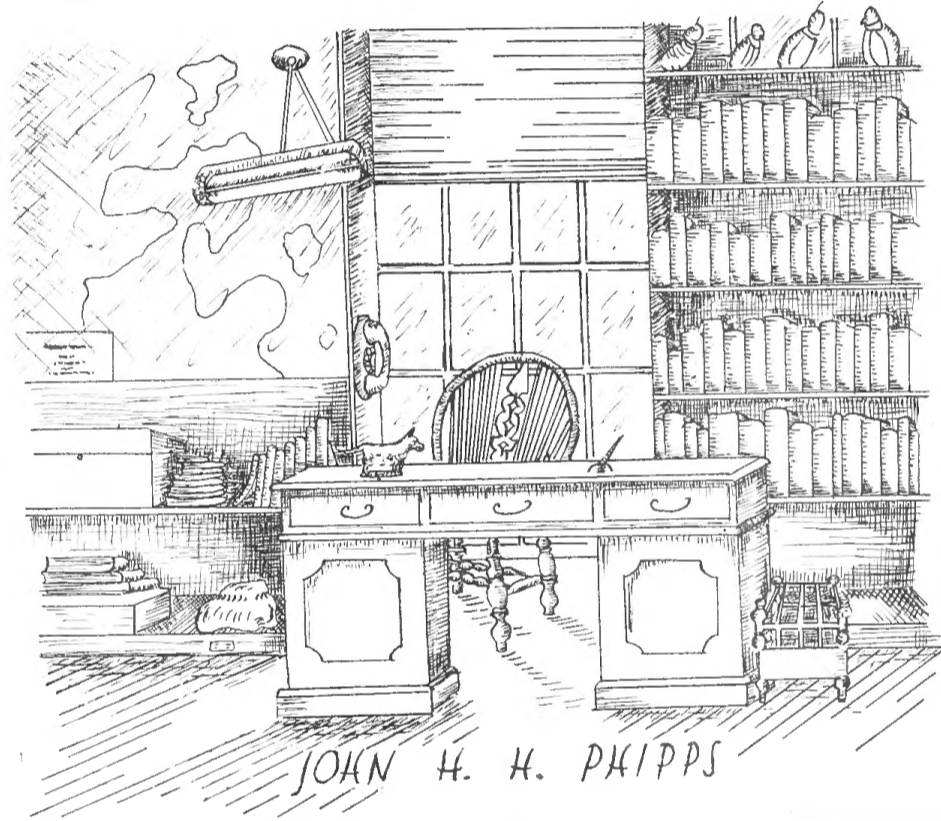




SIR DAVID LIONEL  
GOLDSMID-STERN-SALOMONS, BART.  
OF BROOMHILL, TUNBRIDGE WELLS



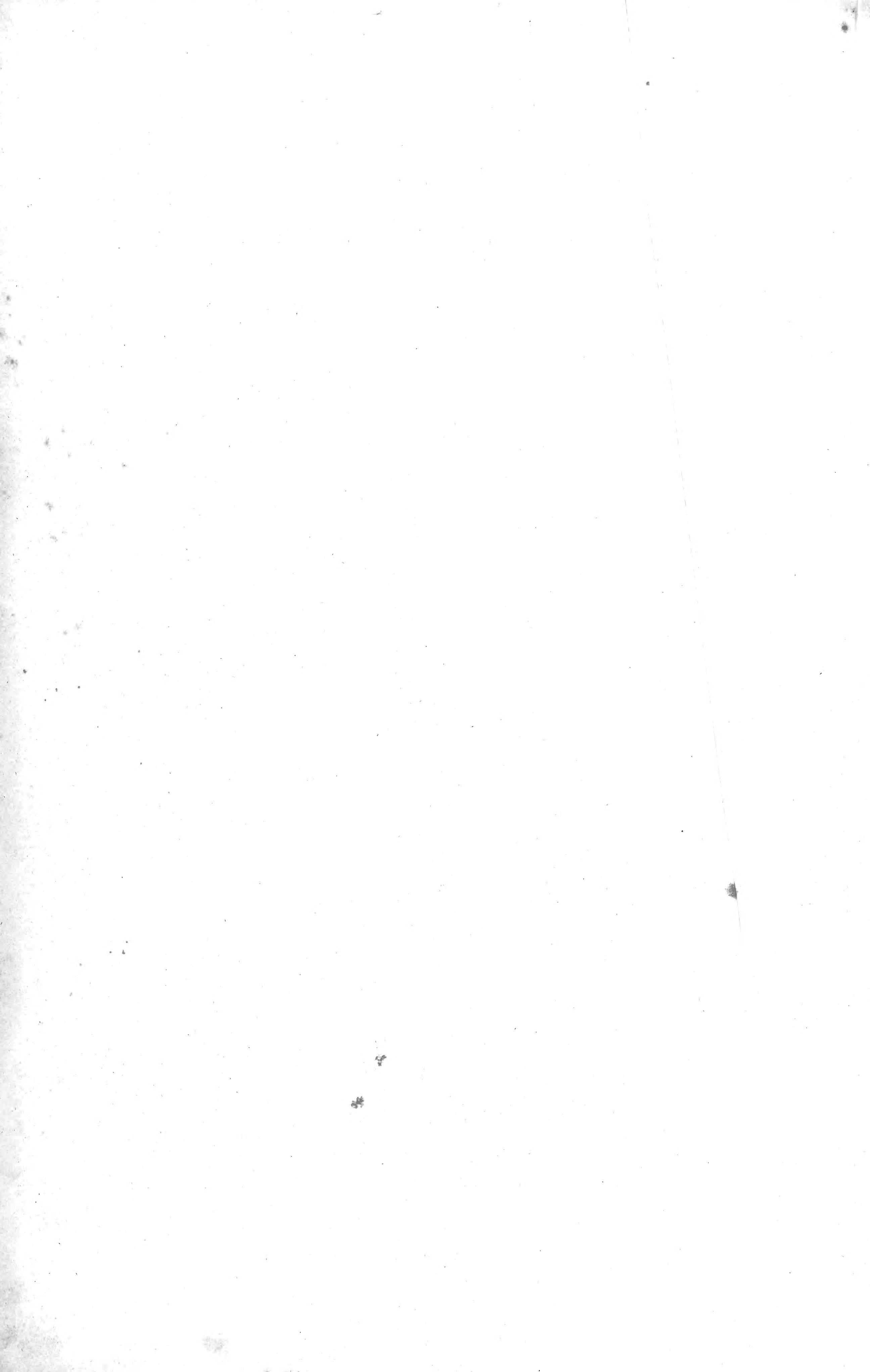
JOHN H. H. PHIPPS













A MONOGRAPH

OF

THE TROCHILIDÆ,

OR

FAMILY OF HUMMING-BIRDS.

BY

JOHN GOULD, F.R.S.,

F.L.S., V.P. AND F.Z.S., M.E.S., F.R.GEOG.S., M.RAY S., CORR. MEMB. OF THE ROYAL ACADEMY OF SCIENCES OF TURIN; OF THE SOC. OF THE MUSEUM OF NAT. HIST. OF STRASBOURG; FOR. MEMB. OF THE NAT. HIST. SOC. OF NÜRNBERG, AND OF THE IMP. NAT. HIST. SOC. OF MOSCOW; HON. MEMB. OF THE NAT. HIST. SOC. OF DARMSTADT; OF THE NAT. HIST. AND THE NAT. HIST. AND MED. SOCS. OF DRESDEN; OF THE ROY. SOC. OF TASMANIA; OF THE ROY. ZOOL. SOC. OF IRELAND; OF THE PENZANCE NAT. HIST. SOC.; OF THE WORCESTER NAT. HIST. SOC.; OF THE NORTHUMBERLAND, DURHAM, AND NEWCASTLE NAT. HIST. SOC.; OF THE IPSWICH MUSEUM; OF THE ORN. SOC. OF GERMANY; OF THE DORSET COUNTY MUSEUM AND LIBRARY; OF THE ROYAL UNITED SERVICE INSTITUTION, ETC.

IN FIVE VOLUMES.

VOL. II.

LONDON:

PRINTED BY TAYLOR AND FRANCIS, RED LION COURT, FLEET STREET.

PUBLISHED BY THE AUTHOR, 26 CHARLOTTE STREET, BEDFORD SQUARE.

1861.



## LIST OF PLATES.

VOL. II.

<p>Eupetomena hirundinacea (<i>misspelt</i> Eupetomena hirundinacea) . . . . . 42</p> <p>Campylopterus Pampa . . . . . 43</p> <p>—— lazulus . . . . . 44</p> <p>—— Delattrei . . . . . 45</p> <p>—— ensipennis . . . . . 46</p> <p>—— Villavicencio . . . . . 47</p> <p>—— latipennis . . . . . 48</p> <p>—— obscurus . . . . . 49</p> <p>—— rufus . . . . . 50</p> <p>—— hyperythrus . . . . . 51</p> <p>—— ? Cuvieri . . . . . 52</p> <p>—— Roberti . . . . . 53</p> <p>Aphantochroa cirrhochloris . . . . . 54</p> <p>—— gularis . . . . . 55</p> <p>Leucippus fallax . . . . . 56</p> <p>Urochroa Bougueri . . . . . 57</p> <p>Sternoclyta cyaneipectus . . . . . 58</p> <p>Eugenes fulgens . . . . . 59</p> <p>Delattria Clemenciæ . . . . . 60</p> <p>Lamprolaima Rhami . . . . . 61</p> <p>Delattria Henrica . . . . . 62</p> <p>—— viridipallens . . . . . 63</p> <p>Heliopædica melanotis . . . . . 64</p> <p>—— Xantusi . . . . . 65</p> <p>Topaza Pella . . . . . 66</p> <p>—— Pyra . . . . . 67</p> <p>Oreotrochilus Chimborazo . . . . . 68</p> <p>—— Pichincha . . . . . 69</p> <p>—— Estella . . . . . 70</p> <p>—— leucopleurus . . . . . 71</p> <p>—— melanogaster . . . . . 72</p> <p>—— Adela . . . . . 73</p> <p>Lampornis Mango . . . . . 74</p> <p>—— Prevosti . . . . . 75</p> <p>—— Veraguensis . . . . . 76</p> <p>—— gramineus . . . . . 77</p> <p>—— viridis . . . . . 78</p>	<p>Lampornis aurulentus . . . . . 79</p> <p>—— virginalis . . . . . 80</p> <p>—— porphyurus . . . . . 81</p> <p>Eulampis jugularis . . . . . 82</p> <p>—— holosericeus . . . . . 83</p> <p>—— chlorolæmus . . . . . 84</p> <p>Lafresnaya flavicaudata . . . . . 85</p> <p>—— Gayi . . . . . 86</p> <p>Doryfera Johannæ . . . . . 87</p> <p>—— Ludoviciæ . . . . . 88</p> <p>Hypuroptila Buffoni . . . . . 89</p> <p>—— urochrysia . . . . . 90</p> <p>—— cæruleigaster . . . . . 91</p> <p>Ionolaima frontalis . . . . . 92</p> <p>—— Schreibersi . . . . . 93</p> <p>Heliodoxa jacula . . . . . 94</p> <p>—— Jamesoni . . . . . 95</p> <p>—— Otero . . . . . 96</p> <p>—— Leadbeateri . . . . . 97</p> <p>Trochilus polytmus . . . . . 98</p> <p>Thalurania glaucopis . . . . . 99</p> <p>—— Watertoni . . . . . 100</p> <p>—— furcata . . . . . 101</p> <p>—— refulgens . . . . . 102</p> <p>—— Tschudi . . . . . 103</p> <p>—— nigrofasciata . . . . . 104</p> <p>—— venusta . . . . . 105</p> <p>—— Colombica . . . . . 106</p> <p>—— verticeps . . . . . 107</p> <p>—— Eryphile . . . . . 108</p> <p>—— ? Wagleri . . . . . 109</p> <p>Panoplites Jardini . . . . . 110</p> <p>—— flavescens . . . . . 111</p> <p>—— Matthewsii . . . . . 112</p> <p>Florisuga mellivora . . . . . 113</p> <p>—— flabellifera . . . . . 114</p> <p>—— atra . . . . . 115</p> <p>Microchera albocoronata . . . . . 116</p>
--	--







EUPETOMEN HIRUNDINACEA.

## EUPETOMENA HIRUNDINACEA.

### Swallow-tail.

*Trochilus macrourus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 487.—Licht. Verz. der Doubl., p. 13.

——— *forcipatus*, Lath. Ind. Orn., tom. i. p. 304.

*Mellisuga Cayanensis caudá bifurcá*, Raii, 83. 3.—Id. 187. 41.—Willoughby, 166.—Briss. Orn., tom. iii. p. 726. pl. xxxvi. fig. 9.

*Oiseau-mouche à queue d'acier bruni*, Buff. Hist. des Ois., tom. vi. p. 36.

——— *à queue fourchue de Cayenne*, Vieill. Ois. dor., tom. i. p. 113.

*Cayenne Fork-tailed Humming Bird*, Lath. Gen. Syn., tom. ii. p. 751.—Shaw, Gen. Hist., vol. viii. p. 310.—Lath. Gen. Hist., vol. iv. p. 299.—Shaw, Nat. Misc., pl. 222.

*Ornismya hirundinacea*, Less. Hist. Nat. des Ois. Mou., p. 98. pl. 25.—Ib. Supp., p. 179. pl. 39.—Ib. Traité d'Orn., p. 272.

*Polytmus macrourus*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 9.

---

THIS species being the most swallow-like member of the entire family of Trochilidæ, I have in this instance departed from the rule of priority and adopted the appropriate name of *hirundinacea* assigned to it by M. Lesson, instead of retaining the indefinite one of *macrourus* originally bestowed by Gmelin. From the little we know of its habits, it seems to be a lowland and fluviatile species rather than a denizen of the mountain districts; its principal habitat, so far as we are at present aware, being the low country of Cayenne and the delta of the Lower Amazon; it is true we do receive specimens from Bahia, and Mr. Reeves informs me that it is also found in Minas Geraes; but it is much less numerous there than in the former locality. Mr. Wallace tells me that it flies very high, and chiefly resorts to the topmost branches of the loftiest trees; is more frequently to be seen in the early morn than at any other period of the day, and that at that hour it may often be observed perched on the smaller dead branches of the trees skirting the forest.

The sexes are precisely alike in colour; but at the same time present a great disparity in size, the female being very much smaller than the male, and having a much shorter tail.

The nestling birds do not differ materially from the adult, being very similar in colour, but of course of a less brilliant hue.

I find considerable variety in the tint of the head and neck of this species; some specimens having those parts clothed in a rich glittering prussian blue, while in others they are glossed with green.

Head, neck and breast rich glittering prussian blue; upper surface, upper and under wing-coverts, flanks and abdomen dark green; across the rump an indistinct band of rufous; wings purplish brown glossed with steel-blue; upper and under tail-coverts and tail rich deep steel-blue; a tuft on each side of the body and the vent white; bill and feet black.

The Plate represents two males and a female of the natural size on a beautiful species of *Datura*, copied from a drawing obligingly sent to me by T. Reeves, Esq., of Rio de Janeiro.









CAMPYLOPTERUS PAMPA.

*Gould and McClellan, del. et lith.*

*Bullman del. & Walter sculp.*

## CAMPYLOPTERUS PAMPA.

### Wedge-tailed Sabre-wing.

*Ornismya Pampa*, Less. Supp. des Ois. mou., p. 127. pl. 15.—Ib. Rev. Zool. 1839, p. 18.

*Polytmus pampa*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 7.

*Campylopterus pampa*, Less. Ind. Gen. et Syn. des Ois. du Genre *Trochilus*, p. vi.—Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 6.—Ib. Rev. et Mag. de Zool. 1854, p. 250.

*Pampa campyloptera*, Reichenb. Aufz. der Colibris, p. 11.

---

THE cuneate form of the tail of this species of *Campylopterus* renders it very remarkable, not only among the members of its own genus, but among the *Trochilidæ* in general, for there are but few besides the present bird which display this peculiarity. Were I to be influenced by the form of the tail alone, I might be induced to constitute it the type of a distinct genus; but, as I can discover no other character that would bear me out in so doing, I content myself, for the present at least, by retaining it in the genus to which it has hitherto been assigned. Dr. Reichenbach has indeed founded one under the name of *Pampa* for its reception, but I hesitate, for the reason just given, in adopting it.

The native country of the *Campylopterus Pampa* is Mexico and Central America; in the former of which countries specimens were procured by M. De Lattre. I have also received it, through Mr. Skinner, from Guatemala. In a brief notice of it by M. De Lattre, that gentleman states that it inhabits the densest forests during the whole of the year; that it is very wild and unsociable; that it is fond of singing; and were its song not monotonous it might be regarded as the Nightingale of the *Trochilidæ*. It is found in the environs of Taupetta, in Mexico.

The sexes, as far as I have seen, are nearly alike in colour, while in size a more than ordinary difference exists, the female being very much smaller than her mate; both have a blue-coloured crown, but the outer tail-feathers of the female are tipped with dirty white instead of being of a uniform colour.

The male has the head fine blue; all the upper surface and wing-coverts green; wings purplish brown; four central tail-feathers dark bronzy green; lateral tail-feathers dark bluish black, glossed with bronzy green at the base; ear-coverts brown; all the under surface dull greyish white, washed with buff on the throat; bill black; feet brown.

The female is similar in colour, but has the three outer tail-feathers tipped with buffy white.

The Plate represents the two sexes of the natural size. The plant is the *Neptunia plena*.







CAMPYLOPTERUS LAZULUS.

## CAMPYLOPTERUS LAZULUS.

### Lazuline Sabre-wing.

- Trochilus lazulus*, Vieill. Ency. Méth. Orn., part ii. p. 557.—Ib. Gal. des Ois., tom. i. p. 296. pl. 179.—Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 1.
- Trochilus falcatus*, Swains. Zool. Ill., vol. ii. pl. 83.—Less. Hist. Nat. des Ois. Mou., p. 126. pl. 36.
- Mellisuga lazulus*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 3.
- Campylopterus lazulus*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.
- Saepiopterus lazulus*, Reichenb. Aufz. der Colibris, p. 11.—Ib. Troch. enumer., p. 9. pl. dccc. fig. 4863.
- 

It will be seen that I have followed preceding ornithologists in considering the *Trochilus lazulus* of Vieillot's "Galerie des Oiseaux," and the *T. falcatus* of Swainson's "Zoological Illustrations," as identical; at the same time I must remark, that neither of their figures nor the accompanying descriptions are quite correct; Vieillot figuring and describing the under tail-coverts as white, and Swainson as green, whereas these feathers are really deep chestnut; with this exception the two figures agree with the bird here represented.

It is just possible that the bird described by these authors, and which is still in the Paris Museum, may be different from the one I have figured, but, if it be, surely additional examples would have reached Europe during the long interval which has elapsed since the dispersion of Bullock's collection, of which the Paris specimen formed a part.

The native habitat of this fine species—for it is a truly beautiful bird—is the Caraccas, Venezuela, and the high parts of Columbia generally: many fine examples were brought from the former country by Mr. Dyson, and numerous specimens are from time to time received in collections from Bogota. As will be seen on reference to the accompanying Plate, the sexes differ materially in their colouring: the young males, again, differ from both in presenting an intermediate kind of plumage, with more or less blue on the throat and under surface.

The male has the head, all the upper surface, wing- and tail-coverts glittering grass-green; wings purplish brown; tail very deep chestnut, with in some instances all the feathers, and in others only the two middle ones, broadly tipped with deep green; throat rich deep shining blue, blending into the green of the upper surface, and the finer glittering green of the flanks and abdomen; under tail-coverts chestnut, slightly tipped in some instances with green; bill black.

The female has all the upper surface and wing-coverts bronzy green; rump and upper tail-coverts purer green; wings purplish brown; central tail-feathers bronzy green; the remainder deep chestnut, more or less margined or fringed with black; under surface, including the under tail-coverts, deep brownish grey.

The figures are the size of life. The plant is the *Cattleya guttata*.









CAMPYLOPTERUS DELATTREI.

*J. Gould and H.C. Richter, del et lith.*

*Hullmandel & Walton, Imp.*

# CAMPYLOPTERUS DELATTREI.

## De Lattre's Sabre-wing.

*Ornysmia (Campylopterus) DeLattre*, Less. Rev. Zool. 1839, p. 14.

*Mellisuga De Lattrei*, Gray and Mitch. Gen. of Birds, vol. i. p. 113, *Mellisuga*, sp. 85.

*Campylopterus delattre*, Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 7.

————— *delattrii*, Ib. Rev. et Mag. de Zool. 1854, p. 250.

————— *Delattrei*, Reichenb. Aufz. der Colibris, p. 11.

---

OF all the members of the genus *Campylopterus*, the present is by far the largest and the most beautifully coloured. It is said to be the boldest species of its race, and to be so extremely pugnacious, that every bird venturing into the neighbourhood of its territory is furiously attacked and driven away; this peculiar feature in the habits of the bird explains the uses of the broad and powerful shafts of the primaries, which form so conspicuous a character in the males of all the *Campylopteri*.

The present bird is strictly a Mexican and Central American species. I have lately received from Mr. Skinner some very beautiful specimens which were procured in Guatemala by M. Riviera Paz, whom I have had occasion to mention in my account of other species. M. De Lattre, to whom we are indebted for its discovery, and after whom it has been named, states that it is found in the forests of Jalapa during two months of the year only; that it is known by the name of the '*Suce fleurs-royal*,' and that it feeds during the entire day, and not during any particular hours. He adds that it selects a flowering shrub, which it never quits, and from which it chases with anger all the other species of the family that may seem desirous of approaching it: on taking flight it utters a cry.

Considerable difference exists, not only in the size, but in the colouring of the sexes of this species; the female being very much less and very plainly coloured when compared with the male, and destitute of the dilatations of the shafts of the primaries.

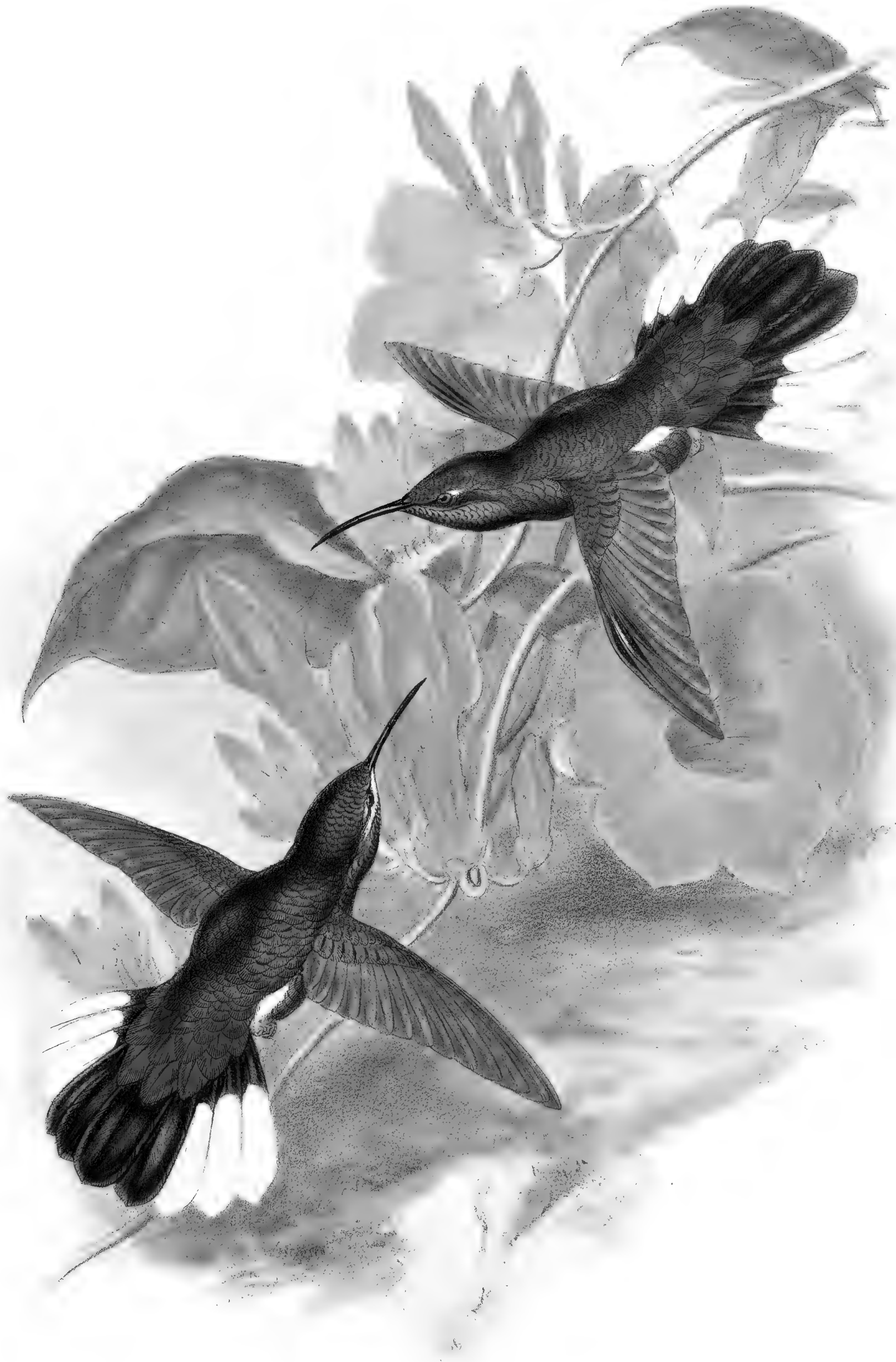
The male has the lores, forehead and crown dull bluish black; behind the eye a small spot of white; all the upper and under surface rich deep violet-blue; wing-coverts, rump and upper tail-coverts green, into which the blue of the upper surface blends; wings dark purplish brown; tail steel-black, the three outer feathers on each side largely tipped with white, slightly margined in some specimens with black; vent greyish white; under tail-coverts steel-black, glossed with green; bill black; feet dark brown.

The female has the head dark bronzy brown; all the upper surface, wing- and tail-coverts and flanks brilliant green, glossed with golden on the back of the neck and wing-coverts; two centre tail-feathers glossed with green for two-thirds of their length from the base; down the centre of the throat a mark of shining greenish blue; remainder of the under surface grey, glossed with green.

The figures represent an adult male, a young male and a female of the size of life. The beautiful flower, which is also indigenous to Guatemala, is the *Lælia majalis*.







CAMPYLOPTERUS ENSIPENNIS, Swains.

## CAMPYLOPTERUS ENSIPENNIS, Swains.

### Blue-throated Sabre-wing.

*Trochilus ensipennis*, Swains. Zool. Ill., vol. ii. pl. 107.—Less. Les Troch., pp. 124, 127. pls. 46, 47.

*Campylopterus ensipennis*, Less. Hist. Nat. des Ois. Mou., pp. xliii, 124. pl. 35.—Ib. Traité d'Orn., p. 287.—Ib. Ind. Gen. et Syn. des Ois. du gen. *Trochilus*, p. vi.—Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 3.—Reich. Aufz. der Col., p. 11.—Bonap. Rev. et Mag. de Zool. 1854, p. 250.—Jardine, Ann. and Mag. Nat. Hist., vol. xx. 1847, p. 372.

*Polytmus ensipennis*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 2.

---

THE *Campylopterus ensipennis* is one of the most powerful species of the genus. The boldness of its markings and the brightness of its colouring render it also one of the most beautiful. Although the female is not so brightly coloured as her mate, she assimilates more closely to him in her dress than do the females of the other brilliantly coloured species to theirs; she is, however, somewhat smaller, and has the blue of the throat less conspicuous, and separated from the sides of the face by a white stripe which passes from the base of the bill to beneath the eye.

The West Indian Islands appear to be the native habitat of this fine species: in all probability it also visits some parts of the South American continent, but this has not yet been positively ascertained.

The following extract from Mr. Kirk's notes on the birds of the island of Tobago, published by Sir William Jardine, Bart., in the twentieth volume of the "Annals and Magazine of Natural History," above referred to, comprises all that is at present known respecting this fine bird:—

"Feeds on ants, small flies and sweets, and is particularly fond of the blossoms of the wild and common plantain tree; but whether from the circumstance that these blossoms are generally attended by numerous herds of ants, which form the principal part of its food, or for the purpose of extracting sweets, or perhaps both, I am unable to determine; but in all I have dissected, I have found the stomach to contain ants and portions of small gnats. It is found principally in the woods, by rivulets and in low marshy places."

The male has the head, all the upper surface, wing-coverts, sides of the neck, under surface of the body and under tail-coverts deep shining golden-green, passing into grass-green on the upper tail-coverts, and particularly glittering on the nape and back of the neck; wings purplish-brown; chin and throat deep lazuline-blue; two centre tail-feathers greenish-bronze, the next on each side dark steel-blue; the three outer on each side steel-blue at the base, the apical two-thirds being pure white; bill black; feet dark brown.

The female differs in having the blue on the throat less extensive, and separated from the green of the sides of the face by a streak of greyish-white; the centre of the abdomen is also grey.

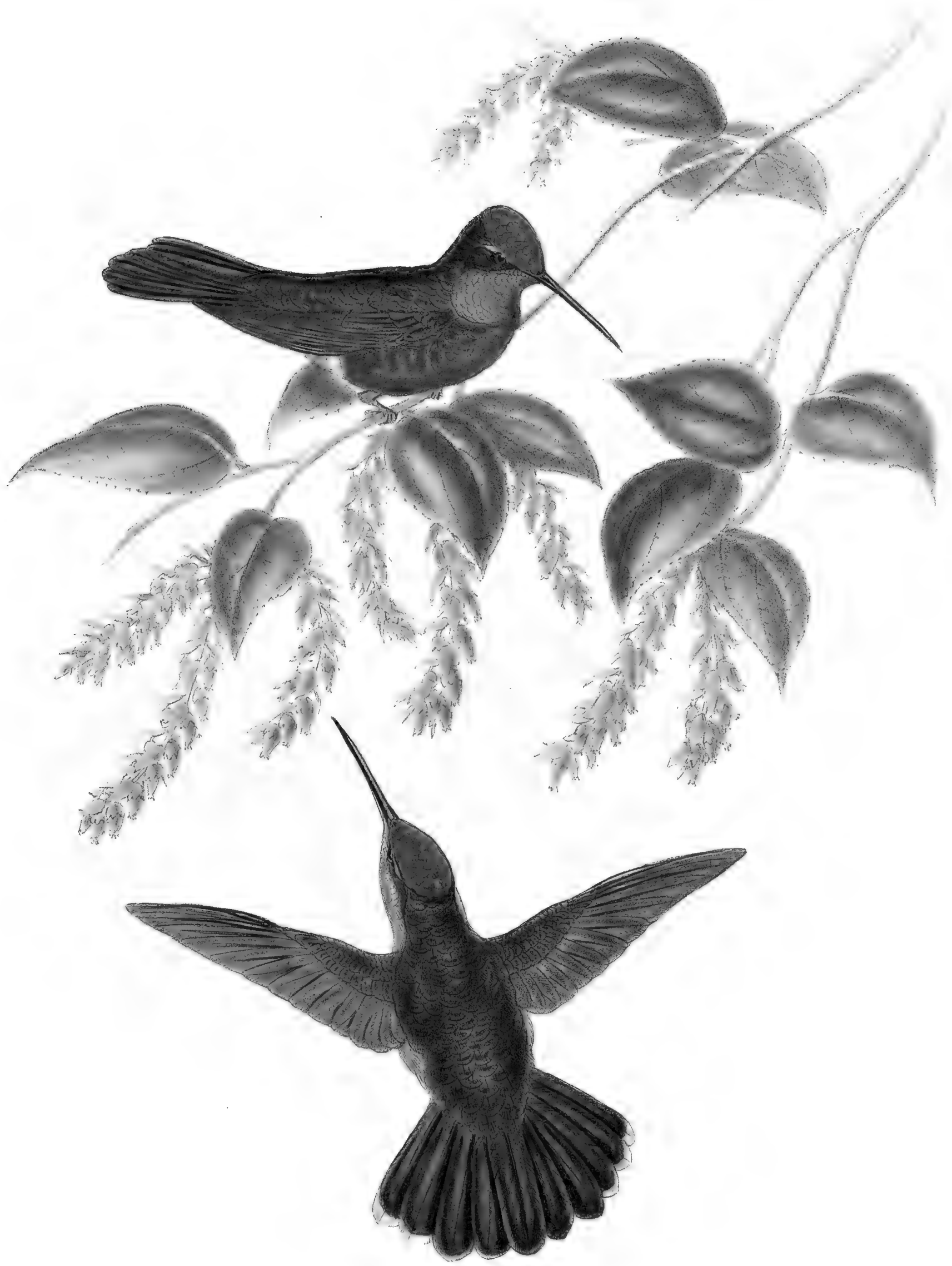
Like the males of other members of the genus, the very old male of this species has the shaft of the outer primaries very much dilated, which we may suppose adds considerably to its wing-powers.

The Plate represents the birds of the natural size. The plant is the *Dipladenia Harrisii*.









CAMPYLOPTERUS VILLAVICENCIO.

## CAMPYLOPTERUS VILLAVICENCIO.

### Villavicencio's Sabre-wing.

*Trochilus Villaviscensio*, Bourc. Compt. Rend. de l'Acad. des Sci., tom. xxxii. p. 187.

*Heliomaster Villaviscensio*, Reich. Auf. der Col., p. 13.

*Heliomastes villaviscensio*, Bonap. Rev. Zool, 1854, p. 251.

*Campylopterus splendens*, Lawr. in Ann. Lyc. Nat. Hist. New York, vol. vi. p. 262?.

---

THE *Campylopterus Villavencio* was first described by M. Bourcier, from a specimen obtained by him during his sojourn in Ecuador, and named in honour of a gentleman attached to the study of natural history resident in that country. A single specimen is also contained in the Loddigesian collection. Both these examples appear to be females, and assimilate so closely in size and in some parts of their colouring to the bird lately named *C. splendens* by Mr. G. N. Lawrence of New York, that I am induced to believe them to be so many examples of one and the same species. I do not, however, insist upon such being the case, and therefore only place them together provisionally. In the length and form of the bill, in the general colouring of the tail and of the upper and under surface, they are precisely similar; the only observable difference being, that Mr. Lawrence's specimen has a splendid deep-blue throat-mark, which is entirely absent in M. Bourcier's and the Loddigesian examples. As both sexes of some other species of the *Campylopteri* are very sombrely coloured, it is just possible that Mr. Lawrence's bird may prove to be distinct, in which case his name of *splendens* may be restored, and retained for the bird represented in the upper figure on the accompanying Plate, and that of *Villavencio* for the lower one. Mr. Lawrence's example was procured by Mr. Wm. E. Moore, between the head waters of the Napo and Quito, the same locality in which the other specimens were obtained.

The following is a description of M. Bourcier's specimen :—

Crown of the head metallic golden green; upper surface, wing-coverts and flanks dark golden green; wings purplish brown; two centre tail-feathers dark green, the remainder steel-blue, the two outer ones tipped, and the others slightly fringed with greyish white at the tip; all the under surface ashy grey; bill black; feet brown.

Mr. Lawrence's specimen differs in having a gorget of rich deep metallic blue on the throat, and in the lateral tail-feathers being merely fringed instead of tipped with greyish white.

The Plate represents the two birds of the natural size. The plant is the *Gualtheria bracteata*.







CAMPYLOPTERUS LATIPENNIS.

# CAMPYLOPTERUS LATIPENNIS.

## Broad-shafted Sabre-wing.

- Trochilus campylopterus*, Gmel. Linn. Syst. Nat., tom. i. p. 499.—Valenc. Dict. Sci. Nat., tom. xxxv. p. 492.—Drap. Dic. Class. Sci. Nat., tom. iv. p. 325.
- *cinereus*, Gmel. edit. Linn. Syst. Nat., tom. i. p. 490.
- *largipennis*, Bodd.
- *latipennis*, Lath. Ind. Orn., vol. i. p. 310.—Vieill. Nouv. Dict. d'Hist. Nat., tom. vii. p. 365.—Swains. Zool. Ill. vol. iii. pls. 130, 131.—Jard. Nat. Lib. Hum.-Birds, vol. i. p. 146.—Vieill. et Bonn. Ency. Méth. Orn., 2<sup>me</sup> partie, p. 566.
- L'Oiseau-mouche à larges tuyaux*, Buff. Hist. Nat. des Ois., tom. vi. p. 35.—Aud. et Vieill. Ois. dor., tom. i. p. 51, pl. 21.
- L'Oiseau-mouche à larges tuyaux de Cayenne*, Buff. Pl. Enl. 672. fig. 2.
- Polytmus largipennis*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 1.
- Broad-shafted Humming-Bird*, Lath. Gen. Syn., vol. ii. p. 765.—Id. Gen. Hist., vol. iv. p. 321.
- Ornismya latipennis*, Less. Hist. Nat. des Ois. Mou. p. 121, pl. 34.—Id. Tab. des Esp. des Ois. Mou., p. xlii.
- Campylopterus latipennis*, Swains. Zool. Journ. vol. iii. p. 358.—Jard. Nat. Lib. Hum.-Birds, vol. i. pl. 34.—Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 1.—Less. Ind. Gen. et Syn. des Ois. du gen. *Trochilus*, p. v.—Reichenb. Auf. der Col., p. 11.—Bonap. Rev. et Mag. de Zool., 1854, p. 250.
- Trochilus cinereus*, Lath. Ind. Orn., vol. i. p. 308.
- Colibri à ventre cendre*, Aud. et Vieill. Ois. dor., tom. i. p. 18, pl. 5.
- Ash-bellied Humming-Bird*, Lath. Gen. Syn., vol. ii. p. 759.—Shaw, Gen. Zool., vol. viii. p. 297.—Lath. Gen. Hist., vol. iv. p. 316.
- Le Colibri à ventre cendré*, Aud. et Vieill. Ois. dor., tom. i. p. 18, pl. 5?

---

THE *Campylopterus latipennis* is one of the very earliest-known species of Humming-Bird; a glance at the long list of names by which it has been described in the works of Linnæus, Boddaert, Gmelin, Latham, Buffon, &c., will at once induce the reader to come to such a conclusion. Long known, however, as the species has been, no reliable information has been transmitted to us as to its habits and economy, or the specific purpose for which the broad shafts of the wings have been designed. They doubtless aid the bird in cleaving the air with great rapidity, but they perhaps have some other especial use, though what that may be cannot be easily imagined, since they do not occur in the females, and are only to be found in the very old males. If we wish to see this bird in a state of nature, a journey to Cayenne and French Guiana will enable us to attain the object of our desire, as it is in those countries, particularly Cayenne, that the specimens sent to Europe are collected. Of these the greater part are of course sent to Paris, whence they find their way to this country.

I believe I have still another species of this form from Ecuador, intermediate between *C. latipennis* and *C. obscurus*; but of this more at some other time, when additional specimens have arrived; at present I have only seen the one which graces my collection. This bird is certainly not the female of either of the above-mentioned species; it has longer wings than either of them, and, moreover, differs in the extent of the white tipping of the outer tail-feathers.

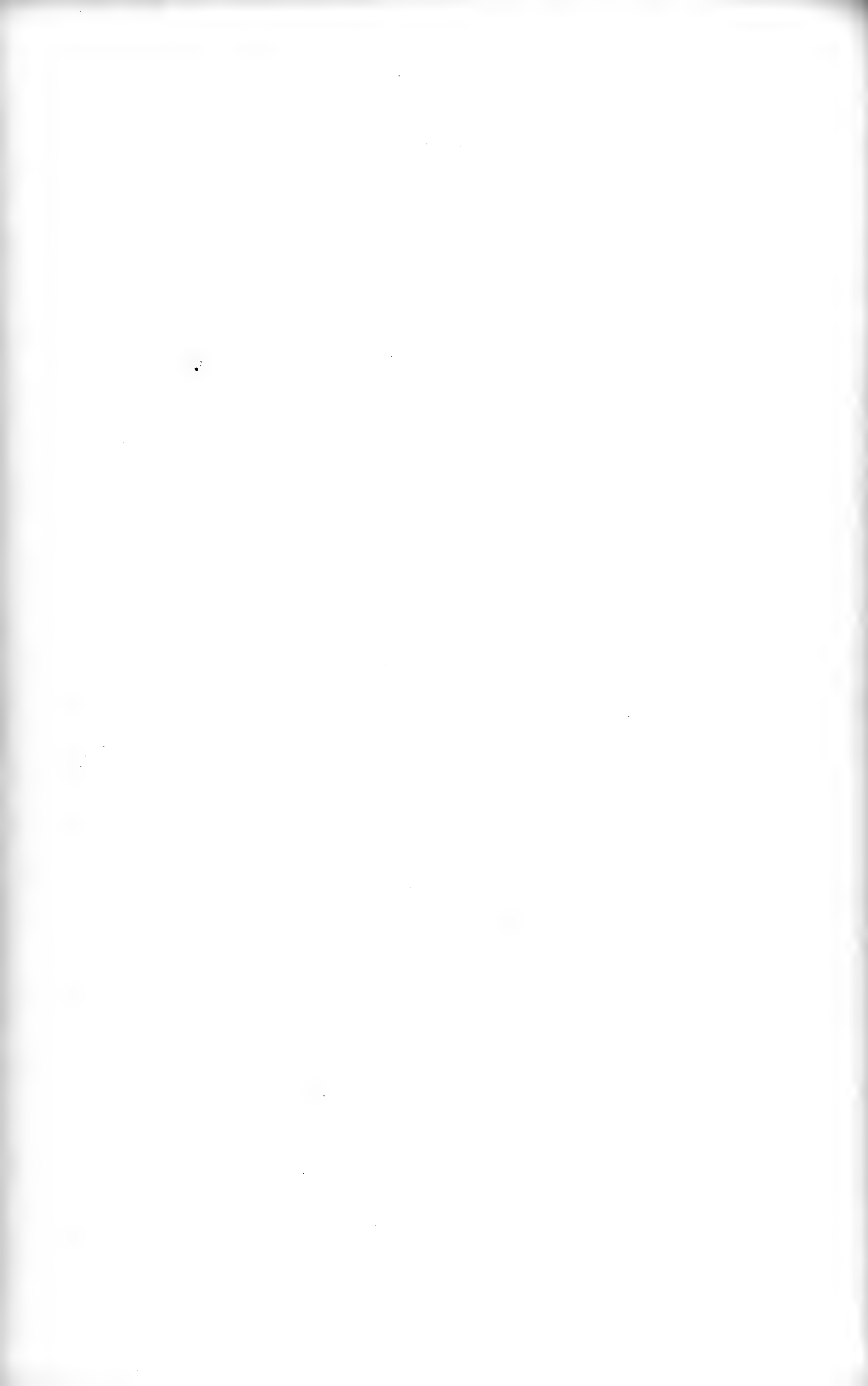
Of the three or four known species of grey-breasted *Campylopteri*, the present has by far the greatest amount of white at the tips of the lateral tail-feathers.

I believe that no difference exists in the colouring of the sexes of the *Campylopterus latipennis*, and that the dilated shafts of the outer wing-feathers is the only tangible character by which the sexes can be distinguished.

Modern research has discovered that the earliest specific appellation assigned to this bird is that of *largipennis*, given to it by Boddaert; by that name, however, it is known to but few, while that of *latipennis* is just as familiar. I have therefore in this instance deviated from the law of priority, and adopted the term which is most generally applied to it.

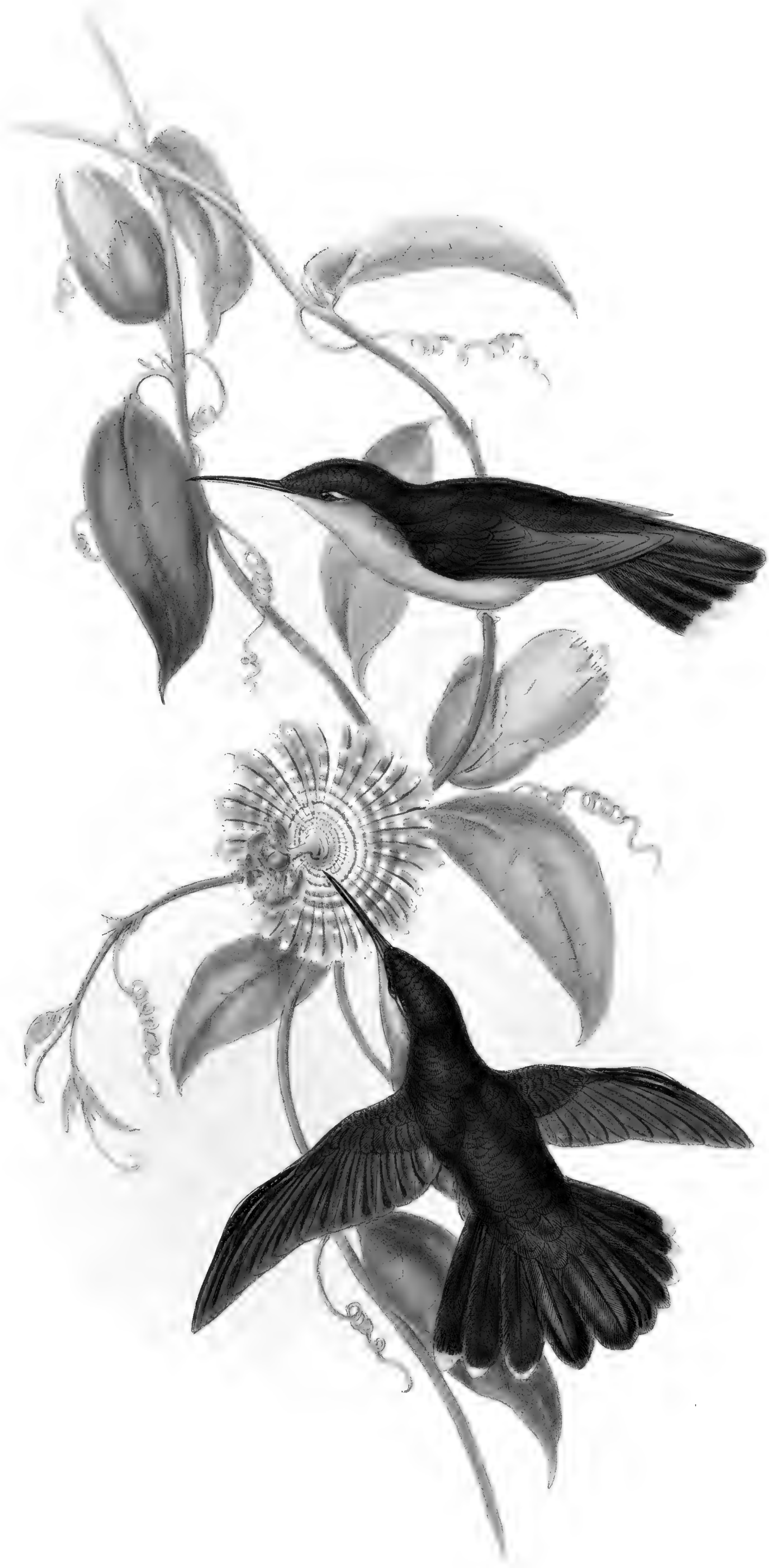
Head, all the upper surface, wing- and tail-coverts, sides of the neck, and flanks deep oil-green; wings dark purplish brown; two centre tail-feathers dark green; the next on each side black, washed with green at the base, and slightly tipped with whitish; the remainder black, largely tipped with white; all the under surface dark grey; bill black.

The figures are of the natural size. The plant is the *Odontoglossum hastilabium*, var. *fuscatum*.









CAMPYLOPTERUS OBSCURUS, *Gould*

## CAMPYLOPTERUS OBSCURUS, *Gould.*

### Sombre Sabre-wing.

*Campylopterus obscurus*, Gould in Proc. of Zool. Soc. 1848, p. 13.—Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 2.—Reichenb. Auf. der Col., p. 11.—Bonap. Rev. et Mag. de Zool., 1854, p. 250.  
*Polytmus obscurus*, Gray and Mitch. Gen. of Birds, vol. iii., appendix, p. 5, app. to p. 108.

---

HAD we not sufficient evidence to the contrary (evidence which has been admitted by many ornithologists), it might be supposed that the *Campylopterus obscurus* and *C. latipennis* were one and the same species, so similar are they in size and in the colouring of their bodies. When we compare their tails, however, a great difference is seen in the extent of the white on the outer feathers—a character very conspicuous in the other *Campylopteri*, but which is nearly obsolete in this species. I possess one male in which the two outer feathers are very slightly tipped with grey; and no trace of it appears on the third. The whole tail, too, is shorter and rounder than that of *C. latipennis*; there is more green on the upper surface of the four middle tail-feathers, and those feathers are broad, and, as well as the rest, very round at the tip.

It will naturally be asked, “What is the native country of this species?” but, in the present state of our knowledge, that is a question not easily answered. All that I know on the subject is, that the specimens I possess were received from the Amazon; but from what part of the banks of that mighty river, I am unable to say; probably the bird is a denizen of the vast forests which cover the alluvial flats, and the islands near its embouchure between the city of Para and the sea.

The feature which distinguishes the sexes of this species is, as in *C. latipennis*, the broadly developed shafts of the outer wing-feathers of the male.

Crown of the head, all the upper surface, and the four middle tail-feathers green; throat and under surface dark grey; flanks and under tail-coverts washed with green; the three lateral tail-feathers on each side black, slightly tipped with grey; bill black.

The figures are of the natural size. The plant is the *Passiflora tinifolia*.







CAMPYLOPTERUS RUFUS, *Less.*

## CAMPYLOPTERUS RUFUS, *Less.*

### Fawn-breasted Sabre-wing.

*Campylopterus rufus*, Less. in Rev. Zool. 1840, p. 73.—Bonap. Consp. Gen. Av., p. 71;

*Campylopterus*, sp. 4.

*Polytmus rufus*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 5.

---

THE first notice of this species of *Campylopterus* occurs in the "Revue Zoologique" for 1840, where it was described by M. Lesson, under the above appellation, from specimens contributed by MM. Longuemare and Parzudaki; neither of those gentlemen, however, have given any account of its habits, nor do they even mention the locality the bird frequents. The fine examples of both sexes which grace my own collection were sent to me by Don Constancia, direct from Guatemala: we may infer, therefore, that that part of the continent is its true habitat.

In colour the two sexes are as similar as they can be; but the more rounded form of the wing and the great dilatation of its first three primaries at once distinguish the male.

The young males of the first, and probably of the second year, assimilate so closely to the opposite sex in the form of their wings, that they cannot be recognized with certainty.

As the insect food of Humming-Birds is sought for among the most varied plants, and not a flower of the forest is left unvisited, I have figured this species on one of the Guatemala Orchids, which is far too conspicuous to escape its notice, the *Cynoches barbatum*.

Head and all the upper surface bronzy green; wings purple-brown; two centre tail-feathers bronzy green, the bronzy hue predominating towards the tip; the next on each side rufous at the base, then bronzy green, the bronzy hue predominating and deepening into brownish black near the extremity, where it is slightly tipped with buff; the next on each side rufous at the base, then bronze, to which succeeds a broad band of dull black, and finally it is tipped with buff; the two lateral feathers reddish buff, the outer one crossed on the inner web, and the second on both webs near the tip with an irregular bar of bluish black; all the under surface buff or fawn-colour; bill black, with the exception of the base of the lower mandible, which as well as the feet is fleshy brown.

The Plate represents a male and a female of the size of life.









CAMPYLOPTERUS HYPERYTHRUS, *Cab.*

## CAMPYLOPTERUS HYPERYTHRUS, Cab.

### Rufous-breasted Sabre-wing.

*Campylopterus hyperythrus*, Cabanis in Rich. Schomb. Reisen in Brit. Guiana, 1848, vol. iii.  
p. 709, No. 202.

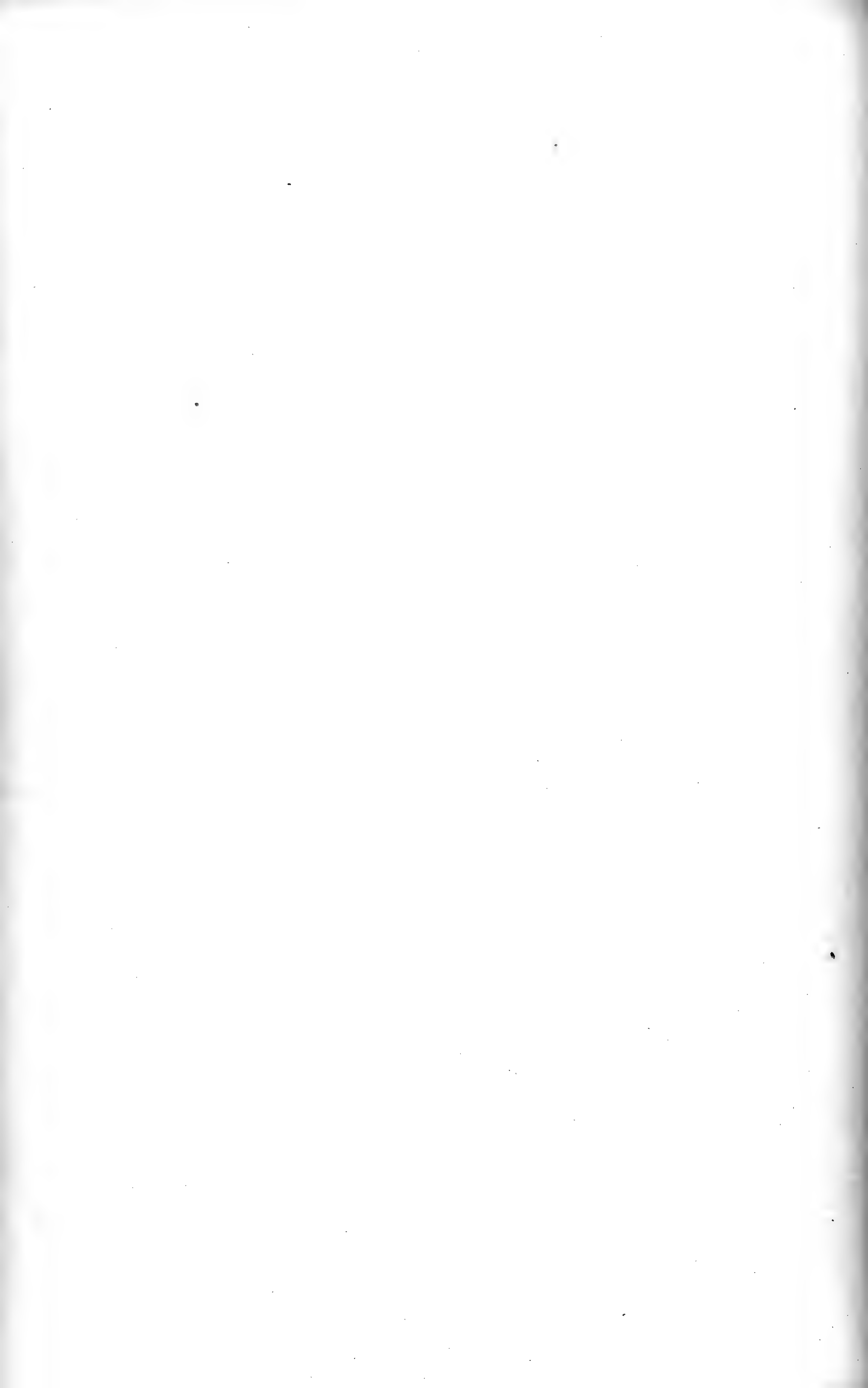
*Takui*, of the Arekuna Indians, Schomb.

---

WE are indebted to the researches of the Chevalier Schomburgk for the discovery of this new species of *Campylopterus*, of which the single specimen he procured—an adult male—now graces the collection of the Museum at Berlin; and I would here beg to record my thanks to Dr. Lichtenstein, the Director of that Institution, for his kindness in permitting this rare bird to be removed to London, for the purpose of its being described and figured in the present work. It was discovered on the Roraima Mountains, in the interior of Guiana, at an elevation of 6000 feet above the level of the sea, where it was busily engaged in procuring its food among the flowering bushes of Mimosa, and other plants of that region. It is a stout thick-set species, with a much shorter bill and wings than the *Campylopterus rufus*; has the colouring of the under surface of a much darker hue than in that species; the four central tail-feathers more golden, and the three lateral feathers on each side uniform rufous, without a trace of the black bar so conspicuous in its near ally.

Head, upper surface, and wing-coverts bronzy green; four central tail-feathers golden bronze, both on their upper and under surface; three lateral feathers on each side uniform rufous; wings purplish brown; all the under surface dark rust-red; bill black, except the basal half of the under mandible, which is fleshy brown; feet dark brown.

The figures are of the natural size, on a beautiful *Clitoria*, copied from an unpublished drawing made in Guiana.







CAMPYLOPTERUS ? CIVIERI.

## CAMPYLOPTERUS CUVIERI.

### Cuvier's Sabre-wing.

*Trochilus Cuvierii*, De Latt. et Bourc. Rev. Zool. 1846, p. 310.

*Polytmus Cuvieri*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 8.

*Campylopterus cuvieri*, Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 9.—Reichenb. Troch. enumer., p. 9. pl. DCCCIV. fig. 4871.

*Aphantochroa Cuvieri*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.—Reichenb. Aufz. der Colibris, p. 17.

---

IN naming this species of Humming Bird after the late Baron Cuvier, I am certain that MM. Bourcier and De Lattre felt assured that they could not add to the fame of that highly gifted and celebrated naturalist. France may indeed be proud of so great a man; and I must confess that I should have been much better pleased if some finer species of this fine family of birds had been selected for dedication to his memory; still, although it is one of the most plainly coloured species of the whole of the Trochilidæ, it plays a part in the economy of nature quite equal to that of the most glittering and gaily attired, and is none the less important or interesting because of its lesser degree of adornment.

All that we know respecting this species is, that it inhabits the northern parts of Columbia, the Caraccas, the Isthmus of Panama, and Veragua; and that the sexes and the young birds from the nest are all attired in a precisely similar style of plumage; in proof of which I may mention, that a little fledgeling I possess, taken from a nest near David in Veragua, is exactly of the same colour as a fully adult male. This latter specimen has the shaft of the first primary considerably dilated, showing clearly the group to which it belongs: its dull colouring and the large white tipping of its outer tail-feathers, too, are in unison with several others of the *Campylopteri*, such as *C. longipennis*, *C. obscurus*, &c. These modestly coloured species form a section which some Trochilidist may hereafter be induced to separate generically from the more gaily adorned *C. Delattrei*, *C. lazulus*, &c., but for the present I should prefer to retain them all in the same genus.

Crown of the head brownish green; all the upper surface and wing-coverts bronzy green; wings dark purplish brown; two centre tail-feathers greenish bronze, the remainder greenish bronze at the base, passing into greenish black, and tipped with white, the extent of the white increasing as the feathers recede from the centre ones; under surface dull bronzy green, each feather fringed with grey; centre of the abdomen washed with buff; under tail-coverts brown, broadly fringed with white; upper mandible dark brown; the under mandible appears to have been flesh-coloured; feet fleshy brown.

The figures are the size of life.









CAMPYLOPTERUS ROBERTI.

## CAMPYLOPTERUS ROBERTI.

Owen's Sabre-wing.

*Alphantochroa Roberti*, Salv. in Proc. of Zool. Soc., part xxix. p. 203.

---

I HAVE great pleasure in figuring a bird which, I am certain, is quite new to science. It was collected in the Vera Paz mountains of Central America by Mr. Robert Owen, after whom it has been named by Mr. Salvin. In point of affinity it is more nearly allied to the bird known to ornithologists as the *Campylopterus Cuvieri* than to any other; but it differs from it in many particulars, all purely specific, for in point of form the two birds are precisely similar. In size it is rather the smallest; both its mandibles are black instead of being lighter beneath; and the plumage of the body is more lustrous; but the greatest difference occurs in the colouring of the middle portion of the two outer tail-feathers, that part being black instead of dark green; there is also a less amount of white on the tips of those feathers. The shaft of the first primary is slightly dilated,—a circumstance which shows that this species, as well as the *C. Cuvieri*, for which I have proposed the generic name of *Phæochroa* in the 'Introduction,' are closely allied to the *Campylopteri*.

Head and all the upper surface bronzy green; throat, chest, and flanks bronzy green; centre of the abdomen mottled bronzy green and greyish white; under tail-coverts olive-green fringed with greyish white; two centre tail-feathers bronzy green slightly tipped with bluish black; the two next on each side bronzy, more largely tipped with bluish black; the extreme base of the two lateral feathers bronzy green, to which succeeds a broad zone of black, and the tips white; wings purplish brown; bill and feet black.

The figures are of the natural size, or, if anything, rather less. The plant is the *Echeveria canaliculata*.







APLANTOCHORDA FERRUGINEICEPS,

*Howell and W. L. G. C. Richter del et lith*

*Hollenstedt & Wolff sculp*

## APHANTOCHROA CIRRHOCHELORIS.

### Sombre Humming-Bird.

- Trochilus cirrochloris*, Vieill. Nouv. Dict. d'Hist. Nat. 2nde Edit., tom. xxiii. p. 430.—Ib. Ency. Méth. Orn., part ii. p. 560.
- Ornismya simplex*, Less. Hist. Nat. des Ois. Mou., p. 119. pl. 33.—Ib. Hist. Nat. des Col., p. 111.—Supp. des Ois. Mou., pl. 6.
- Polytmus cirrochloris*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 4.
- Trochilus campylostylus*, Licht. Verz. der Doubl., p. 14.
- Campylopterus cirrhochloris*, Bonap. Consp. Gen. Av., p. 71, *Campylopterus*, sp. 8.
- 

WHILE the greater number of the Trochilidæ are characterized by a splendid style of plumage, there are others, as will be seen on reference to the present Plate, in which these features are wanting; to most persons these sombre-coloured birds will be less pleasing than their more gaily attired congeners, but they are equally interesting in the eyes of the naturalist. In its general structure, this simply attired bird, which I believe is never adorned with any luminous colouring, offers a considerable alliance to the *Campylopteri*; but as the peculiar dilatation of the shafts of the outer primaries is entirely absent, I have separated it from a group of which I formerly considered it a member, and have made it the type of a new genus—*Aphantochroa*.

I have received numerous examples from various parts of Brazil, Pernambuco, Bahia, and the neighbourhood of Rio de Janeiro, where Mr. Reeves states it is very common, and where it evinces a great predilection for the flowers of the Banana.

As I have not been able satisfactorily to distinguish the one sex from the other, I am led to believe that they do not differ externally.

Head and all the upper surface dark grass-green; wings purplish brown; tail dark purple-brown, glossed with bronze, especially on the two central feathers; throat and breast grey, glossed with green; abdomen greyish brown, crossed just above the vent by a band of white; bill black; feet olive-yellow.

In some specimens the upper surface is bronzy green; the tail of a darker purple, and the under surface of an olive-green, instead of grey glossed with green.

The figures are of the natural size.









APHANTOCHROA GULARIS, *Gould*

*J. Gould and H. C. Richter, del. et lith.*

*H. S. Goussier & Walter, Imp.*

## APHANTOCHROA GULARIS, *Gould.*

### Puce-throated Humming-Bird.

*Aphantochroa? gularis*, Gould in Proc. of Zool. Soc., part xxviii. p. 310.

---

IF this bird had not a small patch of luminous colour on the throat, white under tail-coverts, and a somewhat more lengthened bill, it would so closely resemble the *Aphantochroa cirrhochloris* that one might almost be induced to believe it to be identical with that species. There can be no doubt, however, that the two birds are specifically distinct; indeed, I have for a long time entertained a belief that the bird here represented should not only be generically separated from that species, but from every other known Humming-Bird. The single individual which graces my own collection is the only one that has ever come under my notice; it was procured in the neighbourhood of the river Napo; and when the vast forests bordering that river have been more minutely explored, other specimens will doubtless be discovered, and we shall then be in possession of materials which will enable us to come to a more just conclusion respecting it than we can with that we at present possess.

The luminous mark on the throat reminds us of a similar feature in *Phaiolaima rubinoides* and *P. Aequatorialis*; but the tails of those species are very different from that of the subject of the present memoir, both in size and colouring.

Crown shining grass-green; back of the neck, shoulders, back, upper tail-coverts, and two centre tail-feathers deep grass-green; under surface of the body grass-green, with the exception of a glittering patch of lilac on the throat and centre of the abdomen, and the thighs and under tail-coverts, which are white; primaries purplish brown; four outer tail-feathers on each side purplish green; bill slightly curved and black, with the exception of the base of the under mandible, which appears to have been flesh-colour.

The accompanying Plate gives a very correct representation of this rare species, of the size of life. The plant (*Leucothoë pulchra*) is from the same country; but I am not sure that the bird and the plant are ever in such close juxtaposition as I have represented them.







LEUCIPPUS FALLAX.

## LEUCIPPUS FALLAX.

### Buff-breasted Leucippus.

*Trochilus fallax*, Bourc. Rev. Zool. 1843, p. 103.—Ib. Ann. de la Soc. Sci. de Lyons, 1843, p. 44.

*Trochilus (Lampornis?) fulviventris*, Gould in Proc. of Zool. Soc., part xiv. p. 88.

*Polytmus fallax*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 55.

*Leucippus fallax*, Bonap. Consp. Gen. Av., p. 73, *Leucippus*, sp. 1.—Reichenb. Aufz. der Colibris, p. 11.—Ib. Troch. enumer., p. 8. pl. DCCLXXXIII. figs. 4820, 4821.

*Doleromyia fallax*, Bonap. Rev. et Mag. de Zool. 1854, p. 249.

---

THERE is but little in this species to attract attention, nevertheless to the Trochilidist it is not destitute of interest. The uniformity of the buffy hue of its under surface is a feature rarely occurring among Humming Birds.

The *Leucippus fallax* may be considered rare, since but few specimens are to be found either in the collections of England or in those of the Continent. For those contained in my own I am indebted to Mr. Dyson, who procured them in Venezuela. They offer no difference whatever either in size or colouring, and in all probability it will be found that there is no outward distinction between the sexes, and that the adult livery is assumed at a very early age; for among the specimens I possess is a half-fledged nestling, which has already acquired the plumage of the adult.

Head olive-brown tinged with green; upper surface and wing-coverts green; wings dark purplish brown; four centre tail-feathers bronzy green; lateral feathers bronzy green at the base, passing into black and largely tipped with white, the white increasing in extent as the feathers recede from the centre; throat, breast and abdomen deep buff; under tail-coverts white; upper mandible, and point of the lower, black; remainder of the under mandible either pale yellow or flesh-colour.

The figures are of the natural size. The plant is the *Dictyanthus Pavonii*.









UROCHROA BOUGIERI.

## UROCHROA BOUGUERI.

### Pied-tail.

*Trochilus Bougueri*, Bourc. Compte rend. de l'Acad. des Sci., tom. xxxii. p. 186.

*Cœligena bougueri*, Bonap. Rev. et Mag. de Zool. 1854, p. 252.

*Coeligena Bouguieri*, Reichenb. Aufz. der Colibris, p. 7.—Ib. Troch. enumer., p. 3.

---

THE discovery of this new and very remarkable Humming Bird is due to the researches of M. Bourcier, who, during his late visit to Ecuador, obtained many new species and much valuable information respecting the Trochilidæ. The present is certainly not among the least important of these discoveries, the bird being of large size and possessing several characters peculiar to itself; at the same time, it must be admitted that its colours are not so contrasted or lustrous as those of some of its congeners. Its general contour and the form of its bill and wings rendering it impossible to associate it with the members of any previously established genus, and the colouring of its tail—black, interspersed with white—presenting a character quite unique; I have been induced to constitute it the type of a new genus, the propriety of which must be determined by time and further research, which will probably reveal to us other species of the form; for it must be recollected that our knowledge of the productions of the great primeval forests of Southern America is even yet very imperfect, although each succeeding year has for some time past made us more and more acquainted with them.

Both Sir William Jardine and myself have received specimens of this bird from Professor Jameson, whose researches in the forests round Quito have so frequently been attended with satisfactory results. M. Bourcier's specimens were obtained in the great woods of the hot regions of Nanégan.

Lores reddish brown; space under the eye, forehead, all the upper surface and upper tail-coverts dark coppery bronze, with a tinge of green on the greater wing-coverts, and becoming of a brighter or more coppery hue on the upper tail-coverts; wings dark purple; two centre and the outer tail-feather on each side purplish black; the remaining tail-feathers white, broadly margined externally, and very slightly fringed on the apical portion of their inner webs with purplish black; throat shining greenish blue, passing into grass-green on the sides of the neck; all the under surface dark olive, glossed with grass-green.

The figures are the size of life. The plant is the *Ceratostema longiflorum*.







STERNOCLYTA CYANISPECTUS, Gould

# STERNOCLYTA CYANEIPECTUS.

## Blue-breast.

*Trochilus (Lampornis) cyanopectus*, Gould in Proc. of Zool. Soc., part xiv. p. 88.

*Sternoclyta cyanopectus*, Gould, MS. 1851.

*Campylopterus cyanipectus*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

*Lampornis cyanopectus*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 11.

*Saepiopterus cyanipectus*, Reichenb. Aufz. der Col., p. 11.

---

THE merit of discovering this new species of Humming-bird is due to the late Mr. David Dyson, who formerly travelled in Honduras and Cumana, where, it is believed, this ardent lover of nature contracted the disease from which he never recovered, and which, to the regret of all who knew him, carried him off in the prime of life.

The bird in question was killed by Mr. Dyson on the 25th of April, 1846, on the cocoa-plantation of Neiguata, near Camburi Grande, in the province of La Guayra. Although twelve years have since elapsed, no other examples have been collected, probably in consequence of the species being very local, and no other traveller having visited the district in which it flies.

The *Sternoclyta cyanepectus* is rendered remarkably conspicuous both by its bold style of colouring and by the large size of its bill, and differs so much in form from all the other members of the family, that I have been induced to make it the type of a new genus, for to none of those previously proposed could it be assigned.

Mr. Dyson noticed that the specimens procured by him were collecting their insect food from the flowers of the Cocoa-tree, and mentions that the bird was very rare, as he did not meet with it more than once or twice.

Throat luminous metallic green; centre of the breast brilliant metallic blue, separated from the green by a line of black; head, back, shoulders, flanks and lower part of the abdomen bronzy green; wings purplish brown, the base of the innermost primaries and the secondaries rusty red; tail bronzy brown, the three outer feathers slightly tipped with white; thighs white; bill and feet blackish brown.

The female generally resembles the male, but the green of the throat and blue of the breast are wholly wanting, those parts being grey, slightly spangled with dull green.

The figures are of the natural size. The plant is the *Aphelandra variegata*.









EUGENES FULGENS.

# EUGENES FULGENS.

## The Rivoli.

*Trochilus fulgens*, Swains. in Phil. Mag. 1827, p. 441.

*Ornismya Rivolii*, Less. Hist. Nat. des Ois. Mou., p. 48. pl. 4.

*Trochilus Rivolii*, Jard. Nat. Lib. Humming Birds, vol. ii. p. 96. pl. 18.

*Mellisuga fulgens*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 2.

*Delattria fulgens*, Bonap. Consp. Gen. Av., p. 70, *Delattria*, sp. 4.

*Cœligena fulgens*, Bonap. Rev. et Mag. de Zool. 1854, p. 252.

*Coeligena fulgens*, Reichenb. Aufz. der Colibris, p. 7.—Ib. Troch. enumer., p. 3. pl. DCLXXXVI.  
figs. 4513, 4514.

---

THIS well-known Mexican species, so celebrated for the beauty of its colouring, and the bold style of its markings, enjoys a very wide range of habitat, extending from the latitude of Jalapa in Mexico to the city of Guatemala; but only frequents high table-lands, such as those of Jalapa and Temiscaltepec. This fine bird was described by Swainson under the specific appellation of *fulgens* some years prior to that of *Rivoli* assigned to it by M. Lesson, in honour of M. Massena, Prince of Essling and Duke of Rivoli.

It is to be regretted that nothing has yet been recorded respecting its habits and economy, or the particular plants among which it seeks its food.

In its general contour and in some of its markings it bears a close resemblance to the members of the genus *Oreotrochilus*, but the straighter and more lengthened form of its bill prevents me from placing it in that group.

The sexes, as is usual with many other groups of Humming Birds, offer a very decided difference in their colouring, the female being entirely destitute of the lovely hues which adorn the head and throat of the male.

Fine examples of this species, collected by M. Rivera Paz, have been forwarded to me by Mr. Skinner.

The male has the forehead and crown of a rich violet-blue; chin, throat, and sides of the neck, luminous grass-green; all the upper surface, wing-coverts, breast, and abdomen bronzy green; the back of the neck and breast appearing black when viewed in front; wings purplish brown; two central tail-feathers bronzy green, the remainder brownish bronze, with a wash of bronzy green at the base and at the tip; under tail-coverts olive-grey, fringed with greyish white.

In the young male the forehead is grey, with a few brilliant bluish-green feathers appearing on the crown; upper surface and wing-coverts as in the adult; wings purplish brown; tail darker, and the lateral feathers crossed with a broad mark of dark brown and tipped with grey; under surface greyish brown, with a few of the bright grass-green feathers on the throat.

In the female the crown of the head is brown; upper surface, wings, and tail as in the young male, but the lateral tail-feathers more largely tipped with greyish white; all the under surface greyish brown, washed with green on the flanks, and with the centre of the throat-feathers tinged with reddish; before the eye, but below the lores, a small patch of white, and behind the eye another white mark curving down posterior to the ear-coverts.

The figures and plant are of the natural size; the latter is the *Anguloa uniflora*.







DELATTRIA CLEMENCIE.

*J. Gould and H. C. Richter, del. et lith.*

*Hillman & Walton, Imp.*

## DELATTRIA CLEMENCIAE.

### Blue-throated Cazique.

*Ornismya Clemenciae*, Less. Hist. Nat. des Ois. mou., pp. xlv et 216. pl. 80.—Ib. Supp. des Ois. mou., p. 115. pl. 8.

*Lampornis Clemenciae*, Less. Traité d'Orn., p. 279.

*Coeligena Clemenciae*, Less. Ind. Gen. et Syn. des Ois. du Genre *Trochilus*, p. xviii

*Mellisuga Clemenciae*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 16.

*Delattria clemenciae*, Bonap. Consp. Gen. Av., p. 70, *Delattria*, sp. 3.

*Lampornis clemencia*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

*Coeligena Clemenciae*, Reichenb. Aufz. der Colibris, p. 7.

---

I BELIEVE the true and restricted habitat of *Delattria Clemenciae* to be the moderately high table-land of Mexico. It is a large and powerful bird, and is distinguished for the quietness of its colouring, rather than for any of those brilliant metallic markings so prevalent among Humming Birds in general. M. Lesson has figured both sexes in his volumes on this group of birds, but unfortunately has not given any details as to their habits and economy; this omission is the more to be regretted as it leaves me in doubt as to the propriety of placing the bird in the genus *Delattria*; for, although it has not their broad shafted primaries, in its general colour and markings it approaches so closely to the members of the genus *Campylopterus*, that it becomes a question to which of the two groups it should be referred; future research, then, must determine its true situation.

The sexes differ in the blue throat-mark of the male being entirely wanting in the opposite sex.

The male has the crown of the head, all the upper surface, wing-coverts and flanks dull golden green, changing into bronzy brown on the lower part of the back; behind the eye a semi-crescentic mark of white; throat beautiful azure-blue; under surface ashy grey; under tail-coverts greenish grey, bordered with white; wings purplish brown; upper tail-coverts and tail purplish black, the two lateral feathers on each side largely tipped with white; bill brownish black; feet brown.

The female is very similar in colour to the male, but has no blue on the throat, that part, like the under surface, being grey.

The figures represent two males and a female, of the size of life. The plant is the *Adenocalymna comosum*.









LAMPROLAIMA RHAMI.

## LAMPROLAIMA RHAMI.

### De Rham's Garnet.

*Ornismya Rhami*, Less. Rev. Zool. 1838, p. 315.

*Ornismia Rhami*, De Latt. et Less. Rev. Zool. 1839, p. 13.

*Mellisuga Rhami*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 24.

*Lampornis rhami*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 13.

*Delattria rhami*, Bonap. Rev. et Mag. de Zool. 1854, p. 253.

*Lamprolaima Rhami*, Reichenb. Aufz. der Colibris, p. 9.

*Heliodoxa Rhami*, Reichenb. Troch. enumer., p. 6. pl. DCCXLVI. figs. 4712, 4713.

---

THE information I have been able to obtain from various sources respecting this fine species enables me to state that it inhabits the temperate regions of Guatemala and Mexico, and that it neither frequents the high mountain ranges nor the hot forests of the lower lands, but dwells in a country of perpetual spring, with a temperature similar to our own at midsummer, and where the Trochilidæ are unsurpassed in beauty by those of any other part of the world.

M. Rafael Montes de Oca informs me that this fine bird is occasionally met with in the neighbourhood of Jalapa, and M. Auguste Sallé collected numerous examples of both sexes near Cordova.

For our first knowledge of this species we are indebted to the researches of M. Bourcier, by whom specimens were transmitted to M. Lesson, who described it in the "Revue Zoologique" for 1838, under the specific appellation of *Rhami*, in honour of M. de Rham of New York. "This Humming Bird," says M. Lesson, "which is rare even in its native country, inhabits the thickest forests, procures its food from the flowers of a species of *Loranthus*, a parasitic plant found on the highest branches of the loftiest trees, and evinces a preference for situations of moderate temperature."

The male has the crown of the head, all the upper surface, lesser wing-coverts, and upper tail-coverts deep grass-green; greater wing-coverts, secondaries, and the basal two-thirds of the primaries dark chestnut-red, the tips of the secondaries and the apical third of the primaries dark purplish brown; on the chin and centre of the throat, an oblong mark of fine metallic amethystine-red, bounded on each side by a stripe of black, the whole surrounded by a broad mark of deep metallic-blue; under surface of the body and under tail-coverts dark brown; tail very dark purple; bill and feet blackish brown.

In immature males the central throat-mark is surrounded by bluish green, instead of the fine blue which forms so conspicuous a feature in the adult.

The female differs in being destitute of the rich markings on the throat, the whole of her under surface being light greyish brown, with a somewhat darker hue near the tip of the breast-feathers; the red of the wings is less extensive, and the outer tail-feathers are tipped with grey.

The figures are the size of life. The plant is the *Galeandra Baueri*.







DELATTRIA HENRICA.

*Illustrated and H.C. Bechler, del et lith.*

*Illustrated by A. Walton, Junr.*

## DELATTRIA HENRICI.

Henry De Lattre's Cazique.

*Ornysmia Henrica*, Less. et De Latt. Rev. Zool. 1839, p. 17.

*Topaza Henrica*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 9.

*Delattria henrica*, Bonap. Consp. Gen. Av., p. 70, *Delattria*, sp. 1.

——— *henrici*, Bonap. Consp. Troch. in Rev. et Mag. de Zool. 1854, p. 253.

---

THIS species was first made known to science in the "Revue Zoologique" for 1839, by MM. Lesson and De Lattre, and was by them dedicated to M. Henri De Lattre, the brother of the latter.

Guatemala, if not the exclusive habitat of this species, is certainly the locality in which it is found in the greatest abundance. The specimens in my collection, and all others that I have seen, have been sent direct from the city of Guatemala, by Don Jose Constancia, and were, I believe, collected in its environs. The late M. De Lattre states that he found it in the neighbourhood of Guatepec, where it is very rare; that it lives exclusively among the great trees of the forest, and that the sexes are usually met with separate from each other.

The *Delattria Henrici* may be distinguished from its congeners, and from every other known species by the subdued lilaceous red of its throat and by the sombre brown colour of its under surface.

The total absence of the throat-mark in the female at once distinguishes that sex: in other respects the plumage of the male and female closely assimilates.

The male has the head, all the upper surface and the wing-coverts dark bronzy green, fading into a sombre brownish hue on the rump; wings purplish brown; tail very dark blackish brown, the lateral feathers tipped with greyish brown; behind the eye a semi-crescentic mark of dull white; ear-coverts brown; throat subdued lilaceous red; under surface greyish brown, washed with bronze on the flanks; under tail-coverts dark brown with lighter edges.

The female differs in having no trace of the lilaceous red mark on the throat, that part being brown lightly washed with buff.

The figures represent the two sexes of the natural size. The curious orchid is the *Cynoches ventricosum*.









DELATRIA VIRIDIPALLENS.

*J. Gould and H. C. Richter, del. et lith.*

*Hellmayer & Wallen Imp.*

## DELATTRIA VIRIDIPALLENS.

### Green-throated Caziue.

*Trochilus viridi-pallens*, Bourc. et Muls. Ann. de la Soc. Sci. de Lyons, 1846, p. 321.—Ib. Rev. Zool. 1846, p. 316.

*Polytmus viridi-pallens*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 57.

*Delattria viridi-pallens*, Bonap. Consp. Gen. Av., p. 70, *Delattria*, sp. 2.

*Thaumantias viridipallens*, Bonap. Rev. et Mag. de Zool. 1854, p. 255.

*Agyrtria viridipallens*, Reichenb. Aufz. der Colibris, p. 10.

---

THE *Delattria viridipallens* is a native of Guatemala and Mexico. The specimens from which MM. Bourcier and Mulsant took their description were brought to Europe by M. De Lattre, who obtained them at Coban; others, in my own collection, have been sent to me by my friend George Ure Skinner, Esq., from Guatemala, where they had been procured and beautifully prepared by M. Riviera Paz. The species offers but little to recommend it to our notice, for its structure exhibits no peculiarity, nor is its plumage conspicuous for beauty,—indeed it is its want of colour that is its principal characteristic; even the pale green colouring of the throat, which suggested the specific appellation of *viridipallens*, is not very bright or glittering, and hence I have not sought the aid of a metallic agent in depicting it, but have depended upon ordinary means for its faithful representation.

Like *Delattria Henrici* and *D. Clemenciæ*, this bird bears the semi-crescentic mark of white behind the eye, and like them, too, presents a similar difference in the colouring of the throat of the two sexes, the female being destitute of the green hue which decorates that part in the male.

The male has the head, upper surface, wing-coverts and flanks coppery green, the coppery hue prevailing on the lower part of the back and rump; behind the eye a semi-crescentic mark of white; throat pale green; breast and abdomen white; under tail-coverts pale greenish grey, fringed with white; wings purplish brown; central tail-feathers bluish brown; the remainder brownish grey, the grey tint becoming gradually more apparent or stronger as the feathers recede from the centre; bill black; feet dark brown.

The female is very similar, but has the throat greyish white instead of green; and the lateral tail-feathers of a paler hue than those of the male.

The birds are represented of the natural size, on the *Oncidium ornithorhynchum*, one of the beautiful Orchids of Guatemala.







HELIOPEDICA MELANOTIS.

# HELIOPÆDICA MELANOTIS.

## Black-eared Humming-bird.

*Trochilus melanotus*, Swains. Phil. Mag. 1827, p. 441.

———— *leucotis*, Vieill. 2<sup>nde</sup> Edit. du Nouv. Dict. d'Hist. Nat., tom. xxii. p. 428.—Ib. Ency. Méth. Orn., part 11. p. 559?

*Ornismya Arsenii*, Less. Hist. Nat. des Ois.-Mou., pp. xxvij, 60. pl. 9.—Ib. Supp., p. 152. pl. 27.—Ib. Ind. Gen. et Syn. des Ois. du Gen. *Trochilus*, p. xxxix.—Ib. Traité d'Orn., p. 279.—Jard. Nat. Lib. Humming-birds, vol. i. p. 137. pl. 20.

*Thaumatias leucotis*, Bonap. Consp. Gen. Av. p. 78, *Thaumatias*, sp. 8?

*Basilinna leucotis*, Reichenb. Aufz. der Colibris, p. 13?

---

ALTHOUGH Prince Charles Bonaparte and all recent writers consider the present bird and the *Trochilus leucotis* to be identical, and have made the two names synonymous, I have very great doubt as to the accuracy of this opinion, as Vieillot makes no mention of the splendid blue colouring of the crown, and moreover states that his bird is from Brazil, while the native countries of the one here figured are Guatemala and Mexico. It is doubtless the *Ornismya Arsenii* of Lesson, as the figures given by him accord with the two sexes; but his name must give place to the prior one of *melanotis* assigned to it by Swainson. Lesson evidently had no knowledge of its native country, as, in his description of the male, he states it is from Brazil, and in his endeavour to correct this error, mentions in his account of the female that it is not from Brazil, but from Paraguay, while it is not found in either country. It is one of the prettiest and most highly coloured of the Trochilidæ, and moreover differs so much in form, and particularly in its markings, from all others that I have proposed for it a new generic title.

I observe that specimens from Mexico are a trifle larger in all their admeasurements than those sent from Guatemala; their colouring, however, is precisely the same.

The sexes differ considerably, the female having none of the brilliant blue on the face or the glittering green of the chest, which are so conspicuous in the opposite sex.

The following is Swainson's short but expressive description of this bird:—

“Golden green; front and chin sapphire-blue; throat emerald-green; ears black, margined above with white; bill red; tail even. Table-land of Mexico, Temiscaltepec, Real del Monte.”

To this I may add that the wings are purplish brown; the two centre tail-feathers bronzy green; the lateral feathers in some instances black tipped with bronze, in others their outer webs are bronzy and the inner black; abdomen grey; flanks greenish.

The female has the crown brownish grey; upper surface, wing-coverts, flanks and two centre tail-feathers bronzy green; lateral tail-feathers deep bluish black, washed with bronze at the base and tipped with grey, particularly the outer feather; ear-coverts black, above which is a mark of white; under surface buffy white, spangled here and there with green,

The figures are of the natural size. The plant is the *Barkeria elegans*.









MELIOPÆDICA XANTUSI, *Lanz.*

# HELIOPÆDICA XANTUSI, Lawr.

## Xantus's Humming-Bird.

*Amazilia Zantusii*, Lawr. in Ann. Lyc. Nat. Hist. in New York, April 9, 1860, female.

*Heliopaedica castaneocauda*, Lawr. in Ann. Lyc. Nat. Hist. in New York, April 23, 1860, male.

---

It is pleasing to mark the progress which science has made during the present century, and to note the important discoveries which have been the result of that impetus which has induced the mind of man to search the heavens for a new planet, or to transport himself to the distant and untrodden lands of our globe for the purpose of seeking for novelties in animal and vegetable life; nor is it less pleasing to the man of science to make known and to record the important information that has thus been acquired. It may be fairly stated that America has sons who will be second to none in the employment of their energies in this direction; for many of them are already actively engaged in zoological pursuits, and others are travelling in distant lands in order to add to our store of knowledge; among the latter may be especially mentioned the discoverer of the present highly interesting species of Humming-Bird, of whom Mr. Lawrence, after describing the bird in the 'Annals of the Lyceum of Natural History in New York,' thus speaks: "Specimens were sent to the Smithsonian Institution by Mr. John Xantus, whose investigations of the ornithology of western North America have been the means of adding many new birds to science; in compliment to him I have named it."

I may state that the *Heliopædica Xantusi* and the *H. melanotis* are the only species of this particular form that have yet been discovered. The latter is a native of Mexico and Guatemala, the former an inhabitant of California; but over what portions of that country its range extends is unknown. The specimens sent to the Smithsonian Institution were procured at Cape Lucas.

I cannot close this notice without recording my best thanks to the Secretaries of the Smithsonian Institution for their liberality in permitting this rare species to be transmitted to me for the purpose of enriching the present work; neither am I less obliged to my friend Mr. Lawrence for his attention in making me speedily acquainted with Mr. Xantus's discovery of a new Humming-Bird in what I presume may be considered as a part of the North American States.

"This species," says Mr. Lawrence, "is a near ally of *H. melanotis*, but differs in the head being black instead of sapphire-blue, in the green plumage being of a much darker shade, the abdomen rufous, in place of grey, and in the dark chestnut colour of the tail, which is mostly black in *melanotis*."

The following is Mr. Lawrence's description of the two sexes; but I must premise that, as the male had been placed in spirits, the colours he describes are probably a little darker than those of the bird when alive.

"Male.—Front, crown, chin, and a continuous line running below and beyond the eye, black; a white line extends backward from behind the eye, and borders on the black; the upper plumage is grass-green; tail dark chestnut-red, as are also the shafts; the lateral feathers are somewhat lighter in colour; the two central feathers have a margin of golden bronze extending entirely round them, the other tail-feathers have a narrow edging of dull black encircling their ends; wings purplish brown; throat brilliant grass-green; sides and under wing-coverts grass-green; abdomen and under tail-coverts dull rufous; tarsi clothed with pale rufous feathers; bill flesh-colour for three-quarters of its length, with the end black; feet blackish brown.

"Female.—Front adjoining the bill and lores bright rufous; crown dark ash, with a tinge of pale purple, on a side view dull green; upper plumage and upper wing-coverts light shining green in some lights, golden, paler and more golden on the upper tail-coverts, which are edged with rufous; the two central tail-feathers light shining green, golden at the end; the other tail-feathers are chestnut-red, becoming gradually paler to the outer ones; the two feathers next the middle ones on each side have longitudinal black spots on the outer side of both webs near the end, scarcely reaching to the shaft, these spots are bronzed; the next feather has the same marks, but less in extent, and on the outer web being merely a marginal line; on the outer feather it consists of only a small spot on the edge of the inner web; the shafts of all the tail-feathers are red; wings purplish brown, edged on the bend of the wing with pale rufous; over the eye is a stripe of pale rufous, which is continued and becomes broader over the ears, where it is white; below the eye and extending along the side of the neck and under the white stripe is one of dull rufous brown; under surface of the body of a uniform rather pale rufous, on the sides of the breast and of the body under the wings intermixed with green; under wing-coverts green, marked next the body with rufous; vent white; under tail-coverts pale rufous; upper mandible black, under flesh-coloured for about half its length, dusky black at the end; tarsi clothed with pale rufous feathers; feet black."

The figures represent both sexes of the natural size. The plant is the *Ceanothus Veitchianus*.







TOPAZA PELLIA.

# TOPAZA PELLA.

## Crimson Topaz.

- Falcinellus gutture viridi*, Klein, Aves, No. xv. p. 108.  
*The Long-tailed Red Humming Bird*, Edw. Glean., pl. 32. fig. 1.  
*Polytmus Surinamensis longicaudus ruber*, Briss. Orn., tom. iii. p. 690.—Id. 8vo. tom. ii. p. 27.  
—Gerin., tom. iv. t. 305. 2.  
*Le Colibri Topaze*, Buff. Pl. Enl. 599. fig. 1.—Aud. et Vieill. Ois. dor., tom. i. pl. 2. p. 15  
male, pl. 3. p. 16 female.  
*Trochilus pella*, Linn. Syst. Nat., tom. i. p. 189.—Ib. Gmel. Edit., tom. i. p. 485.—Lath. Ind.  
Orn., tom. i. p. 302.—Temm. Man. d'Orn., 2nd Edit., tom. i. p. lxxxiv.—Vieill.  
Ency. Méth. Orn., part ii. p. 554. pl. 128. fig. 5.—Dumont de Ste Croix, Dict.  
Sci. Nat., tom. x. p. 44.—Drapiez, Dict. Classiq. d'Hist. Nat., tom. iv. p. 320, and  
Atlas, pl. 28. fig. 2.—Less. Hist. Nat. des Colibris, p. 21. pl. 2 mâle adulte, pl. 3  
var. tapirée, pl. 4 jeune mâle, pl. 5 femelle.—Ib. Ind. Gen. et Syn. des Ois. du  
Gen. Trochilus, p. xvi.  
*Certhia Surinamensis*, Spalowsk. Vog., tom. i. t. 13.  
*De Topaz kehlige Kolibri*, Schmid. Vog., p. 61. t. 48.  
*Grand Colibri*, Ferm. Surinam, vol. ii. p. 195.  
*Colibri à longue queue de Cayenne*, Buff. Hist. Nat. des Ois., tom. vi. p. 46.—Ib. Sonn. Edit.,  
tab. xvii. p. 258.  
*Topaz Humming Bird*, Shaw, Zool. Misc., pl. 513.—Lath. Gen. Syn., vol. ii. p. 746.—Ib. Gen.  
Hist., vol. iv. p. 291.  
*Topaz-throated Humming Bird*, Shaw, Gen. Zool., vol. viii. p. 274. pl. 37.—Jard. Nat. Lib.  
Humming Birds, vol. ii. p. 115. pl. 24 male, pl. 25 var.  
*Colibri pella*, Less. Traité d'Orn., p. 288. pl. 78. fig. 1.  
*Topaza pella*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 1.—Bonap. Consp.  
Gen. Av., p. 73.

---

THE countries of Cayenne, Trinidad, and Surinam, and the fluviatile regions of the Lower Amazon are the native habitats of this gorgeous species, which may be regarded not only as one of the gems of Ornithology, but as one of the most beautifully adorned species of the *Trochilidæ*; I may also add that it is one of the oldest known members of the family, being mentioned in the works of every writer on natural history, from the days of Linnæus to the present time; yet curiously enough, the only notice of its habits that has been recorded is that contained in Mr. Waterton's celebrated "Wanderings," which, brief as it is, is of the highest interest. Speaking of the Humming Birds observed by him in Cayenne and Demerara, he says—

"One species alone never shows his beauty to the sun; and were it not for his lovely shining colours, you might almost be tempted to class him with the Goat-suckers, on account of his habits. He is the largest of all the Humming-birds, and is all red and changing gold-green, except the head, which is black. He has two long feathers in the tail, which cross each other, and these have gained him the name of *Karabimiti*, or Ara Humming-bird, from the Indians. You never find him on the sea-coast, or where the river is salt, or in the heart of the forest, unless fresh water be there. He keeps close by the side of woody fresh-water rivers and dark and lonely creeks. He leaves his retreat before sunrise, to feed on the insects near the water; he returns to it as soon as the sun's rays cause a glare of light, is sedentary all day long, and comes out again for a short time after sunset. He builds his nest on a twig over the water in the unfrequented creeks; it looks like tanned cow-leather."

The nest is of a deep cup-shaped form, the walls exceedingly thin, and the whole structure composed apparently of a species of fungus very much resembling German tinder, united by cobwebs or some similar material. The eggs are white, two in number, and about five-eighths of an inch in length.

I have figured two adult males, and a third in a style of plumage which is generally supposed to be that of the female; it is believed by many, however, that this sex, when very old, assumes a plumage similar

to that of the males, but never acquires the lengthened tail-feathers; a conclusion arrived at in consequence of specimens being frequently sent from Cayenne in this state, which after all may be that of immature males.

Head, lores, and a broad crescentic band passing down the sides of the neck and across the lower part of the throat deep velvety black; throat, within the black, lustrous greenish yellow, with a rich golden or topaz hue down the centre; back and wing-coverts rich deep red, passing into orange-red on the scapularies and lower part of the back; wings purplish brown; under wing-coverts and base of the secondaries beneath rufous; upper tail-coverts and two centre tail-feathers bronzy green, the next tail-feather on each side brownish black, about half the breadth and thrice the length of the other tail-feathers, and with their basal third hidden by the central feathers; three outer feathers on each side reddish buff; across the breast a broad band of rich deep crimson; abdomen and flanks paler shining crimson; under tail-coverts golden green; thighs white; bill black; feet yellow.

In the female, or young, the head and upper surface is shining green, washed with bronze on the back; wings purplish brown; upper tail-coverts bright shining green; two central tail-feathers dark green, tipped with black; two next on each side dull black; the two outer ones on each side dull brown at the base, and rufous for the remainder of their length; under surface golden, with a faint indication of the lustrous throat so conspicuous in the male; under tail-coverts bright green; bill black; feet yellow.

The Plate represents two males and a supposed female on a species of *Epidendrum*, common to the country the bird inhabits.







## TOPAZA PYRA, *Gould.*

### Fiery Topaz.

*Trochilus (Topaza) pyra*, Gould in Proc. of Zool. Soc., part xiv. p. 85.

*Topaza pyra*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 3.—Bonap. Consp. Gen. Av., p. 73.

---

THE late Mr. George Loddiges of Hackney, whose love for the Humming Birds was only equalled by his kind and amiable disposition, more than once said to me, "I think the *Trochilus pella* is the finest of all the *Trochilidæ*, and I believe it will always remain so, for we cannot imagine a more beautiful species." Had not his premature death deprived me of a friend, and natural science of one of its most enthusiastic devotees, I should have hastened with a corresponding enthusiasm to show him this new and still more lovely bird, well knowing that he would feel equal pleasure with myself in the discovery of a species still finer than that which he had ever regarded as the finest of its tribe: this gratification is however denied me; but another is still within my reach, that of stating that it was the sight of his fine collection, ever thrown open with the utmost readiness to my inspection, that first turned my attention to this beautiful group of birds, and determined me, since his lamented death, to attempt the delineation in a suitable manner of the forms in which he took so deep an interest.

The native habitat of the *Topaza pyra*, as far as we yet know, is the higher part of the Rio Negro, a tributary of the Upper Amazon; it is in this locality that all the specimens which have been sent to Europe were obtained: the interesting nest which I have figured was procured at Barra, and given to me by W. H. Edwards, Esq., author of "A Voyage up the River Amazon."

In the size of its body and the length of its wings the *T. pyra* is somewhat larger than *T. pella*, while at the same time it has a smaller bill, a more circumscribed gorget, a larger proportion of deep velvety black on the head and surrounding the gorget; the whole of the body of a rich fiery scarlet, without any pectoral band of crimson; and, lastly, the three lateral feathers on each side purplish black instead of buff, and of a narrower form—features by which it may be at once distinguished from its near ally.

The nest is precisely similar in form and materials to that of *T. pella*, and the eggs are also white and two in number.

Abdomen, sides, back and shoulders luminous fiery red; head, ear-coverts, back of the neck and a band crossing the lower part of the neck deep velvety black; throat luminous pale green, passing into rich orange in the centre; two centre tail-feathers purplish green, the remainder deep purple; the feather on each side the centre ones much elongated, and crossing each other near the base; upper tail-coverts luminous light green with red reflexions; under tail-coverts luminous green; primaries purplish brown; black; feet blackish brown.

The figures are of the natural size.







# OREOTROCHILUS CHIMBORAZO.

## Chimborazian Hill-Star.

*Trochilus Chimborazo*, Bourc. Rev. Zool. 1846, p. 305.

*Oreotrochilus Chimborazo*, Gould in Proc. of Zool. Soc., part xv. p. 10.—Gray and Mitch. Gen. of Birds, vol. i. p. 104, Genus *Oreotrochilus*, sp. 3.—Bonap. Consp. Gen. Av., p. 76.

---

THIS beautiful species of Hill-Star is an inhabitant of the celebrated volcanic mountain Chimborazo, where it is to be found at an elevation of from 12 to 16,000 feet, or to the verge of perpetual snow; in these desolate regions it finds a home so congenial to its habits, that it is never known to descend to the warmer valleys below; the various alpine plants, particularly the *Chuquiraga insignis*, afford it a constant supply of insect food; there, in the land of storms and earthquakes, it has dwelt for ages entirely unknown, and there it might have remained for ages yet to come, since few would imagine that so delicate a creature as a Humming-bird could live in such an inhospitable clime, had not the energy of modern travellers induced them to explore regions neglected by their predecessors, and thereby bring to light the numerous interesting objects which have enriched our collections of late years, among which few are more conspicuous for their beauty than the *Oreotrochilus Chimborazo*. The merit of discovering this fine bird is due to M. De Lattre, who obtained a single specimen of the male while passing over one of the ridges of Chimborazo; this specimen is now in the possession of E. Wilson, Esq. of Lydstip House, Pembrokeshire. For the first specimens that came into my own possession I am indebted to my friend Professor Jameson of the University of Quito, who sent me fine examples of both sexes. Since that period the researches of M. Jules Bourcier, late French Consul at Quito, have been rewarded by the acquisition of numerous others, and it is to this gentleman that I am indebted for the following brief notes—all that are known—of its habits and manners.

“This species is exclusively confined to the volcanic mountain Chimborazo; here, at an altitude where vegetation ceases and near to the eternal snows, it loves to dwell, the altitude of its range appearing to be governed by that of the *Chuquiraga*, its favourite shrub, the flowers of which afford it an abundance of nectar and insect food. It is solitary in its habits, and so pugnacious, that it immediately offers battle to intruders upon its haunts: the male always perches on the extremity of the most elevated branch, and is rarely found near the female, which, unlike the male, invariably perches near to the ground; a circumstance, which, combined with her sombre colouring, renders her very difficult of detection.

“The nest is formed of lichens, and is either suspended to or sheltered beneath a ledge of rock; the eggs as usual are white, and two in number.

“The young retain their greyish green colouring during the first year, and do not attain their perfect plumage until the second year of their existence;” the young males may, however, be at all times distinguished by a tolerably well-defined collar of olive-green and brown.

The male has the head and throat bright violet-blue, bounded below by a narrow line of deep velvety black, and having in the centre of the violet-blue of the throat an oblong triangular gorget of rich light shining green; upper surface shining olive-green, becoming of a purer green on the upper tail-coverts; wings purplish brown; two centre tail-feathers dark green; outer feather on each side greenish black for three-fourths of its length, and white at the base; the remainder of the tail-feathers white; the two next the outer feathers broadly, and the inner one narrowly margined with greenish black; chest and centre of the abdomen white, with a line of greenish black down the centre of its lower portion; flanks olive-brown; under tail-coverts shining olive-green; thighs and feathers clothing the tarsi brown; bill and feet black.

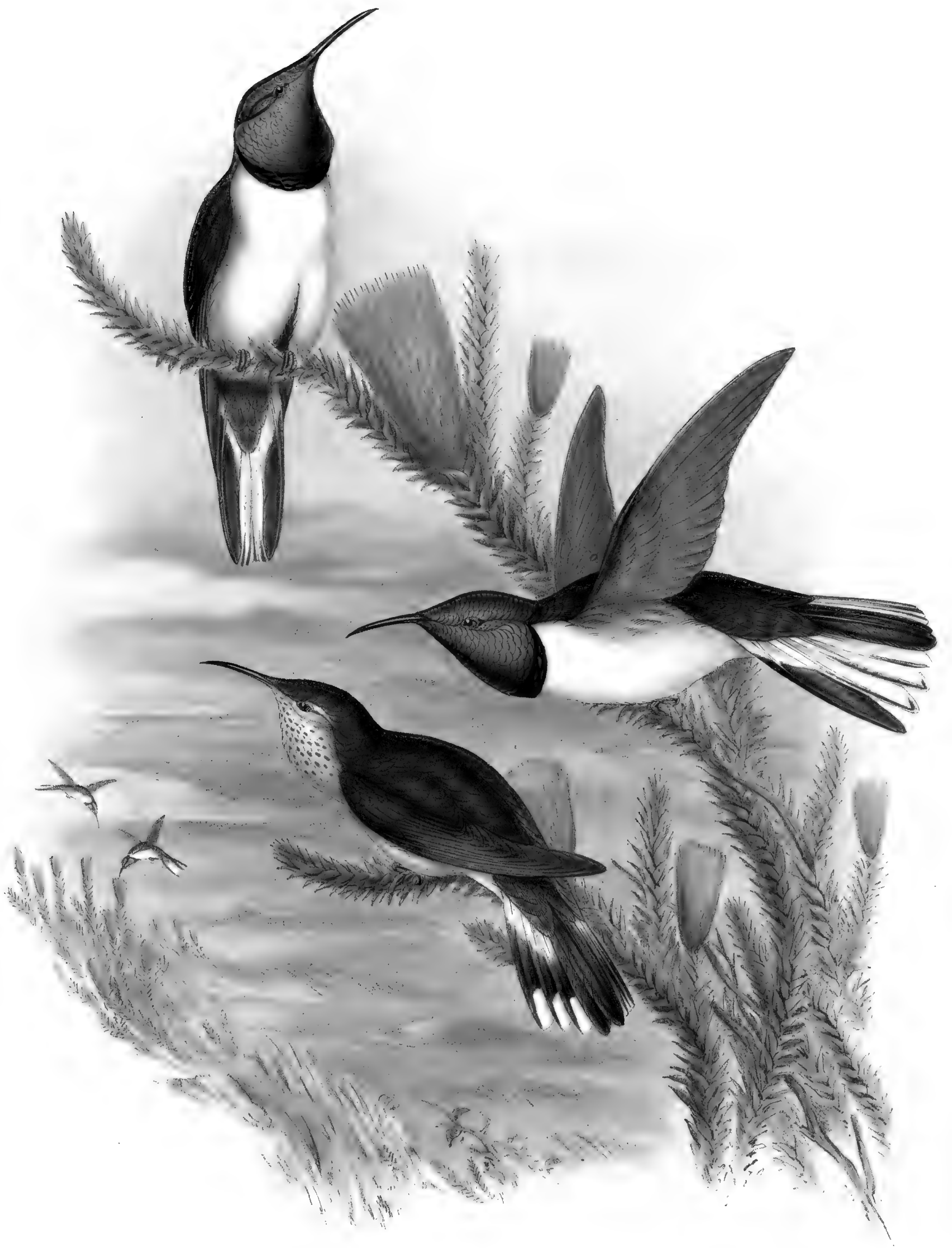
The female has all the upper surface olive-green; two centre tail-feathers dark glossy green; the remainder light greenish brown with white bases, and a large irregular spot of white at the extremity of the inner web; under surface olive-brown, each feather edged with white; throat white, with a spot of olive near the tip of each feather; bill and feet as in the male.

The Plate represents two adult males and a female on the *Chuquiraga insignis*, of the natural size; and in the distance two immature males.









ORNITHOLOGICAL ARTS. 1851.

# OREOTROCHILUS PICHINCHA.

## Pichinchian Hill-Star.

*Trochilus Pichincha*, Bourc. et Muls. Ann. de l'Acad. Sci. Bell. Lett. et Arts de Lyon, July 17, 1849.

*Oreotrochilus Jamesonii*, Jard. Cont. Orn., 1849, p. 42.—Ib. 1850, p. 27—1. pl. 43.

————— *Pichincha*, Bonap. Consp. Gen. Av., p. 76.

---

THE present bird is an inhabitant of the volcanic mountains of Pichincha and Cotopaxi, and is either more abundant or more easily attainable than *O. Chimborazo*, since specimens are far more numerous in our collections of this recently acquired, than of the older known species. These two Hill-Stars are so intimately allied, that the gorget-like mark of green on the throat of *O. Chimborazo* is the only feature by which it can be distinguished from the bird here represented; the opinion of their non-identity is, however, strengthened by the fact that they are never found to invade each other's territories. In a letter to Sir William Jardine, Bart., Professor Jameson states that the present species inhabits the rocky summits of Pichincha, where it is confined to a zone, commencing immediately below the snow-line and extending downwards about 500 feet, and that it extracts its food from the flowers of the *Chuquiraga insignis*, a plant apparently peculiar to the volcanic soil surrounding the extinct craters of Ecuador.

In some notes respecting this species kindly communicated to me by M. Jules Bourcier, that gentleman states that it was first discovered by himself near the line of perpetual snow on the volcanic mountain of Pichincha in the Republic of Ecuador; that the altitude at which it is generally found varies from 10,500 to 12,000 feet above the level of the sea; that it is principally met with in the warmer gorges of the mountain, where the soil being free from snow is adorned with vegetation; that, like the *O. Chimborazo*, it appears to have a decided preference for the shrub named *Chuquiraga insignis* by Humboldt and Bonpland in their "Plantæ Æquinoctiales"; that its habits and manners so closely resemble those of *O. Chimborazo* that one description will serve for both; and that although the volcano of Pichincha is not more than thirty leagues distant as the crow flies from that of Chimborazo, the species inhabiting each of these mountains respectively is never found on the other.

The male has the head and throat bright violet-blue, bounded below by a narrow line of deep velvety black; upper surface shining olive-green, becoming of a purer green on the upper tail-coverts; wings purplish brown; two central tail-feathers dark green, the outer feathers on each side greenish black for three-fourths of their length and white at the base; the remainder of the tail-feathers white, the two next the outer ones broadly, and the inner ones narrowly edged with greenish black; chest and centre of the abdomen white, with a line of greenish black down the centre of its lower portion; flanks olive-brown; under tail-coverts shining olive-green; thighs and feathers clothing the tarsi olive-brown; bill and feet black.

The young male differs in having the head and gorget dull grass-green, with an indication only of the purple hue; and in having the abdomen clouded with brown.

The female has the whole of the upper surface olive-green; two central tail-feathers dark glossy green; the remainder greenish brown with white bases, and a large irregular but nearly triangular-shaped spot of white at the extremity of the inner web; under surface olive-brown, each feather edged with white; throat greyish white, with a spot of olive near the tip of each feather; bill and feet as in the male.

The Plate represents two males and a female on the *Chuquiraga insignis*, all of the natural size.







DREYERDIIHLE'S ESTELLA

## OREOTROCHILUS ESTELLÆ.

### Estella's Hill-star.

*Trochilus Estella*, D'Orb. et Lafr. Syn., No. 31. p. 32.—D'Orb. Voy. dans l'Amér. Mérid., tom. iv. p. 376.

*Orthorhynchus Estella*, D'Orb. Voy. dans l'Amér. Mérid., Atlas, Ois., pl. 61. fig. 1.

*Trochilus Ceciliæ*, Less. Rev. Zool. 1839, p. 43.

*Oreotrochilus Estella*, Gould in Proc. of Zool. Soc., Part XV. 1847, p. 10.—Gray and Mitch. Gen. of Birds, *Oreotrochilus*, sp. 1.

---

IF M. D'Orbigny was not the first who discovered, he was certainly the first who described this fine species of Humming Bird, the rarity of which in our collections may be attributed to the circumstance of its being an inhabitant of those high mountain ranges which are rarely visited by European travellers and naturalists. "We have only met with this charming species," says M. D'Orbigny, "in the valley in which is situated the town of La Paz, in Bolivia, at the foot of the western side of the eastern Cordilleras. It inhabits dry and elevated places, at an altitude of more than 11,000 feet above the level of the ocean. It is solitary in its habits, flits about from flower to flower, and often rests upon shrubs and trees. Its food consists of insects of various kinds," and the pollen of flowers.

Mr. Bridges procured numerous examples during his late expedition into Bolivia, some of which were obtained at a higher elevation than that mentioned by M. D'Orbigny.

The sexes offer very considerable differences in their size and plumage, the female being by far the smaller bird, and entirely wanting the rich green of the throat which is so conspicuous in the male. The young males of the year assume an intermediate style of colouring, the green of the throat being obscurely indicated, and the mark on the centre of the abdomen being much less apparent than in the adult.

The male has the head, all the upper surface and wings greyish olive-brown, passing into dull coppery green on the upper tail-coverts; two centre tail-feathers and the outer one on each side, (which has an inward curvature,) green with bronze reflexions, the remainder narrowly edged on the external webs with brown; throat rich luminous grass-green, bounded below with a crescentic band of deep velvety black with blue reflexions; flanks olive-brown; breast and sides of the abdomen white; down the centre of the abdomen a mark of chestnut; under tail-coverts olive with green reflexions; tarsi clothed with brown feathers; bill and feet brownish black; irides blackish brown.

Total length,  $5\frac{1}{4}$  inches; bill,  $1\frac{1}{8}$ ; wing, 3; tail,  $2\frac{1}{4}$ ; tarsus,  $\frac{5}{16}$ .

The female has the upper surface the same as the male; the two middle tail-feathers brownish green, the remainder white with a band of green across the centre: the outer feather on each side, which is much shorter than the rest, less pointed, and less inwardly curved than in the male, is of a browner hue with bluish green reflexions; throat white, regularly spangled with brown, obscurely tinted with blue; chest and abdomen brownish white, the brown predominating on the flanks.

Total length,  $4\frac{5}{8}$  inches; bill,  $1\frac{1}{2}$ ; wing,  $2\frac{1}{2}$ ; tail, 2; tarsus,  $\frac{5}{16}$ .

The figures represent the two sexes of the natural size. The plant is the *Phycella Herbertiana*.









## OREOTROCHILUS LEUCOPLEURUS, *Gould.*

### White-sided Hill-star.

*Oreotrochilus leucopleurus*, Gould in Proc. of Zool. Soc., Part XV. 1847, p. 10.—Gray and Mitch. Gen. of Birds, *Oreotrochilus*, sp. 2.

---

HITHERTO this species has only been found in Chili, where it inhabits the sheltered valleys among the Andes, just below the line of perpetual congelation, and where it takes the place in those more southern regions of the *Oreotrochilus Estellæ* of Bolivia. Mr. Bridges, from whom I have received numerous specimens, procured on the Andes of Aconcagua, states that the bird was not uncommon near the Ojos de Agua, on the road towards Mendoza, at an elevation of 10,000 feet.

It is a smaller bird in all its admeasurements than *Oreotrochilus Estellæ*, and may be distinguished from that species by the bluish black mark down the centre of the abdomen; the outer tail-feathers also differ in being narrower, more rigid, and of a more incurved form; in other respects the two birds are very similar. I have some specimens with the feathers of the throat of a dull brown tipped with blue, and the abdomen clouded with dull greyish brown, while the black mark on the centre of the abdomen is as conspicuous as in the adult; in all probability these are young males of the year. In the Loddigesian collection there are fine examples of this bird, as well as a beautiful nest, brought direct from Chili by the late Dr. Miller: I have been kindly permitted to figure this nest, which appears to have been attached by means of cobwebs to the side of a rock or a large stone; it is larger in proportion to the size of the bird than is usually the case among the *Trochilidæ*, and is a dense and warm structure composed of moss, fine vegetable substances and feathers.

The male has the head, all the upper surface and wings greyish olive-brown, passing into dull coppery green on the upper tail-coverts; two centre tail-feathers and the outer one on each side, which has an inward curvature, green with bronze reflexions, the remainder narrowly edged on the external webs with brown; throat rich luminous grass-green, bounded below with a crescentic band of deep velvety black with blue reflexions; flanks olive-brown; breast and sides of the abdomen white; down the centre of the abdomen a mark of black with steel-blue reflexions; under tail-coverts olive; tarsi clothed with brown feathers; bill and feet brownish black; irides blackish brown.

Total length, 5 inches; bill,  $1\frac{1}{16}$ ; wing,  $2\frac{3}{4}$ ; tail,  $2\frac{1}{8}$ ; tarsus,  $\frac{5}{16}$ .

The female has the upper surface the same as the male, the two centre tail-feathers brownish green, the remainder white, with a band of green across the centre; the outer feather on each side, which is much shorter than the rest, and not so pointed nor so inwardly curved as in the male, is of a browner hue; throat white, spangled with spots of brown obscurely tinted with blue; chest and abdomen white, the brown predominating on the flanks.

Total length,  $4\frac{1}{2}$  inches; bill,  $\frac{7}{8}$ ; wing,  $2\frac{3}{8}$ ; tail, 2; tarsus,  $\frac{5}{16}$ .

The figures represent two adult males, a young male, a female, and a nest, all of the natural size.







ORESTROCHILUS MELANOGASTER; Gould.

*J. Gould and H.C. Richter, del. et lith.*

*Hullboundel & Walton, Imp.*

## OREOTROCHILUS MELANOGASTER, *Gould.*

### Black-breasted Hill-star.

*Oreotrochilus melanogaster*, Gould in Proc. of Zool. Soc., part xv. p. 10.—Gray and Mitch. Gen. of Birds, vol. i. p. 104, *Oreotrochilus*, sp. 5.—Bonap. Consp. Gen. Av., p. 76, *Oreotrochilus*, sp. 6.—Reich. Aufz. der Col., p. 15.—Bonap. Rev. Zool. 1854, p. 250.

---

No species of this well-defined group of Humming-birds is so rare in the collections of Europe as the *Oreotrochilus melanogaster*: a circumstance which is due to the fact of the country of which it is a native being more unfrequently visited than those inhabited by the other species. Ecuador, as is well known, is the true habitat of the *O. Pichincha* and *O. Chimborazo*, both of which species are named after the volcanic mountains they respectively frequent; *O. Estellæ* and *O. Adelæ* are found in Bolivia; *O. leucopleurus* in Chili, and the present species in Peru. All these species inhabit countries of great elevation, and are mostly confined to very limited areas. The *Oreotrochili* may truly be considered to constitute one of the best defined genera of the great family of the *Trochilidæ*, and to rank among the finest of the Humming-birds. A splendid specimen of the *O. melanogaster* graces the collection of the late Mr. George Loddiges, and two are contained in my own: all of these were procured in Peru, but in what precise locality is unknown. The whole of them are males, and, so far as I am aware, no female has yet reached Europe.

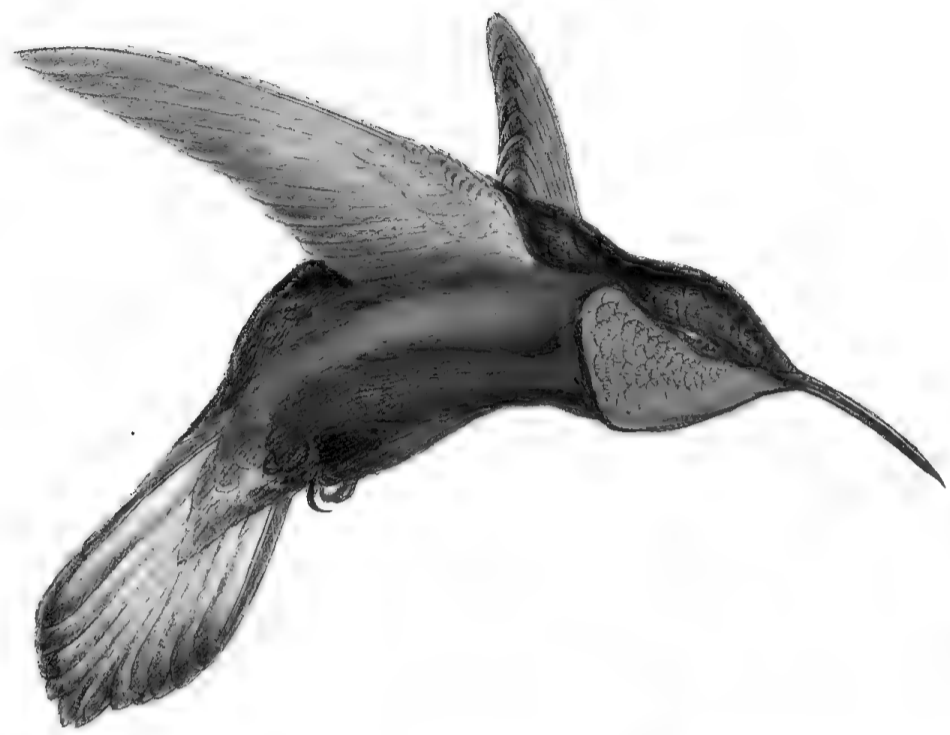
All the upper surface olive-brown with a golden lustre, and washed with green on the upper tail-coverts; wings greyish brown with purple reflexions; throat rich lustrous grass-green; breast and abdomen rich deep bluish black; flanks rusty brown; tail green, with bronze reflexions; bill black; feet olive-black.

The figures are of the size of life. The plant is the *Fuchsia spectabilis*.









DEKORATIONEN

## OREOTROCHILUS ADELÆ.

### Adela's Hill-star.

*Trochilus Adela*, D'Orb. et Lafr. Syn., No. 32. p. 33.—D'Orb. Voy. dans l'Amér. Mérid., tom. iv. p. 377.

*Orthorhynchus Adela*, D'Orb. Voy. dans l'Amér. Mérid., Atlas, Ois., pl. 61. fig. 2.

*Oreotrochilus Adela*, Gould in Proc. of Zool. Soc., Part XV. 1847, p. 10.—Gray and Mitch. Gen. of Birds, *Oreotrochilus*, sp. 4.

---

THIS is one of the many novelties which rewarded the researches of M. D'Orbigny, who figured it for the first time in his fine work, the "Voyage dans l'Amérique Méridionale," and who states that he met with it in one instance only, on the dry and arid mountains in the neighbourhood of Chuquisaca in Bolivia, where it flies among the rocks and perches upon the loftiest plants. It was also seen by Mr. Bridges during his travels in the same country, flying at a considerable elevation, and exhibiting many of the actions and manners of *O. Estellæ* and *O. leucopleurus*. The rich chestnut colouring of the flanks and the black mark down the centre of the abdomen render it conspicuously different from every other species of Humming Bird at present known to us; and it differs from the other *Oreotrochili* in having the tail-feathers of a narrower and more lengthened form, and in the outer feather on each side being broader and less incurved.

The sexes present the usual diversity of colouring, the female being of a very sombre hue.

The male has all the upper surface dark greyish olive-brown, passing into dull coppery green on the upper tail-coverts; wings brown, tinged with purple; two centre tail-feathers olive-brown; remainder of the tail-feathers vinous buff, narrowly margined with olive-brown; throat rich lustrous green, assuming a golden hue in some specimens; centre of the breast and abdomen deep velvety black, with a slight tinge of bluish green; sides of the chest and flanks rich deep chestnut; under tail-coverts olive-brown, tinged with buff; tarsi thickly clothed with brown feathers; bill, eyes and feet black.

Total length, 5 inches; bill,  $1\frac{1}{4}$ ; wing,  $2\frac{1}{2}$ ; tail,  $2\frac{1}{4}$ ; tarsus,  $\frac{3}{8}$ .

The female resembles the male in the colouring of the upper surface; has the lateral tail-feathers clouded instead of being regularly margined with brown; the throat white, regularly spangled with brown; the abdomen rufous; and the under tail-coverts and feathers clothing the tarsi pale brown.

Total length,  $4\frac{1}{2}$  inches; bill,  $1\frac{1}{8}$ ; wing,  $2\frac{3}{8}$ ; tail, 2; tarsus,  $\frac{3}{8}$ .

The figures represent the two sexes on a species of *Salvia*.







LAMPORNIS MANGO.

# LAMPORNIS MANGO.

## The Mango.

- Trochilus Mango*, Linn. Syst. Nat., tom. i. p. 191.—Ib. Gmel. Edit., tom. i. p. 491.—Shaw, Gen. Zool., vol. viii. p. 294.—Lath. Ind. Orn., vol. i. p. 307.—Less. Hist. Nat. des Col., p. 58. pls. 13, 13 bis, 14.—Vieill. Nouv. Dict. d'Hist. Nat., tom. vii. p. 353.—Ib. Ency. Méth. Orn., part ii. p. 557.—Drap. Dict. Class. d'Hist. Nat., tom. iv. p. 319.—Dumont, Dict. Sci. Nat., tom. x. p. 50.—Jard. Nat. Lib. Humming Birds, vol. ii. p. 100. pl. 20.—Swains. Birds of Brazil, pls. 27, 28.—Pr. Max. Beitr. zur Naturg. von Bras., B. iv. Div. i. p. 47.—Aud. Birds of Am., vol. ii. pl. CLXXIV.—Ib. Orn. Bio., vol. ii. p. 480.—Ib. Syn. Birds of Amer., p. 170.
- Le Plastron noir*, Buff. Hist. Nat. des Ois., tom. vi. p. 59.—Vieill. Ois. dor., tom. i. p. 20. pl. 7.
- Le Colibri du Mexique*, Buff. Pl. Enl. 680. figs. 2, 3.
- Trochilus violicauda*, Bodd.
- *albus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 488.
- *nitidus*, Lath. Ind. Orn., vol. i. p. 305.—Shaw, Gen. Zool., vol. viii. p. 301.
- Le Colibri à queue violette*, Buff. Hist. Nat. des Ois., vol. vi. p. 55.—Ib. Pl. Enl. 671. fig. 2.—Vieill. Ois. dor., tom. i. p. 27. pl. 11.
- Trochilus punctulatus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 488.—Vieill. Ency. Méth. Orn., vol. ii. p. 652?—Lath. Ind. Orn., vol. i. p. 306.—Shaw, Gen. Zool., vol. viii. p. 303.
- Le Bec-fleurs à bande noir le long du corps*, Azara, Voy. dans l'Amér. MÉR., Sonn. Edit., vol. iv. p. 89. no. CCXCV.
- Le Bec-fleurs bleu en dessous*, Ib., p. 91. no. CCXCVI.
- Le Bec-fleurs peint*, Ib., p. 92. no. CCXCVIII.
- Polytmus punctulatus*, Briss. Orn., tom. iii. p. 669.
- Trochilus atricapillus*, Vieill. 2<sup>de</sup> Edit. du Nouv. Dict. d'Hist. Nat., tom. vii. p. 354.—Ib. Ency. Méth. Orn., part ii. p. 553.
- *fasciatus*, Shaw, Gen. Zool., vol. viii. p. 303.
- *quadricolor*, Vieill. Ency. Méth. Orn., part ii. p. 573.
- Le Colibri à ventre piqueté*, Vieill. Ois. dor., tom. i. p. 21. pl. 8.
- Trochilus nigricollis*, Vieill. 2<sup>de</sup> Edit. du Nouv. Dict. d'Hist. Nat., tom. vii. p. 349?—Ib. Ency. Méth. Orn., pp. 2, 553?
- Lampornis mango*, Swains. Zool. Journ., vol. iii. p. 358.—Ib. Class. of Birds, vol. ii. p. 330.—Bonap. Consp. Gen. Av., p. 71, *Lampornis*, sp. 1.—Ib. Rev. et Mag. de Zool. 1854, p. 250.
- Polytmus mango*, Gray and Mitch. Gen. of Birds, vol. i. p. 107, *Polytmus*, sp. 10.
- Mango Humming Bird*, Lath. Gen. Syn., vol. ii. p. 758.—Ib. Gen. Hist., vol. iv. p. 310.—Shaw, Gen. Zool., vol. viii. p. 294.
- Violet-tailed Humming Bird*, Lath. Gen. Syn., vol. ii. p. 754.—Shaw, Gen. Zool., vol. viii. p. 301.—Lath. Gen. Hist., vol. iv. p. 303.
- Anthracothorax Mango*, Reichenb. Aufz. der Colibris, p. 11.—Ib. Troch. enumer., p. 8. pl. DCCCLX. figs. 4839–4841.
- Purple-tailed Humming Bird*, Shaw, Gen. Zool., vol. viii. p. 296.—Ib. Nat. Misc., pl. 333.
- Spotted-necked Humming Bird*, Lath. Gen. Syn., vol. ii. p. 755.

---

THIS familiar species of Humming Bird was not only known to Linnæus, but to Ray, Willoughby, Marcgrave, and most of the older authors, and is in fact one of those with which Europeans first became acquainted; nevertheless, much confusion exists with regard to its synonymy, which I believe is principally owing to a nearly allied species, the *Lampornis porphyurus* of Jamaica, having been confounded with it. This bird then it must be understood never goes to Jamaica, and to but few of the West India Islands; on the mainland, however, it enjoys a more extensive range than any other species. Audubon has included a

figure of it in his great work on the "Birds of North America," taken from a specimen said to have been killed in Florida; but I have never yet received examples of the bird from any locality approximating to the northern regions of America, nor from any district to the northward of Costa Rica: on the other hand, it is very generally dispersed over the southern continent for many degrees of latitude along the Andes. I possess examples from Bogota, Guayaquil, Peru, the Caraccas, the Guianas, the Delta of the Amazon, and all parts of Brazil, as far south as the latitude of Rio de Janeiro, in all of which countries it is to be found wherever localities suited to its habits occur. Slight differences of colouring are observable in examples from very distant localities, but none of sufficient importance to warrant their being characterized as distinct. The specimens which exhibit the greatest difference are those from Guayaquil, some of those I possess having the black of the throat washed with a somewhat glittering blue. The great variation which occurs between the colouring of the sexes and the youthful birds at different ages has occasioned an amount of confusion with regard to the synonymy of this species, which it is almost impossible to unravel, and in the investigation of which I have received much valuable assistance from M. Bourcier, of Paris, who has kindly sent me a list of all the synonyms which, in his opinion, are referable to this species, and which, with a few others, are given above. I am also indebted to this gentleman for the following note respecting the range of the bird, &c. :—

"This Humming Bird, though one of the most widely spread members of its family, is only to be met with in hot localities, and wherever it occurs in the interior of a country it is invariably in the very warm valleys. In its disposition it is wild and quarrelsome; for although it lives in societies, several being always found together, it is continually engaged in fighting with its companions, and in driving away all other birds which approach the tree in which it is breeding. It inhabits Bolivia, Peru, Ecuador, Panama, New Grenada, La Trinité, Guiana, and Brazil. The adult does not assume its perfect plumage until the end of the second year, and in the interval passes through so many changes of plumage, that the variety of appearance it presents has given rise to the various names under which the bird has been described.

"I have obtained examples of this species in the province of Manabi, and have killed many in the vicinity of Guayaquil during the rainy season, when I always found there were four or five young birds for every old one. Although this species occurs in such distant localities, there is no great variation in the plumage of the adults. Those obtained in Bolivia are a trifle the largest, and have the bands of green and blue at the sides of the neck a little less brilliant; in fact, the hotter the climate in which the bird dwells, the more brilliant is its general appearance; the black of the throat is more intense, the green of the back and rump is finer, and the violet of the tail more lustrous. Its flight is very rapid."

Mr. Reeves informs me that in Brazil the *Lampornis Mango* is to be found in Rio de Janeiro, Minas Geraes, St. Paul's, Santa Catharina, and Para; that it frequents the gardens as well as the forests, and is very common at Rio in some seasons, and equally scarce at others.

The nest is a round cup-shaped structure, placed near the extremity of a small horizontal branch, and is composed of cottony or any similar materials that may be at hand, bound together with cobwebs and ornamented with numerous small pieces of lichens: the eggs as usual are white and two in number, somewhat more than half an inch long, by three-eighths of an inch in breadth.

The adult male has the head, all the upper surface, wing- and tail-coverts, and flanks golden or coppery green; wings purplish brown; two centre tail-feathers bronzy green; lateral tail-feathers chestnut with violet reflexions, and narrowly margined with dark steel-blue; under surface velvety black, separated from the golden green of the upper surface by a band of shining blue, which extends from the corner of the mouth down each side of the neck and breast; under tail-coverts violet-brown in some specimens, glossy green in others; bill and feet black.

The female has the head, upper surface, wing- and tail-coverts, and flanks as in the male; breast and abdomen white, with a broad stripe of black down the centre of the throat, and a similar mark down the centre of the abdomen; in some specimens these marks unite, and form a broad black mark down the middle of the under surface; under tail-coverts green fringed with grey; two centre tail-feathers bronzy green; the next on each side bronzy green, deepening into black at the extremity and slightly fringed with white at the tip; the next on each side similar, but with an obscure mark of chestnut between the green and the black; the two outer feathers bronzy green at the base, then chestnut with violet reflexions, black towards the extremity and slightly tipped with white.

The young male is similar to the female, but has the white on each side the neck suffused with chestnut.

At a very young age the upper surface is bronzy green; the under surface white, spotted down the sides of the neck and body with chestnut-red, the spots being arranged in a double line from the angle of the lower mandible, and leaving a line of white running between them and the eye.

The Plate represents a male, a female, a young bird, and a nest, all of the natural size. The plant is the *Solanum fragrans*.







LAMPORNIS PREVOSTI.

*J. Gould and H.C. Richter, del et lith*

*Hillman & Walter, Imp*

## LAMPORNIS PREVOSTI.

### Prevost's Mango.

- Trochilus Prevostii*, Less. Hist. Nat. des Col., p. 87. pl. 24.—Ib., Ind. Gen. et Syn. des Ois. du Gen. *Trochilus*, p. xij.—Bourc. et Muls. Ann. de la Soc. Sci. de Lyon, 1843, p. 99.  
*Polytmus Prevostii*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 15.  
*Lampornis prevosti*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 6.—Ib. Rev. et Mag. de Zool. 1854, p. 250.  
*Anthracothorax Prevostii*, Reichenb. Aufz. der Colibris, p. 11.
- 

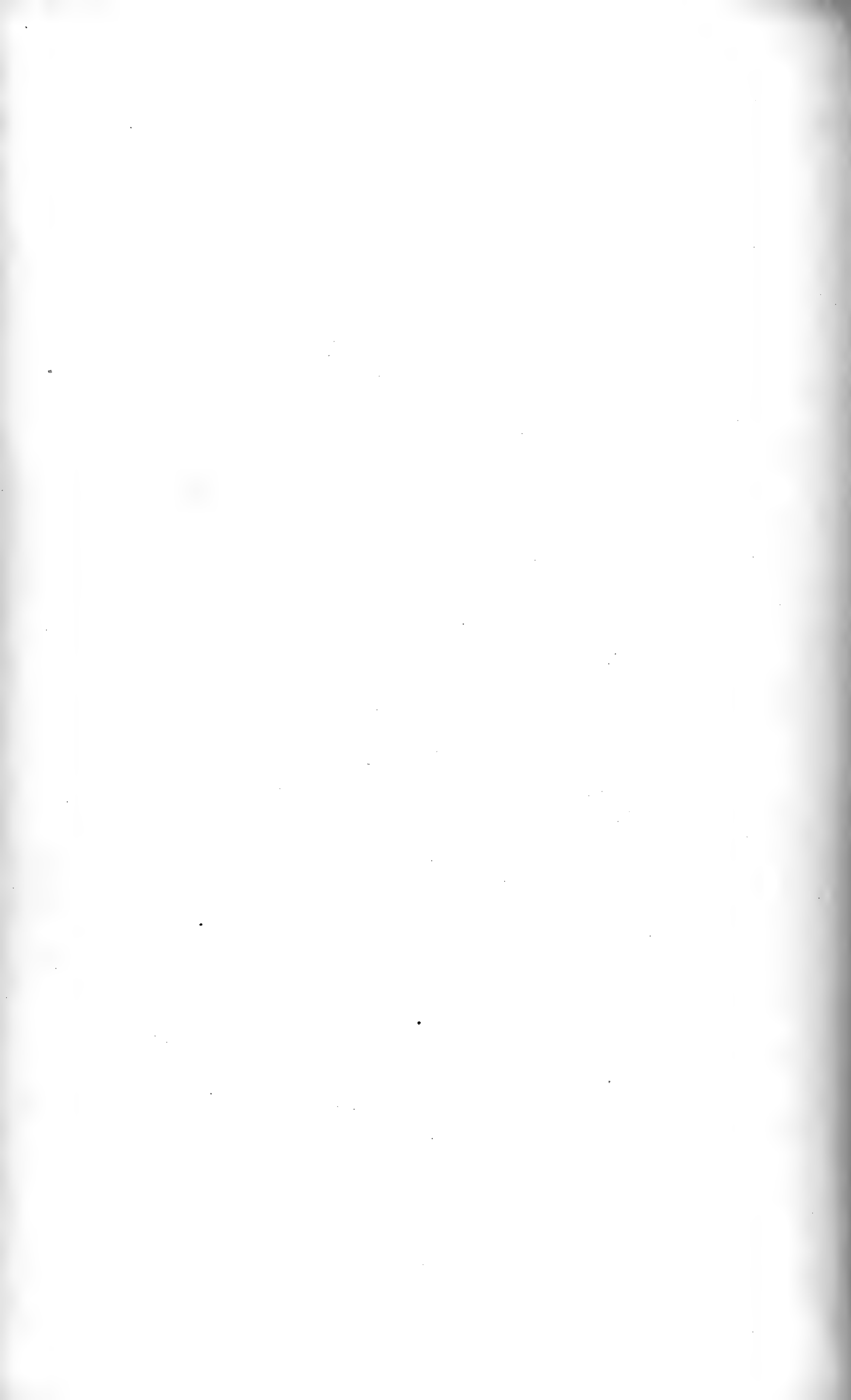
LESSON, in his "Histoire Naturelle des Colibris," has given the figure of a female *Lampornis* under the name of *Trochilus Prevostii*, which would answer equally well for the female of *L. Mango*, *L. Veraguensis*, or *L. gramineus*. It would appear that the male was unknown to him, but specimens have since been received from the same locality—Central America, which the Parisian collectors state to be the males of this species, and I have no doubt they are correct.

My figure of the male on the accompanying Plate was taken from a fine specimen in my own collection, received by me with many others of both sexes from Honduras, which country, together with the adjacent one of Guatemala, is the true habitat of the species. Its most near ally is the *L. Mango*, from which it differs in its rather smaller size, in the much less extent of black on the throat, and in the sides of the neck being glittering green instead of blue. As might be supposed, the females of such nearly allied species assimilate most closely; if any difference occurs, the female of the *L. Prevosti* is the most beautiful as regards the markings of the tail.

The male has the head and all the upper surface, wing-coverts, sides of the neck, flanks and abdomen rich golden green; throat velvety black, bordered on each side with glittering green; centre of the abdomen bluish green; vent and a tuft on each flank white; wings purplish brown; upper tail-coverts and two central tail-feathers coppery bronze; lateral tail-feathers fine purple; under tail-coverts purple, spotted with green.

The female has the upper and under surface dull golden green, interrupted down the throat and abdomen by an irregular mark of black, bounded on each side by a similar one of white; vent white; under tail-coverts light green, edged with white; two centre tail-feathers bronzy green; lateral feathers purple at the base, crossed by a steel-blue band near their extremities, and tipped with white.

The figures on the Plate are the size of life. The plant is the *Lacepedea insignis*.







LAMPORNIS VERAGUENSIS, Gould

*J. Gould and H. C. Richter del. et héliogr.*

*Hallman & Walter, Imp.*

## LAMPORNIS VERAGUENSIS, *Gould.*

### Veraguan Mango.

*Lampornis Veraguensis*, Gould, MSS.

*Lampornis veraguensis*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

*Sericotes veraguensis*, Reichenb. Aufz. der Colibris, p. 11.

---

SEVERAL years have now elapsed since I received both drawings and specimens of this new Humming-bird from M. Warszewicz, the celebrated South American traveller and botanist. The specimens referred to were collected near the volcano of Chiriqui in Veragua; subsequently I received examples from Costa Rica, and more recently still from the vicinity of David, transmitted by Mr. Bridges: nothing can be more certain, therefore, than that the countries immediately to the northward of the Isthmus of Panama are the native habitat of this bird. As a species, the *Lampornis Veraguensis* is as well marked as any member of the genus; it possesses a combination of characters which ally it to the *L. gramineus* and *L. Prevosti*; it differs, however, from the former in its much smaller size, and in the brilliant green of the throat being continued over the chest to the abdomen; and from the *L. Prevosti*, which it about equals in size, by the total absence of black on the throat. I am so fortunate as to possess males, females and young males of this fine species, which may be thus described.

The male has all the upper surface, wing-coverts and flanks golden green; throat glittering green, inclined to blue in the centre, and becoming of a deeper blue on the chest and centre of the abdomen; wings purplish brown; tail purple, each feather narrowly edged and tipped with darker purple, the two centre feathers tinged with bronze; tuft on each flank white.

The young male is similar on the upper surface; has the throat-mark less brilliant and bordered with white; the centre tail-feathers bronzy green; the lateral feathers purple at the base, crossed near the tip with steel-blue and tipped with white.

The female is of a more golden hue above and on the flanks; has a mark of blackish green bordered with white down the throat and the lateral tail-feathers as in the young male.

The figures are of the natural size. The plant is the *Pitcairnia macrocalyx*.









LAMPORNIS GRAMINEUS.

*J. Gould and H. C. Richter del. et lith.*

*Hallman del. & Walter. Imp.*

# LAMPORNIS GRAMINEUS.

## Green-throated Mango.

- Trochilus gramineus*, Linn. Syst. Nat., tom. i. p. 488.—Ib. Gmel. Edit., tom. i. p. 488.—Dumont, Dict. Sci. Nat., tom. x. p. 48.—Drapiez, Dict. Class. d'Hist. Nat., tom. iv. p. 318.—Less. Hist. Nat. des Col., pp. 52, 56. pls. 12, 12 bis.—Ib. Ind. Gen. et Syn. des Ois. du Gen. *Trochilus*, p. x.—Ib. Traité d'Orn., p. 290.—Vieill. Ois. de l'Am. Sept., tom. ii. p. 73.
- *pectoralis*, Lath. Ind. Orn., vol. i. p. 306.—Vieill. Ency. Méth. Orn., part ii. p. 551.—Steph. Cont. Shaw's Gen Zool., vol. xiv. p. 240.
- Le Hausse-col vert*, Buff. Hist. Nat. des Ois., tom. vi. p. 58.—Vieill. Ois. Dor., tom. i. p. 23. pl. 9.
- Le Colibri à cravate verte*, Vieill. Ois. Dor., tom. i. p. 25. pl. 10.—Buff. Hist. Nat. des Ois., tom. vi. p. 56.—Ib. Sonn. Edit., tom. xxii. p. 277.—Ib. Pl. Enl. 621. fig. 1.
- Le Plastron violet*, Vieill. Ois. Dor., tom. i. p. 124. pl. 70?
- Colibri à gorge verte de Cayenne*, Buff. Pl. Enl. 671. fig. 1.
- Colibri du Mexique*, Buff. Pl. Enl. 580. fig. 2.
- Trochilus maculatus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 488.—Vieill. Ency. Méth. Orn., part ii. p. 563.
- *gularis*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 491.—Lath. Ind. Orn., vol. i. p. 306.—Vieill. Ency. Méth. Orn., part ii. p. 553.
- *marmoratus*, Vieill. Ency. Méth. Orn., part ii. p. 567.
- Polytmus dominicus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 11.—Bonap. Rev. et Mag. de Zool. 1854, p. 250.
- Lampornis dominicus*, Bonap. Consp. Gen. Av., p. 71, *Lampornis*, sp. 2.
- Hypophania dominica*, Reichenb. Aufz. der Colibris, p. 11.
- Green-throated Humming-bird*, Lath. Gen. Syn., vol. ii. p. 755.—Ib. Gen. Hist., vol. iv. p. 305.
- Black-breasted Humming-bird*, Lath. Gen. Syn., vol. ii. p. 756.—Shaw, Gen. Zool., vol. viii. p. 298.—Lath. Gen. Hist., vol. iv. p. 302.

---

So much confusion exists respecting the synonymy of this species, that, after instituting the most rigid examination, I am compelled to give up the attempt to unravel it, and content myself with enumerating those terms only which, it appears to me, certainly have reference to the present bird. The state of confusion alluded to is due to two causes: first, from Lesson and the older authors considering the species to be a native of St. Domingo, and, secondly, in consequence of the females of two or three species bearing a great similarity to each other. Now I can positively state that the bird does not inhabit St. Domingo; nor do I believe it is to be found in any of the West India Islands, unless it be in Trinidad, and if so, that is the only one. Its true habitat is Cayenne and Guiana, whence all our collections are supplied with examples, and where it must be very numerous, as shown by the great number of specimens sent to Europe from those countries.

The *Lampornis gramineus* is a large species, distinguished by the boldness and breadth of its markings; it differs from all the other members of its genus in the grass-green of its throat, a colour beautifully relieved by the jet-black hue of its breast and abdomen. The females and young males present a very different style of colouring from that of the male, both on the under surface and in the markings of the tail, which are very beautiful.

The male has the head and neck golden green, gradually passing into rich coppery green on the back, wing-coverts and upper tail-coverts; wings deep purplish brown; throat luminous grass-green; flanks golden green, with a tuft of white on each side; centre of the abdomen bluish black; in certain lights the entire abdomen and flanks appear jet-black; two centre tail-feathers bronzy purple, the remainder violet, broadly margined and tipped with steel-blue; vent white; under tail-coverts purplish green.

The young male has the upper surface mottled green and coppery bronze; sides of the throat and abdomen chestnut; on the centre of the throat a mark of luminous green, bounded on each side by white; down the centre of the abdomen a mark of black, bounded on each side with white; two centre tail-feathers bronzy green; the remainder chestnut-red with a rich bloom of purple; crossed near the tip by a broad band, which on the outer webs is bronzy green, on the inner steel-blue; all but the two middle feathers tipped with greyish white.

The female has all the upper surface and flanks golden green, the golden hue predominating on the rump and upper tail-coverts; throat white, with a large patch of black down the centre; central tail-feathers bronzy green, passing into black at the tip; the remainder chestnut-red, glossed with purple, crossed near the tip by a broad band of bluish black and tipped with white.

The figures are of the size of life. The plant is the *Allosorus flexuosus*.







LAMPORNIS VIRIDIS.

## LAMPORNIS VIRIDIS.

### Blue-tailed Mango.

*Le Colibri vert, Trochilus viridis*, Aud. et Vieill. Ois. Dor., tom. i. p. 34. pl. 15.

*Trochilus viridis*, Vieill. 2<sup>de</sup> édit. du Nouv. Dict. d'Hist. Nat., tom. vii. p. 357.—Bonn. et Vieill. Ency. Méth., Orn., part ii. p. 551.—Dumont, Dict. Sci. Nat., tom. x. p. 49.—Drapier, Dict. Class. d'Hist. Nat., tom. iv. p. 321.—Sonn. Œuvres de Buff., Ois., tom. xvii. p. 315.

*Le Colibri cyanure, Trochilus viridis*, Less. Hist. Nat. des Col., p. 50. pl. 11.—Ib. Ind. Gen. et Syn. des Ois. du Gen. Troch., p. 10.

*Le Plastron blanc*, Aud. et Vieill. Ois. Dor., tom. i. p. 35. pl. 16, female?

---

It would seem that some confusion exists respecting the synonymy of this species, for a male specimen has been sent to me by M. Bourcier with the name of "*Lampornis cyanurus*, Audebert et Vieillot" attached to it, but I do not find that those authors have figured or described any species of this group under that appellation; on the other hand, it is unquestionably the bird described and figured by them and by Lesson under the name of *Trochilus viridis*. The latter author uses the term *cyanure* as its trivial French name, which may, perhaps, have induced M. Bourcier to label his specimen "*cyanurus*."

In his account of the species, M. Lesson states that the only individual he had seen was in the Museum of Natural History at Paris, where it had been deposited by Maugé, who had procured it in Porto Rico, one of the Antilles.

The *Lampornis viridis* is in every respect a typical example of the genus; the characters of the form being, if possible, more conspicuous in the female than in the male.

The specimen of the female from which my figure of that sex was taken was kindly presented to me by Alfred Newton, Esq., of Elveden Hall, Norfolk, a gentleman devoted to the study of natural history generally, but more particularly of ornithology.

The habitat of this species is certainly confined to one or two of the West Indian Islands; Maugé procured it in Porto Rico, and I have reason to believe that it is also found in St. Thomas. Its habits are doubtless very similar to those of the other members of the genus; but I regret to say that on this point nothing has been recorded.

The male has the head, all the upper surface of the body, and the wing-coverts of a bronzy green, becoming of a purer green on the upper tail-coverts; under surface shining grass-green, becoming paler on the under tail-coverts; wings purplish brown; tail deep blue with green reflexions and narrowly edged at the tip with white; bill black; feet blackish brown.

The female has the head, all the upper surface, and wing-coverts bronzy green; wings purplish brown; all the under surface brownish grey, tinged with green on the sides of the breast and flanks, and passing into white on the under tail-coverts; two centre tail-feathers bronze, deepening into black at the tip; the remainder steel-blue largely tipped with white; those next the central ones glossed with bronze on their outer webs, the remainder with white shafts and bases of greyish purple.

The figures in the Plate are a trifle less than the size of life. The plant is the *Pitcairnia undulatifolia*.









LAMPORNIS AURULENTUS.

# LAMPORNIS AURULENTUS.

## St. Domingo Mango.

*Trochilus margaritaceus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 490 ?—Lath. Ind. Orn., vol. i. p. 308.

*Le Hausse-col doré*, Vieill. Ois. Dor., tom. i. pp. 29, 31. pls. 12, 13.

*Trochilus aurulentus*, Vieill. Nouv. Dict. d'Hist. Nat., tom. vii. p. 350.—Dumont, Dict. Sci. Nat., tom. x. p. 49.—Drapiez, Dict. Class. d'Hist. Nat., tom. iv. p. 318.—Vieill. Ency. Méth. Orn., part ii. p. 555.—Less. Hist. Nat. des Col., pp. 68, 71, 73, 74. pls. 16, 17, 18, 19.—Ib. Ind. Gen. et Syn. des Ois. du Gen. *Trochilus*, p. xj.—Ib. Traité d'Orn., p. 289.—Shaw, Gen. Zool., vol. viii. p. 306.—Ib. Steph. Cont., vol. xiv. p. 240.

*Polytmus margaritaceus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 13.

——— *aurulentus*, Vieill. Hist. Nat. des Ois. de l'Am. Sept., tom. ii. p. 72.

*Lampornis margaritaceus*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 5.

*Eulampis aurulentus*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

*Margarochrysis aurulenta*, Reichenb. Aufz. der Colibris, p. 11.

*Grey-necked Humming-bird*, Lath. Gen. Syn., vol. ii. p. 761.—Ib. Gen. Hist., vol. iv. p. 304.

*Aurulent Humming-bird*, Shaw, Gen. Zool., vol. viii. p. 306.—Lath. Gen. Hist., vol. iv. p. 307.

*Trochilus dominicus*, Linn. Syst. Nat., tom. i. p. 191.—Gmel. Edit. Linn. Syst. Nat., tom. i. p. 489.—Lath. Ind. Orn., vol. i. p. 309, female ?

*Polytmus dominicus*, Briss. Orn., tom. iii. p. 672. pl. xxxv. fig. 4, female ?

*Verte perlé*, Buff. Hist. Nat. des Ois., tom. vi. p. 62.—Vieill. Ois. Dor., tom. i. p. 128.

*Saint Domingo Humming-bird*, Lath. Gen. Syn., vol. ii. p. 762.—Ib. Gen. Hist., vol. iv. p. 306.

---

I HAVE adopted the term *aurulentus* for this fine species because we know positively that it has been applied to the male bird figured on the accompanying Plate, while there is a degree of uncertainty whether *margaritaceus* has reference to this or some other species. In adopting this name I am following in the steps of Vieillot, Bonaparte, and many modern authors. The old name of *dominicus* would perhaps be the most correct and appropriate one, but that term is considered by more recent writers to be referable to the *L. gramineus*; with the synonymy of the present species, in fact, as with that of *L. gramineus*, the utmost confusion prevails; it will be better, therefore, to retain the name of *aurulentus*. The native country of this species is St. Domingo: as to Porto Rico, which it is also said to inhabit, I leave it to future Trochilidists to say if it be found there or not; in all probability it may inhabit both those contiguous islands, but I have no positive evidence that such is the case.

Unlike the females of most of the other species of *Lampornis*, which bear a general resemblance to each other, the female of this species is very dissimilar, having the whole of her under surface grey, in lieu of the striped and variegated style of markings which prevail in the females of *L. Mango*, *L. gramineus*, *L. Prevosti*, &c.; this grey colouring of the under surface is, however, the only point of difference, the tail being marked very similarly.

The male has the head, all the upper surface, wing- and tail-coverts dark yellowish green; throat dull golden green; all the under surface dull black; a tuft of white on each flank; wings purplish brown; two central tail-feathers dark bronzy purple; lateral feathers violaceous purple, bordered with dark purple.

The female has all the upper surface and two central tail-feathers bronzy green; all the under surface grey; lateral tail-feathers purplish chestnut, with a broad band of dull black near the tip, which is white.

The Plate represents both sexes of the size of life. The plant is the *Passiflora penduliflora*.







LAMPORNIS VIRGINALIS, *Coold*

## LAMPORNIS VIRGINALIS, *Gould.*

### St. Thomas's Mango.

---

IN my account of *Lampornis aurulentus* I have stated that its native country "is St. Domingo: as to Porto Rico, which it is also said to inhabit, I leave it to future Trochilidists to say if it be found there or not." I am still in doubt on this point; but since this remark was made, I have received numerous examples of a bird from the neighbouring island of St. Thomas, which, although bearing a general resemblance to *L. aurulentus*, differs in so many respects that I am induced to regard it as distinct, and have therefore assigned to it the specific appellation of *L. virginalis*. It is of much smaller size, has a considerably shorter, but at the same time more brilliantly coloured tail, and the semi-luminous gorget of a much brighter hue; the lower part of the back and the upper tail-coverts are also more brilliant; there is a smaller amount of black on the abdomen; and the two centre tail-feathers are rich bronzy purple instead of steely black.

I fear I have led my friend Alfred Newton, Esq. into error by causing him to consider the St. Thomas's birds to be identical with the *L. aurulentus*; if so, it was quite unintentional on my part; and my excuse must be that I had not then seen so many specimens of this bird as are now before me, for some of which I am indebted to his liberality, while the others were obtained by purchase.

The male has the crown and all the upper surface bronzy green; wings light purplish brown; throat shining greenish wax-yellow; chest and centre of the abdomen black, passing into green on the flanks; upper tail-coverts brilliant bronzy green; two centre tail-feathers rich bronze; the remainder fine purple, margined and tipped with bluish black; bill black; feet dark brown.

Total length  $4\frac{1}{2}$  inches; bill  $\frac{1\frac{5}{8}}$ ; wing  $2\frac{3}{8}$ ; tail  $1\frac{1}{2}$ ; tarsi  $\frac{1}{4}$ .

The female differs in the colour of the under surface, which is grey, and in the colouring and markings of the tail, which, like those of the females of all, or nearly all the members of the genus, are very beautiful,—the two centre tail-feathers being resplendent bronze, and the remainder barred at the base with pale reddish, crossed near the extremity with a broad band of steel-black, and largely tipped with white; the two next the central ones are also glossed with bronze on their outer webs.

The accompanying Plate is intended to represent two adult males and a young male of the size of life. The plant is the *Tamarindus officinalis*.









LAMPROLAIMA PORPHYREUS.

*J. Gould and W. C. Richter del. a. lith.*

*Hellmuth & Walton Imp.*

# LAMPORNIS PORPHYRURUS.

## Porphyry-tailed Mango.

*Trochilus porphyurus*, Shaw, Nat. Misc., vol. ix. pl. 333.—Ib. Gen. Zool., vol. viii. p. 296.—Ib. Steph. Cont., vol. xiv. p. 240.

——— *bromicolor*, Less.

——— *Floresii*, Bourc. Ann. de la Soc. Sci. de Lyon, vol. ix. 1846, p.

*Polytmus porphyurus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 20.

*Lampornis mango*, Gosse, Birds of Jamaica, p. 88.—Ib. Ill. Birds of Jam., pl. xviii.

——— *porphyurus*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

*Floresia porphyura*, Reichenb. Aufz. der Colibris, p. 11.

*Lampornis floresi*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 7.

*Mango Humming-bird*, var. A., Lath. Gen. Syn., vol. ii. p. 759.—Ib. Gen. Hist., vol. iv. p. 311.

---

It would scarcely be supposed that an island like Jamaica should have a large and powerful member of this group of birds peculiar to it, yet such really appears to be the case, for up to the present time the *Lampornis porphyurus* has not been found elsewhere. This fine species differs so essentially from every other known Humming-bird, that no mistake can have occurred on this point; for not only does the male present an entirely different style of colouring, but those birds which are considered to be the females of this species are also as widely different. These supposed females are indeed equally, if not more brilliantly coloured than the males, an anomaly which has much puzzled not only myself, but other Trochilidists, by one of whom, at least, these birds have been considered so distinct that he has given them a separate appellation, that of *Floresi*.

Few travellers have written more interestingly on the Humming-birds seen by them in a state of nature than P. H. Gosse, Esq.; in the absence, then, of any knowledge of my own, I cannot do better than copy the following details respecting this species from his "Birds of Jamaica":—"Though occurring at all seasons, I have not found it abundant at any. It affects the lowlands in preference to the mountains, and open places rather than the deep woods; yet it is rarely seen to frequent the blossoms of herbs or shrubs, but hovers around blossoming trees. The bunch of blossom at the summit of the pole-like Papaw-tree (*Carica papaya*) is a favourite resort, especially at sunset. This species, when flying, often flirts and flutters the tail in a peculiar manner, and when it hangs perpendicularly in mid-air, the appearance of the broad lustrous feathers, expanded like a fan, is particularly beautiful. The lustrous glow of the neck of the adult male may be unperceived on a careless examination. In such Humming-birds as I have examined, the iridescence of those portions of the plumage that are changeable is splendid in the ratio of the acuteness of the angle formed by the incident ray of light and the reflected one. I have never met with the nest of this species, but one presented to me by my friend Mr. Hill is now before me. It has evidently been constructed to stand upon a horizontal twig, which the bottom has embraced. It is cylindrical externally, the bottom being flat. Its height is  $1\frac{1}{2}$  inch; its external diameter a little more; its internal diameter about 1 inch; the hollow, which is a little overhung by the margin, is cup-shaped, about  $\frac{2}{3}$ ths of an inch deep. It is composed almost entirely of the down of the gigantic silk-cotton tree (*Eriodendron anfractuosum*), intermixed at the bottom with a little true cotton. The sides are tightly banded round with the threads of spiders' webs, very neatly put on, and the whole exterior is studded with a minute whitish lichen, so profusely as almost entirely to conceal the down, without at all injuring the symmetry of the form. It is a most compact and beautiful little structure."

I am indebted to Mr. Gosse for the gift of a nest of this species, I believe the one described above, and which is figured on the accompanying Plate.

The male has the general plumage dark olivaceous brown, glossed with purple; from the bill through the eye, down each side of the neck, a brilliant purple band; throat and abdomen blackish brown; a few white feathers at the lower part of the abdomen, and on each flank a small patch of white; wings purplish brown; two centre tail feathers bronzy black; the lateral ones changeable purple, margined at the tip with bronzy black.

Female similar, but with a mark of changeable purplish green down the throat.

The Plate represents the two sexes of the size of life. The plant is the *Pachystigma pteleoides*.







EULAMPIS JUGULARIS.

## EULAMPIS JUGULARIS.

### Purple-breasted Carib.

- Le Colibri à gorge carmin*, Buff. Hist. Nat. des Ois. dor., tom. vi. p. 56.—Aud. et Vieill. Ois. dor., tom. i. p. 126.—Sonn. Edit. Buff. Hist. Nat. des Ois., tom. xvii. p. 219.
- Red-breasted Humming-bird*, Edw. Glean. in Nat. Hist., pt. ii. pl. 266. fig. 1.—Lath. Gen. Syn., vol. ii. p. 753.—Shaw, Gen. Zool., vol. viii. p. 288. pl. 39.—Lath. Gen. Hist., vol. iv. p. 301.
- Trochilus jugularis*, Linn. Syst. Nat., tom. i. p. 190.—Ib. Gmel. Edit., tom. i. p. 489.—Lath. Ind. Orn., vol. i. p. 305.—Temm. Man. d'Orn. 2nde Edit., tom. i. p. lxxxiv.
- Eulampis jugularis*, Bonap. Consp. Gen. Av., p. 72, *Eulampis*, sp. 1.—Reichenb. Aufz. der Colibris, p. 11.—Bonap. Rev. et Mag. de Zool. 1854, p. 250.
- Polytmus jugularis*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 19.
- Le Grenat*, Buff. Hist. Nat. des Ois., tom. vi. p. 48.—Ib. Sonn. Edit., tom. xxii. p. 219.—Aud. et Vieill. Ois. dor., tom. i. p. 17. pl. 4.—Vieill. Dict. Sci. Nat., tom. x. p. 51.—Drapiez, Dict. Class. d'Hist. Nat., tom. iv. p. 318.—Dumont, Dict. Sci. Nat., tom. x. p. 51.
- Trochilus auratus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 487.—Less. Hist. Nat. des Col., p. 46. pl. 10.—Ib. Ind. Gen. et Syn. des Ois. du gen. *Trochilus*, p. vii.
- *granatinus*, Lath. Gen. Syn., vol. ii. p. 752. pl. 34.—Ib. Ind. Orn., vol. i. p. 305.
- *Bancrofti*, Lath. Ind. Orn., vol. i. p. 317.
- *cyanomelas*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 498.
- *violaceus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 488.—Briss. Orn., tom. iii. p. 685.—Vieill. Ency. Méth. Orn., part 2. p. 552. pl. 129. fig. 4.
- *Auritus*, Vieill. Ency. Méth. Orn., part 2. p. 555. pl. 130. fig. 2.
- Le Colibri violet*, Buff. Hist. Nat. des Ois., tom. vi. p. 57.—Ib. Pl. Enl. 600. fig. 1.—Aud. et Vieill. Ois. dor., tom. i. p. 126.
- Black and blue Humming-bird*, Bancr. Hist. of Guiana, p. 167.—Lath. Gen. Syn., vol. ii. p. 782.—Ib. Gen. Hist., vol. iv. p. 337.
- Le noir bleu*, Aud. et Vieill. Ois. dor., tom. i. p. 116.
- Polytmus Cayanensis violaceus*, Briss. Orn., vol. iii. p. 683. pl. xxxv. fig. 3.
- Topaza violacea*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 2.
- Le Colibri à gorge grenat*, Aud. et Vieill. Ois. dor., tom. i. p. 126.
- Garnet-throated Humming-bird*, Lath. Gen. Syn., vol. ii. p. 752. pl. 34.—Ib. Gen. Hist., vol. iv. p. 300. pl. lxxv, & var. A, B.
- Certhia prasinoptera*, Lath. Ind. Orn., vol. i. p. 300.—Mus. Carls., pl. 81.
- Le Souimanga prasinoptère*, Aud. et Vieill. Ois. dor., tom. ii. p. 65.
- Green-winged Creeper*, Lath. Gen. Syn. Suppl., vol. ii. p. 163.
- Cynanthus? jugularis*, Jard. Nat. Lib. Humming Birds, vol. ii. p. 145.
- Trochilus cyaneus*, Lath. Ind. Orn., vol. i. p. 309.
- *venustissimus*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 490.
- Crimson-headed Blue Humming-bird*, Lath. Gen. Syn., vol. ii. p. 762.—Ib. Gen. Hist., vol. vi. p. 317.

---

THERE are at least three well-known species of the present form, all of which inhabit the West Indian Islands, and one of them—the bird here figured—is said by some authors to extend its range to Guiana and Surinam; but that it is ever found in those countries appears to me to be somewhat uncertain, for I have never yet

received examples direct from either of them ; it is much more likely that it is a native of Martinique, since I have seen specimens which were certainly killed in the neighbouring island of Nevis. I have, moreover, received a letter from T. J. Cottle, Esq., a gentleman now living in Upper Canada, but who formerly resided in the last-mentioned island, in which he states, that on reference to his memoranda of the Humming-birds observed by him in Nevis, he found that he sent a pair, male and female, to the British Museum in 1839, and requests me to examine them ; this I have accordingly done, and I am now enabled to state from actual inspection that they are referable to the present species. These details may appear trivial, but it is really of importance to ascertain which of the Islands are inhabited by certain species of Humming-birds. Nevis then is one of the homes of this very beautiful bird ; so beautiful indeed is it, and so distinct from every other known species, that it is an especial favourite with all collectors. It is by no means a rare bird, as is evidenced by the low price at which skins may be purchased ; for a few shillings each, the collector may obtain from any of the Parisian dealers as many of the finest examples as he may wish.

I regret to say, that although the bird has been so long known, and so heavily burdened with synonyms, no information as to its true habitat, nor any account of its actions and manners, has been placed on record. Mr. Cottle states that "it inhabits the high lands of the island of Nevis, above the belt of cultivation, and that it never descends to the low grounds unless driven down by a hurricane or some other unusual cause." The other two species noticed on the island by this gentleman are the *Eulampis chlorolæmus* and *Orthorhynchus cristatus*.

There is positively no difference in the colouring of the sexes : some examples are smaller, and have more curved bills than others ; these may be females, but this is by no means certain.

Head, upper surface of the body, flanks and abdomen deep velvety-black ; wing-coverts and wings glittering green ; upper and under tail-coverts very much developed, and of a shining glaucous-green ; tail exceedingly dark green ; chin, throat and chest deep vinous-purple ; bill black ; feet apparently yellow.

In the accompanying Plate, I have attempted to represent this bird as accurately as possible ; but, after all, I find, to my regret, that it conveys only a faint idea of its beauty.

The figures are of the natural size. The plant is the *Nymphæa Amazonum*.







EULAMPIS HOLOSERICEUS.

## EULAMPIS HOLOSERICEUS.

### Green-breasted Carib.

*Trochilus holosericeus*, Linn. Syst. Nat., tom. i. p. 191.—Ib. Gmel. Edit., tom. i. p. 491.—Lath. Ind. Orn., vol. i. p. 305.—Less. Hist. Nat. des Col., p. 76. pl. 20.—Ib. Traité d'Orn., p. 291.—Ib. Ind. Gen. et Syn. des Ois. du gen. *Trochilus*, p. xi.—Dumont de St. Croix, Dict. Sci. Nat., tom. x. p. 50.—Drap. Dict. Class. d'Hist. Nat., tom. iv. p. 319.

*Polytmus Mexicanus*, Briss. Orn., tom. iii. p. 676. pl. xxxv. fig. 2.—Id., 8vo, tom. ii. p. 22.

*Black-bellied green Humming-bird*, Edw. Nat. Hist. of Birds, vol. i. pl. 36. fig. 1.—Lath. Gen. Syn., vol. ii. p. 754.—Shaw, Gen. Zool., vol. viii. p. 307.—Lath. Gen. Hist., vol. iv. p. 313.

*Trochilus aurigaster*, Shaw.

*Le Colibri vert et noir*, Buff. Hist. Nat. des Ois., tom. vi. p. 53.

*Le vert et noir*, Aud. et Vieill. Ois. dor., tom. i. p. 19. pl. 6.

*Le Colibri à ventre noir*, Aud. et Vieill. Ois. dor., tom. i. p. 119. pl. 65.

*Black-bellied American Humming-bird*, Bancr. Hist. of Guiana, p. 169.

*Polytmus holosericeus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 14.

*Eulampis holosericeus*, Bonap. Consp. Gen. Av., p. 72, *Eulampis*, sp. 2.—Ib. Rev. et Mag. de Zool. 1854, p. 250.

*Sericotes holosericeus*, Reich. Aufz. der Col., p. 11.

---

“THIS Humming-bird,” says M. Lesson, “so well characterized and so beautiful, lives exclusively in the islands of the Antilles, and is never found in Mexico. The numerous examples we have examined in the collections of M. Florent Prévost, and in that of the Museum of Paris, were procured in the islands of St. Thomas and Porto Rico, whence they were sent by Maugé, and also from Martinique. These localities justify the name of Caribs which we have conventionally assigned to the birds of this form.” To these observations of M. Lesson, I have unfortunately nothing to add, except that I quite agree with him in believing the bird to be strictly confined to the Caribbean Islands, and that it neither inhabits Mexico nor any other part of the American continent.

In its general structure, and especially in the form of its wings and tail, it is closely allied to the more beautiful *Eulampis jugularis*; the disposition of its colouring, too, is very similar, although in some parts of a different hue; in the luminosity of the wings, however, the *jugularis* stands alone, differing as it does not only from this, but from every other species.

The perfect similarity in the colouring of the sexes renders the members of this little genus very conspicuous among the *Trochilidæ*.

Head, all the upper surface and wing-coverts reddish-green; wings purplish-brown; upper and under tail-coverts largely developed and of a glittering blue, some of the feathers changing to green; tail black, with steel-blue reflexions; chin, throat and breast golden grass-green; on the centre of the chest a patch of shining blue; flanks and abdomen velvety-black; bill black; feet blackish-brown.

The figures are the size of life. The plant is the *Pachystigma Pteleoides*.







EULAMPIS CHLOROLÆMUS, *Gould*

## EULAMPIS CHLOROLÆMUS, *Gould.*

### Grass-green-breasted Carib.

*Eulampis chlorolæmus*, Gould, MSS. 1851.

*Sericotes chlorolaimus*, Reichenb. Aufz. der Colibris, p. 11.

*Eulampis chlorolæmus*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

---

SOME Trochilidists might be inclined to doubt the specific value of this Caribbean Humming-bird, and to regard it as a mere variety of the *Eulampis holosericeus*, but had they as many specimens as I have to examine and form an opinion from, I believe they would come to the same conclusion as myself, and consider it to be distinct. The principal difference between the *E. chlorolæmus* and *E. holosericeus* consists in the former having a deeper and less luminous green throat, and the blue patch on the breast dilated into a band of blue extending across the chest; the former is also a larger and stouter bird than the latter. These differences are much more apparent in the mounted specimens in my collection, where at least six of each kind are placed side by side in one of the cases.

Like the *E. holosericeus*, the present bird is an inhabitant of the Caribbean Islands, but of which, and how many of them, no certain information has been received, further than that a specimen, now in the British Museum, was collected in the island of Nevis, by T. J. Cottle, Esq., who informs me that it inhabits the low grounds of the island, and that it builds a round compact nest, and lays the usual two white eggs.

I have not failed to remark, while mounting my specimens of the genus, that their skins are particularly thick and strong, even approaching the toughness and substance of leather in the *E. jugularis*.

Head, all the upper surface and wing-coverts reddish-green; wings purplish-brown; upper and under tail-coverts largely developed and of a glittering blue, some of the feathers changing to green; tail black, with steel-blue reflexions; chin, throat and chest grass-green; across the breast a broad band of blue; flanks and abdomen velvety-black; bill black; feet blackish-brown.

The figures are of the size of life. The plant is the *Stemonacanthus macrophyllus*.









LAFRESNAYA FLAVICAUDATA.

# LAFRESNAYA FLAVICAUDATA.

## Buff-tailed Velvet-breast.

*Trochilus flavicaudatus*, Fras. in Proc. of Zool. Soc., part viii. p. 18.

————— *Lafresnayi*, Boiss. Rev. Zool. 1848, p. 8.

*Calothorax Lafresnayi*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Calothorax*, sp. 1.

*Lafresnaya flavicaudatus*, Bonap. Consp. Gen. Av., p. 68, *Lafresnaya*, sp. 1.

————— *flavicaudata*, Reich. Aufz. der Col., p. 11.—Bonap. Rev. et Mag. de Zool. 1854, p. 252.

---

NOT only are the Columbian Andes most fertile in species of Humming-birds, but, in many instances, forms there occur which do not exist elsewhere; and the genus *Lafresnaya* may be cited as one of such genera, of which two, if not three, well-defined species have been discovered, and which are true Andean birds. Although the extent of the range enjoyed by the present species has not been accurately ascertained, we know that it plays a conspicuous part in bird-life in the neighbourhood of Bogota and other parts of Columbia. I have not, however, seen specimens from Popayan, Quito, or Ecuador, yet M. Warszewicz collected examples in Peru, a country still farther south.

It will be seen that the present bird has been twice described, and it is to be regretted that the name of *Lafresnayi* cannot be retained as its specific appellation, as no one is more worthy of having a beautiful bird dedicated to him than the worthy and amiable Baron de la Fresnaye: his name will, however, in spite of this *contretemps*, be handed down to posterity not only as the author of many valuable papers on Ornithology, but as the individual in honour of whom the present genus has been entitled *Lafresnaya*.

The females, and especially the young males, of this species present a beautifully spangled character of markings, which become most glittering and attractive when the breasts of the birds are so placed as to receive the direct rays of light, and contrast strongly when compared with the green throat and velvety breast of the male.

The male has the crown of the head, all the upper surface, wing- and upper tail-coverts dark green; wings rich purplish-brown; throat, breast, upper part of the abdomen and flanks very dark shining grass-green; lower part of the abdomen velvety-black; two central tail-feathers of a bronzy hue, the remainder yellowish-buff; the apical two-thirds of the outer web, and the tip of the inner web, of the external feather purplish-brown; the remainder with an arrow-shaped mark of bronzy-brown at the tip, broadest on the external web, and lessening in extent as the feathers approach the centre; under tail-coverts bronzy-green, with white bases; bill blackish-brown, the under mandible somewhat lighter.

In the young males, and in the females, the bronze tipping to the tail-feathers is much more extensive, and the buff is of a somewhat deeper tint; the under surface is white, or buffy-white, with a spangle of glittering green at the tip of each feather.

Both sexes are figured on the accompanying Plate, on the *Sobralia sessilis*.







LAFREYANA

## LAFRESNAYA GAYI.

### White-tailed Velvet-breast.

*Trochilus Gayi*, Bourc. et Muls. Ann. de la Soc. Sci. de Lyon, tom. ix. 1846, p. 325.

————— *Saulæ*, Bourc. Rev. Zool. 1846, p. 309.

*Calothorax Gayi*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Calothorax*, sp. 2.

————— *Saulii*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Calothorax*, sp. 3.

*Lafresnaya gayi*, Bonap. Consp. Gen. Av., p. 68, *Lafresnaya*, sp. 2.—Reich. Aufz. der Col., p. 11.—Bonap. Rev. et Mag. de Zool. 1854, p. 252.

————— *Saulæ*, Bonap. Consp. Gen. Av., p. 68, *Lafresnaya*, sp. 3.

————— *Saul*, Reich. Aufz. der Col., p. 11.

---

THE present is a somewhat larger species than the *Lafresnaya flavicaudata*, and, if I mistake not, will be considered even more beautiful in its colouring, its pure white tail-feathers offering a greater contrast to the velvety-black of the abdomen, and the green colouring of the breast being still more resplendent. In my account of *L. flavicaudata*, I stated that that bird was a native of Columbia, while Ecuador and Peru lay claim to the bird here represented—*L. Gayi*. It was in Quito that the greater number of the specimens in my collection were procured; the remainder are from Peru.

It will be observed that, like the *L. flavicaudata*, this species has been honoured with two specific appellations—*Gayi* and *Saulæ*, both of which were applied to it by M. Bourcier. I have, however, looked in vain for any character in his descriptions by which the opinion that they apply to two distinct birds can be substantiated. When describing *Saulæ*, M. Bourcier stated that it was somewhat larger than the *Gayi*, but I believe he now admits that both terms have reference to the same bird; however, should a further accession of examples induce a contrary conclusion, I shall be happy to rectify the error.

The present species, which has been dedicated to Dr. Gay, so well known for his scientific explorations in Chili, is much more rare than the *L. flavicaudata*. Of its habits and actions, which I suspect are rather peculiar, nothing whatever is known.

The term *Saulæ* was given as a compliment to the daughter of Mr. Saul, the conchologist.

The male has the head, all the upper surface, wing- and tail-coverts golden-green; wings rich purple-brown; throat, chest and flanks shining deep grass-green; abdomen velvety-black; under tail-coverts bronzy-green, with white bases; two centre tail-feathers greenish-bronze; lateral tail-feathers white, with an arrowhead-shaped mark at the tip of each, broadest on the outer web, largest and most conspicuous on the external feather, and gradually lessening towards the central ones.

In the young male the tipping of the tail-feathers is much more extensive, and, except on the outer feather, is bronzy instead of purplish-brown, and the under surface is white, with a spangle of glittering green at the tip of each feather.

The female has the upper surface of a more bronzy hue, and the under surface white, spangled with bronze instead of green.

The Plate represents the birds of the natural size. The plant is the *Sciodacalyx Warszewiczii*.









ODORIFERA JOHANNES

*W Gould and J C Richter, del et lith*

*Holland and Wilson, imp*

## DORIFERA JOHANNÆ.

### Blue-fronted Lance-Bill.

*Trochilus Johannæ*, Bourc. in Proc. of Zool. Soc., Part xv. p. 45.—Ib. Rev. de Zool. 1847, p. 257.

*Mellisuga Johannæ*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 20.

*Trochilus (Doryfera) violifrons*, Gould in Proc. of Zool. Soc., Part xv. p. 95.

*Dorifera johannæ*, Bonap. Consp. Gen. Av., p. 68, *Dorifera*, sp. 2.

---

IN figuring this rare and truly curious species, I feel assured that I shall give pleasure to those who make the Humming-Birds their particular study, inasmuch as it is not only one of the rarest, but one of the most singular members of the entire group. It is to the rich country of the Columbian and Peruvian Andes that we are indebted for this interesting bird. In its form it is precisely like the *D. Ludoviciæ*, but in its colouring it is widely different, the metallic forehead being rich violet-blue instead of green, and the under surface velvety black instead of bronzy green; besides which it also differs in being of a smaller size.

M. Bourcier has given this bird the specific appellation of *Johannæ*, in memory of a daughter of the late Mr. George Loddiges.

The specimen from which he took his description was sent by Mr. Mathews from Peru; the two in my own collection, which appear to be male and female, are from Santa Fé de Bogota; these latter differ from the former in having the whole of the under surface black, without any of the grey on the throat as described by M. Bourcier, which grey colouring may probably be only a mark of immaturity.

Forehead metallic violet; nape, back of the neck and upper part of the back bronzy green, passing into the purer green of the back and wing-coverts; rump and upper tail-coverts dull greyish blue; throat and abdomen black, with green reflexions; under tail-coverts deep violet-blue; wings purplish brown; tail black, slightly glossed with green, and with a trace of bronzy brown on the tips of the three lateral feathers; bill black; feet brown.

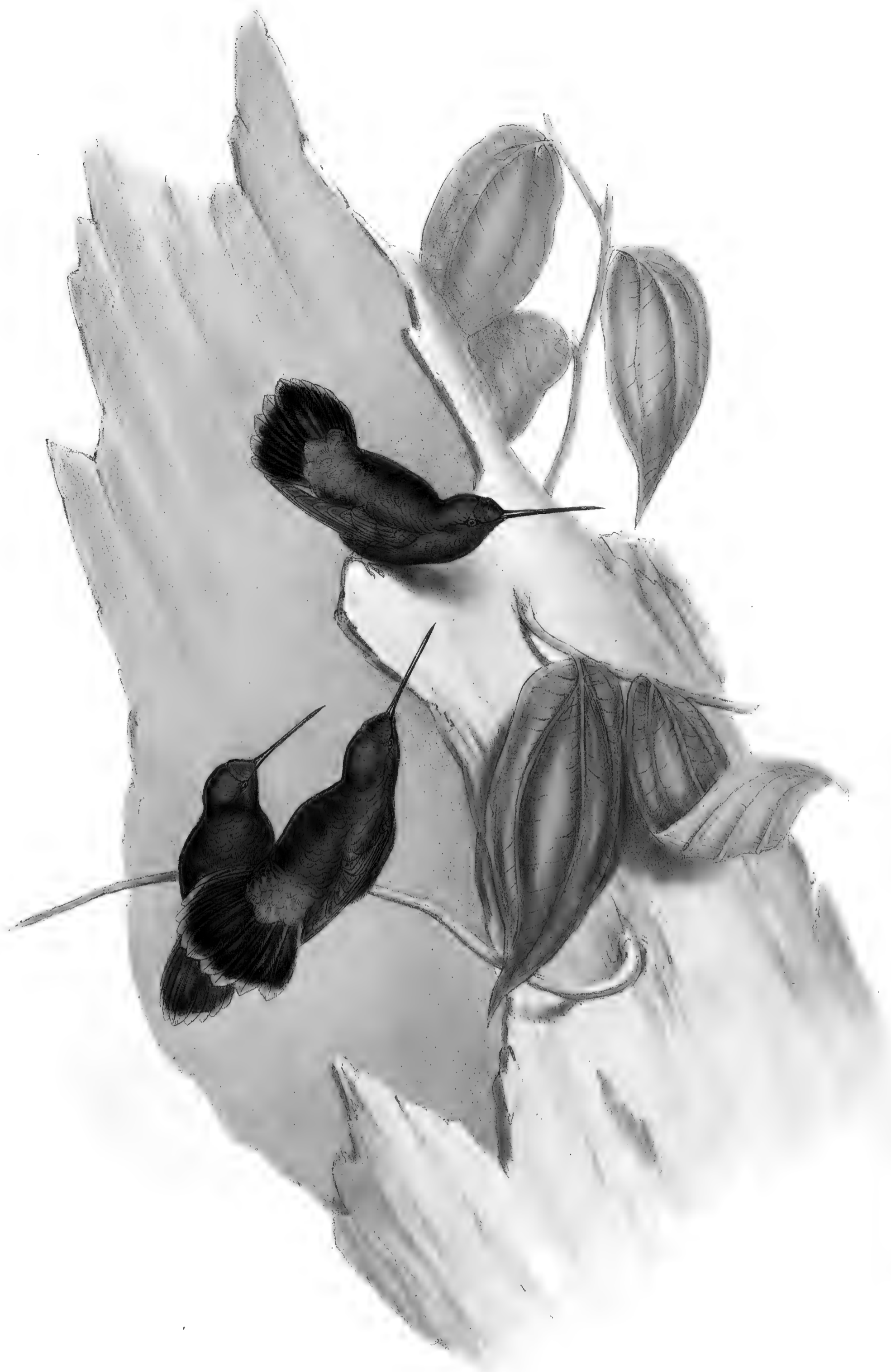
In the second specimen, which I believe to be a female, the bronzy tips of the lateral tail-feathers are larger and more conspicuous, especially on the under surface.

It will be seen, that, like M. Bourcier, I had recognized the specific value of this bird, and had characterized it as distinct under the name of *violifrons*; but his name having the priority, my own must sink into a synonym.

The figures are of the size of life.







DDRE: ERA 4 F'DOV' 11 11

## DORIFERA LUDOVICIÆ.

### Green-fronted Lance-Bill.

*Trochilus Ludoviciæ*, Bourc. et Muls. in Ann. de la Soc. Roy. d'Agric. &c. de Lyon, 1847, p. 136.

*Mellisuga Ludoviciæ*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 19.

*Dorifera ludoviciæ*, Bonap. Consp. Gen. Av., p. 68, *Dorifera*, sp. 1.

---

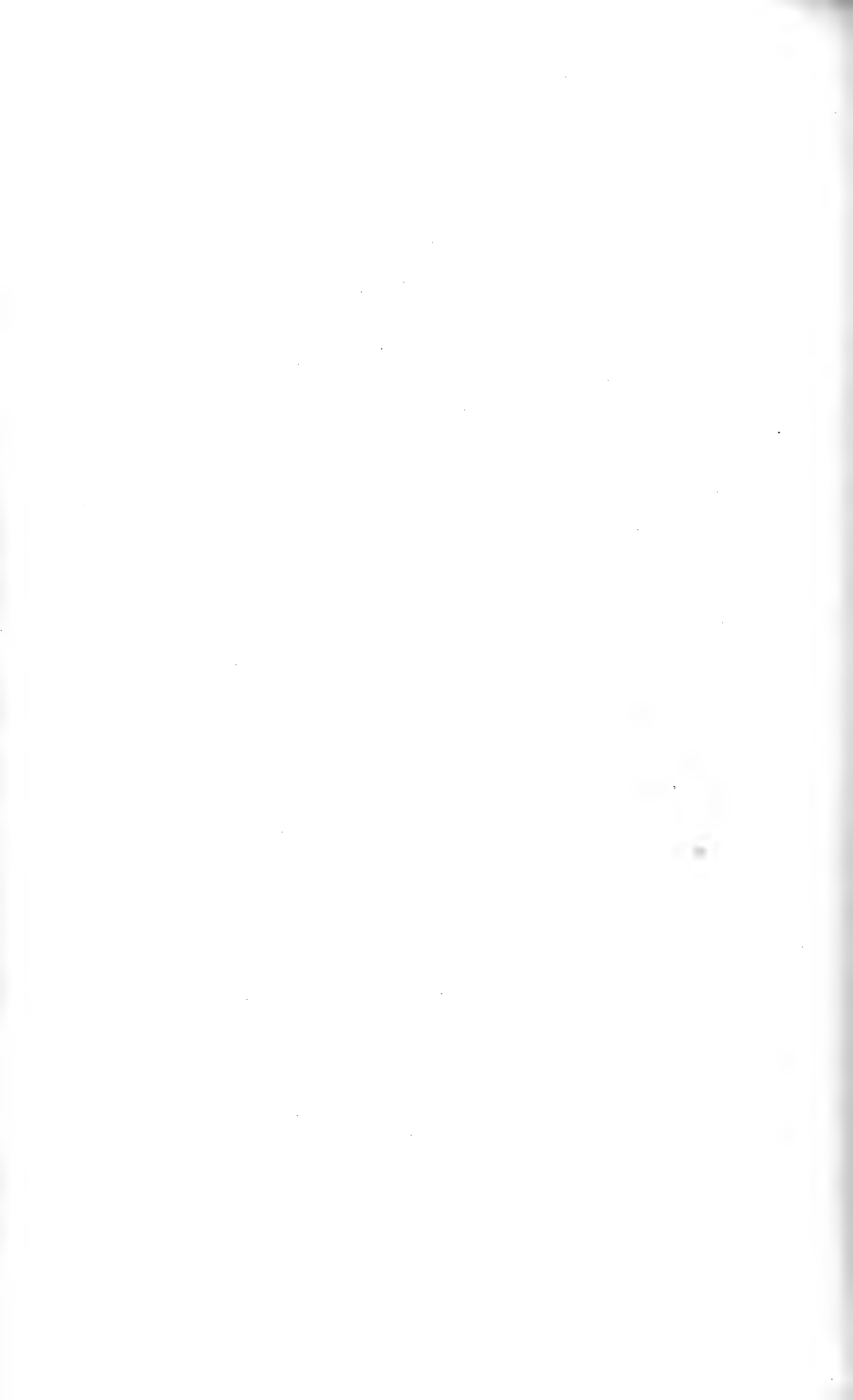
NATURALISTS often assume the privilege of honouring individuals by naming remarkable species after them, and although this practice is by no means to be commended, it is one which may readily be excused when exercised in favour of those whose names are favourably known in the annals of science; in the present instance it has been employed with singular appropriateness to do honour, through his wife, to M. Isidore Geoffroy Saint-Hilaire, whose fame as a scientific naturalist is familiar to every one.

The *Dorifera Ludoviciæ* is remarkable for its short and robust body, the length of its wings, and the straight, sharp, needle-like form of its bill, features in its structure which doubtless in some way modify its habits; probably the peculiar shape of the bill is especially fitted for procuring its insect food from the smaller kinds of tubular flowers, or from among the prickly spines of the Cacti, tribes of plants which abound in the country frequented by the bird. Like many other rarities, this species is a native of New Grenada, and particularly the neighbourhood of Santa Fé de Bogota, from whence alone I believe up to this time specimens have been received; but whether it is a native of the upland or lowland districts of the country is unknown.

All the examples that have come under my notice have been alike in colour, which induces me to believe that there is no difference in the colouring of the sexes; but this of course is uncertain.

Forehead luminous metallic green; crown of the head and nape coppery bronze; back and wing-coverts dark bronzy green, passing into bluish green on the upper tail-coverts; wings purplish brown; tail black, tipped with brownish grey, slightly on the two middle and largely on the lateral feathers; under surface dark bronzy green with a tinge of grey; under tail-coverts grey, with reflexions of bluish green; bill black; feet fleshy-brown.

The figures are of the size of life.









HYPTROPTILA BUFFONI.

## HYPUROPTILA BUFFONI.

### Buffon's Plumeleeter.

*Trochilus Buffonii*, Less. Les Troch., p. 31. pl. 5.—Ib. Ind. Gen. et Syn. du Gen. Trochilus, p. 12.—Jard. Nat. Lib. Humming Birds, vol. ii. p. 98. pl. 19.

*Polytmus Buffoni*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 17.

*Lampornis buffoni*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 9.—Ib. Consp. Troch. in Rev. et Mag. de Zool. 1854, p. 250.

---

SINCE 1831, when this species was first described by M. Lesson, who was not at the time aware of its true habitat, but supposed it might be Brazil, hundreds of examples have been sent to Europe, and it has consequently become one of the commonest birds in our collections. The greater portion of these specimens have been received from two sources, namely, Bogota and the Caraccas. The bird is strictly a hill species, and Mr. Mark informs me that Bogota specimens are generally collected about "La Mesa" or the table mountain, and near the village of San Antonio, both localities being about six or seven thousand feet above the sea-level, and about a day's ride from Bogota. Besides being found in the places above mentioned, I believe that the species is very generally spread over Columbia, and that it even enters Veragua.

The females of this and the other members of the genus are very different from the males, and offer a striking resemblance to the females of the various species of the genus *Thalurania*.

The male has the crown of the head, all the upper surface and wing-coverts bronzy green; upper tail-coverts more bronzy; central tail-feathers dark greenish bronze, the remainder bluish black, margined externally at the base with dark greenish bronze; wings purplish brown; the whole of the under surface of a lively emerald-green, each feather finely fringed with greyish white, giving the whole a scale-like appearance; under tail-coverts snow-white, and so largely developed as to form conspicuous plumes.

Specimens from the Caraccas have the bill somewhat more curved; the feathers of the crown of the head edged with brown; and the green of the under surface of a softer and more mealy hue.

The upper surface of the female is similar to that of the male; the two central tail-feathers bronzy green, the remainder bluish black, margined at the base of the outer web with bronzy green, which lessens in extent as the feathers recede from the centre, the outer feather tipped with white, the next on each side with a diamond-shaped spot of white at the tip; under surface light grey with a few specks of green on the flanks; under tail-coverts large and white, as in the male.

The figures are of the size of life.







HYPUROPTILA UROCHRYSIA, *Gould.*

*J. Gould and H. C. Richter, del. et lith.*

*Hullmandel & Watson, Imp.*

## HYPUROPTILA UROCHRYSIA, *Gould.*

### Golden-tailed Plumeteer.

*Hypuroptila urochrysia*, Gould in Proc. of Zool. Soc., May 14, 1861.

---

I POSSESS a single example of this new species of *Hypuroptila*, which was shot by M. Warszewicz in the neighbourhood of Panama; but the precise locality I have not been able to ascertain. I have delayed describing this bird until the present moment (May 1861), in the hope of receiving other examples, and of obtaining some information respecting its habits and economy. In point of size it is about equal to the *H. Buffoni*, to which it also bears a close resemblance in the plumage of the body; its rich golden-bronzy tail will, however, always distinguish it from that and every other known species. I have no doubt that I have placed the bird in the right genus, although the under tail-coverts are not so fully developed in my specimen as in *H. Buffoni* or *H. cæruleogaster*; this, however, I conceive to be due to imperfection, occasioned by some of them having been lost in the process of skinning, rather than to any other cause.

I am unable to say if any difference occurs in the colouring of the sexes; but if we may judge from analogy, the female will be found to resemble those of *H. Buffoni* and *H. cæruleogaster*.

Head and upper surface dark green, becoming of a bronzy hue on the wing- and tail-coverts; wings purplish brown; tail rich golden bronze both above and beneath; throat and breast grass-green; abdomen bronzy green; thighs, vent, and under tail-coverts pure white; upper mandible black, lower mandible fleshy red with a black tip; tarsi either yellow or flesh-colour.

The figures are of the natural size. The plant is the *Pitcairnia undulatifolia*.









HYPIROPTILA CERULEIGASTER, Gould

*J. Gould and H.C. Richter, del et lith.*

*Hullman, del & Walter, lit.*

## HYPUROPTILA CÆRULEOGASTER, *Gould.*

### Blue-breasted Plumeleteer.

*Trochilus (Glaucis?) cæruleogaster*, Gould in Proc. of Zool. Soc., Part XV. p. 96.

*Polytmus cæruleogaster*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 18.

*Lampornis cæruleogaster*, Bonap. Consp. Gen. Av., p. 72, *Lampornis*, sp. 10.—Ib. Consp. Troch. in Rev. et Mag. de Zool. 1854, p. 250.

---

So closely do the *Hypuroptila cæruleogaster* and *H. Buffoni* assimilate to each other, both in size and in general conformation, that it becomes difficult to divest oneself of the belief that they are merely varieties of one and the same species; but in contradiction to such an opinion, I may state that I have never seen specimens in any intermediate state of colouring, and that the young males at the age when the scaly breast-feathers are assumed for the first time, are blue and not green. I may also mention that while we know the *Hypuroptila Buffoni* to be very widely dispersed, the *H. cæruleogaster* has up to the present time only been found in a very limited area, most of the specimens that have reached this country being either from Bogota, or the country intervening between that city and Popayan.

Mr. Mark tells me that this species inhabits the Andean ranges at an elevation of from six to seven thousand feet, and that, like its ally, it obtains its insect food from the flowers of the shrub-like trees of the table-lands.

The sexes, as will be seen on reference to the accompanying Plate, are very different both in size and colour.

The male has the head and upper surface grass-green, with a wash of bronze at the back of the neck and on the upper tail-coverts; chin and sides of the neck bluish green, gradually merging into the beautiful blue of the centre of the breast and abdomen; lower part of the flanks and abdomen green; under tail-coverts white and largely developed; wings purplish brown; tail black with steel-blue reflexions; bill black.

The upper surface of the female and the under tail-coverts are the same as in the male; her under surface is light grey with a few specks of green on the flanks; two central tail-feathers bronzy green, the remainder bluish black, margined at the base of the outer web with bronzy green, lessening in extent as the feathers recede from the centre, the outer feather tipped with white, the next on each side with a diamond-shaped spot of white at the tip.

The figures represent a male and a female of the natural size. The plant is the *Nematanthus ionæma*.







IONOLAIMA FRONTALIS, Lawrence

J. Gould and H. C. Richter, del et lith

Hullmandel & Walton, Imp

# IÖNOLAIMA FRONTALIS, *Lawr.*

## Emerald-fronted Humming-Bird.

*Iönolaima frontalis*, Lawr. in Ann. Lyc. Nat. Hist. New York, vol. vi. p. 263.

---

WHEN I first received this fine bird from Mr. Lawrence of New York, a question arose in my mind as to whether it were not the *I. Schreibersi* in a more fully adult state of plumage than I had yet seen; I was the more inclined to think this might be the case from the circumstance of one of Mr. Lawrence's specimens, which is evidently immature, being so like the *I. Schreibersi* that it is difficult to say to which species the individual pertains. The differences between the *I. frontalis* and *I. Schreibersi* are these:—the bill is shorter and straighter in the former than in the latter; the green mark on the face is much brighter and better defined; the throat and ear-coverts are black and without a trace of the buff stripe seen in the *I. Schreibersi*; the tail is rather longer and somewhat more forked, and the under tail-coverts are steely black, instead of dark green. I may add, that all the specimens of *I. Schreibersi* contained in the public museums of Vienna, Paris, and London, as well as those in the private collections of Paris and in my own, are similar to the bird figured by me as *I. Schreibersi*, which tends to prove that these exhibit the adult state of that species, and consequently that Mr. Lawrence is right in considering his bird as distinct; and it gives me great pleasure to figure so splendid a bird under the name assigned to it by so valued a friend to myself and to science as Mr. Lawrence.

The following is Mr. Lawrence's description and account of this species, which I give in his own words:—

“On the forehead, immediately adjoining the bill, is a diamond-shaped spot of bright metallic green; upper plumage and wing-coverts dark green, grass-green on the head, but with a golden shade on the back; upper tail-coverts dark green; tail deep steel-blue, extreme tips of the two central feathers green; wings purplish brown, outer edge of first primary chestnut; chin, cheeks, and upper part of throat black; ear-coverts bronzed green; on the throat is a gorget (rather circular in form) of shining violet-purple; adjoining this, and occupying the upper part of the breast, is a band of metallic green, of the same shade as the frontal spot; sides dark green, similar in colour to the back; lower part of the breast and abdomen of the same deep black as the throat; under tail-coverts steel-blue; bill black; feet brownish black.

“In one specimen, not fully mature, the frontal spot is wanting, and the bright feathers on the throat are only partially developed; there is a line of bright rufous feathers running from the bill under the eye; in all other respects precisely like the adult.

“Length  $5\frac{1}{2}$  inches; bill  $\frac{7}{8}$ ; wing 3; tail  $2\frac{3}{4}$ .

“Habitat. Ecuador.

“This makes the second species of this genus, and is even a handsomer bird than *Schreibersi*, which it much resembles; it is, however, larger, and differs in having an emerald spot on the forehead; in the adult being destitute of a buff line on the sides of the head; in having the centre of the abdomen black, and the tail more deeply forked, the outer feathers being over an inch longer than the middle ones, whereas in *Schreibersi* the difference is but half an inch. The latter bird differs also in having the central tail-feathers green.

“The above-described Humming-bird forms part of the collection (now in my possession) made by Mr. Wm. E. Moore in his recent travels in South America. The subjoined extract from one of his letters will give the locality where they were obtained:—

“‘The Humming-birds I gave you were all collected between the head-waters of the Napo and Quito; this journey was performed on foot, 300 miles through a dense forest, at the base of the Bolivian Andes.’”

The figure is of the size of life. The plant is the *Gallandria Devoniana*.









IONOLAIMA SCHREIBERSI.

## IONOLAIMA SCHREIBERSI, *Gould.*

### Schreibers' Humming-bird.

*Trochilus Schreibersii*, Lodd. MSS., Bourc. in Proc. of Zool. Soc., part xv. p. 43.—Ib. Rev. de Zool. 1847, p. 255.

*Calothorax*? *Schreibersii*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Calothorax*, sp. 4.

*Thalurania Schrebersi*, Bonap. Consp. Gen. Av., p. 77, *Thalurania*, sp. 9.

*Ionolaima Schreibersii*, Reich. Aufz. der Col., p. 9.

*Campylopterus schreibersi*, Bonap. Rev. et Mag. de Zool. 1854, p. 250.

---

THE *Ionolaima Schrebersi* is a native of the central and very remote parts of South America; hence it is a species of considerable rarity, and but seldom seen in collections. It was for a long time a unique bird in England, the only specimen known being the single one contributed to the Loddigesian Collection by the late Mr. John Natterer of Vienna, who collected it on the upper part of the Rio Negro: the specimens of both sexes in my own collection were procured on the Napo, and these are the only countries from which I have yet seen examples. It certainly does not occur at Quito or at Bogota, but that it ranges rather widely over the countries skirting the eastern dip of the Andes of Ecuador in Peru, is more than probable; still, strange to say, it was not one of the birds sent by Mr. Hauxwell from the Ucayali. Had not my good friend Natterer been so suddenly called from among us, after his return from his eighteen years' explorations in South America, something would doubtless have been recorded respecting the habits and manners of this fine bird, which was dedicated by his desire to his friend Schreibers, the Director of the Imperial Museum of Natural History at Vienna.

The male has the crown of the head, all the upper surface, wing- and tail-coverts and flanks green; wings purplish-brown; central tail-feathers greenish-blue, remainder dark steel-blue; from the angle of the bill on each side a buff moustache; chin deep black, at the base of which is a patch of lovely purple, succeeded by a band of shining metallic green; centre of the abdomen very dark brown, glossed with green; bill black; feet dark brown.

The female has the upper surface bronzy-green; two outer feathers of the tail on each side dull steel-blue tipped with grey, the remainder bronze; all the under surface grey, with a crescent of glittering green at the tip of each feather; on the side of the face an indistinct greyish-white moustache.

The Plate represents the sexes of the natural size.







HELIODOXA JACULA, *Cozd*

*J. Gould and H. C. Richter del et lith*

*Hillman and W. Walton Imp*

## HELIODOXA JACULA, *Gould.*

### Green-crowned Brilliant.

*Heliodoxa jacula*, Gould in Proc. of Zool. Soc., part xvii. 1849, p. 96.

*Leadbeatera jacula*, Bonap. Consp. Gen. Av., p. 70, *Leadbeatera*, sp. 1.—Ib. Rev. et Mag. de Zool. 1854, p. 251.—Reichenb. Aufz. der Col., p. 7.

---

IN vain have I laboured to represent in the accompanying illustration the gorgeous metallic lustre pervading nearly the whole of the plumage of this wonderful bird, which, when flying, must present the appearance of a moving mass of brilliant light, almost too dazzling for the eye to dwell upon; so resplendent, indeed, is it, that no art can depict or description convey its true portraiture.

The entire crown and all the under surface are alike luminous, but the green colouring of those parts is relieved by a throat-mark of equally luminous blue; while the dull green, tinged with rust-red, of the remainder of the plumage serves as a contrast, and to show off those parts which are metallic. In form this bird is as graceful as its colouring is brilliant; its bill is moderately long, and well proportioned when compared with the body; the wing is rather ample, and the tail long and forked.

The native country of this fine bird is the Columbian Andes, specimens having been received from Santa Fé de Bogotà and Popayan; in all probability its range extends to Ecuador. It is by no means a common species, and its discovery is of very recent occurrence.

The upper figure in the accompanying Plate represents a bird which I believe to be a female of this species; this, however, is somewhat uncertain; but I am confident that the females of *H. jacula* and *H. Leadbeateri* are very similar, and that the bird I have figured is the female of one or the other.

The male has the crown of the head, breast and abdomen resplendent metallic green; in the centre of the throat a crescentic mark of metallic blue; the metallic green of the crown running to a point towards the occiput; back of the neck, back, and upper wing-coverts bronzy green; under wing-coverts and flanks grass-green; wings purplish brown; upper tail-coverts purplish brown with green reflexions; under tail-coverts dark brown with green reflexions; tail considerably forked and of a bluish black; thighs and tarsi white; feet blackish brown; bill black.

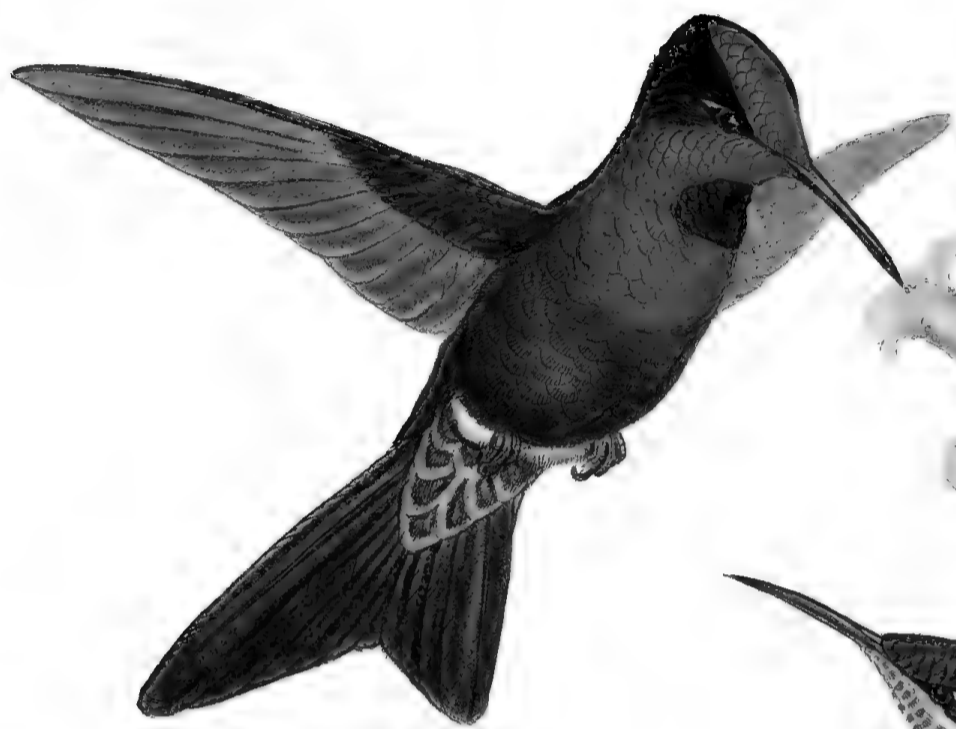
The female has the crown of the head and upper surface green; throat shining metallic green, the white bases of the feathers showing through and giving the throat a speckled appearance; tail bluish black, tipped with white; in some specimens the lores are buff, and a line of the same hue extends beneath the eye; thighs white; under tail-coverts dull green; bill black.

The figures are of the natural size. The beautiful Orchid is the *Cattleya maxima*, partly taken from Curtis's "Botanical Magazine," a work replete with interest, both for the accuracy of the drawings and the scientific character of the letterpress.









HELIODOXA JAMESONI.

# HELIODOXA JAMESONI.

## Jameson's Brilliant.

*Trochilus Jamersoni*, Bourc. Rev. et Mag. de Zool. 1851, p. 97.—Ib. Compt. Rend. de l'Acad. Sci., tom. xxxii. p. 187.

*Leadbeatera Jamersoni*, Reich. Auf. der Col., p. 7.—Bonap. Rev. et Mag. de Zool. 1854, p. 251.

*Coeligena Jamersoni*, Reich. Troch. Enum., p. 4.

*Heliodoxa Jamesoni*, Sclater in Proc. of Zool. Soc., part xxviii. p. 94.—Cab. Mus. Hein., Theil iii. p. 22, note.

---

ONE of the very finest Humming-Birds discovered during the last twenty years is the one I have called *Heliodoxa jacula*, which inhabits Bogota or its neighbourhood. To this species the bird here represented, which was brought from Ecuador by M. Bourcier, is only second in beauty. Since that gentleman's visit, many other examples have been collected, the greater number of which have found their way into my own cabinet; but the person by whom and the immediate locality in which they were procured are equally unknown to me. The specimens sent to England by Mr. Fraser during his sojourn in Quito are stated to have been collected at Nanegal. Perhaps, in Popayan or its neighbourhood, the two species *jacula* and *Jamesoni*, which are very nearly allied, will be found to inosculate; at all events, up to this time the former has not been found in Ecuador, nor the latter in Columbia.

In the naming of this bird after Professor Jameson of Quito, M. Bourcier has my entire acquiescence, since by so doing he will have assisted in perpetuating a name which will ever stand conspicuous among those who have largely contributed to the promotion of natural history. Happily for science, Professor Jameson has long been located at Quito, the capital of one of the richest portions of the New World, both in a zoological and botanical point of view, and few persons have more zealously exerted themselves to make us acquainted with the productions of any country than this gentleman. For myself, I have especial pleasure in recording my great obligations to him for the kind and friendly spirit in which he has ever afforded me all the assistance in his power in furtherance of my works on this and two other groups of South American birds.

The *Heliodoxa Jamesoni* is a larger and more robust bird than the *H. jacula*, and has on the crown of the head a spear-shaped mark of beautiful glittering green, bounded on each side with jet-black when viewed in front, while in *H. jacula* the entire crown is glittering green; the brilliancy of the green crown, as well as that of the under surface, is also less than in that species. The two birds moreover differ in the colouring of their two central tail-feathers, those of *H. jacula* being generally of a bronzy hue, while those of *H. Jamesoni* are as generally black; the tail, too, of the former is longer and more forked than that of the latter.

The male has a broad spear-shaped mark of glittering green on the crown, bordered on each side by a mark of velvety black; behind the eye a small spot of white; chin, sides of the neck and breast glittering green, with a patch of shining steel-blue in the centre of the throat; all the upper surface and wing-coverts dark green, washed with bronze at the back of the neck and on the upper tail-coverts; wings very dark purplish brown; under surface bronzy green; tail black, with steel-blue reflexions; bill black; feet blackish brown.

The female has the head and all the upper surface shining bronzy green; behind the eye a small spot of white; the under surface creamy white, with a crescent of shining green at the tip of each feather, and a streak of white from the base of the lower mandible; wings and tail as in the male.

The Plate represents both sexes about the size of life. The plant is the *Tecoma fulva*.







HELIODOXA OTERO.

## HELIODOXA OTERO.

### Otero Brilliant.

*Trochilus Otero*, Tschudi, Consp. Av., No. 212.—Ib. Faun. Peruana, p. 39, tab. xxiii. fig. 2.

*Leadbeatera otero*, Reichenb. Auf. der Col., p. 7.—Bonap. Rev. et Mag. de Zool. 1854, p. 251.

---

How manifestly is the law of representation exhibited in certain species of Humming-Birds inhabiting similar latitudes north and south of the equator! The *Heliodoxa Otero* and *H. Leadbeateri* are two species which will serve well to illustrate this theory—the one inhabiting Bolivia, on the south, the other Columbia, on the north. I am not a little surprised that some ornithologists have considered these two birds as one and the same species; an Eagle and a Buzzard can scarcely offer greater differences in size than the *Otero* and *Leadbeateri*: the former, moreover, differs in having the blue on the crown extended backwards towards the occiput, and the green colouring of the breast finer, if possible, and more glittering; in other respects a great similarity exists in the two species.

The discovery and characterization of this fine bird are due to Dr. von Tschudi, the celebrated traveller, whose work entitled 'Fauna Peruana' will form a lasting memorial of his ability and zeal in the cause of science. The specimens in my own collection were principally procured by Mr. Bridges, during his short residence near La Paz, but I have one example which I obtained in exchange from the Museum at Copenhagen. All these specimens closely resemble each other, and are of much larger size than the *H. Leadbeateri*. The two species appear never to encroach upon each other's country. I have not yet seen either species from Ecuador.

How must every lover of natural history, particularly the trochilidist, yearn to acquire some information respecting the mode of life, flight, food, &c., of the various forms of Humming-Birds, in all which respects they will doubtless be found to differ as much as these little ornithological gems do in their colouring and structure!

The entire crown of the male is of a brilliant metallic blue; the throat and breast luminous green; occiput and nape reddish bronze, appearing black when viewed in front; back, upper and under wing-coverts, upper tail-coverts, abdomen and flanks bronzy green; wings purplish brown; upper tail-coverts and two central tail-feathers pure bronze, the remaining tail-feathers black, glossed with bronze; behind the eye a small patch of white; bill black; feet dark brown.

The female has the upper surface bronzy green, marked with deeper bronze on the nape; wings purplish brown; four centre tail-feathers bronze, the remainder bluish black, glossed with bronze on the outer webs and tipped with greyish white; under surface white, spangled with green; vent pale buff.

The Plate represents the two sexes of the natural size. The plant is the *Echites Franciscea*.









HELICONIA LEADBEATERI

# HELIODOXA LEADBEATERI.

## Leadbeater's Brilliant.

*Trochilus Leadbeateri*, Bourc. Rev. Zool. 1843, p. 102.—Ib. Ann. Sci. Phys. &c. de Lyon, 1843, p. 43. pl. 5.

*Leadbeatera grata*, Bonap. Consp. Gen. Av., p. 70, *Leadbeatera*, sp. 2.—Ib. Rev. et Mag. de Zool. 1854, p. 251.

*Mellisuga Leadbeateri*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 3.

*Heliodoxa leadbeateri*, Sclat. in Proc. of Zool. Soc., part xxv. p. 16.

---

WHEN this bird was described by M. Bourcier in 1843, but few specimens had reached Europe; and, indeed, it has only recently become common. Its native country is the great uplifted lands known as the Andean range of mountains, and the spurs and lower hills which jut out eastwardly in the direction of the interior; it even extends its range to the high lands of the Caraccas, as shown by specimens brought from thence by the late Mr. David Dyson. Bogota, however, is the country in which it is most numerous; here, wherever a district suitable to its habits and economy occurs, within an area of one hundred miles from the city of Sta. Fé de Bogota, it appears to be found; and from this city hundreds of Indian skinned specimens are from time to time sent to Europe. I have never seen examples from Ecuador, and believe it is never found nearer to Quito than Popayan: neither does its near ally extend its range to this equatorial region; at least, no specimens have as yet been sent from thence. It would seem that both species inhabit countries at an equal distance from either side of the line—one on the south, the other on the north.

It will have been noticed that very many species of this group of birds have been named after persons, living or dead, who have rendered themselves conspicuous for their devotion to art and science, or as promoters of our knowledge of natural history. The name of *Leadbeater*, given to the present bird, is familiar to every ornithologist in Europe; I have known all three of the generations of this family, who have devoted themselves to Ornithology, and can bear testimony to the zeal and liberality with which they have at all times assisted the researches of scientific men to the utmost of their power. The compliment, therefore, cannot be considered as ill bestowed.

The sexes of the *Heliodoxa Leadbeateri* present the same difference in their colouring that is seen in the *H. Otero* and *H. jacula*, the female not having the brilliant blue crown; neither does she exhibit the brilliant green colouring of the breast, which, when seen in a newly-moulted bird, surpasses imagination; it is, however, still finer in the *H. Otero*; no pencil can possibly give more than a faint idea of its brilliancy.

The male has the crown brilliant metallic blue; throat and breast luminous green; back of the neck coppery red, appearing black if viewed in front; back, wing-coverts, abdomen and flanks bronzy green; wings purplish brown; upper tail-coverts reddish bronze; central tail-feathers bronze; lateral feathers purplish black, with bronzy reflexions; under tail-coverts olive; behind the eye a small patch of white; bill black; feet dark brown.

The female has the upper surface bronzy green, with a tinge of red at the nape; wings purplish brown; central tail-feathers bronze; lateral feathers purplish black, tipped with white; under surface white, spangled with green; lower part of the abdomen buff; under tail-coverts pale green, margined with light buff.

The Plate represents both sexes of the natural size. The plant is the *Trichopilia suavis*.







TROCHILUS LEUCOMUS: *Lin.*

# TROCHILUS POLYTMUS, *Linn.*

## Black-capped Humming-bird.

- Polytmus* 1. Brown, Nat. Hist. of Jam., p. 475.  
*Falcinellus, caudâ septem unciarum*, Klein, Av., p. 108. No. 17.  
*Long-tailed Black-cap Humming-bird*, Edwards's Birds, vol. i. pl. 34. p. 34.  
*Bourdonneur de Mangoe à longue queue*, Albin, tom. iii. p. 20. pl. 49. fig. a.  
*Oiseau-mouche à longue queue noir*, Sonn. Edit. de Buff. Hist. Nat., tom. xvii. p. 215.  
*Mellisuga Jamaicensis atricapilla, caudâ bifurcâ*, Briss. Orn., tom. iii. p. 729.  
*Mellivora avis maxima*, Sloane, Jam., vol. ii. p. 309. t. 264. fig. 4.  
*Trochilus Polytmus*, Linn. Syst. Nat. Edit. 10, tom. i. p. 120.—Ib. Gmel. Edit., tom. i. p. 186.  
—Ib. Turt. Edit., vol. i. p. 303.—Lath. Ind. Orn., tom. i. p. 302.—Vieill. Ois. Chant. des Amér., tom. ii. p. 71.—Jard. Nat. Lib. Humming Birds, vol. ii. p. 108. pl. 21.—Gray and Mitch. Gen. of Birds.—Gosse, Birds of Jamaica, p. 97.—Ib. Ill. Birds of Jam., pl. xix.  
—Vieill. Ency. Méth. Orn., part ii. p. 554.  
*Black-capped Humming-bird*, Lath. Gen. Syn., vol. ii. p. 748.—Shaw, Gen. Zool., vol. viii. p. 281.—Lath. Gen. Hist., vol. iv. p. 296.  
*Colibri à tête noire*, Vieill. Ois. Dor., tom. i. p. 121. pl. 67.  
*Ornismya cephalatra*, Less. Ois. Mouch., p. 78. pl. 17.

---

THIS species, the type, according to modern systematists, of the Linnean genus *Trochilus*, is perhaps one of the oldest and best-known members of the entire family, a description of it being included in nearly every general work on Natural History, as will be seen on reference to the synonyms given above; but although the bird itself has been so long known, nothing whatever had been recorded of its habits and economy until the appearance of the very interesting and valuable account published by P. H. Gosse, Esq. in his "Birds of Jamaica," and from which I shall take the liberty of transcribing the more important particulars.

"This is the gem of Jamaican ornithology," says Mr. Gosse; "its slender form, velvet crest, emerald bosom, and lengthened tail-plumes, render it one of the most elegant members of its truly brilliant family." It "is a permanent resident in Jamaica, and is not uncommonly seen at all seasons and in all situations. It loves to frequent the margins of road-sides, where it sucks the blossoms of the trees, occasionally descending, however, to the low shrubs, and is abundant on the summit of the range of mountains known as the Bluefields ridge. Behind these peaks which are visible from the sea, at an elevation of about half a mile, there runs through the dense woods a narrow path, just passable for a horse, overrun with beautiful ferns of many graceful forms, and always damp and cool. No habitation occurs within several miles, and no cultivation, save the isolated provision-grounds of the negroes, which teem with enormous *Arums*; and these are hidden from view far up in the thick woods. The refreshing coolness of this road, its unbroken solitude, combined with the peculiarity and luxuriance of the vegetation, made it one of my favourite resorts. Not a tree, from the thickness of one's wrist to the gigantic magnitude of the hoary fig and cotton tree, but is clothed with fantastic parasites; *Begonias* with waxen flowers, and ferns with hirsute stems climb up the trunks; enormous *Bromelias* spring from the greater forks, and fringe the horizontal limbs; various *Orchideæ* with matted roots and grotesque blossoms droop from every bough, and long lianes, like the cordage of a ship, depend from the loftiest branches, or stretch from tree to tree. Elegant tree-ferns and towering palms are numerous; here and there the wild plantain or *Heliconia* waves its long flag-like leaves from amidst the humbler bushes, and in the most obscure corners over some decaying log, nods the noble spike of a magnificent *Limodorum*. Nothing is flaunting or showy; all is solemn and subdued; but all is exquisitely beautiful. The smaller wood consists largely of the plant called Glass-eye berry, a Scrophularious shrub, the blossoms of which, though presenting little beauty in form or hue, are pre-eminently attractive to the Long-tailed Humming-bird. These bushes are at no part of the year out of blossom, the scarlet berries appearing at all seasons on the same stalk as the flowers, and here at any time one may with tolerable certainty calculate on finding these very lovely birds. But it is in March, April and May that they abound: I suppose I have sometimes seen not fewer than a hundred come successively to rifle the blossoms within the space of half as many yards in the course of a forenoon. They are, however, in no respect gregarious; though three or four may be at one moment hovering round the blossoms of the same bush, there is no

association; each is governed by his individual preference, and each attends to his own affairs. It is worthy of remark, that males compose by far the greater portion of the individuals observed at this elevation, while very few females are seen there; whereas in the lowlands this sex outnumbered the other. In March a considerable number are found to be clad in the livery of the adult male, but without the long tail-feathers, while others possess them in various stages of development. These are, I have no doubt, males of the preceding season. It is also quite common to find one of these lengthened feathers much shorter than the other; and in their aerial encounters with each other a tail-feather is sometimes displaced. The whirring sound made by the rapid vibration of the wings of the male is more shrill than that produced by those of the female, and indicates the proximity of the bird before the eye has detected it. The male utters an almost incessant chirp, both while resting upon a twig and while feeding from the flowers. They do not invariably probe the flowers upon the wing, but may frequently be seen thus engaged when alighted and sitting with closed wings; and they often partially sustain themselves while feeding by clinging with the feet to a leaf with the wings expanded and vibrating." . . . When perched, "they usually sit in a nearly upright posture with the head thrown somewhat backwards, the beak pointing at a small angle above the horizon, the feet almost hidden by the body being brought into contact with the perch, the tail thrown somewhat forward under the belly, and the long feathers crossing each other near their middle."

Mr. Gosse states, that they do not confine themselves to any particular season for nidification, but that he found the nests most numerous in June; while Mr. Hill considers the breeding season to be at its height in January. The situation of the nest too appears to be very various, Mr. Gosse having found one attached to the hanging fibre of the root of a tree which had entwined itself round the projecting points of an overhanging limestone rock in a deep and thickly wooded dell; another stuck on a twig of a sea-side grape-tree (*Coccoloba*), at about fifteen feet from the ground, the tree itself being so near to the water that some of the branches hung over it; another on a hanging twig of a black mangrove-tree, the twig passing perpendicularly through the side and out at the bottom; and another on a twig of a wild coffee-tree (*Tetramerium odoratissimum*). The nest is principally "composed of silk cotton very closely pressed, mixed with the still more glossy cotton of an *Asclepias*, particularly around the edge; the seed remaining attached to some of the filaments. On the outside the whole structure is quite covered with spiders'-web, crossed and recrossed in every direction, and made to adhere by some viscous substance, evidently applied after the web was placed, probably saliva. Little bits of pale green lichen, and fragments of thin laminated bark, are stuck here and there on the outside by means of the webs having been passed over them." The whole forms "a very compact cup,  $1\frac{3}{4}$  inch deep without, and 1 inch deep within; the sides about  $\frac{1}{4}$  inch thick, the inner margin a little overarched, so as to narrow the opening; the total diameter at the top  $1\frac{1}{2}$  inch." The eggs are of a long oval form, and of a pure white, save that when fresh the contents produce a reddish tinge, from the thinness of the shell; they are seven-twelfths of an inch long by four-twelfths of an inch broad. The above, adds Mr. Gosse, is the usual "form, dimensions, and materials of the nest. Variations, however, often occur from local causes: thus in one from a rocky situation only moss is used, and the base is prolonged to a point; one now before me is wholly composed of pure silk cotton bound profusely with the finest web, undistinguishable except on the closest examination; not a fragment of lichen mars the beautiful uniformity of its appearance; others are studded all over with lichens and have a peculiar rustic prettiness." That the chief food of the Humming-bird consists of insects, we have abundant evidence from examination of the stomachs of many species; they are usually sought for in the deep flower-cups, but that they are also obtained by hawking in the air, we learn from Mr. Gosse, who states that he has distinctly seen "the minute flies in the air, which it pursued and caught, and heard repeatedly the snapping of the beak."

It will be seen that I have drawn very largely from the rich store of observations recorded by Mr. Gosse, and much more might be extracted with advantage, particularly a long and most interesting account of the various attempts made by that gentleman at domesticating this very lovely species, for which, however, I must beg to refer the reader to his "Birds of Jamaica."

The male has the crown of the head and the nape deep velvety black; upper surface green; wings purplish black; tail deep black, glossed with green at the base; throat, breast and belly lustrous emerald green; vent and under tail-coverts bluish black; irides black; bill coral-red, the tip black; feet brown.

Total length, 10 inches; bill, 1; wing,  $2\frac{3}{4}$ ; tail,  $7\frac{1}{4}$ ; tarsus,  $\frac{1}{4}$ .

The female has all the upper surface green with a bronzy lustre, deepening into brown on the forehead; wings as in the male; two centre tail-feathers bronzy green, the remainder deep blue glossed with bronzy green on the basal portion of the external web, except the two outer feathers on each side which are deep blue largely tipped with white; under surface white, the tips of the feathers on the sides of the neck and flanks glossy green; irides dark brown; bill reddish brown, black at the edges and tip; feet brownish black.

Total length,  $4\frac{1}{2}$  inches; bill, 1; wing,  $2\frac{1}{4}$ ; tail,  $1\frac{7}{8}$ ; tarsus,  $\frac{1}{4}$ .

The Plate represents two adult males, a young male, a female, and a nest, all of the natural size.







THALURANIA GLAUCOPIS.

# THALURANIA GLAUCOPIS.

## Brazilian Wood Nymph.

*Trochilus glaucopis*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 497.—Pr. Max. Beitr. zur Naturg. von Bras., p. 85.—Vieill. 2nde Edit. du Nouv. Dict. d'Hist. Nat., tom. vii. p. 370, et tom. xxiii. p. 428.—Ib. Ency. Méth. Orn., part ii. p. 557.—Jard. Nat. Lib. Humming Birds, vol. ii. p. 86.

*Mellisuga Brasiliensis cauda bifurca*, Briss. Orn., tom. iii. p. 724. pl. xxxvii. fig. 5?

*Ornismya glaucopis*, Less. Hist. Nat. des Ois. Mou., p. 175. pls. 58, 59.—Ib. Traité d'Orn., p. 273.

*Polytmus glaucopis*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 58.

*Trochilus frontalis*, Lath. Ind. Orn., vol. i. p. 318.

*Blue-fronted Humming Bird*, Lath. Gen. Syn., vol. ii. p. 786.—Ib. Gen. Hist., vol. iv. p. 352.

*L'Oiseau-mouche à queue fourchue du Brésil*, Vieill. Ois. dor., tom. i. p. 116.

*Thalurania glaucopis*, Bonap. Consp. Gen. Av., p. 77, *Thalurania*, sp. 5.—Ib. Rev. et Mag. de Zool. 1854, p. 254.—Reichenb. Aufz. der Colibris, p. 7.

*Coeligena glaucopis*, Reichenb. Troch. enumer., p. 3. pl. DCLXXXV. figs. 4509, 4510.

---

THIS is one of the Humming Birds, the breasts and crowns of which constitute the materials so extensively used for the construction of the beautiful artificial feather-flowers so frequently forwarded to this country and to the Continent; and we cannot but wonder, when we remember the wholesale destruction with which the bird is visited, that it has not become very scarce, or even extirpated; but the contrary seems to be the case, for no one member of the family is more frequently to be seen in collections, many hundreds of specimens being annually sent to Europe from Rio de Janeiro, which appears to be its head-quarters, as, according to Mr. Reeves, it is found there during the whole of the year. It is also common in Minas-Geraes, Santa Catharina, and other provinces of Brazil. It is said to be in full plumage in August and September, at which season it is principally procured, and supplied to the nuns for the purpose above alluded to.

Mr. Reeves informs me, that "the numbers annually killed for the fabrication of artificial flowers are immense. Its haunts are the margins of rivers, the virgin forests, and gardens. Its nest is generally attached to the drooping branch of a Creeper; on being disturbed, it utters a note which may be described by *Fip-fip-fip-fip*, quickly pronounced."

The females appear to escape the wholesale destruction, none of their colours being bright or attractive; indeed, as will be seen on reference to the accompanying Plate, few birds are less gaily adorned.

The nest of this species is of a lengthened form, with a cup-shaped depression at the top: the materials of which it is constructed vary in accordance with those that may be at hand in the situations in which it is placed, but it is generally composed of the brown inner fibres of the Palm fruit, and beautifully decorated with flat pieces of lichen of various sizes and colour.

The male has the centre of the crown fine metallic blue; sides and back of the head and nape dark green, appearing black when viewed in front; upper surface, shoulders and wing-coverts green, becoming of a brighter green on the upper tail-coverts; wings purplish black; tail black, with steel-blue reflexions; the whole of the under surface, including the under tail-coverts, yellowish shining green; bill and feet blackish brown.

The female has the whole of the upper surface green; wings purplish black; two central tail-feathers and the basal portion of the lateral ones bronzy green; the remainder of the lateral feathers black, with steel-blue reflexions, and the external one tipped with grey; under surface grey, washed with green on the flanks.

The figures are the size of life.

For the drawing of the Brazilian plant, the name of which is unknown to me, I am indebted to T. Reeves, Esq.







TIALURANIA WATERBOSI.

## THALURANIA WATERTONI.

### Waterton's Wood Nymph.

*Trochilus Watertoni*, Lodd. MSS.—Bourc. in Proc. of Zool. Soc., part xv. p. 44.

*Polytmus Watertoni*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 65.

*Thalurania Watertoni*, Bonap. Consp. Gen. Av., p. 76, *Thalurania*, sp. 4.—Ib. Rev. et Mag. de Zool. 1854, p. 254.

————— *Watertoni*, Reichenb. Aufz. der Colibris, p. 7.

*Coeligena Watertoni*, Reichenb. Troch. enumer., p. 3.

---

WHETHER the *Trochilidæ* are less numerous in Demerara than in other parts of South America, and whether they have been less attended to, are questions I am unable to answer; certain it is that we possess but a limited knowledge of the species inhabiting that country. At the same time I may remark, that the few with which we are acquainted are all very beautiful, as an evidence of which I may cite the rare and lovely bird here represented, which was discovered by Mr. Waterton on the banks of the Mibiri Creek, about forty miles up the River Essequibo. Mr. Waterton's specimen was kindly presented by him to the late Mr. George Loddiges, in whose collection it still remains. For many years it was unique; but the researches of enthusiastic travellers and collectors are annually unfolding to us the treasures of South America, and very recently two other examples of this fine bird have been procured, not I believe in Demerara, but towards the confines of Brazil, and probably near the embouchure of the great river Amazon; these specimens now grace my own collection, and, with the one above referred to, are all that I have yet seen.

The *Thalurania Watertoni* is in every respect a typical member of the genus, being precisely of the same form, and clothed in a similar style of colouring as the *T. furcata*, but having the tail-feathers much more developed, and the blue of the back more generally spread, forming in fact a great mantle of metallic-blue feathers, which covers nearly the whole of the upper surface. The female remains still undiscovered.

Mr. Loddiges dedicated this fine bird to its discoverer, Mr. Waterton, whose writings on natural history are so well known to the world at large as to render any comment upon them quite unnecessary.

Crown of the head and back of the neck greenish bronze; back, shoulders, wing-coverts and flanks fine rich metallic blue; lower part of the back dark green; upper tail-coverts purple; throat, breast, and centre of the abdomen fine metallic grass-green; wings very dark purplish black; tail and under tail-coverts black, with steel-blue reflexions; bill black; feet dark brown.

The figure is the size of life.









THALURANIA FURCATA,

*J. Gould and H. C. Richter del. et lith.*

*Hollmann del. A. Wetton. imp.*

## THALURANIA FURCATA.

### Cayenne Wood-Nymph.

- Mellisuga Jamaicensis, violacea, cauda bifurca*, Briss. Orn., tom. iii. pp. 728, 732. pl. xxxvii. fig. 6.  
—Id., 8vo, tom. ii. p. 40.
- Trochilus furcatus*, Gmel., Edit. Linn. Syst. Nat., tom. i. p. 486.—Lath. Ind. Orn., vol. i. p. 304.  
—Jard. Nat. Lib., Humming-birds, vol. i. p. 125. pl. 23.—Vieill. Ency. Méth. Orn.,  
part ii. p. 572.—Shaw, Gen. Zool., vol. viii. p. 309.—Ib., Steph. Cont., vol. xiv.  
p. 239.
- L'Oiseau-mouche violet à queue fourchue*, Buff. Hist. Nat. des Ois., tom. vi. p. 37.—Vieill. Ois.  
Dor., tom. i. p. 71. pl. 34.
- L'Oiseau-mouche à queue fourchue*, Buff. Pl. Enl. 599. fig. 2.
- Ornismya furcata*, Less. Hist. Nat. des Ois.-mou., pp. xiv, 82. pl. 18.—Ib. Ind. Gen. et Syn.  
des Ois. du gen. *Trochilus*, p. xxij.—Ib. Traité d'Orn. p. 273.
- Polytmus furcatus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 61.
- Thalurania furcata*, Gould in Proc. of Zool. Soc., part xx. p. 8.—Bonap. Rev. et Mag. de Zool.  
1854, p. 254.—Reichenb. Aufz. der Col., p. 7.  
——— *furcatus*, Bonap. Consp. Gen. Av., p. 76, *Thalurania*, sp. 1.
- Lesser Fork-tailed Humming-bird*, Lath. Gen. Syn., vol. ii. p. 75?—Ib. Gen. Hist., vol. iv. p. 297?
- Furcated Humming-bird*, Shaw, Nat. Misc., vol. xi. pl. 397.

---

It is impossible to say with certainty whether the bird described and figured by Brisson and the older authors be identical with the species here represented or not; if it be, they are certainly quite wrong in stating Jamaica to be one of its habitats, an error which I am surprised to find repeated by Lesson, Jardine, and other recent authorities; for so exclusively, in fact, does the bird inhabit the continent of South America, that I believe it never occurs in any of the islands, not even the adjacent one of Trinidad; it enjoys, indeed, a very restricted range, being confined to Cayenne and Guiana, and scarcely extending so far as the Amazon towards Brazil. The bird of the same form and style of colouring which is found about Para, and which is usually considered to be the same, possesses, in the opinion of some, sufficient differences to warrant its being considered distinct, and to receive a separate appellation, that of *T. furcatoides*. Judging from the great numbers that are annually skinned and sent to Europe, this bird must be very numerous in Cayenne; it frequently arrives in hundreds at a time, consequently a considerable commerce exists between the dealers in Paris and the collectors in Cayenne. Being an exceedingly pretty and elegant species, great care is taken to obtain it only at that season of the year when it is in its finest plumage, and much attention is devoted to the making up of the skins. As is usual with all the members of this genus, the female is totally different from the male in colour, and considerably so in the form and character of the tail. It is surprising how few of this sex are prepared, which is doubtless due to their plumage being too dull and unattractive to demand attention.

The male has the crown of the head, back of the neck, back and wing-coverts black in some lights, deep green in others; throat shining grass-green; band across the back and shoulders violet; under surface beautiful deep violet-blue; wings purplish brown; tail bluish black; under tail-coverts brown, margined with grey.

The Plate represents both sexes of the size of life. The plant is the *Opuntia Salmiana*.







THALURANIA REFULGENS, *Coold.*

## THALURANIA REFULGENS, *Gould.*

### Refulgent Wood-Nymph.

*Thalurania refulgens*, Gould in Proc. of Zool. Soc., part xx. p. 9.—Bonap. Rev. et Mag. de Zool. 1854, p. 254.—Reich. Auf. der Col., p. 7.

*Coeligena refulgens*, Reich. Troch. Enum., p. 3.

---

THE bird figured in the accompanying Plate, to which I have given the name of *Thalurania refulgens*, is distinguished from most of the other members of the genus by its large size, its extreme beauty and strongly contrasted markings. In its general style of colouring, as well as in the form and disposition of its gular patch, it is perhaps more nearly allied to the *T. furcata* than to any other species; but independently of its larger size, it is distinguished from that bird by the jet-black colour of its forehead, crown and nape, and its deep steel-black under tail-coverts. It so far exceeds in all its admeasurements the thousands of specimens of *T. furcata* I have seen and examined, that there is no doubt in my mind of its being specifically distinct; while the form of its green throat-mark, which is square or truncate below, separates it at once from the bird I have called *nigrofasciata*; besides which it is of larger size even than that species.

My collection contains two examples of this fine bird, one of which was presented to me by T. F. Erskine, Esq., a gentleman enthusiastically attached to the Trochilidæ, and whose knowledge of the species of this family is perhaps scarcely surpassed by any devotee of this lovely group of birds.

Up to the present time no example of the female has, so far as I am aware, been collected; neither is it in my power to direct the attention of collectors to the native localities of the species, whereby this desideratum might be supplied; in all probability the interior of Demerara and the neighbouring country of the Caraccas is its true habitat.

It will be seen that I have united with this bird one of the most delicate and beautiful flowering plants which America has yet given us; the drawing was made by Mr. Richter from a freshly expanded blossom which flowered in the stove at Berry Hill, near Taplow in Buckinghamshire; and it gives me great pleasure to offer thus publicly my thanks to Mr. Noble, for his kindness in directing this beautiful specimen of the *Dipladenia splendens* to be placed at my disposal for the purpose of figuring; thereby adding another to the many acts of liberality proffered by this gentleman for the furtherance of art and science.

Crown of the head velvety black; throat rich metallic green; breast and shoulders beautiful purplish blue; wings purplish brown; tail black; under tail-coverts steel-black.

Total length, 5 inches; bill, 1; wing,  $2\frac{1}{4}$ ; tail,  $2\frac{1}{4}$ .

The figures are of the natural size.









THALYRANIA TSCHUDI, *Coold*

*J. Gould and H. C. Richter, del. et lith.*

*Hallman & Waller, imp.*

## THALURANIA TSCHUDII, *Gould.*

### Tschudi's Wood-Nymph.

*Trochilus furcatus*, Tschudi, Fauna Peruana, p. 39.

*Thalurania Tschudii*, Gould MS., Sclat. in Proc. of Zool. Soc., part xxvi. p. 460.—Gould in Proc. of Zool. Soc., part xxviii. p. 312.

---

THE present bird would appear, at a first glance, to be identical either with the *Thalurania furcata* or *T. refulgens*; but when compared with those species, it is found to present many differences. It is a larger and more robust bird, and has broader tail-feathers than the former; but it is smaller than the latter, and differs from both in the colouring of the abdomen, which is prussian-blue, while the same part in *T. furcatus* is ultramarine-blue, and in *T. refulgens* violet-blue; from the *T. nigrofasciata*, to which it is also allied, it differs in the truncate form of its green throat-mark.

I am indebted to the Directors of the Museum of Natural History at Neuchatel for permission to examine all the species of Humming-Birds collected by Dr. Tschudi during his travels in Peru; among these was one of the present bird, which was labelled *Trochilus furcatus*, a circumstance which informs us that this is the species described by that gentleman in his 'Fauna Peruana' under that name; as, however, it is quite distinct from the bird to which the term *furcatus* had been previously applied, I have been obliged to give it a new appellation, and have selected that of *Tschudii*, as a just compliment to one who has effected so much in the cause of science.

Mr. Hauxwell sent me fine examples from the Ucayali; it is evident, therefore, that the banks of that river is one of its habitats; in all probability the forests of the inner dip of the Bolivian and Peruvian Andes are also inhabited by it. At present I have never seen a female; but this sex will doubtless be coloured like the females of the other members of the genus, particularly the female of *T. furcata*.

Crown of the head and all the upper surface golden green, inclining to bronzy green on the tail-coverts; throat beautiful green; abdomen prussian-blue; under tail-coverts steel-black, many of the feathers slightly fringed with white; thighs, tarsi, and anal region white; tail steel-black.

The figures are of the natural size. The plant is a *Passiflora*, the specific name of which is unknown to me.







THALURANIA NIGROFASCIATA, *Coold*

*J. Coold and H. C. Richter, del. à l'èp.*

*Hullmandel & Wäitov, Imp.*

# THALURANIA NIGROFASCIATA, *Gould.*

## Black-banded Wood-Nymph.

*Trochilus* (——?) *nigrofasciatus*, Gould in Proc. of Zool. Soc., part xiv. p. 98.

*Thalurania nigrofasciata*, Gould in Proc. of Zool. Soc., part xx. p. 8.—Reich. Auf. der Col., p. 7.—Cab. Mus. Hein., Theil iii. p. 23.

————— *nigrofasciatus*, Bonap. Consp. Gen. Av., p. 76, *Thalurania*, sp. 2.

*Polytmus nigrofasciatus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 62.

*Thalurania nigrifasciata*, Bonap. Rev. et Mag. de Zool. 1854, p. 254.

*Coeligena nigrofasciata*, Reich. Troch. Enum., p. 3. t. delxxxiv. fig. 4506?

*Thalurania viridipectus*, Gould in Proc. of Zool. Soc. 1848, p. 13.—Bonap. Consp. Gen. Av., tom. i. p. 76, *Thalurania*, sp. 3.—Reich. Auf. der Col., p. 7.—Bonap. Rev. et Mag. de Zool. 1854, p. 254.

*Coeligena viridipectus*, Reich. Troch. Enum., p. 3.

---

THERE is not perhaps a better defined group in the great family of Humming-Birds than that to which I have given the generic name of *Thalurania*, since all the species of which it is composed bear a very general resemblance to each other, and all are alike distinguished by an exceedingly beautiful style of colouring, of which blue and green are the prevailing tints; but so variously are these hues disposed in the several species, that each is readily distinguishable from the other. The present bird (*T. nigrofasciata*) is rendered remarkably distinct from its congeners by the deep band of black which crosses the breast and separates the green of the throat from the rich blue of the abdomen. This band, which of course follows the curvature of the base of the throat-mark, is broad and conspicuous in some specimens, while in others it is almost obsolete, a circumstance which induced me at one time to believe that the banded and non-banded birds were two distinct species, and to give to the latter the name of *viridipectus*; an examination, however, of a great number of specimens has since convinced me that both that term and *nigrofasciata* have reference to one and the same bird: *viridipectus*, therefore, which was proposed in 1848, two years after that of *nigrofasciata*, has been placed in the rank of a synonym.

The true habitat of this bird is the forests which border the upper parts of the rivers Amazon and Rio Negro; but it is also found in Bogota; and I have even received specimens in a collection from Quito; whence we may infer that it ranges over a vast extent of country, perhaps over the whole of the eastern dip of the Andes, of Ecuador, and Columbia.

The sexes present the usual differences in colour; the female being clothed in a most sombre livery, particularly on the under surface, a part which is so richly adorned in the male.

Throat lustrous green; edge of the shoulders and abdomen shining blue, separated from the green of the throat by a lunate band of black; head and back of the neck bronze; back and wing-coverts brownish green; wings purplish brown; tail dull steel-blue; bill black.

The female has the head, all the upper surface, and wing-coverts green; wings purplish brown; tail green at the base, passing into steel-blue at the extremity, and with a spot of white at the tip of the two outer feathers; all the under surface light brownish grey; bill black.

The figures are of the natural size. The plant is the *Pilumna fragrans*.









TOTALURANIA VENUSTA, *Gould*

*J. Gould and H.C. Richter, del. et lith.*

*Hellmuth & Weston Imp.*

## THALURANIA VENUSTA, Gould.

### Veraguan Wood-Nymph.

*Trochilus (Thalurania) venusta*, Gould in Proc. of Zool. Soc., part xviii. p. 163.

————— (—————) *puella*, Gould MSS. 1853.

*Thalurania venusta*, Gould in Proc. of Zool. Soc., part xx. p. 9.—Bonap. Rev. et Mag. de Zool. 1854, p. 254.—Reichenb. Aufz. der Colibris, p. 7.

————— *puella*, Bonap. Rev. et Mag. de Zool. 1854, p. 254.—Reichenb. Aufz. der Colibris, p. 7.

---

THE discovery of this new species by the celebrated traveller Warszewicz near the volcano of Chiriqui in Veragua is of twofold interest; first, as adding an additional species to the well-defined genus *Thalurania*, and, secondly, as affording still further evidence that most of the forms at one time considered to be peculiar to the continent of South America proper, have their representatives in the countries lying to the northward at the Isthmus of Panama, generally known as Central America. Besides the specimens procured by M. Warszewicz, I have received others from the same district through M. Verreaux; these latter, although sufficiently perfect for the purpose of figuring, were not in very good condition. M. Warszewicz describes the living bird to be an object of the greatest beauty, and one can readily believe the truth of his assertion, as, unlike every other member of the genus, not only is the crown, but the greater part of the back of the neck, the entire mantle and the shoulders are clothed in a rich livery of purplish blue; in size it is about the same as *T. furcata*, but its rich bluish-black tail is still more deeply forked. No one member of the genus is more scarce in our collections than the *T. venusta*; it is to be hoped therefore that explorers will at no distant date procure us a further supply of this lovely species.

By some accident the name of *puella*, which I originally intended to apply to this species, but for which I substituted that of *venusta*, has found its way into Dr. Reichenbach's and other lists of the Trochilidæ, which I regret, as it tends to produce confusion; I therefore take this opportunity of saying that the two names are synonymous, and that the one here retained—*venusta*—is the one to be adopted.

The entire crown, back of the neck and upper part of the back, shoulders, abdomen and under tail-coverts beautiful shining ultramarine blue; throat and fore part of the neck rich metallic green; wings purplish black; tail blackish blue; bill black.

The figures are of the natural size. The plant is the *Odontoglossum hastilabrum*.







THALURANIA COLOMBICA.

# THALURANIA COLUMBICA.

## Columbian Wood-Nymph.

*Ornismya Colombica*, Bourc. et Muls. Rev. Zool. 1843, p. 2.—Ib. Ann. de la Soc. Sci. de Lyon, 1843, pl. 6.

*Polytmus Columbicus*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 60.

*Thalurania Columbiana*, Gould in Proc. of Zool. Soc., part xx. p. 8.

————— *colombica*, Bonap. Rev. et Mag. de Zool. 1854, p. 254.

————— *columbica*, Reichenb. Aufz. der Col., p. 7.

---

HOWEVER highly M. Warszewicz may have extolled the loveliness of the *Thalurania venusta*, it scarcely exceeds that of the bird here represented, which must also be regarded as a species of great beauty and elegance. As its name implies, its native country is Columbia, and the chief mart whence specimens are sent to Europe is that great emporium of bird-skins, Santa Fé de Bogota. It differs from all the other known species in its small neat blue cap, and the almost total absence of blue on the back, this colour being more confined to the shoulders; I observe, too, that the green colouring of the throat descends farther down the chest than in *T. furcatus*, and that this mark, moreover, assumes a more rounded form on its lower margin; the bird is also somewhat larger in size.

The great number of specimens that are sent to Europe—principally to France—testify that the bird is very abundant in the districts visited by the Indian collector. Fortunately, this bird has received only a single specific appellation; but it has been placed in three distinct genera.

The male has the crown of the head, a band across the centre of the back, the lesser wing-coverts, the under wing-coverts, the abdomen, flanks and under tail-coverts of a lovely blue; back of the head and neck, back and greater wing-coverts black in some lights, deep green in others; throat and breast shining grass-green; wings purplish brown; upper tail-coverts and tail black, glossed with steel-blue.

The female is golden green above, grey beneath; tail green at the base, the apical portion steel-blue, all but the two middle feathers tipped with greyish white.

The figures are of the natural size. The plant is the *Gualtheria bracteata*.









*THALURANIA VERTICEPS, Gould*

*J. Gould and H.C. Richter, del. et lith.*

*Hillman and Westcott, Inc.*

## THALURANIA VERTICEPS, *Gould.*

### Green-crowned Wood-Nymph.

*Trochilus (Thalurania) verticeps*, Gould, in Jard. Cont. to Orn. 1851, p. 79. pl. 71.

*Thalurania verticeps*, Gould, in Proc. of Zool. Soc., part xx. p. 9.—Bonap. Rev. et Mag. de Zool. 1854, p. 254.

*Trochilus Fannyi*, Bourc. et De Latt. Rev. Zool. 1846, p. 310.

*Hylocharis Fannyi*, Gray and Mitch. Gen. of Birds, vol. i. p. 114, *Hylocharis*, sp. 20.

*Thalurania Lydia*, Reichenb. Aufz. der Colibris, p. 7.

*Riccordia verticeps*, Reichenb. Aufz. der Colibris, p. 8.

---

It would appear that, as we pass along the great chain of the Andes from north to south, or *vice versa*, every few degrees of latitude present us with a distinct species of *Thalurania*; I say distinct, because in no group are the specific characters more decidedly different or more clearly defined than in the members of the present genus. Of all the known species, the *T. verticeps*, a native of Ecuador and Peru, is the most southern representative of the form in those elevated regions. The specimens I possess were principally procured by Professor Jameson in the neighbourhood of Quito. I have also received others from the Napo, and M. Warszewicz obtained examples in the Cordilleras of Quindios. It is a fine and truly elegant species, differing from all others in the resplendent glittering green of its crown, bounded posteriorly in some specimens by a narrow mark of blue, occupying a single, or at most two or three feathers. On the shoulder the purplish blue is most brilliant, while in the centre of the back the colour is generally absent. The specimens collected at Quindios are smaller than those procured in the neighbourhood of Quito and the Napo, and accord precisely with the bird to which M. Bourcier has given the name of *Fanny*. Some persons might be inclined to believe that these birds are distinct, but as they merely differ in size, I shall consider them to be one and the same until corroborating evidence of their being two species has been received. The specific term *Fanny* given to this bird by M. Bourcier having been previously assigned by Lesson to another member of the family, Dr. Reichenbach substituted in 1853 the appellation of *Lydia*; *verticeps* had, however, been given to it by myself two years before, consequently it has the priority, and is necessarily the one adopted. The female, of which I have seen several examples, assimilates very closely to the females of *T. furcata* and the other smaller members of the group; the grey of the throat is, however, rather more circumscribed.

Forehead and anterior portion of the head occupied by a round spot of shining green; throat and breast shining green; back of the head, neck, back, rump and upper tail-coverts dark glossy green, with a wash of bronze on the back of the neck; shoulders metallic blue, passing into green; wings purplish black; tail greenish black, and considerably forked; abdomen dark glossy blue; under tail-coverts greenish blue, margined with white; tarsi clothed with greyish-white feathers; bill black; feet fleshy brown.

The figures are of the natural size. The plant is the *Clavija ornata*.







THALURANIA ERYTHRAEA.

## THALURANIA ERIPHILE.

### Brazilian Wood-Nymph.

*Ornismya Eriphile*, Less. Hist. Nat. des Ois.-mou., Supp. p. 148. pl. 25.—Ib. Ind. Gen. et Syn. des Ois. du gen. *Trochilus*, p. xxij.

*Polytmus Eriphile*, Gray and Mitch. Gen. of Birds, vol. i. p. 108, *Polytmus*, sp. 64.

*Thaluranian eryphila*, Bonap. Rev. et Mag. de Zool. 1854, p. 254.

————— *Eryphile*, Reichenb. Aufz. der Colibris, p. 7.

————— *eriphile*, Bonap. Consp. Gen. Av., p. 77, *Thaluranian*, sp. 7.—Gould in Proc. of Zool. Soc., part xx. p. 9.

---

THE *Thaluranian Eriphile* is one of the two Brazilian representatives of the genus, the other being the *T. glaucopsis*; and these, so far as I am aware, are the only species of the form inhabiting at least the eastern part of that great country. The present bird is tolerably common both in Minas Geraes and Bahia, as is proved by the great numbers that are sent to Europe from those districts. It is a stout robust bird, not so graceful in form as many of its allies. Although the colouring is showy and attractive, the green of the crown must yield in brilliancy to that of its mountain representative, the *T. verticeps*.

In the *T. Eriphile* the entire face, ear-coverts and throat are uniform uninterrupted green, while the under surface is beautiful smalt-blue; and the shoulders are but slightly tipped with this hue, in which respect it differs from all its allies.

Although an inhabitant of that comparatively well-known country, Brazil, I find little or nothing has been recorded respecting its history, which is very singular, considering the numbers of scientific travellers that have visited that country.

Forehead, face and throat shining grass-green; upper surface deep green, washed with blue on the tips of the shoulders, and with bronze on the greater coverts of the wing and the upper coverts of the tail; under surface beautiful blue; wings purplish brown; tail bluish black.

The figures are of the natural size. The plant is the *Galipea macrophylla*.









THALURANIA? WAGLERI.

## THALURANIA WAGLERI.

### Wagler's Wood-Nymph.

*Ornismya Waglerii*, Less. Hist. Nat. des Ois. Mou., p. 203. pl. 73.—Ib. Traité d'Orn., p. 274.—

Ib. Ind. Gen. et Syn. des Ois. du gen. *Trochilus*, p. xxi.

*Le Saphir-émeraude*, Aud. et Vieill. Ois. dor., tom. i. p. 75. pl. 36.

*Trochilus Waglerii*, Jard. Nat. Lib. Humming Birds, vol. ii. p. 83. pl. 16.

*Cynanthus Waglerii*, Jard. Nat. Lib. Humming Birds, vol. ii. p. 147.

*Hylocharis Wagleri*, Gray and Mitch. Gen. of Birds, vol. i. p. 114, *Hylocharis*, sp. 14.

*Thalurania Wagleri*, Bonap. Consp. Gen. Av., p. 77, *Thalurania*, sp. 6.—Reichenb. Aufz. der Col., p. 7.—Bonap. Rev. et Mag. de Zool. 1854, p. 254.

---

It has long been a question with me, as I am sure it must have been with every person who has made the *Trochilidæ* their study, to which genus of the family this species should be assigned: some Trochilidists may hereafter go so far as to separate it from all the genera at present proposed, and make it the type of a new one; but, after an examination of the female, which I have lately received through the kindness of M. Bourcier, I have little hesitation in associating it with the other Wood-Nymphs of the genus *Thalurania*, a genus comprising many species widely dispersed over the continent of America. The present bird is the only one of them that has the throat and the crown of the head blue. Its native habitat is the northern part of Brazil, but it may perhaps visit Guiana. It is by no means a common bird, and unfortunately most of the specimens hitherto sent to Europe have been more or less defective.

The male has the crown of the head, face, chin and throat very rich deep blue; all the upper surface and wing-coverts shining bronzy-green; under surface shining dark grass-green; wings very dark purplish-brown; upper tail-coverts and tail very dark steel-blue; bill black; the basal portion of the under mandible fleshy.

The female has the crown of the head and greater wing-coverts green; upper surface and lesser wing-coverts bronzy-green; upper tail-coverts bluish-green; wings purplish-brown; tail steel-blue glossed with green, and the two outer feathers on each side tipped with white; lores and ear-coverts brown; under surface brownish-white, washed with bronze on the flanks; upper mandible dark brown; under mandible fleshy-brown.

The Plate represents the two sexes of the natural size. The plant is the *Burlingtonia decora*.







PANOPLITES JARDINI.

# PANOPLITES JARDINI.

## Jardine's Panoplites.

*Trochilus Jardini*, Bourc. Comptes rendus de l'Acad. des Sci., tom. xxxii. p. 187.

*Florisuga jardini*, Bonap. Consp. Troch. in Rev. et Mag. de Zool. 1854, p. 253.

---

THE accompanying Plate is intended to represent one of the most beautiful of the Trochilidæ yet discovered; I say intended, for whatever success may have attended my attempts to convey an idea of the beauty of these exquisite living gems, I must confess that the means at my command are utterly inadequate to do justice to the present species, whose crown, back, shoulders and chest-sides are clothed with hues of metallic blue and green of such resplendent brilliancy, that it is quite impossible to represent them upon paper; those therefore of my readers who may wish to view them, must seek an opportunity for attentively examining the birds themselves.

The native country of this glittering gem is the temperate regions of Ecuador, where, in certain localities, it is tolerably common. It is still, however, a rare bird in Europe, and there are few collections which comprise examples, and none, I believe, so fine as those contained in my own. For these I am indebted to my good friend Professor Jameson, of Quito, a gentleman of high scientific attainments, and who has largely contributed to our knowledge of the Zoology and Botany of the rich district in which he resides. That he may have still a long life to enjoy, is, I am sure, the sincere wish of all his scientific friends and correspondents; among whom is included one whose name is familiar to every zoologist, as that of an ardent lover of natural history, and who has spent the greater part of his life in the promotion of its cause; need I add that I allude to Sir William Jardine, Bart., after whom this lovely bird has been named, by M. Bourcier, of Paris, as a just tribute to his merits as a naturalist.

M. Bourcier, who first brought the species to Europe, states that the bird inhabits the hot regions of the great forests in the environs of Nanégan. In the letter accompanying the specimens transmitted by Professor Jameson, he says: "Having from time to time procured from collectors a considerable number of fine species of *Trochilidæ* from an extensive forest about two days' journey distant from Quito, I could no longer resist my inclination to visit that part of the country; and as I particularly wished to ascertain the precise localities frequented by the more interesting species, I determined at once to carry my project into effect, and only regretted that you were not here to accompany me. You are aware that explorations in these countries are achieved at the expense of great bodily fatigue; the journey *on foot* usually commences at the upper boundary of the forest, say at 10,000 feet, and is continued downwards to that of 4000 above the sea-level. The Trochilidæ observed at the first-mentioned elevation, were *Eriocnemis Luciani*, *Aglaëactis cupripennis* and *Helianthea Lutetiæ*, all feeding on the flowers of the *Syphocampylus giganteus*. A little lower down, another species, unknown to me, frequented the flowers of different species of *Fuchsia*; and at a station 6000 feet, where I remained for the night, I saw for the first time that magnificent species named *Jardini*. It was by no means uncommon, and I shot a splendid specimen on a tree belonging to the family *Myrtaceæ*, which appeared to be its favourite haunt. From the height of the tree I could not reach the blossoms; all I could do was to procure a branch with the leaves, which are rather large."

Crown of the head shining violet-blue; back and sides of the neck velvety black; upper surface luminous metallic-bluish verditer green; wing-coverts shining yellowish green, passing into bronzy green towards the primaries; wings dark brownish purple; throat, breast and abdomen violet-blue, bordered on the sides of the neck and flanks with glittering green; under surface of the shoulder rust-red; lower part of the flanks, vent and under tail-coverts dusky black, the latter tipped with white; two centre tail-feathers dark bronzy purple, the remainder white, each margined externally and tipped with dull greenish black; upper tail-coverts dull bluish purple; bill black.

After a careful examination of the specimens, I believe that the sexes of this and the other species of the genus do not differ in their plumage.

The figures are of the natural size. The plant is a species of *Heliconia*.









PANOPLITES FLAVESCENS.

*Should send Mr. Richter del et lith*

*Hallman del & Walker, Imp*

## PANOPLITES FLAVESCENS.

### Yellow-fronted Panoplites.

*Trochilus flavescens*, Lodd. in Proc. of Comm. of Sci. and Corr. of Zool. Soc., Part xi. p. 7.

*Ornismia paradisea*, Boiss. Rev. Zool. 1840, p. 6.

*Mellisuga flavescens*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 26.

*Amazilius flavescens*, Bonap. Consp. Gen. Av., p. 78, *Amazilius*, sp. 9.

*Clytolæma flavescens*, Bonap. Consp. Troch. in Rev. et Mag. de Zool. 1854, p. 254.

---

IN all probability the first example of this bird which reached this country was the one forwarded to me direct from Popayan in 1830. It was from this specimen that Mr. Loddiges took his description of the species, which appeared in the Proceedings of the Committee of Science and Correspondence of the Zoological Society for 1832. That the bird enjoys a wide range of habitat is evidenced by the circumstance of its being found in more or less abundance in various and distant localities along the line of the Western Andes: thus, as already mentioned, I have myself received it from Popayan; M. Bourcier met with it in Ecuador; it is one of the commonest of the numerous species sent from Bogota; and that it inhabits countries still farther north, we know from the circumstance of M. Warszewicz having collected specimens near the Isthmus of Panama. Mr. Mark, Her Majesty's Consul at Bogota, informs me that it is found about two days' journey from that city, particularly near the villages of Guaduas and Fusugasuga, and that it is very generally dispersed over this elevated region at an altitude of from three thousand five hundred to six thousand feet above the sea-level, where the thermometer ranges from seventy to eighty degrees.

The *Panoplites flavescens* is one of the commonest of the Andean Humming Birds that is sent to Europe. Differences occasionally occur in the colouring of the specimens we receive, some having the crown and throat splendid metallic greenish yellow, relieved by a darker olive-green hue on the neck and chest, and other specimens, probably younger birds, having a lighter and more uniform cast of plumage. In form the bird is precisely like the *P. Jardini*, and, as will be seen on comparing the figures of the two species, has a similarly marked and lightly coloured tail. I have not been able to detect any difference in the colouring of the sexes, and I believe they are only to be distinguished by actual dissection.

Crown of the head and throat luminous yellowish green; plumage of the upper and under surface and wing-coverts dark green; wings brownish purple; under surface of the shoulder and the axillæ rufous; vent buffy white; thighs clothed with somewhat lengthened white feathers; central tail-feathers greenish bronze, the remainder delicate buff, broadly margined externally and round the tip with greenish bronze; bill black.

The figures are of the natural size.







PANOPLITES MATTHEWSI.

*Stoull and H.C. Richter, del et lith*

*Hullmandel & Walton, Imp*

## PANOPLITES MATTHEWSI.

### Matthews' Panoplites.

*Trochilus Matthewsii*, Lodd. MSS. Bourc. in Proc. of Zool. Soc. Part XV. p. 43.

*Mellisuga Matthewsii*, Gray and Mitch. Gen. of Birds, vol. i. p. 112, *Mellisuga*, sp. 27.

*Clytolæma matthewsi*, Bonap. Consp. Troch. in Rev. et Mag. de Zool. 1854, p. 254.

---

THE rich country of Peru is the native habitat of this very rare species ; I say very rare, because as yet few examples have been sent to Europe ; there is, however, a very fine one in the Collection of the Jardin des Plantes at Paris, and I have been fortunate enough to procure three or four for my own. One of these was sent to me by Don Manuel Villavicencio, from Quejos in the neighbourhood of the Napo, the others were killed on the banks of the Marañon by M. Warszewicz.

The name of Matthews, to whom this bird has been dedicated, will live as long as the study of Ornithology holds a place among the natural sciences, as the discoverer of the wonderful Humming Bird called *Loddigesia mirabilis*, which is still unique, and forms the chief gem of the Loddigesian Collection ; I regret to add that the life of its discoverer fell a victim to the pestiferous region in which it was found.

Of the habits and economy of the *Panoplites Matthewsii*, nothing is at present known ; they are doubtless very similar to those of its near allies the *P. Jardini* and *P. flavescens*, but of these, unfortunately, little has been recorded. I believe the sexes to be similarly coloured, all the examples I have seen being precisely alike.

Feathers of the head, neck and throat rich shining green, the basal portion of the lower feathers of the throat being chestnut-red ; wing-coverts, back and upper tail-coverts bronzy green ; under surface of the shoulders and under surface of the body rich chestnut-red ; wings purplish brown ; two central tail-feathers greenish bronze ; the remainder cinnamon-red tipped with greenish bronze ; bill black.

The figures are of the natural size.









PLATE 1. HUMMINGBIRDS.

# FLORISUGA MELLIVORA.

Jacobin.

- Trochilus mellivorus*, Linn. Syst. Nat., tom. i. p. 193.—Gmel. Edit., tom. i. p. 499.—Borowsk., tom. ii. p. 159.—Lath. Ind. Orn., tom. i. p. 310.—Jard. Nat. Lib. Humming Birds, vol. i. p. 139. pl. 30.
- White-bellied Humming-Bird*, Edw. Glean., pl. 35. fig. 1.—Lath. Gen. Syn., vol. ii. p. 705.—Ib. Gen. Hist., vol. iv. p. 324.
- La Jacobine*, Buff. Pl. Enl. 640. fig. 2.—Ib. Hist. des Ois., tom. vi. p. 34.
- L'Oiseau mouche à collier, dit La Jacobine*, Aud. et Vieill. Ois. dor., tom. i. p. 55. pl. 23.
- La Jacobine variée*, Aud. et Vieill. Ois. dor., tom. i. p. 56. pl. 24.
- White-collared Humming-Bird*, Shaw, Gen. Zool., vol. viii. p. 320.
- Mellisuga Surinamensis torquata*, Briss. Orn. tom. iii. p. 713.—Ib. 8vo. tom. ii. p. 35.—Gerin., tom. iv. t. 406. fig. 1.
- *Surinamensis*, Steph. Cont. of Shaw's Gen. Zool., vol. xiv. p. 243.
- Ornismya mellivora*, Less. Hist. Nat. des Ois., p. 90. pl. 21 male, pl. 22 female.
- Topaza mellivora*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 6.
- Florisuga mellivora*, Bonap. Consp. Gen. Av., p. 73.
- Trochilus fimbriatus*, Linn. Syst. Nat., tom. i. p. 493.—Lath. Ind. Orn., tom. i. p. 312.
- Mellisuga Cayenensis gutture naviro*, Briss. Orn., tom. iii. p. 706. pl. xxxvi. fig. 2.—Ib. 8vo. tom. ii. p. 33.
- Oiseau-mouche à gorge tachetée*, Buff. Hist. des Ois., tom. vi. p. 31.—Pl. Enl. 276. fig. 2.—Aud. et Vieill. Ois. dor., tom. i. p. 53. pl. 22.
- Spotted-necked Humming-Bird*, Lath. Gen. Syn., tom. ii. p. 772.—Ib. Gen. Hist., vol. iv. p. 325.
- White-collared Humming-Bird*, both var., Shaw, Gen. Zool., vol. viii. p. 321.
- Topaza fimbriata*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 7.

---

THIS species is one of the most widely diffused of the *Trochilidæ* with which I am acquainted; it is also one of the oldest known, and consequently one of the species most abundant in our collections: I have specimens from Guiana, Trinidad, Cayenne, Sta Fé de Bogota and Peru; and Mr. Wallace, who is seeking Humming-Birds expressly for my work, has lately sent numerous specimens of both sexes from Cobati and Guia on the Upper Rio Negro,—a tolerable evidence that the species ranges over all the districts lying between the distant countries of Cayenne and Peru. It appears to be better adapted for low and fluviate countries than for those of a more elevated character; for Mr. Wallace, writing from the Rio Negro, says, “Although I have come seventeen hundred miles from Para into the interior of the country, I am not more than one or two hundred feet above the level of the sea.” It is much to be regretted that no account whatever has been recorded of its habits, &c.

A great diversity exists in the colouring of this species, and much has yet to be learnt as to the changes to which it is subject; examples, apparently adult, have in some instances the head and neck intense blue, while in others the same parts are strongly tinged with green: I also have specimens in which the blue colouring is interrupted by a mark of rufous extending down the sides of the neck; and others, the sex of which has been ascertained by dissection to be feminine, which have a considerable amount of blue pervading the throat, and only a trace of the white nuchal band; while others again are characterized by the mottled dress represented in the lower figure of the accompanying Plate: the colouring of the tail presents a still greater diversity, varying from a pearly white, with a narrow edging of purplish brown, to a dark bronzy green, with a brownish black band towards the extremity, and the outer feathers broadly tipped with white.

His Excellency Lord Harris, Governor of Trinidad, has lately brought fine examples from thence to this country and presented them to the Zoological Society of London; and his Lordship has kindly promised that on his return to the seat of his government he will pay considerable attention to the natural history of the *Trochilidæ* inhabiting that fine island, and communicate the result of his observations for the enrichment

of the present work ; I trust, therefore, before its close to clear up the confusion which at present exists with respect to the changes of plumage to which this and other species are subject.

Some adult males have the head, neck and breast rich deep shining blue margined posteriorly with green, a broad lunate mark of white at the nape of the neck ; wing-coverts, back, the very lengthened tail-coverts and the flanks shining dark grass-green ; wings deep purplish brown ; tail white, very narrowly edged and more broadly tipped with purplish brown ; abdomen, thighs and under tail-coverts white ; bill black ; feathers clothing the tarsi in front black, behind white.

Other adult males have the head and neck greenish blue, the green hue increasing in intensity posteriorly ; a broad band across the breast and the flanks shining olive-green, and the upper surface and tail-coverts shining golden green.

And again, other males, perhaps not fully adult, have the head and neck greenish blue ; the white nuchal mark less extensive ; a like diversity in the hue of the upper surface, some being green and others bronzy ; the tail white, much more deeply tipped with purplish brown, the extent of the purplish brown tipping being greatest on the central feathers, and gradually decreasing towards the outer ones.

In another, which may be a young male, the general colouring is similar, but the tail is deep bronzy green passing into black near the extremity, with the outer three feathers on each side tipped with white, broadest on the outer one, and successively less on the two inner ones ; the basal portion of the external web of the outer feather is also white ; under tail-coverts greenish grey, with a broad crescent of bluish black near the extremity, and tipped with white.

In the female, or perhaps the young, the head is greenish brown ; upper surface mottled glossy green and coppery ; tail as in the last described ; throat variegated, the centre of each feather being brown surrounded with a fringe of white ; under tail-coverts greenish grey, with a crescent of black near the extremity, and tipped with white. It is to the bird in this state that the term *fimbriatus* has been applied.

The Plate represents two males and a supposed female ; the beautiful plant figured is the *Erythrina umbrosa* of Humboldt and Bonpland.





## FLORISUGA FLABELLIFERA, *Gould.*

### Great Jacobin.

*Trochilus* (—?) *flabelliferus*, Gould in Proc. of Zool. Soc., part xiv. p. 45.

*Florisuga flabellifera*, Bonap. Consp. Gen. Av., p. 74.

---

THE chief difference between this species and the *Florisuga mellivora* consists in its far greater size and in the browner colouring of the tips of the tail-feathers: the extent of its range is at present unknown, but we have positive evidence that it is by no means uncommon in the island of Tobago; numerous specimens having been sent from thence by Mr. Kirk to Sir William Jardine, Bart., to whom I am indebted for the specimens illustrated in the present work; I have also examples from the Orinoco, and others from different localities in South America which are at present unknown to me.

The only information I have acquired respecting its habits is contained in the following brief note communicated to Sir William Jardine, Bart., by Mr. Kirk:—"It is said to be found chiefly in low marshy situations among the plantain bushes, in company with the Sabre-wing (*Campylopterus ensipennis*); and to feed constantly on the wing."

Head, neck and chest rich deep shining blue; back, rump, upper tail-coverts and flanks shining green; a broad crescent-shaped mark at the nape of the neck, abdomen, under tail-coverts and tail, pure white, the feathers of the latter bordered at the extremity with purplish brown; wings purplish brown; bill black.

Some examples have a stripe of reddish buff running down the sides of the face, but do not otherwise differ in colouring.

The female has the upper surface coppery bronze; a trace of the white mark on the nape; wings purplish brown; tail bronzy green passing into black near the extremity, with the three outer feathers tipped with white, the white tipping being greatest on the outer feather and successively less on the two inner ones; throat mottled brown; tail-coverts greenish grey, with a crescent of black near the extremity, and tipped with white.

This species appears to be subject to the same variations of plumage as the *Florisuga mellivora*; so much so indeed, that a description of the different styles of plumage of the one would be nearly as descriptive of those of the other.

The Plate represents two males and a female on one of the plants called *Bois immortel* by the settlers.









FLORISULA AFRICA.

## FLORISUGA ATRA.

### Pied Jacobin.

- Trochilus ater*, Pr. Max. Trav., vol. i. p. 322.  
——— *atratus*, Licht. Verz. der Doubl., p. 14.  
——— *niger*, Swains. Zool. Ill. 1st Ser., vol. ii. pl. 82.  
——— *fuscus*, Vieill. Nouv. Dict. d'Hist. Nat. 2nd edit. tom. vii. p. 348.—Ib. Ency. Méth. Orn., part ii. p. 552.  
*Ornismya lugubris*, Less. Hist. Nat. des Ois. Mou., p. 132. pl. 38 male, pl. 39 female.—Less. Traité d'Orn., p. 275.  
*Colibri leucopygius*, Spix, Av. Sp. Nov. Bras., tom i. p. 81. t. lxxxii. fig. 3.  
*Negro Humming-Bird*, Lath. Gen. Hist., vol. iv. p. 312.  
*Mellisuga ater*, Steph. Cont. of Shaw's Gen. Zool., vol. xiv. p. 243.  
*Topaza atra*, Gray and Mitch. Gen. of Birds, vol. i. p. 110, *Topaza*, sp. 4.  
*Florisuga atra*, Bonap. Consp. Gen. Av., p. 74.
- 

THE true, if not the restricted, habitat of this species is the eastern portion of Brazil, over which it is distributed from Pernambuco on the north to Rio Janeiro on the south, from which latter locality and Bahia few collections are sent to Europe which do not contain specimens; consequently it is one of the commonest birds in our museums. The changes of plumage to which it is subject are less diversified than those of *Florisuga mellivora* and *F. flabellifera*: when fully adult the female appears to differ from the male only in her smaller size, and in the black colouring of her head and breast being less pure, or in other words, slightly tinged with brown; a rufous moustache, however, commencing under the eye and running down the sides of the neck and sometimes pervading the ear-coverts, is found to exist in some specimens. It will be recollected that this feature is also observable in some examples of the other two species, but whether it is indicative of the female sex or of immaturity I am unable to say; a diversity is also found to exist in the extent of the black tipping of the lateral tail-feathers, some being merely bordered with purplish black, while others have that hue extending over somewhat more than their apical half.

The male has the whole of the upper and under surface and tail-coverts deep velvety black, glossed on the tips of the feathers with a bronzy hue; wing-coverts and rump tinged with green; wings purplish brown; two centre tail-feathers black, with bronzy green reflexions; lateral tail-feathers white, with a broad band of purplish black at the tip; lower part of the flanks white; tarsi purplish black in front, white behind; bill black.

The supposed female is similar in colouring, but is of a browner hue.

The figures are of the natural size: the plant is a species of *Oncidium*, common in Brazil.







MICROCHERA ALBOCORONATA.

# MICROCHERA ALBOCORONATA.

## Snow-cap.

*Mellisuga albo-coronata*, Laur. Ann. Lyc. New York, vol. vii. 1855, p. 137. pl. iv.

---

IN figuring this little Humming-bird I have the pleasing task of bringing before the notice of my readers one of the most singular species of the family that has been discovered for many years, and of recording my acknowledgements to a most liberal and highly scientific gentleman of the western world. It is to Mr. George N. Laurence of New York, then, that my thanks are due, not only for the gift of the only example of this new bird that graces my collection, but for much kindness and attention during my visit to America. Independently of an intimate acquaintance with other ornithological groups, Mr. Laurence is an excellent Trochilidist, and possesses one of the finest collections of the *Trochilidæ* out of Europe.

On instituting an examination and comparison of this bird with the other forms of the family, I at once perceived that it differed in its characters from every one of them, and, consequently, that it was necessary to constitute it the type of a new genus, and with the kind assistance of P. L. Sclater, Esq., I have instituted that of *Microchera* for its reception.

The following extract from Mr. Laurence's paper on this species, published in the "Annals of the Lyceum of New York" as above quoted, comprises all that is at present known respecting it:—

"In form comparatively short and stout; bill straight and slender, the nostrils hid by the frontal feathers; the wings extend a little beyond the tail, which is slightly rounded; outside of tarsi clothed for half their length with hair-like feathers; the hind toe as long as the outer one.

"*Adult*.—Front and crown silky white, forming a flattened crest, projecting over the sides of the head, the feathers of which (although not lustrous) have the scale-like form of metallic ones; all the upper and under plumage is of a glossy blue-black, having on the neck and upper surface metallic reflections of cupreous red, most conspicuous on the lower part of the back; wings purplish black; wing-coverts slightly bronzed with green; on the chin is a small tuft of feathers, diverging on each side, of a dull green, fringed with white; the two central tail-feathers are deep purple, the others are white at the base for two-thirds of their length on the lateral feathers, increasing to three-quarters on the others, with a terminal band of bluish black edged with white; the outer margins of the outside tail-feathers are black; the upper tail-coverts have crimson-purple reflexions, the lower are white; in the dried specimen the upper mandible is black, the lower brownish yellow; the feathers on the tarsi are brown, terminating with white; tarsi and upper surface of feet brown, underneath the feet are yellow.

"*Young*.—Two specimens of young birds have the white crest-feathers appearing next the bill and along the edges of the crown, the centre of the crown being dull metallic green; the black of the under surface is intermixed with white; the upper plumage is green, with crimson reflexions on the rump; the tail is marked the same as in the adult, except in being more tipped with white.

"Length,  $2\frac{1}{2}$  inches; bill,  $\frac{1}{2}$ ; wing,  $1\frac{5}{8}$ ; tail,  $\frac{7}{8}$ . The young do not differ much in size from the adult.

"*Habitat*.—Veraguas, New Grenada.

"At first view the full-plumaged bird has the appearance of being only black and white, as the metallic reflexions are not very observable except on examination.

"It is a very small species, and, as far as I have been able to ascertain, is unique among its kindred in having the crown entirely white.

"The specimens were presented to me by Dr. J. K. Merrit, who has furnished, in the note which is given below, a very interesting account of their habits.

"It was in the autumn of 1852, while stationed in the district of Belen, Veraguas, New Grenada, that I obtained several specimens of this diminutive variety of the Humming-bird family.

"The first one I saw was perched on a twig pluming its feathers. I was doubtful for a few moments whether so small an object could be a bird, but upon close examination I convinced myself of the fact and secured it. Another I encountered while bathing, and for a time I watched its movements before shooting it; the little creature would poise itself about three feet or so above the surface of the water, and then as quick as thought dart downwards, so as to dip its miniature head in the placid pool; then up again to its original position, quite as quickly as it had descended.

"These movements of darting up and down it would repeat in rapid succession, which produced not a moderate disturbance of the surface of the water for such a diminutive creature. After a considerable number of dippings, it alighted on a twig near at hand, and commenced pluming its feathers."

The Plate represents a male and a female of the size of life. The plant is the *Dichorisandra picta*.







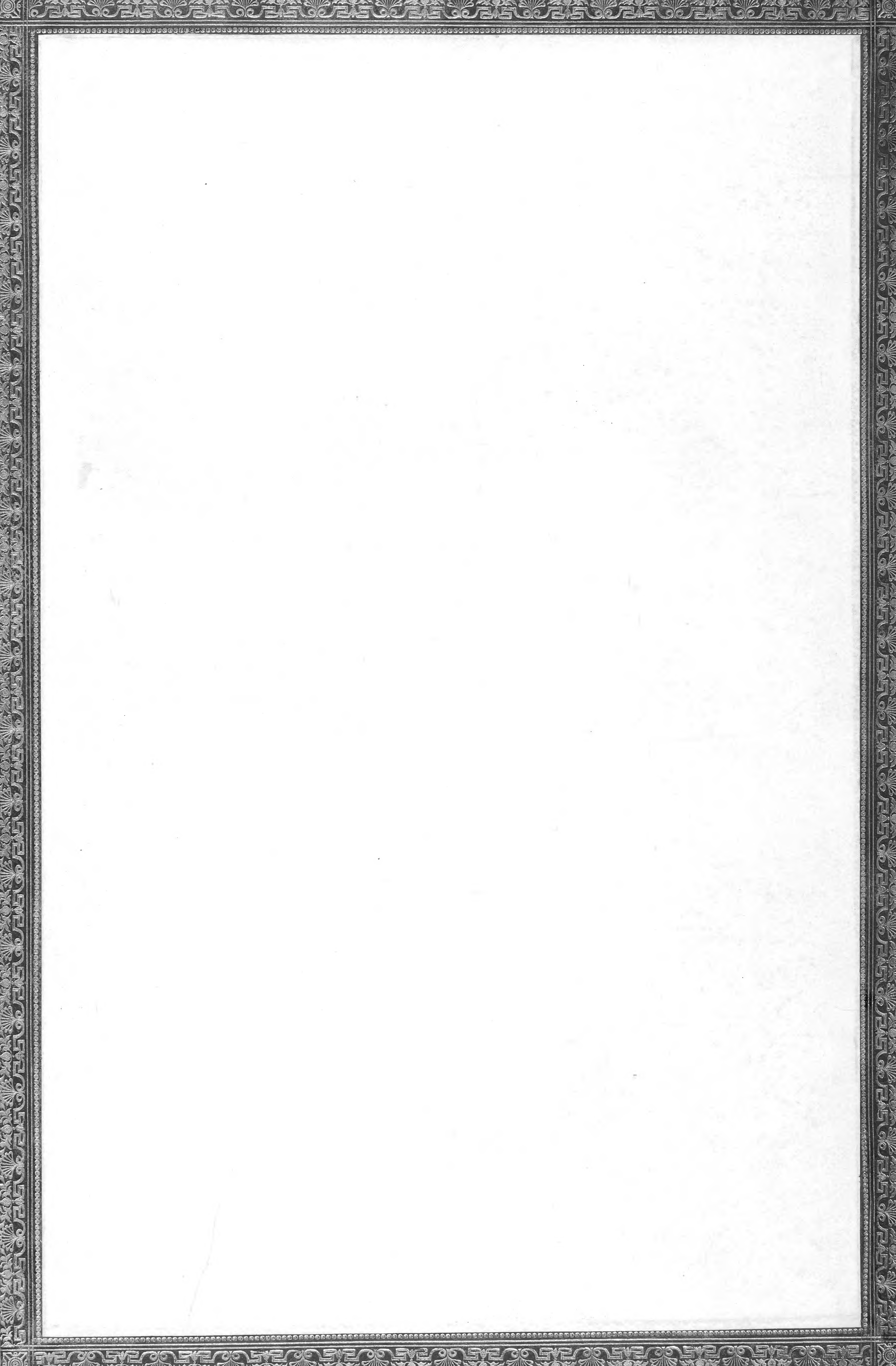












SMITHSONIAN INSTITUTION LIBRARIES  
3 9088 00993 9612