

No. 11

G. Nicholls.

No. IV. OF PART III.]

[PRICE 10s.

THE
ZOOLOGY
OF
THE VOYAGE OF H.M.S. BEAGLE,
UNDER THE COMMAND OF CAPTAIN FITZROY, R.N.,
DURING THE YEARS
1832 TO 1836.

PUBLISHED WITH THE APPROVAL OF
THE LORDS COMMISSIONERS OF HER MAJESTY'S TREASURY.

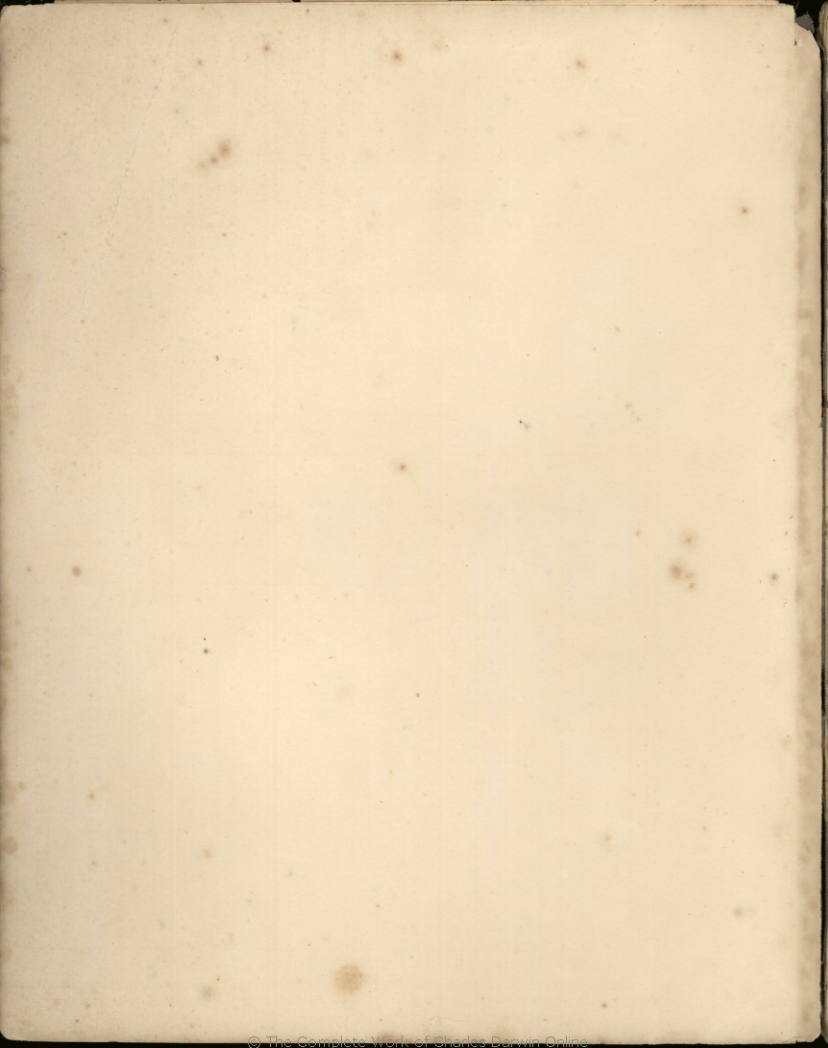
Edited and Superintended by
CHARLES DARWIN, ESQ. M.A., F.R.S., Sec. G.S.
NATURALIST TO THE EXPEDITION.

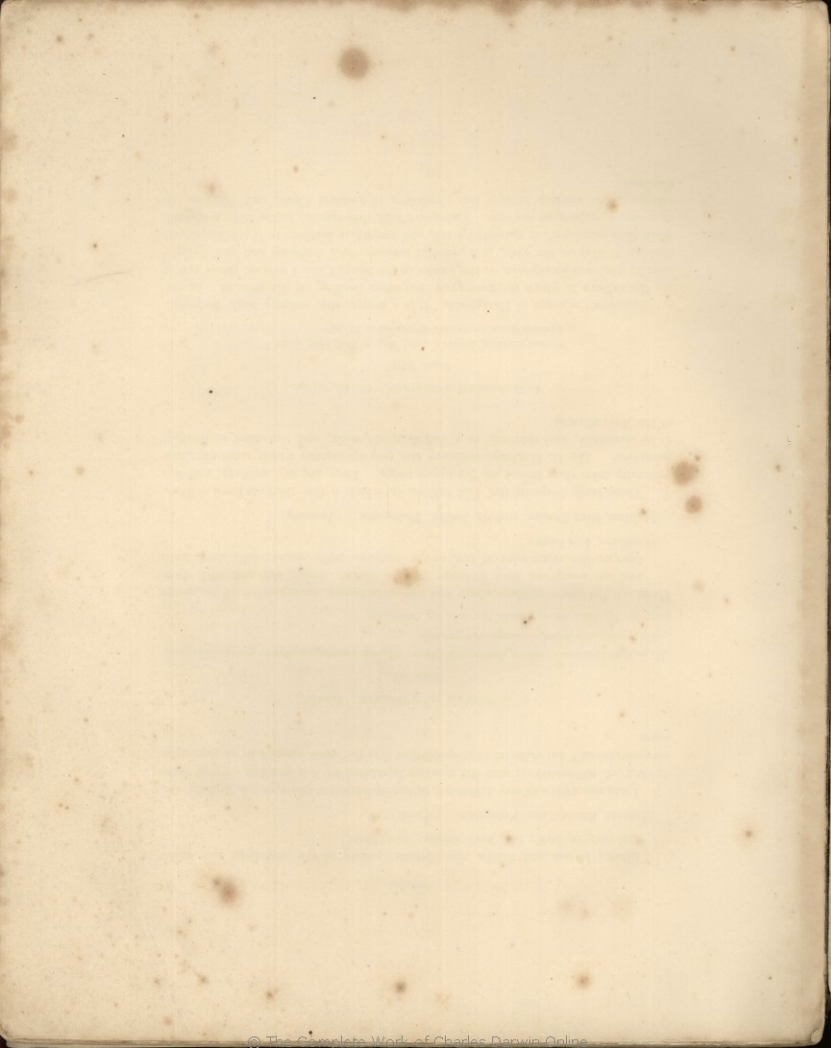
BIRDS,
BY
JOHN GOULD, ESQ. F.L.S.
WITH A NOTICE OF THEIR HABITS AND RANGES,
BY CHARLES DARWIN, ESQ.

LONDON:
SMITH, ELDER AND CO. 65, CORNHILL.
MDCCCXXXIX.

XI.

Nov.





Faint, illegible text at the top of the page, possibly a header or title.

Second block of faint, illegible text.

Third block of faint, illegible text.

Fourth block of faint, illegible text.

Fifth block of faint, illegible text.

Sixth block of faint, illegible text.

Seventh block of faint, illegible text.

Eighth block of faint, illegible text.

Ninth block of faint, illegible text.

black; breast and flanks olive brown; centre of the abdomen and under tail-coverts, buff; bill, horn colour; feet, black.

Habitat, Santa Cruz, Patagonia. (*April*.)

I am not aware of any difference in habits between this species, and the following (*A. micropterus*); and the country inhabited by it is similar. From these circumstances I am induced to suspect, that it is the same species in an immature state.

3. AGRIORNIS MICROPTERUS. *Gould*.

Plate XII.

M. pallidè brunneus, subtus flavescenti-albus; alarum caudæque plumis griseo-marginatis; gutturis albis, brunneo-marginatis.

Long. tot. $9\frac{7}{8}$ unc.; *ala*, $4\frac{1}{2}$; *cauda*, $2\frac{1}{2}$; *tarsi*, $1\frac{1}{2}$; *rostri*, $1\frac{1}{2}$.

Head, all the upper surface, wings and tail, pale brown, each feather of the wings and tail margined with greyish brown; throat, white, striated with dark brown; the remainder of the under surface, buffy white; bill, dark horn colour; feet brown.

Habitat, Port Desire, and St. Julian, Patagonia. (*January*).

These birds frequent the wild valleys in which a few thickets grow. They generally take their stand on the upper twigs. They are shy, solitary, and not numerous. Mr. G. R. Gray considers the two specimens which were obtained to be immature, and that one is a full-fledged young, and the other a nestling of the *Agr. striatus*.

4. AGRIORNIS MARITIMUS. *G. R. Gray*.

PLATE XIII.

Pepoaza maritima, D'Orb. et Lefr., Mag. de Zool. 1837, p. 65.
Agriornis leucurus. Gould's MSS., and on Pl. xiii.

Inhabits the coast of Patagonia. It is a scarce, shy, solitary bird, frequenting the valleys in which thickets grow, but often feeding on the ground. In the interior plains of Patagonia, on the banks of the Santa Cruz, I several times saw it chasing beetles on the wing, in a peculiar manner, half hopping and half flying; when thus employed, it spreads its tail, and the white feathers in it are displayed in a very conspicuous manner. I also met with this species in the lofty and arid valleys on the eastern side of the Cordillera of Central Chile, and likewise at Copiapó.

FAMILY.—LANIADÆ.

SUB-FAM.—LANIANÆ, SWAINS.

CYCLARRHIS GUIANENSIS, *Swains.*

C. Guianensis, *Swains.*, Ornith. Draw. Pl. 58. ♀

Tanagra Guianensis, *Gmel.*

Laniagra Guyanensis, *D'Orb. et Lafr.*

Falcunculus Guianensis, *Swains.*, (1837.)

Le Sourcroux, *Lessill.* Ois. D'Afr. Pl. 76. f. 2.

My specimen was obtained at Maldonado, in the latter end of May. I did not see another during my residence there. In its stomach were Coleoptera.

SUB-FAM.—THAMNOPHILINÆ.

THAMNOPHILUS DOLIATUS, *Vieill.*

Lanius doliatus, *Linné.*

My specimen was obtained at Maldonado, where it is not very common. It generally frequents hedge-rows. Cry rather loud, but plaintive and agreeable. Iris, reddish orange; bill, blue, especially base of lower mandible. I observed individuals (females?) in which the black and white bands on the breast were scarcely visible, and even those on the under tail-coverts but obscurely marked.

FAMILY.—TURDIDÆ.

1. TURDUS RUFIVENTER. *Licht.*

- T. rufiventer*, *Licht.* Cat. p. 38.
 ————— *Vieill.* Ency. Meth. p. 639 ?
 ————— *Spix*, Av. Sp. Nov. tom. 1. p. 70. t. lxxviii.
 ————— *D'Orb. et Lafr.* Voy. de l'Amér. Mer. Av. p. 203.
 Grive rousse et noirâtre, *Asara*, No. 79.
Turdus Chochi, *Vieill.* Ency. Meth. p. 639.
 ————— *D'Orb. et Lafr.* Mag. de Zool. 1835. p. 17.
T. leucomelas, *Vieill.* Ency. Meth. 644.
T. albiventer, *Spix*, Av. Sp. Nov. tom. 1. p. 70. t. lxxix. f. 1. m. 2. fem.
 La grive blanche et noirâtre, *Asara*, No. 80.

The white-bellied thrush, described under the three latter synonyms, according to M. D'Orbigny, (p. 203 of the ornithological part of his work), is the female of the *T. rufiventer*. My specimens were obtained at Maldonado and the Rio Negro, which latter place, in 41°, is its most southern limit: Spix found it near Rio de Janeiro in Brazil. It utters a note of alarm very like that of the common English thrush, (*Turdus musicus*).

2. TURDUS FALKLANDICUS. *Quoy et Gaim.*

- T. Falklandicus*, *Quoy et Gaim.* Zool. de l'Uranie, p. 104.
 ————— *Pernetty*, Hist. d'un Voy. aux Iles Malouines, II. p. 20.
 ————— *D'Orb. & Lafr.*, Voy. de l'Amér. Mer. Av. p. 202.
T. Magellanicus, *King*, Proc. Zool. Soc. (1830) p. 14.
 ————— *D'Orb. & Lafr.* Mag. de Zool. 1835. p. 16.

M. D'Orbigny has pointed out that the *Turdus Magellanicus* of King is only the male bird of *Turdus Falklandicus*. I obtained specimens from the Rio Negro, Falkland Islands, Tierra del Fuego and Chiloe: I believe I saw the same species in the valleys of Northern Chile; I was informed that the thrush there lines its nest with mud, in which respect it follows the habits of species of the northern hemisphere. In the Falkland Islands it chiefly inhabits the more rocky and dryer hills. It haunts also the neighbourhood of the settlement, and very frequently may be seen within old sheds. In this respect, and generally in its habits, it resembles the English thrush (*Turdus musicus*): its cry, however, is different. It is tame, silent, and inquisitive.

1. MIMUS ORPHEUS. *G. R. Gray.*

Orpheus Calandria, *D'Orb. & Lafr. Mag. de Zool.* (1835) p. 17.—Voy. de

l'Amer. Mer. Av. 206. pl. x. f. 2.

Turdus Orpheus, *Spix. Av. t. 1.* pl. 71.

Mimus saturninus, *P. Max. Beitr.* p. 658 ?

Orpheus modulator, *Gould*, in *Proc. of Zool. Soc. Part IV.* (1836) p. 6.

This bird is described in the Proceedings of the Zoological Society (Part IV. 1836, p. 6.) as having come from the Straits of Magellan, which undoubtedly is a mistake. It is extremely common on the banks of the Plata; but a few degrees south of it, is replaced by the *O. Patagonica* of D'Orbigny. In Banda Oriental these birds are tame and bold; they constantly frequent the neighbourhood of the country houses to pick the meat, which is generally suspended to the posts and walls. If any other small bird joins in the feast, the Calandria (as this species is usually called in La Plata) immediately chases him away. In these respects, and in its manner of sometimes catching insects, the *Mimus* is related in its habits with that division of the *Muscicapida*, which includes the genus *Xolmis*: indeed, the general colour of the plumage of *X. Nengeta* is so like that of *Mimus*, that it might readily be mistaken for a bird of that genus. The Calandria haunts thickets and hedge-rows, where it actively hops about, and in doing so often elevates and slightly expands its tail.

2. MIMUS PATAGONICUS. *G. R. Gray.*

Orpheus Patagonicus, *D'Orb. & Lafr. Mag. de Zool.* 1836, p. 19.—Voy. de

l'Amer. Mer. Av. p. 210, pl. xi. f. 2.

I obtained specimens of this bird at the Rio Negro and at Santa Cruz in Southern Patagonia, at both of which places it is common. It is not found in Tierra del Fuego, for neither it nor the other species of the genus inhabit forests. This species has slightly different habits from the *M. Orpheus*. It is a shyer bird, and frequents the plains and valleys thinly scattered with stunted and thorn-bearing trees. It does not appear to move its tail so much. Its cry, like that of the rest of the genus, is harsh, but its song is sweet. The *M. Patagonicus*, whilst seated on the highest twig of some low bush, often enlivens the dreariness of the surrounding deserts by its varying song. Molina, however, describing the song of an allied species, has greatly exaggerated its charms. It may be compared to that of the sedge-bird (*Motacilla salicaria*, Linn.), but is much more powerful, some harsh notes and some very high ones being mingled with a pleasant warbling. The song of the different mocking thrushes certainly is

superior to that of any other bird which I heard in South America ; and they are almost the only ones which formally perch themselves on an elevated twig for the purpose of singing. They sing only during the spring of the year. I may here mention, as a curious instance of the fine shades of difference in habits between very closely allied species, that when I first saw the *M. Patagonicus*, I concluded from habits alone that it was different from *M. Orpheus*. But having afterwards procured a specimen of the former, and comparing the two without particular care, they appeared so very similar that I changed my opinion. Mr. Gould, however, immediately upon seeing them (and he did not then know that *M. D'Orbigny* had described them as different) pronounced that they were distinct species ; a conclusion in conformity with the trifling difference of habit and geographical range, of which he was not at the time aware.

3. MIMUS THENCA. *G. R. Gray.*

Turdus Thenca. *Mol.*

Orpheus Thenca. *D'Orb.* *Voy. de l'Amer. Mer. Orn.* p. 209, pl. f. 3.

This species seems to be confined to the coast of the Pacific, west of the Cordillera, where it replaces the *M. Orpheus*, and *M. Patagonicus* of the Atlantic side of the continent. Its southern limit is the neighbourhood of Concepcion, (lat. 37° S.) where the country changes from thick forests to an open land. The *Thenca*, (which is the name of this species, in the language of the Aboriginal Indians,) is common in central and northern Chile, and is likewise found (I believe the same species) near Lima, (lat. 12°) on the coast of Peru. The habits of the *Thenca* are similar, as far as I could perceive, to those of the *M. Patagonicus*. I observed many individuals, which had their heads stained yellow from the pollen of some flower, into which they bury their heads, probably for the sake of the small beetles concealed there. *Molina* describes the nest of the *Thenca*, as having a long passage, but I was assured by the country people, that this nest belonged to the *Synallaxis ægithaloides*, and that the *Thenca* makes a simple nest, built externally of small prickly branches of the *mimosa*.

4. MIMUS TRIFASCIATUS. *G. R. Gray.*

PLATE XVI.

Orpheus trifasciatus, *Gould*, in *Proc. of Zool. Soc. Part v. 1837*, p. 27.

M. vertice, *nuchá*, *et dorso nigrescentibus*; *uropygio rufo pallidè lavato*; *alis nigrescentibus*, *tectricibus notá albescente terminali fuscias tres transversas facientibus*; *rectricibus caudæ duabus intermediis nigrescentibus*, *reliquis ad apicem pallidioribus*; *plumis auricularibus*, *strigá superciliari*, *guldá*, *et corpore subtis albis*, *lateribus notis guttisque fuscis ornatis*; *rostro pedibusque nigris*.

Long. tot. 10½ unc.; *rost.* 1¾; *ala*, 5; *cauda*, 5½; *tarsi*, 1¾.

The vertex, nape of the neck and the back, blackish; with the lower part of the back tinged with pale rufous; the wings blackish, with the tips of the wing coverts white, forming three transverse bands; the tail with the two intermediate feathers black, with the tips of the others much paler; the auricular feathers with a streak above the eyes, throat, and beneath the abdomen white; the flanks ornamented with fuscous marks and spots.

Habitat, Charles Island, Galapagos Archipelago. (*October*).

5. MIMUS MELANOTIS. *G. R. Gray.*

PLATE XVII.

Orpheus melanotis, *Gould*, in *Proc. of Zool. Soc. Part v. 1837*, p. 27.

M. vertice, *nuchá*, *dorsoque pallidè fuscis*; *plumis capitis et dorsi ad medium colore saturatiore*; *alis intensè fuscis*, *singulis plumis ad marginem pallidioribus*, *secundariis*, *tectricibusque majoribus notá albá terminali*, *fuscias duas transversas facientibus*; *caudæ rectricibus nigrescenti-fuscis ad apicem albis*, *loro*, *plumisque auricularibus nigrescenti-fuscis*; *laterum plumis notá fuscá centrali*, *abdomine albo*; *rostro pedibusque nigris*.

Long. tot. 9½ unc.; *rost.* 1¼; *ala*, 4½; *cauda*, 4½; *tarsi*, 1¾.

The vertex, nape of the neck and the back, pale brown; the feathers of the head and the back, as far as the middle, of a darker colour; the wings intensely brown, with the margins of each of the feathers paler; the secondaries and the greater wing-coverts terminated with white marks, giving the appearance of two transverse bands; the feathers of the tail blackish brown, with the tips white; the lores and the feathers of the ears blackish brown, the feathers of the sides with a central brown mark, the abdomen white; the bill and feet black.

Habitat, Chatham and James's Islands, Galapagos Archipelago. (*October*).

6. MIMUS PARVULUS. G. R. Gray.

PLATE XVIII.

Mimus parvulus. Gould, in Proc. of Zool. Soc. Part v. 1837, p. 27.

M. vertice, nuchâ caudâque intensè fuscis, hujus rectricibus ad apicem albo notatis; alis fuscis secundariis tectricibusque notâ albâ apicali fascias duas transversas facientibus; loro plumisque auricularibus nigrescentibus; guld, colli lateribus, pectore, et abdomine albescentibus; plumis laterum notis fuscis per medium longitudinaliter excurrentibus.

Long. tot. 8½ unc.; rostr. 1; ala, 3½; cauda, 3¾; tarsi, 1½.

The vertex, the nape of the neck, and the tail intensely black; with the tips of the tail feathers marked with white; the wings brown with the secondaries and coverts tipped with white marks, giving the appearance of two transverse bands; the lores and the feathers of the ears black; the throat, the sides of the neck, breast, and the abdomen white; the flanks marked longitudinally with brown.

Habitat, Albemarle Island, Galapagos Archipelago. (October.)

It will be seen, that the three last species of the genus *Mimus*, were procured from the Galapagos Archipelago; and as there is a fact, connected with their geographical distribution, which appears to me of the highest interest, I have had these three figured. There are five large islands in this Archipelago, and several smaller ones. I fortunately happened to observe, that the specimens which I collected in the two first islands we visited, differed from each other, and this made me pay particular attention to their collection. I found that all in Charles Island belonged to *M. trifasciatus*; all in Albemarle Island to *M. parvulus*, and all in Chatham and James's Islands to *M. melanotus*. I do not rest this fact solely on my own observation, but several specimens were brought home in the *Beagle*, and they were found, according to their species, to have come from the islands as above named. Charles Island is distant fifty miles from Chatham Island, and thirty-two from Albemarle Island. This latter is only ten miles from James Island, yet the many specimens procured from both belonged respectively to different species. James and Chatham, which possess the same species, are seventy miles apart, but Indefatigable Island is situated between them, which perhaps, has afforded a means of communication. The fact, that islands in sight of each other, should thus possess peculiar species, would be scarcely credible, if it were not supported by some others of an analogous nature, which I have mentioned in my Journal of the Voyage of the *Beagle*. I may observe, that as some naturalists may be inclined to attribute these differences to local varieties; that if birds so different as *O. trifasciatus*, and

O. parvulus, can be considered as varieties of one species, then the experience of all the best ornithologists must be given up, and whole genera must be blended into one species. I cannot myself doubt that *M. trifasciatus*, and *M. parvulus* are as distinct species as any that can be named in one restricted genus.

The habits of these three species are similar, and they evidently replace each other in the natural economy of the different islands; nor can I point out any difference between their habits and those of *M. Thenca* of Chile; I imagined, however, that the tone of their voice was slightly different. They are lively, inquisitive, active birds, and *run* fast; (I cannot assert, positively, that *M. Thenca runs*). They are so extremely tame, a character in common with the other birds of this Archipelago, that one alighted on a cup of water which I held in my hand, and drank out of it. They sing pleasantly; their nest is said to be simple and open. They seem to prefer the dry sterile regions nearer the coast, but they are likewise found in the higher, damper and more fertile parts of the islands. To these latter situations, however, they seem chiefly attracted by the houses and cleared ground of the colonists. I repeatedly saw the *M. melanotis* at James Island, tearing bits of meat from the flesh of the tortoise, which was cut into strips and suspended to dry, precisely in the same manner as I have so often observed the *M. Orpheus*, in La Plata, attacking the meat hung up near the Estancias.

1. FURNARIUS RUFUS. *Vieill.*

Furnarius rufus, *Vieill.*, Ency. Meth. 513.

Merops rufus, *Gmel.* Pl. enl. 739.

Opetiorhynchus rufus, *Tem.* Man.

Turdus vadius, *Licht.* Cat.

Figulus albogularis, *Spir.* Av. pl. lxxviii. f. 1 & 2.

Fournier, *Buff.*, *Asara*, No. 221.

This bird is common in Banda Oriental, on the banks of the Plata; but I did not see it further southward. It is called by the Spaniards Casaro, or house-builder, from the very singular nest which it constructs. The most exposed situation, as on the top of a post, the stem of an opuntia, or bare rock, is chosen. The nest consists of mud and bits of straw; it is very strong, and the sides are thick; in shape it resembles a depressed beehive or oven, and hence the name of the genus. Directly in front of the mouth of the nest, which is large and arched, there is a partition, which reaches nearly to the roof, thus forming a passage or ante-chamber to the true nest. At Maldonado, in the end of May, the bird was busy in building. The *Furnarius* is very common in Banda Oriental; it often haunts the bushes in the neighbourhood of houses; it is an active bird, and both *walks* and *runs* quickly, and generally by starts; it feeds chiefly on Coleoptera; it often utters a peculiar, loud, shrill, and quickly reiterated cry.

2. FURNARIUS CUNICULARIUS. *G. R. Gray.*

Alauda cunicularia, *Vieill.*

Alauda fisisirotra, *Kittl.* Mem. l'Acad. St. Peters. ii. pl. 3.

Certhilauda cunicularia, *D'Orb. & Laftr.* Mag. de Zool.

This bird has a considerable geographical range. On the eastern side of the continent it is found from about 40° (for I never saw one in the southern districts of Patagonia) northward to at least 30°, and perhaps much further. On the western side its southern limit is the neighbourhood of Concepcion, where the country becomes dry and open, and it ranges throughout Chile (specimens were procured from Valparaiso) to at least as far north as Lima, in lat. 12°, on the coast of Peru. I may here observe, that the northern limit of all birds, which are lovers of dry countries, such as this *Furnarius* and some of the species of *Mimus*, is not probably at Lima but near Cape Blanco, 10° south of the Equator, where the open and parched land of Peru blends (as it was described to me) rather suddenly into the magnificent forests of Guayaquil. This *Furnarius* constantly haunts the driest and most open districts; and hence sand-dunes near the coast afford it a favourite resort. In La Plata, in Northern Patagonia, and in Central Chile, it is abundant: in the former country it is called Casarita, a name which has evidently been given from its relationship with the Casaro, or *Furnarius rufus*, for, as we shall see, its nidification is very different. It is a very tame, most quiet, solitary little bird, and like the English robin (*Sylvia rubecula*) it is usually most active early in the morning and late in the evening. When disturbed it flies only to a short distance; it is fond of dusting itself on the roads; it walks and runs (but not very quickly), and generally by starts. I opened the stomachs of some, and found in them remains of Coleoptera, and chiefly Carabidæ. At certain seasons it frequently utters a peculiar, shrill but gentle, reiterated cry, which is so quickly repeated as to produce one running sound. In this respect, and in its manner of walking on the ground, and in its food, this species closely resembles the Casaro, but in its quiet manners it differs widely from that active bird. Its nidification is likewise different, for it builds its nest at the bottom of a narrow cylindrical hole, which is said to extend horizontally to nearly six feet under ground. Several of the country people told me, that when boys, they had attempted to dig out the nest, but had scarcely ever succeeded in getting to the end. The bird chooses any low bank of firm sandy soil by the side of a road or stream. At the settlement of Bahia Blanca the walls are built of hardened mud; and I noticed one, enclosing a courtyard, where I lodged, which was penetrated by round holes in a score of places. On asking the owner the cause of this, he bitterly complained of the little Casarita, several

of which I afterwards observed at work. It is rather curious, that as these birds were constantly flitting backwards and forwards over the low wall, they must be quite incapable of judging of distance or thickness even after the shortest circuitous route, for otherwise they would not have made so many vain attempts.

UPPUCERTHIA DUMETORIA. *I. Geoffr. & D'Orb.*

PLATE XIX.

Uppucertia dumetoria, *J. Geoffr. & D'Orb.* Ann. du Mus. i. 393 and 394.

Furnarius dumetorum, *D'Orb.* MS.

Uppucertia dumetorum, *D'Orb. & Lafr.* Mag. de Zool. 1838, p. 20.

This bird is an inhabitant of extremely sterile regions. I saw several at the Rio Negro, but at Port Desire they were, perhaps, more numerous. I did not observe it near Valparaiso, in Central Chile, but I procured specimens of it from Coquimbo, where the country is more desert. It frequents open places, in which a few bushes grow. It hops very quickly, and often flies quietly from one place to another. It may often be seen turning over and picking dry pieces of dung. It is a remarkable circumstance, that in the three specimens which I brought home, from different localities, namely the Rio Negro, Port Desire, and Coquimbo, the beak varies considerably in length: in that from Port Desire in Patagonia it is three-eighths of an inch shorter than in that from Coquimbo in Chile; whilst the Rio Negro specimen is intermediate between them. Mr. G. R. Gray has pointed out to me that Latham long since observed a great variation in the beak of the Patagonian warbler, *Opetiorhynchus Patagonicus*.

1. OPETIORHYNCHUS VULGARIS. *G. R. Gray.*

Uppucertia vulgaris, *D'Orb. & Lafr.* Mag. de Zool. 1838, p. 23.

This bird in general habits has several points of resemblance with the *Furnarius cunicularius*, but differs in some other respects. Its flight is somewhat similar, but it shows two red bands on its wings, instead of one, by which it can be distinguished at a distance: instead of walking it only hops; it feeds entirely on the ground, and in its stomach I found scarcely anything but Coleopterous insects, and of these many were fungi feeders. It often frequents the borders of lakes, where the water has thrown up leaves and other refuse. It likewise may be met with in all parts of the open grassy plains of Banda Oriental, where (like the *Uppucertia* at the Rio Negro) it often turns over dry dung. Its note is very like that of the *F. cunicularius*, but more acute, and consists of a shrill cry, quickly reiterated so as to make a running sound. I was informed that, like that bird, it builds its nest at the bottom of a deep burrow. This species

is common in La Plata, the Falkland Islands, and Tierra del Fuego; in the latter it frequents the higher parts of the mountains, or those exposed to the western gales, which are free from forests, for it is a bird that exclusively lives in open countries and on the ground. I believe it is not found in Chile; nor is it common on the coast of Patagonia. This species in its habits is very different from the three following closely allied ones, since the latter never, or most rarely, leave the sea beach, whilst this bird, excepting by chance, is never seen there, but always in the interior country. Nevertheless with this marked difference in habits, (there are several other points beside that of the station frequented), if the preserved skins of *O. parvulus* and *O. vulgaris* were placed in the hands of any one, even perhaps of a practised ornithologist, he would at first hesitate to consider them distinct, although upon closer examination he would find many points of difference,—of which the much greater strength of the feet and the greater length of the tarsus are conspicuous in those species, which live amongst the stones on the sea beach.

2. OPETIORHYNCHUS PATAGONICUS. *G. R. Gray.*

Patagonian Warbler, *Lath. Syn. iv.* p. 434.

Motacilla Patagonica, *Gmel.*

Motacilla Gracula, *Forst. Draw. No.* 160.

Sylvia Patagonica, *Lath. Index, ii.* 517.

Furnarius Lessonii, *Dumont.*

Chilensis, *Less. Voy. de la Coqu. i.* p. 671, n. Tr. d'Ornith. p. 307, pl. 75, f. 1.

Opetiorhynchus rupestris, *Kittl. Mem. de l'Acad. St. Petersb. i.* p. 188, pl. viii.

Uppucerthia rupestris, *D'Orb. & Lafjr. Mag. de Zool.* 1838, p. 21.

This bird is extremely common on the sea shore of all the bays and channels of Tierra del Fuego; on the western coast it is replaced in Northern Chile by the *O. nigrofumosus*, and in the Falkland Islands by the *O. antarcticus*. As the habits of this species and those just named are quite similar, I shall describe them all together under the head of *O. nigrofumosus*. A specimen of *O. Patagonicus* from Chiloe has a bill rather more than two-tenths of an inch longer than in those from Tierra del Fuego; but as no other difference can be perceived, I cannot allow that this is a specific character any more than in the case of the *Uppucerthia*.

3. OPETIORHYNCHUS ANTARCTICUS. *G. R. Gray.*

Certhia antarctica, *Garn. Ann. des Sc. Nat.* 1826.

Furnarius fuliginosus, *Less. Voy. de la Coqu. Zool. i.* p. 670.

Patagonian Warbler, *Lath. ♀* in Dixon's *Voy. App. No.* 1, 359 and pl.

This species inhabits the Falkland Islands. My specimens were procured at

the east island, from which, also, those described by the French naturalists came, and likewise that given in the Appendix to Dixon's Voyage. I have no doubt that it is peculiar to this group, for the foregoing species, which in the neighbouring mainland of Tierra del Fuego supplies its place and has precisely the same habits, has been examined by Mr. Gould and is considered distinct. The *O. antarcticus* has long been noticed by voyagers to the Falkland Islands from its extreme tameness: in the year 1763 Pernetz states it was so tame that it would almost perch on his finger, and that in half an hour he killed ten with a wand.

4. OPETIORHYNCHUS NIGROFUMOSUS. *G. R. Gray.*

PLATE XX.

Uppucerthia nigrofumosa, *D'Orb. et Lafr. Mag. de Zool.* 1838, p. 23.
Opetiorhynchus lanceolatus, *Gould*, MS. and on plate XX.

My specimen was killed at Coquimbo, on the coast of Chile. It differs from *O. Patagonicus* in its larger size, much stronger feet and bill, and more dusky plumage, and in the white streak over the eye being less plainly marked. In this species the red band, which extends from the body obliquely across the wings in all the species, reaches to the third primary, whereas in *O. Patagonicus*, *O. vulgaris*, and *O. antarcticus*, that feather is not marked, or so faintly, as scarcely to be distinguishable. In the genus *Furnarius*, the wing feathers are marked in an analogous manner. I saw this species (as I believe) on the coast near the mouth of the valley of Copiapó.

I will now make a few remarks on the habits of these three coast species. The first, *O. antarcticus*, is confined, as I have every reason to believe, to the Falkland Islands. The second inhabits Tierra del Fuego, and in Chiloe and Central Chile is replaced by the local variety with a long beak, and this still further northward by the *O. nigrofumosa*. On the east side of the continent I do not believe these marine species extend so far northward. I never saw one on the shores of the Plata, but they occur in Central Patagonia. These birds live almost exclusively on the sea beach, whether formed of shingle or rock, and feed just above the surf on the matter thrown up by the waves. The pebbly beds of large rivers sometimes tempt a solitary pair to wander far from the coast. Thus at Santa Cruz I saw one at least one hundred miles inland, and I several times observed the same thing in Chile, which has likewise been remarked by Kittlitz, who has given a very faithful account of the habits of *O. Patagonicus*. I must add that I also saw this bird in the stony and arid valleys in the Cordillera, at a height of at least 8000 feet. In Tierra del Fuego I scarcely ever saw one twenty yards from the beach, and both there and at the Falkland Islands they may fre-

quently be seen walking on the buoyant leaves of the *Fucus giganteus*, at some little distance from the shore. In these respects, the birds of this genus entirely replace in habits many species of *Tringa*. In the stomachs of those I opened I found small crabs and little shells, and one *Buccinum* even a quarter of an inch long: Kittlitz says, he found in one, besides such objects, some small seeds. They are very quiet, tame and solitary, but they may not unfrequently be seen in pairs. They hop and likewise *run* quickly; in which latter respect, and likewise in their greater tameness, they differ from the *O. vulgaris*. Their cry is seldom uttered, but is a quick repetition of a shrill note, like that of the last named bird, and of several species of *Furnarius*.

On the 20th of September, I found, near Valparaiso, the nest of *O. Patagonicus*, with young birds in it: it was placed in a small hole in the roof of a deep cavern, not far from the bank of a pebbly stream. Three months later in the summer I found, in the Chonos Archipelago (Lat. 45°), a nest of this species, placed in a small hole beneath an old tree, close to the sea-beach. The nest was composed of coarse grass and was untidily built. The egg rather elongated; length 1·11 of an inch, width in broadest part ·8 of an inch; perfectly white.

GENUS.—EREMOBIUS. *Gould.*

Rostrum capitis longitudine seu longius, fere rectum, ad apicem deorsum curvatum, haud emarginatum; naribus parvis, basalibus, oblongis, in sulco positis; Alæ breves, remigibus primariis secundariisque fere æqualibus, plumis 4, 5, 6-que subæqualibus longissimisque; Cauda mediocri apice rotundato; Tarsi sublongi antice squamis fere obsoletis induti, halluce digito medio brevior, digitis lateralibus inæqualibus, internis brevioribus.

EREMOBIUS PHENICURUS. *Gould.*

PLATE XXI.

E. fuscus, remigibus cinereo fusco marginatis, striâ superciliari pone oculos extensâ cinereo-albâ; caudâ nigro-fuscâ basi castaneo fuscâ; gulari abdomineque medio cinereo albis; hypochondriis tectricibusque caudalibus inferioribus pallide flavescens.

Long. tot. $6\frac{1}{2}$ unc.; rostr. 1; alæ, $2\frac{1}{2}$; cauda, 3; tarsi, $\frac{1}{2}$.

Head and all the upper surface brown; the primaries margined with greyish brown; stripe over and behind the eye greyish white; tail feathers chestnut brown at the base, and blackish brown for the remainder of their length;

throat and centre of the abdomen greyish white, passing into pale buff on the flanks and under tail-coverts; bill and feet blackish brown.

Habitat, Patagonia.

This bird, though forming a well-marked genus, is in many respects, even in plumage, allied to *Furnarius* and *Opetiorhynchus*,—for instance, in the streak over its eyes, in the red band on its wings extending obliquely from the body to the third primary, and to some of the species of these genera in its rather plumose feathers. In its general manners, the same resemblance, together with some differences, always struck me. It lives entirely on the ground, and generally in dry sterile situations, where it haunts the scattered thickets, and often flies from one to another. When skulking about the bushes it cocks up its tail, imitating in this respect *Pteroptochos* and *Rhinomya*. Its cry is shrill, quickly reiterated, and very similar to that of several species of *Furnarius* and *Opetiorhynchus*. The stomach of one which I opened was full of Coleoptera. I procured specimens from three places on the coast of Patagonia; namely, Port Desire, St. Julian, and Santa Cruz; but it is nowhere common. I likewise saw it at a considerable elevation in the eastern valleys of the barren Cordillera, near Mendoza.

RHINOMYA LANCEOLATA. *Is. Geoffr. & D'Orb.*

Rhinomya lanceolata. *Is. Geoffr. & D'Orb.* Voy. de l'Amer. Mer. pl. 7. f. 1. 1832, cl. 11. pl. 3. id.—Mag. de Zool. 1832, 11. pl. 3. and 1837, p. 15.

I procured a specimen of this bird from the Rio Negro in Northern Patagonia, and I never saw one any where else; and M. D'Orbigny makes the same remark. On the Atlantic side of the continent, it replaces the several species of *Pteroptochos* which live on the shores of the Pacific. Its habits, in some respects, are similar; it lives at the bottom of hedges or thickets, where it runs with such quickness, that it might easily be mistaken for a rat. It is very unwilling to take flight, so that, I was assured by some of the inhabitants, that it could not fly, which, however, is a mistake. It frequently utters a loud and very singular cry. The *Rhinomya* is distantly allied to the *Eremobius phanicurus*, which is found in Southern Patagonia, whose habits in some respects are similar.

I. PTEROPTOCHOS TARNII. *G. R. Gray.*

Hylactes Tarnii. *Vigors*, Proc. Zool. 1830.

Megalonyx ruficeps. *D'Orb. & Lafr.* Mag. de Zool. 1837, p. 15.

Leptonyx Tarnii. *D'Orb. & Lafr.* Voy. de l'Amer. Mer. Av. p. 198, pl. viii. f. 1.

This species, as well as several others of the genus, and likewise of *Scytalopus* are confined to the west coast of South America. The *P. Tarnii* ranges from the

neighbourhood of Concepcion, lat. 37°, to south of the Peninsula of Tres Montes, between 41° and 50°. It is not found in Tierra del Fuego, where the climate probably is too cold for it, for in other respects, the great forests of that country appear admirably adapted to its habits. Its limit, northward of the province of Concepcion, is evidently due to the change which there takes place, from dense forests to an open and dry country. The *P. Tarnii* is abundant in all parts of the Island of Chiloe, where it is called by the native Indians, *guid-guid*; but by the English sailors, the barking-bird. This latter name is very well applied, for the noise which it utters is precisely like the yelping of a small dog. When a person is walking along a pathway within the forest, or on the sea-beach, he will often be surprised to hear on a sudden, close by him, the barking of the *guid-guid*. He may often watch in vain the thicket, whence the sound proceeds, in hopes of seeing its author, and if he endeavour, by beating the bushes, to drive it out, his chance of success will be still smaller. At other times, by standing quietly within the forest, the *guid-guid* will fearlessly hop close to him, and will stand on the trunk of some dead tree, with its tail erect, and strange figure full in view. It feeds exclusively on the ground, in the thickest and most entangled parts of the forest. It rarely takes wing, and then only for short distances. It has the power of hopping quickly and with great vigour; when thus awkwardly proceeding, it carries its short tail in a nearly erect position. I was informed that the *guid-guid*, builds a nest amongst rotten sticks, close to the ground.

2. PTEROPTOCHOS MEGAPODIUS. *Kittl.*

Pteroptochos megapodius. *Kittl.* 1830, Mem. de l'Acad. 1, pl. iv. et Vogel. von Chili, p. 10, pl. iv.

Megalonyx rufus. *Less.* Cent. Zool. 1831, pl. 66.

D'Orb. & Lafr.

Leptonyx macropus. *Scains.* Zool. Ill. pl. 117.

D'Orb. & Lafr. Voy. de l'Amer. Mer. Av. 197.

This bird is common in the dry country of central and northern Chile, where it replaces the *P. Tarnii* of the thickly wooded southern regions. The *P. megapodius*, is called by the Chilenos, "*El Turco*;" it lives on the ground amongst the bushes which are sparingly scattered over the stony hills. With its tail erect, every now and then it may be seen popping on its stilt-like legs from one bush to another with uncommon celerity. Its appearance is very strange and almost ludicrous, and the bird seems always anxious to hide itself. It does not run, but hops, and can hardly be compelled to take flight. The various loud cries which it utters, when concealed in the bushes, are as strange as its appearance. I opened the extremely muscular gizzards of several of these birds, and found them filled with beetles, vegetable fibres, and pebbles. Observing the structure of the gizzard, the

fleshy covering to the nostrils, and the arched, rounded wing, and great scratching claws, it was easy to imagine some distant kind of relationship between these birds and those of the Gallinaceous order. I was informed that the Turco makes its nest at the bottom of a deep burrow which it excavates in the ground.

3. PTEROPTOCHOS ALBICOLLIS. *Kittl.*

Pteroptochos albicollis. *Kittl.* Mem. de l'Acad. Petersb. 1. pl. iii. Vogel von Chili; p. 8. pl. iii.

Megalonyx medius. *Less.* III. Zool. pl. ix.

Megalonyx albicollis. *D'Orb. and Lafr.* Mag. de Zool. (1636,) Aves, p. 15.

Leptonyx albicollis. *D'Orb.* Voy. de l'Amer. Mer. Av. p. 196, pl. viii. f. 2.

This species is called by the Chilenos "Tapacolo," or cover your posteriors. The name is well applied, as the Tapacolo generally carries its short tail more than erect, that is, inclined backward and toward the head. It is extremely common in central Chile; and in the same manner as the Turco replaces the Barking-bird of the southern forest-land, so does the Tapacolo replace a fourth species (*P. rubecula*), which is an inhabitant of the same forests. The Tapacolo frequents hedge-rows, and the bushes which are scattered at a considerable elevation over the sterile hills, where scarcely another bird can exist: hence it plays a conspicuous part in the ornithology of Chile. In its manner of feeding, and quickly hopping out of a thicket and back again, in its desire of concealment, unwillingness to take flight, and nidification, it manifests a close resemblance with the *P. megapodius*; its appearance is not, however, so strange, and (as if in consequence) it exposes itself more readily to view. The Tapacolo is very crafty; when frightened by any person, it will remain motionless at the bottom of a bush, and will then, after a little while, try with much address to crawl away on the opposite side. It is also an active bird, and continually making a noise; these noises are various and strangely odd; one is like the cooing of doves, another like the bubbling of water, and many defy all similes. The country people say it changes its cry five times in the year, which is according, I suppose, to some change of season. I was told that the Tapacolo builds its nest at the bottom of a deep burrow, like the Turco; whereas the *P. Tarnii*, (as well as the *P. rubecula*, an inhabitant of the same districts,) makes its nest amongst the sticks just above the ground. This difference in the nidification, of the southern and northern species, is probably due to the nature of the damp forests inhabited by the former in which a burrow could hardly be made dry. I may here observe, that travelling northward from Valparaiso to Coquimbo, I met near Illapel with a bird closely allied to the Tapacolo, but which, from some slight difference in manners, I believed was a distinct species. The range of this supposed species, is from between Coquimbo and Valparaiso, to at least as far north as the valley of Copiapó.

4. PTEROPTOCHOS RUBECULA. *Kittl.*

Pteroptochos rubecula, *Kittl.* Vog. von Chili, p. 7. pl. ii.
Megalonyx rubecula, *D'Orb. & Lafr.* Mag. de Zool. 1837, p. 16.
Megalonyx rufogularis, *D'Orb. & Lafr.* Voy. de l'Amer. Mer. pl. 7, f. 2.
Leptonyx rubecula, *D'Orb. & Lafr.* Voy. de l'Amer. Mer. Av. p. 196.

This species appears to have nearly the same range with the *P. Tarnii*: its southern limit certainly extends as far as 47° south, but northward, where the forests cease, near Concepcion, I was unable to ascertain that this bird is ever met with, and Kittlitz has made the same remark. In Chiloe, where it is common, it is called by the Indian inhabitants the "Cheucau." It frequents the most gloomy and retired spots within the damp forests. Sometimes, although the cry of the Cheucau is heard close by, a person may watch attentively and yet in vain; at other times, if he stands motionless, the red-breasted little bird will approach within a few feet, in the most familiar manner. It then busily hops about the entangled mass of rotting canes and branches, with its little tail cocked upwards. I opened the gizzard of several specimens; it was very muscular, and contained hard seeds, buds of plants, occasionally some insects, and vegetable fibres mixed with small stones. The Cheucau is held in superstitious fear by the Chilotans, on account of its strange and varied cries. There are three very distinct kinds:—one is called "chiduco," and is an omen of good; another "hui-treu," which is extremely unfavourable; and a third, which I have forgotten. These words are given in imitation of its cries, and the natives are in some things absolutely governed by them. I have already stated that I was informed by the inhabitants that the Cheucau builds its nest amongst sticks close to the ground.

5. PTEROPTOCHOS PARADOXUS. *G. R. Gray.*

Troglodytes paradoxus, *Kittl.* Vog. von Chili, p. 12, pl. 5.—*Id.* Mem. de l'Acad. St. Peters. 1833, i. pl. 5.
Malacorynchus Chilensis, *Kittl.* Mem. de l'Acad. St. Peters. 1835, p. 527.
Leptonyx paradoxus, *D'Orb.* Voy. de l'Amer. Mer. Av. p. 197.

This species differs in a small degree from all the others of the genus: its claws are longer, tarsi shorter, and bill flattened at the top: in these, and some other respects, it approaches to *Scytalopus*. I may add, that from a greater degree of resemblance, especially in the feet, *P. Tarnii* and *megapodius* may be ranked in one section, and *P. albicollis* and *rubecula* in another.

I procured specimens of the *P. paradoxus* both from Valdivia and Chiloe; like the *P. Tarnii* and *P. rubecula* it is confined to the regions of forest. Its habits are closely similar to those of the last species. I opened the gizzard of one at Valdivia, and found it full of large seeds and the remnants of insects. In

Chiloe, where it is much less common than the Cheucau, it is called by the inhabitants Cheuqui. Kittlitz procured specimens from Concepcion. He describes the cry which it utters over and over again, in the same high tone, as very singular, and more like that of a frog than of a bird.

SCYTALOPUS MAGELLANICUS. *G. R. Gray.*

Sylvia Magellanica, *Lath. Index*, ii. p. 528. ♀ Forst. Dr. No. 163. ♀

Scytalopus fuscus, *Gould*, in *Proc. of Zool. Soc.* Part iv. 1836, p. 39. ♂

Jard. and Selb. Ill. Orn. New Ser. pl. 19. ♂

Platyurus niger, *Suainz.*, Two Cent. and a Quarter, p. 323. ♂

This bird has a wider range than the species of the foregoing and closely allied genus. It is common near Port Famine in Tierra del Fuego, and on the west coast in the thickly wooded islets of the Chonos Archipelago. I was assured by an intelligent collector that this bird is met with, though rarely, in central Chile; and Mr. Gould informs me, that he has received specimens from that country. It has found its way over to the Falkland Islands, where, instead of inhabiting forests, it frequents the coarse herbage and low bushes, which in most parts conceal the peaty surface of that island. In general appearance the *Scytalopus fuscus* might at first be mistaken for a Troglodytes, but in habits it is closely allied to the several species of Pterotochos. In a skulking manner, with its little tail erect, it hops about the most entangled parts of the forests of Tierra del Fuego; but when near the outskirts, it every now and then pops out, and then quickly back again. It utters many loud and strange cries: to obtain a good view of it is not always easy, and still less so to make it fly. A specimen I procured at Chiloe had its upper mandible stronger and more arched, but differed in no other respect.

1. TROGLODYTES MAGELLANICUS. *Gould.*

T. Magellanicus, *Gould*, in *Proc. of Zool. Soc.* Part iv. 1836, p. 88.

This bird has a considerable range. I procured specimens of it near Rio de Janeiro, on the banks of the Plata, throughout Patagonia, in Tierra del Fuego, where it is one of the commonest birds, and likewise in Central Chile: its habits resemble very closely those of the common Troglodytes of England. In the open country near Bahia Blanca it lived amongst the thickets and coarse herbage in the valleys; in Tierra del Fuego, in the outskirts of the forest. Its chirp is harsh. In Chile I saw one in October building its nest in a hole in a stone wall, in a situation such as would have been chosen by our Troglodytes.

2. TROGLODYTES PLATENSIS. *Gmel.*

I procured specimens of this bird from Bahía Blanca, in Northern Patagonia, and likewise from the Falkland Islands, where it is not uncommon. When first killed, its legs and beak appear of larger size, compared to its body, than in other species of this genus. In the Falkland Islands it lives, almost exclusively, close to the ground, in the coarse grass which springs from the peaty soil. I do not think I ever saw a bird which, when it chose to remain concealed, was so difficult to disturb. I have frequently marked one down to within a yard on the open grassy plain, and afterwards have endeavoured, quite in vain, by walking backwards and forwards, over the same spot, to obtain another sight of it.

1. SYNALLAXIS HUMICOLA. *Kittl.*

S. humicola, *Kittl.* Mem. de l'Acad. St. Peters. i. pl. 6.—*Id.* Vog. von Chili, p. 13, pl. vi.

Not uncommon in the neighbourhood of Valparaiso. Kittlitz has well described its habits. He says it lives on the ground under thickets, that it is active in running about, and that it readily flies from bush to bush. It holds its tail upright; utters a shrill, quickly reiterated cry; feeds on insects; but Kittlitz found in the stomach chiefly grains and berries, with little stones. From these circumstances, he conceives that this bird shews some affinity with *Pteroptochos*, but I feel no doubt that in the form of its beak, wings, tail, manner of carrying the latter, kind of plumage, sound of voice and habits, the relationship is much closer with *Eremobius*, which perhaps it may be considered as representing on the Pacific side of the Cordillera. Its tongue is furnished with bristly points, but apparently is less deeply bifid than in the other species of *Synallaxis* or *Limnornis*. I obtained both sexes, but there is no difference in their plumage.

For the reason just given, I have put this species at the head of its genus, and therefore nearest to *Eremobius*, although it is impossible to represent by a linear arrangement, the multiplied relations between the following genera—*Furnarius*, *Uppucerthia*, *Opetiorhynchus*, *Eremobius*, *Anumbius*, *Synallaxis*, *Limnornis*, *Oxyurus*; and again, *Rhynomya*, *Pteroptochos*, *Scytalopus*, and *Troglodytes*, which, with the exception of the last, are strictly South American forms.

2. SYNALLAXIS MAJOR. *Gould.*

PLATE XXII.

S. olivaceo fuscus; infra fulvus albo distinctè maculatus; plumis singulis stria obscura centrali notatis; fronte rufo, remigibus fuscis, cinereo-fusco externè maculatis, tertiariis nigro fuscis apice margineque latè cinereo-fuscis; guld albâ, plumarum flavescentium serie fusco maculatarum circumdatâ.

Long, tot. 8 unc.; rostr. 1; ala, 3½; cauda, 4; tarsi, 1.

Forehead rufous; crown of the head, back of the neck and back olive brown, with a conspicuous stripe of blackish brown down the centre of each feather; wing-coverts and lower part of the back olive brown, with a faint trace of the dark patch in the centre of each feather; primaries brown, margined externally with greyish brown; spurious wing and secondaries rufous tipped with brown; tertiaries blackish brown broadly margined and tipped with greyish brown; two centre tail feathers dark olive brown; the remainder blackish brown largely tipped with white; throat white encircled with a series of feathers of a buff colour spotted with dark brown; breast and all the under surface tawny indistinctly blotched with white; tarsi with a very pale blue tinge.

Habitat, Maldonado, north bank of La Plata. (*June*).

This bird is not very common. Those which I saw lived on the ground in dry and open places, and did not frequent the neighbourhood of lakes abounding with rushes or thickets, like the greater number of species of *Synallaxis*, and the allied genus *Limnornis*. The flight of this bird is peculiar, which seems chiefly due to the length of its elegantly acuminate tail. It sometimes alights and rests on the summit of a thistle or twig, a habit different from that of any species of the genus which I have seen. Its manner of living and feeding on the ground might have been suspected, from the length of the soft secondaries, like those of a lark or of *Furnarius cunicularius*. The claws also of the front toes are produced and perhaps they are rather straighter than in other members of the family. The tongue is bifid and divided into bristly points. The nest, of which I have seen two, is very peculiar. It is cylindrical, about two feet long, and placed vertically in the middle of a thick bush in an exposed situation. It is made externally of prickly branches, and is very large compared with the size of the bird. The opening is at the upper extremity, from which a passage leads to the true nest, which is lined with feathers and hairs. There is a slight bend in the passage both at its exit and where it enters the nest.

3. SYNALLAXIS RUFOGULARIS. *Gould.*

PLATE XXIII.

S. olivaceo fuscus plumis singulis maculâ oblongâ fusco nigrâ; remigibus primariis secundariisque basi ferrugineo fuscis, apice nigro fuscis, flavescenti albo marginatis; lineâ superciliari, mento abdomineque medio flavescenti albis; guld ferrugineo fusca; pectore fulvescenti fusco, plumis singulis striâ pallidiorâ centrali ornatis.

Long. tot. $6\frac{1}{2}$ unc; rostr. $\frac{1}{2}$; ala, 3; cauda, $3\frac{1}{2}$; tarsi, 1.

Head and all the upper surface and two centre tail feathers, brown, with a large oblong patch of brownish black down the centre of each feather; primaries, except the three outer ones, bounded posteriorly with an irregular line of black; secondaries, rusty brown at the base, and brown for the remainder of their length, margined all round with greyish olive; lateral tail feathers brownish black, largely tipped with tawny white; stripe from the nostrils over each eye, chin, and centre of the abdomen, pale buff; sides of the face and throat grey, with a spot of dark brown down the centre of each feather; in the centre of the throat, a patch of ferruginous brown; chest, pale brownish buff, with a fine pale stripe down each feather; bill and feet brown.

Habitat, Patagonia. (*April.*) Valparaiso. (*September.*)

These birds are not uncommon on the dry rocky mountains near Valparaiso, and in the valleys of southern Patagonia, where a few thickets grow. They hop actively about the withered herbage and low thickets, and often feed on the ground. The hind claw is weaker and straighter than in most of the other species of this genus.

4. SYNALLAXIS MALUROIDES.

S. maluroides. *D'Orb. & Lafr.* Voy de l'Amer. Mer. Ois. pl. xiv, f. 2. *Mag. de Zool.* 1837, Cl. 11, pl. 22.

My specimens were shot near Maldonado. Iris yellow; tarsi very pale coloured.

This species, as well as some others of *Synallaxis*, *Anumbius*, and *Limnornis*, live amongst reeds and other aquatic plants on the borders of lakes, and have the same general habits. I will, therefore, here describe them. They all have the power of crawling very quickly by the aid of their powerful claws and feet, as I soon discovered when they were not killed at once, for then it was scarcely possible to catch them. Their soft tail-feathers show signs of being used, but they never apply them, as the *Certhias* do, as a means of supporting their bodies. The tail-feathers were (at least during June) so loosely attached, that I seldom procured a specimen with all of them perfect; and I saw many (especially of *S. maluroides*), flying about with no tail. All the species, or nearly all, utter an

acute, but not loud, rapidly reiterated cry. They are active and busily seek for small insects, chiefly Coleoptera, in the coarse herbage. The iris in all is rusty red; the tongue is divided and terminates in bristly points. These reed birds, which are very numerous both in species and individuals, on the borders of lakes in the provinces north of the Plata, appear to supply in South America, the various *Sylviæ*, which frequent similar stations in Europe.

5. SYNALLAXIS FLAVOGULARIS. Gould.

Plate XXIV.

S. supra fuscescenti cinereus, infra cinereo-fuscus; remigibus obscurè fuscis, basi obscurè rufis; caudæ plumis sex mediis nigro-fuscis, externis ferrugineis; genis gulæque flavescens, plumis singulis apice obscurè fuscis.

Long. tot. $6\frac{1}{2}$ unc; rostr. $\frac{3}{4}$; alæ, $2\frac{1}{2}$; caudæ, $3\frac{3}{4}$; tarsi, $\frac{3}{4}$;

Head and all the upper surface, brown; primaries, dark brown, with the basal portions rufous; six central tail-feathers, blackish brown; the remainder ferruginous; sides of the face and throat yellowish, with the tip of each feather dark brown; the remainder of the under surface, greyish brown; bill and feet, dark brown.

Habitat, Patagonia.

My specimens were obtained at Bahia Blanca and at Santa Cruz, two extreme parts of Patagonia. It frequents the thinly scattered thickets on the arid plains: the hind claw of its foot is not produced as in *S. rufogularis*, and it lives less on the ground.

6. SYNALLAXIS BRUNNEA. Gould.

S. pallide rubro fusca; primariis secundariisque rufis apice fuscis; caudæ plumis quatuor mediis nigrescenti fuscis, duabus proximis ferrugineo fuscis internè nigrescenti-marginatis, duabus extimis ferrugineo fuscis; genis, gulâ abdomineque medio albescentibus; hypochondriis cinereis.

Long. tot. $5\frac{1}{2}$; unc. rostr. $\frac{5}{8}$; alæ, $2\frac{1}{2}$; caudæ, $\frac{8}{8}$; tarsi, $\frac{1}{2}$.

Head and all the upper surface pale reddish brown; primaries and secondaries, brown at the tip and rufous at the base; four central tail feathers, blackish brown; the next on each side rusty brown, margined internally with blackish brown; the two lateral feathers wholly rusty brown; sides of the face, throat, and centre of the abdomen, whitish; flanks cinereous; bill and feet brown.

Habitat, Port Desire, Patagonia. (January.)

This little bird frequents the thickets in the dry valleys near Port Desire. It often flies from bush to bush, and its habits are nearly like those of the rest of the genus. From its tail feathers, however, being little used, and the tarsi being slightly elongated, I suppose it lives chiefly on the ground. I may observe, that this species comes nearest to *S. flavogularis*, but that in the form of its tail, straightness of bill, and kind of plumage, it departs from *Synallaxis*, and approaches *Eremobius*.

7. SYNALLAXIS ÆGITHALOIDES. *Kittl.*

S. Ægithaloides. *Kittl.* Mem. de l'Acad. 11. pl. vii.—Vog. von Chili, p. 15, pl. vii.

This bird is common throughout Patagonia and Central Chile, being found wherever thickets grow on a rocky or dry soil. It sometimes moves about in small flocks. Its habits, as Kittlitz remarks, resemble in many respects, those of a titmouse (*Parus*); but there is one remarkable point of difference, namely, that this bird is able to *run* very quickly on the ground. It does not always do so, but often hops about with great activity; nevertheless, I repeat, I have distinctly seen it running very quickly amongst the thickets. When hopping from twig to twig, it does not use its long tail, any more than the long-tailed titmouse (*Parus caudatus*) of Europe. It utters a harsh, shrill, quickly reiterated cry, like so many other species of this genus and the allied ones. In Chile, I several times saw a very large cylindrical nest, built of prickly twigs of the mimosa, and placed in the middle of a thorn-bearing bush, with its mouth at the upper extremity; I was assured by the country people, that although so very large, it belonged to this little bird.* This kind of nidification, the habit of feeding on the ground, and the length of acuminate tail, are points of resemblance with *S. major*.

8. SYNALLAXIS RUFICAPILLA. *Viell.*

Synallaxis ruficapilla. *Viell.* Gal. des Ois. pl. lxxiv.

Parulus ruficeps. *Spix.* Av. Sp. Nov. tom. 1. p. 84, t. lxxxvi. f. 1. m. f. 2. fem.

Sphenura ruficeps. *Licht.* Ver. p. 42.

My specimens were obtained at Maldonado, (June) where it was rare, and at Buenos Ayres. Near Santa Fè, in Entre Rios, 3° northward, it was common: Spix found it near the Rio San Francisco in Brazil. Iris yellowish red; legs with faint tinge of blue; tongue terminated in bristly points, not deeply bifid. This *Synallaxis* approaches in character *Anumbius ruber*. Habits similar to those of *S. maluroides*.

* Molina, in his account of Chile, attributes this nest, I believe, through an error, to *Mimus thenca*.

ANUMBIUS RUBER. *D'Orb. and Lafr.*Anumbius ruber. *D'Orb. & Laf. Mag de Zool*, 1838, p. 18.Furnarius ruber. *Viell. Ency. Meth.* 514.Anumbi rouge. *Azara*, No. 220.

Frequents reeds on the borders of lakes near Maldonado. Habits very similar to those of *Synallaxis maturoides*, and likewise of the two species of *Limnornis*; to one of which *L. curvirostris*, it is most closely allied in structure. Iris bright yellowish orange; tarsi, with faint tinge of blue; tongue divided on each side a little below the extreme point.

GENUS.—LIMNORNIS. *Gould.*

Rostrum capitis longitudine seu longius, leviter a basi ad apicem arcuatum, lateraliter compressum, haud emarginatum; naribus magnis basalibus linearibus apertis aut partim operculo tectis: alæ brevissimæ rotundæ, plumis quarta, quinta sextaque ferè æqualibus et longissimis; cauda rotundata et graduata, scapis aliquanto ultra radios productis; tarsi mediocres, fortiter scutellati; hallucæ digito medio brevioribus, robusto, ungue robusto armato, digitis lateralibus ferè æqualibus, intermediis aliquantò brevioribus.

1. LIMNORNIS RECTIROSTRIS. *Gould.*

Plate XXVI.

L. pallide flavescenti fusca; cervice nigrescenti fusco; caudâ rufa; tectricibus primariis secundariisque fuscis rufo latè marginatis; fasciâ pone oculos, gulâ abdomineque flavescenti albis; hypochondriis fulvis.

Long. tot. $6\frac{9}{12}$ unc; rostr. $\frac{9}{12}$, alæ, $2\frac{9}{12}$ caudæ, $2\frac{9}{12}$ tarsi, $\frac{9}{12}$.

Crown of the head brown; the remainder of the upper surface, pale yellowish brown; tail rufous and acutely pointed; wing coverts, primaries and secondaries brown, broadly margined with rufous; stripe behind the eye, throat, and all the under surface buffy white; flanks tawny; bill lengthened, orange at the base, dark brown at the tip; iris rusty red; feet very pale coloured; claws whitish.

Habitat, Maldonado, La Plata. (*June.*)

This bird lives amongst the reeds on the borders of lakes. It often alights vertically on stems of plants, but in climbing does not use its tail: habits, generally similar to those of *Synallaxis maturoides*.

2. LIMNORNIS CURVIROSTRIS. Gould.

PLATE XXV.

L. rufescenti-fusca; caudâ, remigumque basibus pallidè castaneo-fuscis, lineâ superciliarî, genis, gulâ abdomineque albis; hypochondriis cervino tinctis.

Long. tot. 7 unc., rostr. $1\frac{1}{2}$; ala, $2\frac{1}{2}$; cauda, $3\frac{1}{2}$; tarsi, $\frac{1}{2}$.

Head, all the upper surface, and wings reddish brown; tail and basal portion of the outer margins of the primaries and secondaries reddish chestnut brown; stripe over the eye, throat, and all the under surface white, tinged, especially on the flanks, with fawn colour; bill orange at the base, the tip brown; legs pale bluish; claws white; tongue bristled on the sides; near the extremity it is divided into little bristly points.

Habitat, Maldonado, La Plata. (June.)

This species frequents the same localities with the last, and I am unable to point out any difference in its habits. Of the two specimens collected, the beak of one is very nearly one-tenth of an inch longer than that of the other; but this is almost wholly due to the sharp point of the upper mandible projecting beyond the lower mandible in the one, whereas they are nearly equal in the other.

1. OXYURUS TUPINIERI. Gould.

Synallaxis tupinieri. Less. Zool. de la Coqu. pl. 29. f. 1.

Oxyurus ornatus. Swainson. 2 Cent. and $\frac{1}{2}$. p. 324.

This bird is perhaps the most abundant of any land species inhabiting Tierra del Fuego. It is common along the west coast, (and numerous in Chiloe,) even as far north as a degree south of Valparaiso; but the dry country and stunted woods of central Chile are not favourable to its increase. In the dark forests of Tierra del Fuego, both high up and low down, in the most gloomy, wet, and scarcely penetrable ravines, this little bird may be met with. No doubt, it appears more common than it really is, from its habit of following, with seeming curiosity, every person who enters these silent woods; continually uttering a harsh twitter, it flutters from tree to tree, within a few feet of the intruder's face. It is far from wishing for the modest concealment of the creeper (*Certhia familiaris*); nor does it, like that bird, run up the trunks of trees, but industriously, after the manner of a willow wren, hops about and searches for insects on every twig and branch.

2. OXYURUS? DORSO-MACULATUS. Gould.

Synallaxis dorso-maculata. D'Orb. and Lafr. Voy. de l'Amer. Mer. Ois. pl. 14. f. 1.
Mag. de Zool. 1837, Cl. 11. p. 21.

My specimen was procured from Maldonado, (June), where it was not common. It frequents the same localities with *Synallaxis maluroides*, and the two species of *Limnornis*, and has very similar habits with them. In structure, and in the general shade of its plumage, it is closely allied to the foregoing species, although differing from it in habits.

GENUS.—DENDRODRAMUS. Gould.

Rostrum capitis longitudine, aut longius, culmine recto, gonide ascendente, per omnes partes lateraliter compressum, durum et apice inemarginatum, naribus basalibus longitudinalibusque; alæ mediocres et subacuminatæ, plumis tertia, quarta et quinta æqualibus longissimisque; cauda mediocris, scapis ultra radios in spinas acutas productis; tarsi sub-breves, digitis unguibusque longis, his multum curvatis, digito externo valido et ferè digiti mediî longitudine, digitis lateralibus inæqualibus, internis multum brevioribus.

DENDRODRAMUS LEUCOSTERNUS. Gould.

Plate XXVII.

D. capite, dorsi parte superiore alisque nigrescenti fuscis, rubro-tinctis; primariis secundariisque subferrugineo fusco irregulariter marginatis, uropygio caudâque nitidè ferrugineis, gulâ pectoreque albis, abdomine medio rufescenti fusco, singulis plumis ad apicem maculâ magnâ ovali albâ; hypochondriis saturatè rufis; rostro basi corneo, apice pedibusque nigro fuscis.

Long. tot. $6\frac{1}{2}$ unc.; rostri, $1\frac{1}{2}$; alæ, 3; caudæ, $2\frac{3}{4}$; tarsi, $\frac{1}{2}$.

Head, upper part of the back and wings blackish brown, tinged with red; primaries and secondaries irregularly margined with dull rusty brown; rump and tail rich ferruginous; throat and chest white; feathers of the centre of the abdomen reddish brown, with a large oval spot of white near the tip of each feather; flanks deep rufous; bill horny at the base, the remainder and the feet blackish brown.

Habitat, Chiloe and Southern Chile.

This bird is common in the forests of Chiloe, where, differently from the *Oxyurus tupinieri*, it may constantly be seen running up the trunks of the lofty forest

trees. Its manners appeared to me to resemble those of *Certhia familiaris*. I found Coleopterous insects in its stomach. Its range does not appear to be extensive; Chiloe to the south, and some woods near Rancagua (a degree south of Valparaiso) were the extreme points where I met with it. The *Dendrodrumax* is not found in Tierra del Fuego, where the *O. tупini* is so numerous. Mr. G. R. Gray remarks that this genus is very nearly allied to *Dendroplex* of Mr. Swainson.

FAMILY.—SYLVIADÆ.

SUB-FAM.—MOTACILLINÆ.

1. MUSCISAXICOLA MENTALIS. *D'Orb. & Lafr.*

M. mentalis, *D'Orb. & Lafr. Mag. de Zool.* 1837, p. 66.

Voy. dans l'Amer. Mer. Ornith. pl. 40, f. 1.

I procured specimens of this bird from Bahia Blanca, in Northern Patagonia, from Tierra del Fuego, from Chiloe, and from Central and Northern Chile. It is everywhere common. It frequents open places; so that in the wooded countries it lives entirely on the sea-beaches, or near the summits of mountains, where trees do not grow. In the excessively sterile upper valleys of the Cordillera of Northern Chile I met with this bird, even at a height of little less than ten thousand feet, where the last traces of vegetation occur, and where no other bird lives. It generally moves about in very small flocks, and frequents rocky streams and marshy ground: it hops and flies from stone to stone, very much after the manner of our whinchat (*Motacilla rubetra*), but when alighting it frequently expands its tail like a fan. The sexes are exactly similar in size and plumage.

Mr. G. R. Gray observes, that the genus *Muscisaxicola* is probably synonymous with *Lessonia* of Mr. Swainson; but the latter name cannot be used, as it has already been twice employed in other branches of Natural History.

2. MUSCISAXICOLA MACLOVIANA. *G. R. Gray.*

Sylvia macloviana, *Garn. Voy. de la Coqu. Zool.* p. 663.

Curruca macloviana, *Less.*

I brought home only one specimen of this bird; it came from East Falkland Island, whence also those described by Messrs. Lesson and Garnot were procured. Mr. Gould considered it a distinct species, but having carefully compared it with *M. mentalis*, I can see not the smallest difference in any point, excepting that it

is somewhat larger in all its dimensions. The length of the whole body is .6 of an inch greater, of wing when folded .45, of tarsus .2, greater than in the foregoing species. I can scarcely hesitate in thinking it a large-sized local variety, from some favourable condition in the Falkland Islands to its growth.

3. MUSCISAXICOLA BRUNNEA. Gould.

M. griseo-fusca; gutture abdomineque albis flavescenti tinctis, pectore obscuro; alis caudæque obscure fuscis, singulis plumis rufescenti fusco marginatis; rectricum externarum radiis lateralibus flavescensibus.

Long. tot. 5 unc.; rostri, $\frac{1}{2}$; alæ, $2\frac{1}{2}$; caudæ, $2\frac{1}{2}$; tarsi, 1.

Head, and all the upper surface greyish brown; wings and tail dark brown, each feather margined with reddish brown; the outer webs of the external tail feathers buffy white; throat and all the under surface white, slightly tinged with buff; bill and feet blackish brown.

Habitat, Port St. Julian, Patagonia. (*January*).

The only specimen I procured was immature.

4. MUSCISAXICOLA NIGRA. G. R. Gray.

Alauda nigra, *Boddart*.

—— *rufa*, *Gmel.*

—— *fulva*, *Lath. Index.*

Anthus fulvus, *Vieill. Ency. Meth.* p. 309.

—— *variegatus*, *Gerv. & Eydoux*, *Mag. de Zool.* 1836, p. 26.

Sylvia dorsalis, *King.*

Lessonia erythronotus, *Steains.* *Class. of Birds.*

Alouette noire à dos fauve, *Pl. enl.* 738.

L'Alouette à dos rouge, *Azara*, No. 149.

This bird has a wide geographical range. It is found in La Plata, Patagonia, Tierra del Fuego, and on the west coast at least as far north as the valley of Copiapó, in Northern Chile. It is every where common: it is a quiet, tame, inoffensive little bird: it lives on the ground, and frequents sand-dunes, beaches, and rocky coasts, which it seldom leaves: the broad shingly beds of the rivers in Chile have, however, tempted it inland, together with the *Opetiorhynchus*. I was told that it builds in low bushes.

1. ANTHUS CORRENDERA. *Vieill.*

Anthus correndera, *Vieill.* Ency. Meth. i. p. 325.

La correndera, *Azara*, No. 145.

This titlark is found in La Plata, Chile, and the Falkland Islands. I was informed by an intelligent sealer, that it is the only land-bird on Georgia and South Orkney (lat. 61° S.): it has, therefore, probably a further range southward than any other land-bird in the southern hemisphere. It does not live in flocks, is very common, and resembles a true *Alauda* in most of its habits. This species (as well as the following) is so closely allied to our meadow pipit, *Anthus pratensis*, that Latham considered it only as a variety; the latter has a high northern range, as the former has a southern one. There can be little doubt that the bird alluded to by Mr. Yarrell (*British Birds*, p. 392, vol. i.) as having been caught in the Southern Atlantic Ocean, nine hundred miles from Georgia, was this species, which was mistaken, owing to its close similarity, for the true *Anthus pratensis*.

2. ANTHUS FURCATUS. *D'Orb. & Lafr.*

A. furcatus, *D'Orb. & Lafr.* Mag. de Zool. 1836, p. 27. Voy. de l'Amer. Mer. Av. p. 227.

My specimens were procured on the northern bank of the Plata. It is more common there than the foregoing species, to which it is most closely allied: its chief distinguishing character appears to be the greater shortness of its toes and of the hind claw. I have seen this species alight on twigs. In the breeding season it flies upward, and then falls to the ground, with raised wings, in the peculiar manner common to the *Anthus arboreus* of England. It builds on the ground; nest simple; egg $\frac{1}{2}$ of an inch in length, and $\frac{1}{7}$ in width; colour dirty white, with small specks and blotches of dull red and obscurer ones of purple. This species, both in habits and structure, appears to be an analogue of *A. arboreus* of the northern hemisphere, as *A. correndera* is of *A. pratensis*. Mr. Yarrell informs me that the egg of *Anthus furcatus* is very different from that of *A. arboreus*, although the parent birds are so similar.

3. ANTHUS CHIL. *Licht.*

A. Chil, *Licht. Spiz.* Av. Sp. No. 1st. lxxvi. fig. 2. p. 75.

Le Chil, *Azara*, No. 146.

My specimen was procured at Rio de Janeiro, in Brazil.

SYLVICOLA AUREOLA. *Gould.*

PLATE XXVIII.

S. supra flavescenti olivacea; fronte cerviceque nitide flavis, singulis plumis ad apicem rufescenti castaneis; occipite griseo; alis caudaque nigrescentibus, latè flavo-marginatis; genis guttureque nitidè flavis; pectore concolori sed singulis plumis in medio pallidè castaneo notatis; abdomine albescenti.

Long. tot. 5 unc.; rostri, $\frac{1}{12}$; alæ, $2\frac{1}{2}$; caudæ, $2\frac{1}{2}$; tarsi, $1\frac{1}{2}$.

The nape of the neck, back and tail-coverts yellowish olive; the wings and tail blackish, broadly margined with yellow; the front and crown yellow, with the tips of the feathers reddish castaneous; the hind head grey mixed with yellow, the cheeks and the throat bright yellow; the breast of the same colour, but each feather is marked down the middle with pale reddish castaneous, the sides and middle of the abdomen whitish.

Habitat, Galapagos Archipelago. (*September*).

This bird is not uncommon on these islands. It has the habits of our *Sylvia*. It frequents the thickets in the lower, dry and rocky parts of the island, and especially a peculiar bush, with thick foliage, which grows only near the sea-coast.

CYANOTIS OMNICOLOR. *Swains.*

Regulus omnicolor, *Viell. Gal. pl.* 166.

Sylvia rubrigastra, *Viell.*

Regulus Byronensis, *Gray, Griff. An. King. pl.*

Tachuris omnicolor, *D'Orb. & Lafr.*

Tachuris roi, *Asara, No.* 161.

My specimens were obtained at Maldonado in June, and therefore probably it is not a bird of passage. It frequented reeds on the borders of a lake, but was exceedingly rare. I likewise saw one in Northern Patagonia, and in a collection of birds at Santiago, in Chile, made there by an inhabitant of the place. The soles of the feet of this exquisitely beautiful little bird are bright orange.

TRICHAS VELATA. *G. R. Gray.*

Sylvia velata, *Vieill. Ois. de l'Amer. Sept. ii. pl. 74.*

— *D'Orb. & Lafre. Mag. de Zool. 1836, p. 20.*

Tanagra canicapilla, *Sewins. Ill. Orn. pl. 174.*

Trichas canicapilla, *Sewins.*

My specimen was procured at Maldonado in June.

FAMILY.—FRINGILLIDÆ.

SUB-FAM.—ALAUDINÆ.

MELANOCORYPHA CINCTURA. *Gould.*

M. Fam. fuscescenti rufa; gula abdomineque medio pallidioribus; remigibus ad apicem nigrescenti fuscis; rectricibus singulis maculâ albâ ovatâ nigrescenti fuscâ ad apicem notatis.

Long. tot. $5\frac{1}{2}$ unc.; *ala*, $3\frac{1}{2}$; *cauda*, $2\frac{1}{2}$; *tarsi*, $\frac{3}{4}$; *rostr.* $\frac{1}{2}$.

The whole of the plumage, bill, and feet, sandy rufous brown, which is lightest on the throat and centre of the abdomen; primaries near their extremities passing into blackish-brown; and each of the tail feathers with a large oval spot of blackish-brown near the tip.

Habitat, St. Jago, Cape Verde Islands. (*September.*)

This bird inhabits the most arid plains of lava; it runs, and in its habits resembles, in many respects, a lark.

PYRRHALAUDA NIGRICEPS. *Gould.*

P. supra fuscescenti alba, plumis medio obscurioribus; fronte, genis linedque pectoris utrinque albis; corpore infra linedque à basi rostri supra oculos ad occiput transiente nigris; caudæ plumis mediis nigrescentibus fuscescenti albo marginatis, plumis externis atris.

Long. tot. $4\frac{1}{2}$ unc.; *ala*, $2\frac{3}{4}$; *cauda*, $1\frac{3}{4}$; *tarsi*, $\frac{7}{10}$; *rostr.* $\frac{7}{10}$.

Upper surface brownish-white, with the middle of the feathers darker; the front, cheeks, and a line on each side of the breast white; beneath the body, and a line from the bill passing over the eyes to the hind head, black; the tail with the middle feathers blackish, margined with brownish-white, the outer feathers deep black; the bill and feet pale.

Habitat, St. Jago, Cape Verde Islands. (*September and January.*)

Like the last species, this bird inhabits sterile lava plains; it runs like a lark, and generally goes in small flocks.

SUB-FAM.—PYRRHULINÆ.

SPERMOPHILA NIGROGULARIS. *Gould.*

S. capite corporeque supra, alis caudâque fusco cinereis; loris guldâque nigris; lineis à rostri angulis per collum utrinque descendentibus, pectore abdomineque mediis, tegminibusque caudalibus inferioribus cinereo albis.

Fem. ? supra olivaceo fusca, subtus pallidior.

Long. tot. 3 unc.; *ala*, 2½; *cauda*, 2; *tarsi*, ¾; *rostri*, ⅕.

Male.—Head, all the upper surface, wings and tail, brownish-grey; lores and throat black; lines from the angle of the bill down each side of the neck, centre of the chest and abdomen, and the under tail coverts greyish-white; bill light horn colour; feet dark-brown.

Female?—The whole of the plumage olive-brown above, and lighter beneath; bill and feet brown.

Habitat, Monte Video. (*November.*)

1. CRITHAGRA ? BRASILIENSIS.

Fringilla Brasiliensis, Spix. Av. Sp. Nov. ii. t. lxi. f. 1. m. 2. fem. p. 47.

My specimens were obtained from the northern bank of the Plata, in the months of June and November.

2. CRITHAGRA ? BREVIROSTRIS. *Gould.*

C. vertice dorsoque pallidè olivaceo fuscis, plumis singulis striâ angustâ mediâ nigro-fuscâ, pennis scapularibus alis caudâque nigrofuscis cinereo olivaceo latè marginatis; uropygio virescenti flavo; loris, guldâ, pectore humero infra, abdomine, tegminibusque caudæ inferioribus latè flavis.

Long. tot. 5 unc.; *rostri*, ⅕; *ala*, 2½; *cauda*, 2½; *tarsi*, ¾.

Crown of the head and back, light olive-brown, with a narrow stripe of blackish-brown in the centre of each feather; scapularies, wings and tail, blackish-brown, broadly margined with greyish olive; rump greenish-yellow; lores,

throat, chest, under surface of the shoulders, abdomen, and under tail-coverts bright yellow: bill and feet brown.

Habitat, Maldonado (*May*), and Valparaiso (*September*).

Near Maldonado, I saw very large flocks of this species feeding on the open grassy plains. When the whole flock rises, these birds utter a low but shrill chirp. In Chile I obtained only one specimen.

SUB-FAM.—EMBERIZINÆ.

1. EMBERIZA GUBERNATRIX. *Temm.*

Emberiza gubernatrix, *Temm.*, Pl. Col. 63 & 64.

——— *cristata*, *Sicains*, Zool. Ill. pl. 148.

——— *crisatella*, *Vieill.* Gal. des Ois. pl. 67.

Yellow crested grosbeak, *Lath. Hist.*

La huppe jaune, *Azara*, No. 129.

My specimen was procured on the banks of the Parana, near Santa Fe, in latitude 31° S.

2. EMBERIZA LUTEOVENTRIS. *G. R. Gray.*

Fringilla luteoventris, *Meyen*, Nov. Act. 1850, pl. 12. f. 3.

This bird was procured at Santa Cruz, in Southern Patagonia; it was rare there.

CHRYSOMETRIS CAMPESTRIS. *Gould.*

Fringilla campestris, *Splz.* Avium Nov. Sp. ii. p. 47, pl. 59. f. 3. ♀

C. Mas: olivaceus; dorsi plumis singulis flavo marginatis, uropygii præsertim; vertice, gula, alis caudaque nigris, alis caudaque plus minusve flavo-marginatis; capitibus lateribus corporeque infra latè flavis.

Long. tot. 4 unc. 11 lin.; rostr. 5 lin.; ala, 2½; cauda, 2½; tarsi, 7 lin.

Male; olivaceous, with each feather of the back margined with yellow, especially on the rump; the top of the head, throat, wings and tail, black, the two latter margined more or less with yellow; the sides of the head and beneath the body bright yellow.

Habitat, forests of Tierra del Fuego (*February*), Valparaiso (*September*).

SUB-FAM.—FRINGILLINÆ.

1. AMMODRAMUS LONGICAUDATUS. *Gould.*

PLATE XXIX.

A. vertice humeroque cinereofuscis, dorso pallescenti fusco, uropygio rufescenti fusco tincto, plumis singulis strigâ mediâ fuscâ; tectricibus alarum majoribus, remigibus primariis secundariisque et caudâ nigrescentibus, cinereo albo externe marginatis; fronte, strigâ superciliari corporeque infra flavescentibus.

Long. tot. $5\frac{3}{4}$ unc.; ala, 2 $\frac{1}{2}$; cauda, 3; tarsi, $\frac{3}{4}$; rostri, $\frac{1}{8}$.

Crown of the head and shoulder, greyish brown; back, light brown, tinged with reddish brown on the rump, and with a stripe of dark brown down the centre of each feather; greater wing-coverts, primaries, secondaries, and tail blackish, margined externally with greyish white; forehead, stripe over the eye, and all the under surface, buff; bill black; feet brown. Young, or a bird after gaining its new plumage, differs in having the whole of the upper surface rich brown, with a tinge of olive and with a stripe of dark brown down each feather, and in having the wing coverts margined with reddish instead of greyish brown.

Habitat, Monte Video (*November*), Maldonado (*June*).

At Maldonado this bird frequented, in small flocks, reeds and other aquatic plants bordering lakes. In general habits, as well as in place of resort, it resembles those species of *Synallaxis* and *Limnornis*, with which it is often associated. It appears to live entirely on insects, and I found in the stomach of one which I opened various minute Coleoptera. Mr. Gould remarks, that the structure of this *Ammodramus* is very remarkable, for that it has a great general resemblance both in form and colouring to *Synallaxis*, although the thickness of its bill shows its relation to the *Fringillinæ*. In its habits it certainly is more allied to the former genus, than to its own family.

2. AMMODRAMUS MANIMBE, *G. R. Gray.*

PLATE XXX.

Ammodramus xanthornus, in Plate, and in Gould's MS.
Fringilla Manimbè, *Licht.*, Cat. No. 253.
Emberiza Manimbè, *D'Orb. & Lafr.*, Syn. p. 77.
Manimbè, *Azara*, No. 141.

My specimen was obtained from Maldonado.

1. ZONOTRICHIA MATUTINA. G. R. Gray.

Fringilla matutina, Licht, Cat. 25.

Ktitl, Kupfertafeln der Vögel, pl. 23. f. 3.

Tanagra ruficollis, Spic., Av. Sp. Nov. ii. t. liii. f. 3. p. 39.

Chingolo, Azara, No. 135. Chingolo Bunting, Lath. Hist.

I procured specimens of this species from the banks of the Plata, Bahia Blanca in Northern Patagonia, and from Valparaiso in Chile: in these countries it is perhaps the commonest bird. In the Cordillera, I have seen it at an elevation of at least 8000 feet. It generally prefers inhabited places, but it has not attained the air of domestication of the English sparrow, which bird in habits and general appearance it represents. It does not go in flocks, although several may be frequently seen feeding together. At Monte Video I found on the ground the nest of this species. It contained three eggs; these were .75 of an inch in length; form, rather rounded; colour, dirty white, with numerous small spots of chestnut and blackish brown, almost confluent towards the broadest end. It was in this nest that I found the parasitic egg, supposed to belong to a species of *Molothrus*, described in my journal.*

2. ZONOTRICHIA CANICAPILLA. Gould.

Z. vertice cinereo; loris regioneque parotidæ obscure fuscis: dorso collicque lateribus rufis, dorso superiori et uropygio fuscis; dorso medio nigrescenti fusco, plumis singulis pallido fusco marginatis; tectricibus alarum nigrescenti fuscis, rufescente fusco marginatis, apice albis, duas fascias obliquas trans alarum formantibus.

Long. tot. 5½ unc.; ala, 2½; cauda, 2½; tarsi, ⅞; rostri, ¼.

Crown of the head grey; lores and ear-coverts dark brown; back and sides of the neck rufous; upper part of the back and rump brown; centre of the back blackish brown, each feather margined with light brown; wing-coverts blackish brown, margined with reddish brown, and tipped with white, forming two oblique bands across the wing; primaries, secondaries, and tail, dark brown, margined with greyish brown; throat and all the under surface brownish grey; and feet brown.

Habitat, Port Desire in Patagonia, and Tierra del Fuego.

This species is not uncommon in Tierra del Fuego, wherever there is any open

* Journal of Researches during the Voyage of the Beagle, p. 60.

space. Of the few birds inhabiting the desert plains of Patagonia, this is the most abundant. At Port Desire I found its nest : egg, about .83 in length ; form somewhat more elongated than in that of the last species ; colour, pale green, almost obscured by minute freckles and clouds of pale dull red.

3. ZONOTRICHIA STRIGICEPS. *Gould.*

Z. capite castaneo, lineâ mediâ obscure diviso, plumis singulis striâ mediâ nigrofuscâ, humeri flexurâ rufâ ; corpore supra fuscescente, plumis singulis striâ latâ mediâ obscure fuscâ ; remigibus, primariis caudâque nigro-fuscis pallidè fusco marginatis ; strigâ superciliarî, faciei collique lateribus, gulâ pectore abdomineque medio cinereis ; hypochondriis tegminibusque caudæ inferioribus flavescens.

Long. tot. 5½ unc. ; rostri, ½ ; alar, 2½ ; caudæ, 2½ ; tarsi, ½.

Head chestnut, divided down the middle by a line of deep grey, each feather with a stripe of blackish brown down the centre ; point of the shoulder rufous ; the remainder of the upper surface light brown, with a broad stripe of dark brown down the centre of each feather ; primaries and tail brown ; secondaries blackish brown, margined all round with pale brown ; stripe over each eye, sides of the face and neck, throat, breast, and centre of the abdomen, grey ; flanks and under tail-coverts buff ; upper mandible black ; under mandible light horn colour ; feet brown.

Habitat, Santa Fe. Lat. 31° S. (*October.*)

This species appears to replace in this latitude the *Z. matutina*, which is so abundant on the banks of the Plata and in Chile, as that species does the *Z. canicapilla* of Patagonia and Tierra del Fuego.

PASSERINA JACARINA. *Vieill.*

- Tanagra jacarina, *Lin.*
 Passerina jacarina, *Vieill.* Ency. Meth. p. 933.
 Emberiza jacarina, *D'Orb. & Lafr.*, Syn.
 Le Sautour, *Azara*, No. 138.
 Euphonia jacarina, *Licht.* Cat. p. 30.
 Fringilla splendens, *Vieill.* Ency. p. 981 ?

I procured a specimen of this bird at Rio de Janeiro.

1. FRINGILLA DIUCA. *Mol.*Fringilla Diuca, *Kittl. Mem. de St. Peterab. t. i. pl. 11.*

Mag. de Zool. 1837, pl. 69.

Emberiza Diuca, *D'Orb. et Lafjr. Syn. Mag. of Zool. 1838, f. 77.*

This bird is very common on the coast of Chile, from the humid forests of Chiloe to the desert mountains of Copiapó. In Chiloe it is perhaps the most abundant of the land birds; south of Chiloe I never saw it, although the nature of the country does not change them. On the eastern side of the continent, I met with this bird only at the Rio Negro, in northern Patagonia. I do not believe it inhabits the shores of the Plata, although so common in the open country, under corresponding latitudes west of the Cordillera. The Diuca, as this Fringilla is called in Chile, generally moves in small flocks, and frequents, although not exclusively, cultivated ground in the neighbourhood of houses: habits very similar to those of the *Zonotrichia matutina*. During incubation, the male utters two or three pleasing notes, which Molina has in an exaggerated description called a fine song. In October, at Valparaiso, I found the nest of this bird in the trellis-work of a vineyard, close by a much frequented path. The nest is shallow, and about six inches across; the outer part is very coarse, and composed of the thin stalks of twining plants, strengthened by the husky calices of a composite flower; this outside part is lined by many pieces of rag, thread, string, tow, and a few feathers. Eggs rather pointed, oval, .94 of an inch in length; colour, pale dirty green, thickly blotched by rather pale dull-brown, which small blotches and spots become confluent, and entirely colour the broad end.

2. FRINGILLA GAYI. *Eyd. & Gerv.*Fringilla Gayi, *Eyd. & Gerv. Mag. de Zool. 1834. pl. 23.*Emberiza Gayi, var. *D'Orb. & Lafjr. Syn. p. 76.*

This Fringilla, which was first brought from Chile, is abundant in the southern parts of Patagonia.

3. FRINGILLA FORMOSA. *Gould.*

F. fronte lorisque nigris; vertice, genis, gull, alarum tegminibus caeruleo griseis, tegminibus primariis, secundariis rectricibusque griseo-nigris, caeruleo-griseo marginatis, dorso flavescenti castaneo; tegminibus caudalibus inferioribus pallidè griseis; uropygio pectore hypochondriisque saturatè flavis.

Long. tot. 5½ unc.; ala, 3½; cauda, 2½; tarsi, ¾; rostri, ½.

Forehead and lores black; crown of the head, sides of the face, throat, wing

coverts, and the margins of the primaries, secondaries, and tail feathers, blue grey; the remainder of the primaries, secondaries, and tail feathers, greyish-black; back yellowish-chestnut; under tail coverts light-grey; rump, breast, abdomen and flanks, deep wax-yellow; bill bluish horn-colour; feet light brown.

Habitat, Tierra del Fuego (*December and February*).

This finch is common on the outskirts of the forests in Tierra del Fuego. Mr. Gould remarks, that it is nearly allied to *F. Gayi*, but it is much smaller, and is richer in its colouring.

4. FRINGILLA FRUTICETI, *Kittl.*

Fringilla fruticeti, *Kittl.* Kupf. der Vögel, pl. 23. f. 1.

Emberiza luctuosa, *Eyd. et Gere.* Mag. de Zool. 1834. Cl. 11. pl. 71.

————— *D'Orb. et Lafr.* Syn. p. 80.

I obtained specimens of this bird from Northern Chile, and Southern Patagonia. I saw it also in the Cordillera of Central Chile, at an elevation of at least eight thousand feet, near the upper limit of vegetation. In Patagonia it is not common, it frequents bushy valleys in small flocks, from six to ten in number. These birds sometimes move from thicket to thicket with a peculiar soaring flight: they occasionally utter very singular and pleasing notes.

5. FRINGILLA CARBONARIA. *G. R. Gray.*

Emberiza carbonaria, *D'Orb. et Lafr.* Synop. p. 79.

I never saw this bird but once, and then it was in small flocks, on the most desert parts of the plains between the rivers Negro and Colorado, in Northern Patagonia.

6. FRINGILLA ALAUDINA. *Kittl.*

Fringilla alaudina, Kupf. der Vögel, pl. 23. f. 2.

Emberiza guttata, *Meyen*, Nov. Act. Cur. xvii. pl. 12.

————— *D'Orb. & Lafr.* Syn. p. 78: Adult.

Passerina guttata, *Eyd. & Gere.* Mag. de Zool. 1834. pl. 70. p. 22.

My specimens were obtained from the neighbourhood of Valparaiso.

1. PASSER JAGOENSIS. *Gould.*

PLATE XXXI.

Pyrgita Jagoensis, Gould, Proc. of Zool. Soc. 1837. p. 77.

P. summo capite, et maculâ parvâ gulari intensè nigrescenti-fuscis; strigâ superciliari, collo, humeris dorsoque intensè castaneis, hujus plumis strigâ fuscâ centrali notatis; alis caudâque brunneis, tectricibus alarum minoribus albis, qui color fasciam transversam efficit: linedâ angustâ albâ à nare ad oculum; genis corporeque subtis albis, hoc colore in cinereum ad latera transeunte: rostro, pedibusque fuscis.

Long. tot. 5 unc.; cauda, 2½; ala, 2½; rostr. ½; tarsi, ¾.

Crown of the head and a small mark on the throat intense blackish brown, with a stripe on the eyebrows, the neck, shoulders and back bright chestnut, the feathers of the latter marked with a central dusky streak; wings and tail brown, with the smaller wing coverts white, forming a transverse bar; a narrow white line from the nostrils to the eye; cheeks and under side of body white, this colour passing into grey on the sides; beak and feet dusky.

Habitat, St. Jago, Cape Verde Islands (*January*).

This is the commonest bird in the island; it frequents, generally in small flocks, both the neighbourhood of houses and wild uninhabited spots. It was building its nest towards the end of August.

2. PASSER HISPANIOLENSIS. *G. R. Gray.**Fringilla Hispaniolensis, Temm. Man. i. 353.*

In the month of January I obtained a specimen of this bird from St. Jago, one of the Cape Verde Islands, where it was not common.

1. CHLOROSPIZA? MELANODERA. *G. R. Gray.*

PLATE XXXII.

Emberiza melanodera, Quoy & Gaim. Voy. de L'Uranie, Zool. i. p. 109.

C. flavescenti olivacea; dorso superiori cinereo rufoque mixto; vertice, auribus, colli lateribus pectoreque cinereis rufomixtis; linedâ à naribus pone oculos transiente genisque albis; plumis inter rostrum et oculos gulâque atris; remigibus primariis et secundariis nigrescentibus flavo marginatis: caudâ rectricibus mediis olivaceo-fuscis, tribus externis ferè toto pallidè flavis; abdomine medio flavescenti albo, lateribus obscurioribus.

Long. tot. 6½ unc.; ala, 3½; cauda, 2¾; tarsi, 10 lines; rostri, 5 lin.

Adult. Yellowish olive, mixed with grey and rufous on the upper part of the back;

top of the head, ears, sides of the neck and breast, grey mixed with rufous; the lines from the nostrils reaching behind the eyes and cheeks, white; the space between the bill and eye, and the throat, deep black; the primaries and secondaries blackish; margined with yellow; the tail, with the middle feathers, olivaceous black, with the three external nearly wholly pale yellow; the middle of the abdomen yellowish white, with the flanks darker.

Young: Upper surface brownish white, with the middle of each feather black; the throat lighter; the wing coverts and secondaries margined with white and brown; the primaries with yellow; the tail blackish, with their outer margins yellow, and the external feather wholly pale yellow white; beneath the body pale yellowish white, streaked on the breast and flanks with a darker tint.

Habitat, East Falkland Island (*March*), and Santa Cruz, Patagonia (*April*).

This bird is extremely abundant in large scattered flocks in the Falkland Islands.

2. CHLOROSPIZA? XANTHOGRAMMA. *G. R. Gray.*

PLATE XXXIII.

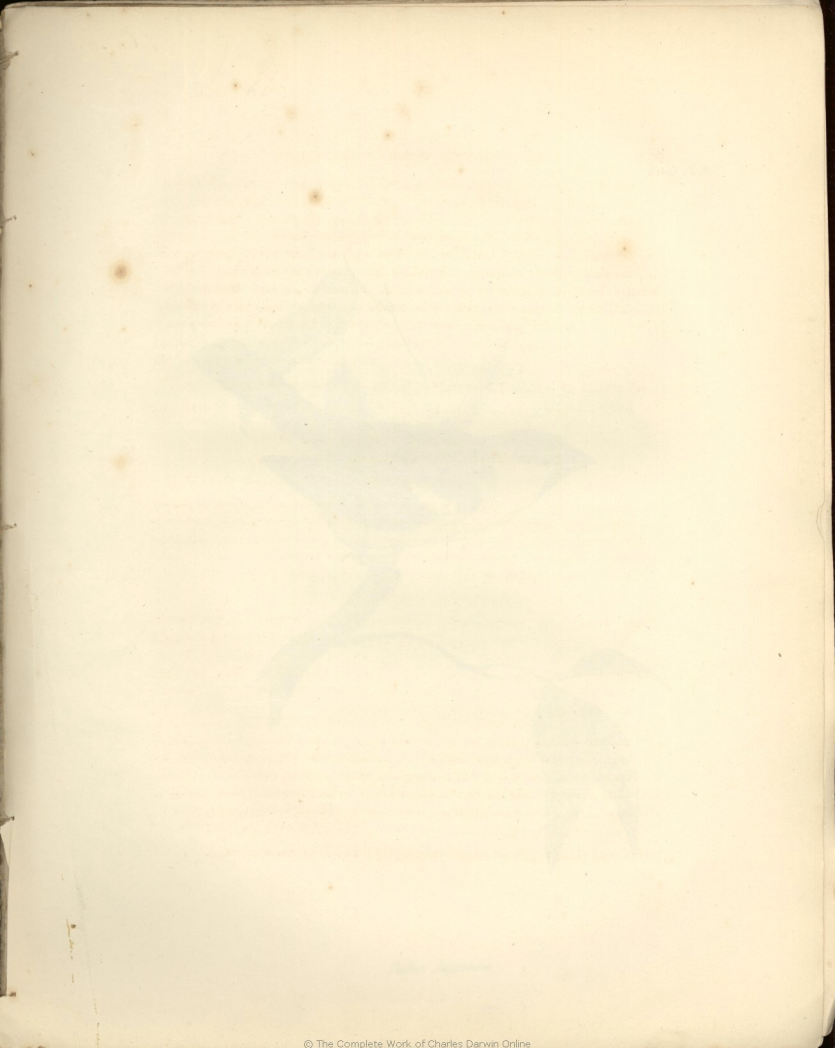
C. cinerascens olivacea, rufo paulo tincta; lineâ à naribus pone oculos transiente genisque flavis; plumis inter rostrum et oculos gulâque atris; remigibus secundariis nigrescentibus, cinereo et olivaceo latè marginatis; primariis nigrescentibus, flavo angustè marginatis; caudâ cinerascens nigra, plumis externis albis; corpore infra flavescens albo, hypochondriis obscurioribus.

Long, tot. 7½ unc.; ala, 3½; caudæ, 3; tarsi, 1; rostri, 7 lin.

Adult: Greyish olive, very slightly mixed with rufous, a line from the nostrils reaching behind the eyes and cheeks, yellow; the space between the bill and eye, and the entire throat, deep black; the secondaries blackish, broadly margined with grey and olive; the primaries blackish, slightly margined with yellow; the tail greyish black, with the outer feathers white; beneath the body yellowish white, darker on the flanks.

Female: Upper surface brownish white, with each feather blackish brown in the middle, the head and throat paler; the wing-coverts and secondaries blackish, margined with brownish white; the primaries blackish, slightly margined with yellow; the tail blackish white-margined, with the outer feathers nearly wholly white; beneath the body yellowish white, streaked with brown on the breast and flanks; and the space from the nostrils reaching to behind the eyes and cheeks, yellowish.

Habitat, East Falkland Island (*March*), and Tierra del Fuego (*February*).



CHARACTER OF THE FORMS OF THE MOUNTAIN

... of the head, sides of the neck and throat, gray mixed with yellow, the space between the bill and eye, and the breast, deep black; the sides of the neck and throat blackish, interspersed with yellow; the tail, with the outer feathers, black; with the inner external feathers chiefly pale yellow; the middle of the abdomen, yellowish white, with the dark streaks.

Young: Upper surface brownish white, with the middle of each breast black; the breast lighter; the wing coverts and secondary feathers, with other and brown; the abdomen with yellow; the tail blackish; with green and yellow; and the external feathers white; pale yellow; through the body pale yellowish white, streaked on the breast and flanks with a pattern like Hutton's Dove, 2. (Iceland Island, Norway, and Santa Cruz, Paraguay, &c.)

The bill is extremely slender; it is large, and is black in the 1. (Iceland)

2. 1. (Iceland) ... G. R. Gray

PLATE XXXIII

... of the head, sides of the neck and throat, gray mixed with yellow; the space between the bill and eye, and the breast, deep black; the sides of the neck and throat blackish, interspersed with yellow; the tail, with the outer feathers, black; with the inner external feathers chiefly pale yellow; the middle of the abdomen, yellowish white, with the dark streaks.

Young: Upper surface brownish white, with the middle of each breast black; the breast lighter; the wing coverts and secondary feathers, with other and brown; the abdomen with yellow; the tail blackish; with green and yellow; and the external feathers white; pale yellow; through the body pale yellowish white, streaked on the breast and flanks with a pattern like Hutton's Dove, 2. (Iceland Island, Norway, and Santa Cruz, Paraguay, &c.)

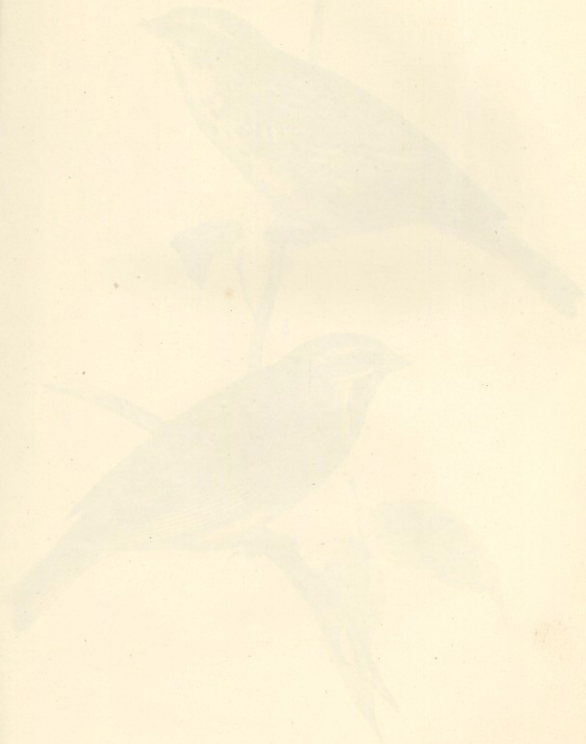
... of the head, sides of the neck and throat, gray mixed with yellow; the space between the bill and eye, and the breast, deep black; the sides of the neck and throat blackish, interspersed with yellow; the tail, with the outer feathers, black; with the inner external feathers chiefly pale yellow; the middle of the abdomen, yellowish white, with the dark streaks.

Young: Upper surface brownish white, with each feather blackish brown on the middle; the breast and throat pale; the wing coverts and secondary feathers, interspersed with brownish white; the primaries blackish, slightly tinged with yellow; the tail blackish white, tinged with the outer feathers black; the body pale yellowish white, streaked with brown on the breast and flanks; and the space from the middle reaching as behind the eye and throat, yellowish.

Hutton's Dove, 2. (Iceland Island, Norway, and Santa Cruz, Paraguay, &c.)



Passer Jagoensis





Chonospiza melanodora



Chrysomitris tristis



Chlorospiza Xanthogramma.



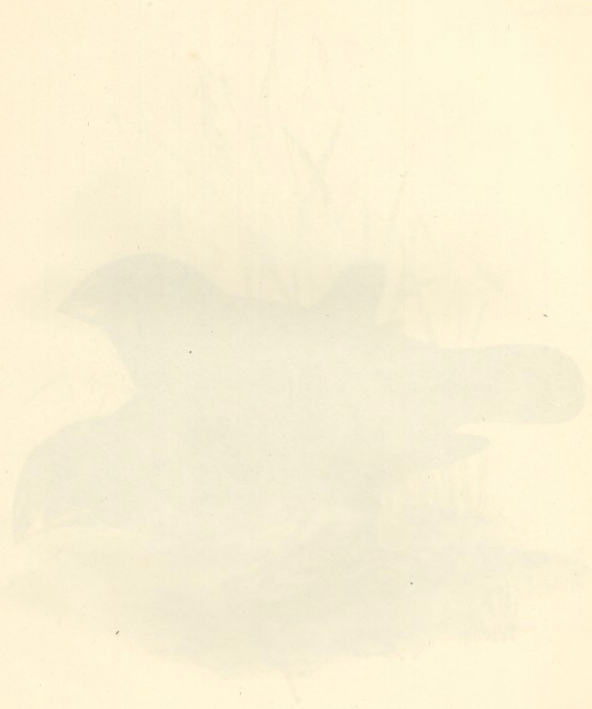
Tanagra Darwini



Two species



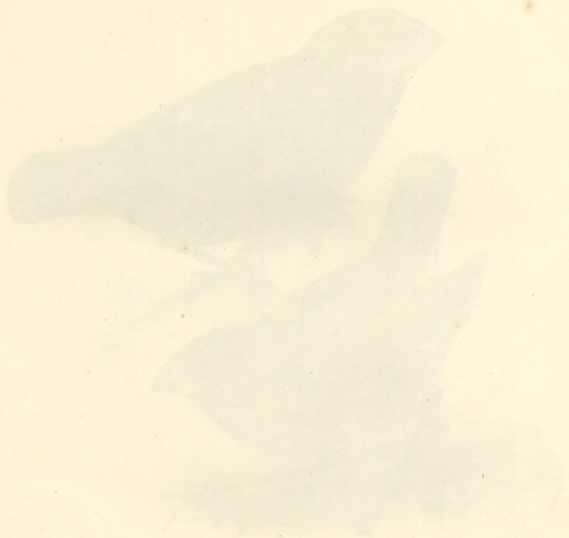
Pipilo personata.



Fregata minor



Geospiza magnirostris



European Sparrow



Geospiza strenua



Chrysomitris tristis



Geospiza fortis

July 1881



Corvus porphyrio



Geospiza parvula



Camarkynchus portuacalis



THE NUMBERS ALREADY PUBLISHED OF THIS WORK ARE AS FOLLOWS:

Nos. I. VII. AND VIII.

FOSIL MAMMALIA,

BY RICHARD OWEN, Esq. F.R.S.
Professor of Anatomy and Physiology in the Royal
College of Surgeons, London.

Nos. II. IV. V. AND X.

MAMMALIA,

BY GEORGE R. WATERHOUSE, Esq.
Curator of The Zoological Society of London, &c.
This Division of the Work is now complete, Price £1 10s.

Nos. III. VI. IX. AND XI.

BIRDS.

BY JOHN GOULD, Esq. F.L.S.

WITH A NOTICE OF THEIR HABITS AND RANGES,

BY CHARLES DARWIN, Esq. M.A., Sec. G.S.

* * The whole of the Plates are engraved in the highest style of Art, from Drawings taken expressly for this Work, and beautifully coloured after Nature.

NOW PUBLISHING IN PARTS,

UNDER THE AUTHORITY OF THE LORDS COMMISSIONERS OF HER MAJESTY'S TREASURY,

ILLUSTRATIONS OF

THE ZOOLOGY OF SOUTH AFRICA:

Consisting chiefly of Figures and Descriptions of the Objects of Natural History collected during an Expedition into the Interior of South Africa, in the years 1834, 1835, and 1836, fitted out by
"The Cape of Good Hope Association for Exploring Central Africa."

TOGETHER WITH

SUMMARY OF AFRICAN ZOOLOGY,

AND AN INQUIRY INTO THE GEOGRAPHICAL RANGES OF SPECIES IN THAT QUARTER OF THE GLOBE.

BY ANDREW SMITH, M.D.

SURGEON TO THE FORCES, AND DIRECTOR OF THE EXPEDITION.

The Drawings for this Work were made on the spot, and have since been engraved in the very first style, and beautifully coloured after Nature.

The First Seven Parts are now ready, each containing Ten Engravings with Descriptive Letter-press, Price 10s.

* * In order to secure to science the full advantage of Discoveries in Natural History, the Lords Commissioners of Her Majesty's Treasury have been pleased to make a liberal grant of money towards defraying part of the expenses of these two important publications. They have, in consequence, been undertaken on a scale worthy of the high patronage thus received, and are offered to the public at a much lower price than would otherwise have been possible.

PUBLISHED BY SMITH, ELDER AND CO., 65, CORNHILL.