—The grey discal scaling on the underside of the forewing dense, the ochraceous brown marginal area narrowing behind on the forewing, while it is of nearly even width on the hindwing, being on this wing wider than in *P. u. ulysses*.

*Hab.* Burn.

1 ♂.
NEW HETEROCERA FROM BRITISH NEW GUINEA.

By G. T. BETHUNE-BAKER, F.L.S., F.Z.S., F.E.S.

EUPTEROTIDAE.

1. Hypercydas turneri spec. nov.

♀. Head, thorax, and abdomen deep orange-red; terminal segment of abdomen slate-grey; both wings red-brown, with a preponderance of red; an ochreous pear-shaped spot at the end of the cell; a broad, slightly curved, oblique postmedian band of darker red; a subterminal deeply dentate ochreous line, from whence to the termen the colour is darker and more solid, the rest of the wing being somewhat thinly scaled, so as to give a slight appearance of being diaphanous. Secondary exactly like the forewing, but without the cell-spot; the veins in both wings are somewhat ochreous.

Expanse, 72 mm.

_Hab._ Kebea Range and Mafalu, 6000 ft., July and August.

Type in my collection.

2. Hypercydas doricrana spec. nov.

♀. Head, thorax, and abdomen bright deep orange-red; both wings darkish red-brown, with red preponderating. Primary with a broad oblique median band and very broad curved postmedian band of darker ground colour, the latter having a scalloped outer edge, adjoining which is a series of broad spear-head ochreous marks up to the termen; a large round ochreous spot at the end of the cell; all the veins distinctly ochreous. Secondary like the primary, but without the cell spot.

Expanse, 72 mm.

_Hab._ Aroa River, November.

Type in my collection.

Epicydas gen. nov.

Legs densely hairy, tarsi covered with short hairs; head, thorax, and abdomen thickly covered with fine hair. Neuration: primary, with vein 4 from the lower angle, veins 5, 6, 7, 8, and 9 stalked; secondary with 4 from the lower angle, 5, 6, and 7 stalked.

Type. _Epicydas ovata_ B-B.

3. Epicydas ovata spec. nov.

♀. Head, thorax, and abdomen orange-red; both wings pale, semitransparent, reddish. Primary with a large ovate white spot at the end of the cell; a whitish scalloped subterminal stripe, the scallops extended into spear-head points in the apical area. Secondary like the primary, but without the cell spot.

Expanse, 58 mm.

_Hab._ Ekeikei, May; Biagi (Mambaré River).

Type in my collection.
4. *Eupterote styx* spec. nov.

♂. Head, thorax, and primary dark umber-brown, the latter with a very obscure trace of three or four darker bands across the centre of the wing; a subterminal slightly curved, dull ochreous line darkly edged; from here a broad dark grey area with a scalloped external margin; termen dull ochreous brown. Secondary paler brown, with three or four obscure darker lines across the median area: a pale postmedian line darkly edged, followed by a broad dark grey band with a scalloped external margin; termen dull ochreous brown.

*Expanse*, 94 mm.

*Hab.* Mafalu, 6000 ft., August; Biagi.

Type in my collection.

*Paracydas* gen. nov.

*Palpi* minute; antenae bipectinate; wings, primary broad, rapidly expanding; costa slightly excavated; apex rounded, depressed; termen very slightly and evenly arched. Secondary rather small, with termen strongly rounded. Neuration: cell extremely small in both wings, not more than a fifth, with veinlets dividing it. Primary vein 4 from the lower angle, 5 from the upper angle, 6, 7, 8, 9 stalked, the latter rising suddenly to 11, and lying beneath it, 11 rising abruptly to 12, and lying below, touching it for all its length. Secondary with 3 and 4 from the lower angle, 5, 6, and 7 stalked.

*Type*: *Paracydas biagi* B-B.

5. *Paracydas biagi* spec. nov.

♂. Head and thorax deep reddish velvety chocolate-brown; abdomen orange-red; ventral surface brown. Primary deep reddish brown, with the terminal area broadly lilac-grey, preceded by a narrow grey line (in some specimens a small white spot is at the end of the cell). Secondary somewhat less dark and less red than the primary. In fresh specimens the texture is very silky.

*Expanse*, 54 mm.

*Hab.* Biagi, Mambaré River (A. S. Meek).

Type in my collection.

6. *Damata varians* spec. nov.

♂. Head and thorax dark brownish grey, with a slate-grey patch on the collar and pale ochreous grey patagia. Primary pale ochreous grey, with a large dark slate-grey patch from the end of the cell to the termen along vein 3, leaving a longish broad ochreous costal dash from the apex: an oblique darkish brown band from the base of vein 3 basewards; two obliquely placed dark velvety spots below vein 2, a mauve-grey stripe in the lower part of the cell; median and postmedian area brownish. Secondary creamy white, with a dark lunate at the anal angle. The primary has a mottled and much variegated appearance.

*Expanse*, 50 mm.

*Hab.* Kebea Range, July, 6000 ft.

Type in my collection.
Neuroanomala gen. nov.

♂. Palpi upturned, thickly fringed with hairs below; second segment with projecting terminal tuft; third segment naked, short, porrect. Neuration: primary with veins 3 and 4 stalked, 5 from above the middle of the discocellulars, 6 from the upper angle, 7, 8, 9, 10 stalked, 11 appressed closely on to 12 for a short distance. Secondary with veins 3 and 4 stalked, 5 and 6 from the upper angle, 7 from before the end of the cell, 8 bent down on to the cell for a third; wings, costa nearly straight, depressed directly before the apex, apex rounded; termen slightly produced outwards to vein 5, receding rapidly to the tornus. Secondary somewhat truncate; termen slightly angled at vein 4.

Type: Neuroanomala variegata B-B.

7. Neuroanomala variegata spec. nov.

♂. Head, thorax, and abdomen pinkish ochreous; thorax finely irrorated with green; patagia edged finely with black. Primary pinkish ochreous, with base greenish, finely edged with black, the edging being sharply dentate; termen greenish, broad at the apex, tapering rapidly to vein 5, uniform from there to the tornus; internally edged with a fine interrupted black line, serrate in the apical area, waved below and extending basewards half along the inner margin; outside this is a somewhat scalloped white line, a dark, rusty spot at the end of the cell. Secondary pinkish ochreous, with a waved fine black edging produced strongly outwards in a bold curve; the upper part of this area is whitish; outside the black line the apical area is dark brown, tinged with greenish, with a greenish patch towards the tornus, extending slightly over the line internally.

Expanse, 50 mm.

Hab. Kebea Range, 6000 ft., March and April.

Type in my collection.

Omestia gen. nov.

Palpi fringed with hairs, upturned, third segment small; antennae bipectinate for two-thirds, set in a socket fringed with long hairs, almost meeting in a tuft in front; legs hairy, mid pair with one pair, hind pair with two pairs of spurs; thorax with patagia expanded into prominent tufts; a slight metathoracic central tuft; abdomen with lateral tufts on the two proximal segments and one dorsal tuft. Neuration: with vein 3 from before the angle, 4 from the angle, 5 from just above the middle of the discocellular, 6, 7, 8, 9, 10 stalked, 7 and 10 from the end of the ariole, 8 and 9 on a long stalk near the apex, 11 long depressed towards the ariole. Secondary 3 from before the angle, 4 from the angle, 5 from above the middle of the discocellular, 6 and 7 from the upper angle; wings, primary triangular, with costa nearly straight, depressed directly in front of apex, which is acute; termen slightly arched in the radial area. Secondary broadish, with a slight angle on the termen about vein 3.

Type: Omestia bella B-B.

8. Omestia bella spec. nov.

♂. Head pinkish brown, with a white bar in front of collar and white tuft; collar and thorax pale chestnut-brown, tufts darker at extremities; abdomen
paler, with creamy lateral tufts and a dark red dorsal tuft. Primary pale fawn-brown, with a median curved silvery stripe from vein 2, receding basewards, and continued obliquely to the costa in a paler stripe of ground colour; a paler postmedian stripe, broken at vein 3, and more so below vein 2; a subterminal pale stripe, broken at each vein, with a dark external edging, a very oblique dark line of shading from the postmedian line at the costa into the silvery stripe; cell darkly pointed on each of its margins; reniform palely edged; a double series of dark points between the postmedian and subterminal stripes; costa dark reddish, broadly purplish grey between the end of the cell and the apex; inner margin reddish from the base to the silvery stripe, a silvery white triangular spot outside that stripe; fringe dark reddish. Secondary pinkish ochreous at the base, with dark reddish fringe.

Expanse, 43 mm.
Hab. Kebea Range, July.
Type in my collection.

9. **Omichlis lineata** spec. nov.

♂. Head and thorax pale ashy grey tinged with brownish; abdomen brownish. Primary pale ochreous ashy grey, with the lower margin of the cell and vein 4 narrowly reddish brown; an angled interrupted brown basal line, a trace of an interrupted median line, an indefinite roughly angled postmedian line followed by a roughly parallel row of fine dark dots; subterminal line scalloped and interrupted at the veins, two dark dots in the cell; reniform ochreous. Secondary pinkish brown, paler at the tornus, with a trace of a short twin dash.

Expanse, 44 mm.
Hab. Kebea Range, 6000 ft., July.
Type in my collection.
Allied to *O. ochracea* E-B.

10. **Omichlis transversa** spec. nov.

♀. Head and thorax cinnamon-brown, abdomen brownish. Primary cinnamon-brown, with a trace of a fine interrupted angled basal line, a very obscure erect interrupted median line, a broad dark straight oblique postmedian line palely edged externally, followed by a slightly curved row of fine dots; subterminal line scalloped, interrupted at the veins; reniform edged by an ochreous line. Secondary pale cinnamon-brown, paler at the base.

Expanse, 51 mm.
Hab. Dinawa, May to June.
Type in my collection.

11. **Omichlis trilineata** spec. nov.

♂. Head and thorax mauve-grey; collar darkly edged; abdomen pale chocolate-brown. Primary pale reddish grey; tinged with mauve; lower margin of cell and vein 4 outlined with reddish brown; a twin red-brown basal line to vein 1a; a twin median line broadly separated, straight, slightly oblique; a broad oblique red-brown postmedian line; a broad curved oblique subterminal line preceded internally by a line nearly parallel to it; the scalloped line near the termen is straight from the costa to vein 4, and only interrupted at the veins below this; it is finely edged
externally with white; reniform ochreous. Secondary uniform reddish brown, paler at the tornus, with a short twin dash.

Expans, 44 mm.

_Hab._ Kebea Range, 6000 ft., July.

Type in my collection.

12. _Omichlis plagata_ spec. nov.

♂. Head and thorax pale ochreous grey; abdomen pale chocolate-brown. Primary pale ochreous grey, with an obscure trace of a basal, median, and postmedian line; subterminal interrupted, scalloped line fine; a broad inner marginal chocolate-brown patch from the base below the cell extended up to vein 2 in an oval spot at its termination, and divided in the middle by a fine curved creamy line; reniform marked by a large round chocolate-brown spot. Secondary uniform pale pinkish brown.

Expans, 49 mm.

_Hab._ Ekeikei, January and February.

Type in my collection.

13. _Omichlis strigata_ spec. nov.

♂. Head and thorax cinnamon-brown; abdomen pale greyish brown. Primary pale pinkish brown, with dark stripes palely edged externally; a short basal stripe between the cell and vein 1a; a median and postmedian oblique stripe; subterminal line somewhat broken, especially as it nears the tornus; cell closed by a tawny reniform; the whole wing is irrorationed in parts very finely. Secondary uniform dull pinkish brown.

Expans, 44 mm.

_Hab._ Biagi, Mambare River (A. S. Meek).

Type in my collection.

**CYMATOPHORIDAE**

_Habrona_ gen. nov.

Palpi short, first two segments heavily scaled, porrect; third segment smoothly scaled, depressed slightly; antennae in male shortly bipectinate, and with cilia to nearly the end; legs, femora heavily haired; tibiae and tarsi roughly scaled; mid tibiae with one pair, hind tibiae with two pairs of spurs; thorax very heavily scaled; patagia almost tufted; metathorax with two large tufts. Neuration: primary vein 2 from centre of cell, 3 from before the angle, 4 from the angle, 5 from below the centre of the discocellulars, 6 from the upper angle, 7 and 8 stalked from the end of the ariole, anastomosing with 9 and 10 to form the ariole. Secondary 2 from before the middle of the cell, 3 from before the angle, 4 from the angle, 5 from above the angle, 6 from the upper angle, 7 near the middle of the cell, 8 bent down and nearly touching 7, then rising again to the apex.

_Type:_ _Habrona alboplaga_ B-B.

14. _Habrona alboplaga_ spec. nov.

♂. Head and thorax grizzled pale chestnut-brown; abdomen ochreous grey. Primary russet-brown, with a white outwardly produced, somewhat scalloped and
irregular basal line, expanding into a spot on the upper margin of the cell, a trace of two dark median wavy lines followed by a strongly produced (outwards) postmedian dark line, beyond which are two fine, very obscure, dark wavy lines rising in a small whitish costal patch, a large white patch at the apex and another at the tornus, with three white spots between them, and three white dots on the costa before the apex; termen with fine white spots; two white dots mark the reniform. Secondary shiny greyish, more ochreous at the base.

♀. Exactly like the male.

Hab. Kebea Range, Ekeikei, March and April, also July and August.

Type in my collection.

15. Habrona brunnea spec. nov.

♂. Head and thorax dark sepia-brown; abdomen pale ochreous grey. Primary rich sepia-brown, with a pale chestnut basal line strongly angled in the fold, a trace of a very short similar line at the extreme base, a trace of twin dark median lines somewhat angled outwardly, a series of four finely waved outwardly angled postmedian lines, a paler brown wedge-shaped apical patch; a pale chestnut or creamy patch at the tornus, intersected with a tridentate short dash; termen with paler internervular dashes darkly edged, two dark spots in the cells. Secondary ochreous grey, pale at the base.

♀. Like the male, but the lines and marks are whiter.

Hab. Kebea Range, Dinawa, and most of the other localities, March to August.

Type in my collection.


This is a Risoba, and will therefore be Risoba dinawa B-B.

Thyatira cheikei B-B. (Nov. Zool. vol. xi. p. 382) also belongs to the genus Risoba.

SYNTOMIDAE.

17. Hyalaethea sublutea spec. nov.

♂. Frons, head, and thorax black; patagia orange-yellow; abdomen black, with broad orange-yellow segmental divisions; forelegs with long orange-yellow fringes to the femora. Primary black, with a small ovate hyaline patch below vein 1, a large elongate hyaline patch occupying the whole area below the cell and vein 2, a subovate patch below vein 3, a semiovate patch below vein 4, and a somewhat broader patch above it; a long oblong patch below vein 7, and a semiovate patch above it; cell entirely hyaline. Secondary orange-yellow, with black apex and costa.

♀. Like the male, but brown and yellow instead of black and orange.

Hab. Owgarra.

Type in my collection.

18. Euchromia epa spec. nov.

♂. Frons whitish; head metallic green; tegulae and shoulders cream colour; patagia and thorax black, shot with metallic green; abdomen first segment cream-
color, other segments metallic creamy colour, with a black inner edging, the black being broader towards the anal extremity; terminal segment black, ventral surface creamy, with fine black segmental edgings, broad on the two terminal segments. Primary with a small hyaline spot at base of cell, two in the middle, the lower spot twice as large as the upper, a green metallic crescent at end of cell, two ovate hyaline spots between veins 3 and 5, a subovate spot between veins 6 and 7, and a narrow hyaline dash below it. Secondary a milky elongate spot at base of cell, two narrow short spots below it, a discal hyaline band beyond the cell; cell closed with a metallic blue crescent.

Expanse, 48 mm.

Hab. Ekeikei, March and April.

Type in my collection.

Nearest E. aemalina Btl.

19. Euchromia ekeikei spec. nov.

♂. Frons black, edged laterally and below with whitish; head, tegulae, shoulders and patagia rich metallic bluish green; thorax black; first abdominal segment creamy, next two segments black, broadly banded with rich metallic bluish green, rest of segments velvety black; shot with blue here and there; four middle segments bright crimson on the ventral surface, and the connecting edges of the corresponding segments above are the same colour. Primary basal area rich metallic bluish green; cell closed by a similar metallic spot, an elongate hyaline spot in base of cell, two large median spots, the lower very large and rather irregular, two elongate spots between veins 3 and 5, one elongate spot between veins 6 and 7. Secondary three large hyaline wedge-shaped spots separated by the veins; a hyaline band beyond the cell, composed of four spots; a metallic bluish-green spot at end of cell.

Expanse, 54 mm.

Hab. Ekeikei, March and April; Mafalu, August.

Type in my collection.

20. Euchromia pratti spec. nov.

♂. Frons blackish; head and tegulae very pale metallic greenish; shoulders creamy; patagia and centre of thorax metallic greenish; first abdominal segment ochreous, next two segments black, broadly banded with very pale greenish metallic ochreous; next two or three segments black, edged with bright crimson; ventral surface banded with crimson on the three or four central segments. Primary deep black, a small hyaline basal spot in the cell, two large median spots, the lower twice the size of the upper, two elongate spots between veins 3 and 5, an elongate spot between veins 6 and 7, and a narrow short dash below it. Cell closed with a metallic blue crescent. Secondary with an elongate milky spot in the cell, and one or two small hyaline spots below it (these spots vary: in some specimens there are no spots, in others one or two); a broadish hyaline band beyond the cell; cell closed with a metallic blue spot.

♀ With tegulae creamy, and more crimson on the abdomen.

Expanse, 51 mm.

Hab. Ekeikei, March and April.

Type in my collection.

Near to E. iriu Boisd.
PSYCHIDAE.

Claniades gen. nov.

♂. Antennae bipectinate to tips; legs very heavily fringed with hair; tarsi bare, short; wings broad. Neuration with veins 4 and 5 stalked, 6 from well above the middle of the discocellulars, 7 from the upper angle, 8 and 9 stalked, 10 from before the angle. Secondary with vein 7 from the cell free, with no branch, 8 with no branches to the costa.

Type: Claniades ekeikei B-B.

21. Claniades ekeikei spec. nov.

♂. Head and thorax very hairy, rough but silky brown; abdomen greyer; both wings uniform pale goldenish brown, without any hyaline patches.

Expanse, 38 mm.

Hab. Ekeikei, March and April.

Type in my collection.

LIMACODIDAE.

Mambara gen. nov.

Palpi of moderate length, porrect, thickly scaled; antennae bipectinate for two-thirds; wings, primary broad, short, triangular; secondary truncate. Neuration: primary, vein 2 curved evenly downwards to termen, 3 from before the angle, 4 from the angle, 5 from above the angle, 6 from just above the middle of the discocellulars, 7 from the upper angle, 8, 9, and 10 stalked, 11 rising suddenly to 12, and lying directly beneath it most of its length, a veinlet from the middle of the discocellulars bisecting the cell; secondary, with vein 3 from before the angle, 4 from the angle, 5 from just above the angle, 6 and 7 stalked, a veinlet from the discocellulars bisecting the cell.

Type: Mambara inconspicua B-B.

22. Mambara inconspicua spec. nov.

♂. Head, thorax, abdomen, and primary pale pinkish ochreous brown. Primary with an obscure trace of a dark median and postmedian line, the latter slightly excurved. Secondary uniform pale pinkish ochreous.

Expanse, 24 mm.

Hab. Biagi, Mambaré River.

Type in my collection.

23. Chalcocelis rubra spec. nov.

♂. Head and thorax rich crimson-brown; abdomen slightly paler. Primary crimson-brown, with a large dark velvety patch occupying the median and postmedian areas into the tornus, with a similar, somewhat wedge-shaped patch at the end of the cell, separated from each other by a broad dash of the paler ground colour. Secondary uniform pinkish brown.

Expanse, 33 mm.

Hab. Kebea Range, June.

Type in my collection.
Squamosa gen. nov.

♂. Palpi short, porrect, thickly scaled; antennae bipectinate for about half the length; wings, primary moderately broad; costa nearly straight for four-fifths, somewhat depressed to apex; termen slightly excurved; secondary smallish termen evenly curved. Neuration: primary with vein 4 from the angle, 5 from directly above the angle, 6 from the middle of the discocellulars, 7, 8, and 9 stalked, 10 and 11 from the cell, cell with anastomosing veinlets bisecting it; secondary with vein 4 from the angle, 5 from directly above the angle, 6 and 7 from the upper angle.

Type: Squamosa ferruginea B-B.

24. Squamosa ferruginea spec. nov.

♂. Head and thorax ferruginous ochreous; abdomen ochreous, with a central rusty red dorsal line. Primary rusty reddish for three-quarters of the wing, terminating in an incurved edge; terminal area paler rusty orange, a white spot closing the cell. Secondary pale orange, with a deep red spot.

Expanse, 42 mm.

Hab. Kebea Range, July.

Type in my collection.

LASIOCAMPIDAE.

25. Metanastria hades spec. nov.

♂. Head and collar grizzly; thorax dark orange-brown; abdomen dark brown, banded with tawny. Primary dark greyish brown, with a dark obscure nearly erect slightly curved median line, postmedian line oblique slightly excurved; area beyond this line paler; a subterminal row of dark internervular spots; a small whitish spot in the cell; wing sparingly irrorated with ochreous grey. Secondary uniform greyish brown, tawny at the base.

Expanse, 71 mm.

Hab. Kebea Range, July.

Type in my collection.

26. Metanastria babooni spec. nov.

♂. Head and collar greyish; thorax reddish chocolate; abdomen black, barred with tawny. Primary reddish chocolate, with a pale grey irregular antemedian line, a broad median band of pale greyish, and a broad irregular similar postmedian band, followed by a fine greyish subcrenulate line, a small white spot in the cell, a subterminal row of grey spots pupilled with black; terminal area with some greyish irroration. Secondary reddish chocolate, with a broad pale medium band darkly edged on each side.

Expanse, 71 mm.

Hab. Babooni, July.

Type in my collection.

27. Metanastria mafala spec. nov.

♀. Head, collar, and centre of thorax pale chestnut-brown, patagia with ochreous hairs; abdomen pale tawny brown. Primary pale tawny brown mixed
with ochreous, an antemedian pale band darkly edged, a creamy spot in the cell, a postmedian very oblique dark line edged with ochreous, followed by a second similar line subcuneolate below vein 7, an irregular row of large dark chestnut subterminal internervular spots edged with ochreous. Secondary pale tawny, paler towards the base, with a straight oblique median line, and a wavy postmedian line; fringes pale ochreous grey.

Expanse, 80 mm.

_Ihab._ Mafalu, 6000 ft., August.

Type in my collection.

**Pararguda** gen. nov.

Palpi longish, thickly scaled, porrect; end segment depressed; antennae bipectinate to tip; legs hairy, mid and hind pair heavily fringed; wings, primary subtriangular, broadish; costa evenly arched; apex depressed; termen erect. Secondary with costa and apex excised. Neuration: primary with vein 4 from the lower angle, 5 from just above, 6 and 7 stalked, rising with 8 from the upper angle, 9 and 10 stalked, 11 rising rapidly to 12, and lying appressed to 12 for the rest of its length; secondary with veins 4 and 5 stalked, 7 free from the base, 8 not depressed towards 7, no accessory veinlets from 8. Cells short in both wings.

_Type:_ *Pararguda rufa* B-B.

28. **Pararguda rufa** spec. nov.

♂. Head, thorax, and abdomen reddish brown. Primary uniform bright reddish brown, with a dark oblique antemedian line and a similar more oblique postmedian line, a dark dot in the cell, a trace of an irregular subterminal dark greyish line; termen slightly scaled with grey. Secondary uniform dark red brown, with a trace of a median line.

Expanse, 40 mm.

_Ihab._ Kebea Range, 6000 ft., July.

Type in my collection.

29. **Pararguda pallens** spec. nov.

♂. Head and thorax pale ochreous grey; abdomen rather darker. Primary pale ochreous grey, with a dark oblique antemedian line and a very oblique postmedian line, sharply angled below the costa; a trace of a spotted subterminal line; termen and inner marginal edge finely dark; a dark dot in the cell. Secondary pale ochreous grey at the base, becoming tawny grey beyond the cell.

Expanse, 43 mm.

_Ihab._ Kebea Range, 6000 ft., July.

Type in my collection.

**LYMANTRIIDAE.**

30. **Caviria owgarra** spec. nov.

♂. Head, thorax, and abdomen pale straw colour; antennae black; forelegs black; mid and hind legs pale straw colour, with blackish tarsi. Primary pure
shining white, slightly tinged with pale straw-colour at the extreme base; secondary pure white; neither of the wings diaphanous at all.

Expanse, 32 mm.

Hab. Owgarra.

Type in my collection.

31. *Porthesia biagi* spec. nov.

♂. Head and thorax white; metathorax tinged with orange; abdomen orange. Primary white, with a very slight suffusion of very fine pale orange iroration, through which a broad median and postmedian line shows somewhat distinctly, the latter receding basewards below vein 4; inner margin more prominently suffused with orange. Secondary white, orange-yellow along the inner margin and up to the cell.

Expanse, 42 mm.

Hab. Biagi, Dinawa, and other localities.

Type in my collection.

32. *Porthesia pallens* spec. nov.

♂. Head, thorax, and abdomen pale whitish ochreous; both wings pale straw colour. Primary with a pale median line, and also a pale postmedian line receding basewards about vein 4; the internervular spaces are filled in with deeper straw colour.

Expanse, 35 mm.

Hab. Aroa River.

Type in my collection.

33. *Porthesia radiata* spec. nov.

♂. Head, thorax, and abdomen lemon-yellow. Primary lemon-yellow, with a trace of an oblique pale median line, and a more distinct pale oblique postmedian line; the internervular spaces broadly filled in with orange. Secondary pale lemon-yellow.

Expanse, 50 mm.

Hab. Babooni, Kebea Range, July.

Type in my collection.

This species is very similar to *Enproctis tiliana* Druce, of which we have a fair series; but it is a *Porthesia*.

34. *Porthesia squamosa* spec. nov.

♂. Head, thorax, and abdomen orange-brown. Primary pale straw colour, with a deep orange fulvous patch, a third from the base of the inner margin, internervular spaces filled in with pale orange. Secondary pale straw colour; basal and median area deeper yellow.

♀. Paler than the male; internervular spaces of primary roughly irrorated with darker scales.

Expanse: ♂ 39; ♀ 49 mm.

Hab. Kebea Range, 6000 ft., March and April; Avola, August, 6000 ft.

Types in my collection.
35. **Porthesia lutearia** spec. nov.

♀ Head, thorax, and abdomen pale orange. Primary uniform orange colour, with deep orange along the inner margin. The wing surface is rough in texture. Secondary chrome-yellow.

Expanses, 36 mm.

*Hab.* Ekeikei, January and February.

*Type in my collection.*

**Porthmeia** gen. nov.

Palpi minute, porrect; antennae bipectinate in both sexes, with cilia (in male) to branches; pectinations wide apart, especially so in the male; legs with a few long bristles; tarsi nearly bare; wings, primary subovate; costa slightly and evenly arched; termen more strongly arched near the apex, gradually receding to the tornus; secondary small. Neuration: vein 2 from the middle of the cell, 3 from before the lower angle, 4 from the angle, 5 from above the angle, 6 from the upper angle, 7, 8, 9, and 10 stalked, 7 from midway between the cell and vein 10; secondary, veins 3 and 4 from the lower angle, 5 absent, 6 and 7 on a long stalk from the upper angle, 8 bent down to 7 and shortly anastomosing.

*Type: Porthmeia subnigra* B-B.

36. **Porthmeia subnigra** spec. nov.

♂ Head, thorax, and abdomen black; patagia and collar tipped with orange. Primary orange, with the basal third and the apical third having the internervular spaces filled in with black, leaving an oblique broad orange band across the median area. Secondary uniform deep black.

♀ Like the male in all respects, but with a white anal tuft.

Expanses: ♂ 34; ♀ 42 mm.

*Hab.* Owgarra.

*Type in my collection.*

37. **Porthmeia bicolora** spec. nov.

♂ Head, collar, and patagia ochraceous; thorax and abdomen black. Primary uniform ochreous, with the outer half of costa and the termen finely black. Secondary deep black, with a terminal line of orange; fringes black.

Expanses, 32 mm.

*Hab.* Owgarra.

*Type in my collection.*

38. **Euproctis stramenta** spec. nov.

♂ Head and thorax straw colour; abdomen whitish, with the anal extremity bright chestnut; both wings pale straw colour without any markings.

♀ Like the male, except that the anal segment is not chestnut colour.

Expanses: ♂ 29; ♀ 39 mm.

*Hab.* Owgarra.

*Types in my collection.*
39. *Euproctis luteomarginata* spec. nov.

♀. Head, collar, and patagia pure white; rest of thorax and abdomen bright orange. Primary pure white, with basal two-thirds of inner margin finely bright orange; a trace of a median and postmedian waved orange line confluent on the inner margin. Secondary white, with the inner margin orange into the cell.

Exp. 43 mm.

*Hab.* Owgarra.

Type in my collection.

I have one specimen which is straw colour, and the waved lines of the primary are distinct.

40. *Euproctis lunula* spec. nov.

♂. Head and thorax dirty straw colour; abdomen orange. Primary cream colour, with a trace of an erect median line and a yellowish postmedian line receding basewards below vein 5; a deep chocolate lunule at the end of the cell. Secondary cream colour, orange for the basal two-thirds.

Exp. 34 mm.

*Hab.* Owgarra; Biagi, 5000 ft.

Type in my collection.

The colour and pattern rapidly fade and become almost white.

*Euproctis dimana* B-B. The ♀ of this species is not pale as described (*Nov. Zool.* vol. xi. p. 39), but is exactly like the male; more material shows that my supposed female belongs to another species.

*Euproctis novaguinensis* B-B. I have received a male of this species since my paper (*i.e.*) was written, which is exactly like the ♀, with the exception that the dark area of the secondaries is slightly larger.

41. *Euproctis pulchra* spec. nov.

♀. Head, thorax, and first abdominal segment pinkish buff; abdomen black, anal segment whitish. Primary pinkish buff, with the veins showing yellowish; the internervular spaces broadly filled in with red in the terminal area. Secondary chrome-yellow, with the inner margin black into the cell and up to the base.

Exp. 58 mm.

*Hab.* Kebea Range, 3600 ft., July.

Type in my collection.

42. *Euproctis griseata* spec. nov.

♀. Head and thorax pale grizzly brown; abdomen black, with whitish anal segment. Primary pale grizzly brown, without any marks except a trace of a pale lunule at the end of the cell. The wing has a rough scaly texture. Secondary chrome-yellow, with the basal half deep black, terminating in a curve in the tornus.

Exp. 36 mm.

*Hab.* Kebea Range, 3600 ft., July.

Type in my collection.

This species is near *E. egregia* Swinhoe.
43. Euproctis coniochroa spec. nov.

♂. Head and thorax dirty grey; abdomen darker; both wings dirty grey; the secondaries rather darker than the primaries; no pattern on either wing.

Expanse, 53 mm.

Hab. Avola, 6000 ft., August.

Type in my collection.

This species is near *E. deficita* Walker.

44. Euproctis mambara spec. nov.

♂. Head and thorax and first abdominal segment very hairy bark red; rest of abdomen black, with white anal segment. Primary uniform bark red, finely irrorated with dark grey. Secondary uniform chrome-yellow.

Expanse, 49 mm.

Hab. Riagi, Mambare River, 5000 ft., April.

Type in my collection.

45. Euproctis xutha spec. nov.

♂. Head, thorax, and first abdominal segments orange-red; abdomen deep reddish, with pale anal segment. Primary dirty orange brownish, with a very broad postmedian reddish waved band, beyond which is a broad area of yellowish; termen reddish. Secondary uniform orange-yellow.

♀. Like the male, but less dark and more uniform in colour.

Expanse: ♂ 52; ♀ 68 mm.

Hab. Kebea Range, June, 3600 ft.; Ekeikei, May, 1500 ft.

Type in my collection.

46. Euproctis luteosa spec. nov.

♂. Head and thorax clear chrome-yellow; abdomen darker, with a brownish anal segment. Primary clear markless chrome-yellow. Secondary uniformly somewhat paler.

Expanse, 44 mm.

Hab. Owgarra.

Type in my collection.

47. Euproctis rotunda spec. nov.

♂. Head, thorax, and abdomen deep fulvous, with whitish terminal segment; both wings deep fulvous, with a large round cream-coloured spot at the end of the cell, a row of subterminal deep cream spear-head marks extending into the termen. Secondary with the spear-head marks narrower than in the primary.

♀. Like the male in all respects, except that the anal tuft is grey, not whitish.

Expanse, ♂ 56; ♀ 74 mm.

Hab. Mafalu, 6000 ft., August.

Type in my collection.

Neorgyia gen. nov.

Palpi short, porrect, roughly fringed with long hairs; antennae, ♀, sub serrate, with rough hairs. Neuration: primary, with vein 2 long before the angle, 3 from before the angle, 4 and 5 from the angle, 6 from below the upper angle, 7 from the...
end of the ariole, 8 and 9 from the ariole stalked on a long highly curved stalk, 10 from the ariole close to 8, 11 anastomosing shortly with 12 then lying close above 10; secondary with 2 from long before the angle, 3 from before the angle, 4 from the angle, 5 from well above the angle, 6 and 7 stalked, 8 bent slightly to meet 7, which rises up just to touch it.

Type: Neorgyia ochracea B-B.

48. Neorgyia ochracea spec. nov.

♀. Head, thorax, and abdomen greyish ochraceous, roughly haired. Primary ochraceous grey, with a pale scalloped antemedian line, a subcrenulate postmedian line adjoining the pale buff reniform; subterminal stripe of dark internervular dashes edged with whitish externally filling up the nerve spaces, prominent in the subapical area, but almost disappearing below vein 4 or 5; an irregular broken darkish line before the termen. Secondary uniform semidiaphanous cream colour. Expanse, 36 mm.

_Hab._ Biagi, Mambaré River, February.

_Type_ in my collection.

Parakanchia gen. nov.

Palpi minute, porrect, hairy; antennæ shortly bipectinate. ♀. Legs hairy, hind pair with two pairs of spurs. Neuration with veins 4 and 5 from the lower angle, 6, 7, 8, 9, and 10 stalked, 8 and 9 near the apex, 10 midway between 7 and 9, 10 rising from 11 to form an ariole, midway between the cell and 7. Secondary with veins 4 and 5 from the lower angle, 6 and 7 stalked.

_Type_: Parakanchia grisea B-B.

49. Parakanchia grisea spec. nov.

♀. Head, thorax, and abdomen darkish grey; abdomen with the anal segment pale. Primary grey, roughly irroration with darker grey, a blackish broad waved antennal band, a blackish spot at the end of the cell, a blackish interrupted subterminal line, rising in two large subcostal spots, and angled in the fold. Secondary uniform neutral greyish.

Expanse, 50 mm.

_Hab._ Babooni, August.

_Type_ in my collection.

50. Lymantria novoguineensis B-B.

Dr. Turner asks (Trans. R. Soc. S. Aust. vol. xxx. p. 125) whether this species is variable. We have a large series, and I can find no variation whatever; it is a most constant insect both as regards size and markings.

51. Lymantria lygaea spec. nov.

♂. Head, antennæ, and thorax umber-brown; abdomen rosy. Primary umber-brown, with dark brown markings, an interrupted basal line, a median subserrate line projected outwards in the cell, receding basewards below it, a dumb-bell shaped dash in the cell, which is closed by a double spot, a more or less obscure postmedian serrate line receding basewards below the cell; in the
postmedial and subterminal area are two more irregular serrate lines receding slightly basewards below vein 3; termen darkly spotted. Secondary uniform brownish grey.

Expanse, 38 mm.

Hab. Ekeikei, January and February.

Type in my collection.

52. Anthela charon spec. nov.

♀. Head, thorax, abdomen, and both wings very dark sooty brown; the primaries and secondaries with an oblique darker postmedian line. Primaries with a white dot in the cell and another larger one at the end of the cell.

Expanse, 59–60 mm.

Hab. Mafalu, 6000 ft., August; Kebea Range, July.

Type in my collection.

Specimens from the Kebea Range are less dark, with a trace of an irregular antemedian and median line, and a row of dark dots outside the postmedian line.

ARCTIIDAE.

53. Spilosoma avola spec. nov.

♀. Head and thorax white; abdomen greyish; both wings white, inclined to be diaphanous. Primary with an erect median row of distinct dark spots straight across the wing, followed by a short oblique series of three or four spots to above vein 2, an oblique series of similar spots from the apex: these two series look as though they should form an oblique continuous row of spots; two small dark spots below the costa at the end of the cell. Secondary spotless.

Expanse, 56 mm.

Hab. Avola, 6000 ft., August.

Type in my collection.

54. Diacriisia biagi spec. nov.

♂. Palpi deep black; head and thorax soft otter brown; collar darker; centre of thorax broadly blackish; abdomen dirty orange colour, with broad black dorsal and lateral stripes; pectus and legs deep black; fore femora edged with orange. Primary pale brown, with veins finely cream-coloured, with deep velvety brown spots palely edged, the spots congregating in pairs on each side of the veins; along vein 1α are two pairs of spots before the middle and three pairs beyond the middle, those in the tornus being very small; along vein 2 one pair in the angle, two pairs of small spots about the middle, a large conglomerate spot at the base of veins 3, 4, and 5, with two pairs of small spots beyond it along vein 3, one large spot across 4 and 5, with a pair of small ones near the termen of each vein, a large spot across 6 and 7, above which is a small one to the costa, beyond this a subapical patch of four spots, with a series of six small spots from the apex ending below vein 6, a small basal spot, a spot near the middle of the cell with a smaller one above it, a large irregular spot at the end of the cell. There is a trace of an orange connecting-line between most of the spots, but it is obscure. Secondary yellow, with a large black spot at the end of the cell, a subterminal irregular series of black spots, with a few spots,
more or less small, between this and the end of the cell; termen below the apex black, with short black invasions of the veins to vein 3.

Expanse, 50 mm.

_Hab._ Biagi, 5000 ft., March.

Type in my collection.

55. **Diacrisia owgarra** spec. nov.

♂. Frons black; head and collar deep cream colour; patagia black, edged with cream; thorax black, with lateral cream stripes; abdomen rose-pink, with a dorsal and lateral row of black spots. Primary pale brownish, with the veins broadly outlined with cream colour; costa black for basal half, with two narrow elongate black dashes, angle of vein of 1b filled in with black, a median curved broad black band interrupted by the veins; a very oblique broad interrupted blackish expanding band from the apex to near the middle of the inner margin; a large black quadrangular spot at the end of the cell, with another above it; a subapical interrupted wedge-shaped spot confluent with the oblique band; a terminal row of spots below vein 5 to the tornus. Secondary deep rose colour, with a black spot closing the cell, and a broadish irregular postmedian interrupted spotted stripe; apex with black spots.

Expanse, 50 mm.

_Hab._ Owgarra; Biagi.

Type in my collection.

56. **Rhodogastria nigropunctata** spec. nov.

♂. Very similar to _R. crokeri_ McL., but the black in the median, apical, and tornal areas is larger and very intense in the primaries; whilst the secondaries are wholly dark grey, not hyaline, except at the extreme base, which is creamy. The underside of the abdomen and the pectus is rosy; the legs are rosy above and black below.

♀. Similar, but browner.

Expanse, 64 mm.

_Hab._ Ekeikei and all other places where we had collections from.

Type in my collection.

57. **Pisara owgarra** spec. nov.

♂. Head whitish; thorax pale grey; abdomen greyish white; both wings white. Primary with the basal third more or less suffused with brownish grey, with a darker band in the middle of the area, a fine median waved line, a subterminal strongly indented dark grey line edged with white, from whence to the termen the ground colour is grey; termen strongly scalloped with dark grey. Secondary translucent white, slightly greyish toward the apex.

Expanse, 20 to 22 mm.

_Hab._ Owgarra.

Type in my collection.

58. **Celama grisescens** spec. nov.

♂. Head, thorax, and abdomen grey. Primary pale grey, more or less suffused with grizzly darker grey, an obscure antemedian line, a waved indefinite median
line, a postmedian irregular dark line, with the rest of the area to the termen
darker grey, in which is a pale waved subterminal line. Secondary uniform greyish
white.

Expanse, 20 mm.
Hub. Owgarra.
Type in my collection.

59. Nola obliqua spec. nov.

♂. Head white; collar and thorax grey; abdomen grey; thorax and abdomen
with a double row of three black spots on the proximal segments. Primary whitish,
strongly suffused with grey, a waved antemedian line, postmedian line very oblique
from the costa to vein 4, whence it recedes more obliquely basewards. This line
is broad brownish grey, with black points on each side; the area between this and
the antemedian line is much suffused with grey and dark points and marks; a short
dark erect dash above the tornus; termen with black spots; fringe white, spotted
with grey. Secondary translucent white.

Expanse, 26 mm.
Hub. Owgarra.
Type in my collection.

60. Nola albescens spec. nov.

♂. Head and thorax pure white; collar dark grey; palpi grey; abdomen
creamy white. Primary pure white, slightly suffused in parts with very fine and
very pale grey irroration; costa with a basal black spot, a sub-basal one, two
median and three subapical spots, an obscure waved pale sub-basal line, a waved grey
median line, an excurved subcrenulate postmedian pale line, receding rapidly
basewards below vein 5, with a short black dash on its curve near the inner
margin, a subterminal interrupted serrate line; termen preceded by a row of white
dashes between the veins; fringe grey. Secondary translucent white, slightly
grey towards the termen.

Expanse, 30 mm.
Hub. Owgarra.
Type in my collection.

Parapelosia gen. nov.

Proboscis developed; palpi minute; antennae with very fine longish cilia.
Primary long and narrow, with vein 2 from the cell strongly curved at the base,
3 and 4 stalked on a long stalk, 5 absent, 6, 7, 8, and 9 stalked, 6 from near cell
with base curved, 7 and 8 on a long stalk, 9 from just beyond 6, 10 from the cell,
11 anastomosing with 12. Secondary with costa straight; apex acute; termen
evenly curved rapidly receding to the anal angle, with vein 2 from beyond the
middle of the cell, 3 and 4 coincident, 5 absent, 6 and 7 stalked, anastomosing
with 8 to half the cell.

Type: Parapelosia grisescens B-B.

61. Parapelosia grisescens spec. nov.

♂. Head and thorax chocolate-grey; abdomen paler. Primary grizzly brownish
grey, with costa ashy grey for the basal half, dark brownish below it, paler in centre
of inner margin, with two short dark dashes above it; veins in discal area darkly
outlined, terminal area darkish, several short dark dashes in the darker areas of the wing. Secondary warm pale slatey grey, paler at base and along inner margin.

Expanse, 25 mm.

Hab. Owgarra.

Type in my collection.

62. Graphosia phaeocraspis spec. nov.

♂. Head, thorax, and abdomen milky white. Primary uniform dead white without any mark. Secondary pale greyish; underside of primary dark brownish grey, with lower part of cell and the inner margin white to near tornus.

Expanse, 25 mm.

Hab. Dinawa, September.

Type in my collection.

This species is figured by me on Pl. v. fig. 20, Noc. Zool. vol. xi. as I in the first instance mistook it for the ♀ of Scoliacma hampsoni B-B.

63. Scoliacma virginea spec. nov.

♂. Head, thorax, and abdomen milky white. Primary uniform dead white, with the inner margin slightly excavated from the middle to the tornus. Secondary highly developed above the cell, snowy white, the costal third tinged with cream; underside with a large patch of androconia in the cell fringed finely and smoothly with cilia below, below which lies a long pencil of deep cream-coloured hairs. Secondary with a large patch of creamy androconia above the cell, having a thick close fringe on the costa.

♀. Normal, entirely snowy white.

Expanse, 34 mm.

Hab. Owgarra; Biagi, 5000 ft., April.

Type in my collection.

64. Scoliacma pellapis spec. nov.

♂. Head and thorax pale greyish brown; abdomen ochreous grey. Primary pale uniform greyish brown without any markings. Secondary whitish ochreous, slightly lustrous. The primaries are much affected by androconia in and around the cell on the underside and by a patch above the apex of the cell, whilst the secondaries are considerably distorted by a like cause.

♀. Exactly like the male, but the wings and the neuration are normal.

Expanse: ♂ 37; ♀ 34 mm.

Hab. Owgarra; Biagi, February.

Type in my collection.

65. Ilema owgarra spec. nov.

♂. Head and thorax dull sepia brown interspersed with ochreous; abdomen pale grey. Primary dull sepia brown tinged with chocolate-brown more or less mottled all over with ochreous, more especially along the fold, the costa being narrowly and finely similarly irrorated. Secondary pale greyish, darker in the apical area.

♀. Exactly like the male.

Expanse: ♂ 36; ♀ 40 mm.

Hab. Owgarra.

Type in my collection.
66. *Ilema warringtonella* spec. nov.

♂. Head, collar, and patagia deep cream, the latter fringed with grey; thorax dark sooty grey; abdomen pale grey. Primary dark bronzy grey, with costa pearly white, slightly expanding outwards; tornus to half the termen and half the inner margin pearly-white. Secondary darkish grey, whitish below the cell.

Expanse, 32 mm.
*Hab.* Owgarra.
Type in my collection.

67. *Nacaduba costimacula* spec. nov.

♂. Head and thorax deep velvety crimson-brown; abdomen pale brownish, with pale grey proximal segments; the third abdominal segment emits a long pencil of fine ochreous hairs reaching to the anal tuft. Primary pale pinkish brownish ochreous, with a deep brown velvety spot near the centre of the costa, beyond which the costa is produced into a deep lobe, where the serrate postmedian line rises; a very slight trace of the median line below the costal spot; a small dark dot at the end of the cell; a slightly paler tornal patch. Secondary whitish, ochreous pink in the apical area.

Expanse, 30 mm.
*Hab.* Owgarra.
Type in my collection.

68. *Palaeosia longistriga* spec. nov.

♂. Head pale ochreous; thorax very pale fawn colour, with pale ochreous patagia; abdomen creamy. Primary with the cell filled in with somewhat speckled darkish brown, expanding with the cell nearly up to the termen; below the cell a broad pale straw-coloured stripe, expanding outwards up to the termen; inner margin broadly darkish for the basal half of its length; costa to the cell pale ochreous, somewhat irrorated with greyish; a trace of an oblique postmedian line. Secondary uniform creamy whitish.

Expanse, 43 mm.
*Hab.* Biagi, 5000 ft., April.
Type in my collection.

These two species are nearly allied, but I believe them to be distinct, especially considering the altitudes at which they were taken, combined with the month of capture.

69. *Palaeosia grandis* spec. nov.

♀. Head creamy white; collar and thorax grizzly brown; patagia fringed with creamy white; abdomen creamy white. Primary mottled grizzly brown, with a broad creamy-white stripe along the fold to the middle of the wing; a largish grey spot directly above the end of this stripe. Secondary pale creamy ochreous.

Expanse, 51 mm.
*Hab.* Kebea Range, 3600 ft., July.
Type in my collection.

More material may prove this to be the ♀ of the preceding species.
Garudinodes gen. nov.

Palpi minute; proboscis developed; antennae, 3 bipectinate, with long and short very fine cilia; legs, midtibiae with one pair of spurs, hindtibiae with two pairs of stoutish spurs. Primary with costa strongly arched at a quarter before the apex; termen evenly arched, receding somewhat towards the tornus. Neuration with vein 2 from rather beyond the middle of the cell, 3 and 4 from the angle, 5 absent, 6, 7, 8, and 9 stalked, 7 and 8 near the apex, 9 nearer to 8 than to 6, 10 from near the end of the cell, 11 absent. Secondary with 2 from the lower angle, 3 and 4 on a long stalk, 6 and 7 on a very long stalk, 8 coincident with 7 to half the cell.

Type: Garudinodes bicolorana B-B.

70. Garudinodes bicolorana spec. nov.

♂. Head white; thorax chocolate-brown, with white patagia; abdomen greyish brown. Primary white, with a broad antemedian pale chocolate-brown band; postmedian area of the same colour to the termen; the termen with an apical white patch; fringes white. Secondary uniform pale brownish.

Expans, 20 mm.

Hab. Ekeikei, March and April.

Type in my collection.

Parascapta gen. nov.

Palpi minute; proboscis absent; antennae very finely and minutely bipectinate; wings of even width; costa strongly arched; termen receding to the tornus. Neuration, primary with vein 2 from a little beyond the middle of the cell, curved at the base, 3 and 4 stalked from the angle, 5 absent, 6 from below the upper angle, 7, 8, and 9 stalked, 7 and 8 from near the termen, 9 from well beyond the cell, 10 and 11 free, the latter arched; secondary with vein 2 from well before the angle, 3, 4, 5 and 6 stalked on a long stalk, 8 free at base, then bent to anastomose shortly with 7.

Type: Parascapta biplagata B-B.

71. Parascapta biplagata spec. nov.

♂. Head and collar bright yellow; thorax yellow, striped with crimson; abdomen pale greyish. Primary bright yellow, with the basal half of the purplish red receding basewards towards the costa, the base having a yellow spot on the costa; a large postmedian patch of purplish red right across the wing, leaving the termen bright yellow. Secondary clear semihyaline yellowish white.

Expans, 16 mm.

Hab. Babooni, 3000 ft., September.

Type in my collection.

72. Chionaema biagi spec. nov.

♂. Head and thorax brownish; abdomen grey. Primary pale brownish grey, with base darker, margined by a dark grey line; the latter half of the median area and the postmedian area dark brownish grey all across the wing, the area beyond the cell being extended farther out than the costal and inner marginal areas, the
rest of the wing pale greyish, with a trace of a darker subapical patch extending to the tornus in an obscure line. Secondary dirty grey.

Expans, 24 mm.  
_Hab._ Biagi, Mambaré River, January.  
Type in my collection.

73. _Azura lutea_ spec. nov.

♂. Head and thorax pale yellow; abdomen creamy. Primary clear pale yellow, with a short pale grey crescent on the fold, and another pale grey obscure crescentic mark beyond the cell. Secondary translucent palest lemon-yellow.

Expans, 22 mm.  
_Hab._ Biagi, March, and Owgarra.  
Type in my collection.

74. _Azura owgarra_ spec. nov.

♂. Head and thorax pale yellow; abdomen creamy yellowish. Primary base clear yellow with a grey basal dot; a broad antemedian dark grey band, followed by an irregular fascia of pale yellow; postmedian and subterminal area entirely dark grey; termen irregular pale yellow; inner margin pale yellow, interrupted by the antemedian band. Secondary clear pale lemon-yellow.

Expans, 24 mm.  
_Hab._ Owgarra.  
Type in my collection.

75. _Miltonchrista biagi_ spec. nov.

♀. Head and thorax vermilion-red; abdomen pinkish ochreous. Primary vermilion-red, with the veins outlined with ochreous, with antemedian, median, postmedian, and subterminal grey lines roughly parallel with each other, excurved, serrate, and broadish; termen with black points; fringe grey. Secondary uniform translucent pinkish.

Expans, 30 mm.  
_Hab._ Biagi, 5000 ft., March.  
Type in my collection.

76. _Schistophleps hyalina_ spec. nov.

♂. Head and thorax very pale straw colour; abdomen whitish. Primary uniform diaphanous washed-out straw colour, with the least trace of a greyish postmedian line. Secondary diaphanous white, practically without any colour at all.

Expans, 20 mm.  
_Hab._ Owgarra.  
Type in my collection.

NOCTUIDAE.

77. _Agrotis kebea_ spec. nov.

♂. Head, thorax, and abdomen pale cinnamon-grey. Primary pale cinnamon-grey, brighter than the thorax, with a pale basal slightly oblique line angled at the costa, darkly edged in part; a dentate antemedian line with dentations darkly tipped; orbicular pale, darkly edged laterally; reniform reddish, with a
dark spot; postmedian line crenulate, slightly produced in the upper radial area, finely and darkly edged internally, with dark points externally; a dark costal subapical cloud, from whence a reddish subterminal line, palely edged externally and slightly toothed just below the dark cloud, descends to near the tornus; termen darkly pointed with reddish. Secondary pale pinkish grey.

Expanse, 40 mm.
*Hab.* Kebea Range, 6000 ft., July.
Type in my collection.
This species is near *A. dahlii*.

78. Agrotis owgarra spec. nov.

♂. Head and thorax pale pinkish grey; abdomen grey. Primary pale pinkish grey; with scarcely any marking before the median line; two sub-basal grey dots in the cell, one beyond the other; an obscure grey line on the basal side of the obscure reniform; orbicular just traceable; an obscure postmedian line, terminal area broadly grey; fringes pinkish grey. Secondary pale greyish, slightly darker towards the apex and termen.

Expanse, 38 mm.
*Hab.* Owgarra.
Type in my collection.
This species is near *A. rubricilia* Moore.

79. Caradrina owgarra spec. nov.

♂. Head grey, interspersed with reddish brown scales, with a large dark central patch; collar deep velvety purplish brown; thorax and abdomen pale grey. Primary pale grey, with an antemedial irregular darker grey line, followed by a nearly similar very dark line; an indefinite waved brownish median line; orbicular and reniform very finely outlined with blackish; postmedial dark line irregular, followed by a narrow curved band of dark shading. Secondary whitish.

Expanse, 30 mm.
*Hab.* Owgarra.
Type in my collection.

80. Leocyma tibiopunctata spec. nov.

♂ ?. Palpi white below, ochreous laterally, tipped with black; fore tibia and tarsi spotted with black; tibia yellow at its joint with the femora; tarsi yellow for the three end segments; both wings pure shining white, with a black point below the apex.

Expanse, 48-50 mm.
*Hab.* Ekeikei, January, February, and July.
Type in my collection.

81. Leocyma nigropunctata spec. nov.

♀. Palpi white; end segment black or strongly tipped with black; fore tibia and tarsi white, spotted with black; femora blackish above; both wings shining white; termen with black points.

Expanse, 45-49 mm.
*Hab.* Ekeikei, January and February; Kebea Range, March and April.
Type in my collection.
82. *Gabala margarita* spec. nov.

♂. Head yellow; palpi dark crimson; collar yellow, with crimson hairs, and a snow-white spot on each side, which is edged outside with dark crimson; thorax deep crimson, edged finely more or less with yellow; abdomen creamy white. Primary with costa and termen narrowly yellow; base yellow, more or less suffused with crimson, followed by a large diamond-shaped spot of pearly white; the rest of the wing crimson, with a slightly greyish band adjoining the pearly spot; a short pearly dash over the end of the cell; a small pearly subapical spot, below which is a similar dot. Secondary pale lemon-pearly, shading into white at the base.

Expanse, 30 mm.

*Hab.* Kebea Range, 6000 ft., March and April.

Type in my collection.

83. *Rivula biagi* spec. nov.

♂. Head, thorax, and abdomen creamy. Primary deep cream coloured, without any markings before the obscure reniform, which is darkly spotted; a trace of a pale serrate subterminal line, beyond which to the termen the ground-colour is darker; termen darkly spotted. Secondary pale creamy, darker close to the termen.

Expanse, 20 mm.

*Hab.* Biagi, Mamlaré River.

Type in my collection.

This species will be next *R. crassipes* Turner.

84. *Ramadasa pratti* spec. nov.

♂. Palpi blackish, whitish below; frons barred orange and steel blue; pectus whitish; legs barred orange and steel blue, especially the forelegs; head finely irrorated lilac grey; collar and thorax chestnut-brown, irrorated with slightly darker chestnut-brown; abdomen chrome-yellow, with a small black tuft on the proximal segment. Primary pinkish brown, suffused in parts with purplish; basal half of costa finely orange, edged finely below with pale purple, with five blue-black spots followed by an excurred blue-black line meeting a similar incurved line, which extends to the inner margin beyond its centre, a short black costal dash beyond the excurred line; a pale olive-green crescent at the end of the cell finely edged with white and with a second edging on its costal side with black, which extends over it right into the termen and has a broader blackish line above it from the costa into the termen about vein 6; the area enclosed by these lines and above the crescent mark is olive-green; a velvety dark spot edged outside with tawny is just outside the inner curve of the crescent, and from it a pale lilac line extends in the black lines to the termen; below the velvety spot are two dark small spots; a series of dark subterminal points with two pale lilac spots at the tornus; base of wing finely irrorated with orange. Secondary spotless chrome-yellow.

♀. Like the male, but instead of being chestnut-brown it is lilac-grey.

Expanse: ♂ 58; ♀ 55 mm.

*Hab.* Babooni, September; Dinawa, August.

Type in my collection.
85. *Zophochroa aneliopa* spec. nov.

♂. Head and thorax dark sooty grey; abdomen dirty grey. Primary dark sooty grey, with a trace of an antemedian line crossing a whitish dot; a trace of a postmedian line edged with a whitish dash in the fold; postmedian area slightly paler, a whitish apical spot preceded by a whitish costal dot. Secondary dirty grey. 

*Expanse*, 17 mm.  
*Hab.* Aroa River, January.  
*Type* in the Tring Museum.  
This species is near *Z. melanica* Turner.

86. *Gadirtha arao* spec. nov.

♀. Head and thorax grizzly grey; abdomen ochreous grey. Primary darkish grey, with a dark waved short costal basal dash, an oblique twin antemedian dark line, twice scalloped near the costa, then straight to vein 2; a pale grey patch in the cell; reniform dark grey, with a dark patch at its lower outer extremity, adjoining a large pale grey spot; edging this spot externally is a trace of a fine curved waved postmedian line, an obscure trace of a serrate subterminal line; termen deeply and finely scalloped with blackish; the wings have a mottled appearance, not being smoothly marked. Secondaries ochreous grey, darker grey for the outer half.  

*Expanse*, 48 mm.  
*Hab.* Aroa River.  
*Type* in my collection.  
I place this species with doubt in this genus, as the thorax has a long central tift.

87. *Stictoptera swinhoei* spec. nov.

♂. Head and collar dark brownish grey; patagia paler than the thorax (in some specimens as dark as the thorax); abdomen dark grey. Primary pale ashy grey; base more or less marked with brownish; the twin median dark lines oblique from the-costa, then curved outwards and receding from vein 1 to the inner margin; these lines are filled in, and the area surrounding them, with dark brownish grey; postmedian line obscure, serrate, and excurved; a subterminal interrupted row of dark small spots; termen with dark internervular dashes; costa mottled with brown; orbicular and reniform stigmata finely outlined with blackish. Secondary hyaline with costa broadly and termen very broadly dark grey.  

♀. Like the male, but the twin median lines and the subterminal row of spots are marked with ochreous spots.  

*Expanse*, 38 mm.  
*Hab.* Dinawa, Avola, Kebea Range.  
*Type* in my collection. ♀ unique.

88. *Capotena hampsoni* spec. nov.

♂. Head and thorax dark olive greenish brown; abdomen dark slate-grey. Primary with the costal half pale pinkish buff colour, the lower half darkish lilac-grey; termen pale lavender-grey, a large median olive greenish patch edged with white except on the costa; the patch is oblique as to its internal edge, and
reniform on its external edge, with a small dark spot at the end of the cell; a dark purplish subterminal dentate line margins internally the pale termen. Secondary dark slate-grey.

♀. Like the male, but paler.

Expanses, 40 mm.

_Hab._ Ekeikei, January to March.

Types in my collection.

89. **Nyctipao* _aroa_** spec. nov.

♂. Head and thorax dark blackish brown; abdomen dark sooty brown, covered with metallic purplish blue; both wings dark sooty brown, with a deep metallic purplish blue Instre in certain lights; no markings visible on either wing, except the large ocellus of the primary, with the least trace of the antemedian line and that across the fold in continuation of the dark edge of the ocellus.

♀. Like the male, but much less dark. Primary with the erect waved and dentate antemedian line distinct; ocellus distinct, with its inner crescent filled in with tawny, the rest dark, with its outer edge black, extending to the inner edge of the crescent, then descending in a broad twice-scalloped line to the inner margin; a broad oblique white dash at a quarter from the apex, with the least trace of a large spotted line crossing it at its lower extremity.

Expanses, 100 mm.

_Hab._ Aroa River, October.

Type in my collection.

90. **Hulodes gothica** spec. nov.

♂. Head and thorax pale cinnamon-brown; abdomen pale greyish. Primary pale cinnamon-brown, with base and termen broadly ochreous; a basal broadish grey band, antemedian band broad dark grey, ending on the inner margin with a deep velvety brown mark with a circular excision on its outer and lower edge, a median grey band, a trace of two confluent postmedian grey lines, and a subterminal one, outside which is an erect rusty definite stripe, edged with a broad sinuous blackish grey dash from the costa and a less conspicuous one from the tornus; a large ochreous patch at the end of the cell. The grey bands are all nearly erect and indefinite as to width, and the wing is more or less closely irrorated with dark grey. Secondary greyish, with a dark median grey band, followed by an ochreous one, then a broad dark grey somewhat divided area with a broad ochreous termen; wing finely irrorated with grey.

Expanses, 86 mm.

_Hab._ Aroa River, April.

Type in the Tring Museum.

_Catephiodes* gen. nov.

Similar to _Catephia_, but palpi, with first and second segments heavily scaled, reaching above the vortex; third segment smoothly scaled, and long antennae, with a few very fine and minute hairs in both sexes, so fine as to be almost simple; thorax with collar erected almost to a tuft; proximal segment of thorax hairy, and with a fan-like spreading tuft; tibiae with spines, hind tibiae of male with long hairy tufts.

_Type_: _Catephiodes mechi_ B-B.
91. *Catephiodes meeki* spec. nov.

♂. Palpi, head, and thorax dark purplish brown; patagia and collar edged with tawny; abdomen sooty grey. Primary dark purplish brown, with dark velvety lines edged with paler mauve or tawny brown; basal line interrupted; antemedian line angled at the costa, waved below; a dark spot in the cell, succeeded by a dark dash; reniform tawny, below which is a large dark patch edged by a deep velvety line; postmedian line spotted, very strongly excurved in the radial area; a broad tawny waved stripe from the apex to in front of the tornus; radial veins darkly dashed; termen darkly scalloped. Secondary black, with a large pure white patch occupying the basal and median areas.

Expanse, 58 mm.

_Hab._ Aroa River, February.

_Type in the Tring Museum._

92. *Hypaetra costiplaga* spec. nov.

♀. Head and thorax cinnamon-brown, finely irrorated with pale greyish; abdomen brownish. Primary cinnamon-brown finely irrorated with pale lilac-grey, a trace of a brown interrupted oblique antemedian line; two wedge-shaped tawny costal spots, one in the middle and one just before the apex; a trace of an interrupted very obscure postmedian line below the first wedge-shaped spot; termen with internervular tawny wedge-shaped dashes. Secondary pale silky brown.

Expanse, 38 mm.

_Hab._ Ekeikei, March.

_Type in my collection._

93. *Acantholipes biagi* spec. nov.

♀. Head, thorax, and abdomen dull umber-brown. Primary umber-brown; costa finely ochreous, spotted with blackish; a dark basal < shaped mark; a dark erect median straight band, adjoining which at the costa and on the fold is the excurred postmedian line, an irregular waved subterminal shaded band; termen darkly scalloped. Secondary dark sooty grey, with a darker median line.

Expanse, 25 mm.

_Hab._ Biagi.

_Type in my collection._

94. *Acantholipes irrorata* spec. nov.

♂. Head russet-brown; thorax, abdomen, and both wings ochreous grey; wings with a series of grey lines interspersed with russet-brown spots. Primary with the median line excurved and edged finely internally with russet-brown; a russet interrupted mark at the tornus; a very interrupted subterminal dentate row of blackish points; termen with black points. Secondary with the grey bands more distinct than in the primary, with the subterminal row of black points complete as also the terminal row; both wings sparsely irrorated with fine blackish points.

Expanse, 25 mm.

_Hab._ Aroa River.

_Type in Tring Museum._
95. **Dahlia melanica** spec. nov.

♂️. Head and thorax dark sooty brown; abdomen paler; both wings dark sooty brown. Primary with two small conspicuous white dots in the cell; a trace of a fine irregular interrupted antemedian line; postmedian dark line waved, subcrenulate; subterminal line irregularly rippled with a paler external edging; termen with dark points. Secondary with median and postmedian curved dark lines.

Expanse, 20 mm.
*Hab.* Biagi, Mambaré River.
Type in my collection.

96. **Dahlia ochreana** spec. nov.

♂️. Head, thorax, abdomen, and both wings ochreous grey. Primary with a dark costal dash at the base, followed by two dark costal dots, a trace of an oblique antemedian line; median oblique line only visible below the cell, a trace of a dotted postmedian oblique line, a dark dot in the cell; reniform rather darker than ground-colour, a short black waved dash from the apex; subterminal pale line subcrenulate, obscure; termen with dark points. Secondary with a paler waved median line; termen broadly greyish, with a trace of a paler subterminal line; termen darkly dotted.

Expanse, 20 mm.
*Hab.* Dinawa, September.
Type in my collection.

97. **Zethes pratti** spec. nov.

♂️. Head irrorated fawn colour; thorax and abdomen cinnamon-grey. Primary cinnamon-grey, with a narrow fawn-coloured shading to the costa for two-thirds, in which is a very short pale basal and antemedian dash to the cell; reniform tawny; postmedian line pale, with a darkly spotted internal edging for its upper half, deeply angled at vein 4; edging this line externally on its costal half is a large wedge-shaped tawny patch, the termen and fringe are darkly suffused by its lower part; the wing is irrorated with rough scales, slightly darker than the ground-colour. Secondary pale brownish grey.

♀️. Like the male, but with darker irrorations.

Expanse, ♂ 40; ♀ 32 mm.
*Hab.* Dinawa, August and September.
Types in my collection.

98. **Capnodes griseiplaga** spec. nov.

♂️. Head greyish; thorax ochreaous; abdomen greyish; both wings pinkish ochreaous; costa finely dark grey for the basal two-thirds, with two white spots, one before, and a second larger behind its centre; an interrupted antemedian dark spotted grey line; a trace of a similar median line of spots; an excurred serrate postmedian line; a subapical patch of dark grey on the termen, and a similar coloured dash above the torni; termen with black points, three below the apex being prominent. Secondary with a trace of a median and postmedian
grey line, a large dark grey patch at the anal angle; termen with fine dark points.

Expanse, 30 mm.

*Hab.* Dinawa, September.

Type in my collection.

**Farara** gen. nov.

♂. Palpi small, scaled, end segment short, not reaching above the vertex; antennae bipecinate with cilia; legs smooth; midtibia with one pair of spurs, hindtibia with two pairs; thorax and abdomen smoothly haired. Neuration: primary with vein 2 from just beyond the centre of the cell, 3 from before the angle, 4 from the lower angle, 5 from above the angle, 6 from the upper angle, 7, 8, and 9 stalked, the first well beyond the ariole, the latter two near the apex, 10 with a short bar to 7 to form the small ariole, 11 from the middle of the cell, depressed near its centre; secondary with 3 and 4 from the angle, 5 from above the angle, 6 and 7 from the upper angle. Primary triangular with costa very slightly arched, depressed at the apex; termen excavated below apex to vein 4, where it is produced outwards, receding below it to the tornus. Secondary fairly full; termen excavated slightly below apex; truncate near angle.

Type: *Farara pulchra* B-B.

99. **Farara pulchra** spec. nov.

♂. Head pale fawn colour; thorax pale whitish, ochreous, barred with pale fawn colour; abdomen pale purplish. Primary pale whitish, ochreous, with three broadish waved basal fawn-coloured lines; reniform fawn-coloured; median area below the cell and postmedian area up to the costa mauve colour, with a dark band of shading below the angle of vein 3; subterminal double line strongly scalloped three times, the two costal scallops being about half the size of the lowest one, which ends in the tornus. This latter portion of the lines is deep purple, a trace of a line of darker interrupted shading between this and the termen, which is darkly edged except about vein 4. Secondary purple up to the postmedian highly scalloped line, which is edged externally with pale fawn, and has a pale fawn subapical waved dash extending into a fine subterminal line in the pale terminal area; termen with a small triangular purple spot at the anal angle.

Expanse, 32 mm.

*Hab.* Dinawa, August.

Type in my collection.

100. **Iluza area** spec. nov.

♂. Head and thorax greyish tawny; abdomen darker. Primary greyish tawny brown, with a tawny very oblique stripe from the costa near the apex to the inner margin at a quarter from the base; a similar coloured scalloped strip from the apex to the inner margin nearer the tornus, followed by a second finer stripe into the tornus; a pale stripe in the cell, and a pale interrupted tornal patch on the termen; termen darkly dotted, and produced into an angle at vein 4. Secondary brownish grey.

Expanse, 42 mm.

*Hab.* Aroa River, January.

Type in the Tring Museum.
Paralopha gen. nov.

Paralopha smoothly scaled, erectly upturned, second segment reaching to the vertex, end segment long, almost naked; antennae of female simple; thorax roughly scaled; abdomen smoothly scaled, with dorsal tufts on the three proximal segments; legs very slightly hairy. Neuration: primary with vein 3 from before the lower angle, 4 from the angle, 5 from well above the angle, 6 from the upper angle, 7 from the tip of the areole stalked with 8 and 9—these two latter on a long stalk, and anastomosing with 10 to form the areole; secondary with cell unusually short, only a quarter of the wing; veins 3 and 4 from close to the angle, 5 from well above the angle, 6 and 7 from the upper angle. Primary with costa very slightly and evenly arched; apex rounded; termen slightly produced to an angle about vein 4, and slightly excavated below it; inner margin produced into a tuft near tornus, then slightly excavated and produced into a rounded shoulder, receding rapidly to the base. Secondary small; costa somewhat straight; termen rapidly rounded off, giving a narrow appearance.

Type: *Paralopha rubiginea* B-B.

101. *Paralopha rubiginea* spec. nov.

♂. Head and thorax purplish brown; abdomen dark grey, with slate-grey tufts. Primary rufous, with a trace of pale ochreous basal and median lines, with a large pale grey median patch mottled with reddish, a dark red spot on the costa near the dark greyish reniform; a much interrupted pale ochreous subterminal line; the wing has a rough and mottled appearance. Secondary pale grey, darker towards the termen.

Expanse, 42 mm.

*Hab.* Owgarra.

Type in my collection.

102. *Ilyrgis brunneata*.

♂. Head, thorax, and abdomen greyish brown. Primary pale greyish brown, with a fine antemedian and postmedian strongly serrated and irregular line, each rising in a short oblique white costal dash, the interspace being more or less olive-brown; a dark olive-brown costal patch, edged externally by an erect white dash, from which descends a fine obscure subterminal line; termen darkly dotted; fringe whitish in the subapical excavation and between veins 1b and 4. Secondary greyish, with a dark irregular median line with an external edging of lighter shading, and a short subterminal pale line from vein 6 to the tornus.

Expanse, 20 mm.

*Hab.* Biagi (Mambaré River); Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

Parilyrgis gen. nov.

Diffs from *Ilyrgis* in that the palpi are sickle-shaped, the second segment reaching well above the vertex of the head; the third segment is long and fringed with long hair; hindwing with vein 3 from just before the angle, 4 from the angle, 5 from just above the angle.

Type: *Parilyrgis concolor* B-B.
103. Parilyrgis concolor spec. nov.

♂. Palpi and head whitish; mesothorax cream colour; thorax, patagia, and abdomen pale ochreous brownish. Primary pale ochreous brownish, with darker very irregular, somewhat scalloped median, postmedian, and subterminal lines, arising in a creamy costal dash, and having several creamy points; termen finely dark, with dark indefinite small internervular spots; fringes creamy below the apex, dark and intersected below vein 5. Secondary pale greyish, with a dark median and a pale postmedian line.

Expanse, 26 mm.
Hab. Dinawa, August; Aroa River, March.
Type in my collection; other specimens in the Tring Museum.

104. Simplicia medioangulata spec. nov.

♀. Palpi, head, thorax, abdomen, and primary uniform dark dull brown. Primary with an inwardly oblique straight dark sub-basal line, a finer dark postmedian line, strongly angled outwardly beyond the cell, an obscure dark spot terminating the cell, a subterminal inwardly oblique dark line edged finely externally with a fine pale line; termen finely pale, preceded by internervular dark points. Secondary slightly paler than the primary, with a short dark median line, postmedian line dark, edged externally with a fine pale line angled below vein 2.

Expanse, 31 mm.
Hab. Dinawa, August.
Type in my collection.

105. Simplicia arca spec. nov.

♀. Similar in general colour to medioangulata B-B., but not so dark, whilst the basal line is nearly crenulate and outwardly oblique; the postmedian line is very slightly angled; the subterminal line is represented by a fine cream-coloured line, with the dark inner line practically obsolete, this difference being also carried out in the secondary, whilst it has no angle below vein 2.

Expanse, 32 mm.
Hab. Aroa River, February.
Type in my collection.

106. Simplicia trilineata spec. nov.

♀. Palpi, head, thorax, and abdomen pale ochreous dirty grey. Primary very pale ochreous, with costa finely dark; antemedian, median, and postmedian lines dark, roughly parallel; the antemedian line very fine, median broader, postmedian still broader, and somewhat curved from this line to the termen suffused with dark grey; termen finely dark. Secondary pale clear yellowish-white, with the postmedian darkish line angled at vein 2.

Expanse, 30 mm.
Hab. Aroa River, January.
Type in the Tring Museum.

107. Simplicia trilinea spec. nov.

♂. Head, thorax, abdomen and primary uniform dull cinnamon-brown, with an oblique waved fine antemedian line; postmedian line excurved beyond the cell; cell
closed by an obscure dash; subterminal line slightly incurved, with the area beyond pale ochreous. Secondary pale ochreous brown, darker near the angled pale subterminal line, beyond which the terminal area is pale ochreous. The three pairs of legs have the tibiae covered with masses of flocculent long hairs.

♀. Like the male, but darker and without the hairy legs.

*Expanse*, type specimen, 50 mm.

*Hab.* Dinawa, and all other localities.

Type in my collection.

The species varies considerably in size.

108. *Libisosa floccosa* spec. nov.

♂. Head, thorax, abdomen, and both wings greyish brown. In addition to the fore tibiae, the mid tibiae have a great mass of flocculent scales, and the hind femora have a large pencil of long hairs. Primary with a fine blackish irregular serrate line, a dark small spot in the cell, and a fine serrate dark postmedian line excurved just below the costa; an oblique pale subterminal line; termen darkly dotted. Secondary with a darkish obscure dot in the cell, an oblique sub serrate postmedian line, a pale angled subterminal line; termen finely ochreous, darkly dotted.

*Expanse*: ♂ 52; ♀ 40 mm.

*Hab.* Babooni and Ekeikei.

Types in my collection.

*Squamipalpis* gen. nov.

*Palpi* sickle-shaped throughout, very roughly and coarsely scaled to the extremity; second segment reaching well above the vertex, third segment long; antennae of male fine, very finely and minutely ciliate, and with paired fine bristles; thorax coarsely scaled; abdomen smooth; legs smoothly scaled, not hairy. Neuration: males with a large costal fold, occupying nearly all of the cell of the primary, and ending well beyond its end, vein 3 from below the lower angle, 4 from the angle, 3 from just above the angle, 6 from the upper angle, 7 from directly below the end of the ariole, which is just visible in the male, and well developed in the female, 8 and 9 forked, 10 and 11 from the aborted costal vein in the male, in the female 9 anastomoses with 10 to form the ariole; secondary 3 and 4 from the lower angle, 5 from directly above the angle, 6 and 7 from the upper angle; costa straight, depressed near the apex, which is very acute, almost falcate; termen excurved at veins 3 to 5; secondary long, slightly excavated below the apex; termen cut off straightish from vein 2; inner margin very short.

*Type*: *Squamipalpis unilineata* B-B.

109. *Squamipalpis unilineata* spec. nov.

♂. *Palpi* tawny brown; thorax and abdomen tawny grey; both wings pale tawny ochreous; primary with a trace of a fine dark serrate sub-basal line, a broad straight inwardly oblique dark median line edged externally with whitish; reniform chestnut colour; a trace of an interrupted somewhat crenulate postmedian line excurved beyond the cell; a subcrenulate autoterminal darkly dotted line palely edged externally, irregular and excurved about veins 7 and 8, and again about
vein 5; termen with dark points; secondary with the oblique median lines and the subterminal line of the primary carried through.

♀. Like the male, but without the oblique lines, with the reniform stigma, and the subterminal line darker.

Expanse: ♂ 33; ♀ 30 mm.

_Hab._ Dinawa, September; Aroa River, February and March.

Type in my collection; other specimens in the Tring Museum.

110. _Badiza albopunctata_ spec. nov.

♂. Head, thorax, abdomen, and both wings olive-brown. Primary with the antemedian fine line, indistinct, oblique, and dentate, a white point followed by a white spot in the cell; postmedian line irregular, serrate, receding at the costa and inner margin; subterminal line irregular, marked out by white dots; termen darkly spotted. Secondary with median line irregular, postmedian line marked out by white points.

Expanse, 33 mm.

_Hab._ Aroa River, March.

Type in the Tring Museum.

111. _Pseudoglossa novoguineana_ spec. nov.

♂. Head, thorax, abdomen, and both wings olive-brown. Primary with the antemedian fine line, indistinct, oblique, and dentate, a white point followed by a white spot in the cell; postmedian line irregular, serrate, receding at the costa and inner margin; subterminal line irregular, marked out by white dots; termen darkly spotted. Secondary with median line irregular, postmedian line marked out by white points.

Expanse, 33 mm.

_Hab._ Aroa River, September; Kebea Range, May and June.

Type in my collection.

112. _Bleptina bifurcata_ spec. nov.

♂. Head, thorax, and abdomen umber-brown. Primaries umber-brown, with a pale creamy line bisecting the cell longitudinally and bifurcated at the end of the cell along veins 3 and 4 to the termen; a basal short scalloped creamy line; an erect sub-basal stripe; a strongly angled postmedian line, the angle occurring between veins 3 and 4; an irregular subterminal line internally edging a small pale apical patch; a creamy dash closes the cell, and is preceded by a creamy dot in the cell. Secondary uniform greyish brown, with an indefinite median and a pale crenulate postmedian line.

Expanse, 38 mm.

_Hab._ Aroa River, March.

Type in the Tring Museum.

This species is nearly allied to _B. albicennata_ Leech.

113. _Bleptina serratula_ spec. nov

♂. Head and thorax fawn-brown, irrutated with dark grey; abdomen darkish grey. Primary pale fawn-brown, with a dark basal line; a dark, somewhat oblique,
internally serrate sub-basal line; a median black band, broad at the costa and in the cell, but narrow at the upper margin of the cell, descending in an angled line below the cell to the margin; postmedian line fine, strongly serrate, projected outwards beyond the cell; subterminal line fine, interrupted, dentate, rising in a black costal patch; termen with fine dark scallops; reniform palely marked out except on its outer side.

Secondary uniform pale ochreous grey, with a pale median band.

Expanses, 40 mm.

_Hab._ Mount Kebea, July.

Type in my collection.

114. _Bleptina albonotata_ spec. nov.

♂. Head, thorax, and abdomen greyish brown; both wings pinkish brown, with a short curved dark basal line, edged palely externally; two white crescents in the cell; a median curved band of dark shading; an oblique white fine dash at two-thirds of the costa; a broad indefinite band of dark postmedian shading; termen with dark internervular dashes edged externally with white. Secondaries with an indefinite median band of dark shading; a pale postmedian fine line, beyond which the terminal area is dark.

Expanses, 30 mm.

_Hab._ Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

_Aneliopis_ gen. nov.

Palpi long, recurved; second segment reaching well over vertex, heavily fringed; third segment with a tuft on the inner side; antennae of male bipectinate with cilia, the termination of the pectinations being a longish simple spine; in the female the bipectination is very fine, and shorter; thorax roughly scaled and tufted; legs, fore- and midtibiae thickly haired, the latter with one pair of spurs; hindlegs smoothly scaled; tibiae with two pairs of long spurs; both wings broad and ample. Primary with costa slightly arched; termen evenly excurved. Secondaries full, long, depressed at anal angle. Neuration: primary with vein 3 before the angle, 4 from the angle, 5 from directly above the angle, 6 from the upper angle, 7, 8, 9, and 10 stalked. Secondaries with veins 3 and 4 stalked, 5 from directly above the angle, 6 and 7 from the upper angle.

_Type:_ Aneliopis _alampeta_ B-B.

115. _Aneliopis alampeta_ spec. nov.

♂. Palpi, head, and thorax dark bronzy brown; abdomen pale greyish brown. Primary darkish amber-brown; a short blackish basal line; sub-basal line broadly dentate, with a paler internal edging; median blackish line very irregular, acutely internally angled about vein 6; postmedian dark line irregular, roughly parallel with the median line and palely edged; a terminal row of small spear-head dashes. Secondary uniform greyish brown.

♀. Like the male, but smaller, paler, and all the black lines much less prominent.

Expanses: ♂ 46; ♀ 34 mm.

_Hab._ Owgarra; Dinawa, August.

Types in my collection.
116. Aneliopis albipuncta spec. nov.

♀. Head and thorax greyish brown; abdomen paler. Primary pale brown, somewhat irrated finely with darker brown; a short, fine blackish basal line; sub-basal line fine, irregular; postmedian line very irregular, receding to costa and inner margin; subterminal line dentate, pale, edged internally with a series of blackish spots or short dashes; termen darkly dotted; a whitish spot in the cell beyond the sub-basal line, followed by a blackish one, with a few whitish scales in it. Secondary uniform pale greyish brown.

Expanse, 38 mm.

Hab. Owgarra.

Type in my collection.

117. Aneliopis adelpha spec. nov.

♀. Head and thorax ochreous brown; abdomen paler. Primary darkish brown, closely irrated with ochreous up to the postmedian line, and less so in the terminal area; basal dark line roughly describing three-quarters of an irregular circle; sub-basal line indistinct, produced outwards on the fold; postmedian line serrate, produced forwards beyond the cell, palely edged externally: subterminal line ochreous, with a dark edging between it and the postmedian line; termen dotted with ochreous, with an internal, almost scalloped, blackish edging. Secondary pale greyish, with a trace of a short line at the anal angle; termen dotted with ochreous, with a scalloped fine internal line.

Expanse, 34 mm.

Hab. Dinawa, August.

Type in my collection.

118. Aneliopis trilineata spec. nov.

♂. Head and thorax darkish brown; abdomen grey. Primary olive-brown, with an indistinct ochreous basal line; antemedian, postmedian, and subterminal lines ochreous, serrated, edged slightly with black; two black spots in the cell; termen with small dark spear-head spots. Secondary uniform pale dirty greyish.

♀. Like the male, but darker purpler brown, with the antemedian and subterminal line without serrations.

Expanse: ♂ 46; ♀ 48 mm.

Hab. Dinawa, July.

Type in my collection.

Cristatopalpus gen. nov.

♂. Palpi with second segment reaching above the vertex, fringed with very long hair; third segment with a large expanding tuft; antennae bipectinate; eyes with thick long lashes, especially below; legs, fore with femora and tibiae having long heavy tufts of hair; midtibiae smoothly haired; hindtibiae densely scaled, and having a flat pad of longish blackish hairs on the outer side, outside which is a long spreading fan-like tuft of fine hairs from the femoral joint. Neuration, vein 2 from near the middle of the cell, 3 and 4 from the lower angle, 5 from just above the angle, 6 from below the upper angle, ariole small, 7 from near the end of the ariole, 8, 9, and 10 stalked on a long stalk from the end of the ariole; secondary with 3 and 4 stalked, 5 from just above the angle, 6 and 7 from the
angle. Primary with costa straight, with an expandible tuft from near the base; termen evenly rounded; wings broad; secondary with wings ample.

Type: Cristatopalpus olivens B-B.

119. Cristatopalpus olivens spec. nov.

♂. Head and thorax olivaceous greyish brown; abdomen olive-grey. Primary pale olive-brown, with a blackish basal spot; an irregular sub-basal pale line darker edged on each side, with a blackish \( \approx \) shaped internal mark on the inner margin; a pale dot in the cell, with two pale small spots at the end of the cell; postmedian line irregular, serrate, receding at the costa and inner margin; subterminal line very irregular, with a dark costal internal filling between it and the postmedian line; terminal area paler, with a blackish patch between veins 4 and 5; termen with a fine crenulate dark line; fringes darkly intersected. Secondaries olive-grey, with a median and postmedian pale line darkly edged, and darkly filled in between a very fine crenulate terminal line.

Expanse, 41 mm.

Hab. Mount Kebea, July, and Dinawa, September.

Type in my collection.

Systaticospora gen. nov.

♀. Palpi with tufts on the back of the second and third segments; second segment long, reaching far above the vertex; third long, curved backwards; antennae with fine short hairs; patagia raised into lateral thoracic tufts. Neuration, primary with veins 2 and 3 from before the angle, 4 and 5 from about the angle, 6 from just below the angle, 7, 8, and 9 stalked, 7 on a short one, 8 and 9 on a long stalk, 9 and 10 from the cell; secondary with veins 3, 4, and 5 from the angle, 6 and 7 from the upper angle. Both wings broad and ample. Primary with costa slightly arched, depressed near apex; termen evenly rounded.

It is not ordinarily advisable to describe a genus from one sex, and especially the female; but this is so evidently new that I cannot do otherwise.

Type: Systaticospora orphina B-B.

120. Systaticospora orphina spec. nov.

♀. Head, thorax, and abdomen blackish brown. Primary dark olive-brown, thickly irrorated with blackish; a basal and sub-basal interrupted black line; a small black spot in the cell, with a minute white pupil; reniform outlined with black, with pale internal dash; postmedian line black, strongly serrate; subterminal line ochreous, edged with black on each side, with a black patch about veins 6 and 7; termen dotted with ochreous, with internal black scallops. Secondary uniform dark greyish brown, with a fine black scalloped termen.

Expanse, 60 mm.

Hab. Aroa River, April.

Type in the Tring Museum.

Megaloptera gen. nov.

♂. Palpi with second segment long, recurved over the head, thickly but smoothly scaled; third joint of moderate size, scaled; antennae bipectinate; legs, with all the femora, having a large spreading fringe of hair on each side; tibia smoothly scaled; thorax with patagial crests formed of long fine straight hairs,
combined with shorter heavy spatulate scales. Neuration, primaries with vein 3 from before the angle, 4 from the angle, 5 from well above the angle, 6 and 7 forked on a short stalk, 8, 9, 10, and 11 free from the cell; cell short, broad, with a spurious cell at its upper apex formed by a short bar to near the middle of the discocellulars, the end of which has a deep pit corresponding with the heavy tuft of androconia on the upper side; secondaries, cell very short, veins 3 and 4 from the lower angle, 5 from just above, 6 and 7 from the upper angle, 8 free from the base.

Type: *Megaloptera lophota* B-B.

121. *Megaloptera lophota* spec. nov.

♂. Head, thorax, and primary uniform bronzy brown; abdomen and secondaries uniform brown as the primary, but lacking the bronzy lustre. The cell of the primary is filled with reversed androconial hairs, and at the end of the cell there is a raised tuft of similar hairs, but heavily spatulate at the tips; termen spotted with ochreous at the veins, and having a preceding dark scalloped edging; a similar edging is just traceable in the secondary.

Expanse, 71 mm.

*Loc. Kebea Range, July; Aroa River, March.*

Type in my collection; other specimens in the Tring Museum.

122. *Mastigophorus (?) dinawa* spec. nov.

Head, thorax, and abdomen dark slate-brown; both wings dark slate-grey, with a trace of a blackish antemedian line; reniform blackish palely edged; a trace of an indefinite median line; postmedian line blackish, excurved and waved; from this line to the termen the wing is darker and has a few scattered lavender scales on it. Secondary with a dark median line palely edged externally, and a trace of a subterminal paler line; lavender scales scattered sparingly over the wing.

Expanse, 28 mm.

*Loc. Dinawa, September.*

Type in my collection.

123. *Mastigophorus olivens* spec. nov.

♂. Palpi, head, thorax, and abdomen olive-grey, the two latter spotted with black; both wings olive-grey, with black markings. Primary with four costal spots, one near the base, two before the centre, one beyond it, a short dash in the cell; antemedian spotted line interrupted, meeting the double oblique interrupted median line on the inner margin; postmedian line serrate, incurved below vein 3, irregular, with a pale external edging; subterminal line irregular and interrupted; termen finely scalloped. Secondary, with two inner-marginal dark small patches, between which is the irregular median line, outside the lower patch is the double postmedian spotted line; termen darkly scalloped.

Expanse, 28 mm.

*Loc. Dinawa, September.*

Type in my collection.

124. *Mastigophorus biagi* spec. nov.

♂. Palpi, head, and thorax dark reddish brown; abdomen paler. Primary dark reddish brown, of a dark rusty tone, with a pale grey irregular antemedian
line; postmedian line pale grey, irregular, subcrenulate, projected outwards beyond the cell, receding on the fold; a trace of a pale grey irregular dentate subterminal line; termen narrowly black, with white dots; a whitish spot at the reniform. Secondary grey, with a median and postmedian pale grey line; termen dotted with whitish.

Expanse, 26 mm.

_Hab._ Biagi, Mambaré River.

_Type_ in my collection.

125. _Rejectaria albolineata_ spec. nov.

♂. Head, thorax, palpi, abdomen, and both wings dirty greyish brown; both wings without any mark except that there is in both a subterminal, narrow, straightish white line.

Expanse, 38 mm.

_Hab._ Aroa River, February.

_Type_ in the Tring Museum.

_Insolentipalpus_ gen. nov.

♂. First segment of palpi long, reaching to the vertex, long and heavily scaled; second segment long, roughly scaled, scales shorter, curved over the head; third segment moderately long, with a tuft of hairs on the inner side; antennae bipectinate; legs long, smoothly scaled. Neuration, primary with vein 2 from the centre of the cell, 3 in front of the angle, 4 from the angle, 5 from just above the angle, 8 and 9 stalked from 7 before the end of the ariole, connected with 10 by a short bar to form the ariole, 11 from the cell at a third from the base; secondary, 2 from the centre of the cell, 3 and 4 from the angle, 5 from directly above the angle, 6 and 7 from the upper angle; wings, costa slightly arched, depressed at the apex; termen evenly curved; primary broad, expanding rapidly outwards; secondary long, fairly ample.

_Type_: _Insolentipalpus ochreopunctata_ B-B.

126. _Insolentipalpus ochreopunctata_ spec. nov.

♂. Head, palpi, and abdomen olive-grey; end segment of palpi with a tuft of fine white hairs. Primary olive-grey, with a basal black interrupted line; an irregular antemedian black line; median line obliquely confluent with the dark reniform, below which it is serrate; postmedian line serrate, receding at the costa, with a fine pale external edging; subterminal dark line serrate, dotted with ochreous externally, finely dashed with ochreous at the termen, the dashes being edged internally with black spear-head marks. The reniform is palely edged and dotted externally with ochreous; secondary grey, darker for the outer half; a median dark line to the cell; postmedian line excurred and serrate; subterminal line pale at the tornus, faintly traceable above; termen with ochreous dashes between the veins, spotted internally with black; fringes to both wings, tessellated ochreous and dark grey.

Expanse, 29–30 mm.

_Hab._ Owgarra.

_Type_ in my collection.
127. *Falcimala aurea* spec. nov.

♂. Palpi, head, and thorax greenish olive-brown; abdomen pale ochraceous grey. Primary greenish olive-brown, spotted with pale metallic gold; a largish spot at the base of the inner margin, with a second beyond the middle, between which nearer the basal spot is another; a spot at the end of the cell; two spots below each other in the postmedian area, with one or two dots below the second; a terminal series of small spots: all these spots are very irregular in shape and size; fringes goldenish, darkly intersected; secondary uniform pale rose-colour with ochreous fringes.

*Expanse*, 20 mm.

*Hab.* Biagi, Mambaré River; Milne Bay.

Type in my collection; a single specimen in the British Museum from Milne Bay.

128. *Falcimala brunneistriga* spec. nov.

♂. Head, thorax, and abdomen pale brownish; terminal segments of the latter smoky. Primary pale brownish, with an erect dark antemedial line edged externally with whitish; median pale line angled outside the reniform, which is faintly traceable (in my somewhat rubbed specimen); subterminal pale line interrupted and obscure below vein 4, with dark dashes between the veins. Secondary straw-yellow, with a very broad greyish-brown termen, in which is a subterminal yellowish line.

*Expanse*, 23 mm.

*Hab.* Dinawa, August; Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

**Ceilodiastrophon gen. nov.**

Palpi scaled, upturned; second segment long, above the vertex; third segment long, with a slight pencil of hairs on the inner side; antennae with very short fine cilia, with evenly interspersed longer, very fine hairs. Legs, fore heavily clothed with hair, mid and hind naked. Neuration, cells short; primary veins 4 and 5 from the lower angle, 6 and 7 from the upper angle, 8, 9 and 10 stalked on a long stalk; secondary with 3 and 4 and 6 and 7 from the lower and upper angles, 5 from directly above the lower angle. In the ♂ a heavy tuft of hair on the fold of the primary near the base, the base of costa produced into a short sharp shoulder with a tuft on its underside.

Type: *Ceilodiastrophon brunneum* B-B.

129. *Ceilodiastrophon brunneum* spec. nov.

♂. Head, thorax, and abdomen darkish brown. Primary entirely uniform dark brown, without any marks at all except two white points in the cell, one near the base and the other slightly larger at the end. Secondary slightly paler brown than in the primary, with the area above vein 6 pale greyish.

*Expanse*, 36 mm.

*Hab.* Dinawa, September.

Type in my collection.
130 Hydrellodes aroa spec. nov.

♂. Head, thorax, and abdomen purplish brown. Primary pale ochreous brown, with basal line broadly chocolate-brown; reniform chocolate-brown; postmedial line clear pale cream colour, with an outward curve beyond the cell and an inward curve on the fold; beyond this line the whole of the area is chocolate-brown, with a short oblique curved line to the costa before the apex and a trace of a subterminal row of pale spots. Secondary ochreous fawn colour, with a median and postmedian dusting of purplish brown; a slight dark fold along vein 16; termen dark, with ochreous fringes.

Expanse, 26 mm.
Hab. Aroa River, January.
Type in the Tring Museum.

131. Hydrellodes emmelodes spec. nov.

♂. Palpi, head, and thorax sooty grey; the third segment of the palpi is covered with a long pencil of fine hairs; abdomen brownish; both wings lavender-grey up to the oblique postmedial line, beyond which the colour is bronzey brown, shading into lavender-grey near the termen. Primary with a dark basal line, and an oblique dark cloudy median line; cell closed by a subhyaline oval dash; secondary with a dark oblique cloudy median line; a subterminal irregular row of five ochreous points; termen of both wings finely dark.

Expanse, 38 mm.
Hab. Aroa River, April.
Type in the Tring Museum.

132. Hydrellodes mediochracea spec. nov.

♂. Head and palpi dirty ochraceous; thorax purplish brown; abdomen brown. Primary with base purplish brown, sharply terminated in an erect oblique line; median area dirty ochraceous, terminating in a postmedial pure ochraceous line, with a small acute angle at the lower angle of the cell; the rest of the wing dark purplish brown, with a more or less distinct spotted ochreous subterminal line with a small pale inward spot about vein 6 and a large one near the tornus; termen with fine black dashes; a dark dot at the reniform. Secondary uniform brownish grey, with a dark spot closing the cell.

Expanse: ♀ 34; ♂ 36 mm.
Hab. Kebea Range, March and April, also June and July; Aroa River, March.
Type in my collection; other specimens in the Tring Museum.
The ♂ of this species has a tuft of curved hairs on the underside of the secondaries along vein 4 beyond the cell.

133. Hydrellodes funerea spec. nov.

♀. Palpi, head, and thorax dark purplish brown; abdomen somewhat paler. Primary with base dusky ochraceous, terminating irregularly with a projection between the lower margin of the cell and vein 16; the whole of the rest of the wing dark purplish brown, with a trace of an outwardly oblique irregular dentate postmedian line, and a similar waved subterminal line rising in a small costal
whitish patch; termen with a fine pale line, preceded by a series of blackish small lunular spots. Secondary uniform darkish grey.

**Expanse, 32 mm.**
**Hab.** Kebea Range, July.
Type in my collection.

134. *Hydrilodes subalbida* spec. nov.

♂. Palpi, head, thorax, and abdomen dark russet-brown. Primary with the basal three-fifths rusty brown, the outer two-fifths dark purplish brown; the former terminates with a paler rusty brown crenulate line, edged internally with a very fine darker crenulate line; a trace of an irregular antemedian line; a dark spot in the reniform, a series of subterminal white points. Secondary with the basal three-quarters white, and a white irregular line in the brownish terminal quarter rising from the tornus.

**Expanse, 34 mm.**
**Hab.** Dinawa, September.
Type in my collection.

135. *Echana meeki* spec. nov.

♂. Head, palpi, and thorax bronzy brown. Primary uniform dark brown, with a deep hairy pit beyond the cell up to the costa, outside which is a deep oblique fold into the tornus; this fold assumes the form of a deep ridge exactly as if a piece of cotton had been drawn across the wing into a groove and the wing membrane had partially closed over it; a broad patch of androconia below the cell. Secondary uniform brownish grey, the terminal third covered with somewhat shining short androconia.

**Expanse, 44 mm.**
**Hab.** Aroa River, April.
Type in the Tring Museum.

136. *Echana dinawa* spec. nov.

♂. Head, palpi, and thorax cinnamon-brown; abdomen greyish. Primary cinnamon-brown, with a trace of an antemedian oblique line; median line angled outwards in the cell; an obscure trace of a postmedian line; termen darkly dotted; fold distorted with a mass of grey scales and hairs below the end of the cell. Secondary uniform pale brownish with a small tuft of darker hairs in the cell.

♀. Like the male, but the primary without the distortion of the fold and the accompanying tuft; basal line erect and irregularly waved; two dark dots in the cell.
Both sexes beneath are alike, the secondary having one longish dark dot in the cell, with a median and postmedian irregular curved line.

**Expanse, ♀ and ♂ 37–38 mm.**
**Hab.** Dinawa, August and September.
Type in my collection.

137. *Echana owgarra* spec. nov.

♂. Head, palpi, thorax, and abdomen brownish grey. Primary ochreous grey, with a fine very oblique black basal line, an angled black median line lost in the contortion and scales of the fold, a trace of a postmedian line arising in a pale costal
dash; termen very strongly arched with prominent black spots. Secondary very pale greyish, with a pencil of fine hairs along the centre of the cell and a patch of fine slightly shining androconia beyond it between veins 2 and 5; underside with a small spot, followed by a large one in the cell, with a median and postmedian line.

Expanse, 40 mm.

_Hab._ Owgarra, Upper Aroa River.

_Type_ in my collection.

138. _Echana nigra_ spec. nov.

♂. Head, palpi, thorax, and abdomen blackish; thorax barred with rusty brown. Primary black, with a basal, median, and postmedian white costal spot, the two latter being the origin of their respective lines, which, however, are almost quite obscured; reniform marked by a deep black spot; termen strongly arched and dotted with deep black. Secondary dark grey, with an ochreous pale grey pencil along the cell, followed by a patch of pale grey androconia.

Expanse, 39 mm.

_Hab._ Owgarra, Aroa River, March.

_Type_ in my collection, a ♀ in the Tring Museum.

139. _Echana kebea_ spec. nov.

Section with costal fold at end of cell.

♂. Head and thorax pale chocolate-brown. Primary pale chocolate-brown, with a trace of a basal line, a pale serrate median line below the costal fold, and a fine dentate pale subterminal line. Secondary whitish, somewhat hyaline, pale pinkish brown at the apex and termen, tapering rapidly to vein 2.

Expanse, 42 mm.

_Hab._ Kebea Range, June.

_Type_ in my collection.

_Echanella_ gen. nov.

♂. Antennae with a swelling and small tuft at a third from the base; palpi strongly curved backwards, with second segment long well over the head; third segment moderate, both thickly scaled; legs, fore with femora heavily scaled; a tuft of hairs at the tarsal joint; mid and hind smoothly scaled. A strong contortion at the end of the cell affecting the wing right across; a fine basal costal fold. Neuration, primary with veins 3 and 4 from the angle, 5 from just above the angle, 6 from near the middle of the discocellulars, 7, 8, 9, and 10 stalked, 11 short, converging into 12, which (latter) is waved and contorted; secondary, cell short, veins 3 and 4 and 6 and 7 stalked, 5 from just above the angle.

_Type_: _Echanella purpurea_ B-B.

140. _Echanella purpurea_ spec. nov.

♂. Head and thorax purplish brown; abdomen chocolate-grey. Primary dark purplish brown, lustrous in the contorted area; base fawn-brown, terminating irregularly with a strong acute angle along the lower margin of the cell; postmedian fawn line fine from below the costal heavy tuft of scales; from this tuft a fawn stripe to the termen about vein 7; a fine obscure subterminal irregular line rising in
a whitish costal lunular mark; termen dotted with velvety black. Secondary brownish grey.

Expanse, 36 mm.

_Hab._ Dinawa, September; Aroa River.

_Type in my collection._

**Cellacrinata** gen. nov.

♂. Palpi with second segment above vertex; third segment long, very heavily tufted for three-fifths; apex curved upwards, naked; antennae fine with very fine short cilia; legs, fore with femora tufted, tibiae heavily tufted, mid pair tufted on femora and tibia, hind legs nearly bare, with two pairs of spurs; wings, primary costa depressed in centre, termen evenly rounded. Neuration, primary with cell very short, veins 3, 4, and 5 stalked, 6, 7, 8, 9, and 10 stalked, 6 from behind the discocellulars, 9 and 10 very short, 11 absent; secondary with 3 and 4 and 6 and 7 stalked, 5 from just below the middle of the discocellulars. Primary with costa produced into a shoulder at the base, but without any hairs. Secondary with an androconial fold along the cell, beyond which is a thick mass of androconial hairs to half-way towards the termen.

_Type: Cellacrinata grisea_ B-B.

141. **Cellacrinata grisea** spec. nov.

♂. Palpi and head ochreous grey; tuft on third segment rich chocolate-brown; thorax chocolate-brown; abdomen greyish. Primary pale ochreous grey, sparingly dusted all over with pale chocolate-brown, except in the terminal area, which is entirely pale chocolate-brown; an antemedial dark line interrupted at the veins with a paler internal edging; a dark spot in the reniform; an ochreous obscure subterminal series of small spots, that on the costa being larger and whitish. Secondary uniform chocolate-grey.

Expanse, 32 mm.

_Hab._ Kebea Range, July.

_Type in my collection._

**Cheillophota** gen. nov.

♂. Palpi thickly scaled; first segment long; second shorter, curved strongly over the head, third segment with a long pencil of fine hairs; antennae with long bipectinations; thorax with crested patagia and crested metathorax; legs nearly bare. Neuration, primary with vein 3 from directly below the angle, 4 and 5 from the angle, 6 from just below the upper angle, 7 stalked with 8 and 10, 9 stalked from 8, a fold lying along and beyond the cell, with tufts of hairs at its extremity, a deep contortion below the cell causing a falcate projection of the inner margin in front of the tornus, androconial hairs on the under surface and a thick covering with terminal tuft on the upper surface; secondary with veins 3 and 4 also 6 and 7 stalked, 5 from just above the lower angle; on the upperside a patch of short androconia beyond the cell.

_Type: Cheillophota costistrigata_ B-B.

142. **Cheillophota costistrigata** spec. nov.

♂. Palpi and collar dark rusty brown; terminal pencil ochreous; thorax dark purplish brown. Primary with a broad pale ochreous costal stripe, dusted with pale
rusty scales; rest of wing sepia-brown, except the hairs and tuft below the cell, which are purplish brown; termen darkly spotted. Secondary uniform greyish brown, with a trace of a median waved line; undersurface of secondary with a dark cell-spot, followed by a waved dark median and postmedian line.

Expanse, 42 mm.

_Hab._ Keben Range, July.

_Type_ in my collection.

**Pseudogyrtoma** _gen. nov._

Palpi scaled short, upturned; second segment not reaching to the vertex; end segment small, oblique; antennae minutely ciliate, with longer equally fine hairs; wings, primary long, narrowish. Neuration, primary, vein 2 from the middle of the cell, 4 from the angle, 5 from close to the angle, 6 from the upper angle, 7, 8 and 9 stalked, 7 nearly midway from the ariole, 8 and 9 close to the apex, 10 from the ariole; secondary with veins 3 and 4 and 6 and 7 from their respective angles, 5 from below the middle of the discocellulars.

_Type_: _Pseudogyrtoma fulvina_ B-B.

143. **Pseudogyrtoma fulvina** _spec. nov._

♂. Head and thorax tawny brown; abdomen with a greyish tinge. Primary uniform tawny brown, with a trace of an interrupted antemedian line; a small whitish wedge-shaped spot in the cell, confluent with the pale chestnut reniform; a trace of an interrupted postmedian spotted line, and a more distinct subterminal line rising in a whitish costal subapical spot; termen darkly pointed, the points preceded by a pale tawny short dash. Secondary uniform greyish brown.

Expanse, 30 mm.

_Hab._ Dinawa, August and September; Aroa River, February and March.

_Type_ in my collection; other specimens in the Tring Museum.

144. **Pseudogyrtoma area** _spec. nov._

♂. Head and thorax ochreous grey. Primary pale ochreous grey, with an irregular dark brown antemedian line, and a dark waved postmedian line, these two lines being connected below the cell by a dark curved line, above which is a broad lunular pale mark to the costa, enclosing the darkly outlined reniform stigma, which is not reniform but spherical; a dark fine indefinite line almost adjoining the postmedian; subterminal waved dark line edged externally by a pale line; termen darkly edged by a fine scalloped line. Secondary uniform pale greyish.

Expanse, 26 mm.

_Hab._ Aroa River, January.

_Type_ in the Tring Museum.

**Catadoides** _gen. nov._

Palpi sickle-shaped, each of the segments long, of nearly equal length, the second reaching over the top of the head, all roughly scaled; antennae of male bipectinate, with fine cilia; pectinations tapering at about two-thirds rapidly up to the tip; legs almost naked; midtibiae flattened with a short tuft at the tarsal joint, one pair of spurs; hindtibiae with two pair of spurs; those at the tarsal joint minute; thorax roughly scaled; patagia slightly raised. Neuration, primary with
vein 3 from before the angle, 4 from the angle, 5 from just above the angle, 6 from below the upper angle; ariole most minute, formed by the anastomosis of 8 and 10, 7 from the end of the ariole, 8, 9 and 10 stalked; secondary with 3 and 4 stalked 5 from directly above the angle, 6 and 7 stalked.

Type: *Catadoides punctata* B-B.

145. *Catadoides punctata* spec. nov.

♂. Head and thorax ochreous, with the scales on the head and collar tipped with brown; both the wings pale ochreous. Primary with a dark dot in the cell, followed by a larger one at the end, touching which internally is a faint trace of an oblique dark line; postmedian line evanescent, dotted, waved; subterminal waved line whitish, preceded by a row of dark dots on its inner margin, and with a faint dark external edging; termen darkly dotted. Secondary with all the markings of the primary repeated, but the median line is distinct, and from the faint postmedian line the outer area has more or less suffusion of pinkish brown scales.

Expanse, 26 mm.

*Hab.* Dinawa, August and September.

Type in my collection.

146. *Nodaria dinawa* spec. nov.

♂. Head, thorax, and abdomen greyish brown; palpi dark brown; legs dark brown. Primary greyish brown, with a trace of a very oblique, strongly serrated basal line; a curved antemedian dark line crossing an ochreous small cell spot; an obscure median band of dark shading across the dark brown reniform; a trace of a postmedian line; a distinct subterminal dark line of shading, edged externally somewhat palely. Secondary greyish brown, with a waved median and postmedian line, the later with a pale external edging.

Expanse, 24 mm.

*Hab.* Dinawa, August.

Type in my collection.

147. *Nodaria pratti* spec. nov.

♂. Head, palpi, thorax, and abdomen pale ochreous grey. Primary pale ochreous grey, minutely irrorated with darker grey, very sparingly on the basal and median areas, but plentifully in the terminal area; a trace of an angled antemedian double darkish line; a dark point at the end of the cell, followed by an obscure oblique darkish postmedian line, beyond which is an indistinct curved row of dark dots, a trace of a scalloped pale subterminal line; termen finely dark. Secondary pale cream colour, irrorated slightly on the fold, more plentifully at the termen; termen finely dark.

Expanse, 24 mm.

*Hab.* Dinawa, August and September; Aroa River, January and February.

Type in my collection; other specimens in the Tring Museum.

148. *Nodaria kebeae* spec. nov.

♂. Head and thorax pale cinnamon-brown; abdomen ochreous brown. Primary cinnamon-brown, with roughly parallel ochreous antemedian, median, and post-
median lines; costa narrowly ochreous; termen finely ochreous. Secondary pale yellow, slightly cinnamon at the tornus, in which is a yellow dash.

Expanse, 43 mm.

*Hab.* Kebea Range, March and April; Aroa River.

Type in my collection; other specimens in the Tring Museum.

149. **Catada ocellata** spec. nov.

♂. Head and thorax brownish grey; abdomen greyish. Primary greyish brown, with a broad median dentate darker band; a very broad similar post-median band projected outwards about vein 5, with the outer edge sub serrate; a pale serrate subterminal line; a whitish < shaped mark at the end of the cell; termen finely ochreous. Secondary greyish brown, with a short angled subterminal dark dash with a pale external edging; between veins 2 and 4 a black ocellus with a white pupil and a pale tawny external edging; termen finely ochreous.

Expanse, 46 mm.

*Hab.* Owgarrra.

Type in my collection.

150. **Catada alb oapicalis** spec. nov.

♀. Head, thorax, and abdomen dark greyish brown. Primary blackish brown, with the basal half tinged with reddish; an antemedian and median waved metallic lead-coloured line; a large triangular snow-white apical patch broadly edged internally with black; termen tawny, edged internally below the white patch with metallic lead colour; termen with black points. Secondary sooty grey, with a short tawny zigzag median line, with a tawny patch at each angle and an ocellus outside the upper patch; termen tawny, edged internally with metallic lead colour; termen with black points.

Expanse, 42 mm.

*Hab.* Aroa River, April.

Type in the Tring Museum; one specimen also in the British Museum.

151. **Catada variegata** spec. nov.

♂. Head and thorax pale cinnamon-brown; abdomen greyish sooty brown. Primary pale cinnamon-brown, with a small basal costal deep sepia-brown spot, a dark sepia median large inner marginal patch, above which is a small dark sepia spot with a costal patch over it; a very large postmedian irregular deep sepia patch, edged above by a curved pale cinnamon dash about vein 7, over which is a costal similarly coloured smaller patch; area from the dark patch to the termen dark greyish, with a paler reddish-brown curved irregular subterminal line and a dark sepia subapical costal patch; termen with dark points. Secondary pale yellow, with termen very broadly, irregularly blackish.

Expanse, 34 mm.

*Hab.* Dinawa, August.

Type in my collection.

152. **Catada sanguinea** spec. nov.

♂. Head, thorax, and abdomen pale creamy grey. Primary pale creamy greyish, with a dark basal point on the cell margin; a point on both cell
margins near the middle, and another pair at the end; an oblique darker band of shading from in front of the apex on the costa to a third from the base on the inner margin, where there is a shortish blood-red dash in the shaded band; a waved deep red spotted subterminal line, edged internally with whitish, with an external band of darker shading from the termen below the apex to near the tornus; termen darkly spotted. Secondary pinkish.

♀. Very much darker grey (though the males are somewhat worn), with the red dash and spotted line much accentuated, being quite sanguineous.

Expanse: ♂ 24; ♀ 26 mm.

Hab. Aroa River, March.

Type in the Tring Museum.

153. Heterogramma biangulata spec. nov.

♂. Head, thorax, and abdomen dark brown, with a fine white line at the second abdominal segment. Primary with the base pale brown up to the irregular fine antemedian line; median area dark brown from the cell to the inner margin; reniform marked by a dark dash, with a pale external edge; an irregular indistinct dark fine postmedian line; subterminal line dark, edged externally with whitish, prominently angled twice; beyond this the terminal area is paler. Secondary greyish brown, with a median and subterminal dark irregular line, the latter edged finely with white in the tornal area.

Expanse, 26 mm.

Hab. Dinawa, September.

Type in my collection.

This species is near H. lapsalis Wlk.

154. Lysimelia aroa spec. nov.

♂. Head and thorax pale brown; abdomen darker brown. Primary pale brown, with a fine dentate dark antemedian line, a fine dark strongly serrate postmedian line, a fine irregular somewhat dotted dark subterminal line, with a fine small angle just below the apex, and a dark terminal dash above the tornus; termen darkly dotted, the dots with a whitish external edging. Secondary palish brown, with an indistinct median line and a distinct subterminal line, edged externally with whitish in the tornal area.

Expanse, 22 mm.

Hab. Dinawa, August; Aroa River, January.

Type in my collection; other specimens in the Tring Museum.

155. Olulis rosacea spec. nov.

♀. Head and thorax pale creamy fawn colour; abdomen pink. Primary pale fawn colour, with the outer two-thirds of the cell creamy; a trace of a double scalloped median line, followed by a trace of a similar postmedian line; a subterminal series of dark spots; termen very finely dark; four black minute spots on the costa beyond the cell; reniform just visible. Secondary uniform pinkish, with a fine series of blackish subterminal spots; termen finely dark.

Expanse, 40 mm.

Hab. Dinawa, September.

Type in my collection.
Olulodes gen. nov.

Palpi obliquely erect, long, heavily scaled; second segment with a long brush on its underside; end segment small; antennae fine, with minute fine cilia. Wings, primary of even width; costa curved just beyond the base, then straight to the apex; termen excised from the acute apex, produced from veins 5 to 3, receding below; scalloped; secondary small; termen scalloped produced below apex, from where it recedes. Nervation as in Olulis, except that veins 7, 8, 9, and 10 are stalked, 7 and 10 from the same point midway from the cell, 8 and 9 from close to the apex; secondary, veins 3 and 4 from the angle, 5 from well above the angle, 6 and 7 from the upper angle.

Type: Olulodes pulchra B-B.

156. Olulodes pulchra spec. nov.

♀. Palpi dark mauve; head and thorax mauve-grey; abdomen pinkish ochreous. Primary lavender-grey, with a restricted tawny ochreous base; a trace of an antemedian and median line; postmedian whitish line more distinct, excurred beyond the cell, from whence it recedes rapidly; a broad band of indefinite ochreous follows; subterminal tawny dotted line roughly parallel; termen darker beyond this line, a dark apical cloud, and a dark tawny patch on the inner margin at the subterminal line. Secondary ochreous grey, fading into lavender-grey, with a tawny patch at the anal angle.

Expanse, 22 mm.

Hab. Aroa River, January.

Type in the Tring Museum.

157. Singara ochreoplagata spec. nov.

♂. Palpi, head, and thorax chocolate-brown; abdomen greyish brown. Primary chocolate-brown; antemedial line dark, waved; postmedial line erect, slightly curved, angled round the ochreous reniform to the costa pale lavender-grey, edged externally by a dark line; in the reniform some dark scales, a trace of an ochreous serrate interrupted line; between this and the postmedian line the area is mostly slate-grey. Secondary chocolate-grey up to the lavender-grey median line, darkly edged externally; the rest of the wing slatey grey; subterminal line dotted ochreous.

Expanse, 38 mm.

Hab. Aroa River, April.

Type in the Tring Museum.

158. Singara ochreostrigata spec. nov.

♂. Palpi, head, and thorax rufous; abdomen rufous grey. Primary rufous brown, with a darker waved antemedian line; a broad ochreous postmedian line, darkly edged externally; a waved more or less interrupted subterminal line, broad above vein 3, narrow below it; termen finely dotted with ochreous; reniform pale ochreous. Secondary dark greyish, with a broad ochreous median serrate line and a narrow irregular obscure postmedian line.

Expanse, 42 mm.

Hab. Aroa River, February.

Type in my collection.
Temnoptera gen. nov.

Head and thorax roughly scaled; palpi nupturbed, long, and roughly scaled; end segment naked; antennae long, with very fine short cilia; legs, forelegs with the tibiae roughly scaled with long hairs, a horny chitinous hook from its socket with the femora; midleg with long heavy tufts of coarse curled scales on the femora and tibiae, tibiae with one pair of spines; hindlegs with hairy tibiae having two pairs of long strong spines. Neuration: primary with vein 3 from near the angle, 4 and 5 from the angle or its close vicinity, 6 from below the upper angle, 7 from just beyond the angle, 8, 9, and 10 stalked from 7, the two former near the apex, the latter from nearer the angle than the apex, 11 from near the middle of the cell, strongly depressed so as to nearly touch 7, rising to the costa just in front of 10; secondary with 4 and 5 from the lower angle, 5 and 6 from the upper angle, a large patch of androconia from vein 1a to 3. Primary with wings long, wide, of moderately even width; costa nearly straight; termen with a slight, even curve; inner margin produced into a slight arch a third from the base. Secondary triangular, with the termen truncated, quite straight from apex to vein 1; costa slightly arched upwards.

Type: Temnoptera meeki B-B.

159. Temnoptera meeki spec. nov.

♂. Head and thorax ochreous brownish grey, the thorax having a dark patch on the centre and the patagia; both wings ochreous brownish grey, with dark brown bars and patches. Primary with two or three dark spots and speckles at the base; a very broad antemedian dark bar below the cell, followed by a second similar one; a dark patch in front of the tornus, bisected by an ochreous line between veins 1 and 3; a subterminal spot between veins 3 and 4, edged by an ochreous line; a subapical patch between veins 6 and 8, bisected by a twice-scalloped ochreous line; a small dark spot in the cell, with a dark patch at the end of the cell, bisected by a curved ochreous line; termen darkly spotted, the spots with ochreous external edging. Secondary with a dark postmedian bar edged externally with an ochreous line; preceding this is a trace of a median patch; between veins 3 and 4 a dark spot edged externally with an ochreous line; termen darkly spotted, spots with ochreous external edging; the wings are more or less irrorated with dark rough scales, and the ochreous veins interrupt all the markings.

Expanse, 54 mm.

Hab. Aroa River, March.

Type in the Tring Museum.

Cyttaralopha gen. nov.

Palpi obliquely porrect, tufted on the upper side, long, reaching above the vertex, end joint longish, naked; antennae finely and minutely bipectinate; legs with hairy tibiae; hindtibiae flattened and inflated, with a heavy tuft of hairs. Neuration: primary with cell very short, veins 3, 4, and 5 in male converging at three-quarters and lying almost touching each other to the lower angle, 6 from the upper angle, 7, 8, 9, and 10 stalked; secondary with two internal veins; veins 2, 3, 4, and 5 from the lower angle of the cell, the three latter stalked from one point, and bent upwards from beyond the cell, which is very short and broadish; veins 6 and 7 from the upper angle, the former bent
deeply down to three-quarters from 7, curved sharply round, but widening upwards slightly from vein 5 at the termen; vein 8 bent down close to the base and touching 7, then bent suddenly upwards in a bold curve towards the costa, terminating just below the apex; both wings very broad and ample. Primary, costa with a bold curve to the centre; a short sudden depression, followed by a bolder curve to the apex; termen receding very slightly from the apex; inner margin with a deepish curve outwards from the base. Secondary, costa with a bold outward curve to its middle, receding from thence rapidly to the somewhat acute apex; termen obliquely straight to vein 2, below which it is straightly truncated to the angle. Primary below, with the costa fringed with long hair to the middle. Secondary with a heavy curled tuft of coarse long scales, the upper portion of the wing covered with androconia and the cell with an androconial-tufted excrescence.

Type: *Cyttaralopha loxographa* B-B.

160. *Cyttaralopha loxographa* spec. nov.

♂. Head and thorax dark sepia-brown; abdomen dark fawn brownish grey. Primary dirty fawn-brown, with the base dark sepia-brown, receding rapidly baseward from the cell; a broad oblique dark sepia-brown median band, from whence the outer area of the wing is more or less covered with short oblique fine dark striae; a broad excraved dark sepia-brown band from in front of the apex to a third from the tornus, the band being quite indefinite as to its outer margin; termen dark grey from the band aforementioned. Secondary with upper half of wing to vein 6 creamy opalescent in certain lights; lower portion of wing fawn brownish, with dark sepia oblique fine striae and a dark oval spot about the middle of vein 5. The curled tuft on the costa below is dark chocolate-brown.

Expanse, 55 mm.

*Hab.* Aroa River, March.

Type in the Tring Museum.

161. *Camptochilus cinnamomeus* spec. nov.

♂. Section with antennae with very minute fine cilia with rather longer fine bristles. Palpi dark slate-grey; head and thorax pale cinnamon colour; collar edged and bisected with slate-grey; abdomen cinnamon. Primary pale dull cinnamon, with antemedian fine oblique line to vein 1b; median and post-median lines darkish, slightly curved basewards, colour between the two first lines pale ochreous; area beyond the postmedian paler cinnamon; the least trace of a somewhat waved subterminal line, beyond which the terminal area is darker, with a dark cloud at the tornus, in which is a short irregular lavender-grey dash. The whole of the wing has the appearance of being very finely irrorated. Secondary ochreous, with a trace of antemedian, median, and post-median dark fine lines; subterminal area broadly dark grey; fringes ochreous to about vein 4, greyish below.

♀. Like the male, but more ochreous, and with all the lines strongly accentuated.

Expanse: ♂ 46; ♀ 56 mm.

*Hab.* Ekeikei, Aroa River, March and April.

Type in my collection; other specimens in the Tring Museum.
162. Camptochilus rufus spec. nov.

♀. Head, thorax, and abdomen rufous brown. Primary uniform red-brown, lighter red in the postmedian area, with a small blackish spot at the end of the cell. Secondary uniform greyish brown.

Expanse, 42 mm.

_Hab._ Aroa River, March.

Type in the Tring Museum.

Plinthopa gen. nov.

Palpi obliquely porrect, scaled; second segment long, reaching above the vertex, with a slight pencil of hairs on the upper side; end segment small; antennae almost simple, the cilia being so extremely short and fine; legs scaled. Neuration: primary with veins 4 and 5 from the lower angle of the cell, 6 from the upper angle, 7, 8, and 9 stalked, 10 and 11 from the cell; secondary, 3 from before the angle, 4 and 5 from the angle, 6 and 7 stalked, 8 lying almost along 7 to well beyond the origin of 6; cell very short. Primary with costa depressed at base and apex, excurved between; apex acute; termen excavated below apex produced outwards at vein 5; wing broad. Secondary ample; termen slightly excavated below apex. This description is taken from a female.

_Type:_ Plinthopa _rufa_ B-B.

163. Plinthopa rubra spec. nov.

♀. Head dark grey; thorax bright red; abdomen greyish brown. Primary with base to antemedian line bright red; a short oblique dark basal line; postmedian line dark crenulate, excurved below the costa; cell closed by a dark spot; area between this line and the antemedian reddish grey; a dark broadish, nearly erect, slightly curved subterminal line in a grey area; terminal area reddish grey, the wing more or less finely irrorated with black. Secondary uniform greyish brown, with a terminal band of reddish.

Expanse, 48 mm.

_Hab._ Ekeikei, January and February; Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

164. Corcobara lutea spec. nov.

Palpi rusty brown laterally, pale grey on the upper side; thorax cinnamon-grey; abdomen yellow. Primary rusty brown, with a sub-costal row of black dots above the cell; a dark line from the upper angle of the cell bent upwards to the apex before its centre; an obscure, dark, strongly angled postmedian line receding very obliquely from its angle about vein 6 to the inner margin; beyond this the area is darker from vein 3 to the dark line already mentioned, up to which it tapers rapidly; subterminal area paler; termen dark rusty brown; the costal area is tinged with lilac; the whole of the wing is more or less irrorated with rusty scales; reniform with a dark spot at its lower margin. Secondary uniform spotless ochre-yellow.

Expanse, 64 mm.

_Hab._ Aroa River.

Type in my collection.
165. **Marapana punctitorna** spec. nov.

♂. Head and thorax pale cinnamon-brown; abdomen pinkish. Primary pale cinnamon-brown, more or less densely irrorated with dark grey; two blackish points in the cell, one at the middle and one at the lower angle; a trace of a broad stripe of the dark irrorations from the apex to the middle of the inner margin, edged externally by an oblique row of fine black points; a largish dark spot close to the tornus; a subterminal row of fine black points. Secondary pinkish, with a dark spot at the tornus and a subterminal row of black dots.

*Expanse, 36 mm.*
*Hab.* Dinawa, July and August.
*Type in my collection.*

166. **Marapana ekeikei** spec. nov.

♂. Head and thorax pale creamy grey; abdomen cinnamon-grey. Primary pale creamy grey, slightly irrorated with grey; two black points at the end of the cell, the lower one the larger of the two; a trace of an oblique line of black points from the apex, followed by a band of pale ground colour; termen with black points. Secondary pale cream colour, somewhat pinkish below vein 6; termen dotted with very distinct blackish dots; underside with a distinct black dot in the cells of both wings.

*Expanse, 37 mm.*
*Hab.* Ekeikei, March and April.
*Type in my collection.*

167. **Marapana angulata** spec. nov.

♂. Head and thorax pale cream colour; abdomen darker. Primary very pale washed-out straw colour, with a short oblique dark dash from vein 16 to the cell; four dark parallelogramic points at the end of the cell; a postmedian strongly angled pinkish indefinite band, angled beyond the cell about vein 5, followed by an interrupted fine dark crenulate line; a dark spot on vein 3 near the termen; three black short costal dashes in front of the apex. Secondary pinkish, pale creamy above the cell; a dark spot at the end of the cell; termen broadly grey; underside, primary pinkish, with a broad dark angled postmedian line; secondary pale creamy, with a dark cell-spot and a trace of a dark postmedian line.

*Expanse, 38 mm.*
*Hab.* Dinawa, September.
*Type in my collection.*

168. **Marapana bilineata** spec. nov.

♂. Head, thorax, abdomen, and both wings brick-red, tinged with pink. Primary darker than secondary, with two paler oblique lines, the postmedian being more oblique than the antemedian; a trace of an irregular subterminal line of paler ground colour; termen with black points; a black dot at the end of the cell. Secondary with an oblique paler median line; termen with black points.

*Expanse, 34 mm.*
*Hab.* Dinawa, August and September; Aroa River, January and February; and other localities.
*Type in my collection; other specimens in the Tring Museum.*
169. Marapana pulchra spec. nov.

♂. Head and thorax olive-grey; collar tipped with white; abdomen white, with olive-grey dorsum. Primary olive-grey up to the reniform, receding somewhat to the inner margin; beyond this pale lilac, irrorated slightly with olive-grey up to the pale pinkish oblique postmedian line; area beyond this line olive-grey, paler and mixed with lilac at the termen; a trace of a pale pinkish serrated subterminal line; reniform palely edged with two dark olive dots; termen with dark points. Secondary exactly similar to the primary.

Expanse, 32 mm.

Hab. Aroa River, March.

Type in the Tring Museum.

Avirostrum gen. nov.

Palpi very long, porrect, thickly scaled, end segment small; thorax and abdomen smoothly scaled; legs, tibiae heavily scaled; wings, primary tapering to broad; costa nearly straight, depressed before apex; termen excised below apex to a projection at vein 4, whence it recedes to the termns; secondary with termen crenulate, slightly angled at vein 4. Neuration: primary with vein 4 from the angle, 5 from above the angle, 6 from the upper angle, 7, 8, 9, and 10 stalked, the first from the end of the ariole, the three latter on a long stalk; secondary with veins 3 and 4 and 6 and 7 from their respective angles, 5 from below the middle of the discoellurals.

Type: Avirostrum pratti B-B.

170. Avirostrum pratti spec. nov.

♂. Head and collar pale fawn-brown, darkly speckled; thorax and abdomen brownish. Primary pale dull madder-brown, with a short dark basal line, a distinct dark antemedian and median line roughly parallel angled near the costa, receding basewards in a slight curve to the inner margin; postmedian line obscure, roughly parallel to the preceding lines; subterminal line dark, oblique; an ochreous terminal patch from vein 5 to 2 (this patch is occasionally almost absent); a whitish dot in the cell; two dark dots at the end of the cell. Secondary, base somewhat ochreous; a dark madder-brown irregular median band, preceded by a dark basal line; a broad ochreous postmedian band edged externally by an oblique rusty subterminal line; the ochreous band is bisected by a fine dark line excised at veins 3 and 4; apex with a dark madder-grey patch, below which is an ochreous patch; a whitish spot in the cell.

♀. Entirely ochreous, with dark lines; the secondary has also dark median and apical areas.

Expanse, 32 mm.

Hab. Dinawa, August, March, and April; also other localities, including the Aroa River.

Type in my collection; other specimens in the Tring Museum.

171. Avirostrum ochraceum spec. nov.

♀. Head, thorax, and abdomen pale tawny ochreous. Primary pale ochreous, finely speckled in parts, with antemedian, median, and postmedian dark lines, the
median being most distinct, all excurred below the costa; a tawny subterminal line, with an outer angled purplish line and a large darkish apical patch. Secondary ochreous, somewhat speckled, with a broadish tawny subterminal line, from which the whole terminal area is slate-colonred, with a dark angled fine line bisecting it.

Expans, 32 mm.

*Hab.* Ekeikei, March and April; Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

172. *Avirostrum pallens* spec. nov.

♀. Palpi, head, and thorax pale cream colour; abdomen deep cream colour. Primary pale creamy white, with a broad purplish grey diffused curved basal line, a waved excurred diffused median and postmedian line, rather deeper in colour than the ground; a dark purplish brown irregular wavy subterminal line, beyond which the whole of the area is purplish grey mixed with purplish rusty colour, with a paler large irregular costal patch; fringes rusty brown. Secondary pale creamy white, with a manve-grey broad costal border and a similar colonred basal line; a median and postmedian wavy grey line; a fine waved whitish subterminal line from the apex to vein 6, where it meets an excurred deep crimson terminal line, to above vein 2, from whence the white waved line is continued into the angle; a rusty spot between veins 6 and 7 in front of the white line, outside which line the termen is manve-grey, with a similar colouring at the anal angle.

Expans, 28 mm.

*Hab.* Dinawa, August; Aroa River, February.

Type in my collection; other specimens in the Tring Museum.

*Marapana modesta* Swinhoe belongs to this genus; also *fulcitenia* Warr. should form a section of the same.

173. *Rhynchina aroa* spec. nov.

♂. Head and thorax umber-brown; abdomen greyish brown. Primary umber-brown, with a black dot below the cell, and another in the cell above and beyond it; a slightly dusky dash between them outwards; an irregular oblique postmedian line; an oblique dark stripe of shading from the apex to the postmedian line near the inner margin; termen with internervular dark dashes, with a pale inner edge. Secondary uniform dark greyish brown.

Expans, 33 mm.

*Hab.* Aroa River, March.

Type in the Tring Museum.

174. *Rhynchina meeki* spec. nov.

♂. Head and thorax russet-brown; abdomen pale greyish. Primary darkish brown, with the inner margin below the cell broadly pale rusty brown; a dark dot in the cell, below which is a dark outward dash; a very irregular fine blackish double postmedian line; reuniform between them slightly rusty; a whitish apical patch extending downwards obliquely in a short tapering dash, outside which is a dark indefinite oblique dash, with three whitish dots beyond it, one on veins 2, 3, and 4, each being edged internally with blackish; termen with a dark interrupted
scalloped line edged finely internally with whitish. Secondary uniform pale brownish grey; termen with a fine dark line.

Expanse, 28 mm.

Hab. Aroa River, March.
Type in the Tring Museum.

175. Rhynchina ides spec. nov.

♂. Head and thorax mottled greyish; abdomen pale greyish. Primary irrorated slaty grey, with an olive costal streak; antemedian pale waved line edged finely internally with olive, with a pale whitish basal dash in the cell; postmedian line slightly waved, whitish, edged finely internally with olive; a dark dash on the lower margin of the cell, with a whitish edging above; a carved, slightly oblique white line from the apex to the inner margin in front of the tornus, edged internally, broadly, and indefinitely, with olive; termen finely white. Secondary uniform greyish brown, with a short ochreous dash, 2 and 4 laterally edged with brown; termen very finely white, edged internally finely with olive.

Expanse, 29 mm.

Hab. Aroa River, January.
Type in the Tring Museum.

This species has bipectinated antennæ, and has a heavy pencil of hairs on the underside of the primary along the lower margin of the cell.

176. Plumipalpia tripunctata spec. nov.

♀. Head, palpi, thorax, and abdomen pale cinnamon-brown. Primary pale cinnamon-brown, with a dark horizontal streak from the base along the upper margin of the cell into the apex; the dark area expands from the cell more or less outwards to about vein 2; three blackish small raised spots in the median area, two in the cell and one below the cell; a postmedian row of minute black points; a pale streak above the dark one from the apex to beyond the spotted row, broadest by the black points. Secondary uniform pale greyish brown.

Expanse, 37 mm.

Hab. Owgarra, Dinawa, August.
Type in my collection.

177. Hypena medionigra spec. nov.

♂. Head and thorax very dark brown; abdomen sooty brown, with darker dorsal tufts. Primary very dark velvety brown up to the waved pale postmedian line; a trace of an antemedian pale line, beyond which the area is darkest; the postmedian and subterminal areas not velvety nor quite so dark, with a trace of a black spotted deeply waved subterminal line; a slight dark subapical cloud on the termen. Secondary uniform dark sooty brown; underside greyish brown; both wings with a trace of a median darker line. Primary with a single white subapical dot below the costa.

Expanse, 40 mm.

Hab. Ekeikei, January and February.
Type in my collection.

178. Hypena nodyna spec. nov.

♂. Head and thorax clay-brown; abdomen sooty brown. Primary uniform clay-brown, with a basal interrupted fine white line, a sharply defined broadish
white erect oblique line, a white subapical dot, below which is a trace of a darkly dotted curved subterminal line, the dark dots having a minute white external edging; a dark dot in the cell. Secondary dark greyish brown.

Hab. Ekeikei, March and April; Aroa River, February.
Type in my collection; other specimens in the Tring Museum.

179. Hypena aneliopis spec. nov.

♀. Head, thorax, and abdomen greyish brown. Primary dull greyish brown, with a waved darker antemedian line and an erect oblique postmedian dark line finely edged externally with white; a broadly waved subterminal dotted line, into which runs a dark line from the apex, extending to the inner margin; a dark dot in the cell; termen finely dark. Secondary uniform greyish brown.

Expanse, 32 mm.
Hab. Dinawa, August; Ekeikei, March and April.
Type in my collection.

180. Hypena hedychroa spec. nov.

♂. Head, thorax, and abdomen greyish brown. Primary greyish brown, with a paler antemedian line edged finely with olive-brown externally; a dark dot in the cell, beyond which the ground colour is dark velvety brown up to the white tri-waved postmedian line; a slight angle is created at the two points where the waves meet about veins 2 and 6; three or four small dark subterminal spots, below which is a pale waved line to the tornus; a dark dash from the apex, sharply curved basewards below the second spot, edged above palely; termen finely dark. Secondary uniform dull greyish brown; underside with a median line in both wings. Primary with two vertical white subapical dots below the costa.

Expanse, 36 mm.
Hab. Ekeikei, January and February; Dinawa and Aroa River.
Type in my collection; other specimens in the Tring Museum.

181. Hypena subalbida spec. nov.

♂. Head, thorax, and abdomen brownish grey. Primary pale greyish brown, with a trace of a curved fine dark antemedian line touching a black dot in the cell; postmedian line white, erect, slightly oblique; the area adjoining, and before this line darker; a trace of a spotted subterminal line interrupted below the second subcostal spot by a broad dark subapical dash curved basewards; the tornal part of the subterminal line unsotted. Secondary white, with a broad dark termen tapering rapidly to the tornus.

Expanse, 34 mm.
Hab. Aroa River, January.
Type in my collection.

182. Hypena leucoprepa spec. nov.

♂. Head and thorax russet-brown, abdomen blackish brown. Primary russet-brown up to the tri-waved white postmedian line, which is slightly but distinctly angled at veins 2 and 6; a dark dot in the cell, in front of which is the antemedian dark strongly excurved line; subterminal line dotted above vein 5 with a large dark
sub-apical cloud invading it below the second subcostal spot and confluent with a subcrenulate band of dark shading outside the postmedian line. Secondary almost snow-white, with a broad black termen tapering to the tornus.

Expanse, 39 mm.

_Hypena_ aroa_ spec. nov._

♂. Head, thorax, and abdomen pale brownish grey. Primary pale olive-grey up to the fine oblique slightly curved whitish line; a dark dot in the cell, from whence up to the postmedian line the colour is more olivaceous; an oblique indefinite band of darker shading from the apex to the inner margin; termen dark slate-grey; with a fine scalloped dark line. Secondary entirely whitish, slightly tinged with cream; a fine blackish-brown termen, with a slight suffusion at veins 2 to 5; fringes dark.

Expanse, 29 mm.

_Hab._ Kebea Range, March and April; Aroa River.

Type in my collection.

Other specimens in the Tring Museum.

184. _Hypena zapluta_ spec. nov.

♀. Head, thorax, and abdomen rich dark brown, inclined to blackish. Primary chocolate-brown; the upper portion of the wing from vein 2 very dark reddish sooty brown, finely irrorated with pale grey in parts, with a chocolate spot showing through here and there a trace of an antemedian line; postmedian dark waved line more distinct and finely edged externally with whitish; a trace of a spotted subterminal line, in which is a series of whitish points; fold with dark bands and spots. Secondary snow-white, with an extremely broad terminal border of deep sooty black.

Expanse, 39 mm.

_Hab._ Kebea Range, March and April.

Type in my collection.

185. _Hypena griseata_ spec. nov.

♂. Head and thorax pale greyish, finely irrorated with pale lilac; abdomen pale greyish, with paler segmental divisions. Primary pale greyish, with pale lavender-grey irrorations; a very strongly dentate antemedian line dark externally, lavender-grey internally; a pale dot in the cell, and a larger pale spot at the reniform; postmedian dark line, pale externally, curved over the reniform, then recurved, below which it is nearly erect to the inner margin; a broad pale lavender-grey band follows, succeeded by an olive-brown band with a pale lavender band beyond this, whence up to the termen it is olive-brown, the two olive-brown areas being confluent about veins 7 and 8; termen darkly dashed, the dashes having pale internal edgings; four whitish points on the costa. Secondary uniform greyish brown, with dark dashes on the termen.

Expanse, 38 mm.

_Hab._ Aroa River, March.

Type in the Tring Museum.
186. **Hypena erecta** spec. nov.

♂. Head, thorax, and abdomen pale greyish brown. Primary greyish brown, finely irrorated more or less all over; antemedial line irregular, excurved, in parts olive-brown, very evanescent, being only distinct in quite fresh specimens; postmedian line erect, white, slightly oblique, with a dark somewhat suffused internal edging; three blackish dots in the subterminal area below the costa, the lowest widely separated from the upper two by a broad dark brown dash from the apex, which dash is angled inwards along vein 7; terminal area slightly darker than the general colour; termen with fine dark scallops. Secondary uniform greyish brown, with a fine dark terminal line.

**Expanse**, 33 mm.

*Hab.* Ekeikei, Area River, February.

Type in my collection.

Other specimens in the Tring Museum.

187. **Hypena zaplutagramma** spec. nov.

♂. Head and thorax mottled brownish grey; abdomen greyish brown. Primary mottled brownish grey, with the deep cream-coloured antemedian and postmedian lines parallel and somewhat oblique, the former externally, the latter internally, edged with olive-brown, the latter also having an indefinite dark suffusion preceding it; a black point in the cell; reniform visible as a fawn-coloured dash; subterminal line pale and irregular into the tornus, descending from four blackish irregular spots edged palely externally, below the second of which is a curved pale line with a blackish edging below, descending from the apex; terminal area greyish, with a dark terminal line. Secondary uniform pale brownish, with a fine dark terminal line.

**Expanse**, 36 mm.

*Hab.* Ekeikei, January and February.

Type in my collection.

Allied to *H. tylistalis* Swinhoe.

188. **Hypena themerodes** spec. nov.

♂. Head and thorax olive-brown; abdomen greyish brown. Primary olive-brown; antemedian line waved, obscure; postmedian line fine white, waved with a darker internal edging; subterminal pale line interrupted, more or less dotted, strongly waved and somewhat interrupted; terminal line fine and dark. Secondary uniform brownish.

**Expanse**, 38 mm.

*Hab.* Kebea Range and other localities, March and April.

Type in my collection.

Other specimens in the Tring Museum.

Allied to *H. phecomalis* Swinhoe.

189. **Hypena lichenalis** spec. nov.

♀. Head and thorax roughly scaled greyish brown; abdomen paler brownish. Primary roughly scaled greyish brown; basal pale line erect from the costa into the cell, then roughly excurved below; postmedian pale line irregular, produced outwards from vein 8 to 4; subterminal area broadly lichen grey; termen broadly
greyish brown. Secondary roughly scaled greyish brown, with a brown median line, beyond which is a broadish tapering band of lichen grey; termen broadly brownish.

Expanse, 39 mm.

*Hab.* Dinawa, September.

Type in my collection.

190. **Hypena irregulinea** spec. nov.

♂. Head and thorax dark brownish grey; abdomen brown, with reddish dorsal tufts. Primary brownish, with basal dark line twice strongly waved outwards; postmedian pale line produced strongly outwards beyond the cell, angled slightly outwards on the fold; area between these lines somewhat reddish darker brown; a dark dot in the cell; a subterminal waved series of dark dots, the costal two with white external edging; terminal line finely dark. Secondary uniform brownish; termen finely pale, with a fine external dark edging.

Expanse, 37 mm.

*Hab.* Kebea Range, March and April.

Type in my collection.

191. **Hypena albicomma** spec. nov.

♂. Head and thorax dark brown; abdomen slightly paler, with dark dorsal tufts. Primary rich velvety burnt brown to the pale waved postmedian line; a trace of an antemedian line across the snow-white comma mark on the lower margin of the cell; outer area beyond the postmedian line dark fawn-brown, paler than the median area, with two large slate-grey patches, one on the costa, the other in the upper radial area, separated by a narrow stripe of the fawn-brown along vein 6; the whole of this outer area is strongly stippled with largish dark irrorations. Secondary uniform dark brown.

Expanse, 40 mm.

*Hab.* Kebea Range, 6000 ft., March and April.

Type in my collection.

192. **Hypena ovisignata** spec. nov.

♂. Head, thorax, and primary palish brown. Primary with an obscure whitish antemedian line nearly erect from the costa across the cell, receding basewards from the lower margin of the cell; postmedian line whitish, nearly straight, very oblique; between these two lines is an ovate, very dark velvety spot along the fold; a darkish cloudy suffusion occupies a large portion of the outer area beyond the oblique postmedian line; a trace of a spotted subterminal line across this suffusion. Secondary uniform brownish.

Expanse, 39 mm.

*Hab.* Ekeikel, January and February.

Type in my collection.

193. **Hypena unicolor** spec. nov.

♂. Head and thorax darkish brown; abdomen somewhat paler. Primary uniformumber-brown, slightly darker in parts, with a somewhat paler large irregularly ovate spot beyond the end of the cell; postmedian line fine dark, twice waved; a subterminal row of white points; a whitish apical spot. Secondary dull
brown, whitish above the cell. On the underside of the primary in a whitish ground is a deep cream-coloured pencil of long hairs lying along the fold, and a corresponding pencil of like hairs lies along the upper margin of the cell of the secondaries.

Expanse, 39 mm.
Hab. Kebea Range, 6000 ft., July.
Type in my collection.

194. Hypena albonotata spec. nov.

♂. Head, thorax, and primary darkish greyish brown, tinged with rusty in the median area and with much dark grey suffusion; a fine waved antemedian line excurred on the fold, edging internally a good-sized snow-white spot in the cell; postmedian line waved, excurred beyond the cell, with a subterminal row of fine white points; a whitish apical spot; termen with fine white points between the veins. Secondary greyish brown, whitish above the cell; termen with fine white inter nervular points; underside, primary with a cream-coloured pencil of hairs lying in the fold, the white cell spot showing through cream-coloured. Secondary with a similar pencil along the upper margin of the cell.

Expanse, 38 mm.
Hab. Dinawa, September.
Type in my collection; other specimens in the Tring Museum.

195. Hypena nephoptera spec. nov.

♂. Head and thorax brown; abdomen paler. Primary pale umber-brown, with a pale slightly waved antemedian line and a white nearly erect post median line; a black dot in the cell, followed by a dark suffused cloud backing up to the white line; a very dark irregular cloud in the subterminal area from the apex obliquely inwards and thence to the tornus; an interrupted subterminal line arising in two white subcostal dots; three or four whitish costal points in front of the apex; termen with dark inter nervular dashes. Secondary uniform brownish.

Expanse, 34 mm.
Hab. Aroa River, February and other localities.
Type in my collection; other specimens in the Tring Museum.

196. Hypena callilinea spec. nov.

♀. Head and thorax dull sepia-brown; abdomen paler brown. Primary dark sepia-brown up to the irregular white line, which is slightly angled twice at vein 5 and about vein 2; a fine dark irregular antemedian line; a dark spot in the cell; area beyond the white line pale lavender-brown, deepening in tone towards the termen; subterminal darkly spotted line strongly waved; a short dark cloudy dash from the apex inwards; termen with inter nervular dark dashes. Secondary uniform dull brown.

Expanse, 36 mm.
Hab. Aroa River, April.
Type in the Tring Museum.

197. Hypena plinthopa spec. nov.

♂. Head and thorax dull reddish brown; abdomen dull brown. Primary dull reddish brown, with an irregular darkish antemedian line and an irregular
postmedian pale line, the area darker up to this point; an irregular waved series of dark subterminal points, arising in a snow-white subapical dot; a dark point in the cell; the whole of the wing is stippled with slate-grey irrorations. Secondary uniform darkish brown.

Expansae, 29 mm.

_Hab._ Ekeikei, March and April, and other localities.

Type in my collection; other specimens in the Tring Museum.

In some specimens the area to the postmedian line is quite bright reddish.

198. _Hypena callipona_ spec. nov.

♂. Head and thorax purplish brown; abdomen paler brown. Primary purplish brown, with a reddish tint in the median area; antemedian deep cream-coloured line, obscure, straightish, very slightly oblique; postmedian line deep cream, more distinct, roughly parallel with the previous line but slightly waved; area beyond the postmedian line paler, but with a subapical terminal dark velvety wedge-shaped suffusion; a waved subterminal series of small dark spots externally edged with white; termen fine blackish, preceded by a series of short snow-white fine dashes; the wing is more or less finely irrorated with lavender-grey. Secondary dark grey; termen with fine white points.

Expansae, 30 mm.

_Hab._ Kebea Range, 6000 ft., March and April.

Type in my collection.

199. _Hypena orphnina_ spec. nov.

♀. Head and thorax grizzled grey; abdomen darkish grey. Primary grizzled grey, with an obscure irregular antemedian paler line darkly edged externally; postmedian line pale, irregular, outwardly produced from vein 8 to 4; a broad subterminal irregular band of bluish grey; reniform fawn colour. Secondary brownish grey, with a dark median line, followed by a band of bluish grey, beyond which the terminal area is dark.

Expansae, 38 mm.

_Hab._ Dinawa, September.

Type in my collection.

200. _Hypena spodopa_ spec. nov.

♀. Head, thorax, and abdomen ashy grey. Primary slightly ochreous pale ashen grey, very finely and densely irrorated; median and postmedian lines roughly parallel, slightly oblique, dark brown; subterminal line dark brown, slightly excurved about veins 4 and 5; a dark brown oblique dash from the apex to the subterminal line at vein 6; termen finely dark. Secondary uniform pale brownish grey.

Expansae, 32 mm.

_Hab._ Dinawa, May; Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

201. _Hypena leucospora_ spec. nov.

♂. Head, thorax, and abdomen dark brown. Primary dark umber-brown, with an oval white small spot in the cell; a trace of a pale postmedian line darkly
edged internally; subterminal band obscure, darkly spotted. Secondary palish grey-brown.
Expanse, 30 mm.
_Hab._ Aroa River, April.
_Type in the Tring Museum._
The type is in poor condition, but it belongs manifestly to a new species and is in a condition to be quite recognisable.

202. **Hypena styx** spec. nov.

♀. Head, thorax, and abdomen dark brown. Primary dark brown, with an irregularly broad, waved, blackish-brown velvety antemedian line; postmedian line deep velvety black, edged externally with deep cream colour; the area between these lines is filled in for its outer half by a suffused band of blackish; subterminal line fine blackish, very irregular and somewhat dentate, with a subapical terminal cloud extending into it; outside the postmedian line is somewhat dusted with whitish grey. Secondary darkish brown.
Expanse, 29 mm.
_Hab._ Aroa River, April.
_Type in the Tring Museum._

203. **Hypena aiana** spec. nov.

♂. Head, thorax, abdomen, and both wings uniform dull brownish, slightly paler beyond the postmedian line; a trace of an excurved antemedian line; postmedian line dark, nearly straight, slightly oblique; termen with a scalloped linear black line.
Expanse, 30 mm.
_Hab._ Aroa River, March.
_Type in my collection; other specimens in the Tring Museum._

204. **Hypena incognata** spec. nov.

♀. Head and thorax dull brown; abdomen paler. Primary olive-brown up to the waved white postmedian line; a trace of a fine dark scalloped antemedian line; postmedian line followed by a broad indefinite band of quite pale greyish; terminal area very broadly dark, with an oblique pale subapical patch. Secondary uniform dull brown.
Expanse, 22 mm.
_Hab._ Aroa River, March.
_Type in the Tring Museum._

205. **Hypena mambara** spec. nov.

♂. Head and thorax chocolate-brown; abdomen greyish. Primary purplish brown, with a rich velvety, dark purplish brown streak in the cell to the termen, and several internervular similar dashes in the radial area; a broad similar stripe all along the fold from base to termen; a dark interrupted antemedian line; a trace of a similar median line; postmedian line finer, irregular, produced slightly outwards at the cell, with a paler external edging; subterminal line irregular, somewhat waved, dotted with pale bluish grey; a bluish-grey dot in the cell;
reniform bluish grey, with a dark central dash; termen interrupted finely pale grey. Secondary greyish brown.

Expanse, 32 mm.

_Hab._ Biagi, Mambaré River.

Type in my collection.

**Parhypena** gen. nov.

Differs from _Stenhypena_ Hmps. in the antennae being fasciculate; no raised specks in the cell. Secondary with veins 3 and 4 and 6 and 7 from the lower and upper angles respectively.

_Type_: _Parhypena albopunctata_ B-B.

206. **Parhypena albopunctata** spec. nov.

♂. Head and thorax darkish cinnamon-brown; abdomen greyish. Primary darkish cinnamon-brown, with a trace of an antemedian dark interrupted line, a more distinct dark serrate postmedian line, and an irregular subterminal series of dark points with whitish external edging; cell closed by a dark broken dash. Secondary uniform pale ochreous grey.

Expanse, 28 mm.

_Hab._ Dinawa, July to September.

Type in my collection.

**Argillana** gen. nov.

Palpi of moderate length, scaled; second segment fringed above; end segment short, oblique; antennae with minute cilia; wings, primary expanding outwards; costa moderately straight; apex depressed; termen evenly produced outwards. Neuration: primary with veins 3 and 4 from the angle, 5 from near the angle, 6 from the upper angle, 7 from the ariole, 8, 9, and 10 stalked from beyond the middle. Secondary with veins 3 and 4 from the angle, 5 from below the middle of the discocellulars, 6 and 7 from the upper angle.

_Type_: _Argillana albistrigata_ B-B.

207. **Argillana albistrigata** spec. nov.

♂. Palpi slate-grey, fringed with white above on the second segment; head, thorax, abdomen, and both wings bright fulvous; an orange-tawny antemedian line; a dark median line confluent with a white line below the cell, on each side of which (latter) is a short orange dash; beyond the obscure reniform a curved white dash bordering internally a pale orange patch, below which to the inner margin is a large patch of slate-grey; an interrupted waved orange-tawny subterminal line. Secondary with a broad orange median band bisected by a waved white line; an obscure darkly dotted excurved subterminal line.

Expanse, 26 mm.

_Hab._ Dinawa, August.

Type in my collection.

**Brithodes** gen. nov.

Palpi with second segment very long, porrect, scaled, haired on the upper side; end segment obliquely upturned, short, haired with naked apex; antennae minutely and finely bipectinate in both sexes, more strongly in the male. Neuration:
primary with 6 from below the angle, 7 from the angle, 8, 9, and 10 stalked near
the apex. Secondary with 3 and 4 stalked, 5 from near the lower angle, 6 and 7
from the upper angle.

Type: Brithodes tetralinea B-B.

208. Brithodes quadrilineata spec. nov.

♂ and ♀. Head, thorax, and primary lilac-grey. Primary with four pale lines
with tawny external edging, more suffused in the female than in the male; basal
line short, parallel with the antemedian line, which is slightly oblique; postmedian
and subterminal lines roughly parallel, both slightly angled and slightly curved
about vein 7 to the costa; termen with a fine linear scalloped dark line, preceded
by a similar but slightly broader line; a dark spot at the end of the cell. Secondary
pale straw, with a slight pinkish suffusion in the female. In the female the lines
are more distinctly white than in the male, and there is a broad white suffusion
preceeding the subterminal line.

Expanse, 24 mm.

Hab. Dinawa, August and September.

Type in my collection.

209. Chusaris aroa spec. nov.

♂. Head pale lemon-yellow; thorax pale lemon, with a black central meta-
thoracic spot and black collar. Primary pale lemon-yellow, with four black costal
spots, one at the base, two in the median area, one near the apex; a large black
patch in the fold excavated above and below, extending upwards to touch the third
costal spot, but not touching the second; a black dot at the apex, and two terminal
patches below it. Secondary greyish, with slight pale lemon invasion near the tornus.

Expanse, 18 to 19 mm.

Hab. Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

210. Chusaris dinawa spec. nov.

♂. Head, thorax, abdomen, and both wings ochraceous grey. Primary with a
darker indefinite oblique median line, a narrower parallel postmedian line, a broadish
pale oblique subterminal line tapering up narrowly to the apex, finely edged
internally, and broadly externally with darker ground colour, a greyish line between
this and the termen, after which the termen is broadly paler; termen darkly dotted.
Secondary with the subterminal markings of the primary carried through, but
waved.

Expanse, 30 mm.

Hab. Dinawa, August.

Type in my collection.

211. Chusaris olearia spec. nov.

♂. Head, thorax, and abdomen brownish grey. Primary pale brownish, with
a slight tinge of purplish; antemedian line dark, waved; postmedian line dark,
irregular, waved, and produced outwards about vein 6 and 7; this line is more or
less distinctly finely edged externally with pale ochreous; a trace of an interrupted,
very irregular pale subterminal line; a dark indefinite spot at the end of the cell,
with the least trace of a median line crossing it; termen with fine internervular
ochreous dashes. Secondary pale brownish-grey. The whole insect has a slightly
shiny appearance, as if it were greasy.

*Expanse*, 26 mm.

*Hab.* Owgarra.

Type in my collection.

**Foveades** gen. nov.

Palpi long, porrect, very heavily scaled, with a long fringe on the upperside
of the second segment; end joint minute; antennae bipectinate; pectinations long;
wings, primary broad, termen arched, secondary ample. *Neuration*: primary
with veins 4 and 5 from the lower angle, 6 and 7 from the upper angle, 8, 9, 10,
and 11 stalked, 8 and 9 from near the apex, 10 and 11 from a common stalk given
off at the cell; a deep pit in the cell extending nearly to the costa, causing the
costal vein to be curved downwards beyond the pit. Secondary with 3 and 4 from
the lower angle, 5 from about the middle of the discocellulars, 6 and 7 from the
upper angle.

*Type*: *Foveades aroensis* B-B.

212. **Foveades aroensis** spec. nov.

♂. Palpi ochreous, heavily scaled with blackish; thorax and abdomen cream-
coloured. Primary cream-coloured, with a black costal spot near the base, followed
by a second black spot; a third small black costal spot above the end of the cell;
a blackish oblique postmedian line preceded by a row of black dots, both shortly
angled inwards above the inner margin; termen dotted with black; a small
black dot in the cell, followed by two at the end; a black dot below the cell near
the base. Secondary creamy, semihyaline, whitish, with a trace of a dark median
line.

*Expanse*, 20 mm.

*Hab.* Aroa River, April.

Type in the Tring Museum.

213. **Hypenagonia brunnea** spec. nov.

♂. Head, thorax, and abdomen umber-brown. Primary darkish brown, with
the trace of a waved basal line, beyond which the median area is darker; post-
median dark line strongly angled about vein 6, up to where it is finely edged with
white externally, below this point most obscure; a tawny wedge-shaped costal
patch before the apex; termen darkly dotted. Secondary brownish, with an irregular
median band darkly edged; a tawny indefinite dash from the tornus.

*Expanse*, 19 mm.

*Hab.* Aroa River, March.

Type in my collection; other specimens in the Tring Museum.

214. **Goinocraspedum aroa** spec. nov.

♀. Palpi, head, and thorax white; body pale olive-brownish. Primary pale
greyish to olive-brownish in parts; base and median area grey, with a trace of
a white basal interrupted line; two slight olive patches on the costa and on the
inner margin also; a patch at the end of the cell, with a white costal patch above
and another white patch nearer the apex; a largish white patch before the tornus
on the inner margin; a trace of an interrupted white postmedian line; a white
spotted subterminal line; termen with a white spot below the apex, with another below it; fringes with white patches. Secondary greyish whitish at the base, with a dark curved median line, followed by a white band below the cell nearly to the tornus; a white short dash, nearer the termen from the tornus.

Expanse, 21 mm.

_Hab._ Ane River, February.

Type in the Tring Museum.

_Hypenarana_ gen. nov.

Palpi very long, porrect, thickly scaled; second segment with long scales on upper edge; end segment at nearly right angles; basal half scaled; apex naked; antennae serrate, very fine in both sexes, with minute cilia; wings, primary moderately broad; termen excised from the apex to vein 6. Secondary small, angled at vein 2, excised from there to the angle. Neuration: primary, vein 4 from the angle, 5 from directly above the angle, 6 from well below the upper angle, 7 from the upper angle, 8, 9, and 10 stalked, 11 appressed almost on to 10; secondary, veins 3 and 4 stalked, 5 from above the angle, 6 and 7 from the upper angle.

_Type_: _Hypenarana rosacea_ B-B.

215. _Hypenarana rosacea_ spec. nov.

♂. Palpi, head, thorax, and abdomen cinnamon-brown. Primary cinnamon-brown; antemedian pale line angled on the fold; postmedian line pale, subcrenulate, produced outwards beyond the cell, angled inwards on the fold; area between these two lines filled in with darker brown; subterminal line darkly dotted; termen with dark dots; cell with a dark dot, followed by two dark dots at the end of it. Secondaries rosy.

♀. Like the male, without the dark median infilling.

Expanse, 19-20 mm.

_Hab._ Bingi, Mambaré River.

Type in my collection.

_Paranoratha_ gen. nov.

Palpi longish, obliquely porrect; second segment scaled with a tuft on the upper side; end segment small, scaled; antennae fine, with fine minute cilia. Legs, foreleg with a small tibial tuft, hindlegs with both femora and tibiae somewhat flattened; both wings broad. Primary, costa nearly straight, slightly depressed at the apex; termen straight to vein 4, from where it recedes rapidly to the tornus. Neuration with vein 2 from near the middle of the cell, 3 from nearer the angle, 4 from the angle, 5 from directly above the angle, 6 from the upper angle, 7 from the ariole, 8 and 9 stalked very near the apex, 10 from the ariole. Secondary with vein 5 from directly below the middle of the discocellulars.

_Type_: _Paranoratha fusca_ B-B.

216. _Paranoratha fusca_ spec. nov.

♂. Palpi sooty brown; head and thorax sooty grey; abdomen paler grey. Primary greyish, with an irregular waved rusty line rising in a dark rusty brown costal spot; postmedian line strongly excurved from vein 7 to 4, the curve
being filled in from before the reniform (which is darkly outlined) with pale rusty brown; a trace of a darkly spotted interrupted subterminal line, roughly parallel with the preceding one; termen with black dots. Secondary greyish, with a distinct dark postmedian line, angled at vein 6, followed by an indefinite darker line of shading; termen darkly pointed.

Expanse, 22 mm.
Hab. Aroa River, March.
Type in the Tring Museum.

217. Moscha modesta spec. nov.

♂. Head, thorax, and abdomen ochreous grey. Primary ochreous grey, with a slight greenish shade; a dark interrupted antemedian line from a costal spot; an olive-brown postmedian line, broad and dark below the costa; a subapical costal olive-brown patch; a trace of a pale subterminal irregular line; termen dark for the apical half; reniform blackish. Secondary darkish grey, with a dark median line.

Expanse, 18 mm.
Hab. Bingi, Mambará River.
Type in my collection.

SATURNIIDAE.

218. Opodipthera strigata spec. nov.

♂. Head and face orange-colour; collar broadly white-edged finely above, below with chocolate-brown, with a deep crimson spot on each shoulder; thorax and abdomen yellowish buff. Both wings yellowish buff, with an oblique slightly waved brownish mauve line from well in front of the apex through each wing, and a small ocellus at the end of the cells, having a fine yellow pupil ringed alternately with mauve, yellow, and mauve. Primary with a whitish subapical small costal patch with a black wedge-shaped centre; base of costa broadly purplish for a fifth. Secondary with a waved mauve postmedian line, in addition to the oblique line mentioned before; a series of dark mauve spearhead marks in the postmedian area.

Expanse, 72 mm.
Hab. Mafalu, 6000 ft., August.
Type in my collection.

CHALCOSIIDAE.

219. Eusphalera semiflava ab. subflava nov.

♂. Head and thorax steel-blue; abdomen black above; ventral surface straw-colour. Primary very restricted black, with steel-blue scales at base, basal two-thirds chrome-yellow; apical third black with steel-blue scales between the veins near the apex. Secondary with extreme base narrowly black; rest of wing canary-yellow, becoming deeper at its edge. Termen broadly black, tapering down narrowly at the angle. Under surface similar to upper surface, but with a steel-blue spot at the apex of the secondary.

Expanse, 50 mm.
Hab. Ekeikei, March and April.
Type in my collection.

I think the nomenclature of this genus must be very inconstant, as in my specimens of semiflava and subflava vein 11 does not anastomose with 12, but is quite free.
220. *Eusphalera semiflava* ab. *ekeikei* nov.

♂. Similar to *semijaca*, but the yellow band of the hindwing extending right up the inner margin.

*Hab.* Ekeikei, January and February; and Kebea Range.

Type in my collection.

221. *Eusphalera semiflava* ab. *sublutea* nov.

♂. Similar to ab. *subflava*, but the forewing black, with an orange-yellow band.

Expanse, 50 to 54 mm.

*Hab.* Ekeikei, March and April.

Type in my collection.

222. *Eusphalera nigrovata* spec. nov.

♂. Head and thorax metallic blue; thorax and patagia with an orange-red central stripe; abdomen black. Primary orange-red, with the apical third black, and a large subovate black patch occupying the inner margin from the base and extending upwards in a curve well into the cell, but not reaching through the orange to the apical black area. Secondary wholly black. Underside as above with the addition of a metallic blue spot at the apex of the secondary.

♀. Like the male, but larger and brighter, and the inner-marginal black area reduced to a large spot or patch in the centre of the margin.

Expanse, ♀ 52; ♂ 60.

*Hab.* Kebea Range, June; Ekeikei, March.

Types in my collection.

The female of this species is a handsome insect.

Probably also an aberration of *semijaca*, as may be the following insect.

223. *Eusphalera pratti* spec. nov.

♂. Head and thorax metallic greenish or steel-blue. Both wings intense black, primary with a defined orange-red curved stripe across the median area, expanding very slightly basewards at the costa; subapical scales metallic blue. Secondary with an orange-red patch above the angle, narrowly extending to the costa. Underside like the upper, except that the secondary has a steel-blue marginal stripe, broad at the apex, tapering narrowly towards the angle.

Expanse, 49 to 56 mm.

*Hab.* Ekeikei, January to April.

Type in my collection.

224. *Eusphalera bicolora* spec. nov.

♂. Head, thorax, and extreme base of primary steel-blue; abdomen black above, white below. Primary black, with a creamy white slightly curved median band; metallic scales in the subapical area. Secondary creamy white, with extreme base grey; termen broadly black, tapering somewhat towards the angle. Underside as the upper, except that the base of both wings is metallic blue, that the secondary has the costa narrowly black, not interrupted as it is above, and that it also has a metallic blue apical patch extended into a short marginal line.

Expanse, 56 mm.
Eusphalera splendens spec. nov.

♀. Head, thorax, and antennae brilliant bronzy green, abdomen pale grey, bronzy green laterally and below. Both wings velvety black. Primary with the base bright bronzy blue and golden green for nearly a quarter, and extending along the veins to the narrow creamy white transverse band, crossing the wing obliquely in front of the end of the cell; band finely edged with metallic bluish green; a curved scalloped subapical metallic blue stripe from the costa to vein 2, interrupted by the veins. Secondary with a large inner-marginal pure white patch extending all along the margin, and well over the cell edged with brilliant pale blue, especially in the cell, and more or less tinged with mother-of-pearl; a slight scaling of metallic blue at the apex. Underside as above, but very strongly suffused with pale metallic blue, and the secondary with a terminal line of metallic blue rising in an apical patch of the same colour.

Expanse, 49 mm.

Hab. Kebea Range, 3600 ft., July.
Type in my collection.

Eusphalera lutescens spec. nov.

♂. Head and collar metallic blue; thorax sooty black; abdomen yellow, terminal segment finely edged with blackish; ventral surface creamy. Primary black, with two short sub-basal orange-red dashes; a chrome-yellow patch on the costa near the end of the cell, extending broadly to near the tornus, but not entirely dividing the wing; a subapical steel-blue patch intersected by the veins. Secondary clear chrome-yellow, with a broad black termen, which is invaded by the yellow from vein 2 to 5; costa narrowly pale grey. Undersurface as above, except that the costa of the primary is finely steel-blue, and the secondary is encircled with a steel-blue line, broad in parts except along the inner margin.

Expanse, 46 mm.

Hab. Ekeikei, March and April; Kebea Range, July.
Type in my collection.

Eusphalera lutescens ab. alboplagata nov.

♂. Head and thorax metallic blue; abdomen deep yellow, with terminal segment edged with blackish, ventral surface pale straw-colour. Primary black, with two short subapical orange-red dashes, and a large whitish costal spot at the end of the cell edged indefinitely and obscurely with steel-blue, with a small canary-yellow dash on its basal edge; a subapical steel-blue patch interrupted by the veins. Secondary chrome-yellow, with costa finely paler; termen broadly black, invaded by the yellow from veins 3 to 4. Underside as above, except that the costa of the primary is finely steel-blue, and the costa and termen of secondary are encircled with steel-blue, the former narrowly and the latter more or less broadly.

Expanse, 49 to 44 mm.

Hab. Kebea Range, 3600 ft., July; Ekeikei, January and February.
Type in my collection.
A REVISION OF THE GENUS CALAMOCICHLA SHARPE.

By OSCAR NEUMANN.

The species placed in the genus Calamocichla are most nearly related to some of the genus Acrocephalus, such as A. baeticus, streperus, palustris, and stentorius. They resemble them in structure, in habits, and mostly also in coloration, the well-developed first primary being the only generic character to distinguish the two genera. If there was not a true Acrocephalus, viz. A. baeticus, breeding in South and East Africa, one would be justified to consider the species of Calamocichla the representatives of Acrocephalus in Africa. One of the species of the group, Calamocichla gracilirostris Hartl., has hitherto been kept separate from the other members on account of its somewhat narrower and shorter first primary, and was dealt with as Luscinia gracilirostris in vol. v. of the Catalogue of Birds, while leptorhyncha, newtoni, and brecippennis are to be found in different places in vol. vii. In a work even of such standing as Reichenow's Vögel Afrikas, gracilirostris and the other species are still dealt with under different genera. Sharpe, in Hand-list of Birds, vol. iv. p. 296, is the first to give gracilirostris its right place.

Another very interesting fact is the striking external resemblance of some of the species of Calamocichla to one species of the Pycnonotidae, viz. Phyllostrephus strepitans of Reichenow. This resemblance was the cause of a rather amusing confusion. Firstly, one species of Calamocichla, viz. parva, was originally described by Fischer and Reichenow as a Phyllostrephus. Ten years later Reichenow corrected this error in his Vogel von Deutsch Ost Afrika, and again, ten years later (1894), the same author redescribed his Phyllostrephus strepitans, which is indeed a true Phyllostrephus, as Calamocichla schillingsi. Shelley had already redescribed the Phyllostrephus strepitans as Phyllostrephus sharpei in 1889, and eight years later (P. Z. S. 1888, p. 24) he employed that name for four specimens of a large form of a true Calamocichla. Sharpe, Hand-list, vol. iv. p. 296, corrected this mistake to a certain extent, but erroneously identified this large Calamocichla with griseldis Hartl., which is another mistake, as griseldis is a true Acrocephalus. That such mistakes as these could be made by the three foremost living authorities on African Ornithology shows that the genus is a rather difficult one to deal with.

In working out the species a still greater difficulty is encountered than the external similarity to Acrocephalus and Phyllostrephus, it being an interesting but embarrassing fact that the female of a larger species sometimes resembles the male of the next smaller one. Further, in the West African forms the adult birds are mostly grey above and below, and the young birds are rufous or yellowish brown, while in the East African forms the differences in coloration between young and adult specimens are not so striking.

The Genus Calamocichla was founded by Sharpe in the Catalogue of Birds, vol. vii. p. 131, where he gives no description, but simply unites under this name two species, newtoni and brecippennis. The definition of the genus is, however, to be found in the key to the Genera of Bradypteri, pp. 93 and 94. This key fits very well brecippennis and all other species of Calamocichla from tropical Africa,
but not *Calamocichla newtoni* from Madagascar, which has the tail not about equal in length to the wing, but always much longer, the length of the tail exceeding that of the wing by about 8—12 mm., in adult specimens. The tail of *C. newtoni* is more graduated, so that the bird is intermediate in structural characters between *Calamocichla* and *Nesillas* Oberh. (="Ellisia* Hartl.), while the streaks on the throat, being always present, give the bird a resemblance to *Bradypterus bracteopterus*. I therefore think that the bird cannot be included in the genus *Calamocichla*, and accordingly create for it the genus

**Hemiiellisia** gen. nov.

**Type**: *Calamotherpe newtoni* Hartl.

Characters: Similar in external character to *Calamocichla*, but the tail far more graduated, decidedly longer than the wing, though the difference in length is not so great as in *Nesillas*.

The other species remain united under the generic term *Calamocichla*, of which the type is *Calamodyta brevipennis* Keulemans.

The Genus *Calamocichla* may shortly be described as follows: Similar in all characters to *Acrocephalus*, but the first primary well developed and not rudimentary. Wing rounded, especially in *brevipennis*, more pointed in *gracilirostris*. Fourth or fifth quill longest, or both equal in length. First quill about half the length of the second, being a little shorter in *gracilirostris* and *zuluensis*.

Distribution: Tropical Africa, from Capetown to Northern Abyssinia* in the East, and to Fernando Po in the West, and Cape Verde Islands.

I do not pretend that the results arrived at in this revision are in every way satisfactory. I cannot even say whether two of the species of *Calamocichla* occur side by side in one and the same geographical province, the two species which appear to occur together in East Africa, viz. *parea* and *leptorhyncha*, being the most difficult to distinguish, as the female of the former is extremely similar to the male of the latter.

I found that the length of the hindclaw, as compared with that of the wing, is a good character by which the different species can be distinguished. I have omitted to give the length of the culmen, which is difficult to take in these birds, and is seldom measured in the same way by different ornithologists.

The length of the hindclaw is taken in a straight line from the basal ventral edge to the tip.

**Calamocichla ansorgei ansorgei** Hart.


♂. Upper-surface olive, somewhat lighter and more brownish on the rump and upper tail-coverts. Under-surface pale olive-grey, upper throat, middle of abdomen, and under tail-coverts whitish.

Wing 82; tail 82; tarsus 30½; hindclaw 10 mm.

*Hab.* North Angola.

Only one specimen known, collected by Dr. W. J. Ansorge at Duque de Braganza.

* The exact locality of the only specimen of *leptorhyncha* collected by Wilke in Northern Abyssinia (Berl. Mus.) is not known. The specimen geographically nearest is the one from Lake Zwai (Brit Mus.) which is referred by me to *C. parea*.
Calamocichla ansorgei nilotica subsp. nov.

Phyllostrophus sharpki (nee Shell.), Shell, P. Z. S. 1888, p. 24,
Aerocephalus grisellis (nee Harl.), Sharpe, Hand-list iv. 1903, p. 206.

Similar to C. a. ansorgei, but everywhere more dirty brown and less grey
The lores are lighter than the sides of the head, but not pure white. (In C. a.
ansorgei the lores are of the same colour as the head.) The wing is shorter.
The bill is slightly broader and is paler. The hindclaw is longer.
Wing, ♂, 77—79; ♀, 72; tarsus 20—30; ♀, 27½; hindclaw, ♂, 11½—12;
♀, 11 mm.

Hab. Wadelai.

Four specimens, collected by Emin, August 1885 (British Museum).

I refer provisionally to this subspecies two birds which seem to be in young
plumage, which have the upperside more rufous brown, and have ochraceous
or rufous brown on the underside, where the Wadelai birds have grey. They
were collected by the British Museum Ruwenzori expedition.

♂. Fort Beni, Semihk River. Wing 79; tarsus 32; hindclaw 12 mm.
♀. Ruwenzori. Wing 72; tarsus 29; hindclaw 11 mm.

Calamocichla rufescens Sharpe & Bouvier.


Sharpe, Ibis 1908, p. 318 [River Ja (Ascha), Kamerun].

The adult bird (poensis dress) similar to C. ansorgei, but paler above and
below and with shorter wing and hindclaw. The younger bird (plebejus dress) has
the upperside more rufous brown, especially the rump and the sides of body, flanks,
and thighs, which are grey in the adult, are yellowish fawn.

In the type of rufescens, which might be a still younger stage, the upperside,
especially the edges of wing and tail, are still more rufous and the dark parts of
the underside ochraceous.

The adult Fernando Po birds are slightly paler than the adult Kamerun
birds and have the bills slightly shorter (for about one-half to one millimetre).

But as the length of wing, tarsus, and hindclaw is about the same in the
three forms, I think it better to unite the birds from Landana, South Kamerun,
and Fernando Po under the same name. The narrow light apical edge on the
tail-feathers of the type of poensis, which Reichenow (Vögel Afrikas, vol. iii.
p. 574) makes a distinguishing character between plebejus and poensis, is of course
only a sign of a very fresh plumage.

Measurements.

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Wing.</th>
<th>Tail</th>
<th>Tarsus</th>
<th>Hindclaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂ juv. (type of rufescens) Landana (Petit). Br. Mus.</td>
<td>72</td>
<td>70</td>
<td>29</td>
<td>9 mm.</td>
</tr>
<tr>
<td>♀ juv. (type of plebejus) Yaunde (Zenker). Berl. Mus.</td>
<td>73</td>
<td>75(?).</td>
<td>30</td>
<td>?</td>
</tr>
<tr>
<td>♂ (sexed ♀) (type of poensis) Fernando Po (Alexander). Priv. Mus.</td>
<td>76</td>
<td>75</td>
<td>20</td>
<td>8½</td>
</tr>
<tr>
<td>♂. Fernando Po (Seimund). Br. Mus.</td>
<td>75</td>
<td>73</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>♂. River Ja (Bates). Br. Mus.</td>
<td>75</td>
<td>74</td>
<td>29</td>
<td>9½</td>
</tr>
<tr>
<td>♂. River Ja (Bates). Br. Mus.</td>
<td>74</td>
<td>69</td>
<td>20½</td>
<td>9</td>
</tr>
<tr>
<td>♂ juv., River Ja (Bates). Br. Mus.</td>
<td>72</td>
<td>67</td>
<td>29</td>
<td>9</td>
</tr>
<tr>
<td>♂ juv., River Ja (Bates). Br. Mus.</td>
<td>73</td>
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<td>30</td>
<td>9</td>
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<tr>
<td>♀, River Ja (Bates). Br. Mus.</td>
<td>71</td>
<td>70</td>
<td>28</td>
<td>9</td>
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</table>

* Measurements taken from the original description.
Calamocichla jacksoni Neum.

In 1901 I described a specimen from Ntebbi under this name as follows: “Similar to C. leptorrhyncha, but somewhat smaller, with the bill more slender. Colour of the upperside much lighter, pale yellowish brown, not earthy brown, very light on lower back and rump. Underside greyish white, suffused with yellow.”

I believed at that time that the species was somewhat smaller than leptorrhyncha, but having now had an occasion of examining a large series of Calamocichla, collected by F. Jackson at Ntebbi in different years, I came to the conclusion that the bird described as jacksoni is a very young bird of a species which is not smaller than leptorrhyncha but larger, approaching in size C. parva, being distinguished from this species by its more greyish brown and less fulvous brown upperside and by its greyish underparts. I arrived at that conclusion as no adult specimen of the smaller size was ever got at Ntebbi, at which place all these grey birds were collected. All the specimens, of which the measurements are given below, were obtained at Ntebbi, the three marked with an * being in the British Museum, the others in Mr. Jackson’s private collection.

**Measurements.**

<table>
<thead>
<tr>
<th>* Type (juv.), Jackson coll.,</th>
<th>Wing.</th>
<th>Tail</th>
<th>Tarsus</th>
<th>Hindclaw.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7, iii. 95</td>
<td>64</td>
<td>62</td>
<td>24½</td>
<td>7 mm.</td>
</tr>
<tr>
<td>*♀ (sexed ♂),</td>
<td>6, x. 01</td>
<td>67</td>
<td>52 (!)</td>
<td>25</td>
</tr>
<tr>
<td>*♀, Cunningham coll.</td>
<td></td>
<td>68</td>
<td>67</td>
<td>25½</td>
</tr>
<tr>
<td>♀, Jackson coll.</td>
<td>7, iii. 95</td>
<td>67</td>
<td>62</td>
<td>25</td>
</tr>
<tr>
<td>♂ (sexed ♀), Jackson coll.,</td>
<td>7, iii. 95</td>
<td>72</td>
<td>69</td>
<td>25</td>
</tr>
<tr>
<td>♂, Jackson coll.,</td>
<td>7, iii. 95</td>
<td>70</td>
<td>69</td>
<td>25½</td>
</tr>
<tr>
<td>♀ (sexed ♂), Jackson coll.,</td>
<td>24, iii. 01</td>
<td>72</td>
<td>66</td>
<td>26</td>
</tr>
<tr>
<td>♀ (sexed ♂),</td>
<td>17, iii. 01</td>
<td>67</td>
<td>64</td>
<td>25½</td>
</tr>
<tr>
<td>♀, Jackson coll.,</td>
<td>15, iv. 01</td>
<td>71</td>
<td>70</td>
<td>27</td>
</tr>
<tr>
<td>♀ (?), Jackson coll.,</td>
<td>15, iv. 01</td>
<td>69</td>
<td>60</td>
<td>25½</td>
</tr>
</tbody>
</table>

Calamocichla parva (Pschl. & Rehw.).

**Phyllostomus parvus** Pschl. & Rehw. *J. f.*, 1884, p. 362 [Lake Naiwascha].

*Calamocharis leptorrhyncha* (nee Rehw.) Sharpe, *Ibis* 1892, p. 154 [Lake Naiwascha].

*Calamocichla leptorrhyncha* (nee Rehw.) Neum. *J. f.*, 1900, p. 302 [Umbugwe].

*Lusciniola gracilirostris* (nee Hart.) Grant & Reid, *Ibis* 1900, p. 646 [Lake Zvai].

“"""""""" (partim) Alexander, *Ibis* 1900, p. 81 [Zambesi].

Upperside fulvous brown. Underside tawny buff or brownish grey, but not so grey as in jacksoni. Throat and middle of abdomen white. Lores of the same colour as the head, or slightly paler. It is extremely difficult to distinguish between the females of parva and the males of leptorrhyncha, both being about equal in size. It seems to me that both species occur in East Africa side by side, from Lake Zvai in Southern Ethiopia to the Zambesi, though in German and British East Africa *C. parva* occurs in the higher elevated regions, while *C. leptorrhyncha* is mostly found in the lowlands, and is the only one which occurs in the coast regions of the Indian Ocean. The specimen from Lake Zvai has a smaller and slenderer bill, and a slightly smaller hindclaw,
I have not been able to measure the type myself, and have some doubt whether the tail is measured by my method.

**Measurements.**

<table>
<thead>
<tr>
<th>Wing</th>
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<th>Tarsus</th>
<th>Hindclaw</th>
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</tbody>
</table>

* Type ♂, Lake Naiwascha, (Fischer) Berlin . 75 78 27 over 8 mm. 
♀, " " (Jackson) Priv. Mus. . 69 69 25 9 ½ "
♂, Nairobi. (Jackson) Priv. Mus. . 74 70 27 10 "
♀, Umbungwe. (Neuman) Berlin . 69 70 26 8 ½ "
♂, Lake Zua. (Peuse) Br. Mus. . 72 72 26 8 "
♀, Zambesi (29. x. 98). (Alexander) Priv. Mus. . 68 67 26 8 ½ "

**Calamocichla leptorhyncha** (Rehw.).

*Turdirostris leptorhyncha* Rechw. O. C. 1879, p. 155 [Tschara, Tana River].
*Luschiola gracilirostris* (nee Hartl.) Alexander, *Ibis* 1900, p. 81 [Zambesi, partim].

Upperside brown, upper tail-coverts brighter (rufous buff). Underside almost white, flanks and belly very pale buff.

**Measurements.**

<table>
<thead>
<tr>
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<th>Tarsus</th>
<th>Hindclaw</th>
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<tbody>
<tr>
<td>.</td>
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</tbody>
</table>

* ♂ (type), Tschara (Fischer). Berlin 60 60 over 8 mm. 
♂, Zanzibar (Fischer). Hamburg 63 60 25 8 
♀, Zambesi (Alexander). Priv. Mus. 57 57 24 8 ½ "
♂ (lab. ♂), Zambesi (Alexander). Priv. Mus. 62 57 25 8 ½ "
♂, Upper Shire (Rendall). Tring 62 59 24 8 "
♂, Lake Stephanie (Donaldson Smith). Tring 64 59 27 8 "
♂, Tertale Mountains (Donaldson Smith). Tring 63 60 27 8 "
♂, Senua, Zambesi (Alex.). Br. Mus. 64 60 27 8 ½ "
♂, Karonga, N. Nyassa (Wyte). Br. Mus. 65 worn, over 60 26 2 9 "
♂, Kagelhi (Fischer). Berlin 66 worn, over 60 25 8 ½ "
♂, Karona (Böhm). Berlin 65 59 25 8 ½ "
♀, Zanzibar (Stuhllmann). Berlin 61 59 26 8 "
♀, Bukoba, Nyanza (Emmil). Berlin 61 61 26 8 "

The species appears to be distributed from North Abyssinia, from where there is a specimen collected by Wilke in the Berlin Museum, to the Zambesi. There are, however, slight differences in the coloration.

The type, and specimens from the Zambesi, have some white on the lores, which is almost entirely absent in the specimens from Karoma, Kagelhi, Bukoba, and North-East Africa. But as also some individual variation occurs in this character, no exact line can be drawn.

In none of the specimens is the white of the lores so distinct as in *Calamocichla cuneocenesis, gracilirostris and zuluensis.*

**Calamocichla zuluensis** Neum.

*Acrocephalus laeticatus* (nee Vieill.) Sharpe, *Ibis* 1897, p. 505.

I know two specimens of this species, one of which is that collected by the Brothers Woodward at Etchlove, Zululand, and recorded by Sharpe as

* Measurements of type taken from the original description.
Acrocephalus baeticatus. The second was collected by C. H. B. Grant in Inhambane, Mozambique. Without examination of the wing Acrocephalus baeticatus and Calamocichla zuluensis resemble each other far more than Phyllostomias streptitans and Calamocichla parva. The coloration and size of the bill are absolutely the same in both species.

This new form is intermediate between C. leptorhyncha and C. gracilirostris. It has the small size of the former, but the coloration of the latter. The lores are pure white, and the white is continued above the eye as in gracilirostris and zuluensis, not slaty white as in leptorhyncha. The first primary is shorter than in leptorhyncha and narrowed in its terminal half. It is a little less than half of the second.

**Measurements.**

<table>
<thead>
<tr>
<th>Wing</th>
<th>Tail</th>
<th>Tarsus</th>
<th>Hindclaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>67</td>
<td>61</td>
<td>26</td>
<td>8 mm.</td>
</tr>
<tr>
<td>63</td>
<td>59</td>
<td>26</td>
<td>7 &quot;</td>
</tr>
</tbody>
</table>

This bird is distributed from South Mozambique to Zululand, and probably to Natal, east of the Drakensberg Mountains, where it may replace C. gracilirostris. I have seen many specimens of true gracilirostris from Newcastle, west of the Drakensberg Range, but none from the coast regions of Natal.

**Calamocichla gracilirostris** Hartl.

Calamochrope gracilirostris Hartl., Ibis 1884, p. 348 [Natal].

Above russet or fulvous brown, brighter on the rump, upper tail-coverts, and edges of wings, below nearly white, slightly washed with yellowish buff on the flanks. Lores and eye-streak white.

But for the pure white lores and eye-streak this species resembles very much lighter specimens of C. leptorhyncha and the rufous dress of C. brevipennis, but gracilirostris and zuluensis are distinguished from all other species of Calamocichla by the shape of the first primary, which is narrowed in its terminal part, and somewhat pointed. It is somewhat less in length than half the second.

The bill is not quite so broad as in most of the other species.

This species never gets a grey dress, such as all the West African forms of Calamocichla, as well as jacksoni, acquire at a certain season.

It is of far less wide distribution than is stated by Seebohm, Cat. Birds, vol. vii. p. 122, Reichenow, Vögel Africans, iii. p. 583, W. L. Schater, Stark's Birds of South Africa, vol. ii. p. 192, all these authors having accepted as correct the statements by various authors who recorded other species of Calamocichla under this name.

It is distributed over South Africa from Capetown northwards to Otavi, in the west, and to South Transvaal and Western Natal in the east, that means high up the Orange River system. But it does not appear to occur in the lower Limpopo River*, nor in the coast region of Natal, east of the Drakensberg Range, from where I have not seen a single specimen, and where it may be replaced by the similar but much smaller C. zuluensis.

As, however, I only know two specimens of C. zuluensis, the task to clear up this question must be left to our friends of the South African Ornithologists' Union.

* From the whole Limpopo system I have seen only one small specimen from the Matlabas River.
I am well aware that *Calamocherpe gracilirostris* has been described from Natal, but no exact locality is given, and the measurements point to the larger bird, wing 3.02 = 76 mm., which, indeed, occurs still plentifully at Newcastle. It is impossible to employ for this bird the name of *Syltria babacula* Vieill., founded on “La Capneteuse” of Levaillant, which has dirty black patches on the chest and breast, and very probably is the *Brodypeternus*, later called *barratti* by Sharpe, as Reichenow, *Toyle Afrikas*, iii. p. 580, has correctly pointed out.

I have examined no less than thirty-eight specimens of this species, all of which, with the exception of three specimens in Tring, are in the British Museum.

Seventeen specimens from Potchefstroom and six specimens from Newcastle have the following measurements:

2 ♂♀, wing 75½—78 (80 in two cases), tail 67—73 (75 in two cases), tarsus 27—29, hindclaw 8—8½ mm.; 2 ♂♀, wing 72—74, tail 67—73, tarsus 27—29, hindclaw 8—8½ mm.

Two specimens from Capetown have the wing 72—76, tail 70—75, tarsus 26½—28, hindclaw 8—8½ mm.

Two specimens from the Berg River (Cape Colony): wing 71—72, tail (worn) 66—68, tarsus 28, hindclaw 8½ mm.

Two specimens from Omambonde, near Otavi, German South West Africa: wing, ♂ 72, ♀ 68, tail 67, 69, tarsus 27, hindclaw 7½ mm.

Four specimens from Sir W. Jardine’s collection without exact locality: wing 69, 69½, 70½, 75, tail 65, 67, 70, 71, tarsus 27, 28, hindclaw 8½ mm.

The only specimen from the Limpopo System belongs to the Tring Museum. ♀ Matlabas River (Ericksson coll.) : wing 71, tail 66, tarsus 26½, hindclaw 8.

Three specimens from Sir Andrew Smith’s collection: wing 70, 72, 76, tail 62, 64, 72, tarsus 27, 28, hindclaw 8, broken in the red specimen, 8½ in the others.

I cannot say, of course, whence the birds out of the Jardine collection came, nor where Sir Andrew Smith collected his specimens, but they seem to belong to a slightly smaller form than the specimens from Potchefstroom and Newcastle.

As to the coloration, the two Omambonde specimens are slightly paler on the underside than most of the others, while two of Sir Andrew Smith’s specimens, as well as some of Sir William Jardine’s birds, are very dark rufons.

**Calamochilca cunenensis** Hart.


In this species the whole lores are white, and this colour is extended to above the eyes. It differs from *L. gracilirostris*, which it resembles in that respect, in having the upper side more grey and less fulvous or russet-brown, and in the underside being practically white and crop and sides of the body slightly washed with grey. A second specimen from Bengal has the upperside a little more fulvous than the type, but still less so than *gracilirostris*, the sides of body, belly, and under tail-coverts being slightly washed with very pale buff. In both specimens the first primary is as broad as in the northern species of *Calamochilca*. Distribution from the Cunene to Bengal.
Type, Cunene, 3. iv. 89 (Ericksson coll.) . . 75 75 26 7 mm.
Bengnella, ii. 01 (Mequery coll.) . . 72 68 28 7 ,,.

Both specimens belong to the Tring Museum. Neither of them is sexed. It is possible that the second belongs to another form than the type, considering that its wings are smaller, while the tarsus is 2 mm. longer.

Calamocichla brevipennis Keulemans.

Calamodyta brevipennis Dohrn, Journ. f. Orn. 1871. p. 4 [San Nicolau and Santiago].
Calamocichla brevipennis Alexander, Ibis 1898. p. 82. 91. 103. 115. 280. 290 [San Nicolau, Brava, Santiago].

A fine series of ten specimens of this species is before me. There is one co-type of Dohrn's in the British Museum and ten specimens collected by Capt. Boyd Alexander, six of which are out of his private collection, two from the British and two from the Tring Museum.

Some of the specimens resemble the bird described by Sharpe in the Catalogue of Birds, vol. vii. p. 132. In this plumage the upperside is russet-brown, more rufous on rump, upper tail-coverts, and edges of wings. The chin, throat, and middle of belly are white, the remainder of the underside is more or less suffused with yellowish buff. In this dress, which seems to be that of the young bird, the species strongly resembles C. leptochnysa.

Some of the birds are ashy grey above, with only a slight indication of fulvous on the rump, edges of wing and tail. The parts of the underside which in the young stage are yellowish buff are pale brownish grey. Some birds are intermediate between these stages.

All these birds are collected in February and April. Two birds obtained during the breeding season in November are very much worn. They are nearly pure ashy grey above and almost white below, only the sides of the body being slightly washed with grey.

Measurements.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotype, fulvous dress, Dohrn, Brit. Mus., San Nicolau .</td>
<td>63 over 60</td>
<td>26</td>
<td>7 mm.</td>
</tr>
<tr>
<td>♂ iv.</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>65</td>
</tr>
<tr>
<td>♂ iv.</td>
<td>&quot; &quot;</td>
<td>&quot;</td>
<td>63</td>
</tr>
<tr>
<td>♂ iv. grey</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>64</td>
</tr>
<tr>
<td>♂ ii.</td>
<td>&quot; &quot;</td>
<td>&quot;</td>
<td>61½</td>
</tr>
<tr>
<td>♀ iii. fulvous</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>64</td>
</tr>
<tr>
<td>♂ iii. grey</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>66</td>
</tr>
<tr>
<td>♂ ii.</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>67</td>
</tr>
<tr>
<td>♂ 5. xi.</td>
<td>&quot; &quot;</td>
<td>Tring Mus., San Nicolau</td>
<td>65</td>
</tr>
<tr>
<td>♀(?) 13. xi. grey</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
<td>67 (?)</td>
</tr>
</tbody>
</table>

If the sections are correct, which I much doubt, there is no difference in size between the two sexes in this species. I believe the specimens with a wing of 65—67 mm. to be males, the others to be females.
LIST OF THE SPECIMENS OF CALAMOCICHLA IN THE TRING MUSEUM.

Calamocichla ansorgei Hart.
Type: ♂. Duque de Braganza, North Angola. 2. viii. 03. W. J. Ansorge.

Calamocichla leptomorpha Rehw.
♂. Tertale Mountain, near Lake Stephanie. 25. v. 95. Donaldson Smith.
♂. Lake Stephanie. . . . . . 31. v. 95.
♂. Upper Shiré . . . . . 2. iii. 96. " Percy Rendall."

Calamocichla brevipennis Kenlemans.
♀ " " " " . . 13. xi. 97. 

Calamocichla anstrenodens Hart. Type: Cunene River, Mossamedes . . 3. iv. 89. A. W. Eriksson.
Bengnella . . . . . ii. 01. Mocqnerys.

Calamocichla zuluensis Neum. Type ♀, Etchowe, Zululand . . . 94. R.B. and T.D.S.Woodward

Calamocichla gracilirostris Hartl.
♀ " " " . . 20. ix. 81. " 
♀. Matlabas River, Transvaal . . 7. x. 86. A. W. Ericksson.

In the foregoing review I had overlooked, by mistake, the following species:

Calamocichla chagensis Alex.


This species resembles C. brevipennis in every respect, but is at once distinguished by its larger size. From adult (grey) specimens of C. rufescens, to which it is about equal in size, it seems to differ by its very pale coloration, but unfortunately the five specimens available for comparison are in much worn condition. They are all in Captain Boyd Alexander’s private collection.

Hab. Lake Chad Region.

Measurements.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Location</th>
<th>Wing</th>
<th>Tail</th>
<th>Tarsus</th>
<th>Hindclaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>Wnunha 19 v.</td>
<td>77</td>
<td>73</td>
<td>30</td>
<td>9 mm</td>
</tr>
<tr>
<td>♂ (sexed ♀)</td>
<td>18 v.</td>
<td>76</td>
<td>69</td>
<td>28</td>
<td>8 &quot;</td>
</tr>
<tr>
<td>♀</td>
<td>Machillela</td>
<td>21 v.</td>
<td>71</td>
<td>67</td>
<td>29</td>
</tr>
<tr>
<td>♀</td>
<td>Karraraga</td>
<td>16 iii. (?)</td>
<td>70½</td>
<td>67</td>
<td>28 8½ &quot;</td>
</tr>
<tr>
<td>♂</td>
<td>&quot; &quot;</td>
<td>17 v.</td>
<td>77</td>
<td>incomplete</td>
<td>29 8½ &quot;</td>
</tr>
</tbody>
</table>

In the foregoing review I had overlooked, by mistake, the following species:

Calamocichla chadensis Alex.
SOME NEW AND SOME UNFIGURED LEPIDOPTERA.

By KARL JORDAN, Ph.D.

(Plates IX., X., XI.)

PAPILIONIDAE.

1. *Papilio mackinnoni benguellae* subsp. nov.
   
   The posterior spots of the band of the upperside of the forewing, and the central spots of that band of the hindwing larger than in East African specimens, the two additional spots placed distally to the apex of the cell of the forewing also larger, exceeding in size the three anterior spots of the band.

   *Hab.* Cuval River, Benguella, Angola, December 10, 1905 (Dr. W. J. Ansorge).

1 ♂.

ERYCINIDAE.

2. *Abisara postalba* (Pl. XI. fig. 7 ♂, 8 ♀).


SATYRINAE.

3. *Platypthima homochroa* (Pl. XI. fig. 6 ♀).


CASTNIIDAE.

4. *Castnia marcus* spec. nov.

   ♀. Upperside of head, thorax, and of the first abdominal segment dark green, shot with bluish and purple, rest of body ochraceous rufous.

   Forewing metallic dark green; distal margin strongly rounded before centre; at middle of costal margin a large irregular creamy patch.—Hindwing ochraceous rufous, but so densely suffused with purple-black that the ground-colour is distinct, only before anal angle and in a small area in the cell, the wing having in certain lights a blue gloss, changing into green at the base.

   Underside of forewing purple-black, with some ochraceous rufous scales along the submedian vein, at the costa and at the edge of the creamy patch.—Hindwing ochraceous rufous, the veins as well as the distal and costal margins purple-black.

   Length of forewing : 42 mm.

AGARISTIDAE.

5. *Schausia leona congoana* subsp. nov.

   ♂. The sub-basal patch of the forewing, on the upperside, wider in front than in *S. l. leona*, its outer edge therefore more transverse; the discal spot longer and more straight than in specimens from Sierra Leone; the abdominal edge of the hindwing black.

   *Hab.* Kassai River, Congo Free State.

1 ♂.
6. Mimusemia hainana spec. nov. (Pl. IX. fig. 10 ?).

? Black-brown; abdomen orange, the base and tip as well as the extreme edges of the orange segments (except ventrally along middle) black-brown.

Forewing nearly as in *M. davidsoni* Swinh. (1899), the proximal creamy spot narrower, and the discal band a little longer and more even in width, and less constricted.—Hindwing with large triangular orange patch from abdominal margin to cell, tapering in front and curving round the lower angle of cell to join the creamy central spot.

The creamy markings beneath somewhat larger than above, the hindwing bearing a short creamy streak near the base between the costal and subcostal veins.

*Hab.* Porten, Hainan, in July 1904.

2 ? ?.

7. Tuerta lycaon (Pl. XI. fig. 1 ?).


Mr. S. M. Klages obtained three ? ? at Fonteboa, Upper Amazons, in August and September 1906.

8. Tuerta platensis bolivar subsp. nov.

? Cell-spot of forewing elongate, longer than in *T. p. platensis*, and situated close to the discocellular spot. Abdomen with indication of a black discal line only at the base.

*Hab.* Ciudad Bolivar, Orinoco, June 1898 (S. M. Klages).

One pair; type: ?.

9. Euschirropterus klagesi spec. nov.

? Similar to *E. discifera* Hamp. (1901). Forewing narrower, with an ovate brown spot in the cell, both above and beneath; the brown distal border of both wings narrower. The pale yellow streak on the underside of the forewing extending far beyond the discocellular spot on to the disc.

*Hab.* Orinoco, Ecuador and Tucuman.

Two or three subspecies:

a. *E. klagesi klagesi* (Pl. XI. fig. ? ?).

? Upperside of head white; the white streak of the forewing extending to costal edge near base; the yellow area of the hindwing very pale, on the underside extended to costal vein along the distal marginal band.

*Hab.* Ciudad Bolivar, Orinoco, July 1898 (S. M. Klages).

3 ? ?.

b. *E. klagesi tucumanus* subsp. nov.

? Head and thorax less white than in the preceding form; the forewing broader, the distal margin being less oblique, the white streak basally less widened costal, or here shaded with fuscous; the distal marginal band of the hindwing somewhat broader; the yellow area deeper in tint, and on the underside not, or very little, extended forward beyond the subcostal vein.

In the larger proportion of the specimens the forewing is entirely shaded with brown, the white streak being vestigial:
f. fuscus nov.

_Hab._ Tucuman, April—May 1905 (J. Steinbach).

Eight specimens.

We have also a specimen of this species from West Ecuador (Guayaquil). This example agrees best with the form from Tucuman, but the yellow area of the hindwing beneath extends distally to the costal vein.

10. _Seirocastnia extensa_ spec. nov.

♀. Abdomen yellow, with a very narrow black dorsal line, the tip of the abdomen being black, but there is no black lateral stripe; collar yellow in front.

Forewing, _above_, with a broad yellow band, which is widest at the lower angle of the cell.—Hindwing yellow, the costal and distal margins bordered with black, as in _S. lindigi_ Feld. (1874); fringes of abdominal margin also black.

On the _underside_, forewing with large yellow triangular patch in basal half.

—Hindwing as above.

Length of forewing: 28 mm.

_Hab._ Rio Dagua, West Colombia (W. F. H. Rosenberg); and Popayan, Colombia (Lehmann).

2 ♀♀.

SATURNIIDAE.

_a_. _Africa._

11. _Bunaea arabella jacksoni_ subsp. nov.

♂. Upperside of thorax without black markings; the patagia pale-edged.

Wings, on the _upperside_, red from base to discal line. Forewing: the black antemedian band of _B. arabella arabella_ replaced by a narrow whitish band, at the proximal side of which there are posteriorly some black hairs; ocellus circular; three black patches between the subcostals and second radial veins proximally to the discal band; the latter consisting of a narrow black dentate line and its whitish proximal border, there being no black scaling on the proximal side of this whitish border; the black line merged together with a row of sharply defined square submarginal patches.—The discal lines of the hindwing and the area outside them as on forewing; the red tint a little deeper along the white lines, as is also the case on the forewing.

_Underside:_ basal half of forewing red, with a diffuse blackish streak in the cell; outer half brownish black like hindwing, the white discal line continuous on both wings, edged with reddish on its proximal side; the veins narrowly yellow, these vein-streaks as well as the yellow distal marginal band sharply defined.

_Hab._ Entebbe, Uganda, May 1901 (F. J. Jackson).

1 ♂.

12. _Epiphora rectifascia_ (Pl. IX. fig. 3 ♂).


We have recently received from Bopoto a second specimen of this insect.

13. _Imbrasia cytherea lucida_ (Pl. IX. fig. 1 ♂).

14. Melanocera parva (Pl. IX. fig. 8 ♂).

15. Parusta xanthops (Pl. IX. fig. 2 ♂).
P. x. Rothschild, l.c. p. 6, n. 13 (1907) (Mpapwa).

16. Tagoropsis sabulosa (Pl. IX. fig. 4 ♂).

17. Cyrtogone ansorgei (Pl. IX. fig. 7 ♂).
C. a. Rothschild, l.c. p. 8, n. 17 (1907) (Bihe, Angola).

18. Holocera suavis (Pl. IX. fig. 11 ♂).
H. s. Rothschild, l.c. p. 9, n. 17 (1907, July) (Usumbara).
Holocera ilacina Weymer, Entom. Zeitschr. xxii. p. 118 (1907) is the same.

b. Asia.

19. Opodiphthera papuana (Pl. IX. fig. 5 ♂).

20. Opodiphthera albicera (Pl. IX. fig. 9 ♂).

This is a distinct species, differing from O. papuana in colour as well as in the genitalia. O. papuana also occurs in British New Guinea (Milne Bay and Mambaré River).

21. Opodiphthera venusta (Pl. IX. fig. 12 ♂).

22. Eurhodia meeki spec. nov.

♂. Upperside of body brownish tawny ochaceous, underside of body and wings ochreous; collar blackish, suffused with grey. Antenna blackish brown, the shaft being more or less tawny.

Wings, above: suffused with dark tawny ochaceous, the ochreous ground-colour being distinct only in the outer half of the forewing; both wings traversed by three blackish brown dentate lines, which are rather indistinct. Forewing: the costal margin fuscous, shaded with grey; ocellus dark walnut-brown, with a small white centre and a thin white ring or half-ring; the central dentate line contiguous with the ocellus on its distal side; a dark walnut-brown distal marginal band; a diffuse white subapical patch.—Hindwing: ocellus minute, walnut-brown with a white ring; the distal margin dark walnut-brown, this band being less well-defined than on forewing, the edge of wing almost straight anteriorly, rounded below the centre.

Underside: ochreous, somewhat shaded with fuscous, the markings much more prominent than above. Forewing with an antemedian and a dentate discal line, the latter touching the ocellus; marginal band indented upon the veins; between the discal line and apex of wing a short triangular band bearing a white subcostal spot.—Hindwing: submedian line arched as on forewing; first discal line
CERATOCAMPIDAE.

27. Citheronia fenestrata (Pl. X. fig. 9 ♂).

28. Citheronia collaris (Pl. XI. fig. 12 ♂).

29. Citheronia armata (Pl. X. fig. 7 ♂).
C. a. Rothschild, l.c. p. 422. n. 27 (1907) (Minas Gerais; Paraguay).

30. Eacles callopteris (Pl. XI. fig. 4 ♂).
E. c. Rothschild, l.c. p. 424. n. 34 (1907) (S.E. Peru).

31. Othorene klagesi (Pl. X. fig. 3 ♂).
O. k. Rothschild, l.c. p. 424. n. 35 (1907) (Surinam).

32. Othorene ocellata ocellata (Pl. X. fig. 1 ♂).
O. o. o. Rothschild, l.c. p. 425. n. 38a (1907) (S.E. Peru).

33. Othorene adusta (Pl. X. fig. 10 ♂).

34. Othorene pelias (Pl. XI. fig. 13 ♂).

35. Othorene vinacea (Pl. X. fig. 12 ♂).
O. v. Rothschild, l.c. p. 428 n. 43 (1907) (S.E. Peru).
36. *Othorene catoxantha* (Pl. X. fig. 14 ♂).
*O. c.* Rothschild, *l.c.* p. 428. n. 44 (1907) (Upper Amazons; S.E. Peru).

37. *Othorene diluta* (Pl. XI. fig. 11 ♀).
*O. d.* Rothschild, *l.c.* p. 428. n. 45 (1907) (N. Argentina).

38. **Adelocephala hypoxantha** (Pl. X. fig. 6 ♂).
*A. h.* Rothschild, *l.c.* p. 429. n. 46 (1907) (Tucuman).

39. **Adelocephala affinis affinis** (Pl. X. fig. 4 ♂).
*A. a. a.* Rothschild, *l.c.* p. 429. n. 47a (1907) (Merida).

40. **Adelocephala hemirhodia** (Pl. X. fig. 2 ♂).
*A. h.* Rothschild, *l.c.* p. 430. n. 48 (1907) (Tucuman).

41. **Adelocephala sabulosa** (Pl. X. fig. 11 ♂).
*A. s.* Rothschild, *l.c.* p. 430. n. 49 (1907) (Tucuman).

42. **Adelocephala homoea** (Pl. X. fig. 5 ♂).
*A. h.* Rothschild, *l.c.* p. 431. n. 52 (1907) (S.E. Peru).

43. **Anisota oslari** (Pl. X. fig. 13 ♀).
*A. o.* Rothschild, *l.c.* p. 432. n. 54 (1907) (Arizona).

**GEOMETRIDAE.**

44. **Milionia ovata** (Pl. XI. fig. 3 ♂).

45. **Eucharidema trichroa** (Pl. IX. fig. 6 ♂).
*E. t.* Rothsch. & Jord., *l.c.* p. 197. n. 16 (1907) (Brit. New Guinea).

**ZYGAENIDAE.**

46. **Saliunca aurifrons ugandana** subsp. nov.
♀. Wings violet-purple, somewhat brass-colour; forewing without yellow spot.
Pectinations of antenna entirely yellow.
*Hab.* Entebbe, Uganda.
2 ♀♀.
SOME NEW SPHINGIDAE.

BY THE HON. W. ROTHSCILD AND K. JORDAN.

1. Amplypterus gannascus cubanus subsp. nov.

Forewing proportionately much shorter and broader than in A. g. gannascus.

_Hab._ Santiago, Cula (Tollin).


2. Polyptychus baxteri spec. nov.

♂♀. Body and wings vinaceous; upperside of head, thorax, and of forewing shaded with grey. Second segment of palpus large, joint between first and second open. Tibiae spinose, upperside of mid- and hindtibiae white. A diffuse central line over thorax and occiput blackish chestnut. Forewing with even distal margin, the apex being pointed, but not produced; two oblique blackish chestnut lines from costal margin, the first at basal fourth, extending to hindmargin near angle, the second in middle, vanishing on disc in a cloud of brown scaling; a short third line at costal margin halfway between the second and the tip of the wing.——Apex of hindwing rounded, distal margin even, except that the anal angle is produced, this angle brown.

_Underside:_ outer two-fifths of forewing washed with brown, within this brown area traces of one or two lines.——Hindwing with two thin lines across disc, the outer one being dentate.

Apex of cell of hindwing very oblique, the second radial near lower angle.

Length of forewing: ♀ 29 mm.; ♂ 36 mm.

_Hab._ Mpapwa, German East Africa (Dr. Baxter).

2 ♂♀, 1 ♂.

3. Polyptychus retusus spec. nov.

♂♂. Nearest to _P. nigriplaga_ R. & J., _Nov. Zool._ ix. Suppl. p. 259. n. 222. t. 5. f. 4. ♂ (1903) (Kamerun). Second segment of palpus apically wider, spurs of hindtibiae shorter, the longer one of the apical pair only a little longer than the tibia is broad.

Forewing narrower, the distal margin distinctly concave, the apex being produced.——Hindwing blackish, anal angle produced, the black anal dot nearer the distal edge than in _nigriplaga_; the fringe without distinct dots; an elongate patch before abdominal margin deeper black than in _nigriplaga_.

_Underside_ blackish brown, distal marginal area of forewing grey, markings as in _nigriplaga_, but the submarginal dots and on hindwing also the submarginal anal line nearer the edge.

Genitalia similar to those of _nigriplaga_, but the clasper ventrally widened from base to two-thirds, then abruptly narrowed, remaining however wider at the apex than in _nigriplaga_; just beyond the widened ventral portion a thorn-like tooth pointing obliquely ventrad, being much more proximal than in _nigriplaga_; process of penis-sheath as long as in _nigriplaga_, but broader, bearing a small tooth at the dilated tip.

_Hab._ Sierra Leone (Major Bainbridge), type, and Kamerun (received from Messrs. Staudinger and Bang-Haas).

2 ♂♂.
In outline and markings also similar to P. marinus; but in the latter species the underside of the hindwing is rufous, and the genitalia are quite different. We have marinus from the Gold Coast and the Congo, and there are specimens of it from Kamerun in the Standinger collection.

4. Temnora wollastoni spec. nov.

♀. Nearest to T. zantus. Mesonotum with a large dark brown patch on each side; under-surface of body smoky grey, with a bluish tint, the first segment of palps bearing a white line along the eye.

Wings, *upperside.*—Forewing: with numerous brown lines, those situated in the proximal half of the wing being crenate, while the ones placed in the outer half are dentate; a short patch-like sub-basal band, an antemedian costal spot and an oblique discal band dark brown (partly discoloured, being there tawny); this band widest at costal margin and reaching the distal margin at the second median vein; the outer edge of the band incurred from costa to the third radial; near to the apex a dark brown subcostal spot, close to which there is a smaller costal one; a small white discocellular dot; distal margin similar to that of T. zantus.—Hindwing brown, with a black marginal dot at anal angle and some minute dark brown dots at the extremities of the veins as in zantus.

Underside: darker than in T. zantus, the lines less distinct.


1 ♀ in the British Museum; a second ♀, much rubbed (and for that reason more tawny) from Lulnabourg, Kassai, in the Tring Museum.

5. Temnora curtula spec. nov.

♀. Upperside of body slate-grey, with a black-brown mesial crest on head and thorax. Underside of palpi, breast, and base of abdomen dirty ecrue-drab, rest of underside of abdomen hazel-brown, the edges of the segments being ferruginous with a white dot on each side.

Wings, *above:* forewing slate-grey; a mummy-brown band from beyond centre of costa to below middle of distal margin, this band shading off proximally into a pale grey space, while it is deeper brown and sharply defined on the distal side; on the outer side of this band, below the costa, a black patch, which is somewhat glossy and is dentate on the distal side, being here bordered with mummy-brown; the outer margin feebly emarginate between apex and third radial, being here brown, angulate at third radial and slightly dentate from this vein to hinder angle; hinder margin sinuate before angle, in front of this sinns three black dots, and farther proximal a faint black double line.—Hindwing dark mummy-brown, shaded with grey at anal angle and near outer edge, bearing an ochreous buff dot before anal angle, a similar dot being indicated on forewing.

Underside: Vandyke-brown. Forewing with a faint dentate discal line beginning with a black costal dot, a second line being indicated farther proximally; a subapical patch below costa faintly tawny; before hinder angle a conspicuous creamy buff dot.—Hindwing a little paler than forewing, except the outer edge; a thin somewhat S-shaped line beyond centre and a dentate one nearer the margin and a faint trace of a third line in between blackish brown; at anal angle a buff dot.

Length of forewing: 21 mm.


1 ♀.
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Plate XII.

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ON THE BIRDS OF CAYENNE.

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(Continued from p. 164.)

FAMILY TROCHILIDAE.*

281. Glaucis hirsuta (Gmel.).


Cayenne: 1 ♂ juv., October 31; 1 ♀, November 2, 1902.
Roche-Marie: 2 ♂ ♂ ad., November 7, 12; 1 ♂ jr., November 11, 1902.
Approuague: 2 ♂ ♂ ad., December 17, 18; 1 ♂ jr., December 18, 1902.

"Iris seal, feet buff (buffy), claws dusky, bill above black, below chrome-yellow, dusky at tip."

♂ ♂: al. 65^1_2—62; cand. 41^1_2—39^1_2; culm. 39^1_2—28^1_2 mm.
♀ ♂: al. 58—56^1_2; cand. 36^1_2—34^1_2; culm. 29—28 mm.

Nos. 421, 471, 589, 707, 12747, 12701, 12702. [Cayenne (Gould collection in Mus. Brit., Deplancbes leg.—Bp.).]

282. Threnetes leucurus (Linn.).

Trochilus leucurus Linné, Syst. Nat. ed. xii. 1 (1766) p. 190 (ex Edw. t. 256. f. 1—typ. ex Surinam).

"Rarely occurs in collections from Cayenne" (Gould ex Bourcier.).]

283. Threnetes antoniae (Bourc. and Muls.).


284. Phaethornis superciliosus (Linn.).


Phaethornis fraterculus Gould, 1861.

Ipousin, R. Approuague: 1 ♂ ad., January 8, 1903.

* Phaethornis rapaxmii Boucard, of British Guiana, has not yet been detected in Cayenne, but as we know that a nearly allied form—viz. Ph. rapaxmii amazonus Hellm.—occurs on the Lower Amazon, it is not unlikely that either the former or the latter may be an inhabitant of Cayenne.

† As pointed out by me long ago (Journ. f. Orn. 1888, p. 3 nota), there is no doubt that the Trochilus superciliosus Linné, founded on Brisson's description, is the small species with short and curved bill, named Ph. fraterculus by Gould. It is true that Brisson's description of the under tail-coverts suits better the large species with the straight long bill (viz. Ph. malairis Nordm.), but Brisson's measurements and figure leave no doubt that the object of his description belonged to the small species.
"Iris seal, feet pale greyish, bill black; above, below orange ochraceous, with dusky tip."

No. 13052.

Al. 58 2/3; cand. 65 2/3; culm. 37 2/3 mm.

[Cayenne (Gould and Sclater collections in Mus. Brit., Brisson, Deplanchas leg.—fide Bp.). St. Jean du Maroni (Geay leg. in Mus. Paris).]

285. Phaethornis malaris (Nordm.).


Ipousin, R. Approuagne: 1 ♂ ad. and 1 ♀ ad., January 5, 1903.

Roche-Marie, Cayenne: 1 ♀ ad., November 7, 1902.

"Iris seal, feet purplish flesh (dusky drab), claws blackish, bill above black, below vermilion red, with dusky tip (scarlet dusky at tip)."

Nos. 598, 13008, 13009.

♂: al. 65 2/3; cand. 75 1/3; culm. 45; rectr. subext. 35 1/3 mm.

♀: al. 64 1/3—63; cand. 75 2/3—73; culm. 43 1/3; rectr. subext. 41 1/3—39 2/3 mm.


286. Phaethornis bourcieri (Less.).


Ipousin, R. Approuagne: 1 ♂ ad., January 5, 1903.

"Iris seal, feet greyish flesh, bill above blackish, below orange-chrome, with dusky tip."

No. 15011.

Al. 60; cand. 61; culm. 31 1/3 mm.


287. Pygmornis longuemareus (Less.).


Cayenne: 2 ♂ ♂ ad., October 29, 1902.

Roche-Marie: 1 ♂ ad., November 8, 1902.

Approuagne: 3 ♂ ♂ ad., December 10, 11, 15; 3 ♀ ♀ ad., December 1, 16, 18, 1902.


"Iris seal, feet dusky (dusky flesh, buffy, claws dusky), bill black, basal two-thirds maalible chrome-yellow (above black, below chrome-yellow)."

♂ ♂ ad.: al. 45 2/3—42 1/3; cand. 43 2/3—41; culm. 20 1/3—25 1/3 mm.

♀ ♀ ad.: al. 46—43 1/3; cand. 42 1/3—39 2/3; culm. 25 1/3 mm.


* Dr. Hellmayr thinks this to be the true supercilivus Linné, but I cannot agree with him. Some specimens of true supercilivus (fraterculus Gould) have the under tail-coverts rusty white (instead of pure white), and the outer tail-feathers margined with rufous, resembling in this way the large species, viz. Ph. malaris (Nordm.).

† Hellmayr tells me that the bird from Malagüity, named P. striigularis by M. Menegaus, is the same as P. longuemareus.
288. Pygornornis ruber (Linn.).


Tortue, R. _Appotagie_. 1 ° ad., January 12, 1903.

"Iris scal, feet buffy yellow, bill blackish, basal two-thirds mandible lemon-yellow."

No. 13066.

Al. 36.4; caud. 34; culm. 22.4 mm.

[Cayenne (Selater and Gould collections in Mus. Brit.).]

289. Campylotopterus largipennis (Bood.).


[290. Eupetomena macroura (Gml.).


_Eupetomena macroura_ grisima Simon, 1897.

Cayenne (BRisson, Mus. H. v. B., Mus. Simon.).]

291. Anthracotherax grammneus (Gml.).


? _Trochilus videllei_ Boddart, 1873 (ex Daubent. _Pl. Ecol._ 671. fig. 2—typ. ex Cayenne). ?

Cayenne: 2 ♂♂ ad., October 17, December 2; 1 ♂ juv., December 4; 3 ♀♀ ad., November 15, 21, 29, 1902.

Is. Le Père: 1 ♂ ad., October 25 ; 3 ♀♀ ad., October 24 (two), 25, 1902.

Nos. 158, 308, 330, 334, 780, 822, 841, 983, 992, 1013.

"Iris scal, feet black (blackish), bill black."

♂♂ ad.: al. 73.4—79; caud. 41—37.4; culm. 28.4—27.4 mm.

♀♀ ad.: al. 71—68; caud. 39.4—36.4; culm. 34.4—28.4 mm.

Two adult birds marked ♂♂ (from October 24 and 25) generally agree with the adult males, but have the green throat shield replaced by dull blackish feathers, with bluish-green margins to the tips of some of them; other specimens marked ♀♀ have the undertails white with a broad black longitudinal band from the throat to the vent. Two ♀♀ of November 15, 21, have the sides of the throat strongly washed with rufous, while others from October 24 and November 29 show not the slightest trace of a rufous wash. The latter are evidently fully adult birds, as are also the females with the dark undertails, and another with the rufous suffusion on the sides of the throat. At present I am unable to explain these different styles of coloration.

[Cayenne (Buffon). (Gould and Selater collections in Mus. Brit., Mus. H. v. B.).]

[292. Anthracotherax nigricollis (Vieill.).


Cayenne (Deplanche leg.—_fide_ Bp.).]
293. *Florisuga mellivora* (Linnaeus).


Iponsin, R. Approuague : 1 ♂ imm., December 24, 1902.

"Iris seal, feet blackish, bill black."

No. 12799.

Al. 68½; cand. 37½; culm. 18½ mm.

[Cayenne (Salvin & Godman and Sclater collections in Mus. Brit., Mus. H. v. B., Deplanches leg.—*vide Bp.*).]


Cayenne (Salvin & Godman and Gould collections in Mus. Brit., Deplanches leg.—*vide Bp.*, Mus. H. v. B.).]

[295. *Avocettula recurvirostris* (Swainson).


Cayenne (Mus. H. v. B., Mus. Heinean., Deplanches leg.—*vide Bp.*).

296. *Chrysolampis elatus* (Linnaeus).

*Chrysolampis mosquitos aut. nec Trochilus mosquitus Linne.*

Cayenne : 3 ♂ ♂ ad., October 13, 27, 29; 1 ♂ ad., October 29, 1902.

Roche-Marie : 1 ♂ juv., November 10, 1902.

"Iris seal, feet black, bill black, dusky at base of mandible."

Nos. 83, 350, 388, 389, 659.

♂ ♂ ad. : al. 57—55; cand. 35½—34; culm. 11½—10½ mm.

♀ ad. : al. 54½; cand. 31½; culm. 13½ mm.

[Cayenne (Salvin & Godman, Sclater, and Gould collections in Mus. Brit., Deplanches leg.—*vide Bp.*). Simmamary (Geay leg. in Mus. Paris).]

[297. *Polytmus thamaantias chrysobrochus* (Shaw).


*Chrysolampis mosquitos aut. nec Trochilus mosquitus Linne.*

Cayenne : 3 ♂ ♂ ad., October 13, 27, 29; 1 ♂ ad., October 29, 1902.

Roche-Marie : 1 ♂ juv., November 10, 1902.

"Iris seal, feet black, bill black, dusky at base of mandible."

Nos. 83, 350, 388, 389, 659.

♂ ♂ ad. : al. 57—55; cand. 35½—34; culm. 11½—10½ mm.

♀ ad. : al. 54½; cand. 31½; culm. 13½ mm.

[Cayenne (Salvin & Godman, Sclater, and Gould collections in Mus. Brit., Deplanches leg.—*vide Bp.*). Simmamary (Geay leg. in Mus. Paris).]


Cayenne (Salvin & Godman and Sclater collections in Mus. Brit., Mus. H. v. B., Mus. Heinean.).]

* Trochilus Mosquitos Linne, *Syst. Nat.* ed. x (1858) p. 120, of which a more detailed description is given by that author in Mus. Ad. Fríd., tomii secundii Prodromus, p. 24, cannot be a *Chrysolampis*, as the "remiges ultimae" are described as "ferrugineae," and as the bird described was evidently of much larger size ("corpus passeres"). Perhaps Linne's bird was a wretched specimen of *Topaza pella*. 
299. Heliothrix aurita (Gml.).


Cayenne: 1 ♂ ad., December 4, 1902.
No. 1006,
"Iris seal, feet blackish, bill black."
♂: al. 65; caud. 64; culm. 17½ mm.
[Cayenne (Gould collection in Mus. Brit., Deplanches leg.—_fide_ Bp.).]

300. Thalurania furcata (Gml.).


Iponsin, R. Appronage: 4 ♂ ♂ ad., December 27, 28, 1902, January 8, 1903; 1 ♂ ad., January 5, 1903.
"Iris seal (seal-brown), feet dusky slate (? dusky), bill black (blackish)."
Nos. 12865, 12879, 13022, 13053, 13012.
♂ ♂ ad.: al. 53—51½; caud. 40⅓—36; culm. 18⅓—18⅔; cannae furca 20—12½ mm.
♀: al. 51; caud. 29½; culm. 18⅔; cannae furca 4 mm.

[301. Anthoscaenius longirostris (Vieill.).


_Trochilus superbus_ Shaw, 1802. Pl. 517.

Cayenne (Mus. Heinean.).]

[302. Doleromyia fallax (Bourc.).


Cayenne (Geay leg. in Mus. Paris, also a true Cayenne skin from the Gould collection in the British Museum—_fide_ Hellmayr in letteris).]

303. Agyrtrea leucogaster (Gml.).


Cayenne: 5 ♂ ♂ ad., October 14, 16, 20, 29, November 4; 1 ♂ ad., October 29, 1902.
Roche-Marie: 2 ♂ ♂ ad., November 10, 13, 1902.
Is. Le Père: 1 ♂ ad., October 24, 1902.
"Iris seal, feet black (blackish), bill above black, below reddish flesh with blackish tip (below pale flesh with blackish tip, basal two-thirds mandible pale flesh-colour, below reddish flesh, dusky at tip)."
Nos. 134, 150, 323, 329, 384, 385, 518, 657, 752.
♂ ♂ ad.: al. 55½—52½; caud. 31½—30½; culm. 21⅔—20 mm.
♀ ad.: al. 53; caud. 30½; culm. 20⅔ mm.
[Cayenne (Salvin & Godman and Gould collections in Mus. Brit., Mus. H. v. B., Deplanches leg.—_fide_ Bp.). "Bords du Mana" (Geay leg. in Mus. Paris).]
304. Agyria chionopectus (Gould).


Cayenne (Geay leg. in Mus. Paris, fide Meneg. s.n. "nicipherctus "); also Surinam (Mus. H. v. B.).)

305. Agyria fimbrata (Gmel.)

Trochilus fimbratus Gmelin, f. Syst. Nat. ed. xiij, i. 1 (1788) p. 493 (ex Briss. iii, p. 706. No. 7. t. 36. f. 2.—typ. ex. Cayenne, envoyé à M. de Réamur par "M. des Essars").

Ornithoglaux albirestris Lesson, 1829.

Cayenne : 8 ♂♂♂ ad., October 10, 11, 13, 17, 27, November 3, 4; one adult, November 3; 3 ♀♀, October 10, November 3; one young bird, October 31, 1902.

Roche-Marie : 2 ♂♂ ad., November 5, 10; two adults, November 6, 8; 3 ♀♀, November 5, 9, 11; 1 ♀ juv., November 5, 1902.

Is. Le Père : 1 ♂ ad., October 25; 2 ♀♀ ad., October 23, 25, 1902.

Approuague : 3 ♀♀, December 8, 17, 1902.

"Iris scut (juv., dusky), feet black (blackish, dusky), bill above black, mandible reddish flesh-colour with blackish tip (below reddish flesh with black tip, pale at base of mandible, below flesh-colour with dusky tip, flesh-colour basal two-thirds mandible, flesh-red basial one-half mandible, flesh-white at base mandible, dusky flesh at base of mandible."

Nos. 41, 42, 45, 72, 73, 79, 159, 297, 336, 337, 349, 422, 476, 477, 478, 517, 532, 533, 534, 561, 638, 648, 656, 687, 1056, 1138, 12758.

♂♂♂ ad. : al. 58½—59½ ; can. 33½—30½ ; culm. 21½—19½ mm.

♀♀ ad. : al. 54½—52; can. 32½—28 ; culm. 21½—19½ mm.


306. Chloristes notatus (Reich).


Trochilus chalybeicauis Suckow, i. (1800) (ex Rich. & Bern. No. 48).

Trochilus corvolus Vieill. 1817 (typ. ex Cayenne).

Cayenne : 1 ♂ ad., November 2; 1 ♀ juv., November 4, 1902.

Roche-Marie : 2 ♀♀, November 8, 11; 1 (♂) juv. (marked ♀♀), November 10, 1902.

Approuague : 1 ♀ ad., December 19, 1902.

"Iris scut, feet blackish (black, dusky), bill black, dusky reddish at base of mandible (black, basal half of mandible pale flesh, pale flesh at base of mandible)."

Mr. Hollmayr tells me that he searched in vain for this specimen in the Paris Museum.

† Trochilus fimbratus Gmelin ex Briss. has been always referred to the female of Florianus mellisora (Linn.), but quite erroneously, I think. The female of that species has the under mandible quite black, while Brisson’s bird had “le demi-bee inferieur blanchatre, excepte son bout, qui est noir.”

Edw. Chas. W. Richmond in Bt. : Mr. Richmond, in a letter addressed to Dr. K. Harttart dated March 15, 1905, says pointed out that some species described, but not named in Richard and Bernard’s article on the bird in 1792, afterwards received specific names by Reich (1795) and by Suckow (1800). I have noticed that the Hemimantis mariae by Richard and Bernard as No. 18 Trochilus... Linn. Super unguis viridis, subrostris viridibus, viridi scutum juvenis somno gutturis nuitate moventis, restrictibus omnibus... and which was named T. notatus by Reich and T. chalybeicauis by Suckow is the same as Chloristes corvolus (Vieill.).
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Nor. 460, 516, 625, 658, 688, 12777.
\[ \delta \delta : \text{al.} 50^1_\text{a} - 50^1_\text{b}; \text{cand.} 28^1_\text{a} - 15^1_\text{b} \text{mm.} \]
\[ \varphi \varphi : \text{al.} 48 - 46^1_\text{a}; \text{cand.} 26^1 - 25; \text{culm.} 16^1 - 16 \text{mm.} \]
Ouanary et Mana (Geay leg. in Mus. Paris).]

[307. Thalurania scapulata (Gould).
Eumela scapulata Gould, Introd. Troch. (1801) p. 166 (hab. “supposed to be Cayenne”—certé—
H. v. B.—typ. in Mus. Brit.).
Oiapock, Cayenne (Gould collection in Mus. Brit., a true Cayenne skin—fide
Hellmayr).]

[308. Hylocharis sapphirina (Gml.).
Trochilus sapphirinus Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 496 (ex Buffon—loc. ignot.—hab.
substit. Cayenne, aut, Berl. & Hart.).
Cayenne (Mus. H. v. B.).]

[309. Hylocharis cyanus viridiventris Berl.
Langier—hab. substit. Rio de Janeiro).]
Cayenne (Deplanche leg.—fide Bp.).]

310. Chlorostilbon prasinus (Less.).
Oraiansa prasina Lesson, Hist. Nat. Ois.-Mouche (1829-30) pp. xxxv, 188, Planche 65 ("parait
habiter le Brésil").
Chlorostilbon brevicaudatus Gould, 1861 (typ. ex Cayenne).
? Trochilus viridissimus Gmelin, 1788 (ex Buffon: Or—vert, nec syn. Edw. t. 390, f. 1*).
Cayenne: 10 \( \delta \delta \) ad., October 13 (two), 14, 28 (two), November 4 (three), 26,
December 20, 1902; 3 \( \varphi \varphi \) ad., October 13, 14, 20, December 2; 4 \( \delta \delta \) juv.,
October 14, 28, November 4, 15, 1902.
Roche-Marie, Cayenne: 1 \( \delta \) jr., November 10, 1902.
"Iris seal, feet black, bill black."
Nos. 80, 81, 82, 131, 132, 133, 320, 367, 368, 369, 502, 521, 522, 523, 683, 791,
889, 918, 1156.
\( \delta \delta \) ad.: al. \( 46^1_\text{a} - 44 \); cand. \( 22^1_\text{a} - 19^1_\text{b} \); culm. \( 14^1_\text{a} - 13^1_\text{b} \) mm.
\( \varphi \varphi \) ad.: al. \( 45^1_\text{a} - 44^1_\text{b} \); cand. \( 24^1 - 21^1 \); culm. 14\( ^1_\text{b} \) mm.
[Cayenne (Gould and Sclater collections in Mus. Brit., Mus. H. v. B., Deplanche
leg.—fide Bp.). Geay leg. in Mus. Paris].
Lesson’s birds may have really come from Brazil, but I should think it more probable
that he had Cayenne specimens before him. An adult male in my
collection supposed to be from Brazil (of the same make as two skins of Agryria
lactea) generally agrees with the Cayenne specimens, but has the bill slightly
shorter and the sides of the throat more golden, the tail perhaps more greenish
black, less blue-black.

[311. Discosura longicanda (Gml.).
Trochilus longicandus Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 438 (ex Buffon loc. ignot. “du
Cayenne (Gould collection in Mus. Brit., Mus. H. v. B., Deplanche leg.—fide
Bp.).]
[312. Lophornis ornatus (Bodd.).


Cayenne (Gould collection in _Muns. Brit._, _Muns. Heinian._, Deplanches leg.—_fide_ Bp.). _St. Georges d'Oypock (Geyag leg. in _Muns. Paris)._]

313. Calliphlox amethystina (Gml.).


† _Trochilus arthuri_ Lesson, _Les Trochilidées_ (1832-33) pp. 85, 88, pl. 28, 29 (typ. ex Cayenne, envoyé à M. de Longuemare).

Cayenne: 2 ♂ ♂ juv., November 3, 5; 1 ♀ ad., October 28, 1902.

“_Iris_ scal, feet dusky, bill black.”

Nos. 366, 476, 531.

♀: al. 36 ½ ; cand. 18; culm. 14 ½ mm.

♂ ♂ juv.: al. 34½—34; cand. 18½—17½; culm. 13½—13½ mm.


**Family CYPSELIADAEP.**

314. Panyptila cayennensis (Gml.).


Roche-Marie, Cayenne: 1 ♂ ad., November 6, 1902.

“Iris scal, feet dusky, bill black.” No. 584.

Al. 120; cand. 58; culm. 6 ½ ; tars. 9½ mm.

[Cayenne (Buffon).]

315. Chaetura chapmani Hellm.


Cayenne (two unmistakable Cayenne skins in _Muns. Brit._ ex Sclater collection, _fide_ Hellmayr in lit.).

316. Chaetura brachyura (Jard.).

_Acrocephalus brachyura_ Jardine; Ann. Mag. Nat. Hist. xviii. (1846) p. 120 (typ. ex Tobago).

_Chaetura poliura_ aut., nec Temm.

Roche-Marie, Cayenne: 1 ♂ ad. and 1 ♂ juv., November 12, 1902; 2 ♀ ♀ ♀ ad., November 12, 13, 1902.

Is. le Pére: 2 ♂ ♀ ad., October 25; 1 ♀ ad., October 25; 1 ♀ imm., October 25, 1902.

“Iris scal, feet slate, bill black.”

* Dr. Hellmayr considers this to be simply the young male of _Calliphlox amethystina_ (Gml.), and I am inclined to agree with him, although I have never seen young males of this species with a quite square tail and with pure white tips to the outer tail-feathers.

† The following species of _Cypselidae_ not yet recorded from Cayenne are likely to occur there:

1. _Chaetura zonaris athelieeta_ (Cub.)—_Brit. Guiana_. (_Ch. zonaris—Brazil._)

2. _Cypselidus rutillus_ (Vieill.)—_Brit. Guiana._

‡ Cf. Hellmayr, _Nov. Zool._ xiii. (February 1896) p. 37 (“Specimens from Tobago, Trinidad, Surinam and Cayenne are absolutely identical”—_Hellm._).
Nos. 724, 725, 723, 754, 325, 326, 328, 327.

Cypselus spinicaudus Temminck, Tabl. Mith. in Pl. Col. x. (1839) p. 78 (ex DuBext. Pl. Ent. 726,—
typ. ex Cayenne).

Cayenne: 1 ♂ ad., November 21; 1 ♀ ad., October 21, 1902.

“ Iris seal, feet dusky, bill black.”

Nos. 830, 248.

♂: al. 105½; caud. 41½; culm. 4; tars. 9½ mm.

♀: al. 103½; caud. 42½; culm. 4½; tars. 9½ mm.

[Cayenne (Buffon, Selater collection in Mus. Brit.).]


St. Laurent, Cayenne (Const. Jelski leg.—in Mus. H. v. B.).]

Family CAPRIMULGIDAE.*

Cyprelus rufus Boddaert, Tabl. Pl. Ent. (1783) p. 46 (ex DuBext. Pl. Ent. 735—typ. ex
Cayenne).

Cayenne (Buffon).]

Stenopsis cayennensis (Gml.).

760—hab. Cayenne).

Cayenne: 1 ♂ ad., November 15; 1 ♂ semi-ad., October 28; 3 ♀ ♀ ad.,
November 15 (two), 18; 1 ♀ imm., November 15, 1902.

“ Iris seal, feet dusky flesh (dusky), bill dusky.”

Nos. 358, 783, 784, 785, 786, 812.

♂: al. 142½—140½; caud. 119½—107; culm. 14½—12½; tars. 16½ mm.

♀: al. 140½—131; caud. 101—95; culm. 13—11½; tars. 10½—15½ mm.

[Cayenne (Buffon), Mus. Heineman, Deplanche's leg.—fide Bp.).]

St. Georges d’Oyapock (Geay leg. in Mus. Paris s.n. St. rufescens—fide
Hellmayr in Littor).]

Nyctidromus albicollis (Gml.).

Cyprelus albicollis Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 1050 (ex Latham—hab. Cayenne):
typ. in coll. Major Davies.

Cayenne: 1 ♂ ad., October 31; 1 ♂ juv., November 3, 1902.

Roche-Marie, Cayenne: 1 ♀ ad., November 10, 1902.

* The following Caprimulgidae not yet mentioned from Cayenne may probably occur there:


5. Cordelia virginianae (Gml.)—U.S. N. Am.—Brazil.


Appronague: 1 ♂ ad., December 9, 1902.
"Iris seal, feet dusky horn (dusky drab, dusky brown), bill black."
Nos. 402, 408, 651, 1075.
♂ ♂ ad.: al. 152—150; cand. 150—146; culm. 94 1/2—93 1/2; tars. 21 1/2 mm.
♀: al. 144 1/2; cand. 130; culm. 11 1/4; tars. 22 1/2 mm.
[Cayenne (Rothery leg. in Mus. Brit.). St. Georges d'Oyapock (Gey leg. in Mus. Paris).]

322. Chordeiles acutipennis (Bodd.).
Cayenne: 7 ♂ ♂ ad., October 21, 28, November 22, 24 (three), 25; 2 ♀ ♀ ad., November 25, 28; 1 ♂ juv., November 24, 1902.
"Iris seal, feet reddish drab, bill blackish."
Nos. 235, 355, 855, 870, 872, 873, 874, 893, 894, 960.
♂ ♂ ad.: al. 169—153; cand. 190—81 1/2; culm. 61 1/2—5 1/2; tars. 13 1/2—12 1/2 mm.
♀ ♂ ad.: al. 150—155 1/2; cand. 92—88; culm. 7 1/2—6 1/2; tars. 12 1/2 mm.
[Cayenne (Bollon and Mus. Brit.).]

323. Nyctiprogne leucopygia (Spix).
Caprimulgus leucopygus Spix, Ar. Bras. ii. (1823) p. 3, pl. iii. ("hab. in lit. sylv. fl. Amazon").
Cayenne (Mus. H. v. B.).

324. Lurocalis semitorquatus (Gmel.).
Cayenne (Buffon, Rothery, and Sclater collections in Mus. Brit.).

325. Nyctibius grisens (Gmel.).
Caprimulgus jamaicensis Gmelin, ibid. p. 1029.
Cayenne (coll. Rothery in Mus. Brit.).

326. Nyctibius grandis (Gmel.).
Cayenne (Buffon, Sclater, and Tweeddale collections in Mus. Brit., coll. Sir A. Lever, etc. Lath.).

Family PICIDAE.†

327. Chloronerpes flavigula (Bodd.).
Iponsin, R. Appronague: 1 ♂, January 1, 1903.
"Iris seal, feet greenish grey, bill above dusky, below slate-grey."
† The following species of Picidae not yet recorded from Cayenne may probably occur there:
1. Chloronerpes capitatus (Math.)—British Guiana (at Para Chl. paraensis Sundev.).
2. Picumnus maccaruellei Sharpe (P. amazonicus Sundev.)—British Guiana—Para (an = P. spilogaster Sundev.).
No. 12946.
Al. 110½; caud. 70; tars. 18½ mm.
[Cayenne (Sclater collection in Mus. Brit.), Oyapock, Cayenne (Salvin & Godman and Sclater collections in Mus. Brit.).]

328. Chloronerpes rubiginosus (Swains.).


329. Chrysoptilus punctigula (Bodd.).

Cayenne: 3 ♂♂ ad., October 11, 20, 27; 2 ♀♀ ad., October 11, 17; 1 ♂ juv., October 14, 1902.

Approuague: 1 ♀, December 11, 1902.

"Iris chestnut, feet sage-green, bill maxilla black, mandibula blackish."

Nos. 66, 213, 348, 75, 117, 177, 1121.

♂ ♂ ad.: al. 104—102; caud. 70—68½; culm. 22—20½; tars. 21½—20½ mm.
♀ ♂: al. 101—100½; caud. 68½—66½; culm. 22½—20½; tars. 21½—20½ mm.

[Cayenne (Sclater collection in Mus. Brit., Mus. H. v. B.).]

330. Melanerpes cruentatus (Bodd.).


Cayenne (Buffon).

331. Melanerpes rubrifrons (Spix).

*Piceas rubrifrons* Spix, *Ar. Bras.* i. (1824) p. 61. pl. Iv. figs. 1 ♂♂, 2 ♀♀ (hab. in sylvis Parae—typus ♂ in Mus. Monac.).

[Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit.).]

332. Melanerpes terricolor (Berl.).

*Centurus terricolor* Berlepsch, *Ibis* 1880. p. 113 (typ. in Mus. H. v. B. ex "Orinoco district").

Cayenne (Mus. Brit.).]

333. Veniliornis sanguineus (Licht.).


Cayenne (Sclater collection in Mus. Brit., ♂♂).

334. Veniliornis passerinus (Linn.).


*Piceas teaphrodus* Wagler, 1827.

Cayenne: 4 ♂♂ ♀ ♀ ad., October 11, 17 (two), November 27; 3 ♀♀ ♀ ♀ ad., October 17, 22, November 4; 1 ♀ ♀ juv., October 11; 1 ♀ ♀ juv., October 17, 1902.

Roche-Marie, Cayenne: 2 ♂♂ ♀ ♀ ad., November 6, 8; 1 ♀ ♀ ad., November 10, 1902.

Approuague: 1 ♂ ad., December 8, 1902.
"Iris seal (dark grey, sepin), feet slate-grey (grey, greyish), bill above dusky, below greyish white (horn-colour, dusky at base of maxilla, dusky at base of mandible, above dusky, below greyish white)."

Nos. 56, 57, 58, 168, 169, 172, 173, 286, 525, 557, 621, 682, 942, 1903.

♀♂: al. 78—73; can. 47—43; culm. 201 1/2—17 3/4; tars. 16 1/2—15 3/4 mm.

[Carayenne (Slater collection and ex M. Verreaux in Mus. Brit.); Sinnamary, Mana et Macurria (Geay leg. in Mus. Paris, s.n. D. Cocciliæ), Mus. Heineau.]

335. Veniliornis cassini (Malh.).


Ipousin, R. Appronague: 2 ♂♂ ad., January 6, 1903.

"Iris hazel, feet olive-grey, bill above dusky, below pale greyish."

Nos. 13936, 13937.

♂♂ ad.: al. 95—93 1/2; can. 54 3/4; culm. 221 1/2—20 1/2; tars. 16 1/4—16 3/4 mm.

[Carayenne (Slater collection in Mus. Brit. ♂♂). Oyapock, Carayenne (Salvin & Godman collection in Mus. Brit.). St. Georges d'Oyapock, Onanary and St. Jean du Maroni et Mahuri (Geay leg. in Mus. Paris).]

336. Celus elegans (Müll.).

Picus elegans* P. L. S. Müller, Naturagst, Suppl. (1776) p. 92 (ex Daubent. Pl. Eid. 524.—hab. Carayenne) ♂♂ !

Picus fasciatus Bodd. 1783 (ex Pl. Eid. 524).

Picus cyanomome Malh. 1788 (ex Pl. Eid. 524).

Colupicus reichenbachii Malh., Picidæ ii. (1862) p. 28. Pl. lvi, figs. 4, 5 ♂ ad. 1 ♀ ad. (hab. Brésil et Colombie—erroneous).


Appronague: 2 ♂♂ ad., December 10, 19, 1902.

Ipousin, Appronague: 1 ♀ ad., December 24, 1902.

"Iris bright claret-brown (♂♂), claret-brown (♀), feet greyish sage-green, bill horny white, washed (tinged) with sulphur yellow, bare skin about eye slate."

Nos. 1103, 12770, 12800.

♂♂ ad.: al. 170 1/2—161 1/2; can. 110—106 1/2; culm. 30 3/4; tars. 27 1/2 mm.

♀ ad.: al. 169; can. 112; culm. 29 1/2; tars. 27 1/2 mm.

[Carayenne (Bufflo, Slater collection, Salvin & Godman collection and Tweeddale collection in Mus. Brit., Mus. H. v. B. ♀♂).]

[337. Celus jumana (Spix).

Picus jumana Spix, Ar. Bras. i. (1824) p. 57. Pl. lvii, fig. 1 ♀ 2 ♀ (ex sylvus fl. Amazon).

Oyapock, Carayenne (Salvin & Godman collection in Mus. Brit.). Camopi and Bas et Haute Caracayenne (Geay leg. in Mus. Paris.).]

* In Nova Zool. xliii. (1906) p. 39 Dr. Hellmayr has pointed out that the species inhabiting Venezuela and British Guiana is not C. elegans of Müller, as was believed by Mr. Hargitt (loc.). The Venezuelan bird he calls C. jumana Spix; but Malherbe's bird is evidently the same as the Carayenne bird (viz. C. elegans). The former wanting a name, I call it

Celus elegans hellmayri

[typ. in Mus. H. v. B. Brit. Guiana ♀ (H. Whitely leg.)].
[338. *Celeus grammicus* (Mall.).


Oyapock (Selater collection and Salvin & Godman collection in Mus. Brit.).]

[339. *Celeus undatus* (Linna.).


*Picus rufus* Gmelin, 1788 (ex *Pl. Enl.* 694. f. 1—Cayenne).

Cayenne (Selater collection in Mus. Brit.). Ouanary (Geay leg., Mus. Paris).]

[340. *Cerchneicus torquatus* (Bodd.).


Cayenne (Buffon). St. Georges d'Oyapock (Geay leg. in Mus. Paris).]

341. *Cromomorphus flavus* (Müll.).


Cayenne: 2 ♀♂ ad., October 18, November 21; 1 ♀ ad., November 21, 1902.

"Iris carmine, feet olive-grey, bill sulphur-yellow at base, Naples yellow at tip."

Nos. 180, 837, 838.

♀♂ ad.: al. 14½—138½; caud. 90½—88½; culm. 27½—23½; tars. 25½—24½ mm.
♀ ad.: al. 142; caud. 96; culm. 25½; tars. 25½ mm.

One male has the secondaries of a nearly uniform cinnamon, while another male has them blackish, varied with cinnamon. The female has the secondaries of a nearly uniform blackish colour.


[342. *Campephilus rubricollis* (Bodd.).


Oyapock, Cayenne (Salvin & Godman collection in Mus. Brit.). Rivière Lumier, Haut Carasevane and Montagne Mahury (Geay leg. in Mus. Paris).]

343. *Campephilus melanoleucos* (Gmel.).


Cayenne: 1 ♀ ad., October 13, 1902.

Approuague: 1 ♀ ad., December 9; 1 ♀ jr., December 18, 1902.

"Iris lemon-yellow, feet plumbeous, washed with olive, bill dusky along culmen and at tip, otherwise pale horn (dusky paler at base)."

Nos. 87, 1067, 12769.

♀♂ ad.: al. 187; caud. 117; culm. 44½; tars. 35½ mm.
♀ ad.: al. 183; caud. 111; culm. 40½; tars. 34½ mm.

[Cayenne (Tweeddale collection in Mus. Brit. ♀, Mus. H. v. B.).]

* The species from Lower Amazonia, named "undatus Linna." by Hargitt should be called *C. multi-fasciatus* (Mall.).
344. **Ceophleous lineatus** (Linn.).


Cayenne: 1 ♂ ad., November 25, 1902.

"Iris lemon-yellow, bill tip black, maxilla slate, mandible horn, feet plumbeous with olive shade.”

No. 895.

Al. 185; caud. 115 2/3; culm. 39; tars. 30 1/2 mm.

[Cayenne (Salvin-Godman collection in Mus. Brit.).]

345. **Picumnus buffoni** Lavr.


*Picumnus undulatus* (partim) Hargitt* (specimen a ex Oyapock)—Meneg., *BuU. Mus. Y. II. x.* (1904) p. 110 (Oyapock—Geay leg.).


Cayenne: 4 ♂ ♂ ♂ ad., October (two), November 15, 23: 5 ? ? ad., October 22, 29, 31; November 2 (two); 2 ♂ ♂ juv., October 22, December 2, 1902.


APpronague: 1 ? ad., December 12, 1902.

"Iris sepia, feet grey washed with olive (greyish), bill black, plumbeous at base of mandible (slate, plumbeous at base of mandible; dusky, greyish at base of mandible; dusky, plumbeous at base of mandible)."


♂ ♂ ad.: al. 51 1/2—48; caud. 28—23; culm. 11 2/4—10 1/3; tars. 12 1/4—16 mm.

♀ ♀ ad.: al. 51—47 1/2; caud. 27 1/2—25 1/2; culm. 12—10 1/2; tars. 12 1/2—11 1/4 mm.


346. **Picumnus minutissimus** (Pall.).


Cayenne (Sclater collection in Mus. Brit.).]  

* Picumnus undulatus Hargitt from Brit. Guiana I regard to be only subspecifically different from *P. buffoni* of Cayenne. In fact, my specimens from Brit. Guiana differ from the Cayenne birds only by being more whitish, less yellowish on the under parts, and perhaps by being a little more brownish, less greenish, on the upper parts, with the white spots generally smaller and less distinct. The Oyapock specimens referred to his *P. undulatus* by Mr. Hargitt should belong to true *P. buffoni*.

† *Pipra minuta* Linne is perhaps the same as *Picumnus buffoni*, but the phrase in its description: "alorum et alac supra griseae" is not in accordance with the coloration of this species, while the phrase "pectus flavescens lineis transversis nigris" rather speaks for the identity of *Pipra minuta* with *Picumnus buffoni*.

‡ There are two specimens of this species in my collection which were sent from Surinam direct.
Family ALCEDINIDAE.

[347. Ceryle torquata (Linn.).]


Cayenne (Sharpe collection in Mus. Brit., Mus. Philada.; *†ide Curs.**.)

[348. Ceryle amazona (Lath.).]


Cayenne (Sclater collection in Mus. Brit.).

[349. Ceryle americana (Gmel.).]


Cayenne: 3 ♂ ♀ ad., October 11, 18, November 27; 3 ♂ ♂, October 20, November 25, 29, 1902.

*Iris seal, feet black (blackish), bill black."

Nos. 63, 182, 217, 809, 941, 981.

♂ ♀ ad.: al. 77½—74; cand. 57½—53½; culm. 43½—42½; tars. 8—7½ mm.

♀ ♀ ♀: al. 78½—74; cand. 58½—54; culm. 45½—38½; tars. 7½ mm.


[350. Ceryle indica (Linn.).]


Cayenne: 2 ♂ ♂ ad., October 20, 21; 1 ♀ ad., October 18, 1902.

Roche-Marie, Cayenne: 1 ♀ ad., November 6, 1902.

*Iris seal, feet dusky, bill blackish."

Nos. 184, 218, 237, 585.

♂ ♂ ad.: al. 95½—93½; cand. 67—64½; culm. 55—50; tars. 10½—9½ mm.

♀ ♀ ♀: al. 95½—94; cand. 65½—64½; culm. 50½—49; tars. 9½ mm.

[Cayenne (Sclater collection in Mus. Brit., Mus. Heinean., Deplanche leg.—*†ide Bp., Mus. Philada.—†ide Cassin*); Oyapock (Geay leg. in Mus. Paris.).]

[351. Ceryle acena (Pall.).]

*Alcedo acena* Pall. in Vroeg *Cat. naai, d'Oiseaux Adumbrat.* (1764) no. 51, (typ. ex Surinam) ♀ .

*Alcedo superciliosa* Linne, 1766.

Cayenne: 4 ♂ ♂ ad., October 20, 21, 22 (two); 5 ♀ ♂ ad., October 11, 17, 18, 20, 21; 1 (?) marked ♂, October 18; 1 ♀ imm., November 14, 1902.

Appromagne: 1 ♀, December 11, 1902.

*Iris seal, feet dusky, bill black, yellowish at base of lower mandible ("black, "blackish")."

Nos. 64, 179, 183, 215, 216, 238, 239, 281, 282, 770, 1123.

♂ ♂ ad.: al. 55½—53½; cand. 37—33½; culm. 39½—27½; tars. 6½—6½ mm.

♀ ♀ ♀: al. 57½—55½; cand. 39½—36½; culm. 30½—27½; tars. 6½—6½ mm.

Family MOMOTIDAE.

352. Momotus momota (Linn.).


Ipponsin, R. Approuague: 1 ♂ ad. and 1 ♀, December 24, 1902, January 3, 1903; 1 ♀, December 27, 1902.

Approuague: 1 ♀, December 13, 1902.

"Iris hazel, feet dusky slate, bill black."

Nos. 12699, 12802, 12819, 12987.

♂: al. 145—142½; cand. 264—258½; culm. 46—42½; tars. 39½—29½ mm.

♀: al. 142½—140; cand. 255—173; culm. 47½—44½; tars. 28½ mm.

[Cayenne (Sclater collection in Mus. Brit., Deplanches leg.—*fide* Bp.), Camopi and Mornes du Mahury (Geay leg. in Mus. Paris).]

Family GALBULIDAE.*

353. Urogenalba dea (Linn.).


*A. paradisaea* Linné, 1758.

[Cayenne (Sclater collection and Salvin & Godman collections in Mus. Brit., Mns. Heinean, Deplanches leg.—*fide* Bp.).]

354. Galbula galbula (Linn.).


**Galbula viridis** Lath., 1790.

Cayenne: 1 ♂ ad., November 21; 1 ♀ ad. (marked ♂), November 21, 1902.

Approuague: 1 ♂ ad., December 19, 1902.

"Iris seal, feet sage green, bill black."

Nos. 835, 836, 12775.

♂: al. 80; cand. 84—82½; culm. 49—43½; tars. 12½ mm.

♀: al. 81½; cand. 82; culm. 45½; tars. 12½ mm.


[♀ 355. Galbula ruficauda Cuv.]


Cayenne (Cuvier)—Brit. Guiana.]


Ipponsin, R. Approuague: 5 ♂ ♂ ad., December 25, 26, 1902, January 3 (three), 1903; 1 ♀ ad., December 25, 1902.

*Brachygala lugubris* (Swains.) is recorded from British Guiana and the Lower Amazon, and may likewise occur in Cayenne.
Tortue, R. Appronague: 1 ♂ ad., December 23, 1902.

“Iris seal, feet indian yellow, bill canary-yellow, distal half maxilla blackish (distal two-thirds maxilla blackish”).

Nos. 12824, 12825, 12843, 12982, 12983, 12984, 13065.

♂ ad.: al. 73—71; cand. 73 1/2—66; culm. 39 1/2—37 1/2; tars. 11 1/2—11 1/2 mm.

♀ ad.: al. 70 1/2; cand. 64; culm. 35 1/2; tars. 11 1/2 mm.

[Cayenne (Mus. Heinean., Deplanches leg.—file Bp.). Camopi (Geay leg. in Mus. Paris).]

[357. Galbula leucogastra Vieill.]


Cayenne (Salvin & Godman collection in Mus. Brit., Mus. Heinean.).]

[358. Jacamorops aureus (Müll.).


J. grumius (Gaul. 1788) aut.

Cayenne (Mus. Brit., Mus. Heinean.).]

Family TROGONIDAE.

359. Trogon collaris Vieill.*


Ipousin, R. Appronague: 1 ♂ ad. and 1 ♀ ad., January 7, 1903.

“Iris vandyke brown (♂), seal (♀), eyelids coral red (♂), blackish (♀); feet olive-buff (♂), olive-grey (♀); bill above wax-yellow, below olive-yellow (♂), above blackish, below olive-yellowish (♀).

Nos. 13048, 13049.

♂: al. 118; cand. 138; culm. ——; tars. 12 1/2 mm.

♀: al. 118; cand. 140 1/2; culm. 17; tars. 12 1/2 mm.

[Cayenne (Gould collection in Mus. Brit., Mus. II. v. B.).]

360. Trogon rufus Gmbl.

Trogon rufus Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 401 (ex Buff. & Daubent., Pl. End. 73b—typ. ex Cayenne) ♀!

Trogon atricollis Vieillot, 1817, ♂!

Trogon Carucui Linné, 1758, partim.*

Ipousin, R. Appronague: 3 ♂ ♂ ad., December 31, 1902, January 2, 3, 1903: 2 ♀ ♀ ad., December 24, 1902, January 2, 1903.

“Iris seal, feet greenish grey (dusky greenish grey, greyish), bill apple-green

* Hellmayr (Nov. Zoöl. xiii. 1906, p. 41) thinks that this species should bear the name T. carucui Linné, but I cannot agree with him. Linné’s diagnosis of T. carucui is evidently made up after Edwards’ plate no. 331, which is T. atricollis Vieill. (= T. rufus Gmbl.).

† Trogon carucui Linné (1758) is a mixture compositum, and I should think it best to drop the name altogether. Linné’s diagnosis evidently rests on the figure of Edwards, which clearly represents the male of T. rufus Gmbl. The specific name Carucui is taken from Caravaggio, who apparently describes the male of T. viridipennis Spix. The first synonym given by Linné is Brisson, who simply reproduces the description of the Caravaggio of Marmore. The synonym “Tainitzaun Hern. mex. 23” may belong to T. meleagris Swains. and Fenlí’s “Pittitius flavicans viridisicensis rostrum serrato is perhaps indefinable. The habitat is given as Mexico (ex Hernand.), Brasilia (ex Marq.), and Pern (ex Fenillé). Should Linné’s name come in use it must be given to the species called T. rufus Gmbl.

19
(pale apple-greenish, apple-green, blackish along ridge of culmen in ♀), eyelids plumbeous grey."

Nos. 12975, 12988, 12994, 12801, 12974.
♂ ♂: al. 115½—113; cand. 144—136; culm. 20—16½; tars. 12½ mm.
♀ ♀: al. 115—113; cand. 152½—141; culm. 16½—16½; tars. 12 mm.

An adult male from January 2 has the upper breast and the upper parts of the body (especially on the upper tail-coverts) strongly suffused with violet blue, a peculiarity which I have never observed before in the male of this species.

[Cayenne (Buffon).]

361. Trogon viridis Linn.

Trogon viridis Linné, Syst. Nat. ed. xii. 1 (1766) p. 167 (ex Brisson—typ. ex Cayenne).

Cayenne: 1 ♀ ad., December 18, 1902.

Iponsin, R. Approgonage: 3 ♂ ♂ ad., January 5, 6, 7, 1903.

"Iris seal (♂♂), chestnut (♀); feet dusky slate (♂♂), bluish slate (♀); bill pale slate grey (slate grey), upper part of mandible to tip blackish, basal ½ of cutting edge bluish slate, maxilla bluish slate (?); eyelids plumbeous grey (♂), light blue (?)."

Nos. 13021, 13047, 12995, 1141.
♂ ♂ ad.: al. 156—148; cand. 168½—156; culm. 23½—22½; tars. 12½ mm.
♀ ♀ ad.: al. 145; cand. 155; culm. 22½; tars. 13 mm.

[Cayenne (Buff.), Oyapock (Verdey) in Mus. Brit. ex Sclater collection; Ouanary (Geay leg. in Mus. Paris).]

[362. Trogon violaceus Guilm.


Trogon meridionalis Swainson, 1837.

♀ Oyapock, Cayenne (Verdey) in Mus. Brit. ex Sclater collection.]

♀ [363. Trogon aurantius Spix.

Trogon aurantius Spix, Ar. Bras. 1 (1824) p. 47 Pl. xxxvi. (hab. in sylvis Rio de Janeiro—typus in Mus. Monac.).

"Guiana" (Mus. Brit.).

[364. Trogon melanurus Swaines.


Cayenne (Dillwyn—Sclater collection in Mus. Brit.), Deplanchels leg.—fide Bp. Oyapock (Sclater collection in Mus. Brit.).]

Family BUCCONIDAE.

[365. Bucco capensis Linn.


Cayenne (Sclater collection in Mus. Brit.).]
[365. *Bucco macrorhynchus* Gmel.]


Cayenne (Sclater collection in Mus. Brit.).]

? [367. *Bucco ordi* Cass.]


? Oyapock, Cayenne (Sclater collection in Mus. Brit.).]

368. *Bucco tectus* Boddaert.


Cayenne: 1 ♂ ad., October 18, 1902. No. 185.

“Iris black, feet blackish.”

Al. 72; caud. 56; culm. 24; tars. 12 mm.

[Cayenne (Rothery & Sclater collection in Mus. Brit.).]

369. *Bucco tamatia* Gmel.


Cayenne: 1 ♂ ad., November 24, 1902. No. 867.

“Iris madder brown, feet olive-grey, bill black.”

Al. 75; caud. 62; culm. 26; tars. 16 mm.

[Cayenne (Sclater and Salvin & Godman collection in Mus. Brit., Mus. Heinean, Deplanche leg.—*fide* Bp.).]

St. Georges d’Oyapock and Maroni (Geay leg. in Mus. Paris.)

370. *Malacoptila fusca* (Gmel.).

*Bucco fusca* Gmelin, *Syst. Nat.* ed. xiii. i. 1 (1788) p. 408 (ex Lath.—“supposed to have come from Cayenne”).

Iponsin, R. Approuague: 1 ♂ ad., December 31, 1902.

“Iris dark carmine, feet olive-yellow, bill black, chrome-yellow at base.”

No. 12929.

Al. 88; caud. 64; culm. 26; tars. 17 mm.

[Cayenne (Sclater collection in Mus. Brit., Mus. Heinean.).]

371. *Monasa nigra* (Müll.).


Iponsin, R. Approuague: 1 ♂ ad., 1 ♀ ad., January 6, 1903.

“Iris bay brown, feet slate black, bill vermilion.”

♂: al. 125; caud. 120; culm. 35; tars. 19 mm.

♀: al. 129; caud. 122; culm. 37; tars. 21 mm.

Nos. 13038, 13039.

[Cayenne (Sclater collection and Gurney in Mus. Brit.).

Oyapock (Verdey, Salvin & Godman collection in Mus. Brit.).

Mus. Heinean., Ouanary and Rivier Lanier (Geay leg. in Mus. Paris).]
372. Chelidoptera tenebrosa (Pall.)


Cayenne: 1 ♂ ad., November 25, 1902. No. 896.

"Iris seal, feet slate, bill black."

Al. 1064; cand. 52; culm. 204; tars. 124 mm.

[Cayenne (Selater collection, Salvin & Godman collection in Mus. Brit., Mus. Heinean.)

Oyapock (Jelski leg.—Salvin & Godman collection in Mus. Brit.), Monts. Sinery (Geay leg. in Mus. Paris).]

**Family CAPITONIDAE.**

373. *Capito niger* (Müll.)


Cayenne: 2 ♀♂ ad., October 31, November 1, 1902.

Roche-Marie: 3 ♀♂ ad., November 5 (three), 2 ♀♀ ad., November 5, 1902.

Iris seal, feet plumbeous olive (plumbeous), bill black, olive-grey at base of mandible.

Nos. 403, 487, 546, 547, 548.

♂♂: al. 844—794; cand. 56—49; culm. 244—204; tars. 234—214 mm.

♀♀: al. 822—81; cand. 53—49; culm. 234—224; tars. 232—222 mm.

[Cayenne (Buffon, Riocour collection in Mus. Brit., Mus. d. Pays-Bas, Deplanches leg., *fide* Bp.). Ornmary (Geay leg. in Mus. Paris).]


Oyapock, Cayenne (Jelski leg.—Selater collection in Mus. Brit.)

**Family RAMPHASTIDAE.**


Cayenne (Buffon).


*R. ergithronychus* Gmelin, 1788.


Cayenne, Market Place: 1 ♂ ad., October 4, 1 av. jr. October 3, 1902.

Aprouague: 1 ♂ ad., December 13, 1902.

"Iris hazel, feet plumbeous, bare skin about eye indigo blue, shading into pale blue at lower border.”

Nos. 6, 7, 12700.
Cayenne (Buffon), Deplanches leg.—"fide" Bp.
Rivière Lunier, Camopi et montagnes de Ronra (Geay leg. in Mus. Paris).


Oyapock, Cayenne (Sclater collection in Mus. Brit.).]

378. **Ramphastos vitellinus** Licht. 

Cayenne, Market Place: 1 ♂ ad., October 4; 1 ♀ ad., October 5, 1902.
Apprognague: 1 ♂ ad., December 9, 1902.
Iponsin, R. Apprognague: 1 ♂ ad., January 3, 1902.
"Bill black with basal blue-grey band, feet plumbeous."
Nos. 8, 10, 1076, 12986.
♂ ♂ ad.: al. 204—200; cand. 165—158½; culm. 156—143; tars. 50½—48½ mm.
♀ ad.: al. 192½; cand. 158½; culm. 118; tars. 44½ mm.
[Cayenne (Mus. Brit., Mus. Philada., Deplanches leg.—"fide" Bp.).
Rivière Lunier, St. Georges d'Oyapock et Ouanary (Geay leg. in Mus. Paris).]

[379. **Pteroglossus aracari atricollis** (Müll.).

Cayenne (Gould & Sclater collections in Mus. Brit., Deplanches leg., "fide" Bp.)
Camopi (Geay leg. in Mus. Paris).]

[380. **Pteroglossus flavirostris** Fras.

Oyapock, Cayenne (Sclater collection in Mus. Brit.).]

[381. **Pteroglossus inscriptus** Swains.

Cayenne (Gould collection in Mus. Brit.).]

[382. **Pteroglossus viridis** (Linn.).

Cayenne (Sclater and Gould collections in Mus. Brit., Deplanches leg.—"fide" Bp.).]

[383. **Selenidera culik** (Wagl.).

*Pteroglossus Culik* Wagler, *Syst., Ir.* (1827) sp. 10 (typ. in Mus. Paris—hab. Cayenne)
*Ramphastos piscicorus* Linné, *ed. xii.* (1766) nec ed. x. (1758).
Iponsin, R. Apprognague: 1 ♂ ad., January 6, 1903.
"Iris hazel, feet sage green, bill black, brick-red at base, bare skin about eye Paris green." No. 3017.
Al. 119½; cand. 101; culm. 80½; tars. 31½ mm.
[Cayenne (Sclater collection in Mus. Brit., Mus. Philada.).
Riviere Luniér et Onanary (Gray leg. in Mus. Paris).]

[384. Selenidera mattereri (Gould).
Oyapock, Cayenne (Sclater collection and Salvin & Godman collection in Mus. Brit.).]

**Family CUCULIDAE.**

[385. Coccyzus americanus (Linn.).
Cayenne (Buffon).]

386. Coccyzus minor (Gmel.).
"Iris seal, feet plumbeous grey, bill black, buff yellow at base of mandible."
Al. 138½; cand. 159; culm. 29; tars. 26½ mm.
[Cayenne (Buffon).]

[387. Coccyzus melacoryphus Vieill.
Cayenne (Sclater collection in Mus. Brit., Mus. d. Pays-Bas).]

388. Piaya cayana (Linn.).
Approuagne: 1 ? ad., December 8, 1902. No. 1050.
"Iris lake red, feet plumbeous, bill citron-yellow, apple-green at base, bare skin about eye carmine."
Al. 140; cand. 258; culm. 32½; tars. 37 mm.
[Cayenne (Salvin & Godman collection in Mus. Brit., Mus. d. Pays-Bas, Deplanches leg.—*fide* Bp.) Onanary (Gray leg. in Mus. Paris).]

[389. Piaya melanogastra (Vieill.).
Cayenne (Mus. Brit.).]

390. Piaya rutila (Illig.).
Roche-Marie, Cayenne: 6 ♂♀ ad., November 6, 7, 8 (two), 12, 13, 1902
Approuagne: 1 ♂ ad., November 12; 1 ? ad., December 11, 1902.

*The following species of *Cuculidae* not yet recorded from Cayenne may be found there:
2. *Bromococcyx phantailius* (Spix)—Venezuela—Bahia,

(282)
"Iris carmine, eyelids crimson, feet slate with greenish wash (washed with olive-green), bill citron-yellow, dusky at extreme base (citron-yellow)."

November 3

394. Crotophaga major


Cayenne: 2 ♂♂ ad. December 17; 2 ♀♀ ad. November 27, November 14, 1902.

Nos. 346, 772, 892, 1142.

"Iris lemon-yellow, feet black, bill black."

♂ ad. al. 205—194; caud. 276—241; culm. 49½; tars. 40½ mm.

♀ ad. al. 192½—188; caud. 248—236; culm. 49½—48½; tars. 42—41 mm.

[Mayenne (Mus. Brit., Mns. d. Pays-Bas); Ouanary and Mahury (Geay leg. in Mus. Paris).]
Family *Psittacidae.*

[395. *Ara macao* (Linn.).]


Cayenne (Buff.).]

[396. *Ara severa* (Linn.).]


Cayenne (Deplanques leg.—*fide* Bp.),

Oyapock (Sonnini—*fide* Buff.).]

[397. *Ara manilata* (Bodd.).]


[398. *Conurus solstitialis* (Linn.).]


Cayenne (Buffon).]

[399. *Conurus leucophthalmus* (Miill.).]


Cayenne (Buffon).]

[400. *Conurus aeruginosus* (Linn.).]


Cayenne (Salvin & Godman and Sclater collections in Mus. Brit.).]

[401. *Conurus aureus* (Gmel.).]


Cayenne (Buffon).]

[402. *Pyrrhura picta* (Miill.).]


Cayenne (Buffon) Canopii (Gray leg. in Mus. Paris.).]

* The following species of *Psittacidae* not yet recorded from Cayenne may occur in that country:

5. *Amazona aestiva* (Linn.)—Surinam (Mus. d. Pays-Bas), Brazil.
Psittaculus passerina Linne,


Agapornis Guineensis Swainson, Anim. in Memag. (1838) p. 320 (typ. ex Demerara).

Cayenne (Deplanches leg.—fide Bp.).

Psittaculus modesta Cab.


Ps. schlederii Gray, 1859.

Oyapock (fide E. Verreaux in Mus. Brit.).

Psittaculus virescens (Gmel.)


Psittaculus cervinicolor Muller, 1776, descr. falsa!

Cayenne (Buffon).

Psittaculus devillei Salvad.


Oyapock Cayenne (Mus. Brit.).

Brotoperys tuipara (Gmel.)


Psittaculus suspens Gmelin (ex Buff & Danbent, Pl. Enl. 456. f. 2—typ. ex Oyapoc, Cayenne) an avis arte facta?

Cayenne (Mus. d. Pays-Bas), ? Oyapock, Cayenne (Buffon).

Amazona farinosa (Bodd.)


Cayenne : 1 ♀ ad., October 6, 1902. No. 14.

Al. 232 ; can. 133 ; culm. 39 1/4 ; tars. 27 1/2 mm.

[Cayenne (Buffon), Mus. d. Pays-Bas (fide Schleg.). Saint Georges d'Oyapock and Rivière Lunier, Haut-Carsevenne (Gray leg. in Mus. Paris.).]

Amazona amazonica (Linn.)

Psittaculus amazonicus Linne, Syst. Nat. ed. xii. 1 (1766) p. 147 § (hab. in Surinamo—typ. in Mus. Upsalae?).

Cayenne : 2 ♀♂ ad., October 6, 16 ; 1 ♀ ad., October 16, 1902.

* There is little doubt that Linne described the northern species with the green uropygium. The Bahia bird has been named Ps. virida by Prof. Ridgway, and the Ceará bird believed to be true Ps. passerina should be called Ps. virida flavescens Salvador.

† Compared by Mr. Hellmayr (fide Hellmayr in Bt.).

‡ Müller's name peruviana, although probably founded on Pl. Enl. 390, cannot be accepted, as the altogether misleading description makes this rather doubtful. What Müller says about the coloration of the tail would really apply to the coloration of the wings.

§ Although Linne's description is quite incorrect ("fronte flava, adnatis Ps. aestiva, sed duplo major"), there is no doubt that Linne meant this species. The phrase "temperibus fulvis" cannot be applied to any other species, also the quotations Brisson, Frisch, Maregrave, all belong to our species.
Appronagne: 1 ♂ ad. and 1 ♀ ad., December 17, 1902.
Nos. 15, 148, 149, 12756, 12757.

"Iris orange chrome (orange yellowish, orange with an inner ring of orange chrome), feet greyish (greyish plumbeous), bill pale olive greenish, dusky at tip."

♂ ad.: al. 206—195 ½; cand. 100—96 ½; culm. 36 ½—31 ½; tars. 21 ½ mm.
♀♀ ad.: al. 202—194; cand. 101 ½—99; culm. 34 ½—32 ½; tars. 22 ½ mm.

[Cayenne (Buffon).]

[410. Amazona ochrocephala] (Gmel.)


? Psittacus caffenius Müller 1776 (ex Pl. Enl. 312).

? Psittacus caffenius Müller, 1776 (ex Pl. Enl. 312). Cayenne (Buffon).]

411. Amazona duфrenseana] (Shaw).


Chrysotis coeliegna Selater ex Lawr. (1879).

Iponsin, R. Appronagne: 1 ♂ ad., January 8, 1903.

"Iris orange chrome, feet dusky slate-grey."

No. 13651.

Al. 221 ½; cand. 122 ½; culm. 40 ½; tars. 24 ½ mm.

[Cayenne (Levaill.).]

[412. Amazona festiva] (Linn.)

Psittacus festivus Linné, Syst. Nat. ed. x. 1 (1758) p. 101 (habitat "in Indiis"—hab. subst. Surinam—typ. in Mus. Upsaliae ?).

Cayenne (Buffon).]

413. Pionus menstruus] (Linn.)


Iponsin, R. Appronagne: 1 ♂ ad., December 28, 1902.

"Iris seal, feet dusky greenish, bill dusky slate, a pink spot on each side of maxilla at base."

No. 2881.

Al. 173; cand. 68 ½; culm. 27 ½; tars. 18 ½ mm.

[Cayenne (Brisson and Buffon, Mornes du Mahury) Geay leg., Mus. Paris.]

[414. Pionus fuscus] (Müll.)


Cayenne (Buffon), Mus. d. Pays-Bas (fide Schleg.); Rivière Lunier and Mornes du Mahury (Geay leg. in Mus. Paris).]

[415. Deropytus accipitrinus] (Linn.)


Cayenne (Buffon, Latham, Selater collection in Mus. Brit., Mus. d. Pays-Bas).]
416. Pionopsitta caica (Lath.).


Ipsinsin, R. Appronagne: 1 c jr., January 5, 1903.

“Iris orange chrome, feet dusky pea-green, bill pale with olive wash.”
No. 13015.
Al. 144; caud. 64 1/2; culm. 21 1/2; tars. 15 1/2 mm.
[Cayenne (Buffon), Mus. d. Pays-Bas and Mus. Bremen (*fide Finsch*)]

? [417. *Urochroma batavica* (Boddt.).]


*(Cayenne, Jelski leg.)* —Salvin & Godman collection in Mus. Brit.]

[418. *Urochroma purpurata* (Gmel.).]

*Psittacus purpuratus* Gmelin, *Syst. Nat.* ed. xiii. i. 1 (1788) p. 350 (ex Lath.—typ. in Mus. Leër, ex Cayenne)

Cayenne (Rioconr collection in Mus. Brit.).

Oiapock, Cayenne (Salvin & Godman collection in Mus. Brit., Mus. d. Pays-Bas).]

? [419. *Urochroma hueti* (Temm.).]

*Psittacus huetii* Temminck, *Planches coloriées* (1850) Pl. 491 (habite probablement le Pérou—hab. subt. Amazon super.).

? Cayenne (Baron Langier collection in Mus. Brit.).]

[420. *Pionites melanocephala* (Linn.).]*


Cayenne (Buffon), Mus. d. Pay-Bas.]

**FAMILY STRIGIDAE.†**

[421. *Bubo magellanicus* (Gmel.).]


Not yet recorded from Cayenne, but generally distributed over South America, Guiana (Schleg.), Brit. Guiana (Schombl.).]

[422. *Lophostrix cristata* (Daud.).]


* In the Mus. des Pays-Bas at Leyden there is a specimen of *Pionites houcogaster* (Ruhl), du Cabinet de M. Temminck, which is said to have come from Cayenne; but this locality is probably erroneous, I think.

† The following species of *Strigidae* not yet recorded from Cayenne may occur there:

1. *Spestygo curvicollaris* (Molina)—South America generally.
2. *Asio stygicus* (Wagl.)—Cuba—Brasil.
3. *Gisella harrisii* (Cass.)—Colombia—Brazil.
423. *Otus choliba crucigerus* (Spix).


Cayenne: 1 ♀ juv., October 16, 1902.

Approquane: 1 ♂ ad., December 11, 1902.

Nos. 135, 1112.

"Iris lemon yellow, feet greyish, lighter on soles, bill dusky bluish grey (lighter at tip in juv.)."

♂ ad.: al. 168; caud. 91; culm. 16; tars. 32 mm.

[Cayenne (Becœur in Mus. Vindob.), Mus. d. Pays-Bas.]

[424. *Glaucidium brasilianum phalaenoides* (Daud.).]


*Glaucidium ferox* (Vieill.) aut.

No records from Cayenne, but generally distributed over South America.]

[425. *Asio clamator* (Vieill.).]


*Asio mexicanus* aut. nec *Strix mexicana* Gmelin!

Cayenne (Vieillot, Mus. Philada.—*fide* Cassin.).]

[426. *Pulsatrix perspicillatum* (Lath.).]


Cayenne (Mus. d. Pays-Bas).]

[427. *Ciccaba huhula* (Daud.).]


Cayenne (Rothery collection in Mus. Brit., Mus. d. Pays-Bas).]

[428. *Ciccaba hylophila* (Temm.).*]


Cayenne (Mus. d. Pays-Bas).]

[429. *Ciccaba virgata* (Linné).]


? *Strix javiata* Vieill., 1817 (hab. Martinique—erreur !).

Cayenne (Mus. Philada.—*fide* Cassin.).]

[430. *Strix flammea perlata* (Licht.).]


Cayenne (Rothery collection in Mus. Brit.).]

* I agree with Dr. Sharpe that *Strix cayennensis* Gmel., founded on Daubenton's *Pl. Ent.* 412, is not recognizable.
Family VULTURIDAE.*

[431. Gypagus papa (Linn.).]

Vultur Papa Linné, Syd. Nat. ed. x. 1 (1758) p. 86 (ex Edw. t. 2, et Alb. t. 4.—"hab. in India occidentali—hab. substit. Surinam ").

Cayenne (Sonnini, Buff.)]

[432. Cathartes aura pernigra (Sharpe).]


"Toute la Guiane" (Brisson); Cayenne (Jelski leg.—Mus. H. v. B.).]

[433. Cathartes atratus brasiensi (Bonap.).]

[Vultur atratus Wilson (ex Bartram), Aner. Orn. ix, (1814) p. 104. tab. lxv. fig. 2.

Cathartes brasiliensis Bonaparte, Consp. Av. i. (1859) p. 9 (ex Am. merid. Antill.—hab. substit. Brasil. merid.).

No special records from Cayenne, but generally distributed over tropical South America.]

Family FALCONIDAE.†

[434. Ibycter americanus (Bodd.).]


Cayenne (Buffon, Mus. des Pays-Bas, Mus. H. v. B.); St. Georges d'Oyapock (Geay leg. in Mus. Paris.).]

[435. Ibycter ater (Vieill.).]


Cayenne (Mus. d. Pays-Bas, Mus. Heinecan.).]

436. Milvago chimachima (Vieill.).


Appronague : 1 ♂ juv., December 12, 1902.

"Iris dark mummy-brown, feet pea-green, bill very pale horn, shaded with greyish." No. 1131.

Al. 261½ ; caud. 186 ; culm. 23¼ ; tars. 49½ mm.

* Cathartes urubitinga Pelz. recorded from the Orinoco, as well as in North and South Brazil, is likely to be found in Cayenne, but we have no evidence of this fact.

† The following species of Falconidae not yet recorded from Cayenne are likely to be found there:

1. Polyborus cheriway (Jacq.), Brit. Guiana, or P. tharsus (Molin.), Lower Amazon.
2. Micrastur mirandollii (Schl.), "Guiana" (Norwich Mus.)—Pará.
3. Acelipeter ventralis ScL., Venezuela, or A. erythronemis Gray—Brazil or.
5. Buteo occidentalis Nap.—Venezuela.
6. Buteo hyperopos Gurn.—Venezuela—Lower Amazon.
7. Buteo lucorum Vieill.—Venezuela—Brazil.
8. Gerania melanocephala (Vieill.)—Venezuela—Brazil.
10. Rostrhamus sociabilis (Vieill.)—South America generally.
12. Falco peregrinus austatum Bp.—Lower Amazon (Satterer).
[437. Herpetotheres cachinuans (Linn.).


Cayenne (Vieillot, Geay leg, in Mus. Paris).]

[438. *Circus buffoni* (Gmel.).


Cayenne (Mus. Blomefield—*fide* Latrh., Mus. Brit., juv.).]

[439. *Micrastur brachypterus* (Temm.).


Cayenne (Mus. d. Pays-Bas, Leblond leg. in Mus. Paris—*fide* Less.).]

[440. *Micrastur rufigollis* (Vieill.).


Cayenne (Mus. d. Pays-Bas—*fide* Schleg. individu figuré dans les *Pl. col.* 92, s.n. *Nisus xanthothorax* Temm.).]

441. *Micrastur gilvicollis* (Vieill.).


*Nisus concentricus* Lesson, 1831.

*Micrastur pelzelni* Ridg. 1875.

Iponsin, Approuague : 1 ♀ ad.

"Iris cream, feet orange-yellow, bill blackish olive, yellowish at base, bare skin of face orange-chrome."

Al. 181; caud. 145; culm. 17½; tars. 63½ mm.

This specimen, which is apparently quite adult, has the upper parts blackish plumbeous with a brownish shade on the wings, the throat whitish, the lower neck, breast, and upper belly with black and white cross-bars of nearly equal width, the tibiae marked with very narrow brownish black transverse lines, the middle of the belly and under tail-coverts immaculate white, the tail crossed by two narrow, white bands and a third one which is quite imperfect and nearly hidden by the upper tail-coverts, all the tail-feathers being terminated with a narrow margin of brownish white. It has the base of the under mandible yellowish (cf. Gurney, *A List of Diurnal Birds of Prey* (1884) pp. 121-26).

[Cayenne (Mus. Norwich, Poiteau leg. in Mus. Paris—*fide* Less.).]

[442. *Geranospizias caerulescens* (Vieill.).


Cayenne (Mus. d. Pays-Bas); St. Georges d'Oyapock (Geay leg. in Mus. Paris).]
[443. *Accipiter tinus* (Lath.).


Cayenne (Mus. Lever., Leblond leg. in Mus. Paris—*fide* Less.; Mus. d. Pays-Bas, De plauches leg.—*fide* Lept.).]

[444. *Cooperastur bicolor* (Vieill.).

*Sparsius bicolor* Vieillot, *Nov. Dict.* x. (1817) p. 325 (typ. ex Cayenne—juv.).


[445. *Morphnus guianensis* (Daud.).


Cayenne (Mauduyt, Guiana (Bullock in Mus. d. Pays-Bas).]

[446. *Thrasaetus harpyia* (Linn.).


Cayenne (Mauduyt.)]

[447. *Spizaetus tyrrannus* (Wied.).


Not yet recorded from Cayenne, but generally distributed over tropical South America, also Surinam (Mus. Lisbon).]

[448. *Spizaetus ornatus* (Daud.).


*Falco mauduyti* Daudin, ibid. p. 73.

Cayenne (Maud.), Becoeur in Mus. Vindob., Leblond leg. in Mus. Paris (*fide* Less.).]

[449. *Spiziastur melanoleucus* (Vieill.).


Cayenne (Vieillot, Mus. Paris—*fide* Temm.).]

[450. *Buteo albicandatus* Vieill.


No records from Cayenne, but generally distributed over eastern tropical South America.]

[451. *Antenor unicinctus* (Temm.).


No records from Cayenne, but generally distributed over tropical South America.]

[452. *Buteola brachyura* (Vieill.).


Cayenne (Becoeur in Mus. Vindob. s.n. *minutus*—juv., M. Leblond leg. in Mus. Paris—*fide* Lesson, s.n. "melanoleucus").]
453. **Rupornis magnirostris** (Gml.).


Approuague: 1 3 ed., December 8, 1904.

“Iris lemon-yellow, feet deep chrome, bill black, grey at base of mandible, cere chrome, citron-yellow about eye.” No. 1032.

Al. 212; caud. 153; culm. 18½; tars. 63 mm.

[Cayenne (Buff., Poitean leg. in Mus. Paris—*fide* Less.).]

454. **Asturina nitida** (Lath.).


Cayenne (Latham, Dufresne in Mus. Vindob., Leblond leg. in Mus. Paris—*fide* Lesson.).

455. **Leucopternis albicollis** (Lath.).

*Falco albicollis* Latham, *Ind. Orn.* i. (1790) p. 36 (habitat in “Cayana”)

Cayenne (Latham, Leblond leg. in Mus. Paris—*fide* Less., Mus. d. Pays-Bas, Jelski leg. in Mus. Brit.). Quanary (Geay leg. in Mus. Paris.)

456. **Leucopternis lacernulata** (Temm.).


457. **Leucopternis melanops** (Lath.).

*Falco melanops* Latham, *Ind. Orn.* i. (1790) p. 37 (hab. in Cayana, typ. in Mus. Lever.).


458. **Leucopternis schistacea** (Sundev.).


Cayenne (*fide* Schleg.).

459. **Urubitinga urubitinga** (Gml.).


460. **Heterospizias meridionalis** (Lath.).


Cayenne (Latham), Mus. Paris, Poitean leg. (*fide* Less.).

461. **Buteogallus aequinoctialis** (Gml.).


Cayenne: 1 ♀ juv., October 29, 1902.

“Feet bright olive-yellow, bill black at tip, pale plumbeous at base, bare skin on face dusky ochre” (in dried skin basal half of upper mandible yellow).

No. 390.
This young bird presents the plumage which is described by Mr. Gurney in *Ibis*, 1876, p. 485. The breast and abdomen are creamy white, but the black and rufous feathers of the adult are already appearing.

[Cayenne (Latham, Mus. d. Pays-Bas, Mus. Vindob., specim. ex Becoeur).]

[462. *Busarellus nigricollis* (Lath.).


Cayenne (Latham, Maiduyt, Leblond leg. in Mus. Paris—*vide* Less.).]

[463. *Eleanoides forficatus* (Linn.).


St. Georges d’Oyapock (Geay leg. in Mus. Paris).]

[464. *Gampsonyx swainsoni* Vig.


No records from Cayenne, but generally distributed over tropical South America.]

[465. *Elanus leucurus* (Vieill.).


No records from Cayenne, but generally distributed over tropical South America.]

[466. *Ictinia plumbea* (Gmel.).


Cayenne (Latham, Mus. d. Pays-Bas).]

[467. *Rogerhinus uncinatus* (Temm.).


Cayenne (Leblond leg. in Mus. Paris—*vide* Less.).]

[468. *Leptodon cayennensis* (Gmel.).


[469. *Harpagus diodon* (Temm.).


[470. *Harpagus bidentatus* (Lath.).


[471. Tinnunculus sparverius isabellinus (Swains.).


Cayenne (Buffon).]

[472. Hypotriorchis fusco-caerulescens (Vieill.).


No records from Cayenne, but generally distributed over tropical South America.]

[473. Hypotriorchis rufigularis (Daud.).

*Falco rufigularis* Daudin, *Traité d'Orn.* ii. (1800) p. 131 (ex Latham—typ. ex Cayenne, fide Lath.).


Cayenne (Latham).]

[474. Hypotriorchis aurantius (Gmel.).


*Falco deiroleucus* Temminck, 1825.

No records from Cayenne, but generally distributed over tropical South America. Surinam (Lath.).]

[475. Pandion haliaetus carolinensis (Gmel.).


No records from Cayenne, but generally distributed over tropical South America.]

Family *COLUMBIIDAE.*

[476. Columba speciosa Gmel.


Cayenne (Buffon, Mus. Lever., Mus. d. Pays-Bas).]

[477. Columba rufina Temminck & Knip.


Cayenne: 1 ♂ ad., October 5, 1902.

1s. le Père: 1 ♂ ad., October 25, 1902.

"Iris rose red, feet burnt carmine, bill black."

Nos. 11, 324.

♂♀ ad.: al. 18½—174½; culm. 19½—17½; tars. 26½—24½ mm.

[Cayenne (Rothery collection in Mus. Brit., Mus. Varsovie).]

* The following species of *Columbaea* not yet recorded from Cayenne may occur in that country:


2. *Columbautilina* rufipes (Bp.)—"Guiane" (Mus. d. Pays-Bas).

3. *Geotrygon violacea* (Temm. & Knip)—Surinam (Mus. d. Pays-Bas) to Brazil.
[478. **Columba purpureotincta** Ridgway.


*Columba fimina* Temminck & Knip (nee Gmel.) 1808-11.


Cayenne (Temminck).]

[479. **Scardafella ridgwayi** Robins. & Richm.


*Columba immaculata* Temm. & Knip, nec Bo nut.

Cayenne (Mus. d. Pays-Bas.).]

480. **Columbigallina passerina griseola** (Spix).


Cayenne: 5♂♀ ad., October 28 (two), 29, November 4 (two); 1♂ Jr., November 13, 1902.

Roche-Marie: 2♂♀ ad., November 8 (two); 1♀ ad., November 13, 1902.

"Iris orange red, feet flesh-colour, bill black at tip, slate at base (blackish at tip, slate at base)."

Nos. 359, 360, 391, 505, 506, 633, 634, 746, 820.

♂♀ ad.: al. 80—77½; caud. 59—51; culm. 11¾—9¾; tars. 16½—16 mm.

♀ ad.: al. 77½; caud. 59; culm. 11¾; tars. 15¾ mm.

[481. **Columbigallina talpacoti** (Temm. & Knip).


Cayenne (Rothery in Mus. Brit., Deplanches leg.—fide Bp., Mus. d. Pays-Bas.).]

[482. **Columbigallina minuta** (Linn.).


Cayenne (Bonnat. ex Holandrecht).]

[483. **Claravis pretiosa** (Ferrari Perez).


*Columba cinerea* Temm. & Knip, 1811, nec Scop. 1786.

Cayenne (Langier).]

484. **Leptotila verreauxi** Bp.


Cayenne: 1♂ ad., November 3, 1902.

Roche-Marie: 1♂ ad., November 11, 1902.

"Iris saturn red, feet burnt carmine, bill black."

Nos. 499, 699.

♂♀: al. 132—125; caud. 99½—97; culm. 16½; tars. 27½—26 mm.


Cayenne: 1 ♂ ad., November 29, 1902.

Approuague: 1 ♂ ad., December 10, 1902.

Ipounsin, R. Approuague: 1 ♂ ad., January 6, 1903.

—Iris saturn red (clay-yellow), feet burnt carniue, bill black."

Nos. 980, 1102, 3018.

♂ ♂ ad.: al. 142—139; caud. 100½—90½; culm. 17½—16½; tars. 31½—30½ mm.

♀ ad.: al. 146; caud. 102; culm. 14½; tars. 28½ mm.

[Cayenne (Rich. & Bern.) Camopi (Geay leg. in Mus. Paris)].

[Cayenne (Rich. & Bern.). Camopi (Geay leg. in Mus. Paris)].

486. *Geotrygon montana* (Linn.).


Cayenne (Buff.)]

**Family TETRAONIDAE.**

487. *Eupsychortyx sonnini* (Temm.).


Cayenne (Sonnini) [Brit. Guiana—Whitely].]

488. *Odontophorus guianensis* (Gmel.).


Cayenne (Buffon, Mus. H. v. B.).]

**Family CRACIDAE.**

489. *Crax alector* Linn.


Cayenne (Brisson) [Brit. Guiana—Whitely].]

490. *Mitua mitu* (Linn.).


No records from Cayenne, but obtained in Brit. Guiana and at Pará, also mentioned from "Guiana" by Brisson.]

* Specimens from British Guiana collected by the late H. Whitely, jr., named "guianensis" by Messrs. Salvin and Grant, are quite distinct. They come nearer to *O. pachyrhynchus* Tsch., but are perhaps to be distinguished from it.

† The following species of *Cracidae* not yet mentioned from Cayenne are likely to be found there:


*Crax dambomba* Gray and *Penelop paru* (Linn.), said to have occurred in Cayenne, are not believed to be inhabitants of that country.
491. Penelope marail Gmel.

Penelope marail Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 734 (ex Buff. & Daubent. Pl. Ed. 338—
typ. ex Cayenne).

Penelope jacupeba Spix, Ar. Bras. ii. (1825) p. 51. tab. lxxi. (in sylvis. Parae—typ. in Mus. 
Monae.).

Iponsin, R. Appronagae: 2 ♂ ♂ ad., and 1 ♀ ad., January 1, 1903. The 
female had a nearly 
developed egg in the 
oviduct.

Nos. 12957, 12903, 12969.

“Iris walnut brown (burnt amber), feet vinaceous purple, bill blackish, bare 
skin on side of face slate, throat scarlet.”

♂♂ : al. 284—282½ ; caud. 282—272; culm. 33¼—33 (17½—17½); tars. 661—
64½ mm.

♀ : al. 253; caud. 233; culm. 28½ (14½); tars. 58½ mm.

These birds agree very well with Mr. Hellmayr’s description of the type of 
P. jacupeba Spix from Para in the Munich Museum, and also with Mr. Grant’s 
description of P. jacupeba. At the same time there can be no doubt, I think, that 
P. marail Gmelin (ex Buff. & Daubent.) is the same species. The species from 
British Guiana named P. marail by M. Grant now wanting a name, I have much 
pleasure in proposing for it the name

P. granti.

[Cayenne (Buffon).]

492. Ortalis motmot (Linn.).

Phasianus motmot Linné, Syst. Nat. ed. xii. 1 (1766) p. 271 (ex Briss.—hab. “Brasilia, Guiania”— 

Cayenne, Market Place: 1 ♂ ad., October 4, 1902.

Appronague: 1 ♂ ad., December 15, 1902.

“Iris chestnut, feet vinaceous (vinaceous washed with purple), bill slate grey, 
darker at base.”

Nos. 9, 12731, 12899.

♂♂ ad. : al. 215—202; caud. 256—245; culm. 20—24 (17—11); tars. 63½—
60½ mm.

[Cayenne (Brisson, Buffon, Mus. Vindob., Mus. H. v. B.).]

[493. Pipile cumanensis (Jacq.).


Oyapoc, Cayenne (Merrem).

Cayenne specimens should be re-examined; perhaps they are referable to 
P. cujubi (Pelz.).]

Family OPISTHOCOMIDAE.

494. Opisthocomus hoazin (Müll.).

typ. ex Cayenne).

Appronague: 2 ♀ ♀, December 16, 19, 1902.

“Iris carmine, feet blackish slate, bill slate grey, dusky basally.”
Nos. 12771, 12782.
♀♂ : al. 317—395 ; caud. 284—286 ; culm. 30 ; tars. 58—57 mm.
[Cayenne (Buffon, Riocour collection in Mus. Brit.).]

**Family TINAMIDAE.**

495. *Tinamus major* (Gmel.).


Cayenne, Market Place : 1 ♂ ad., October 8, 1902. No. 18.
Al. 243 ; caud. 90 ; culm. 34 (18) ; tars. 64½ mm.

This specimen differs from a female collected by the late H. Whitely, jun., near Camacusa, Brit. Guiana, in having the pileum rufus brown instead of blackish brown, the front being but slightly mixed with blackish. The occipital pendent crest is as well developed as in the Camacusa birds.


[496. Crypturus cinereus (Gmel.).]


Cayenne (Buffon, M. Cuv. collection in Mus. Brit., Mus. d. Pays-Bas).]

497. *Crypturus soii* (Herm.).


*Tetrao pileatus* Boddaert, 1783.

Cayenne : 1 ♂ ad., October 21, 1902. No. 234.

"Iris hazel, feet dusky pea-green, bill slate-black, pale at base of mandible."
Al. 131 ; caud. 42 ; culm. 21½ (12½) ; tars. 35½ mm.

[Cayenne (Buffon, Mus. d. Pays-Bas).]

[498. Crypturus tataupa (Temm.).]


Cayenne (Mus. d. Pays-Bas).]

[499. Crypturus variegatus (Gmel.).]


Cayenne ( Buffon), Mus. d. Pays-Bas, H. C. Rothery collection in Mus. Brit., " Charvin près du Maroni" (Geay leg. in Mus. Paris).]

* The following species of *Tinamidae* not yet known from Cayenne may possibly occur there :

2. *Crypturus adspersus* Temm.—Pará, or *C. simplex* Salvad.—Brit. Guiana.
3. *Crypturus cryphiopus* Pelz.—N. Brazil, or *C. dissimilius* Salvad.—Brit. Guiana.

† Daubenton’s Plate, although very bad, is recognisable, and the description given by Buffon leaves no doubt that he had before him a large *Tinamus* with a rufous pileum,
FAMILY RALLIDAE.*

[500. Rallus longirostris Bodd.]


Cayenne (Buffon, Deplanches leg.—*fide* Bp., Mus. d. Pays-Bas.).

[501. Limnopardalus maculatus (Bodd.).]


Cayenne (Buffon, Mus. d. Pays-Bas, Mus. Vindob.).

502. Aramides cajanea (Müll.).


Cayenne: 1 ♀♀ ad., December 4, 1902.

No. 1007.

"Iris coral red, bill basal half yellowish apple-green, distal half all green, feet burnt carmine."

Al. 176; cand. 56½; culm. 56; tars. 60½ mm.

[Cayenne (Buffon, Mus. Vindob.—*fide* Pelzeln.).]

[503. Porzana albicollis (Vieill.).]


No records from Cayenne, but generally distributed over eastern South America, also noted from "Guiana" (Mus. Heinean.) and Surinam (Mus. d. Pays-Bas.).

[504. Porzana flaviventer (Bodd.).]


Cayenne (Buffon, Mus. d. Pays-Bas).

Oyapock River, Cayenne (Jelski leg., Salvin & Godman collection in Mus. Brit., Mus. d. Pays-Bas.).

[505. Thyrrohina schomburgki (Cab.).]


Cayenne (Deplanches leg.—*fide* Bp.).

[506. Criciscus exilis (Temm.).]


Cayenne (Salvin & Godman collection in Mus. Brit.).

507. Creciscus viridis (Müll.).


Rallus cayennensis Boddaert, 1783.


"Iris rufous, feet geranium pink, bill above slate-black, below slate-grey (slate-black above, bluish slate-grey below)."


508. Gallinula galeata (Licht.).


No records from Cayenne, but generally distributed over South America: Brit. Guiana (Schomb.).]

509. Porphyriola martinica (Linn.).


Cayenne (H. C. Rothery collection in Mus. Brit., Deplanche leg.—fide Bp.).]

510. Porphyriola parva (Bodd.).


Cayenne (Buffon, Mus. d. Pays-Bas, Mus. H. v. B.).]

Family HELJORNITHIDAE.

511. Heliornis fulica (Bodd.).


Family ARAMIDAE.

512. Aramus scolopaceus (Gmel.).

Ardea scolopacea Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 647 (ex Buff. & Daubent.—typ. ex Cayenne).

Cayenne (Buffon, Mus. d. Pays-Bas).

Family EURYPYGIDAE.

513. Eurypyga helias (Pall.).


Cayenne (Hocqourcollection in Mus. Brit., Mus. d. Pays-Bas).]
Family PSOPHIDAE.

[514. Psophia crepitans Linn.


Cayenne (Barrère, Buffon). Maroni et rivière Luniер, Haut Carcassonne (Geay leg. in Mus, Paris.)]

Family IBIDAE.*

[515. Theristicus caudatus (Bodd.).


Cayenne (Buffon, Mus. d. Pays-Bas).]

[516. Harpipron cayennensis (Gmel.).


Cayenne (Buffon, Mus. d. Pays-Bas), (Geay leg. in Mus. Paris.)]

? [517. Plegadis guaranna (Linn.).

Scolopax guaranna Linné, Syst. Nat. ed. xii. i. 1 (1766) p. 242 (ex Maregr., typ. ex Brasil or.—excl. quot. Brisson).

? Cayenne (Buffon).]

[518. Eudocimus albus (Linn.).

Scolopax alba Linné, Syst. Nat. ed. x. 1 (1758) p. 145 (ex Catesby i. t. 82—typ. ex Carolina).

"Nons avons reçu ce courlis blanc de la Guyane" (Buff.).]

519. Eudocimus ruber (Linn.).

Scolopax rubra Linné, Syst. Nat. ed. x. 1 (1758) p. 145 (ex Catesby etc.—hab. in "America"—hab. restrict. in. Bahamas, ex Catesby).

Cayenne, Market Place: 1 ♂ ad., October 23; 1 ♂ not quite adult, October 3; 2 ♀♀ (juveniles); and one young bird without indication of sex, October 3, 1902. Nos. 1, 2, 3, 4, 5.

♂♂: al. 277—272; cand. 101—91; culm. 167—157½; tars. 94½—80 mm.

[Cayenne, très commun (Buffon), Mus. d. Pays-Bas.]

Family PLATALEIDAE.

[520. Platalea ajaja (Linn.).


Cayenne (Buffon). [Surinam (Mus. d. Pays-Bas).]

* The following species of Ibidae not yet recorded from Cayenne may probably be found there:
2. Cercibis exsoura (Spix)—Brit. Guiana—Brazil.
(302)

Family Ardeidae.

[521. Ardea cocoi Linn.*


Cayenne (Briss. "niche à Cayenne"—Buffon).

[522. Herodias egretta (Gmel.).


Cayenne, " comm. niche sur les petites îles" (Buffon).

[523. Leucophoyx candidissima (Gmel.).


Cayenne (Mus. Paris—_fide_ Cuv., Deplanches leg.—_fide_ Bp., Rothery collection in Mus. Brit.).

[524. Florida caerulea (Linn.).


Cayenne (Buffon, Deplanches leg.—_fide_ Bp.).

"Mahury, rives de Kaw" (Geay leg. in Mus. Paris).

[525. Hydranassa tricolor (Müll.).


Cayenne: 2 ♂ ♂ juv., October 6, November 24 ; 5 ♀ ♀ juv., October 31, November 24, 25, 28, 29, 1902.

Roche-Marie: 1 ♂ ad., November 12, 1902.

"Iris vinaceo (lemon-yellow), feet anteriorly dusky sage green, posteriorly olive-yellow (sage green lighter below on tibia), bill above blackish, below olive-buff (above blackish, black at tip, below yellowish olive, above blackish, lighter on cutting edges, below yellowish olive-buff)."


♂ ad.: al. 222.2 ; caud. 76 ; culm. 86.3 ; tars. 78 mm.

♂ ♀ juv. and ♀ ♀ juv.: al. 222—205 ; caud. 71—65.1 ; culm. 85.5—77.1 ; tars. 76.1—63.1 mm.

[Cayenne (Buff., Leblond leg. in Mus. Paris), "Mahury, rives de Kaw" (Geay leg. in Mus. Paris)].

[526. Nyctanassa violacea (Linn.).


ex Catesby—aut. Hellm.).

Cayenne (Buffon, Mus. d. Pays-Bas)].

* The following species of Ardeidae not yet mentioned from Cayenne may be found there:

_Nycticorax sibilatrix_ (Temm.)—Angostura, Orinoco—Brazil.

† Daubentons's figure is hardly recognisable, the throat and lower neck being of a uniform slate-blackish colour, instead of rufous brown in the middle portion. Perhaps Richard and Bernard's name, _griseolaiba_, must come in use.
[527. *Agamia agami* (Gmel.).


Cayenne (Buffon, Tweeddale collection in Ms. Brit.), (Ms. d. Pays-Bas).]

[528. *Nycticorax nycticorax naevius* (Bodd.).


Cayenne (Buffon, Deplanches collection in Ms. Brit.), (Ms. d. Pays-Bas).]


Cayenne (Buffon, Deplanches, and Harting collections, in Ms. Brit.).]

[530. *Phalaropus striatus* (Linn.).


"Iris chrome-yellow, feet anteriorly chromium green, posteriorly olive-yellow, bare skin about eye bright olive-yellow, bill above blackish, below green."

[Cayenne (Buffon, Ouanary (Geny leg. in Ms. Paris,* jide Meneg. s.n. B. virescens)).]

[531. *Butorides striata* (Linn.).


"Iris chrome-yellow, feet anteriorly chromium green, posteriorly olive-yellow, bare skin about eye bright olive-yellow, bill above blackish, below green."

[Cayenne (Buffon, Ouanary (Geny leg. in Ms. Paris,* jide Meneg. s.n. B. virescens)).]

[532. *Ixobrychus erythromelas* (Vieill.).


Cayenne (Geay leg. in Ms. Paris—jide Meneg., s.n. exilis).]

[533. *Tigrisoma lineatum* (Bodd.).


Cayenne (Buffon, Ms. d. Pays-Bas), Rivière Lunier (Geay leg. in Ms. Paris).]

[534. *Zebrilus pumilus* (Bodd.).


Cayenne (Buffon, Ms. Brit.).]

[535. *Botaurus pinnatus* (Wagl.).


Cayenne (Rothery collection in Ms. Brit.).]

* This specimen has been examined by Mr. Hellmayr, who tells me that it is *B. striata*. }
Family CICONIDAE.

[536. Euxenura maguari (Gmel.).]  
No records from Cayenne, but generally distributed over South America.]  

[537. Jabiru mycteria (Licht.).]  

[538. Tantalus loculator Linn.]  
"Nous a été envoyé de la Guiane " (Buffon).]  

Family PARRIDAE.

[539. Parra jacana Linn.]

Cayenne: 1 ♀ juv., December 4, 1902. No. 1016.  
"Iris smoke-grey, feet slate-grey, bill centre of mandible olive-yellow, shield and base of bill maroon-purple, tip of bill dusky yellowish fawn-colour."  
[Cayenne (Mus. d. Pays-Bas), "Savanes marécagenses de Kourou" (Geay leg. in Mus. Paris).]

Family CHARADRIIDAE.*

[540. Arenaria interpres (Linn.).]  
Cayenne (Buffon, Jelski leg.—Seebohm collection in Mus. Brit.).]  

[541. Haematopus palliatus Temm.]

No records from Cayenne, but generally distributed over the West Indies and South America.]  

[542. Hoploxypterus cayanus (Lath.).]  
Cayenne (Buffon).]

* The following species of Charadriidae not yet found in Cayenne may really occur there :  
2. Apnocephalus subruficollis (Gibbons.)—U.S. N. Am.—Patagonia.  
3. Phalaropus fulicarius (Linn.)—N. Am.—Chile, Argentina.  
4. Sternaus tricolor (Vieill.)—N. Am.—Argentina.
[543. Belonopterus cayennensis (Gmel.).

typ. ex Cayenne).

Cayenne (Buffon, Deplanches leg.—*fide* Bp.).]

[544. Squatarola squatarola (Linn.).

in Europa—hab. substit. Succia ex Fann. Succ.).

Cayenne: 1 ν juv., November 2, 1902. No. 474.

“Iris seal, feet slate, bill black.”

Al. 188; cand. 70; culm. 30½; tars. 44½ mm.

[545. Charadrius dominicus Müll.

*Charadrius dominicus* P. L. S. Müller, *Natursyst. Suppl.* (1776) p. 116 (ex Briss.—hab. S. Domingue,
typ. in Mus. Réaumur, env. par M. Chervain).

No records from Cayenne, but generally distributed during migration time over all parts of South America, also occurring in Surinam and Brit. Guiana.]

[546. Ochthodromus wilsonia (Ord).

*Charadrius wilsonia* Ord, in Wilson's *Am. Orn.* ix. (1814) p. 77, Pl. lxxvi. fig. 5 (typ. ex Cape Island,
New Jersey).

River Oyapoc, Cayenne (Jelski leg.) in Mus. Brit. ex collection Salvin & Godman.]

[547. Aegialitis semipalmatus (Bp.).


Cayenne: 2 ν ν, October 19, 31, 1902.

Nos. 209, 401.

“Bill black, clay-colour at base of mandible, feet clay-colour, dusky at points.”

Al. 122—119; cand. 57½—53½; culm. 12½—12½; tars. 23½ mm.

[Cayenne (Deplanches leg.—*fide* Bp.), Seebohm (collection in Mus. Brit.: juv.).]

[548. Aegialitis collaris (Vieill.).


No records from Cayenne, but distributed over the whole of South America, also in Brit. Guiana and Lower Amazonia.]

[549. Himantopus mexicanus (Müll.).

*Charadrius mexicanus* P. L. S. Müller, *Natursyst. Suppl.* (1776) p. 117 (ex Briss.—ex Hornaud.—
hab. Mexico).

No records from Cayenne, but occurring in Brit. Guiana and Lower Amazonia.]


Cayenne: 1 ν ad., November 21, 1902. No. 847.

“Feet ashy grey, bill blackish, basal third of mandible pale flesh.”

Al. 248; cand. 98; culm. 94½; tars. 59 mm.
[551. Numenius borealis (Forst.).

_Scolopax borealis_ Forster, _Phil. Trans._ lxii. (1772) pp. 411, 431.

No records from Cayenne, but occurring during migration in the West Indies and in Brazil.]

[552. Limosa hudsonica (Lath.).

_Scolopax hudsonica_ Latham, _Ind. Orn._ ii. (1790) p. 720 (typ. ex Hudson's Bay, received from Mr. Hutchins).

No records from Cayenne, but occurring during migration time in Venezuela and Brazil.]

[553. Macrorhamphus griseus (Gmel.).

_Scolopax grises_ Gmelin, _Syst. Nat._ ed. xiii. i. 1. (1788) p. 658 (ex Lath. in Novo-boraci maritimi,—typ. in Mus. Lever.).

No records from Cayenne, but occurring during migration time in the West Indies and at Pará.]

[554. Micropalama himantopus (Bp.).


No records from Cayenne, but occurring during migration time in the West Indies and in Amazonia.]

[555. Catoptrophorus semipalmatus (Gmel.).


No records from Cayenne, but occurring during migration time in Brit. Guiana and on the Guapore, Brazil.]

[556. Totanus melanoleucus (Gmel.).

_Scolopax melanoleucus_ Gmelin, _Syst. Nat._ ed. xiii. i. 1. (1788) p. 659 (ex Lath.—hab. in Chateaux Bay, Labrador).

Cayenne: 1 ♂, and one specimen without indication of sex, October 19, 1902. Nos. 205, 206.

“Feet chrome-yellow, bill blackish (blackish dusky at base).”
Al. 102—178½; caud. 80—68½; culm. 56¼—56; tars. 65½—60 mm.

[557. Totanus flavipes (Gmel.).

_Scolopax flavipes_ Gmelin, _Syst. Nat._ ed. xiii. i. 1. (1788) p. 659 (ex Lath.—hab. in the province of New York in autumn”).

Cayenne: 1 ♂, October 19, and 4 ♀♀ juv., October 19, November 21 (three), 1902.

“Feet dusky chrome, bill blackish.”
Nos. 207, 208, 848, 849, 850.
♂: al. 157½; caud. 58½; culm. 38½; tars. 51½ mm.
♀♀: 160½—151; caud. 70—59; culm. 39½—35½; tars. 53½—49½ mm.
558. **Helodromas solitarius** (Wils.).

*Tringa solitaria* Wilson, *Am. Orn.* vii. (1813) p. 53, Pl. 58, f. 3 (typ. ex "Hudson's Bay").

Cayenne: 1 ♂ jr., October 29; 1 ♀ jr., October 18, 1902. Nos. 178, 214.

♂: al. 131 ½; cand. 56; culm. 29 ½; tars. 29 ½ mm.

♀: al. 131 ½; cand. 56 ½; culm. 29 ½; tars. 29 ½ mm.

[Cayenne (Deplanches leg.—*fide* Bp., Jelski leg. in Mus. Brit. ex collection Seebohm).]

559. **Tringoides macularia** (Linn.).


Cayenne: 1 ♂ juv., November 2, and 2 ♀ juv. October 18, November 1, 1902.

Roche-Marie, Cayenne: 1 ♂ juv., November 5, 1902.

“Iris seal, feet pale flesh, bill dusky, black at tip.”


♂ ♂ juv.: al. 102 ½—101; cand. 47—46; culm. 23 ½—21 ½; tars. 22 ½—21 ½ mm.

♀♀ juv.: al. 106 ½—101 ½; cand. 46 ½—44 ½; culm. 22 ½; tars. 22 ½—22 ½ mm.

[Cayenne (Rothery collection in Mus. Brit.).]

560. **Pavoncella pugnax** (Linn.).


No records from Cayenne, but mentioned from Surinam.

561. **Bartramia longicauda** (Bechst.).


Cayenne: 1 ♂ ad., October 27, 1902. No. 345.

“Feet olive-yellow, bill black at tip, upper part of culmen buff.”

Al. 157 ½; caud. 75 ½; culm. 28 ½; tars. 46 ½ mm.

562. **Ereunetes pusillus** (Linn.).


Cayenne: 2 ♀, October 19, 1902. Nos. 210, 211.

“Iris slate, feet slate, bill black.”

Al. 98—90 ½; caud. 40—39 ½; culm. 20 ½—18 ½; tars. 22—21 ½ mm.

[Cayenne (Jelski leg. in Mus. Brit. ex Seebohm collection).]

563. **Tringites subruficollis** (Vieill.).


No records from Cayenne, but occurring during the time of migration in Amazonia and other parts of Brazil.

564. **Calidris alba** (Pall.).


*Tryngis Alaearia* Linné, 1766.

No records from Cayenne, but occurring during the time of migration in different parts of Brazil.
[565. **Pisobia minutila** (Vieill.).


Cayenne (Mus. Brit. ex Seebohm collection.)

[566. **Pisobia maculata** (Vieill.).


No records from Cayenne, but occurring during the time of migration near Cumana, Venezuela, and in different parts of Brazil.

567. **Pisobia fusciollis** (Vieill.).


Cayenne: 1♀, October 19, 1902. No. 212.

"Bill blackish."

Al. 117; caud. 49; culm. 21½; tars. 23½ mm.

[568. **Tringa canutus** Linn.


No records from Cayenne, but found in the West Indies and in Brazil during migration, also obtained in Surinam (Mus. d. Pays-Bas).

[569. **Gallinago delicata** (Ord).


No records from Cayenne, but mentioned from Surinam and Brazil.

[570. **Gallinago brazilensis** (Swains.).


*S. fuscata* aut. nec Lichtenstein.

Cayenne (Mus. Brit. ex Seebohm collection.)

[571. **Gallinago undulata** (Bodd.).


Cayenne (Buffon, Mus. d. Pays-Bas, Mus. Berol.).

**Family LARIDAE.**

[572. **Hydrochelidon surinamensis** (Gml.).


Not yet recorded from Cayenne, but observed on the coast of Surinam.

* The following species of *Laridae* may still occur on the coast of Cayenne:

1. **Hydrochelidon leucoptera** (Moisner & Sabirn) — once in Barbadoes.
2. **Hydrochelidon hybrida** (Pall.) — once in Barbadoes.
3. **Sterna forsteri** Nutt., — obtained 200—500 miles from Pernambuco.
4. **Sterna murrillii** Naum.—Coasts of Brazil.
   (= *St. paradisaea* Brünn.).
5. **Sterna dougalli** Mont.—West Indies and coast of Venezuela.
   (= *St. sandvicensis* Lath.).
7. **Sterna troudoni** Audub.—S. Brazil and U. S. North America.
8. **Micronous leucopterus** Gould.—West Indies—Fernando Noronha, Brazil.
9. **Gygis canastra** (Gml.)—Fernando Noronha, Brazil.

† Gmelin’s *H. surinamensis* ex Fermin seems to me rather doubtful. Perhaps the name *St. plumbea* Wilson (1815) must come in use.
Phaethusa magnirostris (Licht.).


? Cayenne (Latham—s.n. Sterna simplex.)

Gelochelidon anglica (Mont.).


? Sterna nilotica Gmelin, 1788.

No records from Cayenne, but occurring on the coasts of British Guiana and Brazil (Bahia).

Sterna fluviatilis Naum.


Cayenne (H. C. Rothery collection in Mus. Brit.—juv.).

Sterna maxima Bodd.


Cayenne (Buffon) [Surinam (Mus. Brit.).]

Sterna eurygnatha Saunders.


No records from Cayenne, but generally distributed over the intertropical seas, obtained on the Lesser Antilles.

Sterna anaestheta Scop.


No records from Cayenne, but generally distributed over the intertropical seas, obtained on the Lesser Antilles.

Sterna fuliginosa Gmel.

Sterna fuliginosa Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 605 (ex Buff., Forst., Cook, Penn., Lath.—"hab. in mari atlantico, americano, indico, australi"—habit. select. New York, typ. in Mus. Lever.—fide Lath.).

Cayenne (Latham) [Month of the Amazon—Mus. Brit.].

Sterna antillarum (Less.).


No records from Cayenne, but generally distributed over the West Indies and Trinidad.

Sterna superciliaris Vieill.


No records from Cayenne, but obtained on the coasts of Surinam and British Guiana (Mus. Brit.).
(310)

[382. **Anous stolidus** (Linn.).

No records from Cayenne, but obtained in the West Indies and on the coasts of Brazil.]

[383. **Rhynchops nigra cinerascens** Spix.


No records from Cayenne, but obtained on the coasts of Surinam and Brit. Guiana and at the mouth of the Amazon.]

[384. **Larus atricilla** Linn.

No Cayenne records, but obtained on the coasts of Surinam, Brit. Guiana, and North Brazil.]

**Family STERCORARIIDAE.**

[385. **Stercorarius cephus** (Brünn.).
*Gulcaracta cephus* Brünnich, *Orn. Bor.* (1764) p. 36 (occisa in Cimbria ad littus maris germanici, prope praedium Lönborregaard).

*Larus cremadua* Banks, 1773.

No Cayenne records. Atlantic Ocean—Rio de Janeiro.]

**Family PROCELLARIIDAE.**

**Family PUFFINIDAE.**

[386. **Puffinus gravis** (O'Reill.).
*Procellaria gravis* O'Reilly, *Voy. to Greenland*, etc. (1818) p. 140, pl. 12, fig. 1.

No Cayenne records. Faroes and North America to Cape of Good Hope and Falklands.]

[387. **Puffinus puffinus** (Brünn.).

*Procellaria anglorum* Temminck, 1820 (ex Ray, 1713).

No Cayenne records, but Azores to the coast of Brazil.]

* Stercorarius pomarinus* (Temm.), inhabiting the Atlantic Ocean to Damaraland, may also possibly occur on the coast of Cayenne.

† The following species of Procellariidae may perhaps occur on the coast of Cayenne:
1. *Oceanodroma castro* (Harc.)—Atlantic Ocean, Madeira.
2. *Oceanites oceanicus* (Kuhl)—Atlantic Ocean.
4. *Cypseloma grallaria* (Vieill.)—Southern Ocean to Florida.

‡ Of the family Puffini, *Puffinis assimilis* (Gould), which breeds in the Canaries, may possibly occur on the coast of Cayenne.
[588. Puffinus obscurus (Gmel.).


No Cayenne records—Atlantic Ocean and West Indies.]

[589. Puffinus griseus (Gmel.).

* Procellaria grisea Gmelin, Syst. Nat. ed. xiii. i. 1 (1788) p. 564 (ex Cook & Lath., "habit. in hemisphaerio australi, inter 35° et 50°").

No Cayenne records, but generally distributed throughout the seas of both hemispheres.]

[590. Aestrelata haesitata (Kuhl).

* Procellaria haesitata Kuhl, Beitr. (1829) p. 142.

No Cayenne records, but found in the West Indies.]

[591. Aestrelata mollis (Gould).


No Cayenne records—Atlantic Ocean, Madeira.]


[No Cayenne records—Atlantic Ocean—Madeira.]


No Cayenne records—Atlantic Ocean, Madeira.]

[594. Diomedea melanophris Boie.

* Diomedea melanophris Boie in Temminck, Planches colorées (1828) pl. 456 (typ. ex Cap. B. Spei in Mus. d. Pays-Bas).

* No Cayenne records—Atlantic Ocean.]

Family PHALACROCORACIDAE.

[595. Phalacrocorax vigua (Vieill.).


Phalacrocorax brasilius aut. nee Procellaria brasilius Gmel. ?

Cayenne (Buffon, Rothery collection in Mus. Brit.).]

[596. Plotus anhinga Linn.

* Plotus anhinga Linné, Syst. Nat. ed. xii. i. (1766) p. 216 (Maregr., et Briss., hab. "in America australi"—habit. subet. Brasil, or. ex Maregr.).

Cayenne (Brisson, Buffon, Rothery collection in Mus. Brit.).]
Family SULIDAE.

[597. Sula cyanops (Sandev.).


Cayenne (Jelski leg. in _Mus. H. v. B._).]

[598. Sula piscator Linn.


No records from Cayenne, but probably occurring on the Guiana coast.]

[599. Sula leucogaster (Bodd.).


Cayenne (Buffón).]

Family FREGATIDAE.

[600. Fregata aquila (Linn.)

_Pelecanus Aquilus_ Linné, _Syst. Nat._ ed. x. 1 (1758) p. 133 (ex Osb., Brown, Sloane—_“in insula Adscensionis”—ex Osb.).

Cayenne (Buffón).]

Family PHAETHONTIDAE.

[601. Phaethon aethereus Linn.

_Phæthon aethereus_ Linné, _Syst. Nat._ ed. x. 1 (1758) p. 134 (ex Catesb. t. 14, Edw. t. 149, Sloane, Osb.—_“in Pelago inter tropicos._

Cayenne (Buffón).]

Family PALAMEDEIDAE.

[602. Palamedea cornuta Linn.


Cayenne (Brisson in _Mus. Réaumur envoyé de Cayenne par M. Artur, Buffon, Mus. d. Pays-Bas)._]


“[Cayenne]”— _Mus. Brit._

Family PHOENICOPTERTIDAE.

[604. Phoenicopterus ruber (Linn.).


No records from Cayenne, but occurring in the West Indies and at Pará.]
[605. Cairina moschata (Linn.).
Cairina moschata Linné, Syst. Nat. ed. x. 1 (1758) p. 124 (ex Albin. iiii. tab. 97, 98, etc.—hab. “in India”—hab. subst. Brasilia cr.).
No Cayenne records, but known from Surinam (Mus. d. Pays-Bas) and Brazil.]

Sarcidiornis sylvicola H. & R. v. Ihering, As Aves do Brazil (1907) p. 72, no. 227 (ex Lichtenstein, A. carunculata).
Cayenne (Eyton).]

[607. Dendrocygna viduata (Linn.).
Dendrocygna viduata Linné, Syst. Nat. ed. xii. 1 (1766) p. 205 (ex Jucquin—hab. “in Carthagenae lacubus”)
Cayenne (Mus. d. Pays-Bas).]

[608. Dendrocygna discors Scl. & Salv.
Cayenne (Buffon, Vieillot, Mus. d. Pays-Bas, Jelski leg. in Mus. H. v. B.).]

[609. Nettion brasilienise (Gml.)
No Cayenne records, but is found in Brit. Guiana (Whiteley), and in Brazil.]

610. Pecilonetta bahamensis (Linn.).
Cayenne, Market : 1 f ad. No. 351.
“ Iris dusky chestnut, feet olive, dusky at joints, bill dusky slate, light spot at base, cadmium yellow.”
Al. 187 (moulting); cand. 114; cnlm. 45½; tars. 38½ mm.

[611. Querquedula cyanoptera (Vieill.).
Cayenne (Buffon, Lesson, Deplanches leg.—fide Bp.).]

[612. Querquedula discors (Linn.).
Aman discors Linné, Syst. Nat. ed. xii. (1766) p. 205 (ex Brown, Jam. & Catesb. car.—hab. in America septentr.—hab. subst. Carolina ex Catesby).
Cayenne (Buffon).]

[613. Nomonyx dominicus (Linn.).
Cayenne (Buffon, Mus. Brit.).]

* The following species of Anatidae not yet recorded from Cayenne may possibly occur there:
1. Dendrocygna bicolor (Vieill.)—U.S. S. Am., Venezuela, S. Brazil,
614. Podiceps dominicus brachyrhynchus (Chapm.).

615. Aechmophorus major (Bodd.).

ADDITIONS AND CORRECTIONS.

When writing the first part of this article I unfortunately overlooked M. A. Menegaux’s article on the "Birds of Cayenne collected by M. Geay," which appeared in the Bulletin du Muséum d’histoire naturelle, vol. x. 1904, pp. 107–19, 174–80, but has not been noticed in the Ibis, nor in any other ornithological journal as far as I know. My friend Hellmayr having kindly supplied me with a copy of M. Menegaux’s article, I find there are some species mentioned as being collected by M. Geay which are new to my list. Owing to the kindness of my friend, I am now in a position to supplement my list as follows:

616. Vireosylvia chivi (Vieill.).

617. Myiodynastes solitarius (Vieill.).

618. Myiarchus tuberculifer tricolor Pelz.

* Podilymbus polliceps (Linn.), known from the West Indies and from Brazil (Pará), is likely to be found at Cayenne, though not yet recorded from there.

† M. Menegaux’s determination has been verified by Mr. Hellmayr.
619. Todirostrum pictum Salv.


620. Lipaugus simplex (Licht.).


"Camopi et Montagnes du Haut Carseevenne" (Geay leg. in Mus. Paris).

621. Automolus turdinus (Pelz.).


"Camopi et Montagnes du Haut Carseevenne" (Geay leg. in Mus. Paris).

The following species were inadvertently omitted from my list, viz.:

622. Dendroica fusca (Mülll.).

Motacilla fusca P. L. S. Müller, Naturyst. Suppl. (1776) p. 175 (ex Daubent. Pl. Enl. 58, fig. 3—typ. ex "Cayenne").

Motacilla blackburniae Gmelin, 1788.

"Cayenne" (Buffon).

There can be no doubt, I think, that "Le Fignier étranger" of Daubenton, Pl. Enl. 58, f. 3, is the same as Dendroica blackburniae (Gmel.), but the locality Cayenne as given by Buffon has not been confirmed by subsequent authors.

623. Pachysylvia thoracica griseiventris (Berl. & Hart.).


Cayenne (trade skin in Mus. Brit.—fide Hellmayr).

624. Pachysylvia musciapina (Sel. & Salv.).


Cayenne (Sclater collection in Mus. Brit.), also a Cayenne skin in Mus. Strickland in Cambridge (fide Salvin).

625. Brachyspiza capensis (Müll.).


 Emberiza pileata Boddaert, 1783.

Cayenne (Buffon).

626. Piprites chlorion (Cab.).


Cayenne (Mus. Berol.).

* M. Menegaux's determination has been verified by Mr. Hellmayr.
Xiphorhynchus dorsoimmaculatus Chapm.


? Cayenne (Lafresnaye collection in Mus. Boston.)

The Geay collection is also important from a geographical point of view, most of the specimens being labelled as coming from certain localities, whence many of them have not yet been mentioned before. I therefore think it well to give a supplementary list of the localities as illustrated by this collection:

_Turdus fumigatus._
St. Georges d'Oyapock (Geay leg. in Mus. Paris).

_Turdus phaeopygus._
Ouanary (Geay leg. in Mus. Paris).

_Donacobius atricapillus._
St. Georges d'Oyapock (Geay leg. in Mus. Paris).

_Thryothorus coraya._
St. Georges d'Oyapock et Mahury (Geay leg. in Mus. Paris).

_Trogloctyes musculus clausus._
St. Georges d'Oyapock et Mahury (Geay leg. in Mus. Paris—_fide_ Meneg., s.n. striatulus).

_Cylorhis guyanensis._
Oyapock (Geay leg. in Mus. Paris).

_Tachycineta albiventer._
Sinnamary (Geay leg. in Mus. Paris).

_Progne chalybea._
Mahury (Geay leg. in Mus. Paris).

_Progne tapera._
Oyapock (Geay leg. in Mus. Paris).

_Cyanerpes coeruleus._
Kourou, Sinnamary et Mahury (Geay leg. in Mus. Paris).

_Correa chloropyga._
Camopi et Ilet la Mère (Geay leg. in Mus. Paris).

_Euphonia violacea._
Kourou et Saint Jean du Maroni (Geay leg. in Mus. Paris).

_Tanagra episcopus._
Mahury et Ilet la Mère (Geay leg. in Mus. Paris).
Tanagra palmarum melanoptera.
St. Georges d'Oyapock, Ouanary et Mahury (Geay leg. in Mus. Paris).

Ramphocelus carbo.
St. Georges d'Oyapock, Sinnamary et Macouria (s.n. "R. dimidiatus") (Geay leg. in Mus. Paris).

Tachyphonus surinamensis.
Rivière Lunier et Camopi (Geay leg. in Mus. Paris).

Arremom sileus.
St. Georges d'Oyapock (Geay leg. in Mus. Paris).

Saltator maximus.
Rivière Lunier (Geay leg. in Mus. Paris).

Pitlylus grossus.
Maroni (Geay leg. in Mus. Paris).

Sporophila minuta.
Bas Mahury, bords et savanes du Sinnamary (Geay leg. in Mus. Paris)

Sporophila americana.
St. Georges d'Oyapock (Geay leg. in Mus. Paris).

Volatinia jacarina splendens.
Guyane française (Geay leg. in Mus. Paris).

Xanthornus viridis.
St. Georges d'Oyapock et Camopi (Geay leg. in Mus. Paris).

Cacicus cela.
St. Georges d'Oyapock, Ouanary et Sinnamary (Geay leg. in Mus. Paris).

Leistes militaris.
Bas Mahury (Geay leg. in Mus. Paris).

Fluvicola pica.
Pointe de Macouria (Geay leg. in Mus. Paris).

Tyrannus melancholicus.
Ouanary, Mahury, Sinnamary (Geay leg. in Mus. Paris).

Pitangus sulphuratus.
Ouanary et Mana (Geay leg. in Mus. Paris).

Myiozetetes cayanensis.
Mahury (Geay leg. in Mus. Paris).

Myiarchus ferox.
St. Georges d'Oyapock, Mahury, Ilet de la Mère (Geay leg. in Mus. Paris).
Myiothrix barbatus.
St. Georges d'Oyapock and St. Jean du Maroni (Geay leg. in Mus. Paris—fide Meneg., s.n. sulphureipygias).

Rynchocyclus poliocephalus sclateri.
Cayenne (Geay leg. in Mus. Paris).

Todirostrum cinereum.
Mahury (Geay leg. in Mus. Paris).

Todirostrum maculatum.
St. Georges d'Oyapock (Geay leg. in Mus. Paris—fide Meneg., s.n. signatum).

Colopterus galeatus.
Saint Jean du Maroni (Geay leg. in Mus. Paris).

Elaeaena furcogaster.
St. Georges d'Oyapock (Geay leg. in Mus. Paris—fide Meneg., s.n. pagana).

Ptychomyias murina incoata.
Mahury (Geay leg. in Mus. Paris—fide Meneg., s.n. M semifascia).

Tyrannus gracilipes.
Mahury (Geay leg. in Mus. Paris).

Tyrannus elatus.
Mahury (Geay leg. in Mus. Paris).

Mionectes oleagineus.
Mahury (Geay leg. in Mus. Paris).

Pipra aurrola.
Saint-Georges, Ouanary et Mahury (Geay leg. in Mus. Paris).

Pipra erythrocephala.
Mahury (Geay leg. in Mus. Paris—fide Meneg., s.n. auricapilla).

Pipra leucocilla.
Camopi, Mahury, monts d'Oyack (Geay leg. in Mus. Paris).

Chiromachaeis manacus.
St. Georges d'Oyapock et Maroni (Geay leg. in Mus. Paris—fide Meneg., s.n. manacus et gutturoso).

Tityra semifasciata.
Rivière Carsevenne (Geay leg. in Mus. Paris).

Lathria cinera.
Rivière Lunier et Camopi (Geay leg. in Mus. Paris).

Phoenicopercus carnifer.
Rivière Carsevenne (Geay leg. in Mus. Paris).
Rupicola rupicola.

Onanary (Geay leg. in Mus. Paris).

Querula purpurata.

Camopi (Geay leg. in Mus. Paris).

Calcifrons calicus.

Camopi et rivière Lunier (Geay leg. in Mus. Paris).

Synallaxis albescens albigularis.

Mahury (Geay leg. in Mus. Paris).

Synallaxis gujanensis.

St. Georges d'Oyapock (Geay leg. in Mus. Paris).

Philydor erythrocerus.

Camopi (Geay leg. in Mus. Paris).

Glyphorhynchus cuneatus.

St. Georges d'Oyapock, Mahury et rivière Lunier (Geay leg. in Mus. Paris).

Dendrocinia guttatoide sororia.

Onanary (Geay leg. in Mus. Paris).

Dendrocinia pardalotus.

Rivière Lunier et Camopi (Geay leg. in Mus. Paris—fide Meneg., s.n. pardalotus et nana).

Dendrocinia fuliginosa.

St. Georges d'Oyapock (Geay leg. in Mus. Paris—fide Meneg., s.n. tertia).

Thamnophilus naevius.

Onanary et Mahury (Geay leg. in Mus. Paris).

Thamnophilus amazonicus.

St. Georges d'Oyapock et Onanary (Geay leg. in Mus. Paris—fide Meneg., s.n. ambiguus).

Thamnophilus canadensis.

Sinnanary et Mana (Geay leg. in Mus. Paris—fide Meneg., s.n. cirratus)

Thamnophilus dilatatus.

St. Georges d'Oyapock, Onanary, Mahury, Mana (Geay leg. in Mus. Paris).

Thamnomanes glaucus.

St. Jean du Maroni et rivière Lunier (Geay leg. in Mus. Paris).

Myrmotherula axillaris.

Onanary et St. Georges d'Oyapock (Geay leg. in Mus. Paris).

Formicivora grisea.

Mahury, ? (Geay leg. in Mus. Paris).
Sclateria naevia.
St. Georges d'Oyapock (Geay leg. in Mus. Paris).

Hypocnemis cantator.
Camopi, Ouanary, et St. Jean du Maroni (Geay leg. in Mus. Paris).

Hypocnemis melanopogon.
Camopi (Geay leg. in Mus. Paris).

Perenostola rufa.
St. Georges d'Oyapock, Camopi, Mahury, Ouanary (Geay leg. in Mus. Paris—fide Meneg., s.n. funebris).

Pithys albifrons.
Camopi (Geay leg. in Mus. Paris).

Anoplops rugula.
Camopi (Geay leg. in Mus. Paris).

Grallaria varia.
Rivière Lunier (Geay leg. in Mus. Paris).

Grallaria breccicauda.
Camopi (Geay leg. in Mus. Paris).

Grallaria macularia.
Camopi (Geay leg. in Mus. Paris).

In another article on the "Birds of French Guiana," just published by M. A. Menegans (Bulletin du Mus. d'Hist. nat. 1907, pp. 493-99, 1908, pp. 8-13 *), I find the following species to be noteworthy:

Basileuterus mesoleucus—"un spécimen."
Vireosylvia chlori—"trois spécimens."
Vireolanius leucotis (= l. chlorogaster)—"un spécimen."
Lamprospiza melanoleuca—1 ♂ ad., 1 ♂ juv.

M. Menegans states that the type of this species in the Paris Museum, described by M. Vieillot, had been presented by the Empress Joséphine.

Sporophila castaneicentris—5 ♂ ♂ (1 juv.).
Hylorchis saphirina—3 ♂ ♂ ad., 5 juv., 13 ♀ ♀.

Also Mr. Hellmayr has kindly communicated to me a list of species received by the Munich Museum directly from St. Jean du Maroni, viz.:

Sporophila castaneicentris. Formicicora consobrina microsticta.
Platyrinchus saturatus. Herpsilochmus sicturus, ♂ ♀.
Todirostrum pictum. Hypocnemis naevia.
Ornithion inermis. Cercomacra nigrescens.
Scotothorus amazonum wallacei.

* The article relates to the birds sent to the Muséum d'Histoire naturelle at Paris by the Governor M. Rey.
At last I have found it necessary to make some corrections, most of them having been suggested to me by Mr. Hellmayr.

1. Hellmayr tells me that *Pachysyelia hypoxantha* is not likely to occur in Cayenne, the so-called "Guiana specimen" in the British Museum being really of the well-known Orinoco make, and being referable to *P. aurantiifrons saturata* Hellm.

2. No. 19. As the probable habitat for *Malacocotus lewotis* Swain., "Upper Amazons" should be accepted instead of Cayenne.

3. No. 40, *Euphonia cayana*, should stand as:

   **Euphonia cayennensis** (Gml.).


   Hellmayr, in *Nor. Zool.* xiii. (1906) p. 357, has pointed out that *Tanagra cayana* Linné, p. 315, is the base for *Calospiza cayana* (Lin.), and that *Tanagra cayana* Linné, p. 316, is preoccupied by *T. cayana* of p. 315.

   4. The author for *Serinopsis accensis chapmanii* is Ridgway, not Allen.

   5. *Sporophila mesya* (Vieill.) is apparently the same as *Sporophila americana* (Gml.)! Cf. Hellmayr, *Vrbh. zool.-bot. Ges. Wien* 1904. p. 532; but in the Museum Heineanum both are mentioned as being represented by Cayenne specimens in that collection.

6. No. 84, *Emberizoides macrourus* (Gml.) should stand as:

   **Emberizoides herbicola sphenurus** (Vieill.).


   *Fringilla macroura* Gmelin, 1788 nec Pallas 1764.

   *Fringilla macroura* Gmelin, 1788, is preoccupied by *F. macroura* Pallas in *Vroeg's Cat.*, 1764.

7. No. 37, *Euphonia chlorotica* (Linn.) should stand as:

   **Euphonia aurea** (Pallas).

   *Parus aureus* Pallas in *Vroeg, Cat. rais. d'Oiseaux Adumbrat.*, (1764) no. 175 (typ. ex Surinam).

   *Tanagra chlorotica* Linné, 1766.

8. No. 168, *Scototherus igniceps* (Scl.) should stand as:

   **Scototherus chrysocephalus** (Pelz.).


   *Heteropelma igniceps* Schater, 1871.


9. No. 190, *Xipholena pompadora* (Linn.), should stand as:

   **Xipholena punicea** (Pall.).

   *Turdus puniceus* Pallas in *Vroeg, Cat. rais. d'Oiseaux Adumbrat.*, (1764) no. 99 (descr. orig.?, cit. Edwards, t. 341—typ. ex Surinam? ("Zuyld America").

   *Amelia pompadora* Linné, 1766.

10. No. 203. The typical habitat for *Anabates insuscatus* Scl. should be "the Peruvian Amazons," not Barra do Rio Negro.
11. No. 269, Cercomera napensis Sel. should stand as:
Cercomera cinerascens (Sol.).


SUMMARY.

To the 626* species admitted as occurring in French Guiana we may add about 149 which, although not yet recorded from that colony, are likely to be found there. We are therefore justified in computing the number of species inhabiting that country to be about 766.

Of the 626 species enumerated in my list about 23 are somewhat doubtful, viz.:

Dendroica fusca
Setophaga ruticilla
Euphonia rufiventris
Tanagrella iridina
Calospiza brasilensis
Tanagra ornata
Piranga saira
Paroaria nigrogenys
Leistes superciliaris
Myiochanes cinereus
Heterocerus luteocophilus
Cephalopterus ornatus
Threnetes leucurus
Chloroperes rubiginosus
Trogon aurantius
Brotogeris devillei

There are 50 species enumerated in my list which, although not yet recorded from Cayenne, being species of vast distribution, are surely to be met there, viz.:

Bubo magellanicus
Glaucidium brasilianum phalaenoides
Catharista atratus brasiliensis
Spizaetus tyrannus
Buteo albicaudatus
Antenor unicinctus
Gampsonyx swainsoui
Elanus leuconurus
Hypholocichis fuscocereus
Hypholocichis aurantius
Pandion haliaetus carolinensis
Mitta mitu
Gallinula galeata
Haematopus palliatus
Aegialitis collaris
Himantopus mexicanus
Numenius borealis
Limosa Hudsonica
Macrorhamphus griseus
Mieropalaena himantopus
Catioptrophorus semifalcata
Pavoncella pugnax
Tringites subruficollis
Calidris alba
Pisobia maculata

Urocromia latavica
Urocromia hueti
Leucoternes lacernulata
Eupsychotrix sonnini
Plegadis guarauna
Chauna cristata
Aechmophorus major

I have deducted No. 73, Sporophila mixya (Vieill.), this being probably = No. 78, S. americana (Gmhl.).
If we relegate the species of the last two categories \((23 + 50)\) to a hypothetical list, then we have at least

\[
626 \text{ less } 73 = 553 \text{ certain species}
\]

which are known to inhabit French Guiana.

The specimens collected by Mr. Cherrie are referable to 254 species, this being not quite half the number of the known Cayenne species.

The following species and conspecifics are peculiar to French Guiana as far as we know:

1. *Heterocercus luteocephalus*—of doubtful occurrence in Cayenne.
2. *Lipaugus immundus*.
3. *Automolus obscurus*.
4. *Hylexetastes perrati*—replaced by a nearly allied form in the Madeira district (\textit{fide} Hellmayr in litt.).
5. *Xiphophygnchus darsoinmaculatus*—of doubtful occurrence in Cayenne.
6. *Terenara claupteryx*—replaced in Surinam and British Guiana by the nearly allied *T. spodiopila*.
7. *Formicicora consobrina microsticta*—replaced by nearly allied forms in Brazil, etc.
8. *Myrmelastes melanotarax*.
9. *Sericornis nigrescens*.
10. *Thoenetes antoniae*.
11. *Phaethornis malarius*.

The following species are apparently peculiar to Cayenne and Surinam:

1. *Todirostrum femisfrons penardi*.
3. *Pachyramphus surinamensis*.
5. *Picumnus minutissimus*.

The following species are perhaps peculiar to the three Guianas—viz. Cayenne, Surinam and Brit. Guiana:

1. *Pachysylvia luteifrond*.
2. *Microcercus bamba*.
4. *Calospiza garola*.
5. *Todirostrum pictum*.
7. *Isoloveira fusca*.
8. *Xiphophygnchus procurvides*.
10. Myrmothela gutturalis — replaced by nearly allied forms in the neighbouring country.
11. Myrmothela cinereiventris
13. Formicarius crissalis
14. Giraltaria macularia
15. Chrysoptilus punctigula
17. Psittacula passerina — replaced by nearly allied forms in the neighbouring country.
18. Amazona dufresneana.

Some species seem to be peculiar to Cayenne and Lower Amazonia, viz.:

Polioptila livida — replaced in Brit. Guiana by P. l. innotata.
Calospiza eirascens.
Empidochlæus fuscatus fuscus.
Pyriglena leucotona.

Two species are perhaps peculiar to Cayenne, Surinam and Lower Amazonia, viz.:

? Mimus gileus — replaced in Brit. Guiana by M. g. columbianus?
Lamprospiza melanoleuca.

Thirteen species or conspecies are apparently peculiar to the three Guianas and Lower Amazonia, viz.:

Euphonia cayennensis.
Calospiza mexicana — replaced by nearly allied forms in the neighbouring countries.
Tanagra episcopus
Pitylus erythromelas.
Pitylus canadensis.
Cassicus haemorrhous
Todirostrum maculatum
Elaenia gaimardi guianensis.
Haematoderaus military.
Sclateria nucia.
Arceola recurvirostris.
Pteroglossus inscriptus.
Selenidera mattereri.
Penelope marail.

My best thanks are due to Mr. C. Hellmayr, Dr. E. Hartert, and M. Menegaux for much useful information about the birds of Cayenne.

In a future article I hope to be able to say some more about the geographical distribution of the Cayenne birds, and to give a summary of the literature referring to them.
NEW THYRIDIDAE IN THE TRING MUSEUM.

By W. WARREN, M.A., F.E.S.

1. *Addaea castaneata* spec. nov.

*Forewing:* with basal area, a broad median fascia, and the whole marginal area deep chestnut-brown, with slightly darker transverse striae especially along costa; a violet purplish tinge along submedian interspace; the median fascia is slightly oblique, narrow at costa, swollen a little above the median vein and bulged below it; on each side of it is a whitish oblique band, the inner one narrow and the outer wide, with some grey strigae in their centre; fringe brown, blackish at apex and anal angle.

*Hindwing:* similar; in the marginal brown area there appears a narrow submarginal band, which is slightly visible on forewing as well; fringe blackish towards apex only.

Underside similar, the contrast greater between the pale and dark areas.

Head, thorax, and abdomen all brown.

Expanse of wings: 20 mm.

2 ♂♀♀ from Milne Bay, British New Guinea, January and February 1899 (Meek).

Allied to both *polyphoralis* Wlk. and *pusilla* Butler, but entirely distinct from either.


In *Nov. Zool.* vi. p. 315 (1899) I suggested that my *B. angustifascia* ♀ from Amboina was the same species as *B. multifenestrata* ♂ Warr. from Humboldt Bay, New Guinea. This identification was premature. For though *angustifascia* occurs commonly in New Guinea, also in the Kei Islands and the Louisiades, yet a good series of both sexes shows that its real ♂ is much more like the ♀ than *multifenestrata*. The sexes agree in having the apical area of forewing filled up with dark fuscons, as in Pagenstecher's *nitida*; but in place of the *numerous* whitish hyaline spaces which appear in *multifenestrata*, the ♂ of *angustifascia* has normally four square white spots in forewing and two in the hindwing; the two most prominent are placed, in the forewing, one above the other on each side of vein 2 between the two branches of the postmedian fascia, the other two being on the insides of the inner branch, but the upper one of the latter pair is very small and often obsolete; in the hindwing the two spots are always above vein 2, one on each side of the inner branch of fascia. In *multifenestrata* ♂ the apex of forewing is of the ground colour, and there are some irregular black spots before outer margin above the middle; at present no ♀ of this form has appeared, though an additional ♀ from the Kunusi River has been sent, exactly like the original 2 ♂♀♀ from Humboldt Bay.

3. *Banisia funesta* spec. nov.

*Forewing:* glossy blackish fuscons with a slight olive tinge; the bands, which are slightly darker than the rest of wing, are placed almost exactly as in *B. angustifascia* Warr.
Hindwing: the same.

Underside pale pearl-grey, with the reticulations olive-fuscous; the costal and apical areas of forewing are usually browner.

Head, thorax, and abdomen all blackish, like wings.

Expanse of wings: ♂ 32 mm.; ♀ 36 mm.

2 ♂ ♀ from Biagi, Mambaré River, British New Guinea, 5,000 feet, April 1906 (A. S. Meek).

Distinguished from all the forms whose ♂ ♀ have hyaline spots or patches in the wings by the ♂ being as densely clothed as the ♀ ♀.

4. Banisia illustrata spec. nov.

Forewing: semi-transparent ochreous, the veins and reticulations rufous; the costa broadly, inner margin below vein 1, and nearly the basal half of wing chocolate-brown; a slight oval pale space on submedian interval within the brown area; from the costal streak beyond middle two irregular teeth give rise to brown lines; that from the outer tooth running to below middle of outer margin and above vein 5 emitting a spur to meet one from the inner tooth; from their junction a brown line runs to an oblong brown blotch at anal angle; from the inner tooth another line runs to a similar blotch at two-thirds of inner margin; fringe ochreous, chequered with brown.

Hindwing: with three narrow interrupted and ramifying brown bands, the second ending in a large blotch beyond middle of inner margin, the third forking to anal angle and outer margin; apical area brown to middle of outer margin.

Underside much paler; costa of forewing pale chocolate-brown; the antemedian and postmedian fasciae of forewing in their lower halves, and the costal streaks of hindwing rich black-brown.

Head, thorax, and abdomen all chocolate-brown.

Expanse of wings: 35 mm.

1 ♀ from Mount Tahan, Malay Peninsula (Waterstradt).

5. Banisia lepida spec. nov.

Forewing: shining whitish ochreous, crossed by pale olive-brown bands; the basal vertical, with straight outer edge; antemedian vertical, narrow at costa and swollen below; postmedian forked narrowly at costa, then much swollen, forked again below middle, the inner arm broad, running to two-thirds of inner margin, with a slight angle inwardly on median vein and outwardly on vein 2, the outer arm outcurved and much narrowed, sometimes interrupted, ending in a triangular rufous blotch, the sides of which are at anal angle and end of vein 2; a narrow subapical brown line from costa to end of vein 4, sometimes, but rarely, forming a fork at costa with the preceding costal blotch; the whole faintly strigulated; fringe brown.

Hindwing: suffused with pale rufous, the costal area remaining pale ochreous; median and postmedian double lines rising each from a point on vein 6, sometimes confluent laterally; a single brown subapical line.

Underside pale fulvous, with the lines and bands deeper fulvous.

Head, thorax, and abdomen shining pale ochreous; palpi and forelegs fulvous.

Expanse of wings: 33 to 44 mm.

1 ♂, Waterfall Valley, Penang, July 1898 (Curtis); 3 ♂ ♀, Pura, October 1891 (Doherty); 1 ♂, Borneo; 1 ♂, Lombok, June 1896 (Everett); 1 ♂, Upper Palembang.
district, Sumatra (Voelcker); 1 ♂, Mindoro lowlands, November 1895 to January 1896 (Whitehead); and 1 ♂ from Tanah Massa, Batoe Islands, September 1896 (Kanebrider) type.

Paler and generally smaller than B. taeniata, described below, from which it may be distinguished not only by the shape of the bands on forewing, but by the subapical line on both wings. ？ not known. As is only natural in an island species, the examples vary much in size (and slightly in markings) according to locality, the specimen from Borneo being smallest, and those from Sumatra and Mindoro the largest.

6. Banisia ocellipennis spec. nov.

**Forewing:** semi-transparent ochreous, the basal two-thirds suffused with dull red-brown except an erect oval patch reaching from cell above the origin of vein 2 to submedian vein; the edge of the brown area runs from four-fifths of inner margin to three-fourths of costa, forming three sinuses, separated by projecting teeth on veins 2 and 5 produced as brown streaks to outer margin; the brown colouring extends narrowly along costa to apex subtending a triangle before apex, from which a red line runs to the streak at end of vein 4, forming there another small triangle; from the middle of the streak along vein 4 a vertical streak falls to the end of the streak on vein 2; the marginal area is thus cut up into five irregular patches, reticulated so as to present the appearance of an aggregation of irregular cells; the inner margin below vein 1 also shows some pale red-centred cells; fringe (worn) brownish.

**Hindwing:** ochreous, cut up by reddish streaks into irregular roundish blotches of cells, and crossed at middle by an irregular brown band; veins, as in forewing, finely red.

Underside the same; the hindwing altogether paler.

Thorax and abdomen red-brown; head and shoulders ochreous mixed with brown.

**Expanse of wings:** 40 mm.

3 ♀ ♂ from Lower Burma.

Allied to ferrofusa Hmps. and illustrata Warr. The outer margin of both wings is strongly bulged below middle, and the apex of forewing acute.

7. Banisia ramifera ab. conformis nov.

In the type form of ramifera Warr, the coloration is uniform in both sexes, the bands and markings being only a little darker than the ground; the aberration conformis mimics to a certain extent B. lateralis Warr., having black blotches in both branches of the outer fascia of forewing on each side of vein 3, and in the hind-wing on each side of vein 2; the difference in the lines will always distinguish them, these being curved and sinuous in ramifera, vertical and angular in lateralis; also the dorsum in the former is dark fuscous, without dots, in the latter pale ochreous and with two rows of dark dots.

1 ♂ from Kumusi River, North-East British New Guinea, low elevation, June 1907 (Meek).

8. Banisia taeniata spec. nov.

**Forewing:** greyish-ochreous with a pink tinge, paler along costal half, more rufous along inner margin; varied with fine striae and crossed by concise chestnut-
brown bands with somewhat ragged edges; two near base, the inner one obscure; an antemedian bent outwards in cell; a postmedian, broad and forked at costa, sharply angled outwards on vein 5, then incurved; a narrower streak, also widely forked at costa, from before apex to outer margin at vein 4; two short bands at anal angle, laterally confluent, becoming pointed on vein 4; the inner sometimes united by a dark line with the angle of postmedian band; fringe dark chestnut.

**Hindwing**: with traces of four bands, less defined than those on forewing, narrow at costa, diffusely broadening out below.

**Underside**: paler with partial fulvous suffusion, the bands bright fulvous; those at anal angle much reduced.

**Head, thorax, and abdomen** like ground colour of wings.

**Expanse of wings**: 44 mm.

5 ♂ from the Khasias (type); 1 ♂ Sikkim 1889 (Pilcher).

9. **Bania tetragonata** Wlk. subsp. ordinaria Warr.

These are undoubtedly local forms of one species: typical *ordinaria* from Australia are on the average the smallest of all the forms, except those from Ambon, which are equally small; *tetragonata* from Borneo, the Malay Peninsula, and India the largest. The examples from New Guinea and the Louisiade Islands are larger than the Australian; while those from the islands of the Solomon group come next in size to *tetragonata*. A noticeable point of difference is that in the ab. *hypenata* the black dash in the Solomon Islands examples is always below vein 2, in all the other forms above it.

10. **Beguma radiata** spec. nov.

**Forewing**: fulvous brown, with broad, abbreviated, slightly glossy, pale ochreous bands from costa, each with the centre fulvous, the darker ground colour forming long wedge-shaped bands between them; three of these pale bands, in the basal half of wing, are somewhat oblique outwards, the two beyond the middle oblique inwards, especially the outermost, which rises from costa before apex and ends in midwing at vein 4; the four others are indistinct below submedian vein, the dark ground colour in the lower middle of wing becoming blackish-brown; all the veins in submarginal area are marked by pale fulvous ochreous rays, that on vein 6 being least conspicuous, those on 3 and 4 forming the ends of a broader curved streak from three-fourths of inner margin; fringe fulvous.

**Hindwing**: with a pale antemedian band, a band from middle of costa widening downwards and forking below middle, one branch running to anal angle but bifurcating along vein 2, the other bifurcating to outer margin along veins 3 and 4; vein 5 also pale-rayed; the apex with a semi-elliptical pale costal blotch; fringe fulvous.

**Underside**: like upper, but the pale spaces emphasised.

**Head, thorax, abdomen, and legs** all fulvous.

**Expanse of wings**: 39 mm.

1 ♂ from Luebo, Kassai River (P. Landbeck).

I refer this species to *Beguma* for the present: the type of the genus, *B. constellata* from India (still unique), is a ♂ with strongly lamellate antennae; the ♂ of the new species has bipectinate antennae, but the pectinations are short and thickened at their apex, like developed serrations; the forehead is strongly bulged; both wings with well-rounded angles and outer margins.
11. Belonoptera arachnidia spec. nov.

Forewing: pale grey, thickly covered with minute irregular darker reticulations; the lines and shading red-brown; basal fourth rather darker, edged by a very irregular curved line, followed by an equally irregular median line; from nearly two-thirds of costa an oblique thick line forked at costa runs to middle of inner margin; space beyond shaded with red-brown, narrowly above, but reaching outer margin at vein 2, forming roughly an A-shaped mark; a black subcostal streak in outer fourth running out into apex, from the base of which a red-brown streak forked at origin runs to outer margin at vein 4; all the paler intervals filled with fine cobweb-like markings; fringe dark brown with paler tips.

Hindwing: with a long white streak, narrow at middle, along the discocellular; the space beyond it rather deeper suffused; all the intervals filled with cobweb-like irregular markings; the apex and some streaks before it darker.

Underside like upper, but the ground colour paler and the markings clearer.

Head, shoulders, and basal half of patagia reddish brown; tips of patagia, the thorax, and two basal segments of abdomen pale grey; rest of dorsum brownish red.

Expanse of wings: 82 mm.
1 ♀ from La Oroya, R. Inambari, S.E. Peru, 3100 ft., October 1904, wet season (Ockenden).

12. Brixia australiae spec. nov.

Forewing: pale greyish fawn-colour in basal half, reddish fawn in the outer; basal area traversed by two faint brownish bands, the paler intervals forming bands of the same width each with a dark line through it; a similar pale band is visible at two-thirds of inner margin, hardly reaching midwing; a large whitish triangular costal blotch before apex, with the veins and striae across it fawn-colour; a faint pinkish mark at apex before fringe, and a black spot on margin above vein 5; fringe with basal half dark leaden brown, apical paler.

Hindwing: with basal area pale lilac-grey, with darker striations; rest of wing reddish fawn, showing traces of a paler dark-centred postmedian band; fringe wholly fawn-coloured.

Underside with the dark and pale bands more clearly defined, the dark markings deeper brown, and the striae more conspicuous; black spot of forewing large, the apical mark above it white.

Head and shoulders deep chestnut; thorax and abdomen pale lilac-grey, the anal half of dorsum browner, the anal extremity fulvous.

Expanse of wings: 28 mm.
2 ♂♀ from Yeppoon, October 1890 (Barnard coll.).

13. Brixia comparalis spec. nov.

Forewing: very much like disparalis Hamp. from Ceylon, but the subapical costal blotch is broadly triangular, not attenuated, marked with two small brown dots on the costal edge, which is tinged with yellow, the white apical portion with faint brownish reticulation; a slight white streak before fringe from costa to vein 6; basal and outer areas paler fawn-colour than the central, which is broadly olive-brown on costa, including the space between the two white marks; narrowing off to a diffuse smoky brown oblique band at middle of inner margin; a black spot
before fringe above vein 5; a few dark dots and striae in the basal half; fringe concolorons.

^Hindwing^: with the smoky brown band continued across wing to inner margin above anal angle, broader and with a darker central stripe; rest of wing pale ochreous fawn; the fringe rather deeper fawn.

Underside much duller; forewing with a purplish grey flush beyond middle; striae more prominent, especially in hindwing, which shows no trace of the dark band.

Head and shoulders deep chestnut-brown; thorax and abdomen pale greyish ochreous; base of anal segment with a brown blotch.

Expanse of wings: 26 mm.
2♂♂ from the Khasia Hills.

14. **Dohertya submicans** spec. nov.

Differes from *D. astradora* Meyr, by the absence of the paler intervals between the dark bands, the whole surface of both wings being leaden fuscous.

^Forewing^: crossed by four dark lines, subbasal, antemedian, postmedian, and outer, and a short submarginal line to middle of outer margin; all the intervals crossed by parallel lines of dots; at end of cell a dull dark cloud containing some brown scales, as if burnt; fringe fuscous.

^Hindwing^: with the outer lines only.

Underside of forewing with the markings as in *astradora*, but the brown ones more developed; a bed of black and metallic scales in cell, and a streak of black scales along subcostal vein beyond cell; hindwing shining whitish, crossed by rows of sharp black striae between the veins, here and there marked with brown.

Head, thorax, and abdomen fuscous.

Expanse of wings: 16 mm.
2♂♂ from Dorei, Dutch New Guinea, June 1897 (W. Doherty).

15. **Draconia accipitrina** spec. nov.

^Forewing^: whitish, the veins and reticulations pale brown, the bands dark brown; basal third suffused with brown; a broad oblique fascia from middle of inner margin and a conical blotch from anal angle brown, the two uniting above vein 5 and reaching the costa as a narrow band at two-thirds; the whitish areas, which are semihyaline, are therefore a narrow oblique band between basal patch and central fascia reaching as far as subcostal vein, and a broader one beyond the fascia reaching vein 5; there are also three roundish hyaline spots beyond the joint fasciae between veins 4 and 7, edged outwardly by black spots which are continued towards costa; apex whitish, traversed by a brown streak along vein 8, which joins at right angles a brown costal spot, from which a brown line, interrupted by the veins, runs to near outer margin on vein 4; fringe dark brown, with pale tips and deeper brown, beyond the veins.

^Hindwing^: with the base only narrowly brown; the double fascia as in forewing, but its central area narrower; the apical area with more numerous hyaline spots, traversed by a curved brown streak from three-fourths of costa to a brownish cloud at middle of outer margin; submarginal line more interrupted; the apex not white.

Underside with the basal areas and the fasciae dark brown and distinct; the rest of both wings pale fawn-colour, the veins not brown.
Head, thorax, abdomen, and legs dark brown; dorsum with a fine black line.

Expanse of wings: 78 mm.

1 ♂ from Bogota, Colombia.

The apex of both wings is produced and the outer margin crenulate, and sinuosity only, not elbowed or angled at middle.

16. Draconia albiapicata spec. nov.

Forewing: ferruginous ochreous, the lines and reticulations darker ferruginous; a dark brown costal streak running out into apex, the extreme edge paler in outer third; some brown streaks in basal half of cell, with a ferruginous blotch at one-third; an oblique ferruginous line just beyond middle, forked at costa and inner margin, the lower fork filled up with ferruginous; the upper fork emits a curved line towards a large oval ferruginous blotch lying between veins 2 and 3, above a bullet-shaped blotch at anal angle; a brown line from the costal-streak at five-sixths runs down towards anal angle parallel to outer margin; the intervening spaces covered with fine interlacing lines; the outer margin deeper ferruginous; apex whitish; fringe brown.

Hindwing: with a curved ferruginous line at one-third, followed by a small white spot at lower end of discocellular; some irregular coalescent dark ferruginous blotches below costa before apex, which is whitish; a round ferruginous blotch between veins 2 and 3, above a streak from anal angle; outer margin above middle deeper ferruginous.

Underside of the same, but the dark markings better defined; the apex of both wings white; the white cell-mark visible on forewing also.

Head, palpi, shoulders, and a dorsal streak along abdomen deep ferruginous; thorax, patagia, and rest of abdomen paler varied with brighter.

Expanse of wings: 65 mm.

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

Resembling B. frondicula Guen., but the outer margin in both wings excavated in upper half and crenulate in lower.

17. Draconia dismutata spec. nov.

Much resembling D. basipleta Warr., Proc. U. S. Nat. Mus. xxix. p. 349, from British Guiana, from which it differs as follows: the brown markings are all paler, more rusty brown; the basal patch of forewing covers quite one-third of the wing instead of only one-fourth; the costal streak is much broader throughout, and the second of the projections depending from it is quite close to apex and not connected by a line with outer margin; vein 2 is not marked with brown. In the hindwing the oblique line from two-thirds of costa to outer margin, which cuts off an equilateral triangle in basipleta, is absent, and is represented by a broad brown streak from shortly before apex, forming a Y with the broad marginal line. In both wings the pale ground colour is tinged with rufous, and the reticulations and veins of hindwing are red.

Expanse of wings: ♂ 40 mm.; ♀ 50 mm.

A pair from Fonte Boa, Upper Amazonas, August 1906 (Klages).

18. Draconia stenoptila spec. nov.

Forewing: brownish ochreous; the bands and reticulations dark brown, the costa irregularly duller brown; inner margin beyond middle dark brown, emitting two
irregular oblique bands, one at middle running to a subquadrate subcostal blotch beyond cell, the second geminate from and from before anal angle, uniting above middle and joining a broad triangular subcostal blotch before apex; the rest of the wing with numerous transverse brown lines that form slight and partial reticulations; fringe brown.

_Hindwing:_ with a broad blackish brown antemedian band, formed by the amalgamation and continuation of the three dark bands of forewing; a dark brown spot at base; rest of wing with fine ramifying brown lines.

_Underside paler, the bands paler; the reticulations and costal streak of forewing quite dull._

_Head, thorax, and abdomen brownish ochreous; palpi and a band on third and fourth segments of abdomen dark brown._

_Expans of wings: 35 mm._

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

_The shoulders and the costal area of forewing are glossy; outer margins of both wings crenulate. Distinguished by the long narrow forewings._

19. **Draconia timida** spec. nov.

_Forewing:_ whitish; the veins and minute reticulations brown; the costal streak and basal third suffused with brown; a postmedian and a submarginal, inwardly oblique, narrow brown band, both swollen at inner margin; a narrow brown marginal shading; fringe pale, chequered with brown beyond the veins.

_Hindwing:_ with the transverse bands all more or less laterally connected.

_Underside paler, with all the markings more distinct, reddish brown._

_Head, thorax, and abdomen brown with white speckling; vertex paler._

_Expans of wings: 22 mm._

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

20. **Dysodia confusata** spec. nov., and **ab olivescens** nov.

_Of the same size and shape as **speculifera** Sepp, but with all the dark markings amplified and the ground colour, whether reddish or tawny, restricted and suffused with a deeper tint: the basal and antemedian curved lines of the forewing are swollen into dark bands; the outer band is broad throughout, its inner margin projecting at middle so as sometimes to touch the antemedian band; in the hindwing the paler areas are still more reduced by the widening of the bands; the hyaline spot is much smaller and figure-of-8-shaped._

_Head, thorax, and abdomen all similarly darkened by the blackish suffusion._

_Expans of wings: ♂ 30—32 mm._

_Three ♂♂ from Zamora, Ecuador, 3000—4000 feet (O. T. Baron)._ Of these, two have the ground colour deep coppery red, the third has it olive tawny; a fourth specimen, from the same locality; an extreme development of the third, must be separated as **ab. olivescens**, the whole of both wings being suffused with dark olive-fuscous, so that the underlying paler areas are obscured, and the hyaline blotch is swollen so as to appear like a large cottage-loaf: head, thorax, and abdomen all olive-fuscous._

21. **Dysodia constellata** spec. nov.

_Forewing:_ pale yellow ochreous, the basal two-thirds suffused with pale olive, obscuring the antemedian band; an oblique dark olive-fuscous band from beyond
middle of inner margin, swelling out towards costa and extending to apex, before which it emits a dark streak to middle of outer margin, followed above vein 2 by a small yellow spot; the marginal area between the fascia and this streak is pale yellow between veins 2 and 5, tinged with olive above and below them, the veins themselves brown with a few neat transverse streaks, thickened into a slight vertical blotch from anal angle; fringe with basal half olive-fuscous, outer half paler beyond the two folds; costa with short pale streaks.

**Hindwing** : with the space below cell-fold and vein 5 yellow, with the veins brown and the transverse markings well developed; costal area suffused with olive; a broad irregular dark central fascia, forked and olive-tinged at anal angle; a small oval hyaline spot in upper end of cell; fringe olive, tipped with yellow below middle.

Underside similar, but the coloration duller.

Head and thorax dull yellow with an olive tinge; dorsum browner, except the anal segment; abdomen beneath pale ochreous like the legs; forelegs and palpi brown.

**Expanse of wings**: 28 mm.

1 ♀ from Zomba, Upper Shire River, 3,000 feet, December 1905 (Dr. P. Rendall).

22. **Dysodia crassa** Wlk., ab. *flavidula* nov.

Like *crassa*, but with the ground colour dull yellowish instead of red.

In both forms the ♀ is rather larger than the ♂ and much darker, the pale ground being almost hidden by fuscos suffusion, which also darkens the head and thorax and to a less degree the abdomen. On the underside the costa and outer band of forewing are olive-green, more conspicuously in the type form than in *flavidula*.

Three ♂ ♀ from Congella, Durban (G. F. Leigh), received with a pair of typical *crassa*.

A preserved larva (of the yellow form) is yellowish grey marbled with black, and with apparently irregular blackish subdorsal blotches; the tubercles beset with short curved spines; head black; front of second segment with a black bar.

23. **Dysodia derufata** spec. nov.

Differs from *speculifera* Sepp in being ochreous, sometimes with a fulvous tinge, without any red suffusion except on abdomen; the reticulations are more minute and regular, taking the form of short transverse streaks between the veins, which are themselves also fuscos; this is especially noticeable in the hindwings, where the dark submarginal curve is quite absent; the hyaline cell-spot of these wings is reduced to two small subcontiguous round spots.

2 ♂ ♀ from Castro, Parana, Brazil.

24. **Dysodia flagrata**

*Vernia flagrata* Wlk. xxxii. p. 827 (1865).

This species is distinct from *speculifera* Sepp; the costa of forewing is dark brown from base to outer band; and this band, instead of being funnel-shaped as in Sepp’s species, forms a subquadrate blotch on costa reaching to vein 5, from the inner angle of which a dark oblique line runs to beyond middle of inner margin, while from its outer angle an irregularly-bent streak runs to anal angle; the cell-spot of hindwing consists of two small hyaline white dots, limited externally by a black central line which is thickened into a blotch above the median vein.
The underside is pale brown with the markings olive-brown; the inner marginal half of hindwing broadly yellowish. In the ♀ the reddish fulvous ground colour is almost hidden by dark fuscous suffusion in both wings.

The species varies in point of size: 2 ♀ ♀ from Ecuador measure 32 mm. in expanse, whereas of four examples from Venezuela one, a ♂, is only 28 mm. and the three ♀ ♀ 26 mm.

25. Dysodia innubila spec. nov.

Differs from D. speculifera Sepp in being deeper, more uniformly copper red; the reticulations therefore are less prominent; the lower half of the postmedian funnel-shaped band of forewing is narrower, and the apical area beyond the oblique submarginal streak broader and darker; the red area between these two runs up to the costal margin, whereas in speculifera the costo-apical area is clouded as far as vein 6. In the hindwing the large hyaline blotch is not only reduced in size, but separated into two small but unequal spots.

Expanse of wings: ♂ 28—30 mm.; ♀ 30 mm.

1 ♂ (type), Charaplaya, Bolivia, 1300 ft., July 1901 (Simons); 1 ♂, Chirimayo, Peru, 1000 ft., July 1901 (Ockenden); 1 ♀, Oconeque, Carabaya, Peru, 7000 ft., July 1904 (Ockenden).

26. Dysodia spissicornis spec. nov.

Forewing: dull reddish fulvous, more or less suffused with olive-fuscous, most densely along costa and inner margin; the reticulations and bands fuscous; basal and antemedian bands narrow, the postmedian broader, projecting outwards above middle, and darkened on submedian interval; costa with four pale marks, one before, the others beyond the middle; fringe brownish, ochreous in the two crenulations above anal angle, and slightly beyond cell.

Hindwing: with numerous darker reticulations, but without distinct lines; inner margin more fulvous, less suffused with olive; cell-spot double, consisting of a small white dot at upper end of discocellular and a slender curved mark at its lower end.

Underside paler, brown with a pink tinge, the markings olive-fuscous; these in the forewing are a narrow antemedian and broad postmedian band, the latter interrupted in the middle, and an apical patch; inner margin of hindwing yellowish.

Head, thorax, abdomen beneath, and legs olive-brown; metathorax and tips of patagia mixed with fulvous; dorsum with a pinky grey sheen, and laterally on anal segments reddish; third segment whitish with a black belt; antennae fulvous brown, with strong fascicles of cilia, which will at once distinguish the species in the ♂.

Expanse of wings: 32 mm.

2 ♂ ♂ from Rio Janeiro.

27. Dysodia thyridina Feld.

This also is an entirely different species from speculifera Sepp. The ground colour is ochreous suffused with brownish fulvous, not orange-red; the dark costal suffusion in both wings ampler; the reticulation more minute, and assuming the form of round pale spots between the veins; the cell-mark of the hindwing is shaped as in oculatana Clem., the two spots being contiguous in the ♀, and
separated in the ♂ (in one ♂ reduced to two small dots) ; it is preceded, not followed, by a dark band.

The underside is pale grey frosted with bluish white, with the darker markings and reticulations olive-fuscous.

Head and thorax dark fuscous; metathorax and patagia redder; the dorsum fuscous varied with reddish, with a dark belt on third segment.

Felder’s type, a ♀, is labelled Guyana; 3 ♂♂ in the Tring Museum come respectively from Zamora, Ecuador, Pozuzo, Peru, and R. Dagna, Colombia.

28. Dysodia subsignata spec. nov.

Diffsers from crassa Wlk., with which it agrees in size and markings, in having a large heart-shaped hyaline blotch on the hindwing; the forewing beneath has the dark outer band terminating in a triangular black-scaled patch reaching from vein 5 to the submedian fold; on the upperside this band is not so wide at costa as in crassa, its outer edge more irregular.

1 ♂, 1 ♀, from Congella, Durian (G. F. Leigh), the ♂ agreeing in colour with the aberr. fuscata of crassa Wlk., and the ♀ with crassa itself.

29. Herdonia miranda spec. nov.

Forewing : pale ochreous, washed in parts with pale brown; costa with base and two double transverse streaks close to it deep green with brown streaks in between; costal edge dotted with dark green; the green streaks continued below cell to inner margin and followed in submedian interspace by transverse green and brown striae; from submedian vein at middle of wing an oblique green band widening outwards runs to below vein 6 near outer margin, where it is narrowed off and blunt, edged on each side by a white line, the white edges connected along submedian fold; from before the anal angle a brownish streak with dark edges runs obliquely to outer margin at vein 6, connecting with a brown apical blotch containing some round white spots; fringe short, pale brownish ochreous.

Hindwing : similar, the green blotch shorter, and becoming brown above median vein.

Underside the same, with all the markings more defined.

Head and palpi cream-colour; patagia very glossy; brownish ochreous; abdomen greyish ochreous; basal segments crossed by tufts of brown and green scales; legs and abdomen beneath ochreous, the femora and tarsi brown.

Expanse of wings : ♂ 35 mm.; ♀ 52 mm.

1 ♂, 1 ♀, from Fonte Boa, Upper Amazons, July 1904 (Klages).

30. Hypolamprus albipunctula spec. nov.

Forewing : dull brownish grey; costal area darker grey, but the costal edge pale ochreous dotted with blackish; numerous dark grey striations forming X-shaped marks in outer half; a broad oblique dark grey band beyond middle running parallel to outer margin, marked by black dashes below vein 2 and on each side of vein 6, followed by a paler fascia of roundish white spots separated by darker marks, the two pale spots above vein 6 being chalk-white, sometimes followed externally by a third beneath the whitish apical spot with a black dot in it; fringe glossy grey.

Hindwing : with the veins and margins brownish grey, the rest of the wing filled with small round white spots between the veins separated by transverse
darker striae; a square black spot at end of cell and an elongate one half-way between it and outer margin.

Underside paler; both wings with numerous dark X-shaped markings; forewing with a pinky whitish apical blotch containing a black spot; streaks of black and yellow metallic scales along upper margin of cell and at its base.

Head and thorax dull grey; the abdomen paler.

Expanse of wings: 24 mm.

1 ♀ from Lower Burma (type); another from Mao, N. Manipur (W. Doherty).

Nearest to H. inductalis Wlk. = peratopis Hmps.n., but duller in appearance distinguished by the whitish hindwings.

31. Hypolamprus inductalis.

_Pyralis inductalis_ Wlk., xxxiv. p. 1525 (1863).
_Hypolamprus peratopis_ Hmps.n., P.Z.S. 1897, p. 615.

Through the kindness of Professor Poulton I have lately been able to examine some of Walker’s types of Thyridiidae in the Oxford Museum. The type of _P. inductalis_ Wlk. from Ceram, notwithstanding its condition, I have identified with _Hypolamprus peratopis_ Hmps.n. from Borneo, Amboina, and Ferguson Island, and my own _subnictitans_ from Penang.

32. Hypolamprus polycyma spec. nov.

Forewing: whitish along costal edge and broadly along inner margin; the rest of the wing and the veins olive-ochreous; the whole surface between the veins covered with grey-brown dappled marks, which in the darker suffusion are more or less hidden; costal edge with four black spots beyond the middle; a white line at base of fringe from anal angle to vein 4, to which point another white line converges from five-sixths of inner margin; fringe olive-ochreous, with a fine black dividing line, and mottled with black in outer half, interrupted by a pale patch between veins 4 and 5; the apex also pale.

Hindwing: with the olive-grey ripplings all parallel to the outer margin; an indefinite pale band before middle with the black cell-spot on its outer edge; a narrow pale line from four-fifths of inner margin to costa before apex, where it is followed by a brown spot, and a similar white line before the fringe, which is waved like the margin, with a waved black dividing line, the inner half ochreous, the outer whitish.

Underside the same, but clearer.

Head, thorax, and abdomen ochreous grey, the thorax and patagia darker.

Expanse of wings: 40 mm.

1 ♀ from Mt. Marapok, Dent Province, British North Borneo.

Forewing with straight costa and acute apex; outer margin very strongly bulged in middle, concave above and strongly oblique below; hindwing with outer margin nearly straight, with only a slight indentation below the produced apex.

33. Hypolamprus subrosealis Leech, ab. rubicunda nov.

The form of this species occurring in the Khasia Hills, for which this name is proposed, is both larger and brighter red than typical examples. Of 13 ♀♀ and 5 ♀♀ from Ceylon, Penang, Borneo, Sumatra, Sumba, and Tambora the
largest ♂ expands only 22 mm., the largest ♀ 25 mm.: while of ♂ ♂ ♂ and ♀ ♀ from the Khasias the ♂ ♂ vary from 22 to 28 mm., and the ♀ ♀ from 30 to 32 mm. The coloration of the ♀ ♀ and of most of the ♂ ♂ is bright brick-red, especially in the hindwings, the costal area of forewings paling off to brownish ochreous. The dorsum, like the hindwings, is bright red.

34. **Hypolamprus semiusta** spec. nov.

*Forewing:* pale brownish ochreous, washed with fulvous along inner margin and in basal area; fulvous antemedian and median fasciae with somewhat darker edges, and becoming more or less obsolete towards costa, where the brown patches indicating fasciae are separated by pale intervals with a brown line at middle; outer half of wing with a few indeterminate brown striae; three patches of black-brown scales running out into the ochreous fringe in upper half of outer margin, the lowest joined by a short fulvous band from costa.

*Hindwing:* wholly suffused with fulvous, and with dark striae, which form indistinct antemedian and median curved bands.

Underside paler, with the dark markings plainer, especially the lower parts of the antemedian and median bands of forewing, which are black-brown.

Head, thorax, and abdomen all fulvous; the fillet and antennae paler.

*Expanse of wings:* ♂ 18 mm.; ♀ 18—24 mm.

1 ♂, 2 ♀ ♀, from Kumusi River, N.E. British New Guinea, August 1907, low elevation (A. S. Meek).

Allied to *H. stylphora* Swinh. from India.

35. **Hypolamprus simplex** spec. nov.

*Forewing:* grey with a pink tinge; the cell and central area pinkish ochreous; costal area paler grey; a few dark dots and striae across basal half, not forming lines; from beyond middle of inner margin an oblique dark grey band of three fine lines runs parallel to outer margin to vein 5, where it becomes obsolete, but appears to curve round to costa; a black apical dot; fringe glossy.

*Hindwing:* pinkish fulvous, with the grey band of forewing continued across the middle, narrowing to inner margin, followed by a pale band with darker central line, and by three submarginal grey lines.

Underside with all the dark markings clearer; upper margin of cell with streaks of black and yellow scales which also fill the base; apical black spot on a pinky blotch.

Head, thorax, and abdomen dull grey, the last pink-tinged.

*Expanse of wings:* 18 mm.

2 ♂♂ from Maymyo, Shan States, June—August 1902 (Hauxwell).

Outer margins of both wings evenly curved.

36. **Hypolamprus squalida** spec. nov.

*Forewing:* pale brownish ochreous with an olive tinge; the basal area dull brown; five darker irregular bands, marked by brownish strigulae; a basal and antemedian straight or slightly curved; a postmedian from three-fourths of costa to two-thirds of inner margin, its lower end vertical, and apparently throwing off a branch from median to costa at middle; a narrow line of dark striae beyond it, and a submarginal double row of striae, the space between them filled up with brown from costa to middle.
Hindwing: with the bands interrupted; one postmedian well marked on inner margin; the whole marginal area olive brownish; at the end of cell a square white spot followed by a subquadrate dark brown one with blackish edges, then a more rounded white one followed by a second brown one; at the anal angle a brownish yellow patch.

Underside the same, the markings somewhat plainer.

Head, thorax, and abdomen brownish ochreous.

Expanse of wings: 36 mm.

1♀ from Lifin, Loyalty Islands.

The only example is considerably worn, but is evidently a distinct species.

37. Hypolamprus stabilis spec. nov.

Forewing: reddish-brown, the same colour as H. angulalis Moore, but browner along costa and at base; the costa with oblique brownish streaks, not dotted ochreous and black; the transverse darker striae mainly vertical; indistinct traces of an antemedian and postmedian band; in the clearer subapical space are four elongate black dots in a vertical line, instead of the single round black dot on a white patch as in angulalis; fringe glossy, dark in basal, yellowish in apical half.

Hindwing: with series of dark transverse striae.

Underside pinker, all the markings much clearer and tinged with brown; fringe pink, with the basal half plumbeous; streaks of velvety black and yellow scales at base of cell and along subcostal vein and vein 8 to apex.

Head, thorax, and abdomen like wings.

Expanse of wings: 39 mm.

1♀ from north side of Choiseul Island, December 1903 (type), and 1♀ from Florida Island, January 1901 (A. S. Meek).

The species is much stouter than angulalis; the wings broader, and with only a very slight projection in middle of outer margins.

38. Hypolamprus vinosata spec. nov.

Forewing: yellowish ochreous, with vinous brown bands and striae; the basal area and inner margin diffusely vinous; at two-thirds an oblique brown fascia, broader towards inner margin, joined at vein 6 by an oblique quadrate patch at middle of costa, the two so forming a Y-shaped mark; an oblique streak from a costal spot before apex to middle of outer margin; the pale spaces with fine brown-red strigulations; fringe ochreous in apical half, brown in lower, with patches of black scales at apex and beyond vein 4.

Hindwing: wholly suffused with deep vinous, with traces of transverse striae and a dark postmedian band; fringe vinous with two patches of black scales at middle.

Underside like upper, but paler.

Head, thorax, and abdomen brown; legs brown with pale joints.

Expanse of wings: 17 mm.

1♂ from Omainasa, Dutch Timor, November—December 1891 (Doherty).

Closely allied to H. stylophorus Swinh.

39. Iza curvistriga spec. nov.

Forewing: greyish fulvous, with the reticulating lines dark brown; two at the middle of costa, with brown between them, form a subquadrate patch, from
the outer lower end of which a curved brown line runs up to apex with a black dash upon it; the cell-fold and space beyond between veins 5 and 6 are compressed, forming a kind of projecting pleat on underside and a corresponding channel above; a dark line from costa to outer margin cuts off an apical triangle; fringe fulvous.

_Hindwing:_ fulvous with numerous brown reticulating lines; the fold along cell present, but less prominent.

_Underside_ rather paler, with the reticulations reproduced; hindwing with abdominal margin ochreous.

_Head, thorax, and dorsum_ deep fulvous; _venter_ and legs paler.

_Expanse of wings: _26 mm._

2 ♀♀ from Aroewarwa Creek, Maroewym Valley, Surinam, June 1905 (Klages).

40. _Iza rufidorsata_ spec. nov.

_Forewing:_ chocolate-brown; the costa reddish; traversed by vertical pale lines; basal and antemedian parallel, slightly oblique inwards; a postmedian slightly bent running into anal angle; a submarginal running from costa to outer margin below middle; between these are more slender and obscure pale lines and slight reticulations; fringe brown.

_Hindwing:_ with antemedian and postmedian lines and traces of finer ones.

_Underside_ like upper: the costa of forewing throughout and of hindwing near base dull yellow.

_Face_ dark brown; _vertex, thorax, and dorsum_ bright orange-red; _abdomen_ beneath and at sides brown.

_Expanse of wings: _22 mm._

1 ♂ from Aroewarwa Creek, Maroewym Valley, Surinam, May 1905 (Klages).

41. _Iza sectilinea_ spec. nov.

_Forewing:_ straw-colour, with the veins and reticulations finely brown; costa with small brown triangles and an oblong mark at three-fourths; a triangular brown space at apex reaching to middle, darker-edged internally, joined between veins 5 and 6 by a straight brown streak from middle of costa; some slight brown suffusion between the reticulating lines at anal angle and between middle of inner margin; fringe brown with deeper mottlings.

_Hindwing:_ the same, but without markings except a slight brown median band containing a round black discal spot; fringe brown.

_Underside_ like upper.

_Head_ and _shoulders_ brown; _thorax_ and _patagia_ and _abdomen_ ochreous, the last with brown rings; _basal segment_ with a pair of black spots, _second segment_ with one in the middle, the three forming the angles of a triangle.

_Expanse of wings: _24 mm._

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

_Wings_ narrow and elongate; _costa_ of _forewing_ depressed at apex; _outer margin_ sinuous.

_Allied to_ _I. gracilis_ _Moeschler._

42. _Iza spureatula_ spec. nov.

_Forewing:_ fawn-colour, with small blackish reticulations; a double series of these just before and beyond middle forms two interrupted bands; _costa_ with small
quadrate black spots, with brown dots in the intervals; some black reticulations at
and below apex along outer margin; fringe fawn colour.

*Hindwing*: with a blackish band at base, and a double row of dark spots across
middle; some black marks at apex.

Underside the same.

Head, thorax, and abdomen fawn colour, the last spotted with black.

Expanse of wings: 19 mm.

1 ♂ from Sapeay, Paraguay, September 1904 (W. Foster).

Somewhat resembling *I. thiastralis* Wlk., but the ground colour is different,
and the underside of forewing shows no metallic scaling.

43. *Letchena extravagan* spec. nov.

*Forewing*: grey-brown, with numerous short dark transverse streaks; costa
paler, reddish brown; in the middle of the wing between subcostal and submedian
veins a ferruginous orange patch, containing several whitish hyaline spots between
the veins, the most prominent being those at the base of the intervals between the
median nervules and one at the outside of the patch between 2 and 3; some smaller
ones on each side of the submedian fold.

*Hindwing*: uniform grey-brown.

Underside similar, but the hindwing with a reddish shade across wing to anal
angle, which is slightly visible on the upper side.

Head, thorax, and abdomen all grey-brown.

Expanse of wings: 34 mm.

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

Allied to *I. myrsinaulis* Wlk.

*Letchenodes* gen. nov.

Differs from *Letchena* Wlk. in having veins 8, 9 of forewings stalked, as in

_Hypolampyas._

_Type*: *Letchenodes minninsalis* Wlk. (*Pyralis*).

44. *Macrogonia lucida* spec. nov.

*Forewing*: pale ochreous, reticulated with orange-red; costal streak brownish
orange; a subquadrate dark brown blotch beyond cell between subcostal vein
and vein 5, darkest below, emitting a short line to join an irregular oblique brown
line from vein 7 to beyond middle of inner margin, which in its turn joins an
outwardly oblique brown line from subcostal at five-sixths to outer margin; rest
of wing occupied by a network of ramifying orange-red streaks; fringe uniformly
and thickly deep brown.

*Hindwing*: with costa pale, unmarked; a dark brown antemedian line from
vein 6 to inner margin, continuing that of forewing; the veins thickly orange-
red and some of the transverse markings tinged with brown; fringe deep brown.

Underside ochreous without the orange-red tuft; the reticulations brown;
an elongate brown blotch from vein 7 to 5 beyond cell; fringe deep brown with the
tips darker.

Head, thorax, and abdomen ochreous tinged and speckled with orange-red;
face and palpi brown; legs ochreous and red, the foretibiae dark brown.

Expanse of wings: ♂ 28 mm.; ♀ 30 mm.

4 ♂, 1 ♀ from Fonte Boa, Upper Amazons, June 1906 (Klages).
45. Microbelia fasciata spec. nov.

Like *M. intimalis* Moore but much larger, the colouring more ochreous. The hindwings contain a dark, often blackish, median fascia from inner margin to vein 6, including the dark cell-mark, which is continued, but less conspicuously, and only ochreous-tinged, to the dark cell-mark of forewing; at the anal angle of hindwing is seen the blackish commencement of an outer fascia; the triangular patch before middle of outer margin of forewing is connected above by a band with two small subapical costal spots, and is often itself clouded with grey. On the underside, which as in *M. uniformis* Warr. is much brighter, the two large costal triangular marks of forewing and the blotch before outer margin are deep brown-black, the other marks being merely brown; in *uniformis* all alike are brown.

Head, thorax, and abdomen ochreous like wings; the face below and fillet whitish.

**Expans of wings:** ♀ 19 mm.; ♂ 22—24 mm.

5 ♀♂, 1 ♀, Milne Bay, British New Guinea, December 1898 (type); 1 ♀, Upper Aroa River, April 1898; 1 ♀, Ferguson Island, December 1895; 1 ♀, Kiriwini, April 1896; 1 ♀, St. Aignan, November 1897; 1 ♀, Goodenough Island, December 1896; 1 ♀, Woodlark Island, March 1896; 3 ♀♀, Guizo Island, Solomons, November 1903; 3 ♀♂, 1 ♀, Guadalcanal, April, May 1901; 1 ♀, Rendova, February 1904; 1 ♀, Kulambangra, March 1901; 4 ♀♀, Choiseul Island, north side, December 1903; all taken by A. S. Meek.

46. Microbelia privata spec. nov.

The same size as *M. intimalis* Moore, 16 mm., but without any of the dark markings of that species, except the blackish cell-marks, the costal edging of the fasciae of the forewing, and the fringe in middle of outer margin of forewing.

3 ♀♂, 5 ♀♀ from Amboina, February 1892, and 1 ♂ from Banda taken in August of the same year (W. Doherty).

47. Microbelia uniformis spec. nov.

**Forewing:** greyish ochreous, the markings, which are broken up, hardly darker than the ground colour, with faintly paler edging; on the costa two grey triangles, a small one just before middle and a larger one at three-fourths; a triangular mark before middle of outer margin, its outer edge black at margin, and running out into the fringe; a small round black cell-spot at lower end of discocellular; fringe concolorous.

**Hindwing:** with the median and outer fasciae darkened by grey scales at the inner margin only; a small black cell-spot.

Underside much gayer; the ground colour pale shining ochreous, with all the fasciae chestnut-brown finely edged with black; cell-spots lustrous, sinuous, surrounded by black scaling.

Head, thorax, and abdomen like wings.

**Expans of wings:** ♀ 18 mm., ♂ 22 mm.

1 ♂, 1 ♀, Bougainville, Solomons, April 1904 (type); 1 ♂, 3 ♀♀, Guizo Island, Solomons, November 1903; 1 ♀, Kulambangra, Solomons, March 1901; 1 ♂, 1 ♀, Woodlark Island, April 1897 (A. S. Meek).
48. Obelura gen. nov.

Distinguished by the extraordinary length of the abdomen of both sexes, especially of the anal segment of the ♂, which is armed with two lateral brushes below; also by the strongly crenulate outer margins of both wings; and the three deep excisions in that of the hindwing between anal angle and middle.

Type: Obelura dohertyi Warr. (Banisia).

49. Pharambara acutalis.

*Pyralis acutalis* Wlk. xxxiv. p. 1523 (1865).


The type of *acutalis*, from Mysol, like that of *inductalis* mentioned above, is a considerably worn and faded specimen, but is evidently, on comparison, identical with Butler’s *nitens* from Alu. The species is of wide distribution, occurring, besides the Malayian islands, commonly in the Solomons, New Guinea, and North Australia.

50. Pharambara cellulata spec. nov.

Forewing: hyaline ochreous, the bands and strigulations dull red-brown; the inner margin, the base, and a costal streak are also suffused with brown, two basal dark bands leaving only a small pale spot below median; a dark antemedian band with a pale one on each side, the outer one swollen and traversed by a reddish line; postmedian band swollen below costa and in submedian interval, almost interrupted between, forming a square spot at end of cell; a broken brown subapical streak from subcostal area to outer margin at vein 4, and an erect streak from anal angle ending in a fork at 4: the pale outer portion of wing divided off by the red veins and transverse striae into aggregations of rounded cells, a line of which also appears alternated with brown along the costa; fringe (worn) red-brown.

Hindwing: with a broadly forked brown median and a narrow excurved postmedian band, beyond which the wing is rufous-tinged, darker along outer margin; the cellular spaces touching the median band are all whitish hyaline.

Underside buff, with all the dark markings dull brown; forewing with a streak of black and yellowish hairs along upper margin of cell and beyond it, and an oblique sinuous streak of the same across cell; hindwing with the veins and discocellular clothed with shining pale scales; the costa striated with dark brown.

Head and thorax brown, the patagia ochreous and glossy; abdomen wanting.

Expansio of wings: 33 mm.

♂ from West Java, 1892.

Allied to *Ph. semiperforata* Warr., from India.

51. Pharambara fractifascia spec. nov.

Like *P. squamigera* Pag. from Natal, but distinguished in several points:—Both wings are narrower, the forewing with less prominent apex; the olive brownish suffusion of the basal two-thirds of forewing not restricted to costal area, but extending to inner margin, except on a small space at middle; no postmedian dark brown fascia, the dentate edge of the brown area ending in a subquadrate blotch on submedian interspace at two-thirds; the curved sub-
marginal bar from costa thicker and darker; in the hindwing the brown reticulating striae are darker and more numerous, and the central band is more broken up: in both wings the fringe is distinctly dark brown instead of ochreous.

Expanse of wings: 26 mm.
1 ♂ from Ogruga, River Niger.

A much neater insect, and decidedly smaller than *squamigera*; for though Dr. Page-Stecker gives 20 mm. and 25 mm respectively for his ♂ and ♀, the six specimens in Tring Museum, all ♂ ♂, from Natal range from 26 mm. to 30 mm.

52. Pharambara fulvipicta spec. nov.

*Forewing*: cream-white, glistening; a diffuse fulvous tinge in basal half, strongest below middle; the inner margin with a plumbeous gloss; the apex fulvous; traces of three fulvous bands on inner margin, their edges marked with black spots on veins, the antemedian obscure, the postmedian oblique, the third at anal angle; in the fulvous apex close to outer margin are two small dead-white spots edged with black, above and below vein 7, and one minute one below vein 6; the pale spaces are dotted, not striated, with darker; fringe pale fulvous.

*Hindwing*: with base plumbeous, limited by a straight deep brown antemedian band; a submarginal fulvous band at anal angle; the apex fulvous; three or four black spots along the interval between veins 5 and 6.

Underside glossy whitish; the bands deep fulvous and strongly marked, especially the centre one of forewing; the apical white dots of forewing larger, attached to the end of a Instrons streak running below vein 8; some black and yellow hair scales at base and along upper margin of cell.

Head, thorax, and abdomen plumbeous grey, the face and shoulders mixed with fulvus.

Expanse of wings: 26 mm.
2 ♂ ♀ from the Khasias, taken in June by a native collector.

53. Pharambara moorei nom. nov.


I propose this name for Moore’s *reticulata*, as Butler had already published a *Pharambara reticulata* in Trans. Ent. Soc. 1886, p. 420, for an Australian insect to which Meyrick, unnecessarily, attached his MS. name *crypsia*.

54. Pharambara obliquifascia spec. nov.

Like *P. fractifascia* allied to *squamigera* Pag., but equally distinct. The whole of the basal area within the fascia is olive-brown; the brown fascia, which in *squamigera* is postmedian, rising at nearly two-thirds of inner margin and slightly diverging from outer margin, here starts from the middle and runs obliquely parallel to or even converging to outer margin and is continued backwards by an equally distinct and well-margined brown fascia across the hindwing; at the anal angle, instead of the slightly thickened double stria, is a curved band of brown striae reaching vein 4, which is likewise represented on hindwing as an interrupted sigmoid reticulated band: fringes darker brown with pale apices.

Expanse of wings: 30 mm.
1 ♂ from Pungo Audongo, Angola, April 1875 (A. von Hom-eyer).

The strong oblique fascia across both wings will at once distinguish the species.
55. Pharambara plumbea spec. nov.

Forewing: glossy lilac-grey with a coppery tinge, crossed by vertical coppery bands; the basal and antemedian simply curved; the postmedian strongly elbowed outwards above middle; these bands are edged with darker lines; a dark submarginal line is forked at each end and preceded by coppery patches; the whole wing is varied with transverse darker striae; costa at base dark plumbeous; fringe glossy, concolorous.

Hindwing: with three coppery bands on a grey ground, basal, median, and submarginal, roundly elbowed above middle and running parallel to each other.

Underside the same, but the copper-red tints deeper and brighter; a streak of black and yellow scales along upper edge of cell and beyond.

Head, thorax, and abdomen all glossy; the head, shoulders, and base of patagia dark plumbeous; the abdomen mixed with red.

Expanse of wings: 30 mm.
1 ♀ from Darjiling (Dr. Lidderdale).

Distinguished from Phar. curcillinea Warr. by the uniform coloration, whereas in curcillinea the costal half of forewing is much paler than the inner; also resembling Phar. reticulata Moore, but much smaller and with more regular lines and bands.

56. Pharambara ruinosa spec. nov.

Wings longer and narrower than in P. cilitulata Guen. (=exusta Butler); the ground colour paler.

Forewing: the basal two-thirds browner; basal and antemedian obscure brown bands, the latter sometimes forked below median; median band outwardly oblique from costa and forming a subquadrate brown blotch at and below end of cell, very narrow, almost interrupted between veins 3 and 2, thence reaching inner margin as an oblong vertical blotch; beyond it a subcostal quadrate brown blotch, from the lower outer corner of which a curved line of brown striae runs to anal angle; a brown oblique band, bent at middle, from subcostal before apex to middle of outer margin, running out into the pale brown fringe; the whole wing with pale brown reticulations.

Hindwing: with brown antemedian and median fasciae, the latter broad and connected at middle with the former; a thick brown marginal line.

Underside like upper, with the markings plainer, the median fascia of forewing black-brown; streaks of black and yellowish scales along upper edge of cell; costa with brownish triangles separated by pale ochreous intervals; a chestnut-brown subcostal streak in outer half of wing.

Head, thorax, and abdomen brownish ochreous.

Expanse of wings: ♂ 30 mm.; ♀ 33 mm.
1 ♂, 1 ♀, Sikkim, 1887 (Pilcher).

Distinguished from cilitulata Guen. (=exusta Butler) by the irregular interrupted median fascia and the square subcostal blotch following it, as well as by the longer, narrower wings; cilitulata Guen. was described from N. China, and exusta Butler from Japan, and I have not seen this form from India.

57. Pharambara sublucens spec. nov.

Forewing: pale stone-grey, with faint brownish striae; costal edge with eight deep chestnut-red spots, alternated with pairs of pearl-grey streaks; the first
three red spots cross the wing as faint lines and form a basal patch which is distinct only towards costa; the second three similarly form a truncated triangular blotch beyond cell, its edges produced across wing and ending in a slight blotch beyond middle of inner margin; from the eighth blotch a curved brown line runs to outer margin at end of vein 4, throwing off at vein 5 another curved streak to outer margin above anal angle; two black submarginal dots, one on each side of vein 7; fringe chestnut-brown.

_Hindwing:_ with faint rufous strigulations; fringe and outer margin just before it rufous, a slight dark mark forming the commencement of a band on inner margin above anal angle, and a faint subapical curved streak.

Underside satiny whitish, especially the two submarginal patches beyond the curved lines, of which the apical one of forewings is silvery white with the two black dots on it; all the dark markings and the strigulae of both wings deep bright chestnut; a line of brilliant metallic scales along upper margin of cell, and another, less conspicuous, along the lower; the retinaculum glossy.

Head, palpi, and forelegs chestnut-brown; shoulders, patagia, thorax, and anal half of dorsum mouse-grey; basal segments paler; venter glossy white.

Expanse of wings: 27 mm.

2 ♂♂, 1 ♀ from the Angabunga River, British New Guinea, 6000 ft., November 1904 to February 1905 (Meek), type; 2 ♂♂ ♀ from Biagi, Mambaré R. (Meek), 1 ♀ from Little Kei Island (Kühn). Allied to _Phar. bracteata_ Hamp. (= _nufrecta_ Hamp.).

58. **Plagiosella ochracea** spec. nov.

_Forewing:_ ochraceous, rather brighter than _B. aurata_ Butler, which it much resembles superficially; costa and lines brown; two curved lines near base; a median line broadly forked at costa and inner margin, the forks often filled in with brown; an outer line curved externally, also forked at costa and before anal angle, to which it is recurved and emits spurs to ends of veins 2, 3, 4; on the outer side of median line between veins 2 and 5 a brown triangle is subtended outwards, meeting two branches emitted inwards from the outer line; an irregular fine submarginal line from costa to middle of wing; veins thickened and darkened at their extremities; the reticulations pale brown; fringe ochraceous with a dark line at base.

_Hindwing:_ with the two outer lines repeated.

Underside pale silky yellow, with only the darker lines faintly represented.

Head, thorax, and abdomen mixed dark and light ochraceous.

Expanse of wings: ♂ 27 mm.; ♀ 32 mm.

2 ♂♂, 1 ♀ from Biagi, Mambaré River, British New Guinea, 5000 ft., April 1906 (A. S. Meek).

**Plesiodesma** gen. nov.

♂. _Forewing:_ triangular; costa straight, slightly incurved beyond middle and convex before apex; outer margin curved.

_Hindwing:_ with outer margin and both angles rounded.

Antennae strongly serrate, and with fascicles of cilia; palpi minute, pointed; tongue absent; abdomen with the sheaths of anal segment large.

Neuration: forewing, cell half as long as wing; vein 2 from one-half, 3 just before end of cell, 4 and 5 long-stalked, 6 from the depressed end of cell; 7, 8
long-stalked, widely divergent, shortly stalked with 9; 10, 11 free: hindwing, 7 from before end of cell, 4 and 5 stalked.
Type: *Plesiodesma infans* spec. nov.

59. *Plesiodesma infans* spec. nov.

*Forewing:* brownish fuscous, covered with minute annuliform ochreous reticulations, which form obscure antemedian, postmedian, and submarginal bands; fringe brown, with the base ochreous yellow.

*Hindwing:* similar.

Underside the same.

Head, thorax, and abdomen varied with brown and ochreous; anal parts, antennae and abdomen beneath ochreous; vertex whitish.

*Expans of wings:* 16 mm.

1♀ from Kunnsi River, N.E. British New Guinea, low elevation, May 1907 (A. S. Meek).

60. *Proteroeuxis brunnea* spec. nov.

*Forewing:* dark brown, slightly paler in ?, densely covered with deeper transverse reticulating striae and with irregular darker lines: four vertical before middle; varying much even in the wings of the same specimen; a postmedian line forked at costa and with a slightly browner cloud at end of cell, where it again divides, one branch running to inner margin and there forked, the other to anal angle; a submarginal line from costa to outer margin below middle; fringe dark brown, paler at apex.

*Hindwing:* with the last three lines of forewing reproduced.

Underside paler; the lines more distinct, the reticulations reduced.

Head, thorax, and abdomen like wings.

*Expans of wings:* ♂ 48—50 mm.; ♀ 54 mm.

2♂, 1♀, from Shilouvane, Transvaal, November—December 1901 (H. Junod).

This is nearest *Rhodoneura pectinisera* Hampson, from Sierra Leone.

61. *Proteroeuxis tessellata* spec. nov.

*Forewing:* whitish ochreous, thickly reticulated with dark brown and with darker brown interlacing lines, which start from brown triangular costal spots; two near base, more vertical; those beyond outwardly oblique at first; two above end of cell unite at the black discal spot, then diverge, to unite again on submedian fold, and fork to inner margin; the fifth runs irregularly to anal angle, where it forks and is connected throughout by ramifying streaks with the preceding line and also with the sixth, which is forked at costa and runs to middle of outer margin; fringe deep brown with paler apices; veins brown.

*Hindwing:* with the three outer lines; the black discal spot with one of the lines forms a kind of ocellus.

Underside the same.

Head, shoulders, and dorsum dark brown; patagia paler brown, much varied with ochreous white scales; abdomen beneath with pairs of large shining whitish spots at the end of each segment and traces of lateral ones.

*Expans of wings:* 40 mm.

Two ♂♂ from Kasangazi, near Bandawe, 3000 ft. above Lake Nyassa, (Dr. Prentice).
62. *Rhodoneura erubescens* spec. nov.

*Forewing*: chalk-grey; the costa brownish for two-thirds, finely striated with dark; a diffuse brownish grey shade at base, running out along lower half of cell and below it to between the origin of the median nervules; the whole wing thickly covered with wavy brown-grey striae between the veins, which are finer and sometimes obsolescent towards apex; all the veins except the subcostal and costal deep pink; a slight grey costal mark in the pale space beyond the costal streak; traces of inner, postmedian, and submarginal lines visible on inner margin; fringe deep pink.

*Hindwing*: suffused with brown beyond middle, the basal area white with few striae except close to base; the striae in outer half thickened, fuscous tinged with red, forming dark waved lines alternating with finer ones; veins all pink; fringe deep pink, white along inner margin and at anal angle.

*Underside* of forewing with five olive-fulvous transverse markings: the antemedian swollen, the median curved and interrupted; the postmedian longer; and two conjoined towards anal angle: costal streak towards apex olive-fulvous with black spots; apical area dull silvery with the veins bright red; a bed of black and yellow scales along lower half of cell and the base of veins 6, 7, 8 finely black; fringe deep pink; hindwing white with all the transverse streaks as well as the veins and fringe bright pink.

Head and prothorax dull brown-grey: tips of patagia and abdomen whitish, the dorsum with slight grey bands.

*Expanse of wings*: 38 mm.

Two ♀♂ from the Khasias (type); one ♀ from Maymyo, Shan States, June to August, 1902 (Hauxwell).

This seems to me to be quite distinct from the Chinese *strigatula*, which has no red whatever on the upper side, and the fringe whitish.

63. *Rhodoneura pudicula* ab. obsolescens nov.

In this form, which appears to be as widely spread as Guence's type-form, the brown spots and blotches in both wings are attenuated and partially obsolescent, the apical half of forewing above vein 4 being entirely without markings.

In the Tring Museum there are five specimens: 1 ♀ from Java; 3♂♂ from Engano, and 1♂ from Humboldt Bay, New Guinea (type); all five are slightly larger than average examples.

64. *Rhodoneura separata* spec. nov.

*Forewing*: white; the veins finely pinkish; costa with densely placed short dark striae; the costal vein dark brown; wing crossed by grey or grey-pink strigulations between the veins, much farther apart than in *erubescens* and not forming lines, but sparse and irregular reticulations; a slight greyish shade in basal half of wing, beyond the oblique edge of which is an unreticulated whitish band as far as vein 6; fringe white.

*Hindwing*: purer white; strigulae brown and pink; a median band of two lines of striae below vein 5, broken up above it; two irregular rows of submarginal striae, and a few at base; the median band having a clear white space on each side of it; fringe white.

*Underside* with the veins and transverse strigulae deep pink; costa of forewing
fulvous: the transverse fulvous bands, prominent in *crubrescens*, all but obsolete; a bed of black and yellow scales at base of cell and fine black scales along base of veins 6, 7, 8.

Head, thorax, and abdomen as in *crubrescens*.

Expanse of wings: 30–36 mm.

1 ♂ from Elna Bay, New Guinea, August 1896 (Webster) type; 1 ♂ from Obi Major (Waterstradt).

65. *Siculodes intermedia* spec. nov.

Intermediate in size between *S. sterna* Feld. and *S. paullula* Pag., for, while the latter reaches 25 mm. only, and *sterna* expands from 34 mm. to 40 mm., the present species measures 39–32 mm. The three species can be well separated by a comparison of the undersides of the forewing. Thus in *sterna* the central area, which on the upper surface is pearl-grey, becomes yellowish beneath, and the veins are yellow, changing to reddish only just before margin; in *paullula* vein 7 is strongly and brilliantly red with a bed of lustrous leaden-grey scales on each side of it, the other veins being faintly pink; in *intermedia* all the veins are uniformly pink throughout; secondly, the two patches in submedian interval and that before outer margin are diffusely fulvous in *intermedia*, in *sterna* the fulvous tints are hardly visible, while in *paullula* they are concise and deep chestnut-brown.

3 ♂♀ from Santo Domingo, Carabaya, S.E. Pern, January to May 1902 (Oekenden).

66. *Siculodes nigralbata* spec. nov.

*Forewing*: chalk-white, with numerous grey spots between the veins and black streaks along the margins; a black spot at base of costa and four black streaks from costa to median vein, the first pair outwardly, the second inwardly oblique, the fourth running on the discocellular; the grey spots alternate with black; before outer margin the two outermost rows of black spots coalesce laterally into blotches; dull black blotches on margin at the vein-ends, with white black-dotted spots between them; fringe worn, apparently mottled black and white.

*Hindwing*: with the black spots and streaks amplified, those along outer margin forming a kind of festoon, with the margin itself cloudy black.

Underside like upper; the base of forewing with shining silvery scales; basal half of cell and the subcostal and adjoining veins tinge tinged with yellow.

Head, shoulders, and basal half of patagia blackish grey, mixed with white scales; thorax, apical half of patagia, and basal half of dorsum white, the last with two black spots at base and a broad black belt at one-fourth; anal half of dorsum black with narrow white segmental rings; abdomen beneath and legs white; tarsi black, white at the joints.

Expanse of wings: 24 mm.

1 ♂ from Kumusi River, N.E. British New Guinea, low elevation, August—September 1907 (A. S. Meek).

67. *Siculodes roseobrunnea* spec. nov.

*Forewing*: white with an iridescent violet sheen, crossed by series of oblique rosy and brown lines, the colours varying according to the incidence of light;
costa, with seven or eight olive-brown patches, from the sides of which the lines rise in pairs; from the fifth, which is largest, the lines are darker and thicker and form a central band, followed by a paler band of the ground colour, edged externally by a dull rose line running to below apex, the marginal area beyond it darkened by thicker and denser reticulations; a slight dark flush along middle of wing between veins 2 and 5, so that the costal and inner-marginal areas appear paler; veins towards margin finely brown; fringe rose brown.

Hindwing: with a series of irregular striated lines parallel to outer margin, thickening towards inner margin and there becoming browner, the dark and pale bands of forewing hardly visible; costa cream-colour, with slight markings; marginal line rose; fringe rose whitish.

Underside of forewing suffused with olive-brown, deepest along costa, the markings visible only along inner and outer margin, where the lines are rose tinged; a patch of deep black scales in and below basal half of cell, and a few linear black marks along its upper edge at the end; hindwing with veins and markings bright rose, only the costal area tinged with brown.

Head, shoulders, and antennae olive-brown; thorax and patagia cream-colour; abdomen cream-colour, with the dorsum tinged with pale olive, and with some lateral rose markings.

Expanse of wings: 28 mm.
1 ♂ from St. Domingo, Carabaya, S.E. Peru, 6000 ft., January 1902, wet season (Ockenden).

68. Siculodes stigmatophora spec. nov.

Forewing: dull white, with numerous grey reticulations, which in basal two-thirds are somewhat dimmed by a pale grey suffusion; they rise from six pairs of darker grey lines on costa forming slight grey blotches, three before and three beyond the middle, each marked on the extreme costal edge by a fine black line; a large black cell-spot on discocellular; the reticulations along outer margin are clearer and more fuscous, and are separated from the greyer basal two-thirds by a broad submarginal whiter band which is comparatively unreticulated except at costa; fringe white with grey basal motting beyond the veins.

Hindwing: with a median slightly grey-tinged band of three or four waved and interlacing lines containing on its inner edge a largish black cell-spot, preceded by a band of unreticulated white beyond two blackish basal lines; outer white band and marginal reticulations as in forewing.

Underside with the grey costal blotches of forewing distinct; all the grey mottlings darker, especially two blotches towards outer margin lying on the two folds; hindwing whiter, with the reticulations less marked; in forewing the base of cell is filled with black and white shining scales, and lines of similar smaller scales precede and follow the upper part of discocellular.

Head, shoulders, and thorax dark grey; patagia, abdomen above and below, and the legs white; tarsi spotted with black; the forelegs, like the palpi, externally grey.

Expanse of wings: 44 mm.
1 ♀ from La Union, R. Hmacamayo, Carabaya, Peru, 2000 ft., December 1904, wet season (Ockenden).
69. *Siculodes subolivescens* spec. nov.

*Forewing*: shining iridescent hyaline white, uniformly covered with olive-fusaceous reticulations; costal streak broadly grey-brown, bronzy red towards apex; a dark inwardly oblique line on discocellular; a fine olive marginal line; fringe white with slight olive mottling beyond veins.

*Hindwing*: similar, but without the dark costa.

Underside with the costa of forewing broadly, of hindwing slightly bronzy olive; the reticulations mainly showing through from above; marginal line reddish.

♀ with stronger iridescence; the reticulations olive; the costa of forewing marked with eight or nine patches of bronzy reddish; the discocellular line, two patches on vein 1, and a submarginal patch beyond cell reddish olive; fringe mottled with rose-pink.

Underside with the marginal lines and mottlings of fringe bright rose-pink.

Head, shoulders, and base of patagia greyish olive; rest of patagia and thorax white; dorsum white, with the basal half of each segment olive; forelegs olive-brown. The tarsi black with white joints; hindlegs reddish; abdomen beneath white.

*Expanse of wings*: ♀ 45 mm.; ♂ 52 mm.

A pair from Agualani, Carabaya, Peru, 9000 feet, July, August 1905, dry season (Ockenden).

70. *Siculodes viriditincta* spec. nov.

*Forewing*: dull white, without any iridescence or hyaline spaces; the reticulating lines rather thick and dull olive; the median nervure and veins 1 to 4 all olive-fusaceous; a dull olive subcostal streak; the costal edge pale with dense and sharp olive striae; a small dark spot at lower end of discocellular, and dark spots at the ends of the veins in the pale fringe; space between two oblique lines in the lower half of submedian interspace at middle of wing filled in with pale olive.

*Hindwing*: with all the lines more or less parallel to outer margin; the base with few reticulations.

Underside with a slight olive suffusion; the reticulations as above; streaks of black and yellow scales in base of cell and along its upper margin towards end.

Head, shoulders, and thorax olive; metathorax, tips of patagia, and two basal segments of dorsum white; rest of dorsum white tinged with olive; abdomen beneath and legs whitish; fore-tarsi black with pale joints.

*Expanse of wings*: 45 mm.

1 ♀ from Paramba, Ecuador, November and December, 1898.

71. *Striglina jacunda* spec. nov.

*Forewing*: brown, with a bright reddish suffusion, obscuring the markings except along costa and outer margin; these markings consist of small yellow round spots between the veins; the costa is marked with large yellow spots in pairs with a third between them on the subcostal vein; from the first pair at two-fifths a slight curved red-tinged line runs to one-third of inner margin; from the second pair at two-thirds and from a single spot beyond them a forked yellow line rises, running straight across wing to inner margin at two-thirds parallel to outer margin, which below the middle is tinged with red; the apex and outer marginal area are dusted
with round yellow dots and spots, a larger one between veins 4 and 5; fringe evenly mottled brown and yellow.

_Hindwing:_ with the red suffusing only the basal half, which is bounded by an irregular serpentine yellow streak, which throws off two similar streaks to outer margin below middle, the lower one interrupted; outer half full of yellow spots and dots.

Underside liver-brown without any red tinge, and with the yellow dots and dusting largely developed, the outer line wholly yellow, with the brown beyond it less interrupted.

Head and shoulders yellow varied with pale and dark brown and black; the shoulders most clearly yellow; thorax and abdomen brown mixed with red; legs black and yellow.

**Expanses of wings:** 28 mm.

2 ♀♂ from La Oroya, R. Isambari, 3100 ft., January 1906, wet season (Oekenden); and 2 ♀♂ from Fonte Boa, Upper Amazons, July 1906 (Klages).

THE BIRDS OF VELLA LAVELLA, SOLOMON ISLANDS.

By the Hon. WALTER ROTHSCCHILD, Ph.D., AND ERNST HARERT, Ph.D.

(Plate XIII.)

The island of Vella Lavella is one of the central group of Solomon Islands, to which belong the islands New Georgia or Rubiana, Rendova, Kulambangra, and Gizo. We have already had collections from Gizo, Kulambangra, Rendova, and New Georgia, all brought together by Mr. Albert S. Meek, who has now visited Vella Lavella. This last island is close to Gizo and Kulambangra. As no bird has ever been collected before on Vella Lavella, a collection from there is a priori of great interest. Moreover, while the majority of the species are, of course, identical with those from the other islands of the central group, some most interesting new forms have been discovered by our indefatigable collector, Albert Meek. In **Novitates Zoologicae** 1905, pp. 243, 244, we have explained that the central group of the Solomon Islands can be regarded as a faunistic area different from the northern chain (Bougainville, Choiseul, Isabel) as well as from the Guadalcanar group, and the southern group (San Cristoval and Ugi).

An interesting feature of the birds of Vella Lavella is the fact that the forms peculiar to that island show a tendency towards a melanistic coloration. *Myzomela eichhornii atrata* has the upper surface black instead of dark olive as in *M. eichhornii eichhornii*; *Pachycephala melanotus* is above deep black instead of yellowish olive as in *P. astrolabi*; *Monarcha brodiei nigropectus* has the upper wing-coverts blue-black instead of white.

The ornis of the island of Ronongo, close to Vella Lavella, remains to be explored, but not many new forms can be expected from there.

1. **Megapodius duperreyii eremita** Hartl.

_Cf. Nov. Zool. 1905, p. 244._

3 ♀♂ ad., 2 ♀♀ ad., 1 ♀ pulc, Vella Lavella, February and March 1908, Nos. 3791, 3806, 3879, 3883, 3909, 3928.
2. Ptilinopus superba (Temm.).


1 ♂ ad. Vella Lavella, 20, ii. 1908. (No. 3803.)

3. Ptilinopus solomonensis solomonensis Gray.


2 ♂♂ ad., 2 ♀ ♀ ad., 1 ♂ juv., 1 ♀ juv. ♂ ad.: "Iris yellow, bill slate, feet warm heliotrope." (Nos. 3764, 3777, 3864, 3906, 3952, 3966.)

4. Ptilinopus lewisii lewisii Rams.


3 ♂ ♂ ad. (Nos. 3815, 3829, 3912.)

5. Carpophaga rufigula Salvad.


4 ♂ ♂ ad., 2 ♀ ♀ ad. (Nos. 3787, 3794, 3840, 3970, 3977, 3995.)

We have been able to compare this series with specimens from San Christoval, the island whence C. rufigula was originally described, and there is no difference whatever between the examples from the various islands.


4 ♂ ♂ ad., 1 ♀ juv. (Nos. 3824, 3893, 3967, 3976, 3996.)

7. Columba albicularis (Ba).


1 ♀ ad., 14, iii. 1908. "Iris cadmium, bill light horn-colour, feet heliotrope." This appears to be the first record of this species from the Solomon Islands.

8. Columba philippinensis (Rams).


1 ♀ ad., Vella Lavella, 18, ii. 1908. "Iris cadmium; bill light fawn, red base; feet canary yellow."

Beside this adult female we had already two immature birds from Bougainville and Choisen, undoubtedly belonging to the same species. This bird being thus known from three different islands, we may, with more certainty than in 1905, consider it to be the same as the bird from Ugi, i.e. Ramsay's philippinensis. We should call the non-metallic ground colour of the body-plumage slaty black and not "light slate-blue"!


5 ♂ ♂ ad. (Nos. 3767, 3782, 3811, 3833, 3904.)


2 ♀ ♀ ad. (Nos. 3984, 3985.)
11. Charadrius dominicus fulvus (Gm.).

Charadrius fulvus Gmelin, Syst. Nat. i. 2, p. 687 (1789—Tahiti).
1 ♂ ad. 9. iii. 1908. (No. 3960.)

12. Heteractitis incanus incanus (Gm.).

Scolopax incana Gmelin, Syst. Nat. i. 2, p. 658 (1789—Eimeo and Palmerston Islands).
1 ♂, 2 ♀ ♀, 6, 7, 16. iii. 1908. (Nos. 3948, 3951, 3990.)

13. Tringoides hypoleucus hypoleucus (L.).

Tringa hypoleuca Linnaeus, Syst. Nat. ed. x. p. 149 (1758—"Habitat in Europe").
1 ♂, 4 ♀ ♀. (Nos. 3936, 3962, 3972, 3990, 3998.)

14. Dupetor flavicollis woodfordi (Grant).

[Ardea flavicollis Latham, Ind. Orn. ii. p. 701 (1790—India).]
Erythrohyge woodfordi Sharpe, Cat. B. Brit. Mus. xxvi. p. 252, pl. iv. (1808—"Solomon Islands").
1 ♂ ad., 1 ♀, 5, 13. iii. 1908. ♂: "Iris hazel; bill black above and horn-colour below; feet black." ♀: "Iris yellow; bill brown above, light horn-colour beneath; feet brownish horn-colour." (Nos. 3939, 3981.)

The female agrees with the above descriptions, the male was hitherto unknown.

The adult male differs from that of Dupetor flavicollis nesophilus by almost completely wanting the broad creamy white margins to the elongated feathers of the chest, and the abdomen and flanks appear slightly more greyish; the back and scapulars are also slightly blacker.

Dr. Sharpe has placed woodfordi in a new genus, which he called Erythrohyge, founding the latter on supposed different proportions between the middle toe and tarsus. It is true that woodfordi has a slightly longer tarsus, exceeding the middle toe and claw by about 1 cm., while in flavicollis and the other allied forms it is about equal. This, however, to my mind, is nothing more than a very good subspecific character. We are convinced that Dupetor flavicollis, gouldii, nesophilus, and woodfordi are geographical forms of one species, as the males—and in most cases the females as well—differ very slightly from each other.

Dr. Sharpe, in the Cat. B. Brit. Mus. vol. xxvi., was evidently misled by having a young blackish bird and a young rufous bird, both labelled as males, from which he concluded that a black and a red species occurred side by side on the Moluccan Islands. From Meek's discovery of the adult ♂ of woodfordi we must conclude that the two Moluccan birds are also sexes of one form. In view of the difficulty in sexing accurately young birds, the fact that these young birds are of different colours is no proof to the contrary; it only goes to show that either the young are sexually different, like the old birds, or that the black specimen is older than the red one. We therefore consider that the birds placed in Dupetor and Erythrohyge, and treated as six species by Dr. Sharpe, are really all referable to two species, one of which can be divided into the following geographical forms:

Dupetor flavicollis flavicollis (Lath.).

India to China, Philippines, Greater Sunda Islands.

♂ characterised by chestnut spots on chin, throat, and foreneck; ♀ very much browner, especially on the under surface, dark spots on throat and foreneck almost entirely chestnut.
Dupetor flavicollis gouldi (Bp.).


Synonym, Dupetor mesophilus (Sharpe).

Australia, New Guinea, Papuan, and Moluccan Islands.

♂ very similar to that of flavicollis, but throat and foreneck with much less chestnut; in a very old Australia skin the chestnut is entirely absent; ♀, foreneck also much less rufous, the chestnut spots being replaced by greyish brown.

We have united mesophilus and gouldi because our New Guinea and Moluccan specimens show that the supposed differences are individual and not restricted to any one country.

Dupetor flavicollis woodfordi (Grant).

Solomon Islands.

♂ differs from flavicollis and gouldi by the almost complete absence of the pale margins to the feathers on the lower neck; ♀ above chestnut, cap blackish, below rufous buff.

Dupetor melaeua (Salvad.).


Differs conspicuously from the forms of D. flavicollis by the absence of the pale markings, the neck being also entirely blackish. ♀ above rufous brown, below greyish buff, foreneck variegated with darker brown. (Cf. plate v. Cat. B. xxvi.)

This bird occurs in the Moluccas together with D. f. gouldi, otherwise we should have considered it also an extreme geographical form of flavicollis.

15. Demiegretta sacra (Gm.).


1 ♀ ad., 12. iii. 1908. (No. 3973.)


1 ♀ ad., 1 ♀ juv., 17. ii., 15. iii. 1908. (Nos. 3771, 3994.)

17. Butorides javanica stagnatilis (Gould).


1 ♀ ad., 27. ii. 1908. (No. 3881.)

18. Astur etorques rubianaæ Roths. & Hart.


1 ♀ ad., 23. ii. 1908, 1 ♀ juv., 29. ii. 1908. (Nos. 3831, 3900.)

The wing of the adult ♀ measures 216 mm.


1 ♀ ad., 15. iii. 1908. (No. 3993.)
20. Haliastur indus girrenera (Viell. & Oud.).

[Falco indus Boddhert. Tabl. Pl. Eol. 25 (1783—ex Daubenton. India.)]

Haliastus girrenera Viellot & Oud. Gla. Ois. i. p. 31 pl. x. (1828—Partum. Restricted habitat: Australia).

1 ♂ ad., 1 ♀ ad. (Nos. 3822, 3832.)

21. Eos cardinalis (Gray).


4 ♂♂ ad., 1 ♀ ad. (Nos. 3816, 3837, 3871, 3892, 3907.)


3 ♂♂, 3 ♀♀. (Nos. 3839, 3859, 3916, 3924, 3942, 3944.)

23. Eclectus pectoralis salomonensis Rothschen. & Hart.


2 ♂♂, 2 ♀♀. (Nos. 3895, 3923, 3927, 3945.)

24. Geoffroyus heteroclitus (Hombr. & Jacq.).


4 ♂♂, 2 ♀♀. (Nos. 3793, 3814, 3835, 3844, 3921, 3947.)


3 ♂♂, 3 ♀♀. (Nos. 3792, 3932, 3938, 3955, 3979, 3991.)

The wings range up to 62 mm. only. None of these specimens have a blue tinge on the crown, which is frequently found on specimens from Gizo.


2 ♂♂ ad., 4 ♀ ♀. (Nos. 3841, 3954, 3961, 3968, 3987, 3988.)

These birds agree in every detail with the series from Rendova and Gizo. The three birds from Treasury Island in our collection, as well as one from the Duke of York Island, are hardly separable from hispidoides.

27. Alcyone pusilla richardi Trist.


1 ♂, 1 ♀. (Nos. 3851, 3971.)


2 ♂♂ ad., 2 ♀ ♀ ad., 2 ♀ ♀ juv. (Nos. 3790, 3807, 3865, 3866, 3889, 3913.)

The young birds have the upper mandible black with whitish tip, the lower horn-colour. This form can be distinguished from the adult bird from Guadalcanar, which also has the upper mandible black, by the bill being thicker and shorter. The Guadalcanar form we described as Ceyx lepida nigromaxilla (Nov. Zool. 1905, p. 250).
29. Halcyon tristrami alberti Rothscl. & Hart.


2 ♂ ♂ , 2 ♀ ♀ ad., 2 ♀ ♀ jun. (Nos. 3830, 3854, 3868, 3874, 3910, 3911.)

30. Halcyon sanctus sanctus Vig. & Horsf.


1 ♀ jun., 26. ii. 1908. (No. 3853.)


1 ♂ ad., 10. iii. 1908. (No. 3965.)

32. Centropus albidiventris Rothscl.


2 ♂ ♂ ad., 2 ♀ ♀ ad., 1 ♀ ♀ juv., 1 ♂ pull. (Nos. 3763, 3768, 3772, 3779, 3817, 3858.)

33. Eudynamis orientalis alberti Rothscl. & Hart.


2 ♂ ♂ ad., 2 ♀ ♀ ad., 1 ♂ juv. (Nos. 3781, 3863, 3869, 3872, 3937.)

The females are above much more rufous, the rufous spots on the crown and occiput larger, the dark bars on the middle rectrices narrower, being of about the same width as the light bars, while in E. o. rajicenter the black bars are wider than the rufous ones. The under surface is darker rufous than in the majority of our females of E. o. rajicenter, and the black bars on the abdomen and flanks are narrower and less distinct.

34. Chrysococcyx plagosus (Lath.).


1 ♀ , 16. iii. 1908. (No. 3997.)

Chr. plagosus is not easily distinguished from Chr. lucidus. The latter, however, seems to have a more uniformly green head and back, and greener transverse bars on the underside; it seems to inhabit New Zealand, the Chatham Islands and Eastern Australia only, while Chr. plagosus occurs in parts of Australia, New Guinea, and the Papuan and Solomon Islands. We can hardly doubt that these two forms are only subspecies, but, until we have revised the genus, we prefer to leave them under binomial appellations.

35. Macropteryx mystacea woodfordiana Hart.


1 ♂ ad., 25. ii. 1908. (No. 3847.)

36. Rhipidura tricolor (Vieill.).


3 ♂ ♂ , 3 ♀ ♀ . (Nos. 3852, 3860, 3873, 3879, 3908, 3931.)
37. **Rhipidura cockerelli** (Rams.).


2 ♂ ♂, 3 ♀ ♀. (Nos. 3849, 3901, 3902, 3903, 3918.)

38. **Rhipidura rubrofrontata** Rams.


6 ♂ ♂. (Nos. 3826, 3857, 3885, 3857, 3899, 3915.)

39. **Myiagra cervinicauda feminina** Rothschr. & Hart.

(Plate XIII. fig. 3.)


3 ♂ ♂ ad., 1 ♀ ad., 1 ♀ juv., 1 ♀ juv. (Nos. 3784, 3797, 3898, 3820, 3858, 3867.)

The name *Myiagra cervinicauda* appeared several months before that of *M. ferrocyanea*. The differences of the females of *M. cervinicauda cervinicauda*, *feminina*, and *ferrocyanea* are shown on Plate XIII. For the differences of the males see *Nov. Zool.* 1905, p. 261 and *infra*, p. 363.

40. **Monarcha richardsii** (Rams.).


3 ♂ ♂ ad., 2 ♀ ♀ ad., 1 ♀ juv. (Nos. 3780, 3785, 3796, 3805, 3810, 3813.)

Mr. Meek has again sexed Nos. 3780 and 3785 as females. These two birds agree with our description of the young male (*i.e.* p. 263), but we find, on measuring the wings of our specimens from Rendova and Gizo, as well as of these two, that they are shorter than those of the adult males. It is therefore, after all, quite possible that these birds are the fully adult females, and that what we considered to be adult females are immature ones.

41. **Monarcha brodiei nigrotectus** Hart.


2 ♂ ♂, 2 ♀ ♀ ad., 2 ♂ ♂ juv. ♂: "Iris dark brown; feet slate; bill chalky blue with a black ridge." ♀ similar. ♂ juv.: "Iris brown; feet slate; bill black." (Nos. 3789, 3801, 3917, 3956, 3957, 3958 (type).)

This new subspecies differs from *M. brodiei brodiei* in having all the upper wing-coverts blue-black, whereas in the latter the median and greater wing-coverts are white. There is also more white in the tail.

42. **Graucalus hypolencus elegans** Rams.


2 ♂ ♂ ad. (Nos. 39, 3949.)

43. **Graucalus pusillus ombriosus** Rothschr. & Hart.


1 ♂ ad., 3 ♀ ♀ ad. (Nos. 3812, 3821, 3969, 3989.)

44. **Edololisma erythropygium saturatus** Rothschr. & Hart.


2 ♂ ♂ ad., 3 ♀ ♀ ad., 1 ♀ juv. (Nos. 3827, 3836, 3926, 3929, 3930, 3980.)
45. Pachycephala melanonota Hart.

(Plate XIII. fig. 4.)


4 d d, 2 ? ? ad., 1 d juv. (marked ?), 1 ? juv. d : "Iris dark red (reddish brown); bill black; feet black (dark slate)." ? : "Iris brown; bill blackish; feet slate." (Nos. 3765, 3834 (type), 3846, 3890, 3897, 3946, 3953, 3964.)

This beautiful Pachycephala differs from all the other forms from the Solomon Islands in the uniform black upper surface of the male. The black pectoral band is very broad. It should probably be regarded as a subspecies of P. astrolabi, though its differences are very striking.

46. Zosterops vellalavella Hart.


4 d d, 2 ? ? ad. "Iris chocolate; bill yellow; feet brownish yellow." (Nos. 3799, 3819, 3848, 3856, 3857, 3861.)

A white ring round the eye; upper surface yellowish green; quills blackish brown, with the outer webs broadly edged with yellowish green and the inner with creamy white. Throat dark yellow, jugulum greenish yellow; abdomen yellowish white. Flanks delicately tinged with grey; under tail-coverts lemon-yellow. Rectrices blackish brown, narrowly edged with yellowish green. Wing 92—94, culmen 17—18 mm.

47. Myzomela eichhorni atrata Hart.


4 d d, 2 ? ? ad. "Iris brown; bill black; feet dark slate" in both sexes. (Nos. 3761, 3795, 3884, 3885, 3890, 3925.)


2 d d ad. (Nos. 3875, 3959.)

49. Calornis metallica (Temm.)


3 d d ad, 2 d d juv., 1 ? immat. changing into a glossy plumage like that of the adult male. (Nos. 3776 (?), 3783, 3802, 3842, 3843, 3935.)

50. Calornis fulvipennis fulvipennis (Jacq. & Puch.).


3 d d, 3 ? ?. (Nos. 3890, 3889, 3905, 3973, 3982, 3983.)

51. Mino kreffti (Sol.)


3 d d, 3 ? ?. (Nos. 3823, 3828, 3845, 3850, 3891, 3963.)
ON A COLLECTION OF BIRDS FROM SAN CHRISTOVAL,
SOLOMON ISLANDS.

By the HON. WALTER ROTHSCHILD, Ph.D., AND ERNST HARTERT, Ph.D.

FOR years it has been our great wish to receive a collection of birds from San Christoval, the southermost island of the Solomon group. Although many birds from San Christoval have been described by Ramsay and Tristram, and many novelties could, therefore, not be expected, they were most necessary to fill up the gaps in the collection, and to understand the relationship of the various forms from other islands; and we were much pleased when at last our industrious correspondent, Albert S. Meek, decided to visit San Christoval. Unfortunately he was not able to stay long and to make an extensive collection, and several of the most interesting species were not found by him. Cycx gentiana (Tristram, Ibis 1879, pl. xi.) was not met with, no hawks or owls were obtained, and of several other birds only a few specimens have been sent.

The principal articles on birds from San Christoval are:

Tristram, Ibis 1879, pp. 437—443, pls. xi, xii.
Tristram, Ibis 1882, pp. 133—146, pls. iii, iv, v.
Ramsay, op. cit. vii, pp. 16—13, 299—301.

It appears that the small island of Ugi, not many miles to the north of San Christoval, has several peculiar forms not found on San Christoval.

1. Ptilinopus solomonensis solomonensis Gray.


4 ♂ ♂, 1 ♀ ♂, 1 ♀ juv., Yanuta and Makira. (Nos. 4022, 4028, 4031, 4096, 4122 from Yanuta ; No. 4127 from Makira.)

These specimens do not differ from those from New Georgia and Vella Lavella. Canon Tristram described the bird from San Christoval as P. ceraseipectus.

2. Carpophaga rufigula Salvad.


Carpophaga (Globicera) richardi Tristram, Ibis 1879, p. 443 (San Christoval).

1 ♂, 1 ♀. (Nos. 4011, Yanuta, 4166 Makira.)


1 ♀ ad., 1 v. 1908. (No. 4128, Makira.)

4. Columba albigularis (Bp.).


1 ♂ ad. 6. v. 1908. (No. 4165, Makira.)

We have already recorded this species from Vella Lavella Island.


*Macropygia arenis* Tristram, *Ib.* 1875, p. 113 (October 1879—San Cristoval).

1 ♂, 25, iv. 1908. (No. 4076, Yanuta.)

This specimen agrees with our birds from Guadalcanar.


1 ♀ ad. 27, iv. 1908. (No. 4109, Yanuta.)


1 ♀ imm., 1 ♀ juv. (Nos. 4021, Yanuta; 4171, Makira.)


1 ♂ juv. 23, iv. 1908. (No. 4042, Yanuta.)


1 ♂, 2 ♀ ♀. (Nos. 4074, Yanuta; 4170, 4173, Makira.) "Iris dirty yellow, light brown, brown; bill bright red, dark yellowish red; feet black."


1 ♂, 6, v. 1908. (No. 4108, Makira.)

11. *Geoffroyus heteroclitus* (Hombr. & Jacq.).


3 ♂ ♀ ad. (Nos. 4145, 4148, 4149, Makira.)


3 ♂ ♀, 3 ♀ ♀. (Nos. 4006, 4029, 4039, 4053, Yanuta; 4153, 4154, Makira.) "Iris brown. Feet and bill ashy blue."

The females differ from those of our *N. aolae tristrami* and *N. aolae aolae* by having the central tail-feathers black, widely bordered with blue, instead of entirely blue, and other minor differences.


1 ♂ ♀ ad., 6, v. 1908. (No. 4167, Makira.)

The figure in *Cat. B. Brit. Mus.* xvii. pl. iii. is very bad. It fails entirely to show the black head and the black tip to the tail, and the body-colour is green instead of bluish.

1 ♀ jun., 4. v. 1908. (No. 4150, Makira.)

This specimen agrees with our three from Treasury Island and the one from Duke of York Island. They are slightly bluer than A. i. hispidoides, but not nearly as blue as A. i. solomonensis. (Cf. Nov. Zool. 1905, p. 255.)


1 ♀ ad., 24. iv. 1908. (No. 4059, Yanuta.)

16. Halcyon perplexa form. nov.

This new form is of great interest, owing to its small size, for it thus stands intermediate between H. tristrami and H. sanctus, having the wing hardly at all longer than that of the latter. As we find three closely allied species (viz. H. tristrami, sanctus, and solomonis) occurring in the Solomon Islands, it is rather difficult to assign this new form as a subspecies to its proper species. We therefore, against our usual custom, name it binomially, awaiting further evidence before deciding as to its true position. Unfortunately none of our six specimens is absolutely adult, the type specimen even showing traces of black margins to the feathers on the chest.

♂ fere adult. Differ from H. tristrami alberti by its brighter blue crown and mantle and paler blue rump. There is no trace of the pale occipital patch, so conspicuous in H. t. alberti. The underside appears never to be uniform cinnamon, but white with cinnamon flanks and an incomplete cinnamon band across the chest. The wing is considerably shorter, while the bill is almost of the same size as in H. t. alberti. The ear-coverts of the more adult birds are strongly washed with blue, while in H. t. alberti they are black. It differs from sanctus by its much broader bill, and by the distinctly blue (not greenish) colour of the upperside, and the very dark blue tail. It also differs from H. t. alberti by having a narrow superciliiary line. Wings 90—94, tail 62—67, culmen 45.5—49 mm.

Type: No. 4907, ♂ fere ad., Yanuta, San Christoval, 20. iv. 1908.

Mr. Meek sent the following specimens:

2 ♂ ♂ fere ad., 2 ♂ ♂ juv., 2 ♀ ♀ juv. (Nos. 4907, 4012, 4048, 4954, 4055, 4061.) "Iris dark brown; bill black, lower mandible with base white; feet brown and fawn-colour."

17. Halcyon solomonis Rams.


1 ♀ fere ad., Yanuta, 24. iv. 1908. (No. 49060.) "Iris dark brown; feet grey; bill black, base of lower mandible whitish."

As we are not yet quite decided as to the exact relationship of Halcyon chloris and H. sordidus, we have also retained this form under a binominal appellation, though we are almost certain that all the chloris-sordidus group are subspecies of one single species.

18. Eudynamis orientalis alberti Rothscl. & Hart.


1 ♀ ad., 1 ♂ juv. (Nos. 4036, 4067, Yanuta.)


3 ♂ ♂ ad., 4 ♀ ♀ ad. (Nos. 4009, 4058, 4070, 4075, 4080, 4092, Yanuta, 4130, Makira.)  

When Canon Tristram described this bird he did not recognise the fact that the entirely grey birds are the males of those with rufous underside; but he evidently afterwards found out his mistake, for the bird which he originally described as *Graniculus monotonus* is now labelled by him as "*Edoliisoma salomonis* ♂," although in the *Ibis* 1879 he specially says: "but unfortunately the collection does not contain a male."  

Ramsay described a bird as the male of *E. salomonis* which he stated had rufous under wing-coverts, though being uniformly grey above and below; this must be either an aberrant specimen, or a not quite adult male. Both the type of "*G. monotonus*" and our males have grey under wing-coverts without any sign of rufous.  

We are obliged to Dr. H. O. Forbes of Liverpool for kindly lending us the specimens collected by Lieutenant Richards, and described by Tristram in the *Ibis* 1879.


1 ♂, Makira, 9. v. 1908. (No. 4177.) "Iris dark brown; bill black, under-mandible light horn-colour; feet vandyke brown."  

This specimen agrees almost exactly with the description of Ramsay, considering that the latter was taken from a spirit-specimen. The two principal differences are the slight fulvous tinge on the whitish tips to the lateral rectrices, and the pure fulvous colour of the tips to the median and greater wing-coverts. A narrow superciliary and postocular line is indicated by white tips to some of the feathers. The feathers of the throat and monasticial line are tipped with white.  

Wing 85.5, tail 91 mm., culmen 16.5.  

This appears to be the second specimen of *Rh. tenebrosa* obtained.

21. *Rhipidura tricolor* (Vieill.).  


2 ♀ ♀, Yanuta. (Nos. 4056, 4057.)


3 ♂ ♂, 2 ♀ ♀. (Nos. 4043, 4068, 4081, Yanuta; 4129, 4162, Makira.) "Iris brown; bill black (base of under-mandible pale); feet smoky brown."  

This form differs conspicuously from *Rh. rubrofrountata* and allies by the rufous colour of the upper surface reaching almost as far as the hind-neck, instead of being confined to the upper tail-coverts and rump.
23. *Monarcha castaneiventris megarhynchus* ssp. nov.

Similar in all respects to *M. castaneiventris castaneiventris*, but the bill larger and the tail and wings longer. The tail of the adult males measures up to 78.5 mm, thus being nearly 1 cm longer than in *M. c. castaneiventris*. The wings of the males measure up to 89 and even 91 mm. Width of bill across nostrils 9, as opposed to about 7 mm. Culmen 23 to 24 mm, as opposed to about 19 to 21 mm.

Type of new subspecies:

♂ ad., Yanuta, 26. iv. 1908, No. 4089, A. S. Meek coll. Mr. Meek sent 3 ♀♂ ad., 1 ♀ jun., 2 ♀♀ ad., all from Yanuta. (Nos. 4035, 4045, 4052, 4069, 4089, 4090.)

In the "Handlist of Birds," iii. p. 285, Dr. Sharpe quotes Pomarea rufocastanea Rams., *Pr. Linn. Soc., N. S. Wales* iv. p. 79 (1879), as coming from San Christoval. This is an error, as Ramsay gives as the locality of his *rufocastanea* "Lango, Guadalcanar," and *rufocastanea* is therefore a synonym of *M. c. castaneiventris*. We have compared Verreaux's type, now in the British Museum, and find it clearly to belong to the small-billed form found on Guadalcanar, Isabel and Choiseul.

24. *Monarcha vidua* (Tristr.).


3 ♀♂, 3 ♀♀. (Nos. 4000, 4014, 4047, 4063, 4064, 4065, Yanuta.) "Iris brown; bill and feet slaty blue."

These six specimens agree entirely in plumage. It is somewhat strange that the sexes in this species should be alike, while in its allies they are very different. The wings measure in the "males" 74.5—81, in the "females" 75 and 76 mm.


(Plate XII. fig. 2.)


2 ♀♂ ad., 2 ♀♀ ad. (Nos. 4034, 4062, Yanuta; 4139, 4146, 4155, Makira.) "Iris, ♂ dark brown, ♀ brown; feet, ♂ slate, ♀ slaty blue and slate; bill, ♂ dark slaty blue, chalky blue, ♀ slaty blue, slate."

The male differs from that of *M. c. ferrocyanea* by the back being dark grey with a deep metallic bottle-green wash instead of entirely deep purple-blue. The head, wings and tail are dark metallic bottle-green. The female differs from those of *M. c. ferrocyanea* and *M. c. feminina* (cf. *Nor. Zool.*, 1905, p. 261) by having the throat and breast cinnamon-rufous and the abdomen cinnamon-buff.

26. *Diaphoropterus affinis* (Tristr.).

*Symmorophus (Lalage) affinis* Tristram, *Ibis* 1879, p. 440 (San Christoval).

3 ♀♂, 3 ♀♀. (Nos. 4079, 4095, 4107, 4110, Yanuta; 4131, 4158, Makira.) "Iris brown; bill and feet black."

27. *Pachycephala christophori* Tristram.

*Pachycephalus christophori* Tristram, *Ibis* 1879, p. 441 (San Christoval).

5 ♀♂, 3 ♀♀. (Nos. 4005, 4010, 4014, 4025, 4032, 4033, 4039, 4040, Yanuta.) ♂ ad., "Iris brown; bill black; feet slate."
The male of this form is a small edition of *P. astrolabi*, but the females before us lack all traces of rufous. We are convinced that all the *Pachycephala* of the *melanura-astrolabi* groups are subspecies of a single species, but we hope to treat more fully on the subject of this and similar cases later on, and so for the present make use of binomials.


4 ♂♂ ad., 5 ♀ ♀ ad., 2 ♂♂ juv. (Nos. 4917, 4951, Yanuta; 4126, 4136, 4142, 4144, 4147, 4157, 4161, 4175, 4176, Makira.) "Iris brown; bill and feet black."

In the adult male the chin and throat are dark brown, the ear-coverts brown, minutely tipped with white, while in the female the chin and upper throat are white, the lower throat lighter brown than in the male, and the auricular region white. The females also are generally somewhat more white on the under-surface. The young birds are uniform sooty brown above, sooty grey below, merging into whitish on the abdomen and flanks; the basal half of the under mandible yellowish.


5 ♂♂ ♂♂ ad., 1 ♀ ♀ juv. (Nos. 4001, 4016, 4019, 4020, 4026, 4028, Yanuta.)

The young female differs from the adult males in having the head much more yellowish, likewise the under-surface, the rump brighter rufous, and the wing-coverts more greenish olive. The wing is 107 mm. long, instead of about 129 mm.


[Myzomela pammelaena Schater, P.Z.S. 1877, p. 553—Admiralty Is.]


Diffsers from *M. p. pammelaena* by the absence of the steely gloss in the plumage of the adult birds, and by the whiter inner edges to the remiges. The young birds differ in having the beak yellowish with a dark tip, instead of blackish, and in having a sooty grey instead of rufous greyish brown underside.

Wing: ♂♂ ad., 67—69; ♀ ♀ ad., 61—62 mm.; while the wing of the type of *pammelaena* measures 75·5 mm.

Mr. Meck sent 4 ♂♂ ad., 3 ♀ ♀ ad., 1 ♂ juv. (Nos. 4015, 4050, 4071, 4098, Yanuta; 4135, 4140, 4141, 4160, Makira.)

31. *Zosterops alberti* sp. nov.

Upper surface bright yellowish olive-green, crown washed with brown. No trace of a white orbital ring. Quills brownish black, all except the second (first developed) primary, margined with the colour of the back, innermost secondaries almost entirely yellowish olive-green. Rectrices blackish brown, broadly edged with the colour of the back. Under-surface whitish, throat and chest with a slight greyish tinge, sides of the throat and body washed with grey. Under tail-coverts washed with yellow; under wing-coverts and axillaries white, washed with yellow, the former mottled with grey near the carpal edge. "Iris hazel; bill black; feet slate-colour." Wing 67·5—69, in one specimen (No. 4102) marked "male" only.
60 mm. Tail 46—50, metatarsals about 20, culmen 16—17 mm. Type, No. 4078 ♂, Ynuta 25. iv. 1908. Albert Meek coll, in the Tring Museum.

_Hab._ San Christoval, Solomon Islands.

3 ♂♂, 3 ♀♀. (Nos. 4078, 4086, 4102, 4103, Ynuta; 4123, 4124, Makira.)

32. **Calornis metallica** (Temm.)

_Cf. Nor. Zoöl. 1905, p. 267._

1 ♂ ad., 5 ♀♀ ad. (Nos. 4094, 4101, 4118, 4119, 4120, 4121, Ynuta.)

The male and the females are alike in colour, but the wing in the male is 100, while in the females it varies from 93 to 96 mm. The tail likewise seems to be longer in the male, our females having tails from 75 to 86 mm., while that of the male is 95 mm.

33. **Calornis fulvipennis dichroa** Tristr.

_Calornis dichroa, Ibis 1895, p. 376. (New name for Calornis minor, which name had already been employed.)_

3 ♂♂, 3 ♀♀. (Nos. 4066, 4077, 4100, Ynuta; 4133, 4172, 4178, Makira.)

“Iris dark red; bill and feet black.”

The wings of the males measure 119 and 120, those of the females 112 to 115 mm.

34. **Dicrurus longirostris** Rams.


2 ♂♂, 3 ♀♀. (Nos. 4037, 4091, 4117, Ynuta; 4138, 4179, Makira.) “Iris brown (dark brown, dark red); bill and feet black.”
NOTES ON AFRICAN BIRDS IN THE TRING MUSEUM.

BY OSCAR NEUMANN.

I. LIST OF THE MUSOPHAGIDAE.

1. Corythacola cristata (Vieill.).

This species occurs in West Africa from the Gambia to North Angola, and is distributed in the interior as far as Uganda proper, but does not cross the Somerst Nile, nor does it seem to occur near Lake Tanganyika. I fail to find any differences between the birds of Upper and those of Lower Guinea.

The Tring Museum possesses the following specimens:

4 ♂♂, 4 ♀♀, 1 pull. Ombrokna (Ugomo),
Ogowe River . . . 8-25. viii. 07. Ansorge coll.
2 ♂♂, 1 ♀. Umphokosa (Lake Ogemwe),
Ogowe River . . . 19-13. vi. 07. " "
1 ♀. Mafini (Lake Onange), Ogowe River . 30. vii. 07. " "
1 (not sexed). Ohumbe (Lake Onange),
Ogowe River . . . 22. vii. 07. " "
1 ♀. Noama (Lake Esanga), Ogowe River . 18. v. 02. " "
1 ad. (not sexed). Uptun (Upper Congo) . Bentley coll.
1 ♀. Ituri River . . . 24. v. 99. Ansorge "
1 ♂, 1 ♀. Ntebbi, Uganda . . . 29-25. i. 05. Seth-Smith coll.
1 ♀, 1 (not sexed). Ntebbi, Uganda . . . " "
1 ♂, 1 ♀. Degama, Southern Nigeria . . 23. ii., 24. vi. 02. Ansorge "
3 ♂♂, 1 ♀. Ogruga, Anambra Creek,
Southern Nigeria . . . xii. 01—ii. 02. Braham "

The pullus is very interesting. Head, neck, and the whole underside are covered with dark grey down, which is somewhat lighter on the belly. There are no green nor brown feathers here at all. The feathers of the wing and tail are already complete, but the tail feathers as far as they are visible are blue throughout. There is no dark subapical bar, nor is there any green colour at the base of the outer tail-feathers.

2. Chizaerhis africana (Lath.).

This species is distributed over West Africa from the Senegal to the Congo, but it seems to be local and rare in Lower Guinea.

The following specimens are in the Tring Museum:

2 ♂♂, 2 ♀♀ from Tevigne, Kirmarsat,
Nguick (near Thies), Senegambia . xii. 07—i. 08. Riggenbach coll.
1 ♀. Thies, Senegambia . . . 17. vii. 07. " "
1 ♂. Gambaga, Gold Coast . . . 25. ii. 98. Giffard "
1 ♂. Upper Casamanze River . . . (Purchased from Boucard.)

Three more skins without exact locality.
3. Chizaerhis zonura Rüpp.

This species is distributed over those regions of North-East Africa from which the waters run to the Nile—i.e., from North Abyssinia to Lake Victoria. It also occurs near Massana and on the Omo River, but not in Somaliland, nor in the Hawash regions of Shoa.

There is no difference between specimens from North Abyssinia and those from Lake Victoria.

The following specimens are in the Tring Museum:

♂. Arba Schiko, Eritrea . . . 15. iii. 03. ” ”
♀. Ghadi Saati, Mareb, Eritrea . . 2. ii. 03. Beecari ”
♂. Torah, Eritrea . . . . 25. x. 05. ” ”
♀. Gurareba, Eritrea . . . . 1. xii. 05. ” ”
♀. Godjeb River, Kaffa . . . . 25. iii. 01. Neumann ”
Not sexed, Kavirondo
♀. Kagehi, Lake Victoria . . . . 22. xi. 05. Jackson ”
♀. Wandi, Makraka . . . . 28. iii. Fischer ”
♂. Kayanga, Ussoga . . . . 7. iii. 99. Emin ”
Not sexed, Uganda Protectorate
♀. Bukoba . . . . 18. v. 07. Ansorge ”

4. Corythaixoides leucogaster (Rüpp.)*

This species is distributed over the Hawash region of Shoa, the whole of Somaliland and from there to the eastern parts of British and German East Africa down to Usagara and Ugogo in the south. It just goes to the border of the Nilotic region, which it reaches near Tarangole.

There is no doubt that the male has always a black bill, while the bill of the female is olive-green with a yellowish point.

The following specimens are in the Tring Museum:

♂. Scheikh, south of Berbera . . . . 3. i. 03. Nemez coll.
4 ♀, 3 ♂, 3 ♀, Waggar Mountains, south-east of Berbera . . . . 5. vii.—13. viii. 05. Bury ”
♂. Milmil, Ogaden . . . . 27. vii. 94. Donaldson Smith coll.
♀. Okoto, near Webi Shebali . . . . 8. ix. 94. Donaldson Smith coll.
♀. Djigdija, near Harar . . . . 23. ii. 03. Zaphiro coll.
2 ♀, ♀. Laga Arba, Assabot, South Dankil . . . . 2. vii. 03. ” ”
♂. Malu River, South Dankil . . . . 15. vi.—6. vii. 03. ” ”
♂. Galadum, South Dankil . . . . 7. vii. 03. ” ”
♂. Kassam River, Hawash . . . . 20. vi. 03. ” ”
♂. Lake Gandjule . . . . 5. i. 01. ” ”
♀. British East Africa . . . . 3. ix. 01. Jackson ”
♂. Kibuesi, Ukamba . . . . 11. xii. 94. Neumann ”

* I have explained the differences between Chizaerhis Rüpp. and Corythaixoides Smith, Journal of Orn., 1893, p. 67. There is no reason to join these two, while Gymnochaizorhis is kept separate.
5. Corythaixoides concolor concolor (A. Sm.).

Colipinus concolor A. Sm., Report of Expedition 1836, p. 64 (Willughby edition, p. 120) [from Kurrehaine to the Tropic].

Andrew Smith described the form from South-East Africa, which is distributed from Natal to Usaramo in German East Africa.

The following specimens are in the Tring Museum:

♀. Monkey Bay, Lake Nyassa . . . 22. xii. 95. Rendall coll.
♀. Barberton, Transvaal . . . . 1. ix. 91. Giffard
♂. Zoutpansberg . . . . 1. xi. 77. Guillemand
Not sexed. Spelonken, Zoutpansberg, Transvaal . . . . iv. 91. Distant
Not sexed. Rustenburg, Transvaal . . W. Ayres
♀. Limpopo River . . . . 2. vi. 86. Ericksson


This form is not only restricted to Angola, but replaces the former on all rivers, which run into the Atlantic Ocean.

It is distinguished by the much paler head and neck, and the longer crest-feathers. The bird is altogether paler, and the green patch of the chest is more pronounced.

The following specimens are in the Tring Museum:

2 ♀♂. Koeleoe River, Kasinga . . . 4-7. v. 87. v. d. Kellen coll.
♀. Gambos, Mossamedes . . . . 6. ix. 88.
Not sexed. Catumbeleta, Benguela . . x. 03. Moequerys
♂. Ketengue, Benguela . . . . 5. viii. Penrice
♀. Barraca, Quanza River, Angola . . 3. vi. 01. Pemberton
3 ♀♂, 3 ♀♀. Fort Quilenges, Benguela 12-22. i. 05. Ansorge
♂. Huxe, Benguela . . . . 23. vi. 04.
♂. Sandpits . . . . 10. viii. 04.
Juvenile. Cahama . . . . 9. iii. 06.

7. Gymnoschizorhis personata personata (Rüpp.).

This form is distributed from the Hawash region of Shoa to Harar in the east and to Lake Zulaï in the south.

The following specimens are in the Tring Museum:

2 specimens (not sexed), Harar . . . . . Zaphiro coll.
2 ♀♂. Erer River, Harar . . . . . vi., vii. 02.
2 ♂ ♂, 2 ♀♀. Mioso, Harar Mountains . 5-6, viii. 03. Zaphiro coll.
♀. Mula River, South Danakil . 6, vii. 03.
♂. Gobelli River, south of Harar . 2, i. 01.

8. Gymnoschizorhis personata leopoldi Shell.
This form is distributed over East Africa from the Pangani River to Lake Nyassa in the south. On the east of Lake Victoria, as well as near Lake Nyassa, intermediate specimens between this and the following form seem to occur.
In true leopoldi the crest-feathers are but slightly darker than in G. p. personata.
The following specimens are in the Tring Museum:
♂. Irangi . 2, vii. 93.
The two following specimens are intermediate between G. p. leopoldi and G. p. centralis:—
♂ ♀. Simiu River, south-east of Lake Victoria . 6-8, xi. 85. G. A. Fischer coll.

This darker form replaces leopoldi in the regions west of Lake Nyanza, and it seems to be this form which occurs near Lake Tanganyika and west of Lake Nyassa.
The following specimens are in the Tring Museum:
♂ ♀. Lake Urigi . 8-12, vi. 07.
♂. Between Lake Urigi and Ussuwé . 18, vi. 07.
♂. Between Kagera River and Nsasa . 6, vii. 07.

10. Musophaga violacea violacea Isert.
This form is distributed over Upper Guinea from Senegambia to the Niger.
There are four specimens only in the Tring Museum:
1 native trade skin. Senegambia.
1 not sexed. Winnebah, Gold Coast . Boucard collection.
♀. Gambaga, interior of Gold Coast . 18, ii. 98. Giffard coll.

11. Musophaga violacea rossae J. Gd.
This form is distributed from Kamerun to Angola, and goes eastwards as far as Lakes Tanganyika and Victoria, where it even occurs on the east shore.
The following specimens are in the Tring Museum:
♀ ♀. N’gnngo, North Bailundu, Angola . 8, viii. 01. Pemberton coll.
pull. Guimbungo, Jinga country, Angola . 30, viii. 03.
♀. Ngombi, Lower Congo. vii. " "
2 ♂, 2 ♀♀. Ntebbi, Uganda. " "
♀. Ntebbi, Uganda. S. vii. '05. Seth-Smith "
♀ juv. Karaschonjo, Kavirondo. 8. iii. '94. O. Neumann "
♂. Kwidjwi Island, Lake Kivu. 9. xi. '07. Graener "

It seems that the helmet-like base of the bill is always narrower in the female than in the male. In the younger bird the bill is not so developed as in the adult. The pulvis has still a black bill and scarcely any red on the head.

12. Ruwenzorornis johnstoni johnstoni (Sharpe).

Restricted to the Ruwenzori Range.
The following specimens are in the Tring Museum:

♂. Ruwenzori. 30. x. '05. " "
♀. " "

13. Ruwenzorornis johnstoni kivuensis Neum.

Ruwenzorornis chloroptalmicus Rehw., Orn. Monatsber. 1908, p. 48 (1 March).

This form replaces the foregoing in the Lake Kivu region.

♂. Western Kivu Volcanoes (Type of sub-species) 27. viii. '07. Graener coll.
♂. Mt. Mikeno. 5. xi. '07. " "
2 ♂, 3 ♀♀. Rugege Forest. 5-17. xii. '07. " "

This series shows that the culmen is not more elevated in R. j. kivuensis than in R. j. johnstoni, as I had supposed when only one skin was available.

14. Gallirex porphyreolophus porphyreolophus (Vig.).

This form is distributed over South Africa from Natal and Transvaal north to Mashonaland and the Maroë River, while in the Zambesi Valley it seems to be replaced by G. p. chlorochlamys.

The following specimens are in the Tring Museum:

I not sexed. Port Natal. McKen coll. (Jardine collection.)
♀ Kranz Valley. (Collector unknown.)
♂ ♀. " " 25. xi. '01. Giffard "

One specimen without locality.

15. Gallirex porphyreolophus chlorochlamys Shell.

This form replaces the foregoing in East Africa from the Zambesi to Taita and Machako's in the north-eastern and to Lake Tanganyika and Lake Nyanza in the north-western direction.

There are two specimens in the Tring Museum.

Not sexed. Machako's, Ukamba. Hinde coll.
♀. Monkey Bay, Lake Nyassa. 2. vi. '95. Rendall "
16. Turacus hartlaubi (Fsehr. & Rehw.).

This species is distributed over the high mountains of East Africa from Kilimanjaro and Machakos to Man, Kenya and Elgon.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Specimen Details</th>
<th>Collector(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 specimens (no locality, probably Kikuyu).</td>
<td>Jackson coll.</td>
</tr>
<tr>
<td>1 not sexed. Machako's, Ukamba</td>
<td>Hinde</td>
</tr>
<tr>
<td>♀ Nairobi, Kikuyu</td>
<td>Ansorge</td>
</tr>
<tr>
<td>♀ ad., ♀ juv. Sunbuko Forest, Man</td>
<td>O. Neumann coll.</td>
</tr>
<tr>
<td>2 ♀♂. Fort Smith, Kikuyu</td>
<td>&quot;</td>
</tr>
<tr>
<td>2 ♀♂. Eldoma Ravine, Man</td>
<td>&quot;</td>
</tr>
<tr>
<td>2 ♀♀. Nairobi, Kikuyu</td>
<td>Mackinder</td>
</tr>
<tr>
<td>5 ♀♂, 2 ♀♀, 1 ♀ juv., 3 ♀♀ juv. Escarpment Station, Kikuyu</td>
<td>Doherty</td>
</tr>
</tbody>
</table>

In the young specimens the bill is brownish black, the feathers of the front are mixed with green. The white stripe below the eye is not well developed. In the youngest specimen the green colour of the back and underside is very pale and just beginning. The white stripe below the eye is faintly indicated; but instead of the white spot in front of the eye there is a broad white stripe over the whole eye, which unites behind the eye with the indication of the lower stripe. Of the five young specimens, the four more advanced were collected in September, October, December, and March. The youngest specimen was collected in March.

17. Turacus leucolophus (Hartl.).

This species is distributed over Central Africa from the Samia Hills in North Kavirondo and Turquel to the Ubangi and Shari Rivers. There are specimens in the Paris Museum collected by de Béhagle in Bagirivi, and Capt. Boyd Alexander collected this species on the Ba-Mingue River (Upper Shari). These specimens which I have compared, are not at all different from those from the Upper White Nile, Unyoro, and Kavirondo.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Specimen Details</th>
<th>Collector(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 specimen (without locality, probably North Kavirondo or Turquel)</td>
<td>Jackson coll.</td>
</tr>
<tr>
<td>1 specimen, Uganda</td>
<td>Grauer</td>
</tr>
<tr>
<td>1 &quot; Uganda Protectorate</td>
<td>Seth-Smith coll.</td>
</tr>
<tr>
<td>♀ Butiaba, Unyoro</td>
<td>&quot;</td>
</tr>
<tr>
<td>2 ♀♀. Masindi, Unyoro</td>
<td>&quot;</td>
</tr>
<tr>
<td>3 ♀♀. Semnio, Nianiam</td>
<td>Bohmudorff</td>
</tr>
</tbody>
</table>

18. Turacus erythrolophus (Vieill.).

The distribution of this species is wrongly recorded even in the last works dealing with that group—i.e. in Reichenow: "Vögel Afrikas" 1902-3, and in Dubois' list of the "Musophagidae" in Genera Avium, which is nothing but an extract from Reichenow's work without any criticism.

In both these works the distribution is given as "from Sierra Leone to Angola." Now the bird was never collected in Sierra Leone, but this statement was made by Hartlaub on account of some specimens in the Paris and Leyden Museums recorded from that locality, which is surely a mistake.
Newton recorded having seen this species on Fernando Po, but he certainly confounded it with *T. cerreuxi* (T. meriani act.). It might occur in Fernando Vaz and Loanda, whence it has been recorded by Marche and Compiègne, and by Toulson, but I think that this locality also should not be quoted without doubt.

The true locality is Angola, where it occurs from the Congo to Central Benguella, and it also occurs in the neighbouring provinces of the Congo Free State.

The following specimens are in the Tring Museum:

♀. Luissange, Angola . . . . 1894  Anchicta coll.
2 ♀♂. Pungo Andongo, Angola . 15-22, vii. 03. Ansorge
1 not sexed. Catumbela, Benguella . . . . 1900  Mecquerryss

19. *Turacus leucotis leucotis* (Rüpp.).

This form is distributed from Keren in North Abyssinia to the mountains of Gardulla south of Lake Gandjule. To the west it occurs in Kaffa and the other mountains of the Omo system, and even in Shebeho on the sources of the Gelo River. There is no difference whatever between northern and southern specimens.

The following specimens are in the Tring Museum:

♀ ♀. Salamona, Eritrea . . . . 27, xii. 97, 12 i. 98. Schrader coll.
♀. Ali Beret . . . . 22, i. 00. " "
♂. Arba Schiko, Anseba River . . . . 13, iii. 03. " "
♀ ♀. Senafe, Eritrea . . . . 21, xii. 02; 19, i. 03. " "
♂. Largesana, Eritrea . . . . 8, xii. 03. Beccari "
♀. Valle di Ghinda, Eritrea . . . . 9, xii. 03. " "
15 specimens which I collected on different localities in Shoa and Southern Ethiopia.

These are recorded *Journ. f. Orn.* 1904, p. 379.


This form is the representative of the foregoing in the river system of the Webbi Web and the Webbi Shehebi, and also at the northern slope of the Harar Mountains. It has the crest feathers pink, where they are dull blue in *leucotis*. Besides this difference the coloration of the two forms is absolutely the same.

The following specimens are in the Tring Museum:

♀. Darro Mountains, near Sheikh Hussein . 10, xi. 94  Donaldson Smith coll.
♂. Mulun, South Danakil . . . . 5, vii. 03. Zaphiro coll.
♂. Kupi, Harar Mountains . . . . 2, xii. 01. " "
♀ ♀. Amadja, Harar Mountains . . . . 18, xii. 01. " "
♀. Miesso, Harar Mountains . . . . 5, vii. 03. " "
♀. Condendo . . . . 30, x. 02. " "
♀. Harawa, near Harar . . . . 27, ix. 02. " "
♂. Erer River, near Harar . . . . 1, i. 03. " "

21. *Turacus macrorhynchus macrorhynchus* (Fras.).

This form is distributed from Sierra Leone to the Gold Coast, neither this nor *cerreuxi*, the corresponding form from Lower Guinea, being found in Togo, Dahomey, and Lagos.
There are only three specimens in the Tring Museum:

3. Juring, Sulyma River, Sierra Leone . . . . 5. ix. 90. Demery coll.
3. Whitefield, Liberia . . . . 29. x. 84 Stampfli

One specimen without locality.

22. Turacus macrorhynchos verreauxi (Schleg.).


This form is the representative of the foregoing one in Lower Guinea, where it occurs from Fernando Po and Kamerun to the Lower Congo. The occurrence at Agnapiin on the Gold Coast is surely stated erroneously, while the birds collected by Thompson, and recorded as coming from the Niger, in the Cat. Birds vol. xix. p. 443, were collected in the Kamerun, as will be found in Thompson's Narrative of the Niger Expedition.

This bird cannot be called Turacus meriani. In his paper, "Ueber eine neue Art von Turacos," which appeared in Bericht der Verhandl. Naturf. Gesellsch. Basel, probably in January 1851, Rüppell described Turacos persa from specimens which had been sent to the Basel Museum from the Gold Coast, probably by the missionary Riis from Agnapiin; as a new species under the name Turacos meriani, believing the red-crested form to be the true Turacos persa: ("Man unterscheidet ihn (persa) leicht durch die scharlachroten Spitzen seines etwas comprimierten Federschopfes ").

He gave here the characters which distinguish the green-crested Turacos from the Gold Coast from the Senegambian T. buffoni.

Shortly afterwards Rüppell found out his mistake, and published another paper on the same subject in Wiegmann’s Archiv für Natursgeschichte, vol. xvii. (1851) p. 316, which appeared in the summer or in October 1851, and which he called a correction of the first article ("Als Berichtigung eines Aufsatzes von mir über den gleichen Gegenstand, abgedruckt in dem 9ten Berichte der Basler naturforschenden Gesellschaft"). In this article now, without mentioning the mistake he has made before, Rüppell simply applies the name "meriani" to a totally different species—i.e. the red-crested one!

It is quite obvious that such a proceeding is not allowed by the rules of nomenclature. Rüppell's name is a synonym to T. persa L., and the red-crested bird has therefore to stand as Turacos cerreauisi Schleg. 1854.

The following specimens are in the Tring Museum:

2 δδ, 2 ♀♀. Banterbali, Fernando Po . . . . 4-8. iii. 04 Seimmund coll.
2 Dipinde, Kamerun . . . . . . . . ix. 98. Zenker
2 specimens (not sexed). Dipinde or Jasinde
3 δ♀. Lake Asebbe, Fernand Vaz, Gabun 23. i.—13. ii. 07. " "
3 δ♀, 1 ♀♀. Lake Asebbe, Fernand Vaz, Gabun 23. i.—13. ii. 07. " "
3 δ♀. Copa, near Sette Cama, Gabun . . . . 27. vi. 05. Little coll.
23. Turacus persa persa (L.).

Cuculus persa L., S. Nat. x. 1758, p. 111. [Africa].

Hab. West Africa from the Gold Coast to the Congo.

It is rather astonishing to find that up to this day, with one exception, no ornithologist has ever pointed out the true relation between Turacus persa L. and Turacus bufoni Vieill.—i.e. that both are nothing but geographical representatives of each other. The one exception is Schlegel, who in his work "De Turac.," 1860, pp. 16, 17, quite correctly states that persa is the only one of the two forms occurring on the Gold Coast, while purpureus (= bufoni) is the Senegambian form.

All other ornithologists, down to Reichenow, Vögel Afrikas, and Shelley, Catalogue of Birds, vol. xix., record both species, as occurring side by side from the Senegal to the Congo, and in addition to these the former created two subspecies.

As to Cuculus persa there can be no doubt that Linné described the form which occurs from the Gold Coast to the Congo, for both figures which he quotes—Albin's as well as Edwards'—show a bird with a distinct white streak below the eye, while the black line below the eye is rather reduced.

Rüppell in 1851 described the Gold Coast bird as Turacus merianii, while half a year later he attributed this name with a new description to the red-crested Turac. from Gabun, afterwards called Musophaga verreauxi by Schlegel. Reichenow separated the birds from Togo and Upper Guinea from those of Lower Guinea as T. p. böttneri, stating that the purple colour of the former inclined more to blue, while it was more copper-brown in the latter; but after having studied more than fifty birds from both regions, I fail to see even the slightest difference in this way. If the two forms were different, the bird from Upper Guinea would of course have to be called merianii Rüpp. Later, Reichenow described birds collected by Zenker in Jaunde, Kamerun, as a subspecies of Turacus bufoni, calling them Turacus bufoni zenkeri, and stating this form to be the representative of T. bufoni in Lower Guinea, and to occur there side by side with, or at least in the same geographical region as, Turacus persa. He states that this bird differs from true bufoni by having only a black patch below the eye, in this character resembling T. persa, while the lower white line is stated to be as narrow as in T. bufoni.

Here again I have failed to see the differences pointed out by Reichenow. It is true that birds from Kamerun, called zenkeri by Reichenow, differ widely from T. bufoni from Senegambia by having only one black patch and no long black line below the eye; but the breadthness of the lower white line is an absolutely indifferent character, so that the birds cannot be separated from specimens of T. persa from the Gold Coast and Togo. In some specimens this white line is indeed very narrow, but it is broader in other specimens from the same locality. I also found specimens from Togo and the Gold Coast (in the Berlin and in the British Museums) in which this line is as narrow as in most of the South Kamerun and Gabun birds.

It thus remains to acknowledge only two subspecies of Turacus persa:
1. Turacus persa persa (L.) From the Gold Coast to the Congo.
2. Turacus persa bufoni (Vieill.). From Senegambia to Sierra Leone.
The following specimens of *T. p. persa* are in the Tring Museum:

One specimen, no locality (probably from the Gold Coast).

<table>
<thead>
<tr>
<th>Specimen Details</th>
<th>Date</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♀♀, 1 ♂ Deguma and Buguma, South Nigeria</td>
<td>14. ii.—24. vii. 92</td>
<td>Ansorge coll.</td>
</tr>
<tr>
<td>2 ♀♀, Bipinde, Kamerun</td>
<td>7. iii. 97</td>
<td>Zenker coll.</td>
</tr>
<tr>
<td>♀♀</td>
<td>vi. 97</td>
<td></td>
</tr>
<tr>
<td>1 ♀♀, Ndamu, Lake Esanga, Ogowe</td>
<td>18—25. v. 97</td>
<td>Ansorge coll.</td>
</tr>
<tr>
<td>♀♀ Degama Kowie Matini, Abuga</td>
<td>31. vii. 07</td>
<td></td>
</tr>
<tr>
<td>♀♀, Mahini, Lake Onunge, Ogowe</td>
<td>12. x.—6. xi. 97</td>
<td></td>
</tr>
<tr>
<td>♀♀, Anda, Lake Asingo, Ogowe</td>
<td>26. xii. 07</td>
<td></td>
</tr>
<tr>
<td>2 (not sexed), Mayumbe, Buki, Congo</td>
<td>Received through Contreras, Bohndorff coll.</td>
<td></td>
</tr>
</tbody>
</table>

24. *Turacus persa buffoni* (Vieill.)

This form is distinguished from *T. p. persa* by having the black patch beneath the eye continued backwards to a distinct black band and the white band beneath it only faintly indicated or wanting.

It replaces the foregoing form in Senegambia and Sierra Leone. It is remarkable that neither of the two forms is found in Liberia. The fauna of the French Ivory Coast between Liberia and the Gold Coast is practically unknown, and it is impossible to say whether the true *T. p. persa* occurs so far west.

As this form was not collected by Riggenbach near Thies and Dionrel, I suppose that the Gambia forms its northern limit.

There are only two native trade-skims from Senegambia in the Tring Museum.

25. *Turacus corythaix corythaix* (Wagl.)

The true *Turacus corythaix* is distributed over Eastern South Africa from the Cape Colony to the southern parts of the Transvaal, while it is replaced in the Lydenburg, Barberton, and Zoutpansberg districts, probably also in Ghazaland, by the blue *T. c. phoebus* Neum.

The following specimens of *T. c. corythaix* are in the Tring Museum:

<table>
<thead>
<tr>
<th>Specimen Details</th>
<th>Date</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>One specimen (not sexed), Knysna Forest, Cape Colony</td>
<td></td>
<td>Miss Newdigate coll.</td>
</tr>
<tr>
<td>Two specimens (not sexed), Kingwilliamstown District, Cape Colony</td>
<td></td>
<td>Sir A. Smith coll.</td>
</tr>
<tr>
<td>Two specimens (not sexed), Iifa River, Natal</td>
<td>1895</td>
<td>Woodward Bros. coll.</td>
</tr>
<tr>
<td>One specimen (not sexed), &quot;Transvaal&quot;</td>
<td></td>
<td>Ayres coll.</td>
</tr>
<tr>
<td>♀, Van Staedens River, Cape Colony</td>
<td></td>
<td>Guillemand coll.</td>
</tr>
<tr>
<td>♀, Kowie River, near Grahamstown, Albany</td>
<td>39. iv. 77</td>
<td></td>
</tr>
<tr>
<td>Two more specimens, labelled &quot;South Africa.&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


*Turacus emini* Rchw., *Orn. Monatsh.* 1893, p. 30 [Bandako, UVamba; Mumbo; Vundekakare; Karevia, Ukondjo].

*Turacus ugandae* Rchw., *Orn. Monatsh.* 1907, p. 4 [Uganda].

This species is distributed from the Nsoro, a source stream of the Uelle and the Upper Ituri to Ntebbi in Uganda and southward to the Rugege Forest, south-east of Lake Kivu.
I cannot see any differences between specimens from the Upper Ituri and the regions of Lakes Albert and Albert Edward and such from Uganda, as the birds from Karevia, Ukondjo, and from west of Lake Albert Edward have absolutely the same gloss as those from Uganda. The differences in the gloss seem to be merely individual.

The following specimens are in the Tring Museum:

♂. Forest, 90 km, west of Lake Albert Edward .... 11—20. xii. 07.
♀. Rugege Forest, Lake Kivu .... 15—20. xii. 07.

As to the other black-billed forms, T. schütt schütti Cab. is distributed from Taha Magungo on the Cuango, North Angola, to the (lower?) Aruwimi, whence there are two specimens in the British Museum collected by Capt. Guy Barrows.

T. schütt schütti sharpei Rchw. is known only from the type, which was collected by Bohndorff at Semnio (Zemio) on the Bonu or M'Bomon River, the large northern affluent of the Uelle.

T. schütt schütti finschi Rchw. was discovered by Bohndorff at Ndoruma, which is just on the watershed between the Uerre and Gurumba Rivers, running into the Uelle and the Sue River, an affluent of the Bahr el Ghazal.

The three specimens which Bohndorff collected here are in the Leyden, Bremen, and Basel Museums.

Captain Boyd Alexander collected two specimens of T. s. finschi on the Likandi (Bumokandi) River, a southern affluent of the Uelle, due south of Ndoruma, which do not absolutely agree with the description of the type, but are in any case intermediate in colour between T. sharpei and T. emini.

27. Turacus livingstonei livingstonei G. R. Gray.

This form of the long-crested group is distributed over the countries south of Lake Nyassa (Zomba, Mlangi, Mlosa, Manjanga Hills, Lower Zambesi), and is said to occur south to Zululand. I have, however, not been able to compare Zululand specimens, and believe they might be different.

The following specimens are in the Tring Museum:

3 ad. (not sexed), Mlangi Hills, Nyassaland. Brown coll.

28. Turacus livingstonei cabanisi (Rchw.).

The northern form of T. livingstonei is distinguished from true livingstonei always by a more bluish green neck and a bluish wash in the tail.

Such birds have been collected at Bagamoyo by Fischer (Berlin and Stuttgart), at Mpopwa by Baxter (London), in Ugogo by Kirk (London).

The Tring Museum has one specimen of this form.

Ad., Nguru Hills, iv. 96.

Side by side with these birds a blue species occurs which has been called by Fischer Turacus reichenowii, and all intermediate forms between the green T. l. cabanisi and T. reichenowii seem to be found in the same region. The puzzle becomes more difficult by the fact that Mr. Claude Grant collected such a blue bird north of Beira, which I have compared with and cannot distinguish from two cotypes of reichenowii from Dar-es-Salaham and Maruji (German East Africa).

While Reiheuow has put down his own Turacus cabanisi as a synonym to
T. livingstonei, he redescribed as T. hybridus those specimens which are a little or much more, but not quite so blue as typical T. reichenowi. There are only two possibilities. Either T. reichenowi is nothing but a blue aberration of T. livingstonei. In that case it is astonishing how frequently it occurs in German East Africa, while it has only once been found in South Mozambique (Beira).

The other possibility is that T. reichenowi is a distinct species, which occurs in German East Africa side by side with T. l. cabanisi, and has so often hybridised with the latter species that both species are beginning to form a new intermediate species.

I have compared the following specimens of the northern bird:

(a) Greenest (cabanisi): Three, Bagamoyo, Fischer coll. (Berlin, Stuttgart); one, Nguru (Tring); three, Ugogo, Kirk coll. (London); one, Mpapwa, Ugogo, Baxter coll. (London); one, East Ulunguru, Stuhlmann coll. (Berlin).

(b) More blue (hybridus): one, Ulunguru, Stuhlmann coll.; one, Kipungu, Fromm coll.; one, Simba Mnene, Emin coll., all in Berlin.

(c) Still more blue: one, Mrogoro, Stuhlmann coll., and one, Mraiji, v. Trotha coll. in Berlin; and one north of Beira, C. Grant coll. in London.

(d) Bluest (reichenowi): one, Nguru, Fischer coll. (the type), and one, Dar-es-Salaam, Stuhlmann coll.—both in Berlin.

Even neglecting the startling locality Beira, it is to be seen that no geographical limits are to be found between the green and the blue birds.

But it is strongly to be wished that a true ornithologist will some day collect good series of these birds with exact localities—a task which cannot be too difficult, as these birds occur close by, or even at the coast.

29. Turacns livingstonei schalowi (Rechw.).

This form is distributed over the whole of Portuguese West Africa from Mossamedes to the Congo. It is at once distinguished from the foregoing species by its long crest, which, however, has not a metallic gloss before the white tips. The white line below the eye is always present, but only half as broad as in T. l. livingstonei.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Locality</th>
<th>Year(s)</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liussango, Angola</td>
<td>1886</td>
<td>Anchita coll.</td>
</tr>
<tr>
<td>Nimbo, Loanda River, Angola</td>
<td>viii. 97</td>
<td>Penrice</td>
</tr>
<tr>
<td>Ngungo, North Bailundu, Angola</td>
<td>8-31. vii. 01</td>
<td>Pemberton coll.</td>
</tr>
<tr>
<td>Unjue River, near Pedreira, Bibi</td>
<td>6. xi. 04</td>
<td>Ausorge coll.</td>
</tr>
<tr>
<td>Bigondo, Bibi, Angola</td>
<td>23. x. 04</td>
<td>&quot;</td>
</tr>
<tr>
<td>Chissamba, Bibi, Angola</td>
<td>17-19. xi. 04</td>
<td>&quot;</td>
</tr>
<tr>
<td>Bongo River, Benguela</td>
<td>6. viii. 04</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mossamedes</td>
<td></td>
<td>Mocquerys coll.</td>
</tr>
</tbody>
</table>

I may add here the exact description of a very interesting geographical form, which occurs on the west coast of Lakes Nyassa and Tanganyika, and between these two lakes—viz. T. l. marungensis Rechw., Vog. Afr. ii. p. 52, in the text. Similar to T. l. schalowi, but the tail is more blue and less purple, the white line below the eye is broader than in T. l. schalowi, but narrower than in T. l. livingstonei; the crest-feathers are strongly developed as in T. l. chalcophilus and T. l. loitans, and are metallic green before the white tip.

This character is very well shown in good skins from the west coast of Lake Nyassa, while it is not so well to be seen in the two (younger?) type-specimens
which come from Marungu on the west coast of Lake Tanganyika. Till more material is available from there, I prefer to unite the Tanganyika and the Nyassa birds.

There is no specimen of *T. l. marungensis* in the Tring Museum, but I have compared the series of the Berlin and London Museums side by side.

The Berlin specimens have the following localities:

Two specimens, Qua Mpara, Marungu. Böhm coll.

" " Mararwopia, north of Lake Nyassa. Fülleborn coll.

One specimen, Songwe, north of Lake Nyassa. Fülleborn coll.

The following specimens are in the British Museum:

Four specimens, South Angoniiland. Manning coll.

One specimen, Kachere; one, Mwanembe; one, Songwe. Sharpe coll.

One, Nyika Plateau. Whyte coll.

One, Ikawa. Manning coll.

One, Palombe. Sharpe coll.

One, Mazuku Range. Whyte coll.

Some of these birds, the South Angoni and the Mwanembe specimens, are more golden-green above, while the Ikawa, Palombe, and Songwe specimens are a little more blue-green above.

In all specimens of *T. l. marungensis* the shortest crest-feathers of the hind-head have distinct white edges, and show scarcely any green gloss.


This form is only found on Mount Gurni, north of Irangi, German East Africa. It is distinguished from *marungensis* by the purple tail, the blue metallic gloss of the crest-feathers, and the entire absence or only faint indication of a white line below the eye. The shortest crest-feathers of the hind-head have a strong blue gloss and scarcely any white edges.

There are two specimens in the Tring Museum:

1 ♂, 1 ♂, Mount Gurni, German East Africa, 9. x. 93. O. Neumann coll.

31. *Turacus livingstonei* loitanus* subsp. nov.


This form is distributed from the Loita Mountains, North-west Massailand, to the east shore of Lake Victoria. *T. l. loitanus*, which I had formerly united with *T. l. chalcolophus*, is distinguished from the latter by the distinct white line below the eye and by the distinct white edges of the shortest crest-feathers. From *T. l. marungensis* it is distinguished by the purple tail.

The only specimen in the Tring Museum is:

♂ (type), Loita Mountains, North-west Massailand, 3. i. 94. O. Neumann coll.

Other specimens from the Loita Mountains (Neumann coll., v. Trotha coll.), the Ngare Dobasch (Neumann coll.), and the Mori River (Fischer coll.), are in the Berlin Museum.

My thanks are due to Prof. Reichenow, who very kindly sent me over all the material of the *livingstonei* group from the Berlin Museum, so that I could bring these specimens in direct comparison with the material of the British and Tring Museums.
II. LIST OF THE AFRICAN PSITTACIDAE.

1. Psittacus erithacus erithacus L.

The true red-tailed grey Parrot occurs from the Gold Coast to Katumbela and Bihé, in Benguela, and eastwards to Kavirondo, on the east shore of Lake Victoria, where I saw a flock near Kwa Kitoto, now Port Florence, in April 1894. Hartert (Kat. Svecbenberg. Mus., 1891, p. 157) has separated the birds from the Congo as megarkynchus on account of their supposed larger bill, from a smaller billed form, supposed to occur in Upper Guinea. As to the specimens before me, I can see no difference between birds from the lower Niger, the islands of the Gulf of Guinea, the Ogowe River, and Uganda. Unfortunately there are not enough wild shot specimens from Upper Guinea (Togo, Gold Coast) available for comparison, either in London, Berlin, or Tring. So I think, for the present, better to leave all under the name of erithacus.

It seems that the males have always larger bills, and are somewhat larger than the females.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Sex</th>
<th>Locality</th>
<th>Date</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂♂</td>
<td>Degama, Southern Nigeria</td>
<td>2. ii—2. vi. 92</td>
<td>Ansorge coll.</td>
</tr>
<tr>
<td>?</td>
<td>Bellavista, Isle of Principe</td>
<td>vi. 01</td>
<td>Mocquerys coll.</td>
</tr>
<tr>
<td>♂♂</td>
<td>Banterberi, Fernando Po</td>
<td>30. i. 94</td>
<td>Seinnud</td>
</tr>
<tr>
<td>♂♂</td>
<td>Lambarene, Ogowe River</td>
<td>6-7. v. 97</td>
<td>Ansorge</td>
</tr>
<tr>
<td>♂♂</td>
<td>Ogewa, Lake Eliva-Elvole, Ogowe River</td>
<td>28. vii. 97</td>
<td></td>
</tr>
<tr>
<td>♂♂</td>
<td>Ombrokua, Ugeomo</td>
<td>14. viii. 97</td>
<td></td>
</tr>
<tr>
<td>♂♂</td>
<td>Katumbela, Benguela</td>
<td></td>
<td>Mocquerys</td>
</tr>
<tr>
<td>♂♂</td>
<td>Kanyanga, Ussoga</td>
<td>6. iii. 99</td>
<td>Ansorge</td>
</tr>
<tr>
<td>♂♂</td>
<td>Kanyanga, Ussoga</td>
<td>7. iii. 99</td>
<td></td>
</tr>
<tr>
<td>♀</td>
<td>Masindi, Unyoro</td>
<td>12. i. 97</td>
<td>Seth Smith</td>
</tr>
<tr>
<td>♂♂</td>
<td>Budongo Forest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>♂♂</td>
<td>Wau Island, Lake Kivu</td>
<td>15. xi. 97</td>
<td></td>
</tr>
</tbody>
</table>

Besides these, there are some normal and some aberrant specimens from captivity, among which is a bird with tail and longest upper and under tail-coverts white instead of red, but otherwise normally coloured.

2. Psittacus erithacus timneh Fras.

This form replaces the true erithacus in Liberia and Sierra Leone.

There are two specimens in the Tring Museum:

“Sierra Leone” (ex captivity).

One without any label whatever.

The last specimen is very interesting. It has a tail which is intermediate in colour between that of the true erithacus and of timneh.

* This locality is the most southern known in modern times, but is not to be doubted, as the bird is already mentioned as occurring in Bihé, by Ladislaus Magyar: cf. Finch. Die Papageien, p. 312. Neither Ansorge, nor Pennicke and Pemberton, however, found the bird in Bihé or elsewhere in Angola.
3. Poicephalus robustus robustus (Gm.).

This form, which may at once be recognised by the narrower bill, especially lower mandible, as compared to that of the other subspecies of robustus, is distributed over the eastern parts of Cape Colony, east of the 23° of longitude to Zululand, and the south-east corner of Transvaal. It seems to be restricted to the coast regions, and never to occur in the Orange River Valley.

The female has generally a pink forehead.

The following specimens are in the Tring Museum:

*♂♀?*. King William's Town District, S. Africa  
♂. S. Africa . . . . . . . . Smith coll.  
♀. juv. Etchowe, Zululand . . . . . 15. x. 83.  
♀. juv. Giffard coll.

4. Poicephalus robustus suahelicus Rehw.

This form is distributed over the northern parts of German South-west Africa and the whole of the West African Portuguese Colony, and goes north as far as Loango. To the eastward it is distributed to the Zambesi Valley in the south, and to Kakoma in the north.

Through the series collected by Ansorge, who is one of the most careful of all collectors in sexing birds, it is proved now that not the male but the female has the whole vertex red, while previously the red-headed birds were thought to be either the males or very old birds of both sexes. Ansorge's dissections are also confirmed by the fact, that the birds with a red vertex have a somewhat smaller bill than those with a silvery grey head, in which the basal parts of the feathers have a red suffusion. Young birds are distinguished by wanting the red feathers on the bend of the wing and on the metacarpal edge. The thighs are entirely green, or have only a few red feathers. Even in the young birds the sexes can mostly be distinguished, as young females have the edges of the feathers on the forehead and vertex mostly red. Young males in the first plumage have also these red edges of the head-feathers, and therefore resemble more the females.

These characters, to distinguish male, female, and young, hold good for all the subspecies of robustus, but not for the subspecies of gulielmii, in which in both sexes the front and sometimes the vertex are scarlet or orange yellow in adult birds.

I cannot find that the western birds are lighter coloured than the eastern ones. I therefore do not recognise P. r. angolensis Rehw. as a distinct subspecies.

The following specimens of P. r. suahelicus are in the Tring Museum:

♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂♂şi
the thighs is yellow instead of red, and the feathers of the metacarpal edge are mixed red and yellow. A few yellow feathers on the upper half of the thighs are also found in one female, collected at the same date.

5. Poicephalus gulielmi gulielmi (Jard.).

Poicephalus gulielmi Jard., Contr. Orn. 1849, p. 64, pl. 28 [Congo].

In P. gulielmi and its subspecies both sexes seem to be coloured alike, and the red or orange forehead and crown is marked alike in male and female, but it is absent in younger birds. Concerning the nomenclature the following is to be said:

Jardine described as Poinephalus gulielmi a living specimen which his son had brought from the west coast of Africa, and it is expressly stated that the bird came from the Congo. Jardine described the colour of the forehead, crown, edges of wing and lower thighs as "bright yellowish scarlet." In four copies of his "Contributions," which I have examined, the plate shows these parts scarlet and not orange-yellow. There is no reason whatever why the name of gulielmi ought to be attributed to the Gold Coast bird, as the description of "bright yellowish scarlet" fits very well the bird from the Congo and other parts of Lower Guinea, but never that from the Gold Coast.

Sonancé, in describing his Aubryana, did not point out any differences in coloration, but simply stated that his new Aubryana was larger, in which he was right, and that it had a white upper mandible, which is more or less the case in all the subspecies of gulielmi.

The bird from the Gold Coast, with the forehead, crown, edges of wings and upper thighs orange-yellow instead of yellowish scarlet, the P. gulielmi (nee Jardine), Salvad., Cat. Birds xx. p. 366; Reichenow, Vögel Afrikas, ii. p. 9, thus requires a new name. I call it:

Poicephalus gulielmi fantiensis subsp. n.

Hab. : Gold Coast.

- Type in the British Museum : ad. Fanti . . . . . . . . Ussher coll.

As to the supposed differences between true gulielmi and Aubryana, I find that Sonancé was absolutely right. I have examined his type in Paris. It is much larger and has a much larger bill than birds from the Congo and Angola, and so have all specimens from Kamerun and Gabun. Wing in P. g. gulielmi 190—193 mm., in P. g. Aubryana 202—223 mm.

We thus have four geographical forms of P. gulielmi :

P. g. fantiensis, Neum. Gold Coast.

P. g. Aubryana, Sonancé. Kamerun and Gabun.

P. g. gulielmi, Jard. Congo and North Angola, eastwards to the Ubangi and Ituri Rivers.

P. g. massaicus, Schr. and Rech. East African high mountains : Meru, Kilimanjaro, Kenia, Kikuyu, Man.

The following specimens of P. g. gulielmi are in the Tring Museum :

1 ad. Mayumba (Luki), Congo . . . . . . . . . . received through Contreras.

♀. Sakurambi, near Fort Béni, Upper Ituri . . . . 5. v. 99. Ansorge coll.

Ad. Golongo Alto, North Angola . . . . . . . . .
6. Poicephalus gulielmii aubryanus (Soroané).

This form, in which the bill is nearly as large as in P. robustus suahelicus, and which also has longer wings than P. g. gulielmii, is distributed over Kamerun and Gabnn.

There is only one specimen in the Tring Museum:
♂ juv. Bipinde, Kamerun . . . . 10. i. 07. Zenker coll.


This form is distributed over the high mountains of East Africa—Ssigejo, Mau, Kenia, Kikuyu, and Kilimandjaro.

It differs from P. g. gulielmii by its smaller bill and longer wings, and by its pale feet. The bird is lighter than P. g. gulielmii, and the scarlet of the forehead is more restricted and never continued over the whole crown.

The following specimens are in the Tring Musem:
4 ♂♂, 4 ♀♀. Escarpment Station, Kiyuyu xi.-xii. 1900. Doherty coll.
juv., not sexed, probably Mau or Kikuyu . Jackson .

8. Poicephalus flavifrons flavifrons (Rüpp.)

The true P. flavifrons was described from Shoa, and is distributed southwards to the mountains of the Omo region, northwards, perhaps to the Ataba Valley in North Abyssinia.

Henglin's P. citreocapillus cannot be the very old bird of this species, as suggested by Reichenow. It is true that the extension of the yellow colour on the head varies a good deal in P. flavifrons, but in the large series collected by the late Baron Erlanger and myself in Shoa and Southern Ethiopia, as well as in all the specimens which came from these regions to the London and Genoa Museums, there is none which has a bluish breast and a blue rump, as Henglin's two specimens in Stuttgart and Leyden have. It only remains that citreocapillus is a distinct species, or that the two specimens are hybrids between P. flavifrons and P. meyeri.

New material from North Abyssinia is much wanted to be compared with the Shoa specimens.

P. crassus Sharpe, which was wrongly united to P. flavifrons by Reichenow, is a totally distinct species, as I have pointed out in Journ. f. Orn. 1904. p. 376.

The following specimens of P. f. flavifrons are in the Tring Museum:
♀. Ejere, Shoa . . . . 16. ix. 90. O. Neumann coll.
♂, ♀, 7 ♂♂. Tschertitschä, Meta, Shoa . . 18. ix. 00. " "
♂ ♀. Alaje, Gindeberat, " . 29. ix. 00. " "
♂. Madali, Upper Abai, " . 1. x. 00. " "
♀. Aenlu, north of Lake Abassi . . 3. xii. 00. " "
♂. Senti Valley, between Uba and Gofa . . 29. i. 01. " "


This form is distinguished by the remarkable orange-red suffusion of the yellow parts of the head.

It inhabits the western parts of South Ethiopia—i.e. the source region of the Sobut River system.
The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Location</th>
<th>Specimens</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>Upper Gelo</td>
<td>26, iv. 01</td>
<td>O. Neumann coll.</td>
</tr>
</tbody>
</table>

10. Poicephalus meyeri meyeri (Cretzschm.).

Poicephalus meyeri Cretzschm., Atlas, 1826, p. 18, Pl. 11 [Kordofan].
Poicephalus meyeri erythrace Neum., Orn. Monatber, 1899, p. 23 [Eritrea].

I had formerly separated the birds from Eritrea from those from Kordofan under the name of erythrace. I still am rather in doubt whether both forms are the same, but the facts (1) that Rüppell's specimens are not exent locality; (2) that nearly all of them are, or had been, mounted, and therefore suffered from the exposure to light; (3) that no real type of P. meyeri can be made out; (4) that no fresh material from Kordofan is available; in addition to the fact (5) that I cannot distinguish the birds from Eritrea from those from Niam Niam, while Kordofan is just between these two countries, induces me to consider all the birds from these northern regions to belong to one form only. This form is distributed from North Abyssinia over Kordofan, Darfur, and Niam Niam to Bagirmi, from which locality there are specimens in the Paris Museum collected by the de Béhagle expedition, and in Capt. Boyd Alexander's collection from the Ba-Mingue River. But it must be mentioned that the species is rather localised, and, it seems, not to be found between the Athbara and the Blue Nile.

Prof. Reichenow has united the birds from Eritrea with those from Kavirondo, and gives them a new name, virescens, thus creating a mere synonym of P. m. erythrace. The bill seems to be the largest of any form of P. meyeri.

Wing: 142—154 mm.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Location</th>
<th>Specimens</th>
<th>Collector</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>Keren, Bogos</td>
<td>1900</td>
<td>through Florence Museum.</td>
</tr>
<tr>
<td>2 ♂ ♂, 1 ♀</td>
<td>Adarte, near Keren, Bogos</td>
<td>7, xi.—13, xii. 99</td>
<td>Schrader coll.</td>
</tr>
<tr>
<td>4 ♂ ♂, 1 ♀</td>
<td>Ghadi Suati, Mareb River</td>
<td>28, i.—13, ii. 03</td>
<td>Gentile</td>
</tr>
<tr>
<td>2 ♂</td>
<td>Setit district, Eritrea</td>
<td></td>
<td>Beccari</td>
</tr>
<tr>
<td>♂</td>
<td>Mai Usseim, Setit, Eritrea</td>
<td>3, xi. 05</td>
<td>Bohndorff</td>
</tr>
<tr>
<td>2 ♂ ♂, 1 ♀</td>
<td>Ombanga (&quot;Omschango&quot;), Niam Niam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>♂</td>
<td>Dem Siber</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Poicephalus meyeri nyansae subsp. n.


This form, which is distributed over Unyoro, Uganda, Ussoga, and Kavirondo, requires a new name.

It cannot be united with the bird from Eritrea and Kordofan. Reichenow's name, "virescens," can, unfortunately, not be applied to this form, as by his description he made it a pure synonym to P. m. erythrace.

The form may be described as follows:

Lower parts less blue than in any of the other subspecies, green, with a yellowish suffusion. Rump green, less blue than in any of the other subspecies.

Wing: 140—150 mm.
Type in the Tring Museum: ♂, Unyoro; Graner coll.
Besides the type, there is one more male and one female in the Tring Museum, all collected in Unyoro by R. Graner.


This form, which is distinguished by its splendid blue rump, in adult specimens, inhabits East Africa from Mombasa to the Zambesi, and seems to run gradually into the larger P. m. transvaalensis towards the south.

The following specimens are in the Tring Museum:
♂. Nai, Ugogo . . . . . 2. viii. 93. O. Neumann coll.

13. Poicephalus meyeri transvaalensis Neum.

This form seems to be distinguished from true P. m. meyeri especially by the larger wings, measuring from 148 to 162 mm. It is distributed over the eastern parts of South Africa.

The following specimens are in the Tring Museum:
♂ ad. ♀ juv. Limpopo River . . . . 25. vi.—27. vii. 86. Eriksson coll.


This large-winged form is distributed over the central and northern parts of German South-West Africa and Mossamedes. In Mossamedes and South Benguella it seems to run gradually into the dark P. m. reichenowi.

Wing: 155—165 mm.

The following specimens are in the Tring Museum:
♂. Cunene River . . . . . 21. x. 87.
♂. Huilla, Mossamedes . . . . . 20. ii. 06. Ansorge .

None of the four specimens has a yellow band across the vertex.

15. Poicephalus meyeri reichenowi Neum.

This very dark form is distributed from North Angola to Benguella, but specimens from the southern limit of its distribution seem to be lighter and form a transition to P. m. damarensis.

The wing measures 152—167 mm.

The following specimens are in the Tring Museum:
♀. Duque de Bragança, Angola . . . . 3. viii. 03. Ansorge coll.
♂ ♀. Guiballu, near Duque de Bragança, Angola . . . . . 13. viii. 03.
♂. Marinha, Jinga Country, Angola . . 28. ix. 03.
♂ ♀. Chissamba " " " . . 21. ix. 04.
♀. Cubrango " " " . . 13. xii. 04.
( 385 )

\[ \begin{array}{lll}
\delta & \text{Elandswater, Benguella} & \quad 26. \text{vii. 04.} \\
\delta & \text{Cassoe} & \quad 26. \text{viii. 04.} \\
\varphi & \text{Zand-draai} & \quad 27. \text{viii. 04.} \\
\varphi & \text{Casombo River} & \quad 20. \text{ix. 04.} \\
3 \delta \delta & \text{Fort Quilenges, Benguella} & \quad 9-21. \text{i. 05.} \\
\varphi \varphi & \text{Hetala River, Benguella} & \quad 2. \text{ii. 05.} \\
\delta \varphi & \text{Cacouda} & \quad 1. \text{xii. 05.} \\
\end{array} \]

In this very large series there is no specimen, which has a yellow bar across the vertex. Only in three specimens a few single yellow feathers are present.


This form is as dark as \( P. \_ m. \text{reichenowi} \), but the yellow band across the vertex is always present and very broad and distinct in adult birds. Young birds have already yellowish frontal feathers.

Wing: 146—159 mm.

It inhabits the countries between Lakes Albert Edward and Kivu and between Lakes Kivu and Victoria (Ankole, Mpororo, Ruanda, and Karagwe).

The following specimens are in the Tring Musaeum:

\[ \begin{array}{lll}
\delta \varphi & \text{Lake Urigi, Karagwe} & \quad 8-9. \text{vi. 07.} \\
2 \delta \delta \text{ad.}, 1 \delta \text{juv. Between Nsasa and} & \text{Kagera River} & \quad 4-6. \text{vii. 07.} \\
3 \delta \delta, 2 \varphi \varphi \text{juv. Between Kissaka and} & \text{Ussuwi, Kagera Region} & \quad 27. \text{vi.-1. vii. 07.} \\
\end{array} \]

17. Poicephalus rüppelli (G. R. Gr.).

This species is distributed over South-West Africa from South Benguella to the Lower Orange River.

The following specimens are in the Tring Musaeum:

\[ \begin{array}{lll}
\varphi & \text{Fort Quilenges, Benguella} & \quad 21. \text{i. 05.} \\
\varphi & \text{Cavallama, Mossamedes} & \quad 6. \text{iii. 06.} \\
\delta & \text{Vipembe} & \quad 13. \text{iii. 06.} \\
\delta \varphi & \text{Humbe} & \quad 20. \text{iii. 06.} \\
5 \delta \delta, 3 \varphi \varphi & \text{Gambos, Mossamedes} & \quad 4-24. \text{ii.}, 9-21. \text{viii. 88.} \\
\end{array} \]

18. Poicephalus fuscicapillus (Verr. \& des Murs).

This species is distributed over East Africa from Mombasa to the Eastern Transvaal and Zululand. The birds from the extreme south have slightly smaller bills than the more northern birds, but birds from the Zambesi and Nyassa regions are intermediate in this respect.

The following specimens are in the Tring Musaeum:

\[ \begin{array}{lll}
2 \varphi \varphi & \text{Tanga, German East Africa} & \quad \text{ii. 93.} \\
\delta & \text{Upper Shiré River} & \quad 3. \text{vii. 95.} \\
\delta \varphi & \text{Mdokas, Lake Nyassa} & \quad 26. \text{vii. 95.} \\
\delta \varphi & \text{Barberton, Transvaal} & \quad 7. \text{viii. 91.} \\
\end{array} \]
19. Poicephalus senegalus senegalus (L.).

This species is distributed from the Senegal to the Portuguese Colony of Bissao (Farim). Neither this nor the following form seems to occur in Sierra Leone and Liberia.

Besides one specimen without locality and one Senegal trade-skin the following specimens are in the Tring Museum:

Ad. Senegal ................................................. Laglaize coll.
5 ad. Gassam .......................................... 28. viii.—17. ix. 07. " "
Ad. Ogo .................................................. 22. viii. 07. " "
Ad. Onomine ............................................. 10. ix. 07. " "

20. Poicephalus senegalus versteri (Finsch.).

This form, which is at once distinguished from the former by its orange-red underparts, is distributed from the Gold Coast to the Niger. The locality "Gabun" is certainly wrong.

The following specimens are in the Tring Museum:

♂. Ilorin, Nigeria ............................... 29. viii. 96. Bryant "
2 ♀♂. Oguigu, Amambara Creek, Nigeria 26. iii.—12. v. 02. Braham "

Three more specimens without locality, probably from the Gold Coast.

21. Poicephalus rufiventris (Rüpp.).

This species is distributed from North Somali Land and the Hawash Region of Shoa to the Pangani River and Lake Manjara in German East Africa.

The following specimens are in the Tring Museum:

♂ ♀. Bunta, Hawash Valley ................... 7. vi. 03. " "
♂ ♀. Mula, South Danakil .................... 28. v. 03. " "
♂ ♀. Dire Ela, South Danakil ................. 20. v. 03. " "
♂. Bulga, Hawash Valley ..................... 14. vi. 03. " "
♀. Bussidimo, near Harar ..................... 2. x. 02. " "
♂ juv. Sheikh Sofia, near Harar ........... 21. ii. 03. " "
♂ ♀ juv., 1 ♀. Erer River, near Harar .... 20. ii. 02. " "
♂ ♀ juv. Harawa (Harar ?) ................. 18-19. ii. 03. " "
♂, 2 ♀♀. Galana River, Lake Abaya .... 2. i. 01. O. Neumann coll.
♀ ♀. Voi River, British East Africa .... 26. x. 96. Ansorge "
♂. Moto Ndei ................................. 2. x. 98. " "
♂. Mkaramo, Pangani River, German East Africa ................. 24. v. 93. O. Neumann "

* All these specimens are marked as ♂ but the indications of sex of Mr. Riggenbach are often incorrect.
22. *Agapornis swindernianus swindernianus* (Kuhl).

This species is restricted to Liberia.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Adult</th>
<th>Liberia</th>
<th>1877.</th>
<th>Schweizer coll.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♂♀</td>
<td>Schieffelinsville, Junk River, Liberia</td>
<td>1918. v. 87.</td>
<td>Bittikofer and Stampfli coll.</td>
</tr>
</tbody>
</table>


This form replaces the former one in South Kamerun, while farther east on the Ituri River it is replaced by the darker and larger-billed form *A. s. emani* Neum.

There is only one specimen of *A. s. zenkeri* in the Tring Museum.


24. *Agapornis taranta* (Staun.)

This black-winged Dwarf-Parrot inhabits the whole of the Abyssinian and South-Ethiopian mountains from the Mareb south to Djamdjan and Doko, southwest to Gimira in the west of Kaffa, south-east to Harar.

The following specimens are in the Tring Museum:

♂. Setit District, N. Eritrea | 1904. | Gentile |
2 ♂♀. Kolli, Shoa | 6. x. 00. | " |
♀. Between Hawash and Lake Zumi | 19. xi. 00. | " |
♀. Abera, Djamdjan | 20. xii. 00. | " |
♀. Bola Goschana, Doko | 12. ii. 01. | " |
2 ♀♀. Buddha, Gimira | 14-16. iv. 01. | " |
2 ♂♀, 1 ♀. Klupi, Harar Mountains | 8-9. xii. 01. | Zaphiro |
♀♀. Klumbi, Harar Mountains | 6. xii. 01 | " |
♀. Harar | 17. ii. 02. | " |

Reichenow, *Vogel Afrikas*, ii. p. 21, states that in the female the red on the forehead is paler and more yellow, which is wrong, as the head of the female is entirely green without any red.


*Psittacus pullarius* L., S. V. x. 1758, p. 102 ["Asia," "Aethiopia," error—we substitute: Upper Guinea, Gold Coast, as typical locality].

*Psittacus guineensis* St. Mull., Linn. N. V. S. Suppl. 1776, p. 81 [Guinea].

*Psittacus rubricollis* Bourn., Perr. 1838, Pl. 90 ["Africa" and "India!"]


The ♂ of the typical form of *A. pullaria* has a dark blue rump.

This form is distributed over West Africa eastwards to the Upper Bahr el Ghazal, and the Ubangi and Uelle Rivers.

The following specimens are in the Tring Museum:

♂. No exact locality (Gold Coast?) | ix. 99. | Hogg coll. |
26. Agapornis pullaria ugandae subsp. nov.

The male of this eastern form of *A. pullaria* differs by having the rump light blue, and never dark blue as in adult specimens of the western form. The rump of the ♀ is mostly lighter than in the West African bird, and sometimes green with only a shade of blue. This form is distributed over Uganda, Karagwe, Ruanda, Unyoro, and the Omo region.

I do not know whether intermediate specimens occur west of Lakes Albert and Albert Edward. I have not yet seen a male specimen about which I would be in doubt to attribute it to its proper subspecies.


The following specimens of this eastern subspecies are in the Tring Museum:

- 3 ♀♂ 4 ♀♀. Ntebie, Uganda 8. iv. 05. Seth-Smith coll. Jackson
- 2 ♀♂. Masindi, Unyoro 8-10. vi. 04. Seth-Smith
- 3 ♀♀. Lake Urigi, Karagwe 8-10. vi. 07. Graner
- ♂. West of Lake Albert Edward 31. i. 08.
- ♂. Rutschurun, between Lakes Kivu and Albert Edward 26. i. 08.
- ♂. Omo River, between Molo and Koscha 21. ii. 01. O. Neumann

27. Agapornis fischeri Rechw.

This species is restricted to the countries bordering the south shore and southern parts of the east shore of Lake Victoria.

The following specimens are in the Tring Museum:

- ♂. Manjanga 13. ix. 90. Emin

28. Agapornis personata Rechw.

This species is distributed over the interior of East Africa from Lake Manyara and the Kibaya-Massai Land southward to the north of Nyassa Land.

Ad. Ugogo or Kibaya, Massai Land 1885. Fischer coll.
♂. Umbugwe, Lake Manyara 17. xi. 93. O. Neumann coll.
29. *Agapornis roseicollis* (Vieill.)

This species is distributed over South-west Africa from Benguella to the lower Orange River.

The following specimens are in the Tring Museum:

<table>
<thead>
<tr>
<th>Species</th>
<th>Number</th>
<th>Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benguella</td>
<td>x. 00</td>
<td>Mocquers coll.</td>
</tr>
<tr>
<td>Catambella, Benguella</td>
<td>2, 4. viii. 05</td>
<td>Ansorge</td>
</tr>
<tr>
<td>Huxe, Mossamedes</td>
<td>23, 26. vi. 04</td>
<td>&quot;</td>
</tr>
<tr>
<td>pull. Cavallana, Mossamedes</td>
<td>6. iii. 06</td>
<td>&quot;</td>
</tr>
<tr>
<td>pull. Cunene River</td>
<td>19. iii. 06</td>
<td>&quot;</td>
</tr>
<tr>
<td>Senegal</td>
<td>1. iii. 02</td>
<td>Pemberton</td>
</tr>
<tr>
<td>Kael, Gambos</td>
<td>11. x. 79</td>
<td>Eriksson</td>
</tr>
</tbody>
</table>


*Psittacus docilis* Vieill., *Nov. Dict.* xxx, 1817, p. 343 [Senegal].

This form of the common *Palaeornis* is distributed over the whole Sudan from the Senegal to the White Nile. It is distinguished by its brilliant yellowish green front and sides of head. The whole bird is somewhat brighter-coloured than the Abyssinian and the Indian birds. The lower mandible is always black. The upper mandible is very dark, far darker than in the Indian and North Abyssinian subspecies. The pink necklace of the males is so narrow in the middle that it is entirely covered by the bluish-grey feathers, and seems therefore to be interrupted. Wing, ♂ 146—158, ♀ 145—149 mm.

The following specimens of this form are in the Tring Museum:

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>Collections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>1817</td>
<td>d'Einville coll.</td>
</tr>
<tr>
<td>Thies, Senegal</td>
<td>5-7. vi. 07</td>
<td>Riggengbach coll.</td>
</tr>
<tr>
<td>Thies, Senegal</td>
<td>28. vi.—1. vii. 07</td>
<td>&quot;</td>
</tr>
<tr>
<td>Onomine, Senegal</td>
<td>9-18. ix. 07</td>
<td>&quot;</td>
</tr>
<tr>
<td>Kael, Senegal</td>
<td>11. viii. 07</td>
<td>&quot;</td>
</tr>
<tr>
<td>Diourbel</td>
<td>5-15. x. 07</td>
<td>&quot;</td>
</tr>
<tr>
<td>Gassam</td>
<td>9-20. ix. 07</td>
<td>&quot;</td>
</tr>
<tr>
<td>Goundian</td>
<td>26. xii. 07</td>
<td>&quot;</td>
</tr>
<tr>
<td>Gambaga, Gold Coast</td>
<td>25. ix. 98</td>
<td>Giffard coll.</td>
</tr>
<tr>
<td>Upper White Nile, 190 miles south of Khartum</td>
<td>28. iii. 05</td>
<td>Yardley coll.</td>
</tr>
</tbody>
</table>


This bird has the pink necklace mostly completely defined, but sometimes hidden and interrupted. The head, especially the front, is more green and less yellow than in the Senegal and Indian birds. The lower mandible is black, the upper mandible coral-red, brighter than in the West African form.

Wing: ♂ 156—160, ♀ 150—153 mm.
This form is distributed over Northern Abyssinia from Massana to the Atbara River and Blue Nile.

The following specimens are in the Tring Museum:

1 ♂, 1 ♀. Anseba River, Keren, Eritrea . . . . 5, 6. iv. 03. Borione Giorgio coll.
♂. Damba, Eritrea . . . . . . . 14, xi. 05. N. Beccari "
♀. Mai Mentai, Eritrea . . . . . . . 8, xi. 05. " "

NEW SUBSPECIES OF PARNASSIUS APOLLO.

BY THE HON. WALTER ROTHSCHILD, PhD.

Parnassius apollo finmarchicus subsp. nov.

DIFFERS from P. apollo apollo by its much larger size and more distinct markings.

♂. Nearest to P. apollo democratus from Eastern Russia, but the submarginal blackish transverse band of the forewings much more distinct and the transparent marginal area separated entirely from it and narrower. Black spots in cell of forewings and on disc larger.

♀. Nearest to that of P. apollo hesebolus, but submarginal band of forewings much wider, blacker, and more distinct; the transparent marginal area more sharply defined. The submarginal band of black sagittate patches on the hindwings more continuous and sharply defined; the marginal area white, fully scaled, not transparent.

A considerable series: Helsingfors, in Finland.

P. apollo levantinus subsp. nov.

♂. Nearest to that of P. a. liburnicus, but smaller, with less extended marginal transparent area to the forewings; submarginal band more obsolete, black spots in cell smaller. On hindwing submarginal row of sagittate spots larger and more distinct; marginal area pure white, fully scaled.

♀. Nearest to that of P. a. carpathicus, but whiter, and all dark and transparent areas, both marginal and submarginal, much more distinct and well defined.

Aintab, N. Syria; one pair received from Messrs. Staudinger & Baug-Haas.
NOTE ON GORILLA GORILLA DIEHLI MatsuCHIE.

BY THE HON. WALTER ROTHSCHILD, PH.D.

(Plate XII.)

IN my "Notes on Anthropoid Apes" (P.Z.S. 1904, vol. ii. pp. 413-440), I treated the North Camaroons race of Gorilla as a subspecies of Gorilla gorilla, but considered the Kirunga resp. Kivu race to be a species. I stated, however, that further material was required to settle the question. At the time of writing ten skulls of G. g. dichli and two skulls and a photograph of the freshly killed Gorilla beringeri was all the available material in museums. In 1906 Mr. Bates sent a somewhat imperfect skin of G. g. dichli, which, while enabling me to complete the diagnosis of the North Camaroons race, settled most unexpectedly the status of the Kirunga gorilla, for the principal reason which made me keep G. beringeri as a species was the heavy beard shown in the photograph mentioned above. The skin of G. g. dichli sent by Mr. Bates shows a beard fully as long and thick as that of G. beringeri; and as some skulls of other races of gorilla show quite as marked differences from G. g. gorilla as that of beringeri does, I think there is no doubt that beringeri is only a local race of G. gorilla gorilla, and not a second species.

Since writing, in 1906, I have had the opportunity of examining a number of fresh skulls of G. g. gorilla and G. g. matschiei, and I find there is considerable variation in size, though the differences between these two races and G. g. dichli are quite constant. These individual variations in size in adult gorilla skulls have brought me to the conclusion that the type skull of Prof. Matschie's Gorilla jacobi is only an abnormally large skull of G. g. matschiei, and that the extreme compression of the face is only an individual and abnormal character, almost approaching distortion or malformation.

The figure of the head of G. g. dichli given on Plate XII. is the reproduction of a fine drawing by Mr. Grönvold, but unfortunately the three-colour process has proved a failure in this instance, for the photographic reduction has completely blurred the outlines, thus hiding the essential character of the heavy beard. In addition to this the red colour has come through, causing the paler grey hairs, where present, to show too distinctly, and in several places to produce light patches which are not present in the original drawing. The races of gorilla will stand for the present as follows:

Gorilla gorilla gorilla.—Gaboon.
Gorilla gorilla mangema.—South Congo region.
Gorilla gorilla matschiei.—N. Camaroons.
Gorilla gorilla dichli.—N. Camaroons.
Gorilla gorilla beringeri.—Kirunga resp. Kivu.

My reason for altering my opinion on the status of MM. Alix & Bouvier's-
Gorilla mungema is that I have seen several Simia rhesus fuliginosus and Simia satyrus warungensis from that region, and they do not agree at all with the stuffed female in Paris described by the above-named authors. I therefore think it may well be a much distorted skin of a female gorilla.

I have recently received an adult male skull and photograph which clearly show that the Congo gorillas have a still narrower and more elongated skull than those from Gaboon, and have very sharply defined pale and dark areas in the pelage, so I think the name of G. g. mungema must be resuscitated.

NOTE ON CASUARIUS CASUARIUS BISTRATUS OORT.

By the Hon. Walter Rothschild, Ph.D.

In the Notes from the Leyden Museum for 1907-8, Dr. van Oort has described under the above name a race of Casuarius casuarius from the north coast of Dutch New Guinea. I can confirm his diagnosis, as I have had some seven or eight specimens of the bird alive. Dr. van Oort, however, ought not to have confused it even for a moment with C. c. beccarii, as I specially state in my monograph that C. c. beccarii is confined to Vokan Island, in the Aru Islands. I hesitated to describe the bird from the north coast, as I was not sure of its relationship to C. c. altijugus Sel. and C. c. salvadorii Oust., both from Dutch New Guinea. As, however, my three mounted specimens (one at Tring and two in the British Museum) agree inter se and are considerably smaller than C. c. sclateri, I think the form is fairly distinct and fully entitled to a name. The New Guinea Cassowaries of the C. casuarius group therefore number now seven in all, and if my C. c. chimacra is also from the true Papuan region there would be eight, as follows:

Casuarius casuarius beccarii.—Vokan Island, Aru.
" " violicollis.—Trangan Island, Aru.
" " bicarunculatus.—Kobroor Island, Aru.
" " altijugus.—Coasts of Geelvink Bay.
" " salvadori.—Beran Peninsula.
" " bistriatus.—West of Humboldt Bay.
" " sclateri.—British New Guinea.
" " chimacra.—Uncertain.
MIROUNGA ANGUSTIROSTRIS (GILL).

(Plates I.—VIII.).

By the HON. WALTER ROTHSCHILD, PH.D.

The Californian Sea-Elephant was described from skulls by Theodore Gill in detail in the *Proceedings of the Chicago Academy of Sciences*, vol. i. p. 33, 1866; but he already gave the salient differences between it and *Mirounga leonina* (Linn.), and the name in his prodromus for a Monograph of the Pinnepedes in the *Proceedings of the Essex Institute*, vol. v. p. 13, 1866-7.

Its outward appearance was first described by Capt. Charles M. Scammon in the *Proceedings of the Academy of Natural Sciences of Philadelphia*, p. 63, 1869, and it is figured and described by him also in his *Marine Mammals of the N.W. Coast of North America*, p. 115, pl. xx. (1874). The unfortunate Sea-Elephants underwent such continual persecution and slaughter at the hands of sealers that when, in 1885, Mr. Charles Townshend succeeded in securing fifteen specimens (twelve females, two young, and one male only 12 ft. long), he expressed the opinion that the species was almost exterminated.

The number of Sea-Elephants killed on the Californian and Mexican coasts between the years 1880 and 1885 was 294, and of these 16 are preserved in the Smithsonian Institute. The only other recorded specimens (*i.e.* preserved in museums), besides a few skulls, are a young male and female obtained by Prof. Marsh, and one male, 12 ft. long, in the collection of the Californian Academy of Sciences, since destroyed in the recent earthquake. As no Sea-Elephants were got after 1885, it was believed that *Mirounga angustirostris* was extinct. Therefore, when Mr. Charles Harris, early in 1907, cabled the news that there were still some Sea-Elephants alive on Guadalupe Island, off the Mexican Coast, I at once told him to get them. He first of all met with ill-luck, owing to rough sea, while proceeding from San Diego to Guadalupe, and had to return. After his failure with the steamboat (or, as he put it, "power-boat"), Mr. Harris went to San Quintín, hired a sailing-boat, and succeeded in reaching Guadalupe Island after a very rough passage. After several days' search Mr. Harris located the herd of Sea-Elephants on the opposite side of the island to his anchorage, on a small beach against perpendicular cliffs over 3000 ft. high. After several weeks' hard work in hurricane seas (twelve days running it was too rough to land) Mr. Harris and his party killed fourteen Sea-Elephants, of which four entire bulls, three cows, and two bulls' skeletons reached England safely. Three bulls and two cows were lost on two separate occasions by the upsetting of the boat in the breakers.

Plate I. represents the cove where the vessel anchored; Plate II., part of the beach frequented by the Sea-Elephants, with eight of them asleep on the shore; Plate III., four bulls swimming; Plate IV., three bulls on the beach; Plate V., a bull on the beach and a quantity of bones; Plate VI., a bull just crawling out
of the sea on to the beach; Plate VII., an adult female (cow) on the shore; Plate VIII., a bull freshly killed.

Measurements of specimens:

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Tip of Nose to end of Flipper</th>
<th>Circumference of Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bull No. 1</td>
<td>15 ft. 7 in.</td>
<td>11 ft. 1 in.</td>
</tr>
<tr>
<td>&quot; 2</td>
<td>14 &quot; 4 &quot;</td>
<td>10 &quot; 2 &quot;</td>
</tr>
<tr>
<td>&quot; 3</td>
<td>16 &quot; 8 &quot;</td>
<td>11 &quot; 8 &quot;</td>
</tr>
<tr>
<td>skeleton No. 1</td>
<td>12 &quot; 4 &quot;</td>
<td>(?)</td>
</tr>
<tr>
<td>&quot; 2</td>
<td>12 &quot; 5 &quot;</td>
<td>(?)</td>
</tr>
<tr>
<td>Cow No. 4</td>
<td>10 &quot; 0 &quot;</td>
<td>5 ft. 4 in.</td>
</tr>
<tr>
<td>&quot; 5</td>
<td>11 &quot; 5 &quot;</td>
<td>6 &quot; 3 &quot;</td>
</tr>
<tr>
<td>&quot; 6</td>
<td>10 &quot; 8 &quot;</td>
<td>5 &quot; 6 &quot;</td>
</tr>
<tr>
<td>&quot; 7</td>
<td>8 &quot; 8 &quot;</td>
<td>(?)</td>
</tr>
</tbody>
</table>

The nine animals were obtained between June 2nd and 17th, 1907, on Guadalupe Island, off the west coast of Mexico.

---

A NEW LYCAENID FROM THE SOLOMON ISLANDS.

By DR. K. JORDAN.

**Hypochrysops taeniata** spec. nov.

♀. *Upperside* resembling that of *H. architas* Sal. (1891) from Fanuro Island, Solomons, but the hindwing metallic blue in and below the cell.

*Underside.*—The costal and apical areas of the forewing as well as the whole hindwing metallic green, with very narrow clayish yellow bands; the costal edge and a streak in the cell of the forewing also clayish yellow, the disc below the cell being white and the anal area of this wing blackish, as is also the base below the cell; between the green submarginal spots and the clayish yellow discal band there is a broad green band. The hindwing with five clayish yellow bands, inclusive of the marginal one, the first three thinly edged with black on both sides, the outer two only on the inside, these bands about one-third the width of the green metallic interspaces, only the fourth band widening a little behind, becoming very thin towards the costa, and only the submarginal interspace being about as narrow as the bands.

*Hab.* San Christoval, Solomons.

A series of ♀♀ obtained by A. S. Meek in April and May 1908.
MISCELLANEA ORNITHOLOGICA.

CRITICAL, NOMENCLATORIAL, AND OTHER NOTES, MOSTLY ON PALAEOARCTIC BIRDS AND THEIR ALLIES.

By Dr. ERNST HARTERT.

Part V.*

Acrocephalus inexpectatus Ber. & Bianchi = A. arundinaceus orientalis.

In the Annuaire du Mus. Zool. St. Petersb. v. p. 210 (1890) Messrs. Berezowski and Bianchi described a Reed-Warbler from Southern Kansu under the name of A. inexpectatus. Through the kindness of my friend Dr. Bianchi I have been able to examine the type-specimen. It needed only a glance to perceive that the example is a young bird of the year. The fluffy condition of the feathers of the back, rump, and underside, and the russet-brown, somewhat spotty colour of the upper surface prove beyond doubt that the bird is quite young. The authors state that their type is an "adult female." It is strange how they could have made such a mistake. The end of the tail is entirely worn off—a thing which is of common occurrence in young birds, which have softer rectrices than old ones, and the tail can therefore not be measured with any attempt at accuracy; the authors give the length of the tail as 58 mm., adding, "Tips of longer feathers greatly injured." On the back are to be seen two or three feathers of the first autumn plumage. I have before me a female from Amur Bay (17. viii. 1894) in almost the same plumage as the type of A. inexpectatus, except that most of the head is already covered with the feathers of the first autumn plumage, and that some more such feathers are out on the back.

The wing of the type of A. inexpectatus is 76 mm. long, which is the measurement of smaller females of A. arundinaceus orientalis, in which the wing varies from 76 to 80 mm. Moreover, Southern Kansu is within the range of A. a. orientalis. There can therefore be no doubt that A. inexpectatus is a synonym of A. a. orientalis.

On the Genus Scotocerca.

In the Bull. B. O. Club xxii. p. 98 (May 1908) Mr. M. J. Nicoll described as a new subspecies a Grass-Warbler, of which he obtained specimens in the Wadi Hof, near Cairo, in Egypt. In his description he compared his supposed new form only with Scotocerca iniquita subarac from Algeria and Tunis. Unfortunately Mr. Nicoll has fallen into an error in considering this form to be unnamed, for it has had already three names!

In 1826 Cretzschmar described it as "Malurus inquites" from the Sinai Peninsula. In 1828 Hemprich and Ehrenberg named it "Curruca famula," from

three skins collected in "Aegypto utraque." Again, in 1867 (Ibis, p. 76), Tristram named the same form "Drymoica eremita," from examples obtained in the desolate wadis opening on the west side of the Dead Sea, and from Arabia Petraea, i.e. the Sinai Peninsula.

There is no mistake that the birds from the Dead Sea, the Sinai Peninsula and the Wadi Hof belong to one and the same form. I have, through the kindness of Mr. Nicoll, been able to compare five of his specimens, including the type, two from the Sinaiic Peninsula, and three from Palestine, and there is no difference whatever between them. This form, the Scotocerca inquietus inquietus, differs from all the other forms of S. inquietus, except the much darker S. inquietus buri Grant from South Arabia, in having a white superciliary line, this being buff or rich cream-colour in the other races.

We must distinguish:

Scotocerca inquietus saharae.—Sahara of Algeria and Tunisia.
Scotocerca inquietus inquietus.—Cairo to Sinai and S. Palestine.
Scotocerca inquietus platyura.—Transcaisia.
Scotocerca inquietus striatus.—E. Persia, Baluchistan, Afghanistan to Punjab.
Scotocerca inquietus buri.—S. Arabia.

All these forms are more fully discussed in the forthcoming fifth part of my "Vögel der paläarktischen Fauna."
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